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ENVIRONMENTAL HEALTH SERVICES

R0315

*Transmitted Via UPS Next Day Air Saver*

October 27, 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

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. an ARCADIS company (BBL) is transmitting herewith the Second Semi-Annual 2006 Monitoring & Sampling Report for the above-referenced facility. This report describes groundwater monitoring efforts performed at the site on September 28, 2006. 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 2006 are also included.

UPS is considering replacing the existing diesel underground storage tanks (USTs) at the latter part of 2006. If this occurs, it is UPS's plan to remediate residual petroleum hydrocarbons at this time via selective over-excavation of impacted soils and/or stained pea gravel, and possible impacted tank pit water. If you have any questions regarding this report, please do not hesitate to contact Mr. Hugh Devery at (770) 428-9009 extension 11.

Sincerely,

BLASLAND, BOUCK & LEE, INC.



Hugh B. Devery, P.G.  
Senior Geologist

Attachments

cc: Ms. Linda Lyons, UPS, (w/ attach.)

# REPORT

## *Year 2006 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**

**RECEIVED**  
OCT 31 2006  
ENVIRONMENTAL HEALTH SERVICES

**October 2006**

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**TECHNICAL REPORT**

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***Year 2006 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**

**October 2006**

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- Appendix B Well Gauging Data
- Appendix C Laboratory Analytical Results

# Groundwater Monitoring & Sampling

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## 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 September 28, 2006. 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 September 28, 2006. 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 September 28, 2006. 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 the apparent thickness of 0.03-ft and 0.02-ft. Groundwater elevations in monitoring wells MW-1 through MW-3 in September 2006 were approximately 1.0 to 1.25-ft lower than water levels measured during the last sampling event of March 2006. A generalized groundwater contour map prepared using the September 2006 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 September 28, 2006. The thin layer amount of PSH was bailed off prior to sampling monitoring well MW-2 (0.03-ft) and OW-1 (0.02-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 0.87 micrograms 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 September 2006 monitoring event. TPH-g was detected in monitoring wells MW-1, MW-2 and MW-3; MW-1 contained a concentration of 0.22 milligrams per liter (mg/L), MW-2 contained a concentration of 0.062 mg/L, MW-3 contained a concentration of 0.37 mg/L and OW-1 contained a concentration of 0.82 mg/L. TPH-d concentrations were detected in wells MW-1, MW-2, MW-3 and OW-1; MW-1 contained a concentration of 28.0 mg/L, MW-2 contained a concentration of 7.5 mg/L, MW-3 contained a concentration of 17.0 mg/L and OW-1 contained a concentration of 130.0 mg/L. There is currently no established MCL for TPH-g or TPH-d.

#### 1.4. Purge Water Handling

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

#### 1.5. Summary

1. PSH was detected in monitoring wells MW-2 and OW-1 with an apparent thickness' of 0.03-ft and 0.02-ft.
2. Groundwater samples were collected on September 28, 2006 and sampled for BTEX, MTBE, TPH-g and TPH-d.
3. Groundwater elevations in September 2006 for site wells were approximately 1.0 to 1.25-ft feet lower on average than water levels measured during the last sampling event of March 2006. Groundwater flow is to the southwest, consistent with historical direction.
4. BTEX was not detected above laboratory detection limits or their primary drinking water MCLs.
5. MTBE was detected in MW-1 at the low concentration of 0.87  $\mu\text{g/L}$ . 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.

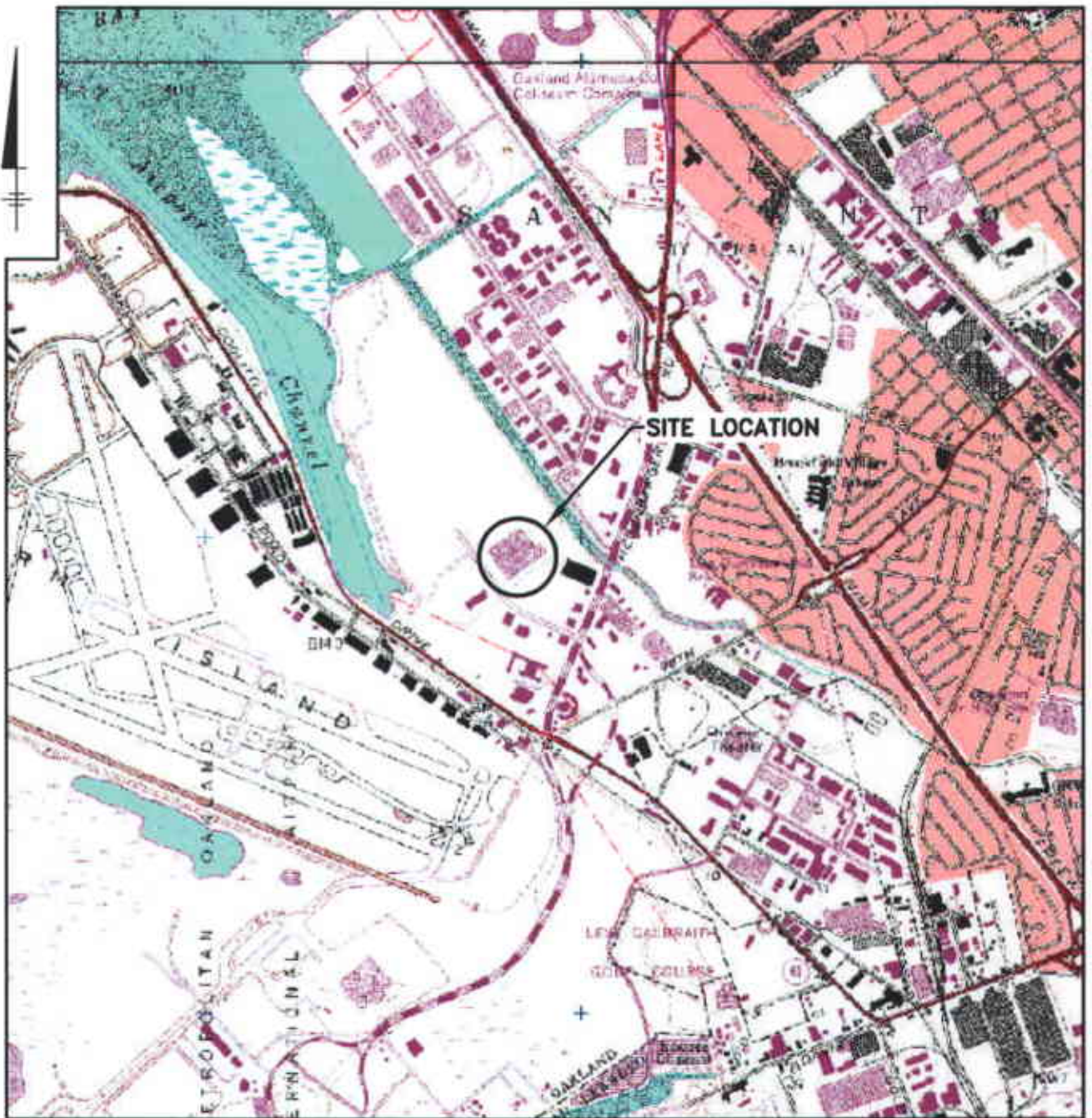
# FIGURES

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## UPS- Oakland Hub

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PROJECTNAME: UPS-Oak  
XREFS: UPS-Oak.dwg



**NOTES:**

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



APPROXIMATE SCALE: 1"=2000'

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

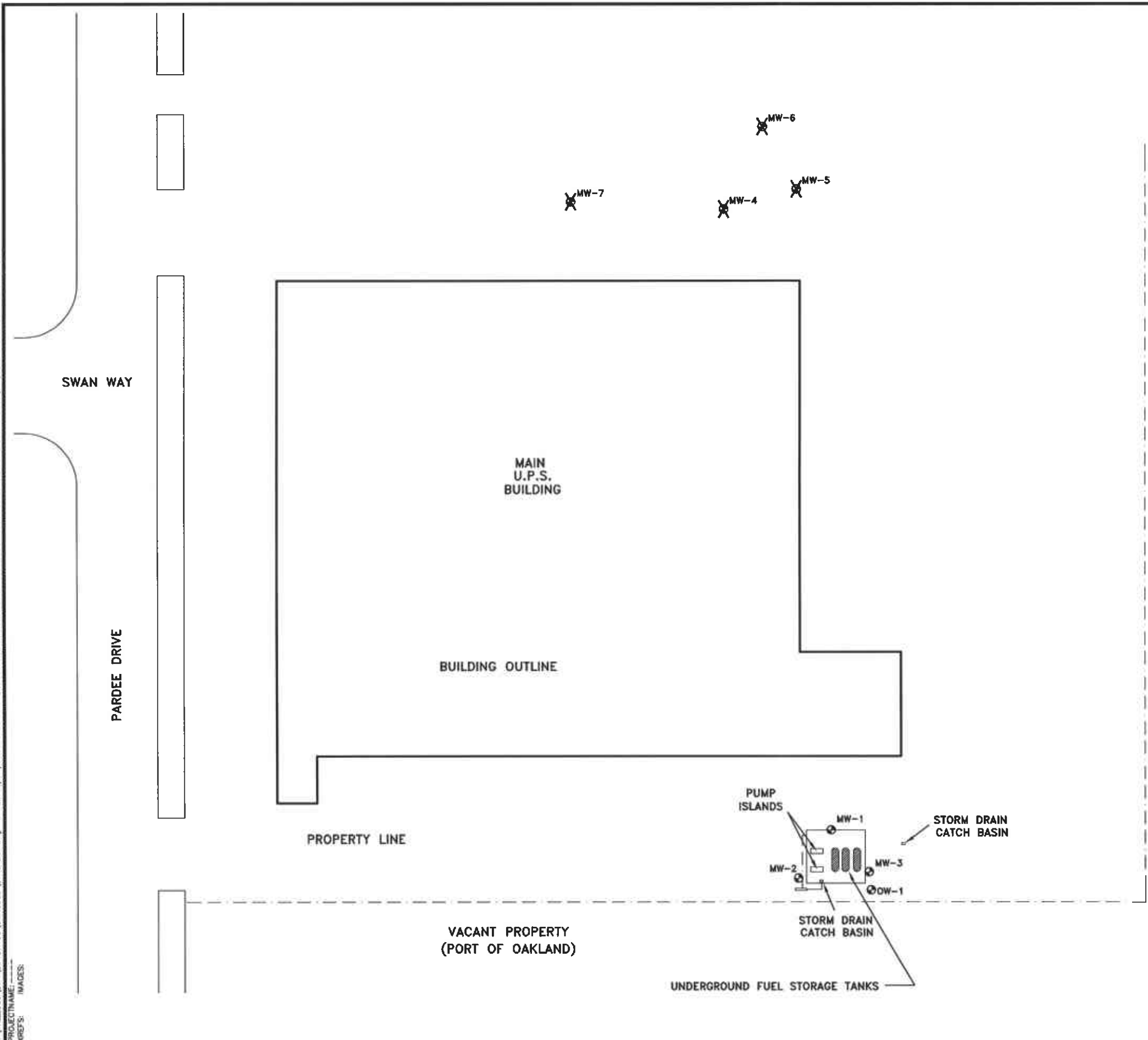
**TOPOGRAPHIC MAP OF  
SITE LOCATION AND VICINITY**



FIGURE  
**1**

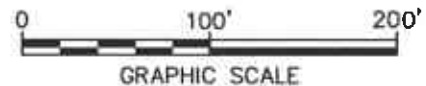


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 PROJECT NAME: IMAGES:



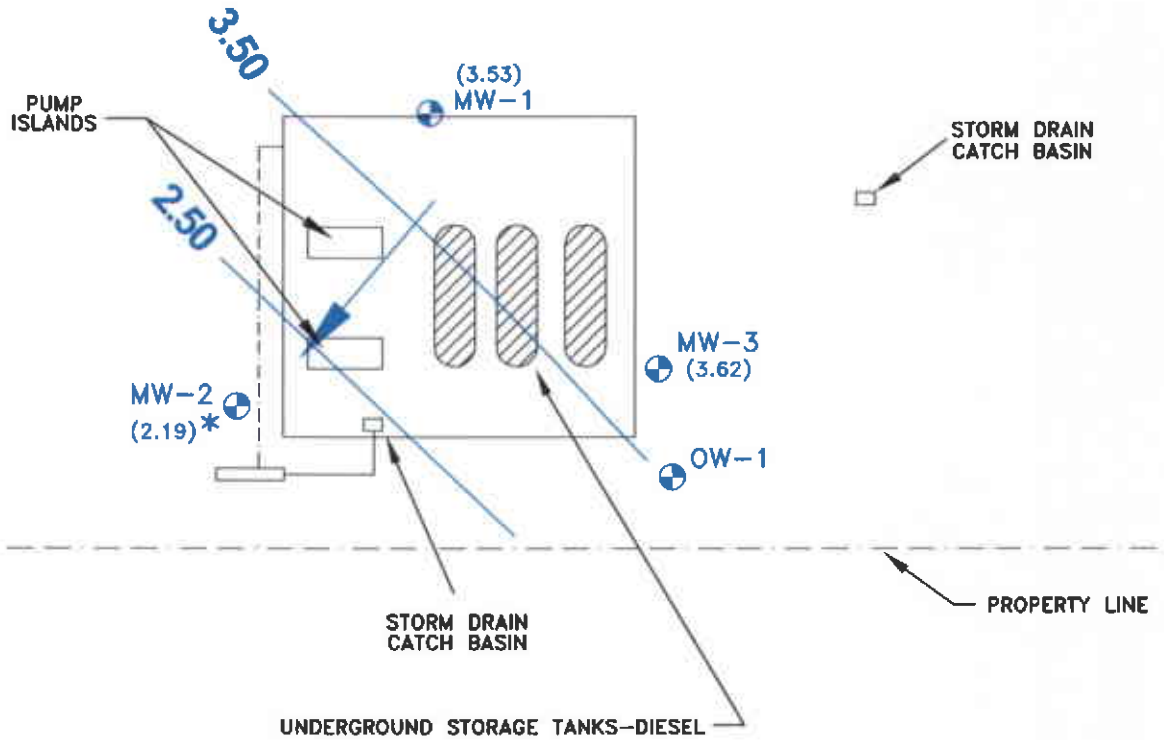
**LEGEND:**

- 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 <b>GROUNDWATER MONITORING REPORT</b>	
<b>MONITORING WELL LOCATION MAP</b>	
 BBL <small>an ARCADIS company</small>	<b>FIGURE</b> <b>2</b>

UPS BUILDING



**LEGEND:**

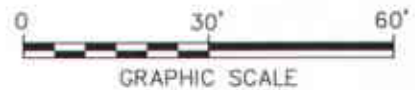
MW-1  GROUNDWATER MONITORING WELL

(3.75) GROUNDWATER TABLE ELEVATION (FEET ABOVE MSL)

4.00  GROUNDWATER ELEVATION CONTOUR

\* GROUNDWATER ELEVATION NOT CORRECTED FOR 0.03 FOOT OF PRODUCT PRESENT IN WELL

 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**

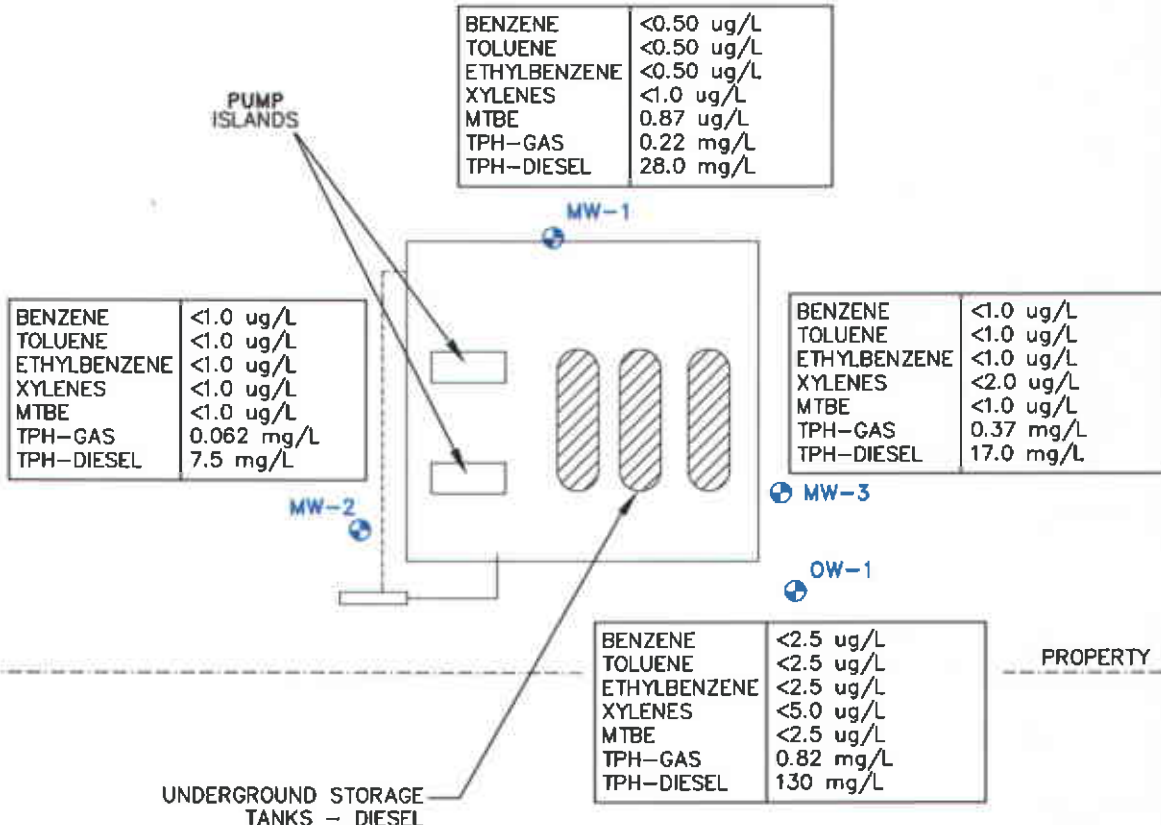
**GROUNDWATER CONTOUR MAP**  
**SEPTEMBER 28, 2006**




FIGURE  
**3**

IRV-85-JMS TAM-BB-JAR LAYER: 01/14/07 OFF-WHEP  
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PROJECT NAME: IMAGES:

UPS BUILDING



**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**

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**GROUNDWATER QUALITY MAP**  
**SEPTEMBER 28, 2006**

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FIGURE  
**4**

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PROJECT NAME: UPS-OAK bmp  
 PLOTS:

# TABLES

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## 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 Sampled	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	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		
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		

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)	
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	0.2	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	N/A	Small globules
		9/30/1999	4.95	2.20	1.07	1.07	0.00
		10/11/2000	4.97	2.18	-0.02	-0.02	0.08
		9/3/2002	5.02	2.13	-0.05	-0.05	0.07
		9/27/2002	4.89	2.26	0.13	0.13	0.09
		12/23/2002	4.25	2.90	0.64	0.64	0.04
		2/12/2003	4.26	2.89	-0.01	-0.01	0.01
		3/28/2003	4.35	2.80	-0.09	-0.09	0.01
		6/20/2003	4.55	2.60	-0.20	-0.20	0.01
		7/14/2003	4.56	2.59	-0.01	-0.01	0.00
		8/25/2003	4.79	2.36	-0.23	-0.23	0.01
		9/9/2003	4.90	2.25	-0.11	-0.11	0.01
		9/25/2003	4.97	2.18	-0.07	-0.07	0.01
		10/28/2003	4.98	2.17	-0.01	-0.01	0.04
		11/18/2003	4.83	2.32	0.15	0.15	0.00
		12/3/2003	4.87	2.28	-0.04	-0.04	0.00
		1/27/2004	7.39	-0.24	-2.52	-2.52	0.00
		2/24/2004	4.56	2.59	2.83	2.83	0.01
		3/29/2004	4.24	2.91	0.32	0.32	0.01
		4/19/2004	4.50	2.65	-0.28	-0.28	0.01
		5/20/2004	4.53	2.62	-0.03	-0.03	0.00
		6/22/2004	4.65	2.50	-0.12	-0.12	0.00
		7/27/2004	4.80	2.35	-0.15	-0.15	0.00
		8/24/2004	5.93	1.22	-1.13	-1.13	0.00
		9/29/2004	5.00	2.15	0.93	0.93	0.02
		10/25/2004	4.68	2.47	0.32	0.32	0.00
		12/15/2004	4.34	2.81	0.34	0.34	0.02
		1/24/2005	4.15	3.00	0.19	0.19	0.00
		2/23/2005	4.95	2.20	-0.80	-0.80	0.03
		3/23/2005	4.96	2.19	-0.01	-0.01	0.02
		4/29/2005	4.23	2.92	0.73	0.73	0.10
		5/27/2005	4.20	2.95	0.03	0.03	0.02
		6/29/2005	4.29	2.86	-0.09	-0.09	0.00
7/20/2005	4.48	2.67	-0.19	-0.19	0.04		
8/24/2005	4.71	2.44	-0.23	-0.23	0.00		
9/27/2005	4.98	2.17	-0.27	-0.27	0.03		
10/19/2005	5.08	2.07	-0.1	-0.1	0.00		
11/29/2005	4.68	2.47	0.40	0.40	0.01		
12/29/2005	4.19	2.96	0.49	0.49	0.01		
1/31/2006	4.05	3.10	0.14	0.14	0.00		
2/28/2006	4.16	2.99	-0.11	-0.11	0.00		
3/27/2006	4.11	3.04	0.05	0.05	0.01		
4/28/2006	4.03	3.12	0.08	0.08	0.00		
6/27/2006	4.45	2.70	-0.42	-0.42	0.01		
7/31/2006	4.60	2.55	-0.15	-0.15	0.02		
8/29/2006	4.84	2.31	-0.24	-0.24	0.01		
9/28/2006	4.96	2.19	-0.12	-0.12	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 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)
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		

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, 1998; 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)
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	-1.7	0.02
		3/29/2004	6.08	NC	-0.18	0.02
		4/19/2004	6.29	NC	0.21	0.03
		5/20/2004	6.16	NC	-0.13	0.00
		6/22/2004	6.37	NC	0.21	0.00
		7/27/2004	5.67	NC	-0.7	0.04
		8/24/2004	6.81	NC	1.14	0.00
		9/29/2004	7.08	NC	0.27	0.04
		10/25/2004	6.74	NC	-0.34	0.04
		12/15/2004	5.33	NC	-1.41	0.01
		1/24/2005	3.98	NC	-1.35	0.00
		2/23/2005	3.44	NC	-0.54	0.01
		3/23/2005	3.34	NC	-0.1	0.02
		4/29/2005	6.89	NC	3.55	0.13
		5/27/2005	7.18	NC	0.29	0.11
		6/29/2005	7.12	NC	-0.06	0.10
		7/20/2005	7.20	NC	0.08	0.10
		8/24/2005	7.15	NC	-0.05	0.06
		9/27/2005	7.43	NC	0.28	0.12
		10/19/2005	7.48	NC	0.05	0.11
		11/29/2005	7.00	NC	-0.48	0.04
		12/29/2005	5.22	NC	-1.78	0.00
1/31/2006	5.64	NC	0.42	0.00		
2/28/2006	6.53	NC	0.89	0.01		
3/27/2006	5.80	NC	-0.73	0.01		
4/28/2006	6.39	NC	0.59	0.00		
6/27/2006	7.82	NC	1.43	0.06		
7/31/2006	5.82	NC	-2.00	0.05		
8/29/2006	7.05	NC	1.23	0.07		
9/28/2006	7.10	NC	0.05	0.02		

Notes:

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



TABLE 2

## HISTORICAL GROUNDWATER MONITORING RESULTS SUMMARY

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

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

**Notes:**

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

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

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

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

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

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

Bold values indicate analytical detections above MCL.

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

J - Estimated value between MDL and PQL.

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

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

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

TABLE 2

## HISTORICAL GROUNDWATER MONITORING RESULTS SUMMARY

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

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

**Notes:**

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

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

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

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

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

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

Bold values indicate analytical detections above MCL.

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

J - Estimated value between MDL and PQL.

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

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

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

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

TABLE 2

## HISTORICAL GROUNDWATER MONITORING RESULTS SUMMARY

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

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

**Notes:**

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

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

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

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Bold values indicate analytical detections above MCL.

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

J - Estimated value between MDL and PQL.

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
	3/27/2006	<13	<13	<13	<25	<13	<1.30	58.0	NM
9/28/2006	<2.5	<2.5	<2.5	<5.0	<2.5	0.82	130.0	NM	
MCL	--	1	150	300	1,750	13	--	--	--

**Notes:**

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

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

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Bold values indicate analytical detections above MCL.

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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***

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# **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***

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**Well Gauging Data  
UPS- Oakland Hub**



## WELL GAUGING DATA

Project # 060928-SS4 Date 9/28/06 Client BBEL

Site 8400 PARDEE, OAKLAND.

Well ID	Time	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	Notes
MW-1	1414	4					3.90	14.00	↑	
MW-2	1408	4		4.93	.03		4.96	14.40		
MW-3	1400	4		<del>4.93</del>			3.80	14.50		
OW-1	1355	6		7.08	.02		7.10	18.40		↓



## WELL MONITORING DATA SHEET

Project #: <u>060928-554</u>	Client: <u>BB+L</u>
Sampler: <u>500m</u>	Start Date: <u>9/28/06</u>
Well I.D.: <u>MW-1</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth: <u>14.00</u>	Depth to Water: <u>3.90</u>
Before: _____ After: _____	Before: <u>9</u> After: <u>3.95</u>
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: <u>PVC</u> Grade _____	D.O. Meter (if req'd): YSI HACH

Purge Method:

- Bailer
- Disposable Bailer 3"
- Positive Air Displacement
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other \_\_\_\_\_

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: \_\_\_\_\_

<u>6.5</u> (Gals.) X	<u>3</u>	= <u>19.5</u> Gals.
I 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 <sup>2</sup> * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or <u>µS</u> )	Turbidity (NTU)	Gals. Removed	Observations
1450	75.3	6.9	1981	442	6.5	grey, sheen. odor <sup>gas</sup>
1453	75.7	6.9	2001	>1000	13.0	"
1456	75.8	6.9	2111	>1000	19.5	"

Did well dewater? Yes  No  Gallons actually evacuated: 19.5

Sampling Time: 1500 Sampling Date: 9/28/06

Sample I.D.: MW-1 Laboratory: STL

Analyzed for: TPH-G BTEX MTBE TPH-D Other: \_\_\_\_\_

Equipment Blank I.D.: \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D.: \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: \_\_\_\_\_

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

ORP (if req'd): Pre-purge: \_\_\_\_\_ mV Post-purge: \_\_\_\_\_ mV

## WELL MONITORING DATA SHEET

Project #: <u>060928-554</u>	Client: <u>BB &amp; L</u>
Sampler: <u>SPOCIT</u>	Date: <u>9/28/06</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>4.96</u>
Depth to Free Product: <u>4.93</u>	Thickness of Free Product (feet): <u>.03</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      Waterra      Sampling Method: Bailer  
 Disposable Bailer 3"      Peristaltic      Disposable Bailer  
 Positive Air Displacement      Extraction Pump      Extraction Port  
 Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

$\frac{6.1}{15} \text{ (Gals.)} \times 3 = \frac{18.3}{4.5} \text{ Gals.}$ <p>1 Case Volume      Specified Volumes      Calculated Volume</p>	<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>radius<sup>2</sup> * 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 <sup>2</sup> * 0.163
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1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1510</u>	<u>74 ml</u>	<u>spH</u>	<u>prior to purge:</u>			
<u>1518</u>	<u>light product heavy sludge. no parameters taken due to possible instrument damage.</u>					
<u>1522</u>	<u>well dewatered @ 8 gal.</u>					

Did well dewater? Yes No      Gallons actually evacuated: 8

Sampling Date: 9/28/06      Sampling Time: 1555      Depth to Water: 6.02

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

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 #: <u>060928-554</u>	Client: <u>BB &amp; L</u>
Sampler: <u>SOOCH</u>	Date: <u>9/28/06</u>
Well I.D.: <u>MW-3</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth (TD): <u>14.50</u>	Depth to Water (DTW): <u>3.80</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 <input checked="" type="checkbox"/> Disposable Bailer <u>3"</u> <input type="checkbox"/> Positive Air Displacement <input type="checkbox"/> Electric Submersible	Waterra <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump Other _____	Sampling Method: <input checked="" type="checkbox"/> Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing Other: _____
--	--	---

$\underline{7} \text{ (Gals.)} \times \underline{3} = \underline{21} \text{ Gals.}$ 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <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>radius<sup>2</sup> * 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 <sup>2</sup> * 0.163
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1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1429	76-7	6.6	1760	177	7	9.55 sileen, odor
1434	75-3	6.7	2116	162	14	" "
		well dewatered e		1 gal.		DTW = 12.47
1550	76.0	6.6	2222	110	—	

Did well dewater? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Gallons actually evacuated: <u>14</u>	
Sampling Date: <u>9/28/06</u>	Sampling Time: <u>1550</u>	Depth to Water: <u>4.03</u>
Sample I.D.: <u>MW-3</u>	Laboratory: Kiff CalScience	Other: <u>597</u>
Analyzed for: <input checked="" type="checkbox"/> TPH-G <input checked="" type="checkbox"/> BTEX <input checked="" type="checkbox"/> MTBE <input checked="" type="checkbox"/> 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>060928-SS4</u>	Client: <u>BB &amp; L</u>
Sampler: <u>SPOC</u>	Date: <u>9/28/06</u>
Well I.D.: <u>OW-1</u>	Well Diameter: 2 3 4 <u>6</u> 8
Total Well Depth (TD): <u>18.40</u>	Depth to Water (DTW): <u>7.10</u>
Depth to Free Product: <u>7.08</u>	Thickness of Free Product (feet): <u>.02</u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer	Watera	Sampling Method: <u>Bailer</u>
Disposable Bailer <u>3"</u>	Peristaltic	Disposable Bailer
Positive Air Displacement	Extraction Pump	Extraction Port
Electric Submersible	Other _____	Dedicated Tubing
Other: _____		

$\frac{16.6 \text{ (Gals.)} \times 3}{\text{Specified Volumes}} = \frac{49.8 \text{ Gals.}}{\text{Calculated Volume}}$	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <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>radius<sup>2</sup> * 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 <sup>2</sup> * 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 <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>841L60</u>	<u>11.1 ml</u>	<u>set prior to purge.</u>				
<u>1540</u>						<u>Heavy Green, Product - no parameters taken.</u>
						<u>well dewatered @ 17 gal.</u>

Did well dewater? <u>Yes</u> No	Gallons actually evacuated: <u>17</u>
Sampling Date: <u>9/28/06</u>	Sampling Time: <u>1600</u> Depth to Water: <u>11.08</u>
Sample I.D.: <u>OW-1</u>	Laboratory: Kiff CalScience Other <u>GALV</u>
Analyzed for: <u>TPH-G</u> <u>BTEX</u> <u>MTBE</u> <u>TPH-D</u>	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

# BLAINE

TECH SERVICES, INC.

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

### CONDUCT ANALYSIS TO DETECT

LAB

STL

DHS #

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

- EPA
- LIA
- OTHER

RWQCB REGION \_\_\_\_\_

### SPECIAL INSTRUCTIONS

Invoice and Report to : Blasland, Bouck, & Lee, Inc.

Attn: Hugh Devery

~~770-428-9009~~ 770-428-9009

**Low Detection levels requested**

ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
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CHAIN OF BTS # 060928-554

CLIENT Blasland, Bouck, & Lee, Inc.

SITE UPS

8400 Pardee Drive

Oakland, CA

SAMPLE I.D.	DATE	TIME	MATRIX		CONTAINERS
			S=SOIL W=H <sub>2</sub> O	TOTAL	
MW-1	9/28	1500	W	6	
MW-2	↓	1535	↓	↓	
MW-3	↓	1550	↓	↓	
OW-1	↓	1600	↓	↓	

C = COMPOSITE ALL CONTAINERS

TPH-Gro, BTEX, MTBE (8260)

TPH-D (8015)

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED	
	9/28/06	1645	SUCKHOON SUNG	NO LATER THAN As contracted	
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	2/28/06	1755		9/28/06	1800
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
(Sample Custodian)	9/29/06	1000	#5212	9/25/06	1000
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #		

## WELLHEAD INSPECTION CHECKLIST

Page      of     

Client BB & L Date 9/28/09  
 Site Address 8400 Purdie Avenuo  
 Job Number 060928.554 Technician SPD ch

Well ID	Well Inspected - No Corrective Action Required	WELL IS SECURABLE BY DESIGN (12" or less)	WELL IS MARKED WITH THE WORDS "MONITORING WELL" (12" or less)	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-1	X									
MW-2	X									
MW-3	X									
MW-4								X		

NOTES: OW-1. missing 1 bolt.

## SPH or Purge Water Drum Log

Client: BB&L  
 Site Address: UPS - Oakland, CA

STATUS OF DRUM(S) UPON ARRIVAL						
Date	3/27/06	4-28-06	5-31-06	6-27-06	7/31/06	8/29/06
Number of drum(s) empty:						
Number of drum(s) 1/4 full:	1	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	2	0	1	1	1
Are the drum(s) properly labeled?	Y	Y		Y	Y	Y
Drum ID & Contents:	SPH + H <sub>2</sub> O	→	"	"	SPH H <sub>2</sub> O	"
If any drum(s) are partially or totally filled, what is the first use date:	2/28/06	→			5/31/06 2/28/06	5/31/06

- If you add any SPH to an empty or partially filled drum, drum must have at least 20 gals. of Purge water 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	3/27/06	4-28-06	5-31-06	6-27-06	7/31/06	8/29/06
Number of drums empty:						
Number of drum(s) 1/4 full:	1	1	1	1	1	1
Number of drum(s) 1/2 full:	0					
Number of drum(s) 3/4 full:						
Number of drum(s) full:	1	1				
Total drum(s) on site:	2	2	1	1	1	1
Are the drum(s) properly labeled?	Yes	Y	Y	Y	Y	Y
Drum ID & Contents:	SPH + H <sub>2</sub> O	→	→	→	→	→

**LOCATION OF DRUM(S)**  
 Describe location of drum(s): SEE MAP

FINAL STATUS						
Number of new drum(s) left on site this event	1	0	1	0	0	0
Date of inspection:	3/27/06	4-28-06	5-31-06	6-27-06	7/31/06	8/29/06
Drum(s) labelled properly:	Y	Y	Y	Y	Y	Y
Logged by BTS Field Tech:	DW	DW	DW	DW	DW	DW
Office reviewed by:	W	W	W	W	W	W

WELLHEAD INSPECTION CHECKLIST

Date 8-29-06 Client Oakland

Site Address 8400 Pardee Dr Oakland

Job Number 060829-DW-2 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	Y							
MW-3	Y							
DW-1							Rim loose, missing 1 bolt	

NOTES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



WELL GAUGING DATA

Project # 060829-DW-2 Date 8-29-06 Client BBL

Site 8400 Pardee Dr Oakland

Well ID	Time	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>TOC</u>	Notes
MW-1	1020	4					3.60	-	↓	
MW-2	1029	4		4.83	.01	.25	4.84	-		
MW-3	1025	4	sheen				3.60	-		
DW-1	1033	5		6.98	.07	768	7.05	-		

**WELL MONITORING DATA SHEET**

Project #: <b>060929-DW-2</b>	Client: <b>BBL</b>
Sampler: <b>DW</b>	Date: <b>8-29-06</b>
Well I.D.: <b>MW-1</b>	Well Diameter: 2 3 <b>4</b> 6 8
Total Well Depth (TD): <b>-</b>	Depth to Water (DTW): <b>3.60</b>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>PVE</b> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: <del>Bailer</del> Disposable Bailer Positive Air Displacement Electric Submersible	<del>Water</del> Peristaltic Extraction Pump Other	Sampling Method: <del>Bailer</del> Disposable Bailer Extraction Port Dedicated Tubing Other:
---	---	--

(Gals.) X <b>-</b> = <b>-</b> 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>radius<sup>2</sup> * 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 <sup>2</sup> * 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 <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
		<b>No</b>	<b>SOH detected</b>			

Did well dewater? <del>Yes</del> <del>No</del>	Gallons actually evacuated: <del>-</del>
Sampling Date: <del>-</del>	Sampling Time: <del>-</del>
Sample I.D.: <del>-</del>	Depth to Water: <del>-</del>
Analyzed for: <del>TPH-G BTEX MTBE TPH-D Oxygenates (5) Other</del>	Laboratory: <del>Kiff CalScience Other</del>
EB I.D. (if applicable): <del>-</del>	Duplicate I.D. (if applicable): <del>-</del>
Analyzed for: <del>TPH-G BTEX MTBE TPH-D Oxygenates (5) Other</del>	
D.O. (if req'd): <del>Pre-purge: <input type="text"/> mg/L</del>	<del>Post-purge: <input type="text"/> mg/L</del>
O.R.P. (if req'd): <del>Pre-purge: <input type="text"/> mV</del>	<del>Post-purge: <input type="text"/> mV</del>

**WELL MONITORING DATA SHEET**

Project #: <b>060829-QW-2</b>	Client: <b>BBL</b>
Sampler: <b>DW</b>	Date: <b>8-29-06</b>
Well I.D.: <b>MW-2</b>	Well Diameter: 2 3 <b>(4)</b> 6 8
Total Well Depth (TD): <b>-</b>	Depth to Water (DTW): <b>4.84</b>
Depth to Free Product: <b>4.83</b>	Thickness of Free Product (feet): <b>.01</b>
Referenced to: <b>(PVD)</b> 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 Disposable Bailer Extraction Port Dedicated Tubing Other: _____
--	--	---

_____ (Gals.) X _____ = _____ 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>radius<sup>2</sup> * 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 <sup>2</sup> * 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 <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
						<b>Bailer ≈ 25 ml sent from well</b>

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 #: <b>060829-DW-2</b>	Client: <b>BBL</b>
Sampler: <b>DW</b>	Date: <b>8-29-06</b>
Well I.D.: <b>MW-3</b>	Well Diameter: 2 3 <b>4</b> 6 8
Total Well Depth (TD): <b>—</b>	Depth to Water (DTW): <b>3.62</b>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>PVE</b> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

_____ (Gals.) X _____ = _____ 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>radius<sup>2</sup> * 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 <sup>2</sup> * 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 <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
						<b>No SPH detected. Sheen</b>

Did well dewater? <del>Yes</del> <del>No</del>	Gallons actually evacuated: <del>_____</del>
Sampling Date: <del>_____</del>	Sampling Time: <del>_____</del>
Sample I.D.: <del>_____</del>	Depth to Water: <del>_____</del>
Laboratory: <del>Kiff CalScience Other _____</del>	
Analyzed for: <del>TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____</del>	
EB I.D. (if applicable): <del>_____ @ _____ time</del>	Duplicate I.D. (if applicable): <del>_____</del>
Analyzed for: <del>TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____</del>	
D.O. (if req'd): <del>Pre-purge: _____ mg/L</del>	<del>Post-purge: _____ mg/L</del>
O.R.P. (if req'd): <del>Pre-purge: _____ mV</del>	<del>Post-purge: _____ mV</del>

**WELL MONITORING DATA SHEET**

Project #: <b>060829 DW-2</b>	Client: <b>BBL</b>
Sampler: <b>DW</b>	Date: <b>8-29-06</b>
Well I.D.: <b>DW-1</b>	Well Diameter: 2 3 4 6 8 <b>5</b>
Total Well Depth (TD): <b>-</b>	Depth to Water (DTW): <b>7.05</b>
Depth to Free Product: <b>6.98</b>	Thickness of Free Product (feet): <b>.07</b>
Referenced to: <b>PVE</b> 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: <b>Bailer</b> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
--	---	--

_____ (Gals.) X _____ = _____ 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 <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
		<b>Bailed ≈ 268 ml SPH from well</b>				

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: Kiff CalScience Other: _____
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____	
EB I.D. (if applicable): _____ @ _____ Time	Duplicate I.D. (if applicable): _____
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____	
D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV

## SPH or Purge Water Drum Log

Client: BB&L

Site Address: UPS - Oakland, CA

STATUS OF DRUM(S) UPON ARRIVAL						
Date	3/27/06	4-28-06	5-31-06	6-27-06	7/31/06	
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:		1				
Total drum(s) on site:	1	2	0	1	1	
Are the drum(s) properly labeled?	Y	Y			Y	
Drum ID & Contents:	SPH + H <sub>2</sub> O	→			SPH & H <sub>2</sub> O	
If any drum(s) are partially or totally filled, what is the first use date:	3/28/06	→			5/31/06 2/28/06	

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

STATUS OF DRUM(S) UPON DEPARTURE						
Date	3/27/06	4-28-06	5-31-06	6-27-06	7/31/06	
Number of drums empty:						
Number of drum(s) 1/4 full:	1	1	1	1	1	
Number of drum(s) 1/2 full:	0					
Number of drum(s) 3/4 full:						
Number of drum(s) full:	1	1				
Total drum(s) on site:	2	2	1	1	1	
Are the drum(s) properly labeled?	Yes	Y	Y	Y	Y	
Drum ID & Contents:	SPH + H <sub>2</sub> O	→	→	→	→	

**LOCATION OF DRUM(S)**  
Describe location of drum(s): SEE MAP

FINAL STATUS						
Number of new drum(s) left on site this event	1	0	1	0	0	
Date of inspection:	3/27/06	4-28-06	5-31-06	6-27-06	7/31/06	
Drum(s) labelled properly:	Y	Y	Y	Y	Y	
Logged by BTS Field Tech:	DW	DW	DW	DW	DW	
Office reviewed by:	W	W	W	W	W	

# WELLHEAD INSPECTION CHECKLIST

Date 7/3/06 Client BRL

Site Address 8100 Pardee Dr., Oakland

Job Number 060731-PCS Technician P. Cornish

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	K							
MW-2	K							
MW-3	K							
OW-1							K	

NOTES: ow-1 1/2 bolts missing  
1/2 tabs stripped

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## WELL MONITORING DATA SHEET

Project #: <u>060731-PCS</u>	Client: <u>BB&amp;L</u>
Sampler: <u>PC</u>	Date: <u>7/31/06</u>
Well I.D.: <u>MW-1</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth (TD): <u>14.08</u>	Depth to Water (DTW): <u>3.35</u>
Depth to Free Product: <u>—</u>	Thickness of Free Product (feet): <u>—</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      Waterra      Sampling Method: Bailer  
 Disposable Bailer      Peristaltic      Disposable Bailer  
 Positive Air Displacement      Extraction Pump      Extraction Port  
 Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing  
 Other: \_\_\_\_\_

_____ (Gals.) X _____ = _____ Gals.   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>radius<sup>2</sup> * 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 <sup>2</sup> * 0.163
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1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1310</u>	<u>No</u>	<u>SPH</u>	<u>Detected with interface probe</u>			

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 #: <b>060731-PL5</b>	Client: <b>BB &amp; L</b>
Sampler: <b>PL</b>	Date: <b>7/31/06</b>
Well I.D.: <b>MW-3</b>	Well Diameter: 2 3 <b>(4)</b> 6 8 _____
Total Well Depth (TD): <b>14.50</b>	Depth to Water (DTW): <b>4.33</b>
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: <b>PVC</b> 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 _____ = _____ 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>radius<sup>2</sup> * 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 <sup>2</sup> * 0.163
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1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<b>1315 1320</b>	<b>NA</b>	<b>SPH</b>	<b>detected</b>	<b>with interface probe</b>		

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 #: <u>060731-PCS</u>	Client: <u>BBL</u>
Sampler: <u>PC</u>	Date: <u>7/31/00</u>
Well I.D.: <u>0W-1</u>	Well Diameter: 2 3 4 <u>6</u> 8
Total Well Depth (TD): <u>-</u>	Depth to Water (DTW): <u>5.82</u>
Depth to Free Product: <u>5.77</u>	Thickness of Free Product (feet): <u>0.05</u>
Referenced to: <u>PVO</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 <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 _____ = _____ 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>radius<sup>2</sup> * 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 <sup>2</sup> * 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 <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
			<u>278 m/SPH Bailed</u>			

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





STL

**ANALYTICAL REPORT**

Job Number: 720-5740-1

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  
10/09/2006

cc: Mr. Robert Rogero  
Ms. Lisa Taylor

Project Manager: Dimple Sharma

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

## EXECUTIVE SUMMARY - Detections

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

Job Number: 720-5740-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
<b>720-5740-1</b>	<b>MW-1</b>				
MTBE		0.87	0.50	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		220	50	ug/L	8260B
Diesel Range Organics [C10-C28]		28000	2500	ug/L	8015B
<b>720-5740-2</b>	<b>MW-2</b>				
Gasoline Range Organics (GRO)-C5-C12		62	50	ug/L	8260B
Diesel Range Organics [C10-C28]		7500	500	ug/L	8015B
<b>720-5740-3</b>	<b>MW-3</b>				
Gasoline Range Organics (GRO)-C5-C12		370	100	ug/L	8260B
Diesel Range Organics [C10-C28]		17000	2500	ug/L	8015B
<b>720-5740-4</b>	<b>OW-1</b>				
Gasoline Range Organics (GRO)-C5-C12		820	250	ug/L	8260B
Diesel Range Organics [C10-C28]		130000	10000	ug/L	8015B

## METHOD SUMMARY

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

Job Number: 720-5740-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
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: 720-5740-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Client Matrix</u>	<u>Date/Time Sampled</u>	<u>Date/Time Received</u>
720-5740-1	MW-1	Water	09/28/2006 1500	09/29/2006 1200
720-5740-2	MW-2	Water	09/28/2006 1555	09/29/2006 1200
720-5740-3	MW-3	Water	09/28/2006 1550	09/29/2006 1200
720-5740-4	OW-1	Water	09/28/2006 1600	09/29/2006 1200

# Analytical Data

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

Job Number: 720-5740-1

Client Sample ID: MW-1

Lab Sample ID: 720-5740-1

Date Sampled: 09/28/2006 1500

Client Matrix: Water

Date Received: 09/29/2006 1200

## 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-13933

Instrument ID: Varian 3900C

Preparation: 5030B

Lab File ID: c:\saturnws\data\200610\10

Dilution: 1.0

Initial Weight/Volume: 40 mL

Date Analyzed: 10/05/2006 1744

Final Weight/Volume: 40 mL

Date Prepared: 10/05/2006 1744

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
MTBE	0.87		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	220		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	107		77 - 121
1,2-Dichloroethane-d4 (Surr)	120		73 - 130

**Analytical Data**

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

Job Number: 720-5740-1

Client Sample ID: MW-2

Lab Sample ID: 720-5740-2

Date Sampled: 09/28/2006 1555

Client Matrix: Water

Date Received: 09/29/2006 1200

**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 720-13976

Instrument ID: Varian 3900C

Preparation: 5030B

Lab File ID: c:\saturday\data\200610\10

Dilution: 1.0

Initial Weight/Volume: 40 mL

Date Analyzed: 10/06/2006 1247

Final Weight/Volume: 40 mL

Date Prepared: 10/06/2006 1247

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	62		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	118		77 - 121
1,2-Dichloroethane-d4 (Surr)	113		73 - 130

# Analytical Data

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

Job Number: 720-5740-1

Client Sample ID: MW-3

Lab Sample ID: 720-5740-3

Date Sampled: 09/28/2006 1550

Client Matrix: Water

Date Received: 09/29/2006 1200

## 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-13976

Instrument ID: Varian 3900C

Preparation: 5030B

Lab File ID: c:\satumws\data\200610\10

Dilution: 2.0

Initial Weight/Volume: 40 mL

Date Analyzed: 10/06/2006 1154

Final Weight/Volume: 40 mL

Date Prepared: 10/06/2006 1154

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	370		100
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	106		77 - 121
1,2-Dichloroethane-d4 (Surr)	115		73 - 130

# Analytical Data

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

Job Number: 720-5740-1

Client Sample ID: OW-1

Lab Sample ID: 720-5740-4

Date Sampled: 09/28/2006 1600

Client Matrix: Water

Date Received: 09/29/2006 1200

## 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-13976

Instrument ID: Varian 3900C

Preparation: 5030B

Lab File ID: c:\saturday\data\200610\10

Dilution: 5.0

Initial Weight/Volume: 40 mL

Date Analyzed: 10/06/2006 1501

Final Weight/Volume: 40 mL

Date Prepared: 10/06/2006 1501

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		2.5
Ethylbenzene	ND		2.5
Toluene	ND		2.5
MTBE	ND		2.5
Xylenes, Total	ND		5.0
Gasoline Range Organics (GRO)-C5-C12	820		250
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	102		77 - 121
1,2-Dichloroethane-d4 (Surr)	104		73 - 130

**Analytical Data**

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

Job Number: 720-5740-1

**Client Sample ID: MW-1**

Lab Sample ID: 720-5740-1

Date Sampled: 09/28/2006 1500

Client Matrix: Water

Date Received: 09/29/2006 1200

---

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

Method: 8015B

Analysis Batch: 720-13974

Instrument ID: Varian DRO4

Preparation: 3511

Prep Batch: 720-13805

Lab File ID: N/A

Dilution: 50

Initial Weight/Volume: 35 mL

Date Analyzed: 10/05/2006 2111

Final Weight/Volume: 2 mL

Date Prepared: 10/03/2006 0545

Injection Volume:

Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	28000		2500
Surrogate	%Rec		Acceptance Limits
o-Terphenyl	0	X	50 - 130

**Analytical Data**

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

Job Number: 720-5740-1

Client Sample ID: MW-2

Lab Sample ID: 720-5740-2

Date Sampled: 09/28/2006 1555

Client Matrix: Water

Date Received: 09/29/2006 1200

---

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

Method: 8015B

Analysis Batch: 720-13974

Instrument ID: Varian DRO4

Preparation: 3511

Prep Batch: 720-13805

Lab File ID: N/A

Dilution: 10

Initial Weight/Volume: 35 mL

Date Analyzed: 10/05/2006 2140

Final Weight/Volume: 2 mL

Date Prepared: 10/03/2006 0545

Injection Volume:

Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	7500		500
Surrogate	%Rec		Acceptance Limits
o-Terphenyl	0	X	50 - 130

**Analytical Data**

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

Job Number: 720-5740-1

Client Sample ID: **MW-3**

Lab Sample ID: 720-5740-3

Date Sampled: 09/28/2006 1550

Client Matrix: Water

Date Received: 09/29/2006 1200

---

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

Method: 8015B

Analysis Batch: 720-13974

Instrument ID: Varian DRO4

Preparation: 3511

Prep Batch: 720-13805

Lab File ID: N/A

Dilution: 50

Initial Weight/Volume: 35 mL

Date Analyzed: 10/05/2006 2209

Final Weight/Volume: 2 mL

Date Prepared: 10/03/2006 0545

Injection Volume:

Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	17000		2500
Surrogate	%Rec		Acceptance Limits
o-Terphenyl	0	X	50 - 130



# Analytical Data

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

Job Number: 720-5740-1

Client Sample ID: OW-1

Lab Sample ID: 720-5740-4

Date Sampled: 09/28/2006 1600

Client Matrix: Water

Date Received: 09/29/2006 1200

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

Method:	8015B	Analysis Batch: 720-13974	Instrument ID: Varian DRO4
Preparation:	3511	Prep Batch: 720-13805	Lab File ID: N/A
Dilution:	200		Initial Weight/Volume: 35 mL
Date Analyzed:	10/05/2006 2238		Final Weight/Volume: 2 mL
Date Prepared:	10/03/2006 0545		Injection Volume:
			Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	130000		10000
Surrogate	%Rec		Acceptance Limits
o-Terphenyl	0	X	50 - 130

## DATA REPORTING QUALIFIERS

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

Job Number: 720-5740-1

<u>Lab Section</u>	<u>Qualifier</u>	<u>Description</u>
GC Semi VOA	X	Surrogate exceeds the control limits

## Quality Control Results

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

Job Number: 720-5740-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:720-13933</b>					
LCS 720-13933/2	Lab Control Spike	T	Water	8260B	
LCSD 720-13933/1	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-13933/3	Method Blank	T	Water	8260B	
720-5740-1	MW-1	T	Water	8260B	
720-5740-1MSD	Matrix Spike Duplicate	T	Water	8260B	
<b>Analysis Batch:720-13976</b>					
LCS 720-13976/2	Lab Control Spike	T	Water	8260B	
LCSD 720-13976/1	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-13976/3	Method Blank	T	Water	8260B	
720-5740-2	MW-2	T	Water	8260B	
720-5740-3	MW-3	T	Water	8260B	
720-5740-4	OW-1	T	Water	8260B	
<b>Report Basis</b>					
T = Total					
<b>GC Semi VOA</b>					
<b>Prep Batch: 720-13805</b>					
LCS 720-13805/2-A	Lab Control Spike	T	Water	3511	
LCSD 720-13805/3-A	Lab Control Spike Duplicate	T	Water	3511	
MB 720-13805/1-A	Method Blank	T	Water	3511	
720-5740-1	MW-1	T	Water	3511	
720-5740-2	MW-2	T	Water	3511	
720-5740-3	MW-3	T	Water	3511	
720-5740-4	OW-1	T	Water	3511	
<b>Analysis Batch:720-13974</b>					
LCS 720-13805/2-A	Lab Control Spike	T	Water	8015B	720-13805
LCSD 720-13805/3-A	Lab Control Spike Duplicate	T	Water	8015B	720-13805
MB 720-13805/1-A	Method Blank	T	Water	8015B	720-13805
720-5740-1	MW-1	T	Water	8015B	720-13805
720-5740-2	MW-2	T	Water	8015B	720-13805
720-5740-3	MW-3	T	Water	8015B	720-13805
720-5740-4	OW-1	T	Water	8015B	720-13805
<b>Report Basis</b>					
T = Total					

STL San Francisco

# Quality Control Results

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

Job Number: 720-5740-1

Method Blank - Batch: 720-13933

Method: 8260B  
Preparation: 5030B

Lab Sample ID: MB 720-13933/3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/05/2006 0941  
Date Prepared: 10/05/2006 0941

Analysis Batch: 720-13933  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\satumws\data\200610\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)	101		77 - 121
1,2-Dichloroethane-d4 (Surr)	110		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: 720-5740-1

**Lab Control Spike/  
Lab Control Spike Duplicate Recovery Report - Batch: 720-13933**

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

LCS Lab Sample ID: LCS 720-13933/2  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/05/2006 0848  
Date Prepared: 10/05/2006 0848

Analysis Batch: 720-13933  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200610\100  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 720-13933/1  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/05/2006 0915  
Date Prepared: 10/05/2006 0915

Analysis Batch: 720-13933  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200610\100  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	103	108	69 - 129	4	25		
Toluene	104	106	70 - 130	2	25		
MTBE	114	111	65 - 165	2	25		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)	97		107		77 - 121		
1,2-Dichloroethane-d4 (Surr)	100		104		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: 720-5740-1

Method Blank - Batch: 720-13976

Method: 8260B  
Preparation: 5030B

Lab Sample ID: MB 720-13976/3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/06/2006 1049  
Date Prepared: 10/06/2006 1049

Analysis Batch: 720-13976  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\satumws\data\200610\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)	110	77 - 121
1,2-Dichloroethane-d4 (Surr)	114	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: 720-5740-1

**Lab Control Spike/  
Lab Control Spike Duplicate Recovery Report - Batch: 720-13976**

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

LCS Lab Sample ID: LCS 720-13976/2  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/06/2006 0902  
Date Prepared: 10/06/2006 0902

Analysis Batch: 720-13976  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\satumws\data\200610\100  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 720-13976/1  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/06/2006 0929  
Date Prepared: 10/06/2006 0929

Analysis Batch: 720-13976  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\satumws\data\200610\100  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	105	106	69 - 129	0	25		
Toluene	103	117	70 - 130	13	25		
MTBE	124	118	65 - 165	5	25		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)	100		111		77 - 121		
1,2-Dichloroethane-d4 (Surr)	106		106		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: 720-5740-1

**Method Blank - Batch: 720-13805**

**Method: 8015B  
Preparation: 3511**

Lab Sample ID: MB 720-13805/1-A  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/06/2006 0034  
Date Prepared: 10/03/2006 0545

Analysis Batch: 720-13974  
Prep Batch: 720-13805  
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	93	50 - 130

**Lab Control Spike/  
Lab Control Spike Duplicate Recovery Report - Batch: 720-13805**

**Method: 8015B  
Preparation: 3511**

LCS Lab Sample ID: LCS 720-13805/2-A  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/05/2006 2336  
Date Prepared: 10/03/2006 0545

Analysis Batch: 720-13974  
Prep Batch: 720-13805  
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 720-13805/3-A  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 10/06/2006 0005  
Date Prepared: 10/03/2006 0545

Analysis Batch: 720-13974  
Prep Batch: 720-13805  
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	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Diesel Range Organics [C10-C28]	103	102	50 - 150	1	25		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
o-Terphenyl	112	110			50 - 130		

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



720-5740

# BLAINE

TECH SERVICES, INC.

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

### CONDUCT ANALYSIS TO DETECT

LAB STL 102041 DHS #  
ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND  
 EPA  RWQCB REGION  
 LA  OTHER

SPECIAL INSTRUCTIONS  
Invoice and Report to : Blasland, Bouck, & Lee, Inc.  
Attn: Hugh Devery  
~~770-428-9000~~ **770-428-9009**

Low Detection levels requested

ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
			52

CHAIN OF CLIENT: BTS # 060928-554  
 CLIENT: Blasland, Bouck, & Lee, Inc.  
 SITE: UPS  
8400 Pardee Drive  
Oakland, CA

C = COMPOSITE ALL CONTAINERS

TPH-Gro, BTEX, MIBE (\$260)

TPH-D (8015)

SAMPLE I.D.	DATE	TIME	MATRIX	TOTAL	CONTAINERS
			S=SOIL W=H <sub>2</sub> O		
MW-1	9/28	1500	W	6	
MW-2	↓	1555	↓	↓	
MW-3	↓	1550	↓	↓	
MW-1	↓	1600	↓	↓	

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED	
	9/28/06	1615	SUCHON SUNG	NO LATER THAN As contracted	
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>[Signature]</i>	7/28/06	1755	<i>[Signature]</i>	9/28/06	1800
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>[Signature]</i>	9/29/06	1000	<i>[Signature]</i>	7/25/06	1000
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>[Signature]</i>	09/29/06	12:00	<i>[Signature]</i>	9-29-06	1200
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #		

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## LOGIN SAMPLE RECEIPT CHECK LIST

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

Job Number: 720-5740-1

Login Number: 5740

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