

20315



Alameda County

APR 10 2007

Environmental Health

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Kennesaw
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Mr. Amir K. Gholami, REHS
Hazardous Materials Specialist
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Re: First Semi-Annual Groundwater Monitoring & Sampling Report
UPS – Oakland Hub
8400 Pardee Drive, Oakland, California
State ID # 583

ENVIRONMENT

Dear Mr. Gholami:

Date:
April 9, 2007

On behalf of United Parcel Service (UPS), ARCADIS BBL is transmitting herewith the First Semi-Annual Groundwater Monitoring & Sampling Report for the above-referenced facility. This report describes groundwater monitoring activities performed at the site on March 19, 2007. The groundwater monitoring events were conducted in accordance with the Work Plan approval letter, dated August 8, 1997, from the Alameda County Health Care Services Agency. Monthly Free Product Gauging and Recovery Data for the latter 2006 are also included.

Contact:
Hugh B. Devery

Phone:
770-428-9009

Email:
Hugh.Devery@arcadis-us.com

UPS is considering replacing the existing diesel underground storage tanks (USTs) at the latter part of 2007. If this occurs, it is UPS's plan to remediate residual petroleum hydrocarbons at this time via selective over-excavation of impacted soils and/or stained pea gravel, and possible impacted tank pit water. If you have any questions regarding this report, please do not hesitate to contact Mr. Hugh Devery at (770) 428-9009 extension 11.

Our ref:
B0037393.0000

Sincerely,

ARCADIS U.S., Inc.

Hugh B. Devery, P.G.
Senior Geologist

Attachments

Copies:
Ms. Julie Straub, UPS, (w/ attach.)

2007 APR 10 11 09:23

Imagine the result

***Year 2007 First Semi-Annual
Monitoring & Sampling Report***

***UPS – Oakland Hub
8400 Pardee Drive
Oakland, California
State ID # 583***

**United Parcel Service
55 Glenlake Parkway, NE
Atlanta, Georgia 30328**

April 2007

*Year 2007 First Semi-Annual
Monitoring & Sampling Report*

*UPS – Oakland Hub
8400 Pardee Drive
Oakland, California
State ID # 583*

**United Parcel Service
55 Glenlake Parkway, NE
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April 2007

Table of Contents

1.1. INTRODUCTION	1
1.2. WATER LEVELS	1
1.3. WATER QUALITY	1
1.4. PURGE WATER HANDLING	2
1.5. SUMMARY	2

Figures

Figure 1. Topographic Map of Site Location and Vicinity

Figure 2. Monitoring Well Location Map

Figure 3. Groundwater Contour Map – March 19, 2007

Figure 4. Groundwater Quality Map – March 19, 2007

Tables

Table 1. Historical Groundwater Elevation Summary

Table 2. Historical Groundwater Monitoring Results Summary

Appendices

Appendix A Standard Field Procedures for Groundwater Monitoring

Appendix B Well Gauging Data

Appendix C Laboratory Analytical Results

Groundwater Monitoring & Sampling

1.1. Introduction

United Parcel Service (UPS) retained ARCADIS BBL to perform semi-annual quality groundwater monitoring at the UPS-Oakland Hub located at 8400 Pardee Drive, Oakland, California (**Figures 1 and 2**). This report describes results of groundwater monitoring performed on March 19, 2007. Groundwater monitoring was conducted in accordance with the Alameda County Health Care Services (ACHCS)-approved work plan (ARCADIS BBL, August 1997). Monthly free product gauging and recovery are also included as **Table 1**.

Groundwater samples were collected from groundwater monitoring wells MW-1, MW-2, MW-3 and OW-1 on March 19, 2007. The field activities were conducted in accordance with the groundwater monitoring procedures described in **Appendix A**. Water levels were measured prior to purging the wells. Purge water was monitored to document stabilization of pH, temperature, and conductivity parameters (**Appendix B**). Disposal of purged water is described in Section 1.4.

1.2. Water Levels

Depths to water in the four monitoring wells were gauged on March 19, 2007. Static fluid levels in the wells were measured to an accuracy of 0.01-foot (ft) using an electronic interface probe that is capable of detecting water and phase-separated hydrocarbons (PSH). The thin layer amount of PSH was bailed off prior to sampling monitoring well MW-2 (0.01-ft) and OW-1 (0.02-ft) during this sampling activity. Groundwater elevations in monitoring wells MW-1 through MW-3 in March 2007 were approximately 0.30 to 1.00-ft lower than water levels measured during the last sampling event of September 2006. A generalized groundwater contour map prepared using the March 2007 groundwater elevation data is shown on **Figure 3**. Groundwater flow is to the southwest, which is consistent with historical groundwater flow direction.

1.3. Water Quality

Groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3 and OW-1 on March 19, 2006. The groundwater samples were analyzed for total petroleum hydrocarbons as diesel (TPH-d) by US Environmental Protection Agency (USEPA) Method 8015M and for TPH-gasoline (TPH-g), benzene, toluene, ethylbenzene, total xylenes, and methyl tert-butyl ether (BTEX/MTBE) by USEPA Method 8260B. Analyses were conducted by STL in Pleasanton, California, certified for environmental analyses by the California Department of Health Services (certificate number 2496). Summaries of the groundwater analytical data are presented in **Table 2** and on **Figure 4**. The laboratory analytical results and chain-of-custody documentation are attached as **Appendix C**.

Benzene was not detected above the primary drinking water maximum contaminant levels (MCL) of Title 22 of the California Code of Regulations in the groundwater sample collected from any wells. MTBE was not detected above MCL in any of the groundwater samples. No additional BTEX analytes were detected above detection limits or MCL in any of the remaining groundwater samples collected during the March 2007 monitoring event. TPH-g was detected in monitoring wells MW-1, MW-3 and OW-1; MW-1 contained a concentration of 0.940 milligrams per liter (mg/L), MW-3 contained a concentration of 0.510 mg/L and OW-1 contained a concentration of 0.460 mg/L. MW-2 was not detected above laboratory reporting limit of 0.05 mg/L.

TPH-d concentrations were detected in wells MW-1, MW-2, MW-3 and OW-1; MW-1 contained a concentration of 11.0 mg/L, MW-2 contained a concentration of 11.0 mg/L, MW-3 contained a

concentration of 26.0 mg/L and OW-1 contained a concentration of 76.0 mg/L. There is currently no established MCL for TPH-g or TPH-d.

1.4. Purge Water Handling

The water generated from groundwater sampling activities was contained in two 55-gallon drums and stored at the UPS Hub pending proper disposal offsite.

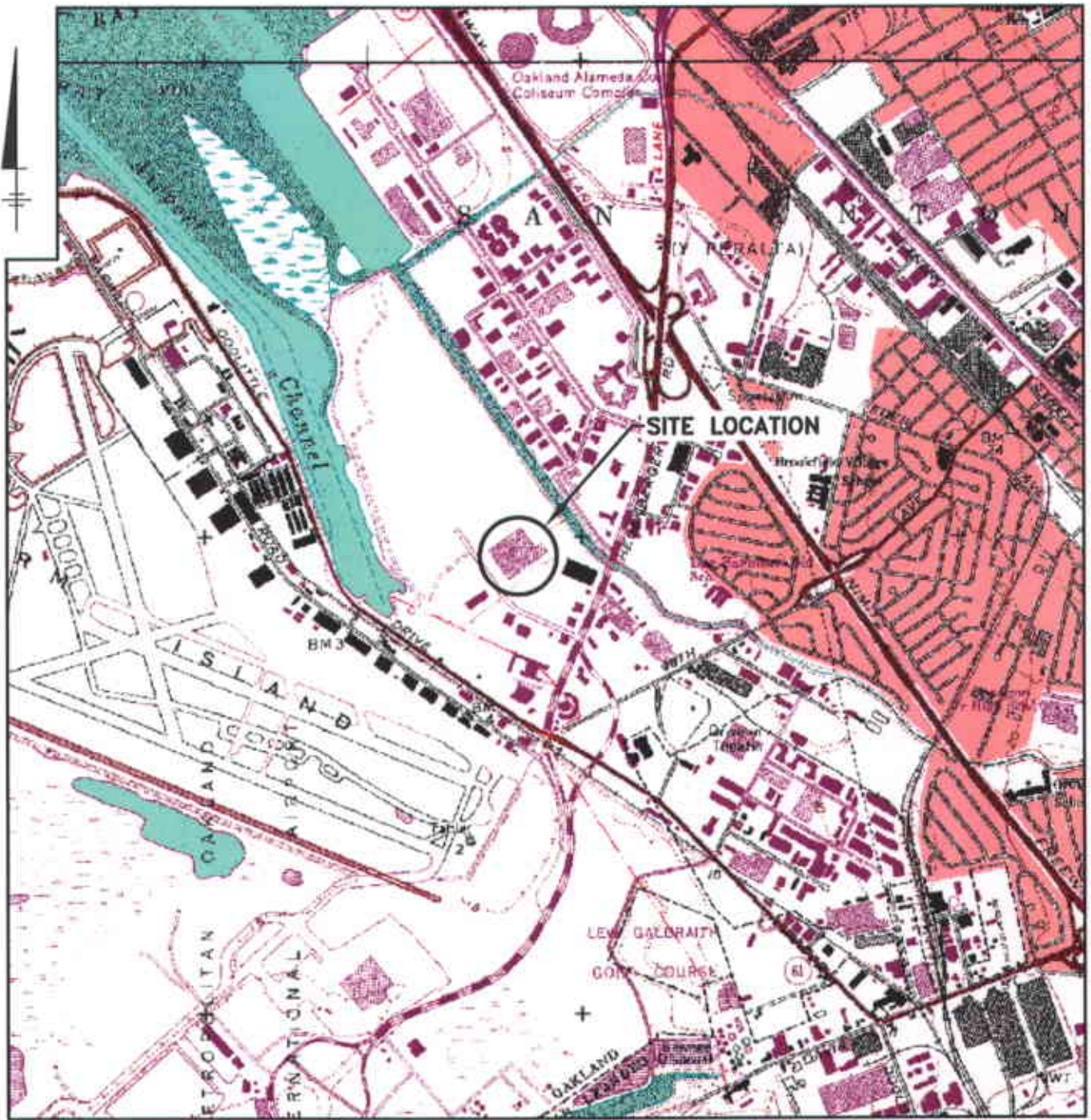
1.5. Summary

1. PSH was detected in monitoring wells MW-2 and OW-1 with an apparent thickness' of 0.01-ft and 0.02-ft.
2. Groundwater samples were collected on March 19, 2006 and sampled for BTEX, MTBE, TPH-g and TPH-d.
3. Groundwater elevations in March 2007 for site wells were approximately 0.30 to 1.00-ft feet lower on average than water levels measured during the last sampling event of September 2006. Groundwater flow is to the southwest, consistent with historical direction.
4. BTEX was not detected above laboratory detection limits or their primary drinking water MCLs.
5. MTBE was not detected above detection limits in any of the other groundwater samples, and is below its MCL.
6. TPH-g and TPH-d were both detected at low concentrations in site wells; however, a MCL for TPH-g or TPH-d does not exist.

References:

Blasland, Bouck & Lee, Inc., 1997. Work Plan for UPS Distribution Center, 8400 Pardee Drive, Oakland, California.

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NOTES:

1. Base Map Source: USGS 7.5 Min. Topo. Quad., San Leandro, Calif.(1993)
2. Property Location is Approximate Only.

CALIFORNIA

SITE LOCATION



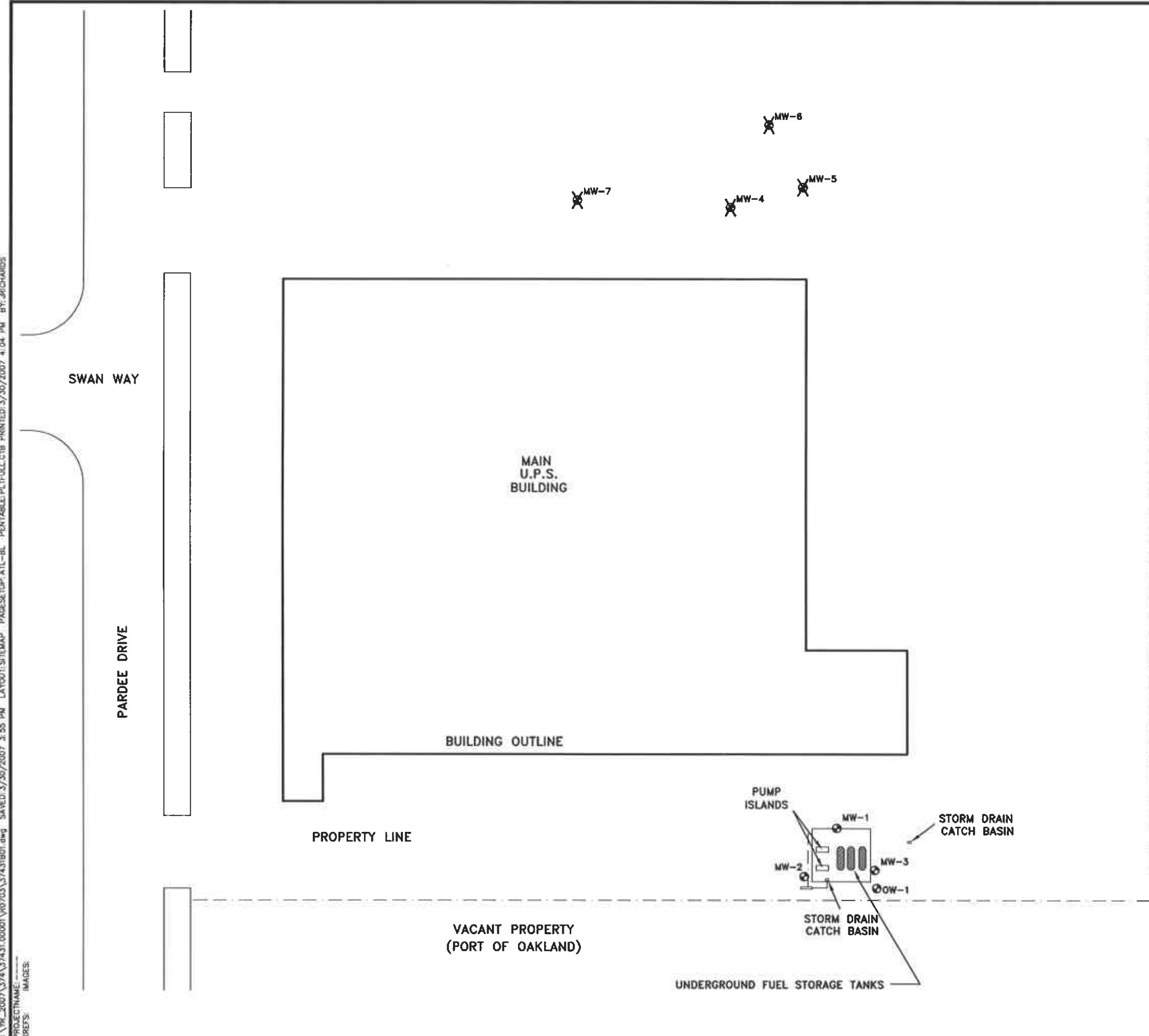
UPS-OAKLAND FACILITY
 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA
GROUNDWATER MONITORING REPORT

**TOPOGRAPHIC MAP OF
 SITE LOCATION AND VICINITY**



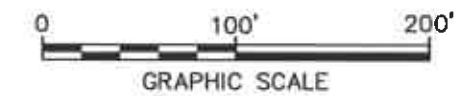
FIGURE
1

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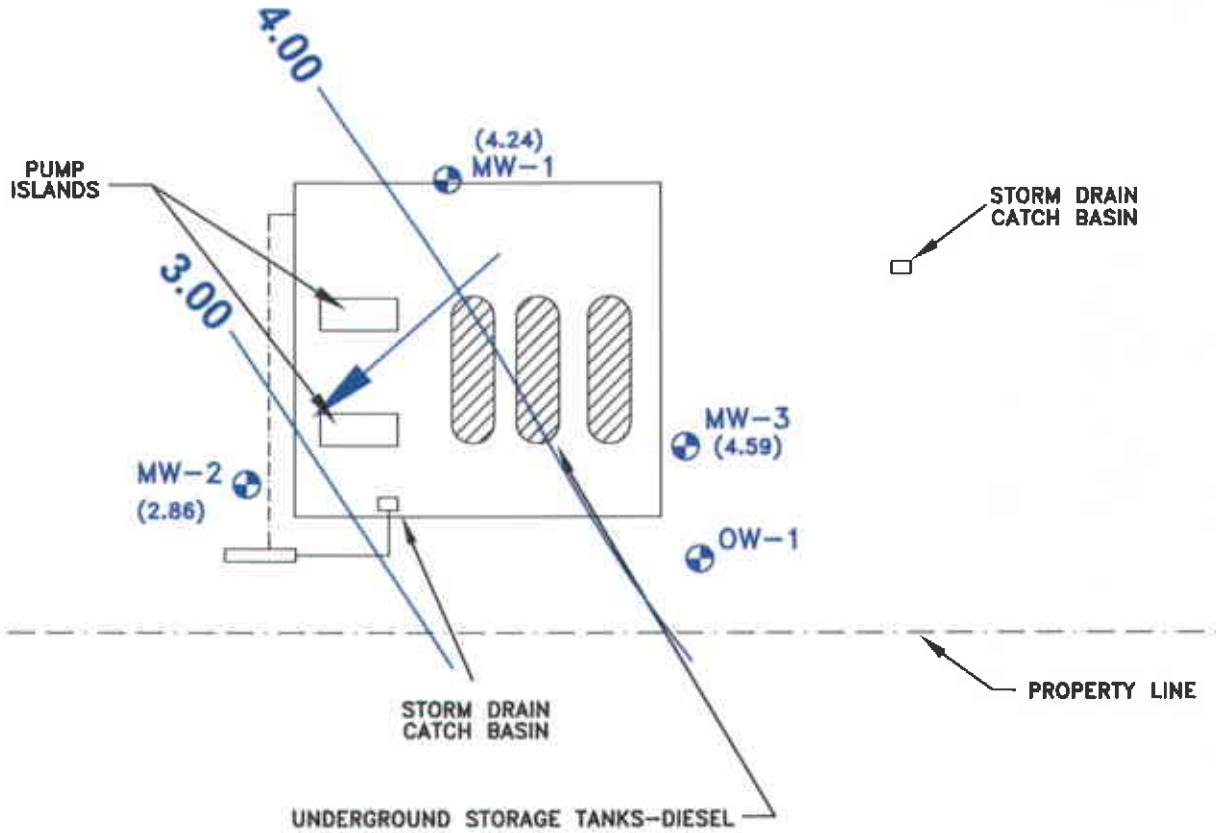
LEGEND:

- MW-3 EXISTING GROUNDWATER MONITORING WELLS INSTALLED BY GERAGHTY & MILLER
- MW-4 DESTROYED MONITORING WELLS
- BUILDING OUTLINE



UPS-OAKLAND FACILITY 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA GROUNDWATER MONITORING REPORT	
MONITORING WELL LOCATION MAP	
	FIGURE 2

UPS BUILDING



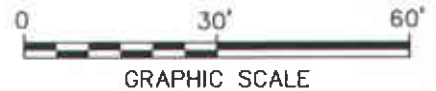
LEGEND:

MW-1 GROUNDWATER MONITORING WELL

(3.75) GROUNDWATER TABLE ELEVATION (FEET ABOVE MSL)

4.00 GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION



NOTE:

1. OW-1 WAS NOT USED TO GENERATE CONTOURS. NO SURVEY DATA.

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GROUNDWATER MONITORING REPORT

GROUNDWATER CONTOUR MAP
MARCH 19, 2007

UPS BUILDING



BENZENE	<0.5 ug/L
TOLUENE	<0.5 ug/L
ETHYLBENZENE	<0.5 ug/L
XYLENES	<1.0 ug/L
MTBE	<0.5 ug/L
TPH-GAS	0.94 mg/L
TPH-DIESEL	11.0 mg/L

PUMP ISLANDS

BENZENE	<0.5 ug/L
TOLUENE	<0.5 ug/L
ETHYLBENZENE	<0.5 ug/L
XYLENES	<1.0 ug/L
MTBE	<0.5 ug/L
TPH-GAS	<0.5 mg/L
TPH-DIESEL	11.0 mg/L

BENZENE	<1.0 ug/L
TOLUENE	<1.0 ug/L
ETHYLBENZENE	<1.0 ug/L
XYLENES	<2.0 ug/L
MTBE	<1.0 ug/L
TPH-GAS	0.51 mg/L
TPH-DIESEL	26.0 mg/L

MW-2

MW-1

MW-3

OW-1

UNDERGROUND STORAGE TANKS - DIESEL

BENZENE	<2.5 ug/L
TOLUENE	<2.5 ug/L
ETHYLBENZENE	<2.5 ug/L
XYLENES	<5.0 ug/L
MTBE	<2.5 ug/L
TPH-GAS	<0.460 mg/L
TPH-DIESEL	76.0 mg/L

PROPERTY LINE

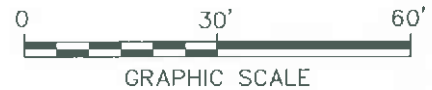
LEGEND:

MW-1  EXISTING GROUNDWATER MONITORING WELLS INSTALLED BY GERAGHTY & MILLER

ug/L MICROGRAMS PER LITER

mg/L MILLIGRAMS PER LITER

TPH TOTAL PETROLEUM HYDROCARBONS



UPS-OAKLAND FACILITY
8400 PARDEE DRIVE, OAKLAND, CALIFORNIA
GROUNDWATER MONITORING REPORT

GROUNDWATER QUALITY MAP
MARCH 19, 2007



FIGURE
4

IRV-85-JMS TAN-85-LAR LAYER: ON=*.OFF=REF*
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TABLE 1
HISTORICAL GROUNDWATER ELEVATION SUMMARY

UPS-OAKLAND HUB
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA
STATE ID # 583

Monitoring Well	Reference Elevation	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	Change in Measurement (ft)	Product Thickness (ft)
MW-1	7.43	8/28/1990	3.80	3.63	--	0.00
		9/20/1990	3.99	3.44	-0.19	0.00
		6/19/1991	3.47	3.96	0.52	NM
		7/23/1991	3.70	3.73	-0.23	NM
		8/26/1991	3.92	3.51	-0.22	NM
		11/18/1991	4.21	3.22	-0.29	NM
		2/3/1992	3.99	3.44	0.22	NM
		6/29/1992	3.38	4.05	0.61	NM
		6/23/1993	2.72	4.71	0.66	NM
		10/11/1993	3.87	3.56	-1.15	NM
		1/4/1994	3.34	4.09	0.53	NM
		5/10/1994	2.14	5.29	1.20	NM
		2/1/1995	1.84	5.59	0.30	NM
		8/2/1995	3.10	4.33	-1.26	NM
		10/16/1995	3.75	3.68	-0.65	NM
		12/28/1995	3.56	3.87	0.19	NM
		6/4/1997	3.16	4.27	0.40	0.00
		9/30/1999	3.75	3.68	-0.59	0.00
		10/11/2000	3.88	3.55	-0.13	0.00
		9/3/2002	3.73	3.70	0.15	0.00
		10/22/2002	5.11	2.32	-1.38	0.05
		12/23/2002	3.51	3.92	1.60	0.00
		3/28/2003	3.52	3.91	-0.01	0.00
		6/20/2003	3.50	3.93	0.02	0.00
		7/14/2003	3.65	3.78	-0.15	0.00
		8/25/2003	3.87	3.56	-0.22	0.00
		9/9/2003	4.02	3.41	-0.15	0.00
		9/25/2003	4.10	3.33	-0.08	0.00
		10/28/2003	4.29	3.14	-0.19	0.00
		11/18/2003	4.32	3.11	-0.03	0.00
		12/2/2003	4.34	3.09	-0.02	0.00
		1/27/2004	3.88	3.55	0.46	0.00
		2/24/2004	2.75	4.68	1.13	0.00
		3/29/2004	3.45	3.98	-0.70	0.00
		4/19/2004	3.55	3.88	-0.10	0.00
		5/20/2004	3.69	3.74	-0.14	0.00
		6/22/2004	3.81	3.62	-0.12	0.00
		7/27/2004	3.99	3.44	-0.18	0.00
		8/24/2004	4.14	3.29	-0.15	0.00
		9/29/2004	4.32	3.11	-0.18	0.00
		10/25/2004	3.89	3.54	0.43	0.00
		12/15/2004	3.18	4.25	0.71	0.00
		1/24/2005	2.69	4.74	0.49	0.00
		2/23/2005	2.48	4.95	0.21	0.00
		3/23/2005	2.21	5.22	0.27	0.00
		4/29/2005	2.57	4.86	-0.36	0.00
		5/27/2005	2.68	4.75	-0.11	0.00
		6/29/2005	2.97	4.46	-0.29	0.00
		7/20/2005	3.13	4.30	-0.16	0.00
		8/24/2005	3.48	3.95	-0.35	0.00
9/27/2005	3.69	3.74	-0.21	0.00		
10/19/2005	3.87	3.56	-0.18	0.00		
11/29/2005	3.79	3.64	0.08	0.00		
12/29/2005	3.08	4.35	0.71	0.00		
1/31/2006	2.91	4.52	0.17	0.00		
2/28/2006	2.84	4.59	0.07	0.00		
3/27/2006	2.26	5.17	0.58	0.00		
4/28/2006	2.40	5.03	-0.14	0.00		
6/27/2006	3.09	4.34	-0.69	0.00		
7/31/2006	3.35	4.08	-0.26	0.00		
8/29/2006	3.60	3.83	-0.25	0.00		
9/28/2006	3.90	3.53	-0.30	0.00		
10/27/2006	3.97	3.46	-0.07	0.00		
11/22/2006	3.64	3.79	0.33	0.00		
12/26/2006	3.04	4.39	0.60	0.00		
1/25/2007	3.26	4.17	-0.22	0.00		
2/16/2007	3.12	4.31	0.14	0.00		
3/19/2007	2.91	4.52	0.21	0.00		

Notes:

1. Reference elevation surveyed relative to mean sea level by Geraghty and Miller (Geraghty and Miller, Inc., 1990)
2. Depth to groundwater measured from notch/mark on north edge of well casing
3. Sources: Geraghty and Miller, 1996; BBL
4. NM = Not measured; NC = Not calculated; N/A= Not Available

TABLE 1
HISTORICAL GROUNDWATER ELEVATION SUMMARY

UPS-OAKLAND HUB
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA
STATE ID # 583

Monitoring Well	Reference Elevation	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	Change in Measurement (ft)	Product Thickness (ft)
		8/28/1990	4.98	2.17	--	0.00
		9/20/1990	4.94	2.21	0.04	N/A
		6/19/1991	4.66	2.49	0.28	N/A
		7/23/1991	4.81	2.34	-0.15	N/A
		8/26/1991	4.89	2.26	-0.08	N/A
		11/18/1991	4.93	2.22	-0.04	N/A
		2/3/1992	4.44	2.71	0.49	N/A
		6/29/1992	4.80	2.35	-0.36	N/A
		6/23/1993	4.38	2.77	0.42	N/A
		10/11/1993	5.20	1.95	-0.82	N/A
		1/4/1994	4.56	2.59	0.64	N/A
		5/10/1994	4.20	2.95	0.36	N/A
		2/1/1995	4.00	3.15	0.2	N/A
		8/2/1995	4.71	2.44	-0.71	N/A
		10/16/1995	5.02	2.13	-0.31	N/A
		12/28/1995	4.56	2.59	0.46	N/A
		6/12/1996	NM	--	--	0.25
		6/4/1997	6.02	1.13	-1.46	Small globules
		9/30/1999	4.95	2.20	1.07	0.00
		10/11/2000	4.97	2.18	-0.02	0.08
		9/3/2002	5.02	2.13	-0.05	0.07
		9/27/2002	4.89	2.26	0.13	0.09
		12/23/2002	4.25	2.90	0.64	0.04
		2/12/2003	4.26	2.89	-0.01	0.01
		3/28/2003	4.35	2.80	-0.09	0.01
		6/20/2003	4.55	2.60	-0.20	0.01
		7/14/2003	4.56	2.59	-0.01	0.00
		8/25/2003	4.79	2.36	-0.23	0.01
		9/9/2003	4.90	2.25	-0.11	0.01
		9/25/2003	4.97	2.18	-0.07	0.01
		10/28/2003	4.98	2.17	-0.01	0.04
		11/18/2003	4.83	2.32	0.15	0.00
		12/3/2003	4.87	2.28	-0.04	0.00
		1/27/2004	7.39	-0.24	-2.52	0.00
		2/24/2004	4.56	2.59	2.83	0.01
MW-2	7.15	3/29/2004	4.24	2.91	0.32	0.01
		4/19/2004	4.50	2.65	-0.26	0.01
		5/20/2004	4.53	2.62	-0.03	0.00
		6/22/2004	4.85	2.50	-0.12	0.00
		7/27/2004	4.80	2.35	-0.15	0.00
		8/24/2004	5.93	1.22	-1.13	0.00
		9/29/2004	5.00	2.15	0.93	0.02
		10/25/2004	4.68	2.47	0.32	0.00
		12/15/2004	4.34	2.81	0.34	0.02
		1/24/2005	4.15	3.00	0.19	0.00
		2/23/2005	4.95	2.20	-0.80	0.03
		3/23/2005	4.96	2.19	-0.01	0.02
		4/29/2005	4.23	2.92	0.73	0.10
		5/27/2005	4.20	2.95	0.03	0.02
		6/29/2005	4.29	2.86	-0.09	0.00
		7/20/2005	4.48	2.67	-0.19	0.04
		8/24/2005	4.71	2.44	-0.23	0.00
		9/27/2005	4.98	2.17	-0.27	0.03
		10/19/2005	5.08	2.07	-0.1	0.00
		11/29/2005	4.68	2.47	0.40	0.01
		12/29/2005	4.19	2.96	0.49	0.01
		1/31/2006	4.05	3.10	0.14	0.00
		2/28/2006	4.16	2.99	-0.11	0.00
		3/27/2006	4.11	3.04	0.05	0.01
		4/28/2006	4.03	3.12	0.08	0.00
		6/27/2006	4.45	2.70	-0.42	0.01
		7/31/2006	4.60	2.55	-0.15	0.02
		8/29/2006	4.84	2.31	-0.24	0.01
		9/28/2006	4.96	2.19	-0.12	0.03
		10/27/2006	4.98	2.17	-0.02	0.00
		11/22/2006	4.58	2.57	0.40	0.00
		12/26/2006	4.22	2.93	0.36	0.02
		1/25/2007	4.44	2.71	-0.22	0.00
		2/16/2007	4.13	3.02	0.31	0.00
		3/19/2007	4.30	2.85	-0.17	0.01

Notes:

1. Reference elevation surveyed relative to mean sea level by Geraghty and Miller (Geraghty and Miller, Inc., 1990)
2. Depth to groundwater measured from notch/mark on north edge of well casing
3. Sources: Geraghty and Miller, 1996; BBL
4. NM = Not measured; NC = Not calculated; N/A= Not Available

**TABLE 1
HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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8400 PARDEE DRIVE
OAKLAND, CALIFORNIA
STATE ID # 583

Monitoring Well	Reference Elevation	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	Change in Measurement (ft)	Product Thickness (ft)	
MW-3	7.42	8/28/1990	3.88	3.54	--	0.00	
		9/20/1990	3.99	3.43	-0.11	0.00	
		6/19/1991	3.49	3.93	0.50	0.00	
		7/23/1991	3.71	3.71	-0.22	0.00	
		8/26/1991	3.94	3.48	-0.23	0.00	
		11/18/1991	4.23	3.19	-0.29	0.00	
		2/3/1992	4.01	3.41	0.22	0.00	
		6/29/1992	3.40	4.02	0.61	0.00	
		6/23/1993	2.75	4.67	0.65	0.00	
		10/11/1993	3.84	3.58	-1.09	0.00	
		1/4/1994	3.40	4.02	0.44	0.00	
		5/10/1994	2.25	5.17	1.15	0.00	
		2/1/1995	2.43	4.99	-0.18	0.00	
		8/2/1995	3.20	4.22	-0.77	0.00	
		10/16/1995	3.72	3.70	-0.52	0.00	
		12/28/1995	3.56	3.86	0.16	0.00	
		6/4/1997	3.20	4.22	0.36	0.00	
		6/3/1998	NM	--	--	--	0.00
		9/30/1999	3.72	3.70	-0.52	0.00	
		10/11/2000	3.88	3.54	-0.16	0.00	
		9/3/2002	3.75	3.67	0.13	0.00	
		12/23/2003	3.50	3.92	0.25	0.00	
		3/28/2003	3.56	3.86	-0.06	0.00	
		6/20/2003	3.52	3.90	0.04	0.00	
		7/14/2003	3.65	3.77	-0.13	0.00	
		8/25/2003	3.99	3.43	-0.34	0.00	
		9/9/2003	3.99	3.43	0.00	0.00	
		9/25/2003	4.06	3.36	-0.07	0.00	
		10/28/2003	4.15	3.27	-0.09	0.00	
		11/18/2003	4.28	3.14	-0.13	0.00	
		12/2/2003	4.31	3.11	-0.03	0.00	
		1/27/2004	3.85	3.57	0.46	0.00	
		2/24/2004	3.70	3.72	0.15	0.00	
		3/29/2004	3.47	3.95	0.23	0.00	
		4/19/2004	3.55	3.87	-0.08	0.00	
		5/20/2004	3.65	3.77	-0.10	0.00	
		6/22/2004	3.83	3.59	-0.18	0.00	
		7/27/2004	3.98	3.44	-0.15	0.00	
		8/24/2004	4.14	3.28	-0.16	0.00	
		9/29/2004	4.30	3.12	-0.16	0.00	
		10/25/2004	3.85	3.57	0.45	0.00	
		12/15/2004	3.16	4.26	0.69	0.00	
		1/24/2005	2.65	4.77	0.51	0.00	
		2/23/2005	2.50	4.92	0.15	0.00	
		3/23/2005	2.48	4.94	0.02	0.00	
		4/29/2005	2.59	4.83	-0.11	0.00	
		5/27/2005	2.75	4.67	-0.16	0.00	
		6/29/2005	3.05	4.37	-0.30	0.00	
		7/20/2005	3.10	4.32	-0.05	0.00	
		8/24/2005	3.45	3.97	-0.35	0.00	
9/27/2005	3.71	3.71	-0.26	0.00			
10/19/2005	3.73	3.69	-0.02	0.00			
11/29/2005	3.75	3.67	-0.02	0.00			
12/29/2005	3.08	4.34	0.67	0.00			
1/31/2006	2.99	4.43	0.09	0.00			
2/28/2006	2.95	4.47	0.04	0.00			
3/27/2006	2.60	4.82	0.35	0.00			
4/28/2006	2.90	4.52	-0.30	0.00			
6/27/2006	3.01	4.41	-0.11	0.00			
7/31/2006	4.33	3.09	-1.32	0.00			
8/29/2006	3.62	3.80	0.71	0.00			
9/28/2006	3.80	3.62	-0.18	0.00			
10/27/2006	3.90	3.52	-0.10	0.00			
11/22/2006	3.60	3.82	0.30	0.00			
12/26/2006	3.07	4.35	0.53	0.00			
1/25/2007	3.25	4.17	-0.18	0.00			
2/16/2007	3.09	4.33	0.18	0.00			
3/19/2007	2.83	4.59	0.26	0.00			

Notes:

1. Reference elevation surveyed relative to mean sea level by Geraghty and Miller (Geraghty and Miller, Inc., 1990)
2. Depth to groundwater measured from notch/mark on north edge of well casing
3. Sources: Geraghty and Miller, 1996; BBL
4. NM = Not measured; NC = Not calculated; N/A= Not Available

TABLE 1
HISTORICAL GROUNDWATER ELEVATION SUMMARY

UPS-OAKLAND HUB
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA
STATE ID # 583

Monitoring Well	Reference Elevation	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	Change in Measurement (ft)	Product Thickness (ft)
		6/4/1997	7.22	NC	--	0.01
		9/30/1999	8.35	NC	1.13	0.01
		10/11/2000	6.90	NC	-1.45	0.09
		10/22/2002	7.34	NC	0.44	0.01
		9/27/2002	7.02	NC	-0.32	0.14
		12/23/2002	5.17	NC	-1.85	0.03
		1/16/2003	4.97	NC	-0.20	0.01
		2/12/2003	5.23	NC	0.26	0.01
		3/28/2003	5.16	NC	-0.07	0.01
		6/20/2003	4.93	NC	-0.23	0.01
		7/14/2003	5.33	NC	0.40	0.00
		8/28/2003	5.85	NC	0.52	0.00
		9/9/2003	6.33	NC	0.48	0.00
		9/25/2003	6.52	NC	0.19	0.01
		10/28/2003	7.26	NC	0.74	0.03
		11/18/2003	7.29	NC	0.03	0.00
		12/2/2003	7.23	NC	-0.06	0.03
		1/27/2004	7.96	NC	0.73	0.01
		2/24/2004	6.26	NC	-1.7	0.02
		3/29/2004	6.08	NC	-0.18	0.02
		4/19/2004	6.29	NC	0.21	0.03
		5/20/2004	6.16	NC	-0.13	0.00
		6/22/2004	6.37	NC	0.21	0.00
		7/27/2004	5.67	NC	-0.7	0.04
		8/24/2004	6.81	NC	1.14	0.00
		9/29/2004	7.08	NC	0.27	0.04
		10/25/2004	6.74	NC	-0.34	0.04
OW-1	N/A	12/15/2004	5.33	NC	-1.41	0.01
		1/24/2005	3.98	NC	-1.35	0.00
		2/23/2005	3.44	NC	-0.54	0.01
		3/23/2005	3.34	NC	-0.1	0.02
		4/29/2005	6.89	NC	3.55	0.13
		5/27/2005	7.18	NC	0.29	0.11
		6/29/2005	7.12	NC	-0.06	0.10
		7/20/2005	7.20	NC	0.08	0.10
		8/24/2005	7.15	NC	-0.05	0.06
		9/27/2005	7.43	NC	0.28	0.12
		10/19/2005	7.48	NC	0.05	0.11
		11/29/2005	7.00	NC	-0.48	0.04
		12/29/2005	5.22	NC	-1.78	0.00
		1/31/2006	5.64	NC	0.42	0.00
		2/28/2006	6.53	NC	0.89	0.01
		3/27/2006	5.80	NC	-0.73	0.01
		4/28/2006	6.39	NC	0.59	0.00
		6/27/2006	7.82	NC	1.43	0.06
		7/31/2006	5.82	NC	-2.00	0.05
		8/29/2006	7.05	NC	1.23	0.07
		9/28/2006	7.10	NC	0.05	0.02
		10/27/2006	7.27	NC	0.17	0.02
		11/22/2006	7.05	NC	-0.22	0.02
		12/26/2006	6.73	NC	-0.32	0.03
		1/25/2007	7.15	NC	0.42	0.00
		2/16/2007	7.71	NC	0.56	0.01
		3/19/2007	6.77	NC	-0.94	0.02

Notes:

1. Reference elevation surveyed relative to mean sea level by Geraghty and Miller (Geraghty and Miller, Inc., 1990)
2. Depth to groundwater measured from notch/mark on north edge of well casing
3. Sources: Geraghty and Miller, 1996; BBL
4. NM = Not measured; NC = Not calculated; N/A= Not Available

TABLE 2

HISTORICAL GROUNDWATER MONITORING RESULTS SUMMARY

UPS-OAKLAND HUB
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA
STATE ID # 583

Monitoring Well	Date	Benzene µg/L	Toluene µg/L	Ethyl- benzene µg/L	Total Xylenes µg/L	MTBE µg/L	TPH as gasoline (mg/L)	TPH as diesel (mg/L)	D.O. (mg/L)
MW-1	8/28/1990	3	1.4	4	2.4	NA	NA	21	NA
	6/19/1991	1.7	0.7	0.5	0.9	NA	NA	7.1	NA
	7/23/1991	1.6	1.1	0.5	1.5	NA	0.22	8.7	NA
	8/26/1991	180	120	31	160	NA	NA	2.8	NA
	11/18/1991	1.1	0.4	0.5	< 0.3	NA	NA	6.6	NA
	2/3/1992	0.9	< 0.3	0.8	0.7	NA	NA	2.2	NA
	6/29/1992	0.8	0.4	0.4	0.9	NA	NA	2.1	NA
	6/23/1993	0.66	< 0.5	0.5	< 0.5	NA	NA	3.2	NA
	10/11/1993	1.3	< 0.5	< 0.5	< 0.5	NA	NA	9.6	NA
	1/4/1994	2.1	0.65	1.3	2.1	NA	NA	12	NA
	5/10/1994	0.54	0.53	< 0.5	1.1	NA	NA	6.4	NA
	2/1/1995	< 1.0	< 1.0	1	< 1.0	NA	0.51	10	NA
	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	0.51	8.7	NA
	10/16/1995	2.8	< 0.5	< 0.5	< 0.5	NA	0.83	15	NA
	12/28/1995	2.1	< 0.5	< 0.5	< 0.5	NA	0.56	15	NA
	6/4/1997	NA	NA	NA	NA	NA	NA	28	0.76
	9/30/1999	< 0.5	0.6	< 0.5	1.8	< 3	1.6	28	9.9
	10/11/2000	< 0.5	< 0.5	< 0.5	< 1.0	< 5	0.26	21	0.39
	9/3/2002	< 0.5	< 0.5	< 0.5	0.5	< 0.5	1.2	38	NA
	3/28/2003	< 5	< 5	< 5	< 10	< 5.0	0.25	35	NM
	9/9/2003	< 0.5	< 0.5	< 0.5	< 1.0	0.6	0.44	11	NM
	4/19/2004	3.2	< 2.5	< 2.5	< 5.0	< 2.5	0.280	24.00 ndp	NM
	9/29/2004	< 1.0	< 1.0	< 1.0	< 2.0	2.1	1.40 g	150 ndp	NM
3/23/2005	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	0.55 Q1	15 Q2	NM	
11/29/2005	< 0.50	< 0.50	< 0.50	< 1.0	0.94	0.31	7.80	NM	
3/27/2006	< 0.50	< 0.50	< 0.50	< 1.0	0.62	0.42	11.0	NM	
9/28/2006	< 0.50	< 0.50	< 0.50	< 1.0	0.87	0.22	28.0	NM	
3/19/2007	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	0.94	11.0	NM	
MCL	--	1	150	300	1,750	13	--	--	--

Notes:

(µg/L) = are micrograms per liter and mg/L are milligrams per liter.

NA = Not Analyzed; NS = Not Sampled; NM = Not Measured

TPH = Total petroleum hydrocarbons; MTBE = Methyl tertiary butyl ether.

Title 22 of the California Code of Regulations, California Maximum Contaminant Levels (MCLs) for drinking water.

D.O. = Dissolved Oxygen measured in the field.

Results collected between the dates of 8/28/90 and 12/28/95 are based on prior reporting by Geraghty & Miller, Inc. (1996).

Bold values indicate analytical detections above MCL.

The 9/96, 10/96 BBL reports revealed concentrations reported as TPH as diesel did not resemble the diesel chromatogram standard, containing > C-26.

J - Estimated value between MDL and PQL.

ndp - Hydrocarbon reported does not match the pattern of laboratory Diesel standard.

Q2 = Quantity of unknown hydrocarbon(s) in sample based on diesel.

Q1 = Quantity of unknown hydrocarbon(s) in sample based on gasoline.

TABLE 2

HISTORICAL GROUNDWATER MONITORING RESULTS SUMMARY

UPS-OAKLAND HUB
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA
STATE ID # 583

Monitoring Well	Date	Benzene µg/L	Toluene µg/L	Ethyl- benzene µg/L	Total Xylenes µg/L	MTBE µg/L	TPH as gasoline (mg/L)	TPH as diesel (mg/L)	D.O. (mg/L)
MW-2	8/28/1990	0.6	0.4	0.6	0.7	NA	NA	3.5	NA
	6/19/1991	0.5	< 0.3	< 0.3	< 0.3	NA	NA	<0.50	NA
	7/23/1991	0.7	< 0.3	< 0.3	< 0.3	NA	<0.50	0.66	NA
	8/26/1991	0.7	< 0.3	< 0.3	< 0.3	NA	NA	<0.50	NA
	11/18/1991	0.8	< 0.3	< 0.3	< 0.3	NA	NA	3.2	NA
	2/3/1992	0.7	< 0.3	< 0.3	0.5	NA	NA	0.4	NA
	6/29/1992	0.6	< 0.3	< 0.3	< 0.3	NA	NA	0.25	NA
	6/23/1993	0.55	< 0.5	< 0.5	< 0.5	NA	NA	11	NA
	10/11/1993	1.2	< 0.5	< 0.5	1.3	NA	NA	1.4	NA
	1/4/1994	0.72	< 0.5	< 0.5	1.1	NA	NA	3.7	NA
	5/10/1994	0.74	< 0.5	< 0.5	0.7	NA	NA	2.3	NA
	2/1/1995	2.1	< 1.0	< 1.0	< 1.0	NA	<100	2.1	NA
	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	0.21	3.6	NA
	10/16/1995	0.73	< 0.5	< 0.5	< 0.5	NA	0.13	1.4	NA
	12/28/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	0.21	2.8	NA
	6/12/1996	NS	NS	NS	NS	NS	NS	--	NS
	6/4/1997	NA	NA	NA	NA	NA	NA	3.3	0.52
	9/30/1999	< 0.5	< 0.5	< 0.5	< 1.0	< 3.0	0.22	6.3	9.5
	10/11/2000	< 0.5	< 0.5	< 0.5	< 1.0	< 5.0	0.17	4.4	0.43
	9/27/2002	0.7J	<2.5	<2.5	<2.5	<2.5	17	67	NM
	3/28/2003	<25	<25	<25	<50	<25	1.6	10	NM
	9/25/2003	0.52	<0.50	<0.50	<1.0	<0.50	0.15	12	NM
	3/29/2004	0.51	<0.50	<0.50	<1.0	<0.50	0.084 g	7.80 ndp	NM
	9/29/2004	<0.50	<0.50	<0.50	<1.0	<0.50	0.63 g	10 ndp	NM
	1/24/2005	<0.50	<0.50	<0.50	<1.0	<0.50	2.3 Q1	15 Q2	NM
	11/29/2005	<1.0	<1.0	<1.0	<2.0	<1.0	1.90	22.0	NM
3/27/2006	<1.0	<1.0	<1.0	<2.0	<1.0	0.71	8.9	NM	
9/28/2006	<0.50	<0.50	<0.50	<1.0	<0.50	0.062	7.5	NM	
3/19/2007	<0.50	<0.50	<0.50	<1.0	<0.50	<0.05	11.0	NM	
MCL	--	1	150	300	1,750	13	--	--	--

Notes:

(µg/L) = are micrograms per liter and mg/L are milligrams per liter.

NA = Not Analyzed; NS = Not Sampled; NM = Not Measured

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Bold values indicate analytical detections above MCL.

The 9/96, 10/96 BBL reports revealed concentrations reported as TPH as diesel did not resemble the diesel chromatogram standard, containing > C-26.

J - Estimated value between MDL and PQL.

g - Hydrocarbon reported in the gasoline range does not match laboratory gasoline standard.

ndp - Hydrocarbon reported does not match the pattern of laboratory Diesel standard.

Q2 = Quantity of unknown hydrocarbon(s) in sample based on diesel.

Q1 = Quantity of unknown hydrocarbon(s) in sample based on gasoline.

TABLE 2

HISTORICAL GROUNDWATER MONITORING RESULTS SUMMARY

UPS-OAKLAND HUB
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA
STATE ID # 583

Monitoring Well	Date	Benzene µg/L	Toluene µg/L	Ethyl- benzene µg/L	Total Xylenes µg/L	MTBE µg/L	TPH as gasoline (mg/L)	TPH as diesel (mg/L)	D.O. (mg/L)
MW-3	8/28/1990	0.5	0.8	4.3	2.3	NA	NA	18	NA
	6/19/1991	0.4	0.4	1.7	1.4	NA	NA	1.3	NA
	7/23/1991	0.3	< 0.3	1.5	0.5	NA	0.33	6.8	NA
	8/26/1991	13	13	5.8	26	NA	NA	<0.05	NA
	11/18/1991	0.6	< 0.3	< 0.3	< 0.3	NA	NA	2.5	NA
	2/3/1992	0.4	< 0.3	1.3	0.6	NA	NA	1.1	NA
	6/29/1992	< 0.3	< 0.3	1.3	0.3	NA	NA	3.2	NA
	6/23/1993	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	8.1	NA
	10/11/1993	1	< 0.5	1.5	2.4	NA	NA	7.1	NA
	1/4/1994	< 0.5	< 0.5	1.6	< 0.5	NA	NA	7.4	NA
	5/10/1994	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	5.7	NA
	2/1/1995	< 1.0	< 1.0	2.7	4.1	NA	0.81	10	NA
	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	1.2	6.5	NA
	10/16/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	0.93	9.8	NA
	12/28/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	0.69	11	NA
	6/4/1997	NA	NA	NA	NA	NA	NA	34	0.84
	9/30/1999	< 0.5	0.6	0.7	1.2	< 3.0	1.3	8.7	8.6
	10/11/2000	< 0.5	< 0.5	< 0.5	< 1.0	< 5.0	0.43	20	0.51
	9/3/2002	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	14	NA
	3/28/2003	<25	<25	<25	<50	<25	2.5	19	NM
	9/9/2003	<0.5	<0.5	<0.5	<1.0	<0.5	0.7	73	NM
	4/19/2004	<0.50	<0.50	<0.50	<1.0	<0.50	0.099	14 ndp	NM
	9/29/2004	<2.5	<2.5	<2.5	<5.0	<2.5	0.39 g	10 ndp	NM
	1/24/2005	<2.5	<2.5	<2.5	<5.0	<2.5	.33 Q1	14 Q2	NM
	11/29/2005	< 1.0	< 1.0	<1.0	<2.0	< 1.0	1.20	8.30	NM
	3/27/2006	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	0.43	13.0	NM
9/28/2006	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	0.37	17.0	NM	
3/19/2007	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	0.51	26.0	NM	
MCL	--	1	150	300	1,750	13	--	--	--

Notes:

(µg/L) = are micrograms per liter and mg/L are milligrams per liter.

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TABLE 2

HISTORICAL GROUNDWATER MONITORING RESULTS SUMMARY

UPS-OAKLAND HUB
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA
STATE ID # 583

Monitoring Well	Date	Benzene µg/L	Toluene µg/L	Ethyl- benzene µg/L	Total Xylenes µg/L	MTBE µg/L	TPH as gasoline (mg/L)	TPH as diesel (mg/L)	D.O. (mg/L)
OW-1	6/23/1993	< 0.5	< 0.5	< 0.5	31.0	NA	NA	3,400	NA
	6/4/1997	NS	NS	NS	NS	NS	NS	NS	NS
	9/30/1999	< 2.0	< 2.0	< 2.0	4.2	< 12.0	8.3	2,800	9.7
	9/30/1999	< 1.0	< 1.0	1.9	8.9	< 6.0	2.9	340	--
	10/11/2000	< 0.5	< 0.5	< 0.5	< 1.0	< 5.0	2.1	58	0.74
	9/27/2002	0.6J	<2.5	<2.5	<2.5	<2.5	17	23	NA
	3/28/2003	<50	<50	<50	<100	<50	0.82	81	NM
	9/25/2003	<50	530	500	6,200	<50	0.22	91	NM
	3/29/2004	<0.50	<0.50	<0.50	<1.0	<0.50	0.51	280 ndp	NM
	9/29/2004	<2.5	<2.5	<2.5	<5.0	<2.5	2.80 g	440 ndp	NM
	1/24/2005	<0.50	<0.50	<0.50	<1.0	<0.50	.22 Q1	16 Q2	NM
	11/29/2005	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	0.65	30.0	NM
	3/27/2006	<13	<13	<13	<25	<13	<1.30	58.0	NM
	9/28/2006	<2.5	<2.5	<2.5	<5.0	<2.5	0.82	130.0	NM
3/19/2007	<2.5	<2.5	<2.5	<5.0	<2.5	0.46	76.0	NM	
MCL	--	1	150	300	1,750	13	--	--	--

Notes:

(µg/L) = are micrograms per liter and mg/L are milligrams per liter.

NA = Not Analyzed; NS = Not Sampled; NM = Not Measured

TPH = Total petroleum hydrocarbons; MTBE = Methyl tertiary butyl ether.

Title 22 of the California Code of Regulations, California Maximum Contaminant Levels (MCLs) for drinking water.

D.O. = Dissolved Oxygen measured in the field.

Results collected between the dates of 8/28/90 and 12/28/95 are based on prior reporting by Geraghty & Miller, Inc. (1996).

Bold values indicate analytical detections above MCL.

The 9/96, 10/96 BBL reports revealed concentrations reported as TPH as diesel did not resemble the diesel chromatogram standard, containing > C-26.

J - Estimated value between MDL and PQL.

ndp - Hydrocarbon reported does not match the pattern of laboratory Diesel standard.

Q2 = Quantity of unknown hydrocarbon(s) in sample based on diesel.

Q1 = Quantity of unknown hydrocarbon(s) in sample based on gasoline.

Appendix A

Standard Field Procedures for Groundwater Monitoring UPS- Oakland Hub

STANDARD FIELD PROCEDURES FOR GROUNDWATER MONITORING AND WELL SAMPLING

Standard field procedures for groundwater sampling at UPS are as follows during the monitoring events.

Groundwater Sampling Procedure

Prior to the collection of groundwater samples at the subject property, each well is sounded to determine depth to water and total well depth using an electronic Interface Probe. From this data, the wetted casing volume is calculated for each monitoring well. The electric sounder is cleaned in a solution of Liquinox (or equivalent) and water, and triple-rinsed with de-ionized water before and after measuring each well.

The wells are purged a minimum of three wetted casing volumes prior to sampling utilizing a new disposable bailer or an electric submersible pump. Purged water from the casing and gravel/sand pack is contained in labeled, sealed, DOT-approved 55-gallon drums. This purge water is stored on-site in a designated hazardous waste storage area until proper disposal can be determined based on groundwater sampling laboratory results.

Dedicated latex or nitrile surgical gloves and string are used when sampling each well. A new disposable bailer is used to sample each well to avoid the potential for cross-contamination. Upon collection, the groundwater samples are transferred from the sampling bailer to clean, laboratory-provided, sample containers. The sample containers are filled, labeled and sealed with teflon-lined screw lids and septa. The sample containers are double-bagged in self-locking plastic bags to prevent cross-contamination, placed on ice to prevent possible volatilization, and transported to a California state certified laboratory. Transportation of the samples follows industry standard chain-of-custody protocol. In addition, a duplicate sample is collected from one of the monitoring wells. The duplicate sample and the laboratory-supplied trip blank are also transported in the iced cooler with the other collected groundwater samples.

Decontamination Procedures

The non-disposable field drilling and sampling equipment is cleaned prior and after use. Field equipment is cleaned with a solution of Liquinox (or equivalent) and water. Prior to each use all field equipment is subsequently, triple rinsed with the final being de-ionized water. The purge water and decontamination water is collected in 55-gallon DOT approved drums and temporarily stored on-site pending laboratory analysis.

Appendix B

**Groundwater Sampling Forms &
Miscellaneous Data
UPS- Oakland Hub**

WELL MONITORING DATA SHEET

Project #: 070319-AB1	Client: BBL
Sampler: A Brown	Date: 3/19/07
Well I.D.: 1 1/2	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 13.91	Depth to Water (DTW): 2.91
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.11	

Purge Method: Bailer Watertra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

7.1 (Gals.) X 3 = 21.4 Gals.	Well Diameter	Multiplier	Well Diameter	Multiplier
1 Case Volume	Specified Volumes	Calculated Volume	1"	0.04
			2"	0.16
			3"	0.37
			4"	0.65
			6"	1.47
			Other	radius ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1039	64.6	7.3	1997	268	7.1	
1041	64.5	7.1	1946	53	14.2	
1042	64.3	7.0	1869	21	21.4	

Did well dewater? Yes No Gallons actually evacuated: 21.4

Sampling Date: 3/19/07 Sampling Time: 1045 Depth to Water: 3.07

Sample I.D.: 1 1/2 Laboratory: Kiff CalScience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd): Pre-purge: _____ mg/L Post-purge: _____ mg/L

O.R.P. (if req'd): Pre-purge: _____ mV Post-purge: _____ mV

WELL MONITORING DATA SHEET

Project #: <i>070319-AB1</i>	Client: <i>BB&L</i>
Sampler: <i>A Brown</i>	Date: <i>3/19/07</i>
Well I.D.: <i>MW-2</i>	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): <i>14.40</i>	Depth to Water (DTW): <i>4.29</i>
Depth to Free Product: <i>4.70</i>	Thickness of Free Product (feet): <i>0.61</i>
Referenced to: <i>(PVC)</i> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <i>6.31</i>	

Purge Method: Bailer Water Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Other: _____

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

6.3 (Gals.) X *3* = *19.7* Gals.
 1 Case Volume Specified Volumes Calculated Volume

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<i>1100</i>						<i>Product in purge water</i>
<i>1</i>						<i>Dewatered at <i>1200</i> gal DTW: <i>13.06</i></i>
<i>1200</i>	<i>65.4</i>	<i>7.3</i>	<i>5377</i>	<i>—</i>	<i>—</i>	

Did well dewater? *(Yes)* No Gallons actually evacuated: *10.0*

Sampling Date: *3/19/07* Sampling Time: *1200* Depth to Water: *6.31*

Sample I.D.: *MW-2* Laboratory: Kiff CalScience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ _____ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WATER MONITORING DATA SHEET

Project #: <u>070319-AD</u>	Client: <u>BARL</u>
Sampler: <u>A. Brown</u>	Date: <u>3/19/07</u>
Well I.D.: <u>0.1</u>	Well Diameter: 2 3 4 8 <u>5</u>
Total Well Depth (TD): <u>18.40</u>	Depth to Water (DTW): <u>6.75</u>
Depth to Free Product: <u>6.75</u>	Thickness of Free Product (feet): <u>0.02</u>
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>9.08</u>	

Purge Method: Bailer	Waterra	Sampling Method: Bailer
Disposable Bailer <input checked="" type="checkbox"/>	Peristaltic	Disposable Bailer <input checked="" type="checkbox"/>
Positive Air Displacement	Extraction Pump	Extraction Port
Electric Submersible	Other _____	Dedicated Tubing
		Other: <u>SA</u>

<u>13.7</u> 17.7 (Gals.) X <u>3</u> = <u>35.3</u> 52.4 Gals.
1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1130</u>					<u>11.7</u>	
						<u>Product in purge water</u>
						<u>dewatered at 15.0 gal</u>
						<u>DTW: 16.90</u>
<u>1205</u>	<u>66.8</u>	<u>7.2</u>	<u>3076</u>	<u>—</u>	<u>—</u>	<u>Skipped</u>

Did well dewater? (Yes) No Gallons actually evacuated: 15.0

Sampling Date: 3/19/07 Sampling Time: 1205 Depth to Water: 9.08

Sample I.D.: 0.1 Laboratory: Kiff CalScience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____

EB I.D. (if applicable): @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____

D.O. (if req'd): Pre-purge: _____ mg/L Post-purge: _____ mg/L

O.R.P. (if req'd): Pre-purge: _____ mV Post-purge: _____ mV

SPH or Purge Water Drum Log

Client: BBL
 Site Address: 8400 Purdue Dr. Oakland Ca.

STATUS OF DRUM(S) UPON ARRIVAL

Date	10/27/06	11-22-06	12-26-06	1-25-07	2/16/07	3/19/07
Number of drum(s) empty:						
Number of drum(s) 1/4 full:						
Number of drum(s) 1/2 full:						
Number of drum(s) 3/4 full:	1	1	1	1	1	1
Number of drum(s) full:						
Total drum(s) on site:	1	1	1	1	1	1
Are the drum(s) properly labeled?	Y	Y	Y	Y	Y	Y
Drum ID & Contents:	SPH + PWC	→	→	→	→	Purge SPH
If any drum(s) are partially or totally filled, what is the first use date:					5/31/06	

- If you add any SPH to an empty or partially filled drum, drum must have at least 20 gals. of Purgewater or DI Water.
- If drum contains SPH, the drum MUST be steel AND labeled with the appropriate label.
- All BTS drums MUST be labeled appropriately.

STATUS OF DRUM(S) UPON DEPARTURE

Date	10/27/06	11-22-06	12-26-06	1-25-07	2/16/07	3/19/07
Number of drums empty:						
Number of drum(s) 1/4 full:						1
Number of drum(s) 1/2 full:						
Number of drum(s) 3/4 full:	1	1	1	1	1	
Number of drum(s) full:						1
Total drum(s) on site:	1	1	1	1	1	
Are the drum(s) properly labeled?	Y	Y	Y	Y	Y	Y
Drum ID & Contents:	SPH + PWC	→	→	→	→	→

LOCATION OF DRUM(S)

Describe location of drum(s): See Map

FINAL STATUS

Number of new drum(s) left on site this event	0	0	0	0	0	1
Date of inspection:	10/27/06	11-22-06	12-26-06	1-25-07	2/16/07	3/19/07
Drum(s) labelled properly:	Y	Y	Y	Y	Y	Y
Logged by BTS Field Tech:	DK	PW	DW	OW	PC	AA
Office reviewed by:	KJ	KJ				

Appendix C

**Laboratory Analytical Results
UPS- Oakland Hub**



STL

ANALYTICAL REPORT

Job Number: 720-8306-1

Job Description: UPS-Oakland

For:
ARCADIS of New York
975 Cobb Place Blvd NW
Suite 311
Kennesaw, GA 30144-4817

Attention: Mr. Hugh B. Devery

Dimple Sharma
Project Manager I
dsharma@stl-inc.com
03/27/2007

cc: Mr. Robert Rogero
Ms. Lisa Taylor

Project Manager: Dimple Sharma

Severn Trent Laboratories, Inc.
STL San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 484-1096 www.stl-inc.com

EXECUTIVE SUMMARY - Detections

Client: ARCADIS of New York

Job Number: 720-8306-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-8306-1	MW-1				
Gasoline Range Organics (GRO)-C5-C12		940	50	ug/L	8260B
Diesel Range Organics [C10-C28]		11000	100	ug/L	8015B
720-8306-2	MW-2				
Diesel Range Organics [C10-C28]		11000	100	ug/L	8015B
720-8306-3	MW-3				
Gasoline Range Organics (GRO)-C5-C12		510	100	ug/L	8260B
Diesel Range Organics [C10-C28]		26000	250	ug/L	8015B
720-8306-4	OW-1				
Gasoline Range Organics (GRO)-C5-C12		460	250	ug/L	8260B
Diesel Range Organics [C10-C28]		76000	500	ug/L	8015B

METHOD SUMMARY

Client: ARCADIS of New York

Job Number: 720-8306-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS	STL SF	SW846 8260B	
Purge-and-Trap	STL SF		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	STL SF	SW846 8015B	
Separatory Funnel Liquid-Liquid Extraction	STL SF		SW846 3510C

LAB REFERENCES:

STL SF = STL San Francisco

METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: ARCADIS of New York

Job Number: 720-8306-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Client Matrix</u>	<u>Date/Time Sampled</u>	<u>Date/Time Received</u>
720-8306-1	MW-1	Water	03/19/2007 1045	03/20/2007 1435
720-8306-2	MW-2	Water	03/19/2007 1200	03/20/2007 1435
720-8306-3	MW-3	Water	03/19/2007 1155	03/20/2007 1435
720-8306-4	OW-1	Water	03/19/2007 1205	03/20/2007 1435

Analytical Data

Client: ARCADIS of New York

Job Number: 720-8306-1

Client Sample ID: MW-1

Lab Sample ID: 720-8306-1
Client Matrix: Water

Date Sampled: 03/19/2007 1045
Date Received: 03/20/2007 1435

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/23/2007 1356
Date Prepared: 03/23/2007 1356

Analysis Batch: 720-19676

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200703\03
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
MTBE	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	940		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	89		77 - 121
1,2-Dichloroethane-d4 (Surr)	99		73 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-8306-1

Client Sample ID: MW-2

Lab Sample ID: 720-8306-2

Date Sampled: 03/19/2007 1200

Client Matrix: Water

Date Received: 03/20/2007 1435

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-19698

Instrument ID: Varian 3900E

Preparation: 5030B

Lab File ID: c:\varianws\data\200703\03

Dilution: 1.0

Initial Weight/Volume: 10 mL

Date Analyzed: 03/26/2007 1926

Final Weight/Volume: 10 mL

Date Prepared: 03/26/2007 1926

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
MTBE	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	86		77 - 121
1,2-Dichloroethane-d4 (Surr)	93		73 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-8306-1

Client Sample ID: MW-3

Lab Sample ID: 720-8306-3

Date Sampled: 03/19/2007 1155

Client Matrix: Water

Date Received: 03/20/2007 1435

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-19676

Instrument ID: Varian 3900E

Preparation: 5030B

Lab File ID: c:\varianws\data\200703\03

Dilution: 2.0

Initial Weight/Volume: 10 mL

Date Analyzed: 03/23/2007 1441

Final Weight/Volume: 10 mL

Date Prepared: 03/23/2007 1441

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		1.0
Ethylbenzene	ND		1.0
Toluene	ND		1.0
MTBE	ND		1.0
Xylenes, Total	ND		2.0
Gasoline Range Organics (GRO)-C5-C12	510		100
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	87		77 - 121
1,2-Dichloroethane-d4 (Surr)	99		73 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-8306-1

Client Sample ID: OW-1

Lab Sample ID: 720-8306-4
Client Matrix: Water

Date Sampled: 03/19/2007 1205
Date Received: 03/20/2007 1435

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 5.0
Date Analyzed: 03/26/2007 1221
Date Prepared: 03/26/2007 1221

Analysis Batch: 720-19698

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200703\03
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		2.5
Ethylbenzene	ND		2.5
Toluene	ND		2.5
MTBE	ND		2.5
Xylenes, Total	ND		5.0
Gasoline Range Organics (GRO)-C5-C12	460		250
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	90		77 - 121
1,2-Dichloroethane-d4 (Surr)	97		73 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-8306-1

Client Sample ID: MW-1

Lab Sample ID: 720-8306-1

Date Sampled: 03/19/2007 1045

Client Matrix: Water

Date Received: 03/20/2007 1435

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method:	8015B	Analysis Batch: 720-19690	Instrument ID: HP DRO5
Preparation:	3510C	Prep Batch: 720-19548	Lab File ID: N/A
Dilution:	2.0		Initial Weight/Volume: 250 mL
Date Analyzed:	03/23/2007 1721		Final Weight/Volume: 1 mL
Date Prepared:	03/21/2007 1141		Injection Volume:
			Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	11000		100
Surrogate	%Rec		Acceptance Limits
o-Terphenyl	41	X	50 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-8306-1

Client Sample ID: MW-2

Lab Sample ID: 720-8306-2

Date Sampled: 03/19/2007 1200

Client Matrix: Water

Date Received: 03/20/2007 1435

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method:	8015B	Analysis Batch: 720-19690	Instrument ID: HP DRO5
Preparation:	3510C	Prep Batch: 720-19548	Lab File ID: N/A
Dilution:	2.0		Initial Weight/Volume: 250 mL
Date Analyzed:	03/23/2007 1748		Final Weight/Volume: 1 mL
Date Prepared:	03/21/2007 1141		Injection Volume:
			Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	11000		100
Surrogate	%Rec		Acceptance Limits
o-Terphenyl	42	X	50 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-8306-1

Client Sample ID: MW-3

Lab Sample ID: 720-8306-3

Date Sampled: 03/19/2007 1155

Client Matrix: Water

Date Received: 03/20/2007 1435

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method:	8015B	Analysis Batch: 720-19690	Instrument ID:	HP DRO5
Preparation:	3510C	Prep Batch: 720-19548	Lab File ID:	N/A
Dilution:	5.0		Initial Weight/Volume:	250 mL
Date Analyzed:	03/23/2007 1815		Final Weight/Volume:	1 mL
Date Prepared:	03/21/2007 1141		Injection Volume:	
			Column ID:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	26000		250
Surrogate	%Rec		Acceptance Limits
o-Terphenyl	0	D	50 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-8306-1

Client Sample ID: OW-1

Lab Sample ID: 720-8306-4

Date Sampled: 03/19/2007 1205

Client Matrix: Water

Date Received: 03/20/2007 1435

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method:	8015B	Analysis Batch: 720-19690	Instrument ID:	HP DRO5
Preparation:	3510C	Prep Batch: 720-19548	Lab File ID:	N/A
Dilution:	10		Initial Weight/Volume:	250 mL
Date Analyzed:	03/23/2007 1842		Final Weight/Volume:	1 mL
Date Prepared:	03/21/2007 1141		Injection Volume:	
			Column ID:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	76000		500
Surrogate	%Rec		Acceptance Limits
o-Terphenyl	0	D	50 - 130

DATA REPORTING QUALIFIERS

Client: ARCADIS of New York

Job Number: 720-8306-1

<u>Lab Section</u>	<u>Qualifier</u>	<u>Description</u>
GC Semi VOA	X	Surrogate exceeds the control limits
	D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Quality Control Results

Client: ARCADIS of New York

Job Number: 720-8306-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-19676					
LCS 720-19676/3	Lab Control Spike	T	Water	8260B	
LCSD 720-19676/2	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-19676/5	Method Blank	T	Water	8260B	
720-8306-1	MW-1	T	Water	8260B	
720-8306-3	MW-3	T	Water	8260B	
Analysis Batch:720-19698					
LCS 720-19698/3	Lab Control Spike	T	Water	8260B	
LCSD 720-19698/2	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-19698/4	Method Blank	T	Water	8260B	
720-8306-2	MW-2	T	Water	8260B	
720-8306-4	OW-1	T	Water	8260B	
Report Basis					
T = Total					
GC Semi VOA					
Prep Batch: 720-19548					
LCS 720-19548/2-AA	Lab Control Spike	T	Water	3510C	
LCSD 720-19548/3-AA	Lab Control Spike Duplicate	T	Water	3510C	
MB 720-19548/1-AA	Method Blank	T	Water	3510C	
720-8306-1	MW-1	T	Water	3510C	
720-8306-2	MW-2	T	Water	3510C	
720-8306-3	MW-3	T	Water	3510C	
720-8306-4	OW-1	T	Water	3510C	
Analysis Batch:720-19690					
LCS 720-19548/2-AA	Lab Control Spike	T	Water	8015B	720-19548
LCSD 720-19548/3-AA	Lab Control Spike Duplicate	T	Water	8015B	720-19548
MB 720-19548/1-AA	Method Blank	T	Water	8015B	720-19548
720-8306-1	MW-1	T	Water	8015B	720-19548
720-8306-2	MW-2	T	Water	8015B	720-19548
720-8306-3	MW-3	T	Water	8015B	720-19548
720-8306-4	OW-1	T	Water	8015B	720-19548
Report Basis					
T = Total					

STL San Francisco

Quality Control Results

Client: ARCADIS of New York

Job Number: 720-8306-1

Method Blank - Batch: 720-19676

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-19676/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/23/2007 1120
Date Prepared: 03/23/2007 1120

Analysis Batch: 720-19676
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200703\03
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
MTBE	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	86	77 - 121
1,2-Dichloroethane-d4 (Surr)	102	73 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: ARCADIS of New York

Job Number: 720-8306-1

**Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-19676**

**Method: 8260B
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-19676/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/23/2007 1013
Date Prepared: 03/23/2007 1013

Analysis Batch: 720-19676
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200703\032
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-19676/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/23/2007 1036
Date Prepared: 03/23/2007 1036

Analysis Batch: 720-19676
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200703\032
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	93	92	69 - 129	1	25		
Toluene	99	100	70 - 130	0	25		
MTBE	97	95	65 - 165	2	25		
Gasoline Range Organics (GRO)-C5-C12	76	77	60 - 130	1	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)	92		93		77 - 121		
1,2-Dichloroethane-d4 (Surr)	95		98		73 - 130		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: ARCADIS of New York

Job Number: 720-8306-1

Method Blank - Batch: 720-19698

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-19698/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/26/2007 1127
Date Prepared: 03/26/2007 1127

Analysis Batch: 720-19698
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200703\03
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
MTBE	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	91	77 - 121
1,2-Dichloroethane-d4 (Surr)	94	73 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: ARCADIS of New York

Job Number: 720-8306-1

**Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-19698**

**Method: 8260B
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-19698/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/26/2007 1020
Date Prepared: 03/26/2007 1020

Analysis Batch: 720-19698
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200703\032
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-19698/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/26/2007 1042
Date Prepared: 03/26/2007 1042

Analysis Batch: 720-19698
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200703\032
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	97	102	69 - 129	6	25		
Toluene	106	114	70 - 130	7	25		
MTBE	91	101	65 - 165	10	25		
Gasoline Range Organics (GRO)-C5-C12	76	89	60 - 130	16	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)	94		93		77 - 121		
1,2-Dichloroethane-d4 (Surr)	88		91		73 - 130		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: ARCADIS of New York

Job Number: 720-8306-1

Method Blank - Batch: 720-19548

Method: 8015B
Preparation: 3510C

Lab Sample ID: MB 720-19548/1-AA
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/22/2007 1249
Date Prepared: 03/21/2007 1141

Analysis Batch: 720-19690
Prep Batch: 720-19548
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	81	50 - 130

**Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-19548**

Method: 8015B
Preparation: 3510C

LCS Lab Sample ID: LCS 720-19548/2-AA
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/22/2007 1130
Date Prepared: 03/21/2007 1141

Analysis Batch: 720-19690
Prep Batch: 720-19548
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-19548/3-AA
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/22/2007 1157
Date Prepared: 03/21/2007 1141

Analysis Batch: 720-19690
Prep Batch: 720-19548
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Diesel Range Organics [C10-C28]	70	67	50 - 130	5	30		
Surrogate	LCS % Rec		LCSD % Rec	Acceptance Limits			
o-Terphenyl	93	92		50 - 130			

Calculations are performed before rounding to avoid round-off errors in calculated results.

720-8306

104622

BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7774
PHONE (408) 573-0555

CONDUCT ANALYSIS TO DETECT

LAB STL DHS # _____

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

EPA RWQCB REGION _____

LIA

OTHER

CHAIN OF BTS # 070319-AB1

CLIENT Blasland, Bouck, & Lee, Inc.

SITE UPS

8400 Pardee Drive

Oakland, CA

C = COMPOSITE ALL CONTAINERS

TPH-Gro, BTEX, MTBE (8260)

TPH-D (8015)

SPECIAL INSTRUCTIONS

Invoice and Report to : Blasland, Bouck, & Lee, Inc.
Attn: Hugh Devery
770-428-9009

Low Detection levels requested

3.5

SAMPLE I.D.	DATE	TIME	MATRIX S= SOIL W=H ₂ O	CONTAINERS TOTAL	C	TPH-Gro, BTEX, MTBE (8260)	TPH-D (8015)												ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
M6-1	3/19	1045	W	4		X	X															
M6-2		1200				X	X															
M6-3		1155				X	X															
OW-1		1005				X	X															

SAMPLING COMPLETED DATE 3/19 TIME 1215 SAMPLING PERFORMED BY A. Brown RESULTS NEEDED NO LATER THAN As contracted

RELEASED BY [Signature] DATE 3/19/07 TIME 1215 RECEIVED BY [Signature] DATE 3/19/07 TIME 1615

RELEASED BY [Signature] DATE 3/20/07 TIME 1010 RECEIVED BY [Signature] DATE 3-20-07 TIME 10:10 AM

RELEASED BY [Signature] DATE 3-20-07 TIME 14:35 RECEIVED BY [Signature] DATE 3-20-07 TIME 1435

SHIPPED VIA _____ DATE SENT _____ TIME SENT _____ COOLER # _____

LOGIN SAMPLE RECEIPT CHECK LIST

Client: ARCADIS of New York

Job Number: 720-8306-1

Login Number: 8306

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	