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ENVIRONMENTAL HEALTH SERVICES

Transmitted Via UPS Next Day Air

February 2, 2006

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

Alameda County
FEB 03 2006
Environmental Health

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

Dear Mr. Gholami:

On behalf of United Parcel Service (UPS), Blasland, Bouck & Lee, Inc. (BBL) is transmitting herewith the Second Semi-Annual 2005 Monitoring & Sampling Report for the above-referenced facility. This report describes groundwater monitoring efforts performed at the site on November 29, 2005. 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 2005 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.

Sincerely,

BLASLAND, BOUCK & LEE, INC.

Hugh B. Devery, P.G.
Senior Geologist

HBD/hbd

cc: Linda Lyons, UPS, w/ attachments
File

REPORT

Year 2005 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**

January 2006

Transmitted Via UPS Next Day Air

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COPY

*Year 2005 Second Semi-Annual
Monitoring & Sampling Report*

*UPS – Oakland Hub
8400 Pardee Drive
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**United Parcel Service
55 Glenlake Parkway, NE
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January 2006

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Appendix C Laboratory Analytical Results

Groundwater Monitoring & Sampling

1.1. Introduction

United Parcel Service (UPS) retained Blasland, Bouck & Lee, Inc. (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 November 29, 2005. Groundwater monitoring was conducted in accordance with the Alameda County Health Care Services (ACHCS)-approved work plan (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 November 29, 2005. 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 measured on November 29, 2005. 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). PSH was detected in wells MW-2 and OW-1 at apparent thicknesses of 0.01-ft and 0.04-ft. Groundwater elevations in monitoring wells MW-1 and MW-3 in November 2005 were approximately 0.5 to 1.0-ft higher than water levels measured during the last sampling event of March 2005. A generalized groundwater contour map prepared using the March 2005 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 November 29, 2005. The thin layer amount of PSH was bailed off prior to sampling wells MW-2 (0.01-ft) and OW-1 (0.04-ft). 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 concentrations were detected in MW-1 at the low concentration of 0.94 microgram per liter ($\mu\text{g/L}$). 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 November 2005 monitoring event. TPH-g was detected in monitoring wells MW-1, MW-2, MW-3 and OW-1; MW-1 contained a concentration of 0.31 milligrams per liter (mg/L), MW-2 contained a concentration of 1.90 mg/L , MW-3 contained a concentration of 1.20 mg/L and OW-1 with a contained of 0.65 mg/L . The groundwater samples collected from each well contained a laboratory validation flag stating, "Quantity of unknown hydrocarbon(s) in sample based on gasoline". TPH-d concentrations were detected in wells MW-1, MW-2, MW-3 and OW-1; MW-1 contained a concentration of 7.80 mg/L , MW-2 contained a concentration of 22.0 mg/L , MW-3 contained a concentration of 8.30 mg/L and OW-1 contained a

concentration of 30.0 mg/L. The laboratory reported a data flag stating, "Quantity of unknown hydrocarbons(s) in sample based on diesel". 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

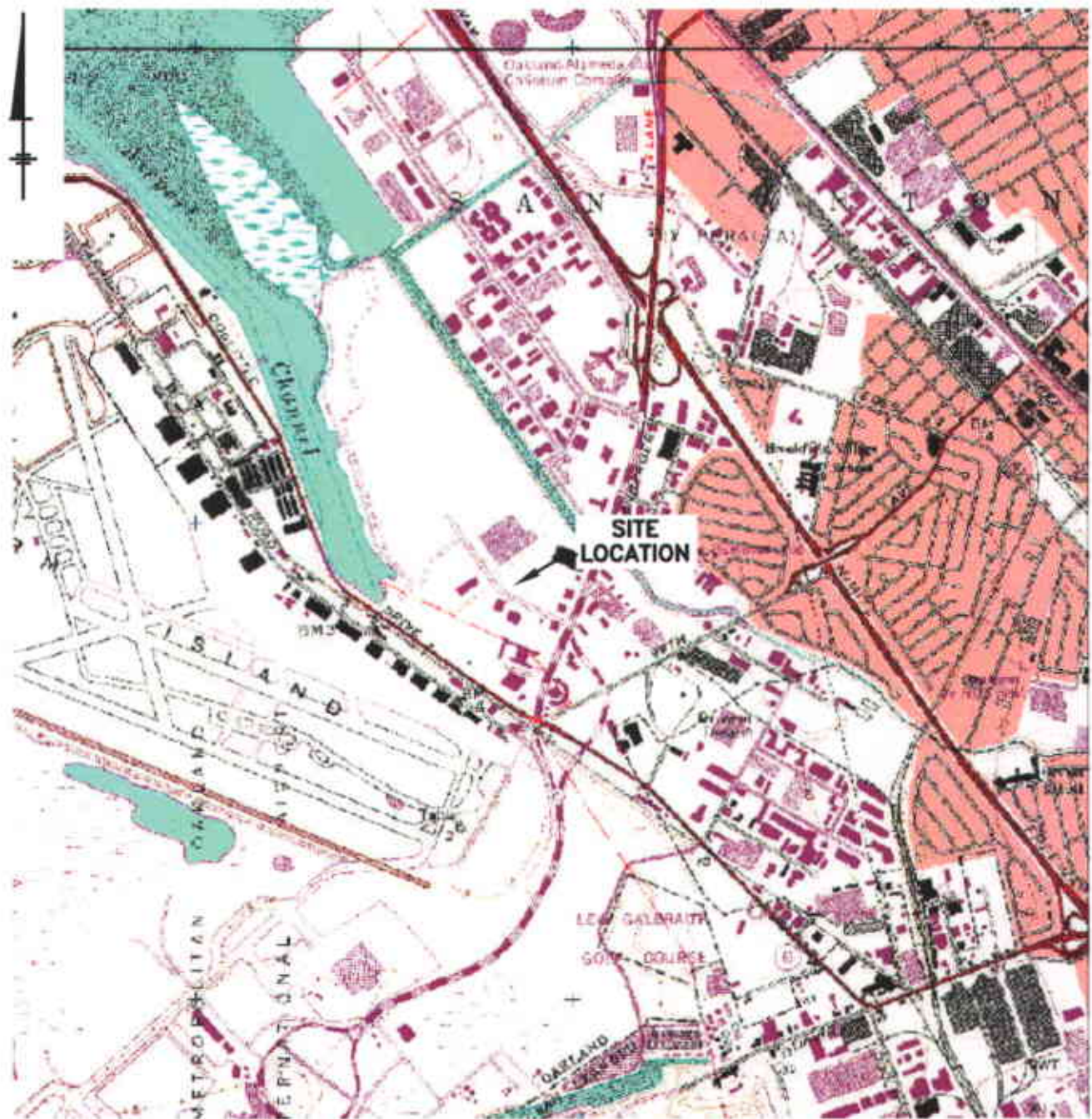
1. PSH was detected in monitoring wells MW-2 and OW-1, with apparent thicknesses of 0.01-ft, and 0.04-ft.
2. Groundwater samples were collected on November 29, 2005 and sampled for BTEX, MTBE, TPH-g and TPH-d.
3. Groundwater elevations in November 2005 were approximately 0.5 to 1.0-ft feet higher on average than water levels measured during the last sampling event of March 2005. 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 detected in MW-1 at the low concentration of 0.94 µg/L. 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.

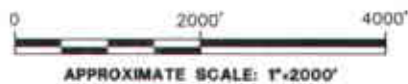
FIGURES

UPS-Oakland Center



NOTES:

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



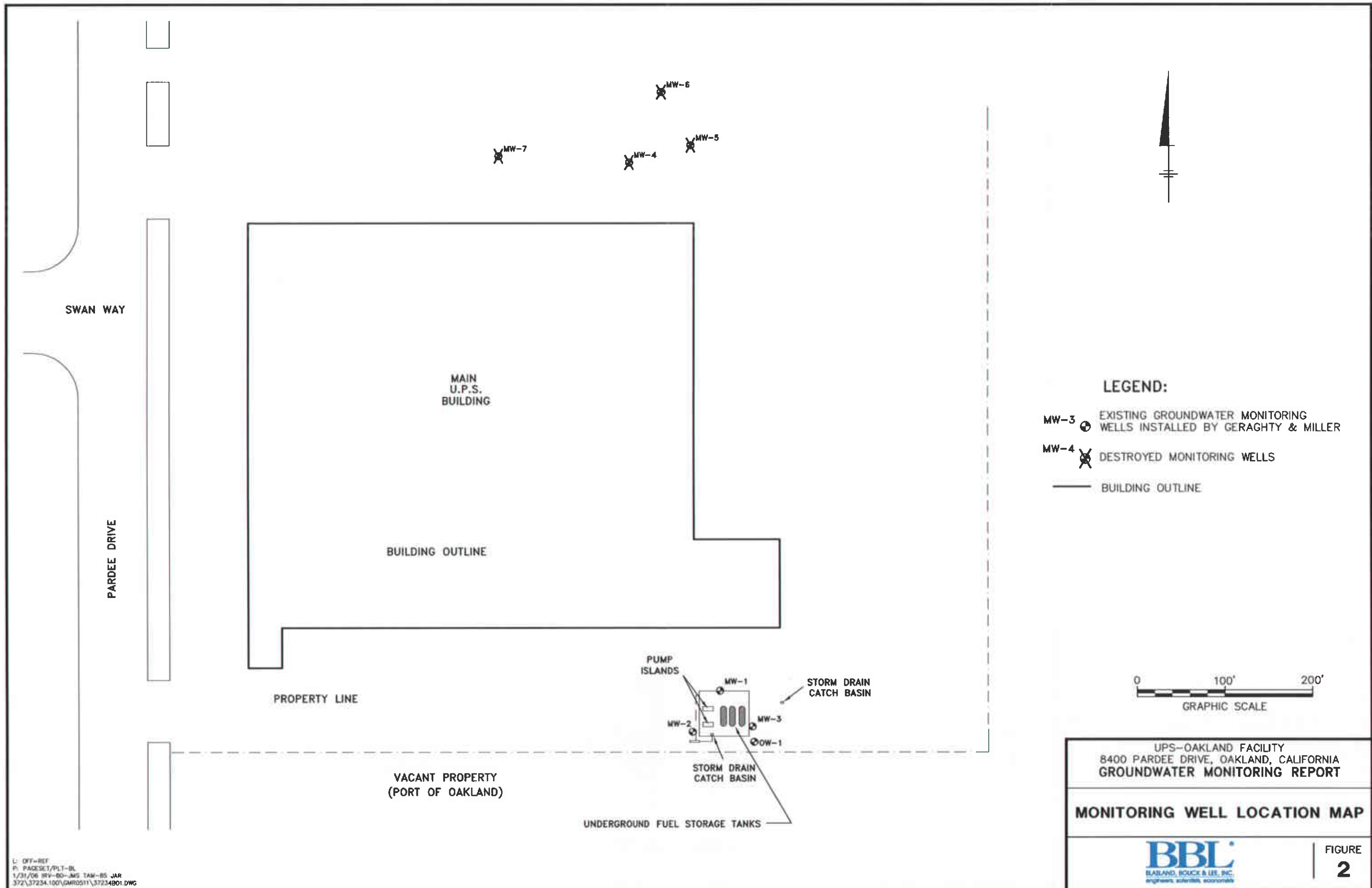
UPS-OAKLAND FACILITY
 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA
 GROUNDWATER MONITORING REPORT

**TOPOGRAPHIC MAP OF SITE
 LOCATION AND VICINITY**



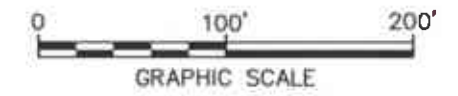
FIGURE

1



LEGEND:

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



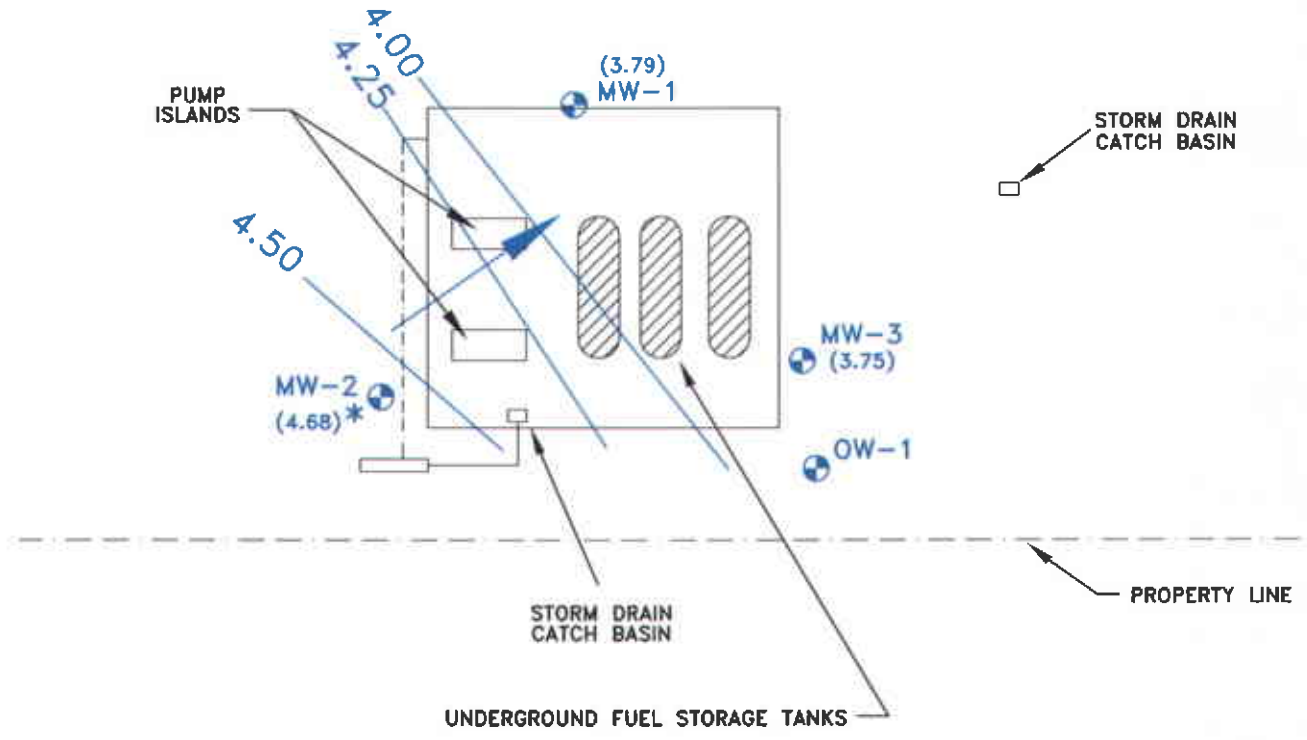
UPS-OAKLAND FACILITY
 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA
GROUNDWATER MONITORING REPORT

MONITORING WELL LOCATION MAP

FIGURE
2

L: OFF-REF
 P: PAGESET/PLT-BL
 1/31/06 IRV-BD-JMS TAM-B5 JAR
 372\37234.100\GMR0511\37234B01.DWG

UPS BUILDING



LEGEND:

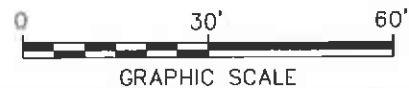
MW-1 GROUNDWATER MONITORING WELL

(3.75) GROUNDWATER TABLE ELEVATION (FEET ABOVE MSL)

4.00 GROUNDWATER ELEVATION CONTOUR

* GROUNDWATER ELEVATION NOT CORRECTED FOR 0.02 FOOT OF PRODUCT PRESENT IN WELL

GROUNDWATER FLOW DIRECTION



NOTE:

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

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8400 PARDEE DRIVE, OAKLAND, CALIFORNIA
GROUNDWATER MONITORING REPORT

GROUNDWATER CONTOUR MAP
NOVEMBER 29, 2005

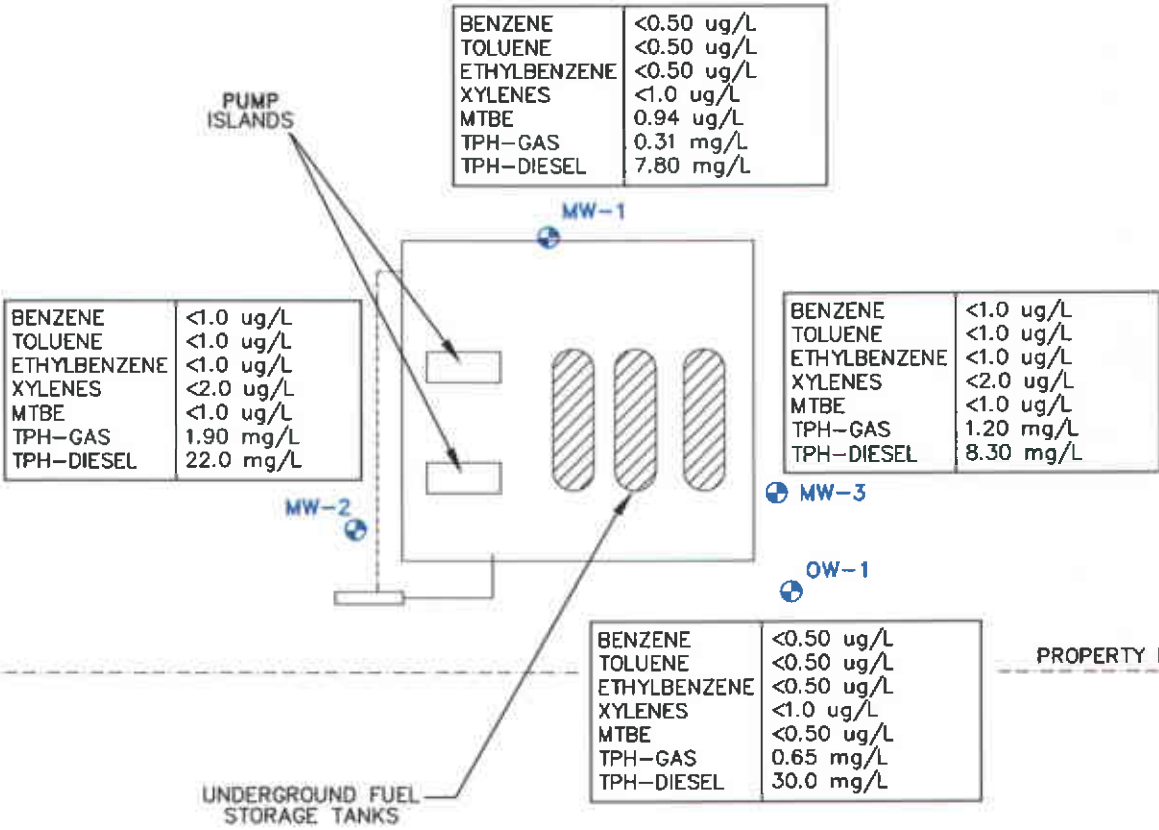


FIGURE

3

X: (XREF)
L: (LAYER)
P: PAGESET/PLT-AP1
1/31/06 IRV-80 JMS TAM-65 JAR
372\37234.100\DMR0511\37234WD1.DWG

UPS BUILDING

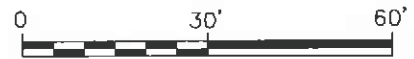


LEGEND:

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

ug/L MICROGRAMS PER LITER

mg/L MILLIGRAMS PER LITER



GRAPHIC SCALE

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

GROUNDWATER QUALITY MAP
NOVEMBER 29, 2005



FIGURE

4

TABLES

UPS-Oakland Center

TABLE 1
HISTORICAL GROUNDWATER ELEVATION SUMMARY

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

Monitoring Well	Reference Elevation	Date Sampled	Depth to Groundwater (ft)	Groundwater Elevation (ft)	Change in Measurement (ft)	Product Thickness (ft)
		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	N/A	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

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

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HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

Monitoring Well	Reference Elevation	Date Sampled	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	N/A	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
MW-2	7.15	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	-0.1	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

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

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STATE ID # 583

Monitoring Well	Reference Elevation	Date Sampled	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		

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 Sampled	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
OW-1	N/A	4/19/2004	6.29	NC	0.21	0.03
		5/20/2004	6.16	NC	-0.13	0.00
		6/23/2004	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
		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

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)	Ethylbenzene (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	.55 Q1	15 Q2	NM	
11/29/2005	< 0.50	< 0.50	< 0.50	< 1.0	0.94	0.31	7.80	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; ND = Not Detected

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)	Ethylbenzene (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	
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; ND = Not Detected

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.

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)	Ethylbenzene (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	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	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	
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; ND = Not Detected

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)
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	
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; ND = Not Detected

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

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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 Center**

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 Center**

SPH or Purge Water Drum Log

Client: BB&L

Site Address: UPS - OAKLAND

STATUS OF DRUM(S) UPON ARRIVAL						
Date	9/27/05	10/19/05	11/29/05			
Number of drum(s) empty:						
Number of drum(s) 1/4 full:	1 (BTS)	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			
Are the drum(s) properly labeled?	N	yes	Y			
Drum ID & Contents:	H2O	SPH + H2O	→			
If any drum(s) are partially or totally filled, what is the first use date:						

- 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	9/27/05	10/19/05	11/29/05			
Number of drums empty:						
Number of drum(s) 1/4 full:	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 (BTS)	1	2			
Are the drum(s) properly labeled?	yes	yes	Y			
Drum ID & Contents:	SPH + H2O	→	→			

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	1			
Date of inspection:	9/27/05	10/19/05	11/29/05			
Drum(s) labelled properly:	Y	N	Y			
Logged by BTS Field Tech:	MMP	PAW	SLY			
Office reviewed by:	MMP	PAW	SLY			

10.21

WELL MONITORING DATA SHEET

Project #: <u>051129-0W-4</u>	Client: <u>BB+L</u>
Sampler: <u>DW</u>	Date: <u>11-29-05</u>
Well I.D.: <u>MW-1</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): <u>14.00</u>	Depth to Water (DTW): <u>3.79</u>
Depth to Free Product:	Thickness of Free Product (feet):
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]:	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible

Water: Waterra Peristaltic Extraction Pump Other _____

Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing

Other: _____



6.6 (Gals.) X 3 = 19.8 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 μ S)	Turbidity (NTUs)	Gals. Removed	Observations
12.46	64.3	6.53	1067	42	6.6	clear
12.48	64.3	6.55	1920	30	13.2	clear
12.50	70.1	6.58	1900	23	19.8	clear

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: 11-29-05 Sampling Time: 12.55 Depth to Water: _____

Sample I.D.: MW-1 Laboratory: Kiff CalScience Other: STL

Analyzed for: TPH-O 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 #: <u>051129-DW-4</u>	Client: <u>BB+L</u>
Sampler: <u>DW</u>	Date: <u>11-29-05</u>
Well I.D.: <u>MW-2</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): <u>14.40</u>	Depth to Water (DTW): <u>4.68</u>
Depth to Free Product: <u>4.67</u>	Thickness of Free Product (feet): <u>.01</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]:	

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

<u>6.3</u> (Gals.) X <u>3</u> = <u>18.9</u> 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
1334	No parameters b/c sheen				6.3	heavy sheen
	well dewatered @ 9.9 gal				DTW = 12.78	
1435	No parameters due to sheen				-	sheen
	Bailed 25 ml soil before purging well					

Did well dewater? Yes No Gallons actually evacuated: 9.9 gal

Sampling Date: 11-29-05 Sampling Time: 1435 Depth to Water: 5.92

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

Analyzed for: TPH-C 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 #: 051129-DW-4	Client: BB+L
Sampler: DW	Date: 11-29-05
Well I.D.: 0W-1	Well Diameter: 2 3 4 6 8 5
Total Well Depth (TD): 18.40	Depth to Water (DTW): 7.00
Depth to Free Product: 6.96	Thickness of Free Product (feet): .04
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

11.6 (Gals.) X	3 Specified Volumes	= 34.8 Gals. 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
1407	No parameters taken due to sheen				11.6	Heavy sheen
	well dewatered @ 13 gl. DTW=				17.00	
1448						
	Bailed 153 ml SPH prior to purging					

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: **11-29-05** Sampling Time: **1448** Depth to Water: **11.37**

Sample I.D.: **0W-1** Laboratory: Kiff CalScience Other **STL**

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 GAUGING DATA

Project # 051229-OW-3 Date 12-29-05 Client BB+L

Site 8400 Redwood Dr Oakland

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC
MW-1	4			0		3.08	-	↓
MW-2	4		4.18	.01	25	4.19	-	
MW-3	4			0		3.08	-	
OW-1	5	Green		0		5.22	-	

WELL MONITORING DATA SHEET

Project #: 051229-0W-3	Client: BB+L
Sampler: DW	Date: 12-29-05
Well I.D.: MW-1	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): -	Depth to Water (DTW): 3.08
Depth to Free Product:	Thickness of Free Product (feet): 0
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

_____ (Gals.) X Check SPH = _____ Gals. 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	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
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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
		No	SPH detected			

Did well dewater?	Yes	No	Gallons actually evacuated:
Sampling Date:	Sampling Time:		Depth to Water:
Sample I.D.:	Laboratory:		Kiff CalScience Other _____
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

WELL MONITORING DATA SHEET

Project #: 051229-0W-3	Client: BB+L
Sampler: DW	Date: 12-29-05
Well I.D.: MW-2	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): -	Depth to Water (DTW): 4.19
Depth to Free Product: 4.18	Thickness of Free Product (feet): .01
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

(Gals.) X check SPH = _____ Gals. 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </table>	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
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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
						Bailed 25 ml SPH from well

Did well dewater? <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Gallons actually evacuated:
Sampling Date:	Sampling Time: Depth to Water:
Sample I.D.:	Laboratory: Kiff CalScience Other _____
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

WELL MONITORING DATA SHEET

Project #: 051229-0W-3	Client: BBTL
Sampler: DW	Date: 12-29-05
Well I.D.: MW-3	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): -	Depth to Water (DTW): 3.08
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]:	

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

(Gals.) X check SPH = _____ Gals. 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </table>	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
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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
						No SPH detected

Did well de-water? Yes No	Gallons actually evacuated:
Sampling Date:	Sampling Time: Depth to Water:
Sample I.D.:	Laboratory: Kiff CalScience Other
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

WELL MONITORING DATA SHEET

Project #: 051229-0W-3	Client: BBTL
Sampler: DW	Date: 12-29-05
Well I.D.: 0W-1	Well Diameter: 2 3 4 6 8 (5)
Total Well Depth (TD): -	Depth to Water (DTW): 5.22
Depth to Free Product:	Thickness of Free Product (feet): 0
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

_____ (Gals.) X check SPH = _____ Gals. 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </table>	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
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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
		No	SPH detected. Sheen			

Did well dewater? Yes No	Gallons actually evacuated: _____
Sampling Date: _____	Sampling Time: _____
Sample I.D.: _____	Depth to Water: _____
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____	Laboratory: Kiff CalScience 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

WELLHEAD INSPECTION CHECKLIST

Date 12-29-05 Client BB+L

Site Address 8400 Pardee Drive Oakland

Job Number 051229-OW-3 Technician DW

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1	X							
MW-2	X							
MW-3	X							
OW-1								

NOTES: _____

WELL GAUGING DATA

Project # 060131-DW-4 Date 1-31-16 Client BB+L

Site 8400 Pardee Drive Oakland

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or <u>TOB</u>
<i>mw-1</i>	<i>4</i>		<i>No SPH detected</i>	<i>0</i>	<i>0</i>	<i>2.91</i>	<i>-</i>	<i> </i>
<i>mw-2</i>	<i>4</i>	<i>Sheen.</i>	<i>No SPH detected</i>	<i>0</i>	<i>0</i>	<i>4.05</i>	<i>-</i>	<i> </i>
<i>mw-3</i>	<i>4</i>		<i>No SPH detected</i>	<i>0</i>	<i>0</i>	<i>2.99</i>	<i>-</i>	<i> </i>
<i>DW-1</i>	<i>5</i>	<i>Sheen.</i>	<i>No SPH detected</i>	<i>0</i>	<i>0</i>	<i>5.64</i>	<i>-</i>	<i>✓</i>

WELL MONITORING DATA SHEET

Project #: 060131-DW-4	Client: BB+L
Sampler: DW	Date: 1-31-06
Well I.D.: MW-1	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): —	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]:	

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

	(Gals.) X check SPA =	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
	No	SPH	detected.			

Did well dewater? Yes No	Gallons actually evacuated:
Sampling Date:	Sampling Time: Depth to Water:
Sample I.D.:	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 #: 060131-DW-4	Client: BB+L
Sampler: DW	Date: 1-31-06
Well I.D.: MW-2	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 4.05
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]:	

Purge Method: ~~Bailer~~ ~~Disposable Bailer~~ ~~Positive Air Displacement~~ ~~Electric Submersible~~ ~~Water~~ ~~Peristaltic~~ ~~Extraction Pump~~ Other: _____

Sampling Method: ~~Bailer~~ ~~Disposable Bailer~~ ~~Extraction Port~~ ~~Dedicated Tubing~~ Other: _____

_____ (Gals.) X check SPH = _____ Gals. 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </table>	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
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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
		No	SPH detected. Sheen.			

Did well dewater? Yes No	Gallons actually evacuated: _____
Sampling Date: _____	Sampling Time: _____
Sample I.D.: _____	Depth to Water: _____
Laboratory: Koff CalScience Other _____	
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

WELL MONITORING DATA SHEET

Project #: 060131-DW-4	Client: BB+L
Sampler: DW	Date: 1-31-06
Well I.D.: MW-3	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 2.99
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]:	

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

_____ (Gals.) X check SPH = _____ Gals. I Case Volume Specified Volumes Calculated Volume	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </table>	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
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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
			No SPH detected.			

Did well dewater? Yes No	Gallons actually evacuated: _____
Sampling Date: _____	Sampling Time: _____
Sample I.D.: _____	Depth to Water: _____
Sample I.D.: _____	Laboratory: Riff 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 #: 060131-OW-4	Client: BB+L
Sampler: DW	Date: 1-31-06
Well I.D.: OW-1	Well Diameter: 2 3 4 6 8 (5)
Total Well Depth (TD): —	Depth to Water (DTW): 5.64
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]:	

Purge Method: ~~Bailer~~
~~Disposable Bailer~~
~~Positive Air Displacement~~
~~Electric Submersible~~

~~Water~~
~~Peristaltic~~
~~Extraction Pump~~
 Other _____

Sampling Method: ~~Bailer~~
~~Disposable Bailer~~
~~Extraction Port~~
~~Dedicated Tubing~~

Other: _____

_____ (Gals.) X check SPH = _____ Gals. 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	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
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
			No SPH	detected.	Seen	

Did well dewater? <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Gallons actually evacuated:
Sampling Date: _____	Sampling Time: _____
Sample I.D.: _____	Depth to Water: _____
Laboratory: <input checked="" type="checkbox"/> Kiff <input checked="" type="checkbox"/> CalScience <input checked="" type="checkbox"/> Other _____	
Analyzed for: <input checked="" type="checkbox"/> TPH-G <input checked="" type="checkbox"/> BTEX <input checked="" type="checkbox"/> MTBE <input checked="" type="checkbox"/> TPH-D <input checked="" type="checkbox"/> Oxygenates (5) <input checked="" type="checkbox"/> Other _____	
EB I.D. (if applicable): _____ @ _____ Time	Duplicate I.D. (if applicable): _____
Analyzed for: <input checked="" type="checkbox"/> TPH-G <input checked="" type="checkbox"/> BTEX <input checked="" type="checkbox"/> MTBE <input checked="" type="checkbox"/> TPH-D <input checked="" type="checkbox"/> Oxygenates (5) <input checked="" type="checkbox"/> 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

APPENDIX C

**Laboratory Analytical Results
UPS-Oakland Center**

ANALYTICAL REPORT

Job Number: 720-736-1

Job Description: UPS-Oakland

For:

Blasland, Bouck & Lee, Inc. (BBL)
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
12/07/2005

cc: Mr. Robert Rogero
Ms. Lisa Taylor

METHOD SUMMARY

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

Description	Lab Location	Method	Preparation Method
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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	
Organic Compounds in Water by Microextraction	STL-SF		SW846 3511

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: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Client Matrix</u>	<u>Date/Time Sampled</u>	<u>Date/Time Received</u>
720-736-1	MW-1	Water	11/29/2005 1255	12/01/2005 1248
720-736-2	MW-2	Water	11/29/2005 1435	12/01/2005 1248
720-736-3	MW-3	Water	11/29/2005 1604	12/01/2005 1248
720-736-4	OW-1	Water	11/29/2005 1448	12/01/2005 1248

Analytical Data

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

Client Sample ID: MW-1

Lab Sample ID: 720-736-1

Date Sampled: 11/29/2005 1255

Client Matrix: Water

Date Received: 12/01/2005 1248

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-2562

Instrument ID: Varian 3900A

Preparation: 5030B

Lab File ID: c:\satumwsl\data\200512\12

Dilution: 1.0

Initial Weight/Volume: 10 mL

Date Analyzed: 12/03/2005 1718

Final Weight/Volume: 10 mL

Date Prepared: 12/03/2005 1718

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND	*	0.50
Ethylbenzene	ND		0.50
Toluene	ND	*	0.50
MTBE	0.94	*	0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	310		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8	101		77 - 121
1,2-Dichloroethane-d4	87		73 - 130

Analytical Data

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

Client Sample ID: MW-2

Lab Sample ID: 720-736-2

Date Sampled: 11/29/2005 1435

Client Matrix: Water

Date Received: 12/01/2005 1248

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-2562

Instrument ID: Varian 3900A

Preparation: 5030B

Lab File ID: c:\saturmws\data\200512\12

Dilution: 2.0

Initial Weight/Volume: 10 mL

Date Analyzed: 12/03/2005 1740

Final Weight/Volume: 10 mL

Date Prepared: 12/03/2005 1740

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	1900		100
Surrogate	%Rec		Acceptance Limits
Toluene-d8	101		77 - 121
1,2-Dichloroethane-d4	88		73 - 130

Analytical Data

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

Client Sample ID: MW-3

Lab Sample ID: 720-736-3

Date Sampled: 11/29/2005 1604

Client Matrix: Water

Date Received: 12/01/2005 1248

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-2562

Instrument ID: Varian 3900A

Preparation: 5030B

Lab File ID: c:\saturday\data\200512\12

Dilution: 2.0

Initial Weight/Volume: 10 mL

Date Analyzed: 12/03/2005 1802

Final Weight/Volume: 10 mL

Date Prepared: 12/03/2005 1802

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	1200		100
Surrogate	%Rec		Acceptance Limits
Toluene-d8	103		77 - 121
1,2-Dichloroethane-d4	86		73 - 130

Analytical Data

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

Client Sample ID: OW-1

Lab Sample ID: 720-736-4

Date Sampled: 11/29/2005 1448

Client Matrix: Water

Date Received: 12/01/2005 1248

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-2562

Instrument ID: Varian 3900A

Preparation: 5030B

Lab File ID: c:\saturmws\data\200512\12

Dilution: 1.0

Initial Weight/Volume: 10 mL

Date Analyzed: 12/03/2005 1823

Final Weight/Volume: 10 mL

Date Prepared: 12/03/2005 1823

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	650		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8	102		77 - 121
1,2-Dichloroethane-d4	87		73 - 130

Analytical Data

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

Client Sample ID: MW-1

Lab Sample ID: 720-736-1

Date Sampled: 11/29/2005 1255

Client Matrix: Water

Date Received: 12/01/2005 1248

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

Method: 8015B

Analysis Batch: 720-2701

Instrument ID: Varian DRO4

Preparation: 3511

Prep Batch: 720-2557

Lab File ID: N/A

Dilution: 10

Initial Weight/Volume: 35 mL

Date Analyzed: 12/06/2005 1238

Final Weight/Volume: 2 mL

Date Prepared: 12/05/2005 0846

Injection Volume:

Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	7800		500
Surrogate	%Rec		Acceptance Limits
o-Terphenyl	0	D	60 - 130

Analytical Data

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

Client Sample ID: MW-2

Lab Sample ID: 720-736-2

Date Sampled: 11/29/2005 1435

Client Matrix: Water

Date Received: 12/01/2005 1248

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

Method: 8015B

Analysis Batch: 720-2701

Instrument ID: Varian DRO4

Preparation: 3511

Prep Batch: 720-2557

Lab File ID: N/A

Dilution: 10

Initial Weight/Volume: 35 mL

Date Analyzed: 12/06/2005 1306

Final Weight/Volume: 2 mL

Date Prepared: 12/05/2005 0846

Injection Volume:

Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	22000		500
Surrogate	%Rec		Acceptance Limits
o-Terphenyl	0	D	60 - 130

Analytical Data

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

Client Sample ID: MW-3

Lab Sample ID: 720-736-3

Date Sampled: 11/29/2005 1604

Client Matrix: Water

Date Received: 12/01/2005 1248

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

Method: 8015B

Analysis Batch: 720-2701

Instrument ID: Varian DRO4

Preparation: 3511

Prep Batch: 720-2557

Lab File ID: N/A

Dilution: 10

Initial Weight/Volume: 35 mL

Date Analyzed: 12/06/2005 1333

Final Weight/Volume: 2 mL

Date Prepared: 12/05/2005 0846

Injection Volume:

Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	8300		500
Surrogate	%Rec		Acceptance Limits
o-Terphenyl	0	D	60 - 130

Analytical Data

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

Client Sample ID: OW-1

Lab Sample ID: 720-736-4

Date Sampled: 11/29/2005 1448

Client Matrix: Water

Date Received: 12/01/2005 1248

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

Method: 8015B

Analysis Batch: 720-2701

Instrument ID: Varian DRO4

Preparation: 3511

Prep Batch: 720-2557

Lab File ID: N/A

Dilution: 10

Initial Weight/Volume: 35 mL

Date Analyzed: 12/06/2005 1401

Final Weight/Volume: 2 mL

Date Prepared: 12/05/2005 0846

Injection Volume:

Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	30000		500
Surrogate	%Rec		Acceptance Limits
o-Terphenyl	0	D	60 - 130

DATA REPORTING QUALIFIERS

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

<u>Lab Section</u>	<u>Qualifier</u>	<u>Description</u>
GC/MS VOA	*	LCS, LCSD, MS, MSD, MD, or Surrogate exceeds the control limits
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 will be flagged with a D.

Quality Control Results

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
GC/MS VOA				
Analysis Batch:720-2562				
LCS 720-2562/21	Lab Control Spike	Water	8260B	
LCSD 720-2562/20	Lab Control Spike Duplicate	Water	8260B	
MB 720-2562/22	Method Blank	Water	8260B	
720-714-A-1 MS	Matrix Spike	Water	8260B	
720-714-A-1 MSD	Matrix Spike Duplicate	Water	8260B	
720-736-1	MW-1	Water	8260B	
720-736-2	MW-2	Water	8260B	
720-736-3	MW-3	Water	8260B	
720-736-4	OW-1	Water	8260B	
GC Semi VOA				
Prep Batch: 720-2557				
LCS 720-2557/2-A	Lab Control Spike	Water	3511	
LCSD 720-2557/3-A	Lab Control Spike Duplicate	Water	3511	
MB 720-2557/1-A	Method Blank	Water	3511	
720-736-1	MW-1	Water	3511	
720-736-2	MW-2	Water	3511	
720-736-3	MW-3	Water	3511	
720-736-4	OW-1	Water	3511	
Analysis Batch:720-2701				
LCS 720-2557/2-A	Lab Control Spike	Water	8015B	720-2557
LCSD 720-2557/3-A	Lab Control Spike Duplicate	Water	8015B	720-2557
MB 720-2557/1-A	Method Blank	Water	8015B	720-2557
720-736-1	MW-1	Water	8015B	720-2557
720-736-2	MW-2	Water	8015B	720-2557
720-736-3	MW-3	Water	8015B	720-2557
720-736-4	OW-1	Water	8015B	720-2557

Quality Control Results

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

Method Blank - Batch: 720-2562

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-2562/22
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/03/2005 0948
Date Prepared: 12/03/2005 0948

Analysis Batch: 720-2562
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900A
Lab File ID: c:\saturmws\data\200512\12
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	100	77 - 121
1,2-Dichloroethane-d4	86	73 - 130

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

Quality Control Results

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

**Laboratory Control/
Laboratory Control Duplicate Recovery Report - Batch: 720-2562**

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

LCS Lab Sample ID: LCS 720-2562/21
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/03/2005 0905
Date Prepared: 12/03/2005 0905

Analysis Batch: 720-2562
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900A
Lab File ID: c:\saturmws\data\200512\120
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-2562/20
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/03/2005 0926
Date Prepared: 12/03/2005 0926

Analysis Batch: 720-2562
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900A
Lab File ID: c:\saturmws\data\200512\120
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	101	95	69 - 129	5	25		
Toluene	105	100	70 - 130	5	25		
MTBE	106	102	65 - 165	4	25		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Toluene-d8	102		106		77 - 121		
1,2-Dichloroethane-d4	76		81		73 - 130		

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

Quality Control Results

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-2562**

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

MS Lab Sample ID: 720-714-A-1 MS
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/03/2005 1338
Date Prepared: 12/03/2005 1338

Analysis Batch: 720-2562
Prep Batch: N/A

Instrument ID: Varian 3900A
Lab File ID: c:\saturmws\data\200512\1
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-714-A-1 MSD
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/03/2005 1400
Date Prepared: 12/03/2005 1400

Analysis Batch: 720-2562
Prep Batch: N/A

Instrument ID: Varian 3900A
Lab File ID: c:\saturmws\data\200512\1
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	82	87	69 - 129	6	20		
Toluene	84	87	70 - 130	4	20		
MTBE	85	94	65 - 165	10	20		
Surrogate	MS % Rec		MSD % Rec	Acceptance Limits			
Toluene-d8	106		103	77 - 121			
1,2-Dichloroethane-d4	82		81	73 - 130			

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

Quality Control Results

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

Method Blank - Batch: 720-2557

**Method: 8015B
Preparation: 3511**

Lab Sample ID: MB 720-2557/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/05/2005 1650
Date Prepared: 12/05/2005 0846

Analysis Batch: 720-2701
Prep Batch: 720-2557
Units: ug/L

Instrument ID: Varian DRO4
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
o-Terphenyl	107		60 - 130

**Laboratory Control/
Laboratory Control Duplicate Recovery Report - Batch: 720-2557**

**Method: 8015B
Preparation: 3511**

LCS Lab Sample ID: LCS 720-2557/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/05/2005 1407
Date Prepared: 12/05/2005 0846

Analysis Batch: 720-2701
Prep Batch: 720-2557
Units: ug/L

Instrument ID: Varian DRO4
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 720-2557/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/05/2005 1434
Date Prepared: 12/05/2005 0846

Analysis Batch: 720-2701
Prep Batch: 720-2557
Units: ug/L

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Diesel Range Organics [C10-C28]	74	69	60 - 150	7	25		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
o-Terphenyl	99	99			60 - 130		

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

LOGIN SAMPLE RECEIPT CHECK LIST

Client: Blasland, Bouck & Lee, Inc. (BBL)

Job Number: 720-736-1

Login Number: 736

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.	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	