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Alameda County
Environmental Health



55 Glenlake Parkway, N.E.
Atlanta, GA 30328

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

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

Dear Mr. Gholami:

Attached please find the Second Semi-Annual Groundwater Monitoring & Sampling Report for the above-referenced site. The report, which describes the groundwater monitoring activities performed at the site on September 25, 2007, was prepared for United Parcel Service (UPS) by ARCADIS BBL.

I declare under penalty of perjury, that the information and/or recommendations contained in the attached Second Semi-Annual Groundwater Monitoring & Sampling Report is true and correct.

Please feel free to contact me directly at 404.828.8991 should you have any questions or comments.

Sincerely,

United Parcel Service

Julie Straub
Julie Straub
Corporate Environmental Manager

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

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Kennesaw, Georgia 30144
Tel 770.428.9009
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www.arcadis-us.com

ENVIRONMENT

Subject:
Second Semi-Annual Groundwater Monitoring & Sampling Report
UPS – Oakland Facility
8400 Pardee Drive, Oakland, California
State ID # 583

Date:
November 26, 2007

Dear Mr. Gholami:

On behalf of United Parcel Service (UPS), ARCADIS BBL is transmitting herewith the Year 2007 Second Semi-Annual Groundwater Monitoring & Sampling Report for the above-referenced facility. This report describes groundwater monitoring activities performed at the site on September 25, 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 from April through September 2007 are also included.

If you have any questions regarding this report, please do not hesitate to contact Mr. Hugh Devery at 770.428.9009 extension 11.

Contact:
Hugh B. Devery
Phone:
770.428.9009
Email:
Hugh.Devery@arcadis-us.com

Our ref:
B0037393.0000

Sincerely,

ARCADIS U.S., Inc.



Hugh B. Devery
Senior Geologist



Gregory R. Albright, P.G.
Senior Geologist
California P.G. No. 5098



PROFESSIONAL GEOLOGIST
GREGORY R. ALBRIGHT
No. 5098
STATE OF CALIFORNIA

Copies:

Ms. Julie Straub – UPS Corporate Plant Engineering, 55 Glenlake Parkway NE,
Atlanta, GA 30328
File

***Year 2007 Second 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**

November 2007

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- Appendix B Well Gauging Data
- Appendix C Laboratory Analytical Results
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Groundwater Monitoring & Sampling

1.1. Introduction

United Parcel Service (UPS) retained ARCADIS BBL to perform semi-annual groundwater quality 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 September 25, 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 September 25, 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 September 25, 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 (0.03-ft) during this sampling activity. Groundwater elevations in monitoring wells MW-1 through MW-3 in September 2007 were approximately 0.75 to 1.20-ft lower than water levels measured during the last sampling event of March 2007. A generalized groundwater contour map prepared using the September 2007 groundwater elevation data is shown on **Figure 3**. The apparent groundwater flow direction is to the south, 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 September 25, 2007. The groundwater samples were analyzed for total petroleum hydrocarbons as diesel (TPH-d) by US Environmental Protection Agency (USEPA) Method 8015B 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 TestAmerica Laboratories, Inc. (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. Xylene was detected above MCL [1,750 micrograms per liter ($\mu\text{g}/\text{L}$)] in MW-1 at a concentration of 1.1 $\mu\text{g}/\text{L}$. No additional BTEX analytes were detected above detection limits or MCL in any of the remaining groundwater samples collected during the September 2007 monitoring event. MTBE was not detected above the MCL of 13 $\mu\text{g}/\text{L}$ in any wells. TPH-g was detected in monitoring wells MW-1, MW-2, and MW-3; MW-1 contained a concentration of 0.24 milligrams per liter (mg/L), MW-2 contained a concentration of 0.055 mg/L, and MW-3 contained a concentration of 0.39 mg/L. TPH-g was not detected above laboratory reporting limit of 0.2 mg/L in monitoring well OW-1.

TPH-d concentrations were detected in wells MW-1, MW-2, MW-3 and OW-1; MW-1 contained a concentration of 9.7 mg/L, MW-2 contained a concentration of 8.7 mg/L, MW-3 contained a concentration of 11.0 mg/L, and OW-1 contained a concentration of 42.0 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 one 55-gallon drum (1/4 full) and stored at the UPS Hub pending proper disposal offsite. The total number of 55-gallon drums now stored onsite is two; one full drum containing purge water generated from previous groundwater sampling activities (May-August 2007) and one 1/4 full drum containing water generated from the September 2007 groundwater sampling activities. Upon filling of the second investigation derived waste (IDW) drum, the two drums will be removed and properly disposed of offsite.

1.5. Summary

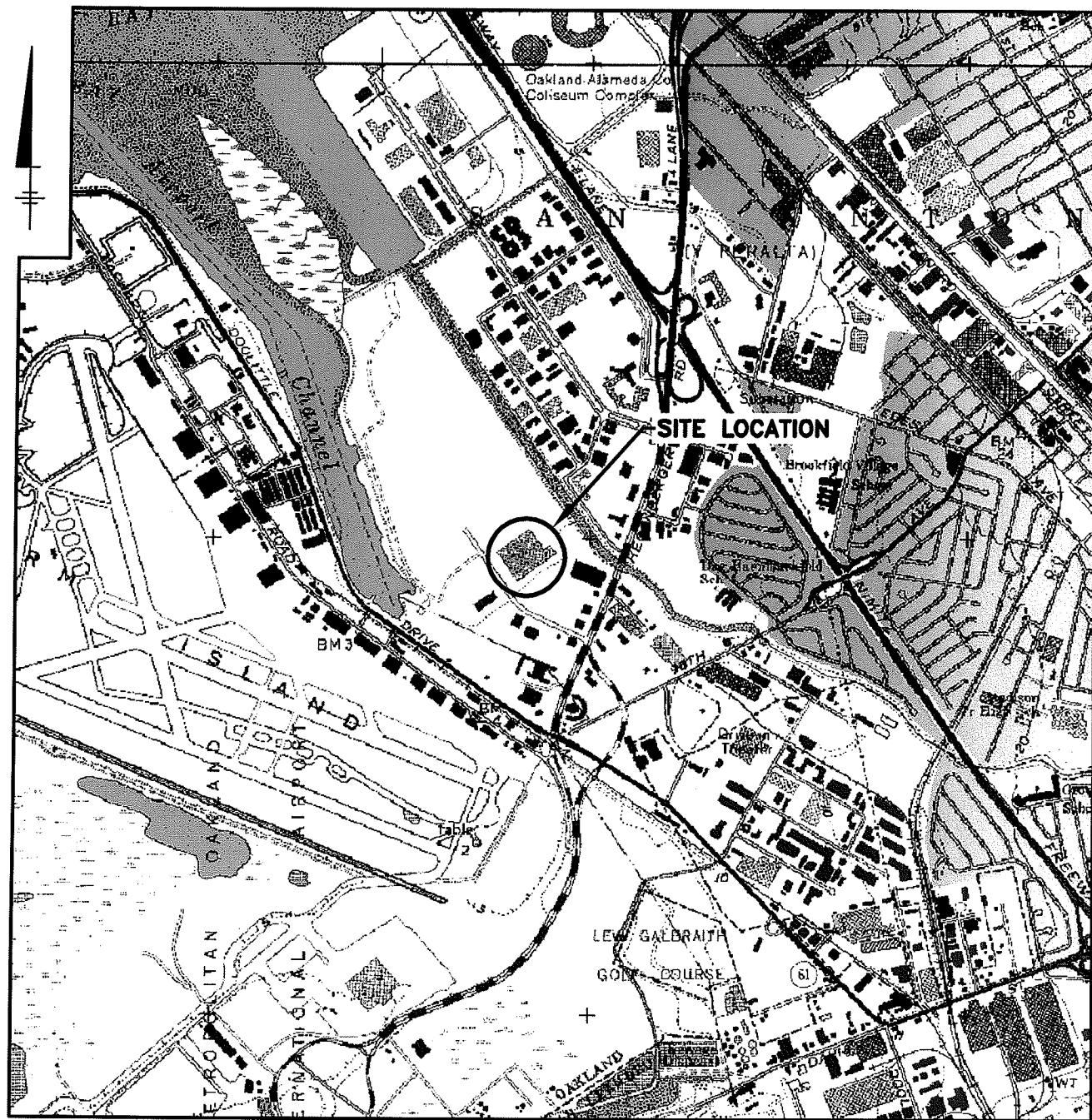
1. PSH was detected in monitoring wells MW-2 and OW-1 with an apparent thickness' of 0.01-ft and 0.03-ft, respectively.
2. Groundwater samples were collected on September 25, 2007 and sampled for BTEX, MTBE, TPH-g and TPH-d.
3. Groundwater elevations in September 2007 for site wells were approximately 0.75 to 1.20-ft lower on average than water levels measured during the last sampling event of March 2007. Apparent groundwater flow direction is to the south, consistent with historical direction.
4. Xylene was detected above laboratory detection limits at a concentration on 1.1 µg/L, but was below their primary drinking water MCL of 1,750 µg/L.
5. MTBE was not detected above detection limits in any of the other groundwater samples.
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.

Figures

UPS-Oakland Hub



NOTES:

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



0 2000' 4000'
APPROXIMATE SCALE: 1"-2000'

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

**TOPOGRAPHIC MAP OF
SITE LOCATION AND VICINITY**

SWAN WAY

PARDEE DRIVE

MAIN
U.P.S.
BUILDING

BUILDING OUTLINE

VACANT PROPERTY
(PORT OF OAKLAND)

PUMP
ISLANDS
MW-1
MW-2
MW-3
OW-1
STORM DRAIN
CATCH BASIN
STORM DRAIN
CATCH BASIN
UNDERGROUND FUEL STORAGE TANKS

MW-6
MW-7
MW-4
MW-5

LEGEND:

- MW-3 EXISTING GROUNDWATER MONITORING
WELLS INSTALLED BY GERAGHTY & MILLER
MW-4 DESTROYED MONITORING WELLS
--- PROPERTY LINE

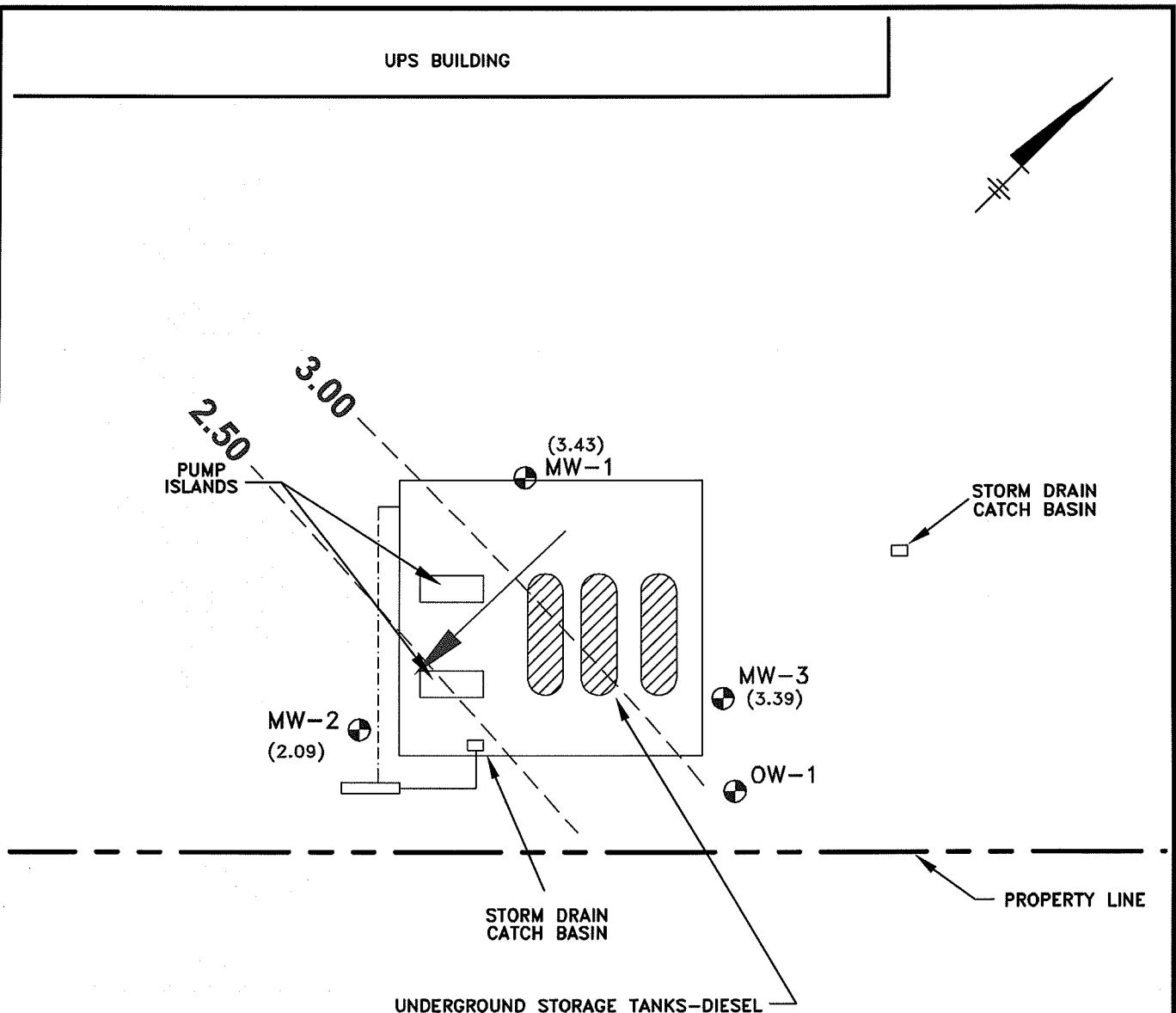
0 100' 200'
GRAPHIC SCALE

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

MONITORING WELL LOCATION MAP

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
2



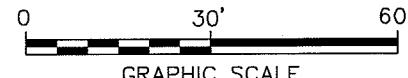
LEGEND:

MW-1 (●) GROUNDWATER MONITORING WELL

(3.75) GROUNDWATER TABLE ELEVATION
(FEET ABOVE MSL)

4.00 ~~~ GROUNDWATER ELEVATION CONTOUR

← GROUNDWATER FLOW DIRECTION

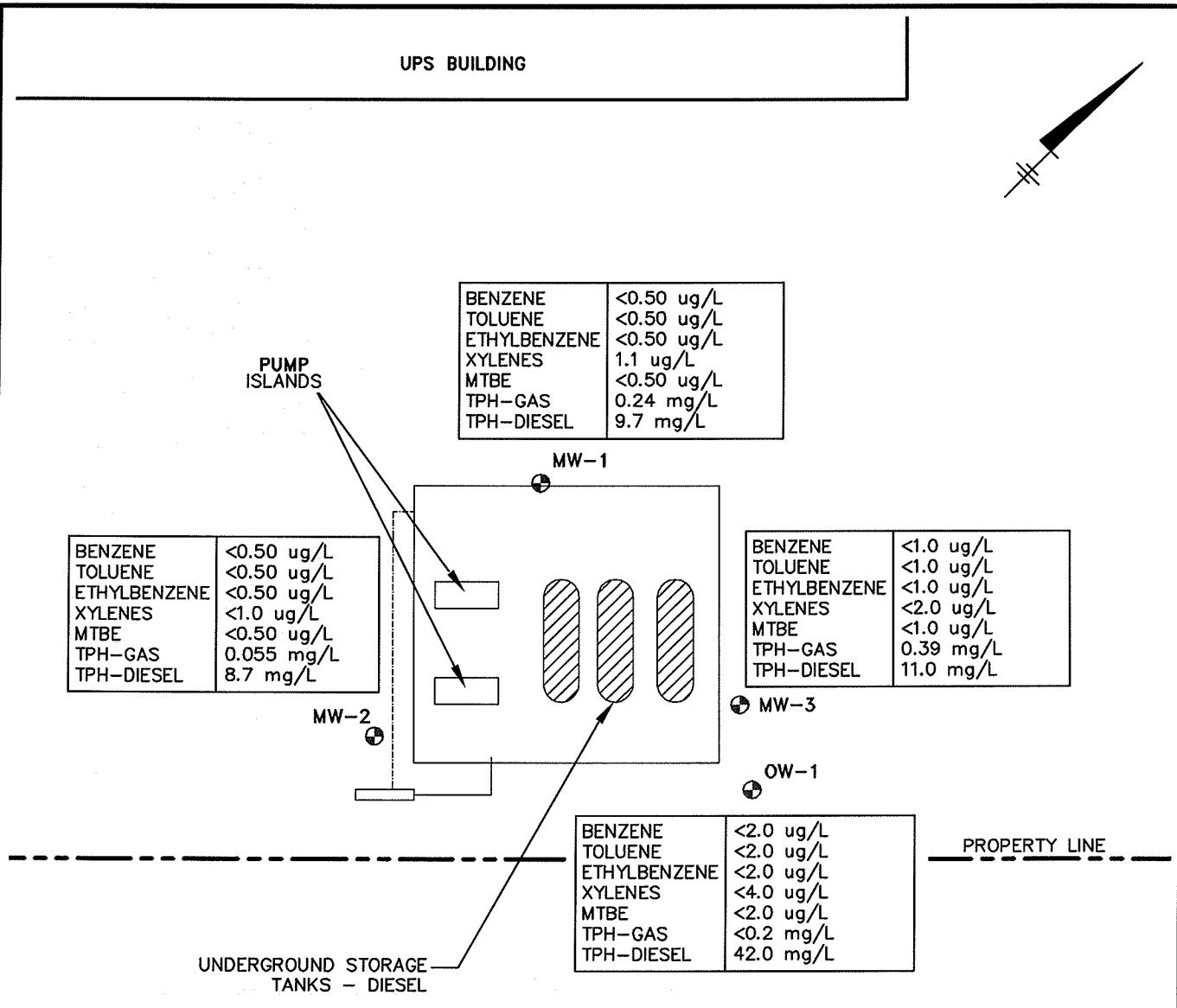


NOTE:

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

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

GROUNDWATER CONTOUR MAP
SEPTEMBER 25, 2007



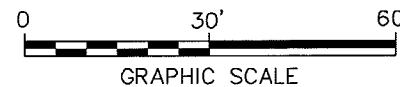
LEGEND:

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 SEPTEMBER 25, 2007

TABLES

UPS-Oakland Hub

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
		4/26/2007	2.93	4.50	-0.02	0.00
		5/29/2007	3.15	4.28	-0.22	0.00
		6/28/2007	3.42	4.01	-0.27	0.00
		7/30/2007	3.60	3.83	-0.18	0.00
		8/30/2007	3.85	3.58	-0.25	0.00
		9/25/2007	4.00	3.43	-0.15	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)
MW-2	7.15	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	0.20	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
		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	4.65	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	-0.10	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
		4/26/2007	4.17	2.98	0.13	0.03
		5/29/2007	4.42	2.73	-0.25	0.01
		6/28/2007	5.16	1.99	-0.74	0.01
		7/30/2007	4.71	2.44	0.45	0.00
		8/30/2007	4.94	2.21	-0.23	0.03
		9/25/2007	5.06	2.09	-0.12	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

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-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	0.16	0.00
		3/19/2007	2.83	4.59	0.26	0.00
		4/26/2007	2.94	4.48	-0.11	0.00
		5/29/2007	3.18	4.24	-0.24	0.00
		6/28/2007	3.41	4.01	-0.23	0.00
		7/30/2007	3.62	3.80	-0.21	0.00
		8/30/2007	3.84	3.58	-0.22	0.00
		9/25/2007	4.03	3.39	-0.19	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)
OW-1	N/A	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	-1.70	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	-0.70	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
		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	-0.10	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
		4/26/2007	6.66	NC	-0.11	0.01
		5/29/2007	6.86	NC	0.20	0.02
		6/28/2007	6.97	NC	0.31	0.20
		7/30/2007	7.06	NC	0.09	0.01
		8/30/2007	7.25	NC	0.19	0.03
		9/25/2007	7.25	NC	0.00	0.03

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	3.00	1.40	4.00	2.40	NA	NA	21.00	NA
	6/19/1991	1.70	0.70	0.50	0.90	NA	NA	7.10	NA
	7/23/1991	1.60	1.10	0.50	1.50	NA	0.22	8.70	NA
	8/26/1991	180.00	120.00	31.00	160.00	NA	NA	2.80	NA
	11/18/1991	1.10	0.40	0.50	< 0.3	NA	NA	6.60	NA
	2/3/1992	0.90	< 0.3	0.80	0.70	NA	NA	2.20	NA
	6/29/1992	0.80	0.40	0.40	0.90	NA	NA	2.10	NA
	6/23/1993	0.66	< 0.5	0.50	< 0.5	NA	NA	3.20	NA
	10/11/1993	1.30	< 0.5	< 0.5	< 0.5	NA	NA	9.60	NA
	1/4/1994	2.10	0.65	1.30	2.10	NA	NA	12.00	NA
	5/10/1994	0.54	0.53	< 0.5	1.10	NA	NA	6.40	NA
	2/1/1995	< 1.0	< 1.0	1.00	< 1.0	NA	0.51	10.00	NA
	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	0.51	8.70	NA
	10/16/1995	2.80	< 0.5	< 0.5	< 0.5	NA	0.83	15.00	NA
	12/28/1995	2.10	< 0.5	< 0.5	< 0.5	NA	0.56	15.00	NA
	6/4/1997	NA	NA	NA	NA	NA	NA	28.00	0.76
	9/30/1999	< 0.5	0.60	< 0.5	1.80	<3.0	1.60	28.00	9.90
	10/11/2000	< 0.5	< 0.5	< 0.5	< 1.0	< 5	0.26	21.00	0.39
	9/3/2002	<0.5	<0.5	<0.5	0.50	<0.5	1.20	38.00	NA
	3/28/2003	<5	<5	<5	<10	<5.0	0.25	35.00	NM
	9/9/2003	<0.5	<0.5	<0.5	<1.0	0.60	0.44	11.00	NM
	4/19/2004	3.20	<2.5	<2.5	<5.0	<2.5	0.28	24.00 ndp	NM
	9/29/2004	<1.0	<1.0	<1.0	<2.0	2.10	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	11.00	NM
	9/28/2006	< 0.50	< 0.50	< 0.50	<1.0	0.87	0.22	28.00	NM
	3/19/2007	< 0.50	< 0.50	< 0.50	<1.0	<1.0	0.94	11.00	NM
	9/25/2007	<0.50	<0.50	<0.50	1.1	<0.50	0.24	9.7	NM
MCL	--	1.00	150.00	300.00	1750.00	13.00	--	--	--

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	0.60	0.40	0.60	0.70	NA	NA	3.50	NA
	6/19/1991	0.50	< 0.3	< 0.3	< 0.3	NA	NA	<0.50	NA
	7/23/1991	0.70	< 0.3	< 0.3	< 0.3	NA	<0.50	0.66	NA
	8/26/1991	0.70	< 0.3	< 0.3	< 0.3	NA	NA	<0.50	NA
	11/18/1991	0.80	< 0.3	< 0.3	< 0.3	NA	NA	3.20	NA
	2/3/1992	0.70	< 0.3	< 0.3	0.50	NA	NA	0.40	NA
	6/29/1992	0.60	< 0.3	< 0.3	< 0.3	NA	NA	0.25	NA
	6/23/1993	0.55	< 0.5	< 0.5	< 0.5	NA	NA	11.00	NA
	10/11/1993	1.20	< 0.5	< 0.5	1.30	NA	NA	1.40	NA
	1/4/1994	0.72	< 0.5	< 0.5	1.10	NA	NA	3.70	NA
	5/10/1994	0.74	< 0.5	< 0.5	0.70	NA	NA	2.30	NA
	2/1/1995	2.10	< 1.0	< 1.0	< 1.0	NA	<100	2.10	NA
	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	0.21	3.60	NA
	10/16/1995	0.73	< 0.5	< 0.5	< 0.5	NA	0.13	1.40	NA
	12/28/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	0.21	2.80	NA
	6/12/1996	NS	NS	NS	NS	NS	NS	--	NS
	6/4/1997	NA	NA	NA	NA	NA	NA	3.30	0.52
	9/30/1999	< 0.5	< 0.5	< 0.5	< 1.0	< 3.0	0.22	6.30	9.50
	10/11/2000	< 0.5	< 0.5	< 0.5	< 1.0	< 5.0	0.17	4.40	0.43
	9/27/2002	0.7J	<2.5	<2.5	<2.5	<2.5	17.00	67.00	NM
	3/28/2003	<25	<25	<25	<50	<25	1.60	10.00	NM
	9/25/2003	0.52	<0.50	<0.50	<1.0	<0.50	0.15	12.00	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	22.00	NM
	3/27/2006	<1.0	<1.0	<1.0	<2.0	<1.0	0.71	8.90	NM
	9/28/2006	<0.50	<0.50	<0.50	<1.0	<0.50	0.06	7.50	NM
	3/19/2007	<0.50	<0.50	<0.50	<1.0	<0.50	<0.05	11.00	NM
	9/25/2007	<0.50	<0.50	<0.50	<1.0	<0.50	0.055	8.7	NM
MCL	--	1.00	150.00	300.00	1750.00	13.00	--	--	--

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.

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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.

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	0.50	0.80	4.30	2.30	NA	NA	18.00	NA
	6/19/1991	0.40	0.40	1.70	1.40	NA	NA	1.30	NA
	7/23/1991	0.30	< 0.3	1.50	0.50	NA	0.33	6.80	NA
	8/26/1991	13.00	13.00	5.80	26.00	NA	NA	<0.05	NA
	11/18/1991	0.60	< 0.3	< 0.3	< 0.3	NA	NA	2.50	NA
	2/3/1992	0.40	< 0.3	1.30	0.60	NA	NA	1.10	NA
	6/29/1992	< 0.3	< 0.3	1.30	0.30	NA	NA	3.20	NA
	6/23/1993	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	8.10	NA
	10/11/1993	1.00	< 0.5	1.50	2.40	NA	NA	7.10	NA
	1/4/1994	< 0.5	< 0.5	1.60	< 0.5	NA	NA	7.40	NA
	5/10/1994	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	5.70	NA
	2/1/1995	< 1.0	< 1.0	2.70	4.10	NA	0.81	10.00	NA
	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	1.20	6.50	NA
	10/16/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	0.93	9.80	NA
	12/28/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	0.69	11.00	NA
	6/4/1997	NA	NA	NA	NA	NA	NA	34.00	0.84
	9/30/1999	< 0.5	0.60	0.70	1.20	< 3.0	1.30	8.70	8.60
	10/11/2000	< 0.5	< 0.5	< 0.5	< 1.0	< 5.0	0.43	20.00	0.51
	9/3/2002	<0.5	<0.5	<0.5	<0.5	<0.5	2.30	14.00	NA
	3/28/2003	<25	<25	<25	<50	<25	2.50	19.00	NM
	9/9/2003	<0.5	<0.5	<0.5	<1.0	<0.5	0.70	73.00	NM
	4/19/2004	<0.50	<0.50	<0.50	<1.0	<0.50	0.10	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	13.00	NM
	9/28/2006	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	0.37	17.00	NM
	3/19/2007	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	0.51	26.00	NM
	9/25/2007	<1.0	<1.0	<1.0	<2.0	<1.0	0.39	11.0	NM
MCL	--	1.00	150.00	300.00	1750.00	13.00	--	--	--

Notes:

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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	31.00	NA	NA	3400.00	NA
	6/4/1997	NS	NS	NS	NS	NS	NS	NS	NS
	9/30/1999	< 2.0	< 2.0	< 2.0	4.20	< 12.0	8.30	2800.00	9.70
	9/30/1999	< 1.0	< 1.0	1.90	8.90	< 6.0	2.90	340.00	—
	10/11/2000	< 0.5	< 0.5	< 0.5	< 1.0	< 5.0	2.10	58.00	0.74
	9/27/2002	0.6J	<2.5	<2.5	<2.5	<2.5	17.00	23.00	NA
	3/28/2003	<50	<50	<50	<100	<50	0.82	81.00	NM
	9/25/2003	<50	530.00	500.00	6200.00	<50	0.22	91.00	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	30.00	NM
	3/27/2006	<13	<13	<13	<25	<13	<1.30	58.00	NM
	9/28/2006	<2.5	<2.5	<2.5	<5.0	<2.5	0.82	130.00	NM
	3/19/2007	<2.5	<2.5	<2.5	<5.0	<2.5	0.46	76.00	NM
	9/25/2007	<2.0	<2.0	<2.0	<4.0	<2.0	<0.2	42.0	NM
MCL	--	1.00	150.00	300.00	1750.00	13.00	--	--	--

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

Well Gauging Data UPS-Oakland Hub

WELL GAUGING DATA

Project # 070925-DW-Y Date 9-25-07 Client Arcadis

Site 8400 Pardee Drive Oakland

WELL GAUGING DATA

Project # 070830-TV2 Date 8/30/07 Client Arcadis

Site 8400 Pardue Drive Oakland

WELL GAUGING DATA

Project # 0707 30 - DW-3 Date 7-30-07 Client Arcadis

Site 8400 Pardee Dr Oakland

WELL GAUGING DATA

Project # 070628-04w-2 Date 6-28-07 Client B&T Arcadis

Site 8400 Pardee Dr Oakland

WELL GAUGING DATA

Project # 070529-DW-2 Date 5-29-07 Client BB&L ARCADES

Site 8400 Fardee Dr Oakland

WELL GAUGING DATA

Project # 070426-BPZ

Date 4-26-07

Client görl

Site 8400 Pardoe Dr. Ogklend

Appendix C

Laboratory Analytical Results UPS-Oakland Hub

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

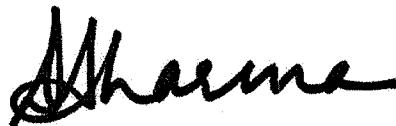
Job Number: 720-11009-1

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
dimple.sharma@testamericainc.com
10/09/2007

TestAmerica Laboratories, Inc.

TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 484-1096 www.testamericainc.com

**Job Narrative
720-J11009-1**

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 26974 was outside control limits. The associated laboratory control standard (LCS) met acceptance criteria.

Method 8260B: The following sample(s) was diluted due to the abundance of non-target analytes: 720-11009-4. Elevated reporting limits (RLs) are provided.

Method 8260B: 1,2-DCA-d4 surrogate recovery is low.

No other analytical or quality issues were noted.

GC Semi VOA

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: ARCADIS of New York

Job Number: 720-11009-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-11009-1	MW-1				
Xylenes, Total		1.1	1.0	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		240	50	ug/L	8260B
Diesel Range Organics [C10-C28]		9700	50	ug/L	8015B
720-11009-2	MW-2				
Gasoline Range Organics (GRO)-C5-C12		55	50	ug/L	8260B
Diesel Range Organics [C10-C28]		8700	50	ug/L	8015B
720-11009-3	MW-3				
Gasoline Range Organics (GRO)-C5-C12		390	100	ug/L	8260B
Diesel Range Organics [C10-C28]		11000	50	ug/L	8015B
720-11009-4	OW-1				
Diesel Range Organics [C10-C28]		42000	500	ug/L	8015B

METHOD SUMMARY

Client: ARCADIS of New York

Job Number: 720-11009-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS Purge-and-Trap	TAL SF	SW846 8260B	
	TAL SF		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	TAL SF	SW846 8015B	
Organic Compounds in Water by Microextraction	TAL SF		SW846 3511

Lab References:

TAL SF = TestAmerica 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: 720-11009-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-11009-1	MW-1	Water	09/25/2007 1339	09/26/2007 1640
720-11009-2	MW-2	Water	09/25/2007 1455	09/26/2007 1640
720-11009-3	MW-3	Water	09/25/2007 1425	09/26/2007 1640
720-11009-4	OW-1	Water	09/25/2007 1440	09/26/2007 1640

Analytical Data

Client: ARCADIS of New York

Job Number: 720-11009-1

Client Sample ID: MW-1

Lab Sample ID: 720-11009-1

Client Matrix: Water

Date Sampled: 09/25/2007 1339

Date Received: 09/26/2007 1640

8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	720-26950	Instrument ID:	Saturn 3900B
Preparation:	5030B			Lab File ID:	c:\saturnws\data\200710\10
Dilution:	1.0			Initial Weight/Volume:	40 mL
Date Analyzed:	10/02/2007 2011			Final Weight/Volume:	40 mL
Date Prepared:	10/02/2007 2011				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
MTBE	ND		0.50
Xylenes, Total	1.1		1.0
Gasoline Range Organics (GRO)-C5-C12	240		50

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	96	77 - 121
1,2-Dichloroethane-d4 (Surr)	88	73 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-11009-1

Client Sample ID: MW-2

Lab Sample ID: 720-11009-2

Client Matrix: Water

Date Sampled: 09/25/2007 1455

Date Received: 09/26/2007 1640

8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	720-26950	Instrument ID:	Saturn 3900B
Preparation:	5030B			Lab File ID:	c:\saturnws\data\200710\10
Dilution:	1.0			Initial Weight/Volume:	40 mL
Date Analyzed:	10/02/2007 2038			Final Weight/Volume:	40 mL
Date Prepared:	10/02/2007 2038				

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	55		50

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	101	77 - 121
1,2-Dichloroethane-d4 (Surr)	90	73 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-11009-1

Client Sample ID: MW-3

Lab Sample ID: 720-11009-3

Client Matrix: Water

Date Sampled: 09/25/2007 1425

Date Received: 09/26/2007 1640

8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	720-26950	Instrument ID:	Saturn 3900B
Preparation:	5030B			Lab File ID:	c:\saturnws\data\200710\10
Dilution:	2.0			Initial Weight/Volume:	40 mL
Date Analyzed:	10/02/2007 2105			Final Weight/Volume:	40 mL
Date Prepared:	10/02/2007 2105				

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	390		100

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	98	77 - 121
1,2-Dichloroethane-d4 (Surr)	101	73 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-11009-1

Client Sample ID: OW-1

Lab Sample ID: 720-11009-4

Client Matrix: Water

Date Sampled: 09/25/2007 1440

Date Received: 09/26/2007 1640

8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch:	720-27026	Instrument ID:	Saturn 3900B
Preparation:	5030B			Lab File ID:	c:\saturnws\data\200710\10
Dilution:	4.0			Initial Weight/Volume:	40 mL
Date Analyzed:	10/04/2007 1526			Final Weight/Volume:	40 mL
Date Prepared:	10/04/2007 1526				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		2.0
Ethylbenzene	ND		2.0
Toluene	ND		2.0
MTBE	ND		2.0
Xylenes, Total	ND		4.0
Gasoline Range Organics (GRO)-C5-C12	ND		200

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	98	77 - 121
1,2-Dichloroethane-d4 (Surr)	82	73 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-11009-1

Client Sample ID: MW-1

Lab Sample ID: 720-11009-1

Date Sampled: 09/25/2007 1339

Client Matrix: Water

Date Received: 09/26/2007 1640

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

Method:	8015B	Analysis Batch:	720-27170	Instrument ID:	Varian DRO2
Preparation:	3511	Prep Batch:	720-26764	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	35 mL
Date Analyzed:	10/08/2007 1946			Final Weight/Volume:	2 mL
Date Prepared:	09/28/2007 0833			Injection Volume:	
				Column ID:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	9700		50
Surrogate p-Terphenyl	%Rec		Acceptance Limits 50 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-11009-1

Client Sample ID: MW-2

Lab Sample ID: 720-11009-2

Client Matrix: Water

Date Sampled: 09/25/2007 1455

Date Received: 09/26/2007 1640

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

Method:	8015B	Analysis Batch:	720-27170	Instrument ID:	Varian DRO2
Preparation:	3511	Prep Batch:	720-26764	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	35 mL
Date Analyzed:	10/08/2007 2019			Final Weight/Volume:	2 mL
Date Prepared:	09/28/2007 0833			Injection Volume:	
				Column ID:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	8700		50
Surrogate	%Rec		Acceptance Limits
p-Terphenyl	105		50 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-11009-1

Client Sample ID: MW-3

Lab Sample ID: 720-11009-3

Client Matrix: Water

Date Sampled: 09/25/2007 1425

Date Received: 09/26/2007 1640

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

Method:	8015B	Analysis Batch:	720-27170	Instrument ID:	Varian DRO2
Preparation:	3511	Prep Batch:	720-26764	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	35 mL
Date Analyzed:	10/08/2007 2051			Final Weight/Volume:	2 mL
Date Prepared:	09/28/2007 0833			Injection Volume:	
				Column ID:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	11000		50
Surrogate	%Rec		Acceptance Limits
p-Terphenyl	99		50 - 130

Analytical Data

Client: ARCADIS of New York

Job Number: 720-11009-1

Client Sample ID: OW-1

Lab Sample ID: 720-11009-4

Date Sampled: 09/25/2007 1440

Client Matrix: Water

Date Received: 09/26/2007 1640

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

Method:	8015B	Analysis Batch: 720-27170	Instrument ID: Varian DRO2
Preparation:	3511	Prep Batch: 720-26764	Lab File ID: N/A
Dilution:	10		Initial Weight/Volume: 35 mL
Date Analyzed:	10/09/2007 1028		Final Weight/Volume: 2 mL
Date Prepared:	09/28/2007 0833		Injection Volume:
			Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	42000		500
Surrogate p-Terphenyl	%Rec 0	D	Acceptance Limits 50 - 130

DATA REPORTING QUALIFIERS

Client: ARCADIS of New York

Job Number: 720-11009-1

Lab Section	Qualifier	Description
GC Semi VOA	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: 720-11009-1

QC Association Summary

Lab Sample ID	Client Sample ID		Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA						
Analysis Batch:720-26950						
LCS 720-26950/5						
LCS 720-26950/4	Lab Control Spike	T	Water	8260B		
LCSD 720-26950/4	Lab Control Spike Duplicate	T	Water	8260B		
MB 720-26950/6	Method Blank	T	Water	8260B		
720-11001-B-1 MS	Matrix Spike	T	Water	8260B		
720-11001-C-1 MSD	Matrix Spike Duplicate	T	Water	8260B		
720-11009-1	MW-1	T	Water	8260B		
720-11009-2	MW-2	T	Water	8260B		
720-11009-3	MW-3	T	Water	8260B		
Analysis Batch:720-27026						
LCS 720-27026/2	Lab Control Spike	T	Water	8260B		
LCSD 720-27026/1	Lab Control Spike Duplicate	T	Water	8260B		
MB 720-27026/3	Method Blank	T	Water	8260B		
720-11009-4	OW-1	T	Water	8260B		

Report Basis

T = Total

GC Semi VOA

Prep Batch: 720-26764						
LCS 720-26764/2-A	Lab Control Spike	T	Water	3511		
LCSD 720-26764/3-A	Lab Control Spike Duplicate	T	Water	3511		
MB 720-26764/1-A	Method Blank	T	Water	3511		
720-11009-1	MW-1	T	Water	3511		
720-11009-2	MW-2	T	Water	3511		
720-11009-3	MW-3	T	Water	3511		
720-11009-4	OW-1	T	Water	3511		
Analysis Batch:720-27170						
LCS 720-26764/2-A	Lab Control Spike	T	Water	8015B	720-26764	
LCSD 720-26764/3-A	Lab Control Spike Duplicate	T	Water	8015B	720-26764	
MB 720-26764/1-A	Method Blank	T	Water	8015B	720-26764	
720-11009-1	MW-1	T	Water	8015B	720-26764	
720-11009-2	MW-2	T	Water	8015B	720-26764	
720-11009-3	MW-3	T	Water	8015B	720-26764	
720-11009-4	OW-1	T	Water	8015B	720-26764	

Report Basis

T = Total

TestAmerica San Francisco

Quality Control Results

Client: ARCADIS of New York

Job Number: 720-11009-1

Method Blank - Batch: 720-26950

Method: 8260B

Preparation: 5030B

Lab Sample ID: MB 720-26950/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/02/2007 1517
Date Prepared: 10/02/2007 1517

Analysis Batch: 720-26950
Prep Batch: N/A
Units: ug/L

Instrument ID: Saturn 3900B
Lab File ID: c:\saturnws\data\200710\10
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 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)	100	77 - 121	
1,2-Dichloroethane-d4 (Surr)	83	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: 720-11009-1

Matrix Spike/

Matrix Spike Duplicate Recovery Report - Batch: 720-26950

Method: 8260B

Preparation: 5030B

MS Lab Sample ID: 720-11001-B-1 MS Analysis Batch: 720-26950
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0
Date Analyzed: 10/02/2007 1851
Date Prepared: 10/02/2007 1851

Instrument ID: Saturn 3900B
Lab File ID: c:\saturnws\data\200710\
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

MSD Lab Sample ID: 720-11001-C-1 MSD Analysis Batch: 720-26950
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0
Date Analyzed: 10/02/2007 1918
Date Prepared: 10/02/2007 1918

Instrument ID: Saturn 3900B
Lab File ID: c:\saturnws\data\200710\1C
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	101	97	69 - 129	4	20		
Toluene	105	98	70 - 130	7	20		
MTBE	96	97	65 - 165	2	20		
Gasoline Range Organics (GRO)-C5-C12	78	81	60 - 130	4	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)	98		97		77 - 121		
1,2-Dichloroethane-d4 (Surr)	103		100		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: 720-11009-1

Method Blank - Batch: 720-27026

Method: 8260B

Preparation: 5030B

Lab Sample ID: MB 720-27026/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/04/2007 1137
Date Prepared: 10/04/2007 1137

Analysis Batch: 720-27026
Prep Batch: N/A
Units: ug/L

Instrument ID: Saturn 3900B
Lab File ID: c:\saturnws\data\200710\1C
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 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)	104	77 - 121	
1,2-Dichloroethane-d4 (Surr)	80	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: 720-11009-1

Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 720-27026

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID: LCS 720-27026/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/04/2007 1016
Date Prepared: 10/04/2007 1016

Analysis Batch: 720-27026
Prep Batch: N/A
Units: ug/L

Instrument ID: Saturn 3900B
Lab File ID: c:\saturnws\data\200710\10
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 720-27026/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/04/2007 1043
Date Prepared: 10/04/2007 1043

Analysis Batch: 720-27026
Prep Batch: N/A
Units: ug/L

Instrument ID: Saturn 3900B
Lab File ID: c:\saturnws\data\200710\10
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	98	94	69 - 129	4	20		
Toluene	96	98	70 - 130	1	20		
MTBE	83	84	65 - 165	1	20		
Gasoline Range Organics (GRO)-C5-C12	67	75	60 - 130	11	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)	99		101		77 - 121		
1,2-Dichloroethane-d4 (Surr)	91		97		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: 720-11009-1

Method Blank - Batch: 720-26764

Method: 8015B

Preparation: 3511

Lab Sample ID: MB 720-26764/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/08/2007 1913
Date Prepared: 09/28/2007 0833

Analysis Batch: 720-27170
Prep Batch: 720-26764
Units: ug/L

Instrument ID: Varian DRO2
Lab File ID: N/A
Initial Weight/Volume: 35 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50
Surrogate	% Rec		Acceptance Limits
p-Terphenyl	107		50 - 130

Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 720-26764

Method: 8015B

Preparation: 3511

LCS Lab Sample ID: LCS 720-26764/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/08/2007 1808
Date Prepared: 09/28/2007 0833

Analysis Batch: 720-27170
Prep Batch: 720-26764
Units: ug/L

Instrument ID: Varian DRO2
Lab File ID: N/A
Initial Weight/Volume: 35 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-26764/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/08/2007 1841
Date Prepared: 09/28/2007 0833

Analysis Batch: 720-27170
Prep Batch: 720-26764
Units: ug/L

Instrument ID: Varian DRO2
Lab File ID: N/A
Initial Weight/Volume: 35 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Diesel Range Organics [C10-C28]	75	76	50 - 150	2	25		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
p-Terphenyl	101		104		50 - 130		

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

Login Sample Receipt Check List

Client: ARCADIS of New York

Job Number: 720-11009-1

Login Number: 11009

List Source: TestAmerica San Francisco

Creator: Bullock, Tracy

List Number: 1

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
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	

Appendix D

Field Notes UPS-Oakland Hub

WELLHEAD INSPECTION CHECKLIST

Page _____ of _____

Date 9-25-07 Client Arcadis

Site Address 8400 Fardee Dr Oakland

Job Number 070925-0W-Y Technician DW

NOTES: _____

WELL GAUGING DATA

Project # 070925-DW-Y Date 9-25-07 Client Arcadis

Site 8400 Pardee Drive Oakland

V. WELL MONITORING DATA SHEET

Project #: 070925-DW-4	Client: Arcadis
Sampler: DW	Date: 9- 25-07
Well I.D.: MW-4 MW-1	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 13.91	Depth to Water (DTW): 4.06
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.98	

Purge Method: Bailer

Disposable Bailer

Positive Air Displacement

Electric Submersible

Electric Submersible

Waterro

Peristaltic

Peristaltic Extraction Pump

1

Sesamolin = Methyl- α -A-

11

Baller

Disposable Baileys

Extraction Port

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

Time	Temp °F or °C	pH	Cond. (mS or μ S)	Turbidity (NTUs)	Gals. Removed	Observations
1331	78.8	6.6	1837	113	6.4	
1332	79.1	6.6	1772	49	12.8	
1334	79.3	6.6	1736	16	19.2	

Did well dewater? Yes No Gallons actually evacuated: 19,2

Sampling Date: 9-25-07 Sampling Time: 1339 Depth to Water: 4.00

Sample I.D.: mw-1 Laboratory: Kiff CalScience Other TA

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

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (800) 545-7558

WELL MONITORING DATA SHEET

Project #: 070925-DW-4	Client: Arcadis
Sampler: DW	Date: 9-25-07
Well I.D.: DW-1	Well Diameter: 2 3 4 6 8 5
Total Well Depth (TD): 18.40	Depth to Water (DTW): 7.25
Depth to Free Product: 7.22	Thickness of Free Product (feet): .03
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.45	

Purge Method:	Bailer Disposable Bailer Positive Air Displacement <input checked="" type="checkbox"/> Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method:	Bailer <input checked="" type="checkbox"/> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
11.3 (Gals.) X 3 = 33.9 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
1405	SPH in purge water - no parameters well dewatered @ 15 g/s				11.3	
1440	no parameters				-	
	Bailed 115 ml SPH prior to purging					

Did well dewater? Yes No Gallons actually evacuated: 15

Sampling Date: 9-25-07 Sampling Time: 1440 Depth to Water: 9.80

Sample I.D.: DW-1 Laboratory: Kiff CalScience Other TA

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

EB I.D. (if applicable): @ 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: B&T ARCADES

Site Address: 8400 Fardee Dr Oakland

STATUS OF DRUM(S) UPON ARRIVAL

Date	6-28-07	7-30-07	8/30/07	9-25-07	
Number of drum(s) empty:					
Number of drum(s) 1/4 full:	1	1	1	1	
Number of drum(s) 1/2 full:					
Number of drum(s) 3/4 full:					
Number of drum(s) full:					
Total drum(s) on site:	1	1	1	1	
Are the drum(s) properly labeled?	y	y	y	y	
Drum ID & Contents:	SPH + H ₂ O	→	→	→	
If any drum(s) are partially or totally filled, what is the first use date:	5-29-07	5-29-07	5-29-07		

- 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	6-28-07	7-30-07	8/30/07	9-25-07	
Number of drums empty:					
Number of drum(s) 1/4 full:	1	1	1	1	
Number of drum(s) 1/2 full:					
Number of drum(s) 3/4 full:					
Number of drum(s) full:				1	
Total drum(s) on site:	1	1	1	2	
Are the drum(s) properly labeled?	y	y	y	y	
Drum ID & Contents:	SPH + H ₂ O	→	→	→	

LOCATION OF DRUM(S)

Describe location of drum(s):

FINAL STATUS

Number of new drum(s) left on site this event	0	0	0	1	
Date of inspection:	6-28-07	7-30-07	8/30/07	9-25-07	
Drum(s) labelled properly:	y	y	y	y	
Logged by BTS Field Tech:	DW	PW	TV	PW	
Office reviewed by:	w	PW	w	w	

BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE
 SAN JOSE, CALIFORNIA 95112-1105
 FAX (408) 573-7771
 PHONE (408) 573-0555

CHAIN OF CUSTODY

BTS # 070925-0w-4

CLIENT ARCADIS U.S., Inc.

SITE UPS

8400 Pardee Drive

Oakland, CA