CONESTOGA-ROVERS
& ASSOCIATES

5900 Hollis Street, Suite A, Emeryville, Calfornia 94608
Telephone: 510-420-0700 Facsimile: 510-420-9170
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July 1, 2008

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

Re: **Groundwater Monitoring Work Plan**
1137-1167 65th Street, Oakland, California 94608
CRA Project No. 521000
Fuel Leak Case No. RO0000082

Dear Ms. Jakub:

On behalf of Mr. John Nady, Conestoga-Rovers & Associates, Inc. (CRA) is pleased to present this *Groundwater Monitoring Work Plan* (Work Plan) for the above referenced site.

Pending your approval, we proposed to modify the existing groundwater sampling protocol by adding additional analytes and a groundwater data logger. These additional analytes include bioattenuation parameters, petroleum hydrocarbon "fuel fingerprint" characterization, and isotopes to attempt to identify water signatures. After we receive agency approval, we will proceed with the scope of work presented in this Work Plan. New monitoring wells, as recommended in our *Additional Site Characterization Work Plan*, will be added to the groundwater monitoring protocol presented in this Work Plan. 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 Work Plan*

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

To the best of my knowledge, I have no argument or disagreement with the contents of this Work Plan.

Nady Trust U/D/T dated 1/21/1997

John Nady, trustee

CONESTOGA-ROVERS
& ASSOCIATES

GROUNDWATER MONITORING WORK PLAN
1137-1167 65th Street
Oakland, California
Fuel Leak Case No. RO0000082
CRA Project No. 521000

July 1, 2008

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

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

Mark Jonas, P.G.
Senior Project Manager

PROFESSIONAL GEOLOGIST
MARK L. JONAS
No. 6392
STATE OF CALIFORNIA

CONESTOGA-ROVERS
& ASSOCIATES

GROUNDWATER MONITORING WORK PLAN

1137-1167 65th Street
Oakland, California 94608
CRA Project No. 521000
Fuel Leak Case No. RO0000082

July 1, 2008

INTRODUCTION

On behalf of Mr. John Nady, Conestoga-Rovers & Associates (CRA) is pleased to submit this *Groundwater Monitoring Work Plan* (Work Plan) for the above referenced site. This Work Plan is in response to the April 22, 2008 agency meeting between Alameda County Health Care Services Agency, Environmental Health Services (ACEH), our client, and CRA. ACEH is the lead agency for this site.

OVERVIEW AND RATIONALE

Presented in this Work Plan are proposed modifications to the existing groundwater monitoring protocol. Recommended modifications include additional analytes and a groundwater data logger. These additional analytes include bioattenuation parameters, petroleum hydrocarbon "fuel fingerprint" characterization, and isotopes to attempt to identify water signatures. The "fuel fingerprint" characterization will attempt to determine if detected Total Petroleum Hydrocarbons (TPH) are actually Stoddard Solvent or include other petroleum hydrocarbons. The groundwater data logger will attempted to determine if any short-term time-series changes in groundwater levels exist. The reason for modification of the existing groundwater monitoring protocol is to improve the site conceptual model. This may lead to focus remediation, where necessary, and eventually to site closure.

After we receive agency approval, we will proceed with the modified groundwater sampling protocol, as presented in this Work Plan. New monitoring wells, as recommended in our *Additional Site Characterization Work Plan*, will be added to the groundwater monitoring protocol after the wells are installed. Results will be presented in the *Quarterly Groundwater Monitoring Report* for each quarterly monitoring event.

EXISTING AND PROPOSED MONITORING ACTIVITIES

Existing groundwater monitoring activities include quarterly groundwater levels, sampling and analysis of selected analytes, and submittal of quarterly groundwater monitoring reports. Monitoring and grab groundwater results are provided in the attached figures and tables.

Proposed monitoring activities include adding additional analytes, petroleum hydrocarbon "fuel fingerprint" characterization, isotopes, and a water level data logger. TPH as Stoddard Solvent, Gasoline, Diesel, and Motor Oil (TPHss, TPHg, TPHd, & TPHmo) will be evaluated by the laboratory to attempt to determine the actual petroleum hydrocarbon fingerprint. Appendix A presents general guidance as a *Standard Field Procedure* for *Groundwater Monitoring and Sampling*. The following table presents the current and proposed groundwater analyses:

Table 1

Current and Proposed Groundwater Analyses

	Monitoring Well																
Analysis and Method	MW-1A	MW-1B	MW-1C	MW-2A	MW-3A	MW-3B (proposed)	MW-3C (proposed)	MW-4A	MW-4B	MW-4C	MW-5B	MW-6A	MW-6B	MW-6C	MW-7A	MW-7B (proposed)	MW-7C (proposed)
Current Groundwater Analysis:																	
TPHss (8015m)	x			x	x	x	x	x				x	x		x	x	x
TPHg (8015m)	x			x	x	x	x	x				x	x		x	x	x
BTEX (8021m)	x			x	x	x	x	x				x	x		x	x	x
TPHd & TPHmo (8015M) with silica gel cleanup	x			x	x	x	x	x				x	x		x	x	x
HVOCs (8010)	x	x			x	x	x					x	x	x	x	x	x
Proposed Groundwater Analysis for "Fuel Fingerprint":																	
TPHss (8015m) Fuel Fingerprint	x			x	x	x	x	x				x	x		x	x	x
TPHg (8015m) Fuel Fingerprint	x			x	x	x	x	x				x	x		x	x	x
TPHd & TPHmo (8015M) with silica gel cleanup Fuel Fingerprint	x			x	x	x	x	x				x	x		x	x	x
Proposed Groundwater Analysis for Bioattenuation Parameters:																	
Ethane, Ethene, Methane (RSK175)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Iron, Manganese, Sodium (200.8)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Total Alkalinity (310.1)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Ammonia (350.1)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Analysis and Method	Monitoring Well																
	MW-1A	MW-1B	MW-1C	MW-2A	MW-3A	MW-3B (proposed)	MW-3C (proposed)	MW-4A	MW-4B	MW-4C	MW-5B	MW-6A	MW-6B	MW-6C	MW-7A	MW-7B (proposed)	MW-7C (proposed)
Inorganics: Ca, Na, Cl, Fe, K, Mg, SO_4^{-2} (200.8)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Inorganic Anions: Bromide, Chloride, Nitrate as N, Nitrate as NO_3, Nitrite as N, Phosphate as P, & Sulfate (300.1)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Sulfide (376.2)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Total Dissolved Solids (160.1)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Biochemical Oxygen Demand (405.1)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Chemical Oxygen Demand (410.4)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Total Organic Carbon (415.3)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Dissolved Organic Carbon (415.3)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Proposed Groundwater Analysis for Isotopes:																	
O^{18}/O^{16}	x	x	x					x	x	x		x	x	x			

Notes: TPHss = Total Petroleum Hydrocarbons as Stoddard Solvent.
TPHg = Total Petroleum Hydrocarbons as Gasoline
BTEX = Benzene, Toluene, Ethyl Benzene, and Xylenes
HVOCs = Halogenated Volatile Organic Compounds, 8010 Basic Target List.

Table 2 present the proposed groundwater analysis, sampling containers, preservations, detection limits, and holding times.

Table 2

Groundwater Analysis, Sampling Containers, Preservatives, Detection Limits, and Holding Times

Analysis and Method	Sampling Containers	Preservatives	Detection Limit	Holding Times
Current Groundwater Analysis:				
TPHss (8015m)	VOA	HCl	50 ug/L	14 days
TPHg (8015m)	VOA	HCl	50 ug/L	14 days

Analysis and Method	Sampling Containers	Preservatives	Detection Limit	Holding Times
BTEX (8021m)	VOA	HCl	0.50 ug/L	14 days
TPHd & TPHmo (8015M) with silica gel cleanup	Amber	HCl	50 & 250 ug/L	14 days
HVOC 8010 Target List (by 8260b)	VOA	HCl	0.50 ug/L	14 days
Proposed Groundwater Analysis for "Fuel Fingerprint":				
TPHss (8015m) Fuel Fingerprint	VOA	HCl	50 ug/L	14 days
TPHg (8015m) Fuel Fingerprint	VOA	HCl	50 ug/L	14 days
TPHd & TPHmo (8015M) with silica gel cleanup Fuel Fingerprint	Amber	HCl	50 & 250 ug/L	14 days
Proposed Groundwater Analysis for Bioattenuation Parameters:				
Ethane, Ethene, Methane (RSK175)	VOA	HCL	0.4-0.5 ug/L	14 days
Iron, Manganese, Sodium (200.8)	250 MLP	HNO_3	20 & 100 ug/L	6 Months
Total Alkalinity (310.1)	500 MLP	Unpreserved	1 mg $CaCO_3$/L	14 days
Ammonia (350.1)	500 ML AG	H_2SO_4	0.2 mg/L	28 days
Inorganics: Ca, Na, Cl, Fe, K, Mg, SO_4^{-2} (200.8)	250 MLP	HNO_3	20 & 200 ug/L	6 Months
Inorganic Anions: Bromide, Chloride, Nitrate as N, Nitrate as NO_3^-, Nitrite as N, Phosphate as P, & Sulfate (300.1)	250 MLP	Unpreserved	0.1- 0.45 mg/L	48 hr
Sulfide (376.2)	250 MLP	NaOH+ZnAc	0.05 mg/L	7 days
Total Dissolved Solids (160.1)	500 MLP	Unpreserved	10 mg/L	7 days
Biochemical Oxygen Demand (405.1)	32 oz POLY	Unpreserved	4 mg/L	48hrs
Chemical Oxygen Demand (410.4)	VOA (2)	H_2SO_4	10 mg/L	28 days
Total Organic Carbon (415.3)	VOA (2)	HCl	0.3 mg/L	28 days
Dissolved Organic Carbon (415.3)	VOA (2)	Unpreserved	0.7 mg/L	ASAP
Proposed Groundwater Analysis for Isotopes:				
O^{18}/O^{16}	VOA	Ice	0.2 g/L	14 days

Semi-Annual Evaluation: After the completion of two quarterly groundwater sampling rounds, the list of proposed analytes will be evaluated with respect to removal from the monitoring protocol.

Water Level Measurements: Groundwater levels will be measured in all available wells quarterly.

Groundwater Level Data Logger: Assuming that an in-well logger is available, for one quarter groundwater data loggers will be installed in MW-1A, MW-1B, and MW-1C to collect time-series water levels. Water level results will be presented in a *Quarterly Groundwater Monitoring Report.*

Investigation Derived Waste: Purge water generated during each quarterly monitoring event will be stored in a sealed Department of Transportation (DOT) approved 55 gallon drums and temporarily left on site for eventual transport and disposal.

REPORTING

After each quarterly monitoring event, on behalf of John Nady, a *Quarterly Groundwater Monitoring Report* will be electronically submitted to the ACEH ftp and Geotracker.

ATTACHMENTS

Figures:

Figure 1 - Vicinity Map
Figure 2 - Aerial Map
Figure 3 - Site Map
Figure 4 - Groundwater Flow and Chemical Concentrations – A Zone
Figure 5 - Groundwater Flow and Chemical Concentrations – B Zone
Figure 6 - Groundwater Flow and Chemical Concentrations – C Zone

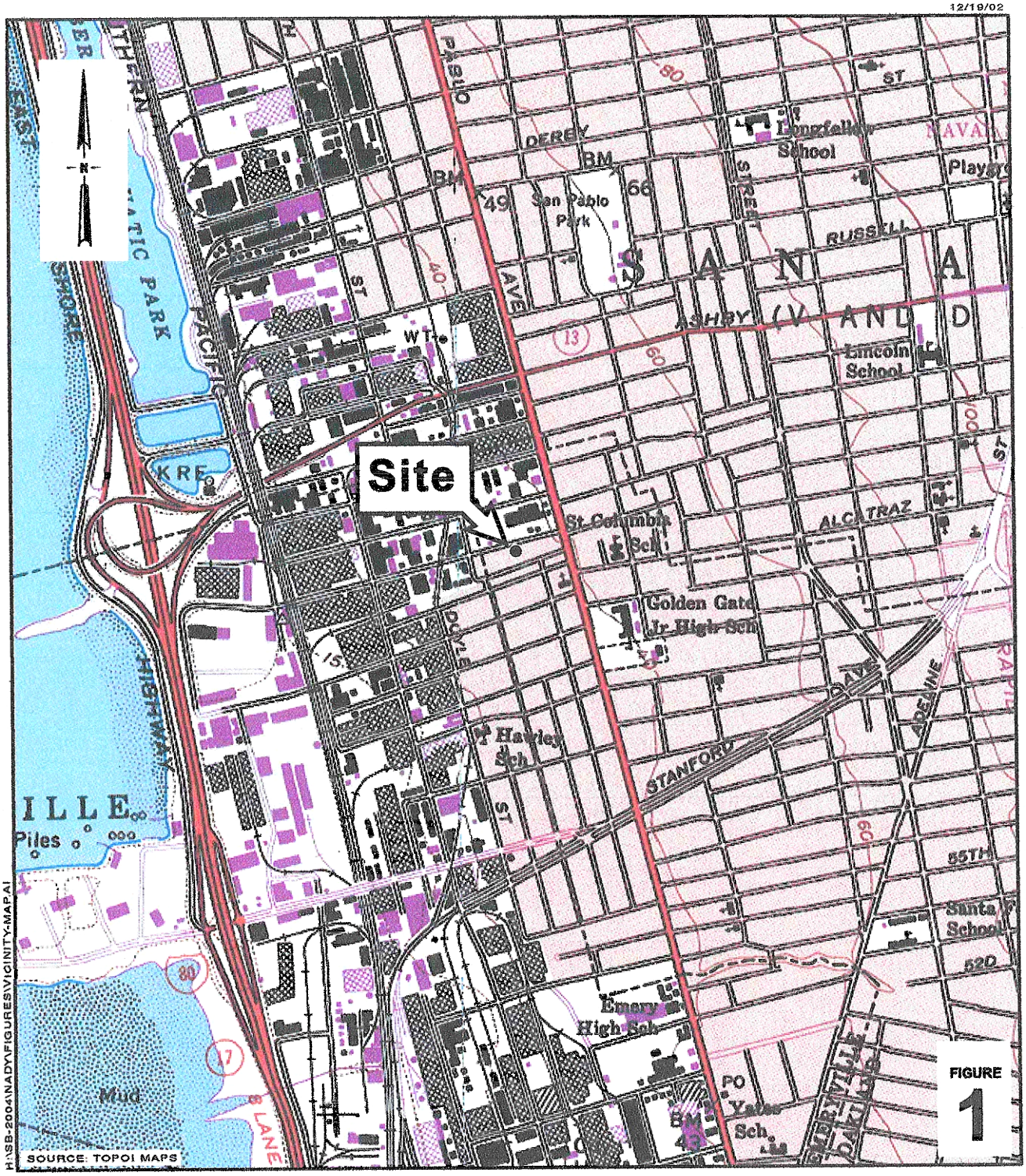
Tables:

Table 1 - Well Construction Details
Table 2 - Monitoring Well Groundwater Results: Petroleum Hydrocarbons
Table 3 - Monitoring Well Groundwater Results: Halogenated Volatile Organic Compounds
Table 4 - Grab Groundwater Sampling Details
Table 5 - Grab Groundwater Results: Petroleum Hydrocarbons
Table 6 - Grab Groundwater Results: Volatile Organic Compounds

Appendix:

Appendix A - Standard Field Procedures

12/19/02



H:\SB-2004\NADY\FIGURES\VICINITY-MAP.AI

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

FIGURE 1

Vicinity Map

1137 - 1167 65th Street

Oakland, California

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06/12/08

Aerial Map

FIGURE

2

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1137 - 1167 65th Street
Oakland, California

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06/12/08

Site Map

EXPLANATION

- MW-1A ✦ Monitoring well location
- SB-12 ◉ Soil boring location
- SB-1 ◉ Cambria 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

65TH STREET

PEABODY LANE

VALLEJO STREET

MARSHALL STREET

OCEAN AVENUE

SB-19A
MW-4A
SB-1
MW-4B
MW-4C
SB-25C
SB-25A
??
MW-5B
former heating oil tank location
1145 65TH STREET
SB-2
floor drain
SB-21A
MW-7A
SB-22A/C
?
SB-8
MW-3A
SB-23
1167 65TH STREET
SB-24
SB-13
SB-11
former gasoline UST and pump location
product piping
SB-9
5
6
SB-3
filled in place tank location
former tank location
MW-2A
SB-4
SB-10
Exterior tank area
4
3
2
1
SB-26A
SB-12A
parking lot
SB-18B/C
SB-18A
SB-7
SB-6
MW-1B
MW-1C
MW-1A
SB-16A
SB-5
SB-14A
SB-14C
MW-8C
MW-8A
MW-8B
SB-20A/C
SB-15A
SB-17B
SB-17A/C
shed
vacant lot
Day Care
car port
redidence
shed
residence
residence
residence
residence
residence
residence
residence
residence
residence
residence
residence
residence
residence
residence
residence
residence
residence
residence
residence
residence

0 25 50 100
Scale (ft)

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1137 - 1167 65th Street
Oakland, California

FIGURE
3

06/23/08

Groundwater Flow and Chemical Concentrations - A Zone

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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
- 36.00 — Groundwater elevation contour line in feet above mean sea level (MSL), March 2008
- 0.02 — Groundwater flow direction and gradient
- -- Not analyzed
- NA Not Available / Unknown

Well ID	Monitoring Well Designation
Year	Year of sample
ELEV.	Groundwater elevation in feet above mean sea level (MSL)
TPHd	Concentrations in groundwater in micrograms per liter (µg/L)
TPHss	
TPHg	
PCE	
TCE	
cis-1,2-DCE	
Vinyl Chloride	

MW-4A	SB-1
MAR. 2008	2002
36.46	35.44
71	2,000
<50	<50
<50	58
--	<0.5
--	1.5
--	<0.5
--	<0.5

SB-8	SB-21A	MW-7A
2002	2004	MAR. 2008
36.55	NA	36.28
1,200,000	110,000	56,000
100,000	5,600	3,500
110,000	6,100	3,800
<10	<50	<0.5
<10	<50	<0.5
<10	<50	<0.5
<10	<50	<0.5

MW-3A
MAR. 2008
36.87
26,000
2,800
3,200
<1.0
<1.0
<1.0
<1.0

SB-25A
2004
NA
64
<50
<50
<0.5
<0.5
<0.5
<0.5

SB-12A
2004
NA
130
<50
230
<0.5
<0.5
<0.5
<0.5

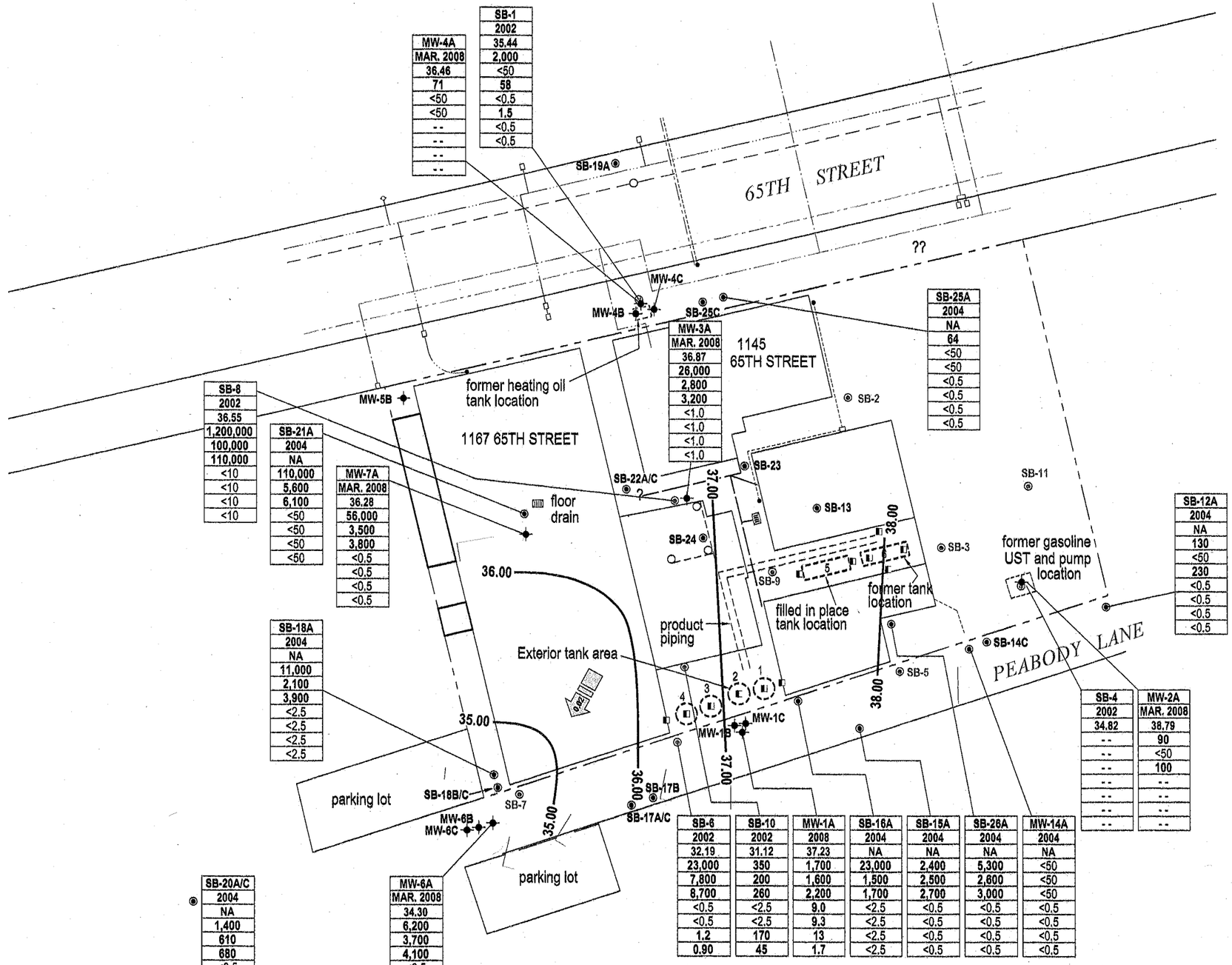
SB-18A
2004
NA
11,000
2,100
3,900
<2.5
<2.5
<2.5
<2.5

SB-4	MW-2A
2002	MAR. 2008
34.82	38.79
--	90
--	<50
--	100
--	--
--	--
--	--
--	--

SB-6	SB-10	MW-1A	SB-16A	SB-15A	SB-26A	MW-14A
2002	2002	2008	2004	2004	2004	2004
32.19	31.12	37.23	NA	NA	NA	NA
23,000	350	1,700	23,000	2,400	5,300	<50
7,800	200	1,600	1,500	2,500	2,600	<50
8,700	260	2,200	1,700	2,700	3,000	<50
<0.5	<2.5	9.0	<2.5	<0.5	<0.5	<0.5
<0.5	<2.5	9.3	<2.5	<0.5	<0.5	<0.5
1.2	170	13	<2.5	<0.5	<0.5	<0.5
0.90	45	1.7	<2.5	<0.5	<0.5	<0.5

SB-20A/C
2004
NA
1,400
610
680
<0.5
<0.5
<0.5
<0.5

MW-6A
MAR. 2008
34.30
6,200
3,700
4,100
<0.5
<0.5
<0.5
<0.5



FIGURE

4

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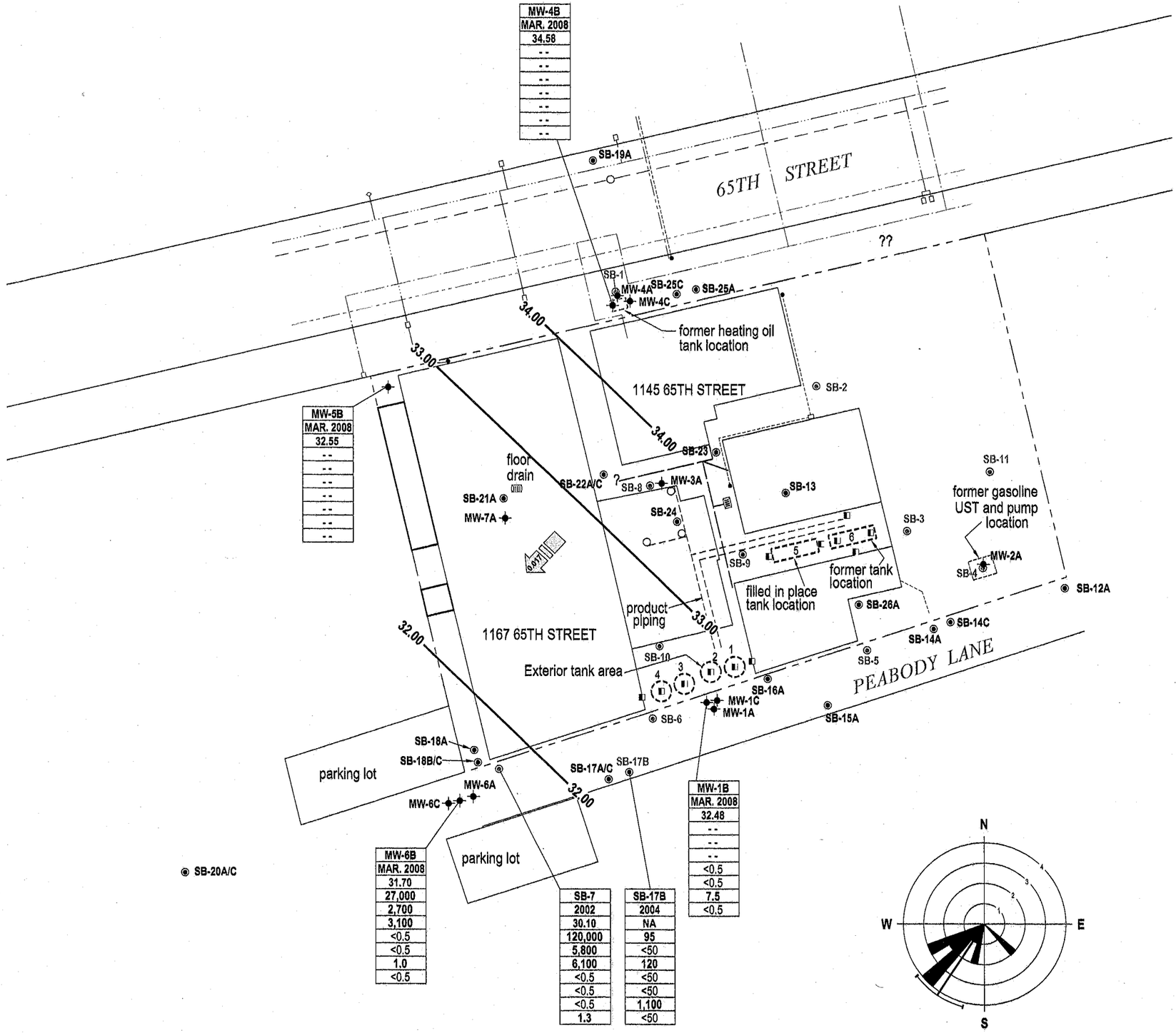
08/23/08

Groundwater Flow and Chemical Concentrations - B Zone



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
- 32.00 — Groundwater elevation contour line in feet above mean sea level (MSL), March 2008
- 0.17 — Groundwater flow direction and gradient
- -- Not analyzed
- NA Not Available / Unknown

Well ID	Monitoring Well Designation
Year	Year of sample
ELEV.	Groundwater elevation in feet above mean sea level (MSL)
TPHd	Concentrations in groundwater in micrograms per liter (µg/L)
TPHss	
TPHg	
PCE	
TCE	
cis-1,2-DCE	
Vinyl Chloride	

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1137 - 1167 65th Street
Oakland, California

FIGURE
5

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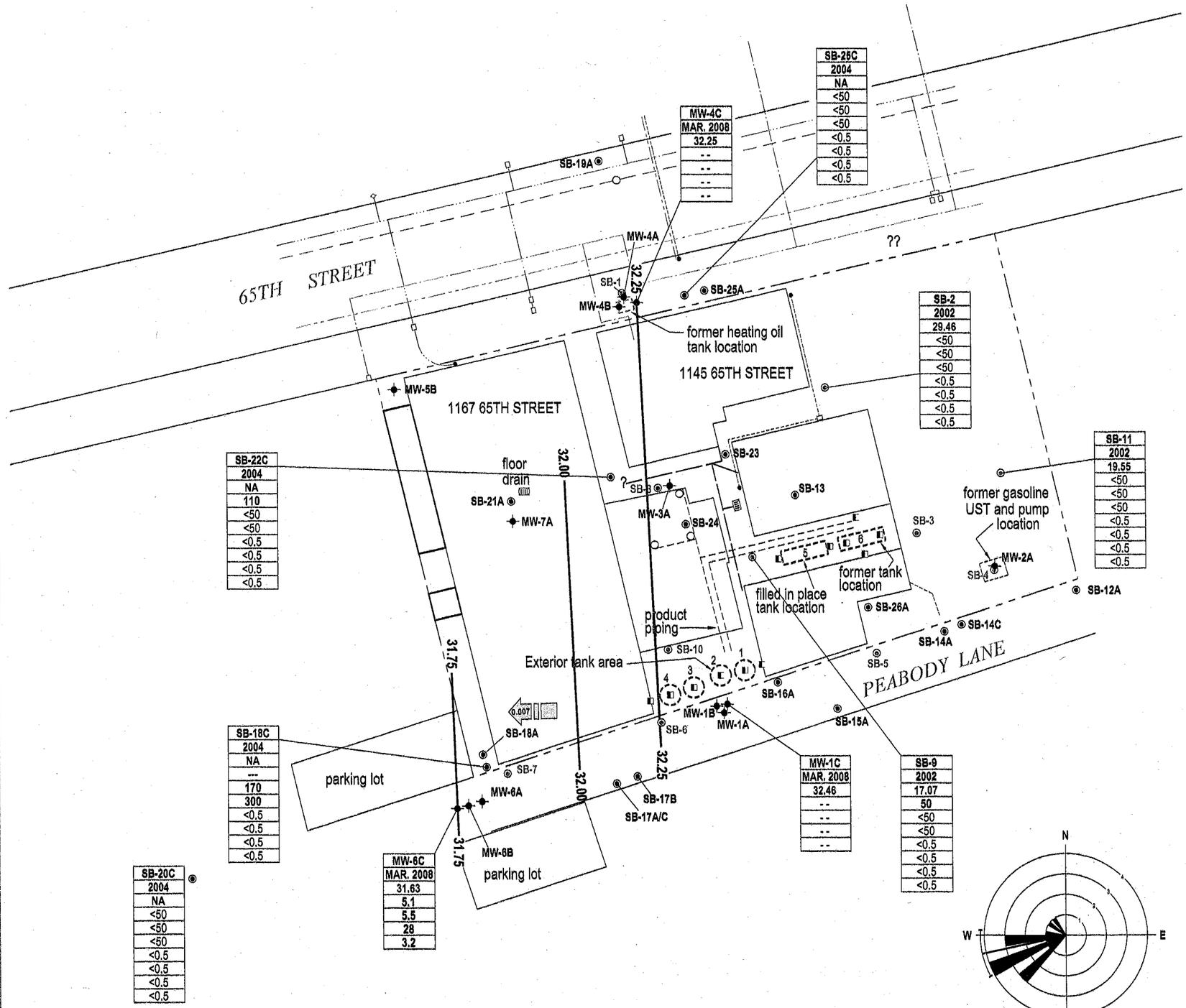
Groundwater Flow and Chemical Concentrations - C Zone

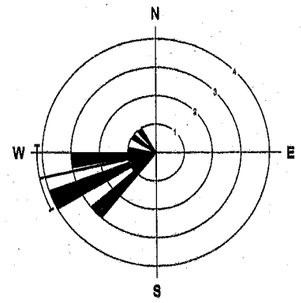


EXPLANATION

- 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
- 32.00 — Groundwater elevation contour line in feet above mean sea level (MSL) March 2008
- 0.007 — Groundwater flow direction and gradient
- -- Not analyzed
- NA Not Available / Unknown

Well ID	Monitoring Well Designation
Year	Year of sample
ELEV.	Groundwater elevation in feet above mean sea level (MSL)
PCE	Concentrations in groundwater in micrograms per liter
TCE	
cis-1,2-DCE	
Vinyl Chloride	

Well ID	Monitoring Well Designation
Year	Year of sample
ELEV.	Groundwater elevation in feet above mean sea level (MSL)
TPHd	Concentrations in groundwater in micrograms per liter (µg/L)
TPHss	
TPHg	
PCE	
TCE	
cis-1,2-DCE	
Vinyl Chloride	



Groundwater Flow Direction

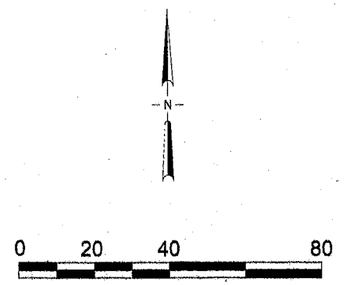


FIGURE **6**

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1137 - 1167 65th Street
Oakland, California

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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)	First Water (ft bgs)
A-Zone Monitoring Wells											
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	7.0
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	4.5
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	4.0
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	NA
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	12.0
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	6.0
B-Zone Monitoring Wells											
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	7.0
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	3.5
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	NA
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	15.5
C-Zone Monitoring Wells											
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	7.0
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	12.0
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	15.0

Abbreviations / Notes

ft = feet

in = inches

ft bgs = feet below grade surface

ft msl = feet above mean sea level

TOC = top of casing

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

Well ID *(TOC)*	Date Sampled	Groundwater Zone	Groundwater Elevation *(ft msl)*	Depth to Water *(ft)*	TPHd	TPHg	TPHmo	TPHss	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
					←				µg/L				→	
MW-1A	6/3/2004	Zone A	35.14	4.50	1,300	1,400	260	2,500	ND<0.5	ND<0.5	2.0	11	ND<5.0	
39.64	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,i
	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,i
	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
	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
	9/7/2007		33.90	5.74	1,800	2,300	ND<250	1,700	ND<0.5	ND<0.5	2.2	4.6	ND<5.0	a,b,c
	12/12/2007		36.53	3.11	2,500	3,100	ND<250	3,400	ND<5.0	ND<5.0	ND<5.0	12	ND<50	a,c
	3/7/2008		**37.23**	**2.41**	**1,700**	**2,200**	**ND<250**	**1,600**	**ND<0.5**	**ND<0.5**	**2.3**	**8.9**	**--**	**a,c**
MW-2A	6/3/2004	Zone A	36.48	4.24	2,900	1,700	ND<250	3,500	ND<0.5	3.5	4.9	5.1	ND<5.0	
40.72	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
	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
	9/7/2007		35.04	5.68	190	240	ND<250	180	ND<0.5	0.98	ND<0.5	ND<0.5	ND<5.0	a,b,c,i
	12/12/2007		37.82	2.90	220	190	360	140	ND<0.5	2.9	ND<0.5	ND<0.5	ND<5.0	a,b,g,e
	3/7/2008		**38.79**	**1.93**	**90**	**100**	**ND<250**	**ND<50**	**ND<0.5**	**1.2**	**ND<0.5**	**ND<0.5**	**--**	**e,b**
MW-3A	6/3/2004	Zone A	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	
40.88	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
	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
	6/15/2005		36.78	4.10	--	--	--	--	--	--	--	--	--	
	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

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

Well ID *(TOC)*	Date Sampled	Groundwater Zone	Groundwater Elevation *(ft msl)*	Depth to Water *(ft)*	TPHd	TPHg	TPHmo	TPHss	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
					← µg/L →									
	9/19/2005		35.93	4.95	--	--	--	--	--	--	--	--	--	
MW-3A	9/20/2005		--	--	55,000	4,700	ND<5,000	8,000	ND<1.0	ND<1.0	2.6	6.8	ND<10	a,b,c,d,i
(cont.)	12/12/2005		36.72	4.16	--	--	--	--	--	--	--	--	--	
	12/13/2005		--	--	34,000	1,100	ND<12,000	1,600	ND<1.7	ND<1.7	ND<1.7	2.3	ND<17	a,b,c,d,h,i
	3/13/2006		37.42	3.46	--	--	--	--	--	--	--	--	--	
	3/14/2006		--	--	21,000	2,200	1,600	3,300	ND<0.5	ND<0.5	1.1	ND<0.5	--	a,c,d,g,h
	6/19/2006		36.48	4.40	--	--	--	--	--	--	--	--	--	
	6/20/2006		--	--	19,000	8,000	1,000	16,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--	c,d,g,h,m
	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	--	a,c,d,g,h,i
	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	--	e,g,h,n
	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	a,c,d,h
	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
	9/7/2007		35.98	4.90	36,000	11,000	1,600	15,000	ND<10	ND<10	ND<10	ND<10	ND<100	a,c,d,h
	12/12/2007		36.54	4.34	41,000	9,500	ND<2,500	13,000	ND<5.0	7.1	ND<5.0	32	ND<50	a,c,h,
	3/7/2008		**36.87**	**4.01**	**26,000**	**3,200**	**1,200**	**2,800**	**ND<2.5**	**ND<2.5**	**ND<2.5**	**2.5**	**--**	**a,h,c**
MW-4A	6/3/2004	Zone A	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	
38.71	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	d
	3/14/2005		36.66	2.05	--	--	--	--	--	--	--	--	--	
	3/15/2005		--	--	210	ND<50	300	ND<50	0.91	1.7	ND<0.5	1.9	ND<5.0	g,d,f,i
	6/15/2005		36.38	2.33	--	--	--	--	--	--	--	--	--	
	6/16/2005		--	--	99	59	ND<250	75	1.0	1.9	ND<0.5	2.1	ND<5.0	j,d,f
	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	--	--	--	--	--	--	--	--	--	
	6/20/2006		--	--	72	ND<50	ND<250	ND<50	0.53	1.1	ND<0.5	1.6	--	f
	9/20/2006		35.10	3.61	160	110	ND<250	88	1.2	2.5	0.61	3.9	--	a,d,f,i
	12/20/2006		36.39	2.32	97	ND<50	ND<250	ND<50	0.99	2.1	0.52	2.9	--	f
	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
	9/7/2007		35.34	3.37	78	ND<50	ND<250	ND<50	0.74	1.3	ND<0.5	1.9	ND<5.0	f
	12/12/2007		36.25	2.46	68	86	ND<250	62	0.62	1.8	ND<0.5	2.4	ND<5.0	j,d,f
	3/7/2008		**36.46**	**2.25**	**71**	**ND<50**	**ND<250**	**ND<50**	**ND<0.5**	**1.0**	**ND<0.5**	**1.5**	**--**	**l,f**
MW-6A	6/3/2004	Zone A	31.98	6.00	3,500	970	340	2,400	ND<0.5	ND<0.5	ND<0.5	2.1	ND<5.0	
37.98	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	a,c
	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	e,d,i
	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	a,i,c,d
	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

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Well ID *(TOC)*	Date Sampled	Groundwater Zone	Groundwater Elevation *(ft msl)*	Depth to Water *(ft)*	TPHd	TPHg	TPHmo	TPHss	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
					←				µg/L				→	
	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
MW-6A	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
(cont.)	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
	6/11/2007		32.95	5.03	6,400	4,300	ND<250	3,700	ND<0.5	ND<0.5	2.1	9.5	--	a,c
	9/7/2007		32.32	5.66	5,800	1,600	ND<250	1,400	ND<1.0	ND<1.0	ND<1.0	3.1	ND<10	a,b,c,d,h
	12/12/2007		33.50	4.48	9,600	3,300	ND<250	4,400	ND<5.0	ND<5.0	ND<5.0	8.4	ND<50	a,c,d
	3/7/2008		**34.30**	**3.68**	**6,200**	**4,100**	**280**	**3,700**	**ND<2.5**	**ND<2.5**	**ND<2.5**	**6.9**	**--**	**a,h,c**
MW-7A	6/3/2004	Zone A	36.08	4.50	--	3,900	--	9,900	ND<5.0	ND<5.0	ND<5.0	6.6	ND<50	
40.58	11/23/2004		--	--	--	--	--	--	--	--	--	--	--	
	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	c,d,h
	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,d,h,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,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,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
	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
	9/7/2007		35.18	5.40	57,000	21,000	ND<2,500	19,000	ND<10	ND<10	ND<10	54	ND<100	a,b,c,d,h
	12/12/2007		35.96	4.62	45,000	13,000	1,400	16,000	ND<25	ND<25	ND<25	ND<25	ND<250	a,c,d
	3/7/2008		**36.28**	**4.30**	**56,000**	**3,800**	**1,600**	**3,500**	**ND<2.5**	**ND<2.5**	**ND<2.5**	**3.7**	**--**	**a,h,i,c**
MW-1B	6/3/2004	Zone B	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	
39.50	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	
	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	d,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	--	--	--	--	--	--	--	--	--	
	12/20/2006		31.60	7.90	--	--	--	--	--	--	--	--	--	
	3/29/2007		24.63	14.87	--	--	--	--	--	--	--	--	--	
	6/11/2007		26.39	13.11	--	--	--	--	--	--	--	--	--	
	9/7/2007		28.42	11.08	--	--	--	--	--	--	--	--	--	
	12/12/2007		30.60	8.90	--	--	--	--	--	--	--	--	--	
	3/7/2008		**32.48**	**7.02**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	
MW-4B	6/3/2004	Zone B	33.52	5.02	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	
38.54	11/23/2004		34.65	3.89	ND<50	ND<50	ND<250	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	

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Well ID (TOC)	Date Sampled	Groundwater Zone	Groundwater Elevation (ft msl)	Depth to Water (ft)	TPHd	TPHg	TPHmo	TPHss	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
					← µg/L →									
	3/14/2005		34.78	3.76	--	--	--	--	--	--	--	--	--	
MW-4B	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
(cont.)	6/15/2005		33.98	4.56	--	--	--	--	--	--	--	--	--	
	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	i
	9/19/2005		32.57	5.97	--	--	--	--	--	--	--	--	--	
	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	i
	12/12/2005		33.65	4.89	--	--	--	--	--	--	--	--	--	
	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		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	--	--	--	--	--	--	--	--	--	
	9/7/2007		33.22	5.32	--	--	--	--	--	--	--	--	--	
	12/12/2007		33.85	4.69	--	--	--	--	--	--	--	--	--	
	3/7/2008		**34.58**	**3.96**	--	--	--	--	--	--	--	--	--	
MW-5B	6/3/2004	Zone B	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	
38.98	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	--	--	--	--	--	--	--	--	--	
	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		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	--	--	--	--	--	--	--	--	--	
	9/7/2007		30.02	8.96	--	--	--	--	--	--	--	--	--	
	12/12/2007		30.88	8.10	--	--	--	--	--	--	--	--	--	
	3/7/2008		**32.55**	**6.43**	--	--	--	--	--	--	--	--	--	
MW-6B	6/3/2004	Zone B	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	
37.66	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
	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

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

Well ID (TOC)	Date Sampled	Groundwater Zone	Groundwater Elevation (ft msl)	Depth to Water (ft)	TPHd	TPHg	TPHmo	TPHss	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
					← µg/L →									
	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
MW-6B	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
(cont.)	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
	9/7/2007		28.95	8.71	32,000	4,500	ND<1,200	3,800	ND<5.0	ND<5.0	ND<5.0	11	ND<50	a,b,c,d,h
	12/12/2007		30.00	7.66	36,000	12,000	1,000	15,000	ND<25	ND<25	ND<25	ND<25	ND<250	a,h,c,d
	3/7/2008		**31.70**	**5.96**	**27,000**	**3,100**	**1,100**	**2,700**	**ND<2.5**	**ND<2.5**	**ND<2.5**	**6.1**	--	**a,h,k**
MW-1C	6/3/2004	Zone C	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	
39.49	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	--	--	--	--	--	--	--	--	--	
	9/7/2007		29.60	9.89	--	--	--	--	--	--	--	--	--	
	12/12/2007		30.61	8.88	--	--	--	--	--	--	--	--	--	
	3/7/2008		**32.46**	**7.03**	--	--	--	--	--	--	--	--	--	
MW-4C	6/3/2004	Zone C	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	
38.50	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	--	--	--	--	--	--	--	--	--	
	9/7/2007		30.20	8.30	--	--	--	--	--	--	--	--	--	
	12/12/2007		31.10	7.40	--	--	--	--	--	--	--	--	--	
	3/7/2008		**32.25**	**6.25**	--	--	--	--	--	--	--	--	--	

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

Well ID *(TOC)*	Date Sampled	Groundwater Zone	Groundwater Elevation *(ft msl)*	Depth to Water *(ft)*	TPHd	TPHg	TPHmo	TPHss	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes
					←				µg/L				→	
MW-6C	6/3/2004	Zone C	27.89	9.70	240	160	ND<250	340	ND<0.5	ND<0.5	ND<0.5	1.1	ND<5.0	
37.59	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	--	--	--	--	--	--	--	--	--	
	9/7/2007		28.92	8.67	--	--	--	--	--	--	--	--	--	
	12/12/2007		29.94	7.65	--	--	--	--	--	--	--	--	--	
	3/7/2008		**31.63**	**5.96**	--	--	--	--	--	--	--	--	--	

Abbreviations:

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

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

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

n = 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 Zone	Groundwater Elevation (ft amsl)	Depth to Water (ft)	Chloroethane	Chloroform	1,1,2,2-Tetrachloroethane	(PCE) Tetrachloroethene	(TCE) Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride	Notes/Other VOCs
					← µg/L →											
MW-1A	6/3/2004	**Zone A**	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	6.3	
39.64	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	h,i
	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	h,i
	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	i
	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	
	9/7/2007		33.90	5.74	ND<0.5	ND<0.5	ND<0.5	25	15	ND<0.5	17	1.4	2.0	ND<0.5	2.3	
	12/12/2007		36.53	3.11	ND<0.5	ND<0.5	ND<0.5	15	10	ND<0.5	14	1.2	2.1	ND<0.5	1.5	
	3/7/2008		**37.23**	**2.41**	**ND<0.5**	**ND<0.5**	**17**	**9.0**	**9.3**	**1.3**	**13**	**1.2**	**1.7**	**ND<0.5**	**1.7**	
MW-2A	6/3/2004	**Zone A**	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	
40.72	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	
	3/14/2005		39.02	1.70	--	--	--	--	--	--	--	--	--	--	--	
	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	i
	6/15/2005		37.91	2.81	--	--	--	--	--	--	--	--	--	--	--	
	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	i
	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	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	i
	3/13/2006		40.33	0.39	--	--	--	--	--	--	--	--	--	--	--	
	6/19/2006		37.31	3.41	--	--	--	--	--	--	--	--	--	--	--	
	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	--	--	--	--	--	--	--	--	--	--	--	
	9/7/2007		35.04	5.68	--	--	--	--	--	--	--	--	--	--	--	
	12/12/2007		37.82	2.90	--	--	--	--	--	--	--	--	--	--	--	
	3/7/2008		**38.79**	**1.93**	--	--	--	--	--	--	--	--	--	--	--	
MW-3A	6/3/2004	**Zone A**	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	a
40.88	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	
	3/14/2005		37.28	3.60	--	--	--	--	--	--	--	--	--	--	--	
	3/15/2005		--	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	43	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	j, i, 1,3-dichlorobenzene (1.2) 1,4-dichlorobenzene (5.7)
	6/15/2005		36.78	4.10	--	--	--	--	--	--	--	--	--	--	--	
	6/16/2005		--	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	52	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	h,i, 1,3-dichlorobenzene (1.5) 1,4-dichlorobenzene (8.3)
	9/19/2005		35.93	4.95	--	--	--	--	--	--	--	--	--	--	--	
	9/20/2005		--	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	51	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	i, 1,4-dichlorobenzene (7.6) 1,3- dichlorobenzene (1.4)
	12/12/2005		36.72	4.16	--	--	--	--	--	--	--	--	--	--	--	
	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	h,i, 1,4-dichlorobenzene (7.2)
	3/13/2006		37.42	3.46	--	--	--	--	--	--	--	--	--	--	--	
	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	i, chlorobenzene (3.7) 1,4-dichlorobenzene (7.2)
	6/19/2006		36.48	4.40	--	--	--	--	--	--	--	--	--	--	--	
	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	h, chlorobenzene (9.8) 1,4-dichlorobenzene (7.3)
	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	h,i, chlorobenzene (31)

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

Well ID (TOC)	Date Sampled	Groundwater Zone	Groundwater Elevation (ft amsl)	Depth to Water (ft)	Chloroethane	Chloroform	1,1,2,2-Tetrachloroethane	(PCE) Tetrachloroethene	(TCE) Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride	Notes/Other VOCs
					← µg/L →											
MW-3A (cont.)	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	h, chlorobenzene (31) 1,4-dichlorobenzene (5.6)
	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	chlorobenzene (55) 1,4- dichlorobenzene (6.0)
	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	h, chlorobenzene (68)
	9/7/2007		35.98	4.90	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	h, chlorobenzene (82)
	12/12/2007		36.54	4.34	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 (72) 1,4- dichlorobenzene (5.6)
	3/7/2008		**36.87**	**4.01**	**ND<1.0**	**ND<1.0**	**ND<1.0**	**ND<1.0**	**ND<1.0**	**19**	**ND<1.0**	**ND<1.0**	**ND<1.0**	**ND<1.0**	**ND<1.0**	**h, chlorobenzene (74)**
MW-4A	6/3/2004	**Zone A**	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	
38.71	11/23/2004		37.13	1.58	ND<0.5	ND<0.5	ND<0.5	1.9	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	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	
	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	
	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	i
	3/13/2006		36.75	1.96	--	--	--	--	--	--	--	--	--	--	--	
	6/19/2006		36.15	2.56	--	--	--	--	--	--	--	--	--	--	--	
	9/20/2006		35.10	3.61	--	--	--	--	--	--	--	--	--	--	--	
	12/20/2006		36.39	2.32	--	--	--	--	--	--	--	--	--	--	--	
	3/29/2007		36.46	2.25	--	--	--	--	--	--	--	--	--	--	--	
	6/11/2007		36.14	2.57	--	--	--	--	--	--	--	--	--	--	--	
	9/7/2007		35.34	3.37	--	--	--	--	--	--	--	--	--	--	--	
	12/12/2007		36.25	2.46	--	--	--	--	--	--	--	--	--	--	--	
	3/7/2008		**36.46**	**2.25**	--	--	--	--	--	--	--	--	--	--	--	
MW-6A	6/3/2004	**Zone A**	31.98	6.00	4.7	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	
37.98	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	
	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	i
	6/15/2005		33.28	4.70	6.9	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	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	1.1	0.82	ND<0.5	ND<0.5	h,i
	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	h
	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	1.0	1.1	ND<0.5	1.3	h
	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	1.6	1.9	0.57	ND<0.5	i
	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	ND<0.5	ND<0.5	h
	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	0.69	0.71	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	
	9/7/2007		32.32	5.66	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	h
	12/12/2007		33.50	4.48	4.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
	3/7/2008		**34.30**	**3.68**	**1.0**	**ND<0.5**	**9.5**	**ND<0.5**	**ND<0.5**	**2.4**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**h**
MW-7A	6/3/2004	**Zone A**	36.08	4.50	ND<0.5	ND<0.5	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	
40.58	11/23/2004		--	--	--	--	--	--	--	--	--	--	--	--	--	
	3/14/2005		37.03	3.55	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
	6/15/2005		36.41	4.17	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	h,i
	9/19/2005		35.25	5.33	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	h,i
	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	h,i
	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	h,i
	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	h,i
	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	h

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

Well ID (TOC)	Date Sampled	Groundwater Zone	Groundwater Elevation (ft amsl)	Depth to Water (ft)	Chloroethane	Chloroform	1,1,2,2-Tetrachloroethane	(PCE) Tetrachloroethene	(TCE) Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride	Notes/Other VOCs
					← µg/L →											
	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	
MW-7A	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	j,h,i
(cont.)	9/7/2007		35.18	5.40	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
	12/12/2007		35.96	4.62	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	chlorobenzene (0.70)
	3/7/2008		**36.28**	**4.30**	**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,i**
MW-1B	6/3/2004	**Zone B**	25.10	14.40	ND<0.5	8.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.9	ND<0.5	8.1	7.9	ND<0.5	
39.50	11/23/2004		26.24	13.26	ND<0.5	6.2	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	3.8	ND<0.5	5.2	12	ND<0.5	i
	6/15/2005		31.87	7.63	ND<0.5	1.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.3	ND<0.5	8.8	9.9	ND<0.5	i
	9/19/2005		30.35	9.15	0.98	0.87	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.0	ND<0.5	7.1	11	ND<0.5	i
	12/12/2005		30.39	9.11	1.5	0.75	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.7	ND<0.5	7.0	12	ND<0.5	i
	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	6.1	ND<0.5	6.8	5.2	ND<0.5	i
	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	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	9.9	ND<0.5	11	10	ND<0.5	i
	12/20/2006		31.60	7.90	2.5	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	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	8.5	ND<0.5	8.0	6.5	ND<0.5	i
	9/7/2007		28.42	11.08	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.8	ND<0.5	8.6	7.0	ND<0.5	
	12/12/2007		30.60	8.90	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11	ND<0.5	7.2	7.5	ND<0.5	
	3/7/2008		**32.48**	**7.02**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**7.5**	**ND<0.5**	**8.8**	**5.6**	**ND<0.5**	
MW-4B	6/3/2004	**Zone B**	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	
38.54	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	
	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	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	i
	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	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	i
	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	--	--	--	--	--	--	--	--	--	--	--	
	9/7/2007		33.22	5.32	--	--	--	--	--	--	--	--	--	--	--	i
	12/12/2007		33.85	4.69	--	--	--	--	--	--	--	--	--	--	--	
	3/7/2008		**34.58**	**3.96**	--	--	--	--	--	--	--	--	--	--	--	
MW-5B	6/3/2004	**Zone B**	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	
38.98	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	
	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	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	i
	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	
	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	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	--	--	--	--	--	--	--	--	--	--	--	

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

Well ID (TOC)	Date Sampled	Groundwater Zone	Groundwater Elevation (ft amsl)	Depth to Water (ft)	Chloroethane	Chloroform	1,1,2,2-Tetrachloroethane	(PCE) Tetrachloroethene	(TCE) Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride	Notes/Other VOCs
					←					µg/L					→	
MW-5B	9/7/2007		30.02	8.96	--	--	--	--	--	--	--	--	--	--	--	
(cont.)	12/12/2007		30.88	8.10	--	--	--	--	--	--	--	--	--	--	--	
	3/7/2008		**32.55**	**6.43**	–	–	–	–	–	–	–	–	–	–	–	
MW-6B	6/3/2004	**Zone B**	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	
37.66	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	0.89	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	1.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.5	i
	6/15/2005		30.17	7.49	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.4	ND<0.5	ND<0.5	0.66	ND<0.5	0.55	
	9/19/2005		28.83	8.83	1.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0	1.2	ND<0.5	1.1	ND<0.5	1.1	
	12/12/2005		29.85	7.81	2.3	ND<0.5	11	ND<0.5	ND<0.5	ND<0.5	1.3	ND<0.5	1.3	ND<0.5	ND<0.5	h,i
	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	h
	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	0.52	ND<0.5	ND<0.5	h
	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	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	1.2	ND<0.5	0.69	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	0.76	ND<0.5	ND<0.5	
	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	j,h
	9/7/2007		28.95	8.71	1.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.9	ND<0.5	0.66	ND<0.5	ND<0.5	h
	12/12/2007		30.00	7.66	0.77	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.4	ND<0.5	0.62	ND<0.5	ND<0.5	h
	3/7/2008		**31.70**	**5.96**	**1.1**	**ND<0.5**	**16**	**ND<0.5**	**ND<0.5**	**1.2**	**1.0**	**ND<0.5**	**0.58**	**ND<0.5**	**ND<0.5**	**h**
MW-1C	6/3/2004	**Zone C**	30.07	9.42	ND<0.5	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	
39.49	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	
	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	i
	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	
	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	i
	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	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	--	--	--	--	--	--	--	--	--	--	--	
	9/7/2007		29.60	9.89	--	--	--	--	--	--	--	--	--	--	--	
	12/12/2007		30.61	8.88	--	--	--	--	--	--	--	--	--	--	--	
	3/7/2008		**32.46**	**7.03**	–	–	–	–	–	–	–	–	–	–	–	
MW-4C	6/3/2004	**Zone C**	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	
38.50	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	
	3/14/2005		33.15	5.35	--	--	--	--	--	--	--	--	--	--	--	
	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	i
	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	
	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	
	12/12/2005		30.00	8.50	--	--	--	--	--	--	--	--	--	--	--	
	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	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	--	--	--	--	--	--	--	--	--	--	--	
	9/7/2007		30.20	8.30	--	--	--	--	--	--	--	--	--	--	--	
	12/12/2007		31.10	7.40	--	--	--	--	--	--	--	--	--	--	--	
	3/7/2008		**32.25**	**6.25**	–	–	–	–	–	–	–	–	–	–	–	

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

Well ID (TOC)	Date Sampled	Groundwater Zone	Groundwater Elevation (ft amsl)	Depth to Water (ft)	Chloroethane	Chloroform	1,1,2,2-Tetrachloroethane	(PCE) Tetrachloroethene	(TCE) Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride	Notes/Other VOCs
					←					µg/L					→	
MW-6C	6/3/2004	**Zone C**	27.89	9.70	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	
37.59	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	
	3/14/2005		31.79	5.80	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	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	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	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	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	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	3.7	4.6	ND<0.5	23	0.76	1.0	ND<0.5	9.4	
	12/20/2006		30.29	7.30	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	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	6.1	6.4	ND<0.5	26	0.99	0.85	ND<0.5	4.0	
	9/7/2007		28.92	8.67	ND<0.5	ND<0.5	ND<0.5	7.0	6.9	ND<0.5	32	0.99	0.90	ND<0.5	4.2	
	12/12/2007		29.94	7.65	ND<0.5	ND<0.5	ND<0.5	5.0	5.2	ND<0.5	29	0.84	0.87	ND<0.5	3.8	
	3/7/2008		**31.63**	**5.96**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**5.1**	**5.5**	**ND<0.5**	**28**	**0.90**	**0.78**	**ND<0.5**	**3.2**	

Abbreviations:

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

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

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:

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

Table 4. Grab Groundwater Sampling Details - John Nady, 1137-1167 65th Street, Oakland, California

Boring ID	Boring Date	Borehole Depth (ft bgs)	Borehole Diameter (inches)	Casing Diameter (in)	Screening Interval (ft bgs)	Screen Size (in)	First Water (ft bgs)
A-Zone Grab Groundwater Samples / Temporary Samplng Wells							
SB-12A	1/13/2004	13.0	2.5	---	8 to 13	---	4.5
SB-14A	1/9/2004	5.0	2.375	---	2 to 7	---	4.0
SB-15A	1/12/2004	13.0	2.5	---	8 to 13	---	4.0
SB-16A	1/12/2004	13.0	2.5	---	8 to 13	---	4.0
SB-18A	1/6/2004	20.0	2.375	---	7 to 12	---	1.5
SB-20A	1/13/2004	13.0	2.5	---	8 to 13	---	8.0
SB-21A	1/20/2004	9.5	3	---	4.5 to 9.5	---	8.5
SB-25A	1/8/2004	10.0	2.375	---	5 to 10	---	5.0
SB-26A	1/7/2004	13.0	2.375	---	8 to 13	---	4.0
SB-1	11/26/2002	12.0	2	1	7 to 12	0.01	3.45
SB-4	11/26/2002	12.0	2	1	7 to 12	0.01	6.10
SB-6	11/26/2002	12.0	2	1	7 to 12	0.01	11.25
SB-8	11/26/2002	9.0	2	1	4 to 9	0.01	4.70
SB-10	11/26/2002	12.0	2	1	7 to 12	0.01	11.60
B-Zone Grab Groundwater Samples / Temporary Sampling Wells							
SB-17B	1/8/2004	22.0	2.375	---	17 to 22	---	16.5
SB-7	11/26/2002	18.0	2	1	13 to 18	0.01	10.30
C-Zone Grab Groundwater Samples / Temporary Sampling Wells							
SB-18B	1/9/2004	31.0	2.375	---	26 to 31	---	25.0
SB-18C	1/9/2004	40.0	2.375	---	35 to 40	---	34.0
SB-20C	1/13/2004	40.0	2.5	---	29 to 34	---	31.0
SB-22C	1/7/2004	46.0	2.375	---	41 to 46	---	---
SB-25C	1/8/2004	34.0	2.375	---	29 to 34	---	29.0
SB-2	11/26/2002	36.0	2	1	31 to 36	0.01	29.50
SB-9	11/26/2002	29.0	2	1	24 to 29	0.01	25.00
SB-11	11/26/2002	30.0	2	1	25 to 30	0.01	29.30

Abbreviations / Notes

ft = feet

in = inches

ft bgs = feet below grade surface

ft msl = feet above mean sea level

Table 5. Grab Groundwater Results: Petroleum Hydrocarbons - John Nady, 1137-1167 65th Street, Oakland, California

Boring ID *(TOC)*	Date Sampled	Groundwater Zone	Groundwater Elevation *(ft msl)*	Depth to Water (ft)	TPHmo	TPHd	TPHss	TPHg	Notes
					← µg/L →				
SB-1	11/25/2002	Zone A	35.39	3.45	---	---	---	---	
(38.84)	11/26/2002		35.44	3.40	**7,500**	**2,000**	<50	58	
SB-2	11/25/2002	Zone C	11.61	29.50	---	---	---	---	
(41.11)	11/26/2002		29.46	11.65	<250	<50	<50	<50	
SB-4	11/25/2002	Zone A	34.02	6.90	---	---	---	---	
(40.92)	11/26/2002		34.82	6.10	---	---	---	---	SPH
SB-6	11/25/2002	Zone A	28.24	11.25	---	---	---	---	
(39.49)	11/26/2002		32.19	7.30	620	**23,000**	**7,800**	**8,700**	a,b,c
SB-7	11/25/2002	Zone B	28.20	10.30	---	---	---	---	
(38.50)	11/26/2002		30.10	8.40	<25,000	**120,000**	**5,800**	**6,100**	a,b,c
SB-8	11/25/2002	Zone A	36.30	4.70	---	---	---	---	
(41.00)	11/26/2002		36.55	4.65	<250,000	**1,200,000**	**100,000**	**110,000**	a,b,c
SB-9	11/25/2002	Zone C	16.02	25.00	---	---	---	---	
(41.02)	11/26/2002		17.07	23.95	300	50	<50	<50c	
SB-10	11/25/2002	Zone A	29.27	11.60	---	---	---	---	
(40.87)	11/26/2002		31.12	9.75	<250	350	200	260a,c	
SB-11	11/25/2002	Zone C	12.15	29.30	---	---	---	---	
(41.45)	11/26/2002		19.55	21.90	<250	<50	<50	<50	
SB-12A	1/13/2004	Zone A	---	4.5	300	130	<50	230	h,c,e,d,f
SB-14A	1/9/2004	Zone A	---	4.0	<250	<50	<50	<50	c
SB-14C	1/9/2004	Zone C	---	NW	---	---	---	---	
SB-15A	1/12/2004	Zone A	---	4.0	290	**2,400**	**2,500**	**2,700**	a,c,d
SB-16A	1/12/2004	Zone A	---	4.0	**9,800**	**23,000**	**1,500**	**1,700**	a,b,c,d,e,i

Table 5. Grab Groundwater Results: Petroleum Hydrocarbons - John Nady, 1137-1167 65th Street, Oakland, California

Boring ID *(TOC)*	Date Sampled	Groundwater Zone	Groundwater Elevation *(ft msl)*	Depth to Water (ft)	TPHmo	TPHd	TPHss	TPHg	Notes
					← µg/L →				
SB-17A	1/13/2004	Zone A	---	NW	---	---	---	---	
SB-17B	1/8/2004	Zone B	---	16.5	<250	95	<50	120	c,d,f,g
SB-17C	1/13/2004	Zone C	---	NW	---	---	---	---	
SB-18A	1/6/2004	Zone A	---	1.5	<2,500	**11,000**	**2,100**	**3,900**	d,b
SB-18B*	1/9/2004	Zone C	---	25.0	<250	92	<50	250	g,h
SB-18C	1/9/2004	Zone C	---	34.0	---	---	170	300	c,g,h
SB-19A	1/13/2004	Zone A	---	NW	---	---	---	---	
SB-20A	1/13/2004	Zone A	---	8.0	<250	**1,400**	**610**	**680**	b,d,j
SB-20C	1/13/2004	Zone C	---	31.0	<250	<50	<50	<50	c
SB-21A	1/20/2004	Zone A	---	8.5	<25,000	**110,000**	**5,600**	**6,100**	a,b,i,k
SB-22A	1/7/2004	Zone A	---	NW	---	---	---	---	
SB-22C	1/7/2004	Zone C	---	--	<250	110	<50	<50	c,f
SB-25A	1/8/2004	Zone A	---	5.0	<250	64	<50	<50	c,f,g
SB-25C	1/8/2004	Zone C	---	29.0	<250	<50	<50	<50	c
SB-26A	1/7/2004	Zone A	---	4.0	**1,000**	**5,300**	**2,600**	**3,000**	c,d,e
Previous SCI Samples									
Interior	2/20/2002		---	---	---	**94,000**	**13,000**	**21,000**	
Exterior	2/25/2002		---	---	---	**82,000**	**42,000**	**66,000**	

Table 5. Grab Groundwater Results: Petroleum Hydrocarbons - John Nady, 1137-1167 65th Street, Oakland, California

Boring ID *(TOC)*	Date Sampled	Groundwater Zone	Groundwater Elevation *(ft msl)*	Depth to Water (ft)	TPHmo	TPHd	TPHss	TPHg	Notes
					← µg/L →				

Abbreviations:

µg/L = micrograms per liter = parts per billion = ppb

(TOC) = Top of temporary casing in feet above mean seal level.

ft msl = Feet above mean sea level.

TPHmo = Total petroleum hydrocarbons as motor oil by EPA Method 8015C with silica gel cleanup

TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015C with silica gel cleanup

TPHss = Total petroleum hydrocarbons as Stoddard solvent by EPA Method 8021B/8015Cm

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8021B/8015Cm

--- = Not available, not analyzed, or does not apply.

< n = Chemical not present at a concentration in excess of detection limit.

Notes:

Grab groundwater samples may have been collected without protection against cross contamination between groundwater zones; may not be discrete.

* = Sample SB-18B collected in the C-zone

a = Laboratory note: TPH pattern that does not appear to be derived from gasoline (Stoddard solvent/mineral spirit?)

b = Laboratory note: lighter than water immiscible sheen/product is present

c = Laboratory note: liquid sample that contains greater than ~2 vol. % sediment

d = Laboratory note: gasoline range compounds are significant

e = Laboratory note: oil range compounds are significant

f = Laboratory note: diesel range compounds are significant; no recognizable pattern

g = Laboratory note: one to a few isolated non-target peaks present

h = Laboratory note: unmodified or weakly modified gasoline is significant

i = Laboratory note: sample diluted due to high organic content

j = Laboratory note: strongly aged gasoline or diesel range compounds are significant

k = Laboratory note: stoddard solvent/mineral spirit

Table 6. Grab Groundwater Results: Volatile Organic Compounds - John Nady, 1137-1167 65th Street, Oakland, California

Boring ID *(TOC)*	Date Sampled	Groundwater Zone	Groundwater Elevation *(ft msl)*	Depth to Water *(ft)*	Benzene	Toulene	Ethylbenzene	Xylenes	Chloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride	Notes
					µg/L													
Soil Boring Grab Groundwater Samples																		
SB-1	11/25/2002	Zone A	35.39	3.45	---	---	---	---	---	---	---	---	---	---	---	---	---	
(38.84)	11/26/2002		35.44	3.40	1.7	3.2	0.55	3.6	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	j,o
SB-2	11/25/2002	Zone C	11.61	29.50	---	---	---	---			---	---		---			---	
(41.11)	11/26/2002		29.46	11.65	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	o
SB-4	11/25/2002	Zone A	34.02	6.90	---	---	---	---	---	---	---	---	---	---	---	---	---	
(40.92)	11/26/2002		34.82	6.10	---	---	---	---	---	---	---	---	---	---	---	---	---	SPH
SB-6	11/25/2002	Zone A	28.24	11.25	---	---	---	---	---	---	---	---	---	---	---	---	---	
(39.49)	11/26/2002		32.19	7.30	2.1	1.2	<0.5	0.55	3.8	<0.5	<0.5	<0.5	<0.5	1.2	1.4	<0.5	0.90	a,n,o
SB-7	11/25/2002	Zone B	28.20	10.30	---	---	---	---			---	---		---			---	
(38.50)	11/26/2002		30.10	8.40	<0.5	0.74	<0.5	3	**16**	16	<0.5	<0.5	<0.5	<0.5	1.7	<0.5	1.3	a,n,o
SB-8	11/25/2002	Zone A	36.30	4.70	---	---	---	---	---	---	---	---	---	---	---	---	---	
(41.00)	11/26/2002		36.55	4.65	<10	<10	<10	<10	<10	<10	<10	<10	**20**	<10	<10	<10	<10	a,n,o
SB-9	11/25/2002	Zone C	16.02	25.00	---	---	---	---	---	---	---	---	---	---	---	---	---	
(41.02)	11/26/2002		17.07	23.95	<0.5	0.88	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	o
SB-10	11/25/2002	Zone A	29.27	11.60	---	---	---	---	---	---	---	---	---	---	---	---	---	
(40.87)	11/26/2002		31.12	9.75	<2.5	3.4	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	170	19	<2.5	**45**	a,o
SB-11	11/25/2002	Zone C	12.15	29.30	---	---	---	---	---	---	---	---	---	---	---	---	---	
(41.45)	11/26/2002		---	21.90	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
SB-12A	1/13/2004	Zone A	---	4.5	<0.5	2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	a,i,o

Table 6. Grab Groundwater Results: Volatile Organic Compounds - John Nady, 1137-1167 65th Street, Oakland, California

Boring ID *(TOC)*	Date Sampled	Groundwater Zone	Groundwater Elevation *(ft msl)*	Depth to Water *(ft)*	Benzene	Toulene	Ethylbenzene	Xylenes	Chloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride	Notes
					µg/L													
SB-14A	1/9/2004	Zone A	---	4.0	0.58	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	i,o
SB-14C	1/9/2004	Zone C	---	NW	---	---	---	---	---	---	---	---	---	---	---	---	---	
SB-15A	1/12/2004	Zone A	---	4.0	<0.5	<0.5	<0.5	**17**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	e,i,o
SB-16A	1/12/2004	Zone A	---	4.0	0.65	0.51	1.3	7.7	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	e, h,i,p,n,o
SB-17A	1/13/2004	Zone A	---	NW	---	---	---	---	---	---	---	---	---	---	---	---	---	
SB-17B	1/8/2004	Zone B	---	16.5	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	<50	<50	**1,100**	<50	<50	<50	f,i,o
SB-17C	1/13/2004	Zone C	---	NW	---	---	---	---	---	---	---	---	---	---	---	---	---	
SB-18A	1/6/2004	Zone A	---	1.5	<5.0	<5.0	<5.0	11	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	e,h,p,n
SB-18B*	1/9/2004	Zone C	---	25.0	0.54	<0.5	<0.5	0.64	<100	<100	**630**	**430**	<100	**1,800**	<100	<100	<100	a,f
SB-18C	1/9/2004	Zone C	---	34.0	0.82	<0.5	<0.5	1.3	<50	<50	**300**	250	<50	**1,200**	<50	<50	<50	a,f,i,o
SB-19A	1/13/2004	Zone B	---	NW	---	---	---	---	---	---	---	---	---	---	---	---	---	
SB-20A	1/13/2004	Zone A	---	8.0	<0.5	<0.5	<0.5	3.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	g,h,n
SB-20C	1/13/2004	Zone C	---	31.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	i,o
SB-21A	1/20/2004	Zone A	---	8.5	<5.0	<5.0	<5.0	<5.0	<50	<50	<50	<50	<50	<50	<50	<50	<50	e,h,p.n
SB-22A	1/7/2004	Zone A	---	NW	---	---	---	---	---	---	---	---	---	---	---	---	---	
SB-22C	1/7/2004	Zone C	---	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	i, o
SB-25A	1/8/2004	Zone A	---	5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	i, o
SB-25C	1/8/2004	Zone C	---	29.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	i, o
SB-26A	1/7/2004	Zone A	---	4.0	6.2	<5.0	<5.0	**13**	<0.5	<0.5	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<5.0	i,e,o,p

Table 6. Grab Groundwater Results: Volatile Organic Compounds - John Nady, 1137-1167 65th Street, Oakland, California

Boring ID (TOC)	Date Sampled	Groundwater Zone	Groundwater Elevation (ft msl)	Depth to Water (ft)	Benzene	Toulene	Ethylbenzene	Xylenes	Chloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride	Notes
					µg/L													
Trip Blank	11/26/2002		---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Previous SCI Samples																		
Interior	2/20/2002		---	---	**47**	<5.0	9.4	**114**			<5.0	<5.0		<5.0			<5.0	
Exterior	2/20/2002		---	---	<7.1	<7.1	<7.1	**24**			83	<7.1		9.6			<7.1	

Abbreviations:

µg/L = micrograms per liter = parts per billion = ppb

Volatile organic compounds by EPA Method 8260B

--- = Not available, not analyzed, or does not apply

< n = Chemical not present at a concentration in excess of detection limit.

(TOC) = Top of temporary casing in feet above mean seal level.

ft msl = Feet above mean sea level.

Grab groundwater samples may have been collected without protection against cross contamination between groundwater zones; may not be discrete.

* = Sample 18B collected in the C-zone

Notes:

a = TPH pattern that does not appear to be derived from gasoline

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

n = Laboratory note: lighter than water immiscible sheen/product is present

o = Laboratory note: liquid sample that contains greater than `2vol.. % sediment

p = Laboratory note: sample diluted due to high organic content

q = Laboratory note: reporting limit rasied due to insufficient sample amount

CONESTOGA-ROVERS
& ASSOCIATES

APPENDIX A

Standard Field Procedure

STANDARD FIELD PROCEDURE
GROUNDWATER MONITORING AND SAMPLING

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

Groundwater Elevation Monitoring

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

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

Groundwater Purging and Sampling

Prior to groundwater purging and sampling, the historical analytical data of each monitoring well shall be reviewed to determine the order in which the wells should be purged and sampled (i.e. cleanest to dirtiest). No purging or groundwater sampling shall be performed on wells with a measurable thickness of NAPL or floating NAPL globules. If sheen is observed, the well should be purged and a groundwater sample collected only if no NAPL is present. Wells shall be purged either by hand using a disposal or PVC bailer or by using an aboveground pump (e.g. peristaltic or Wattera™) or down-hole pump (e.g. Grundfos™ or DC Purger pump).

Groundwater wells shall be purged approximately three to ten well-casing volumes (depending on the regulatory agency requirements) or until groundwater parameters of temperature, pH, and conductivity have stabilized to within 10% for three consecutive readings. Temperature, pH, and conductivity shall be measured and recorded at least once per well casing volume removed. The total volume of groundwater removed shall be recorded along with any other notable physical characteristic such as color and odor. If required, field parameters such as turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) shall also be measured prior to collection of each groundwater sample.

Groundwater samples shall be collected after the well has been purged. If the well is slow to recharge, a sample shall be collected after the water column is allowed to recharge to 80% of the pre-purging static water level. If the well does not recover to 80% in 2 hours, a sample shall be collected once there is enough groundwater in the well. Groundwater samples shall be collected using clean

disposable bailers or pumps (if an operating remediation system exists on site and the project manager approves of its use for sampling) and shall be decanted into clean containers supplied by the analytical laboratory. New latex gloves and disposable tubing or bailers shall be used for sampling each well. If a PVC bailer or down-hole pump is used for groundwater purging, it shall be decontaminated before purging each well by using soapy water consisting of Liqui-nox™ or Alconox™ followed by one rinse of clean tap water and then two rinses of distilled water. If a submersible pump with non-dedicated discharge tubing is used for groundwater purging, both the inside and outside of pump and discharge tubing shall be decontaminated as described above.

Sample Handling

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

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

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

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

Waste Handling and Disposal

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