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Alameda County  
MAY 05 2005  
Environmental Health

*Transmitted Via UPS Next Day Air*

May 3, 2005

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. (BBL) is transmitting herewith the First Semi-Annual 2005 Monitoring & Sampling Report for the above-referenced facility. This report describes groundwater monitoring efforts performed at the site on March 23, 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  
Senior Geologist

HBD/hbd

cc: Linda Lyons, UPS, w/ attachments  
File

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

***UPS – Oakland Hub  
8400 Pardee Drive  
Oakland, California***

***State ID # 583***

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

**April 2005**

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

*UPS – Oakland Hub  
8400 Pardee Drive  
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Alameda County  
Health & Environmental Health  
Division  
April 2005

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

**April 2005**

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# 1 Groundwater Monitoring & Sampling

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## 1.1. Introduction

United Parcel Service (UPS) retained Blasland, Bouck & Lee, Inc. (BBL) to perform groundwater monitoring at the UPS-Oakland Center located at 8400 Pardee Drive, Oakland, California (**Figures 1 and 2**). This report describes results of groundwater monitoring performed on March 23, 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 (**Table 1**).

Groundwater samples were collected from groundwater monitoring wells MW-1, MW-2, MW-3 and OW-1 on March 23, 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 March 23, 2005. Static fluid levels in the wells were measured to an accuracy of 0.01-foot 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 0.02 feet and each. Groundwater elevations in monitoring wells MW-1 and MW-3 in March 2005 were approximately 0.09 feet higher on average than water levels measured in September 2004. The groundwater elevation in MW-2 decreased 0.01 feet between September 2004 and 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 agrees with historical direction.

## 1.3. Water Quality

Groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3 and OW-1 on March 23, 2005. The thin amount of PSH was bailed off prior to sampling wells MW-2 (0.02 feet) and OW-1 (0.02 feet). The samples were analyzed for total petroleum hydrocarbons as diesel (TPH-d) by United States Environmental Protection Agency (USEPA) Method 8015M and for TPH-g (gasoline), benzene, toluene, ethylbenzene, total xylenes, and methyl tert-butyl ether (BTEX/MTBE) by USEPA Method 8260B. Analyses were conducted by STL in Pleasanton, California, certified for environmental analyses by the California Department of Health Services (certificate number: 2496). Summaries of the groundwater analytical data are presented in **Table 2** and on **Figure 4**. The laboratory analytical results and chain-of-custody documentation are attached as **Appendix C**.

Benzene was not detected above the primary drinking water maximum contaminant levels (MCL) of Title 22 of the California Code of Regulations in the groundwater sample collected from any wells. MTBE was not detected in groundwater samples collected from any wells. No additional BTEX/MTBE analytes were detected above the MCL in any of the remaining groundwater samples collected during the March 2005 monitoring events. TPH-g was detected in monitoring wells MW-1, MW-2, MW-3 and OW-1; MW-1 with a concentration of 0.55 milligrams per liter (mg/L), MW-2 with a concentration of 2.3 mg/L, MW-3 with a concentration of 0.33 mg/L and OW-1 with a concentration of 0.22 mg/L. The samples collected from each well contained a laboratory validation flag stating, "Quantity of unknown hydrocarbon(s) in sample based on gasoline". TPH-d was detected in wells MW-1, MW-2, MW-3 and OW-1; MW-1 with a concentration of 15 mg/L, MW-2 with a concentration of 15 mg/L, MW-3 with a concentration of 14 mg/L and OW-1 with a

concentration of 16 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 55-gallon drums and stored at the UPS center pending proper disposal offsite.

#### 1.5. Summary

1. Groundwater samples were collected on March 23, 2005 and sampled for BTEX, MTBE, TPH-g and TPH-d.
2. Measured depths to water ranged from 2.21 feet below top of casing (btoc) in MW-1 to 4.96 feet btoc in MW-2 (**Table 1**). PSH was detected in monitoring wells MW-2 and OW-1, both at apparent thicknesses of 0.02 feet. Groundwater elevations in monitoring wells MW-1 and MW-3 in March 2005 were approximately 0.09 feet higher on average than water levels measured in September 2004. The groundwater elevation in MW-2 decreased 0.01 feet between September 2004 and 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 agrees with historical direction.
3. Benzene was not detected above the primary drinking water MCL of Title 22 of the California Code of Regulations in any groundwater samples collected from the site. MTBE was not reported in any groundwater samples collected at the site. No additional BTEX/MTBE analytes were detected above the MCL in any of the remaining groundwater samples collected during the March 2005 monitoring events.
4. TPH-g was detected in monitoring wells MW-1, MW-2, MW-3 and OW-1; MW-1 with a concentration of 0.55 mg/L, MW-2 with a concentration of 2.3 mg/L, MW-3 with a concentration of 0.33 mg/L and OW-1 with a concentration of 0.22 mg/L. The samples collected from each well contained a laboratory flag stating, "Quantity of unknown hydrocarbon(s) in sample based on gasoline". TPH-d was detected in wells MW-1, MW-2, MW-3 and OW-1; MW-1 with a concentration of 15 mg/L, MW-2 with a concentration of 15 mg/L, MW-3 with a concentration of 14 mg/L and OW-1 with a concentration of 16 mg/L. The laboratory reported a data flag stating, "Quantity of unknown hydrocarbon(s) in sample based on diesel".

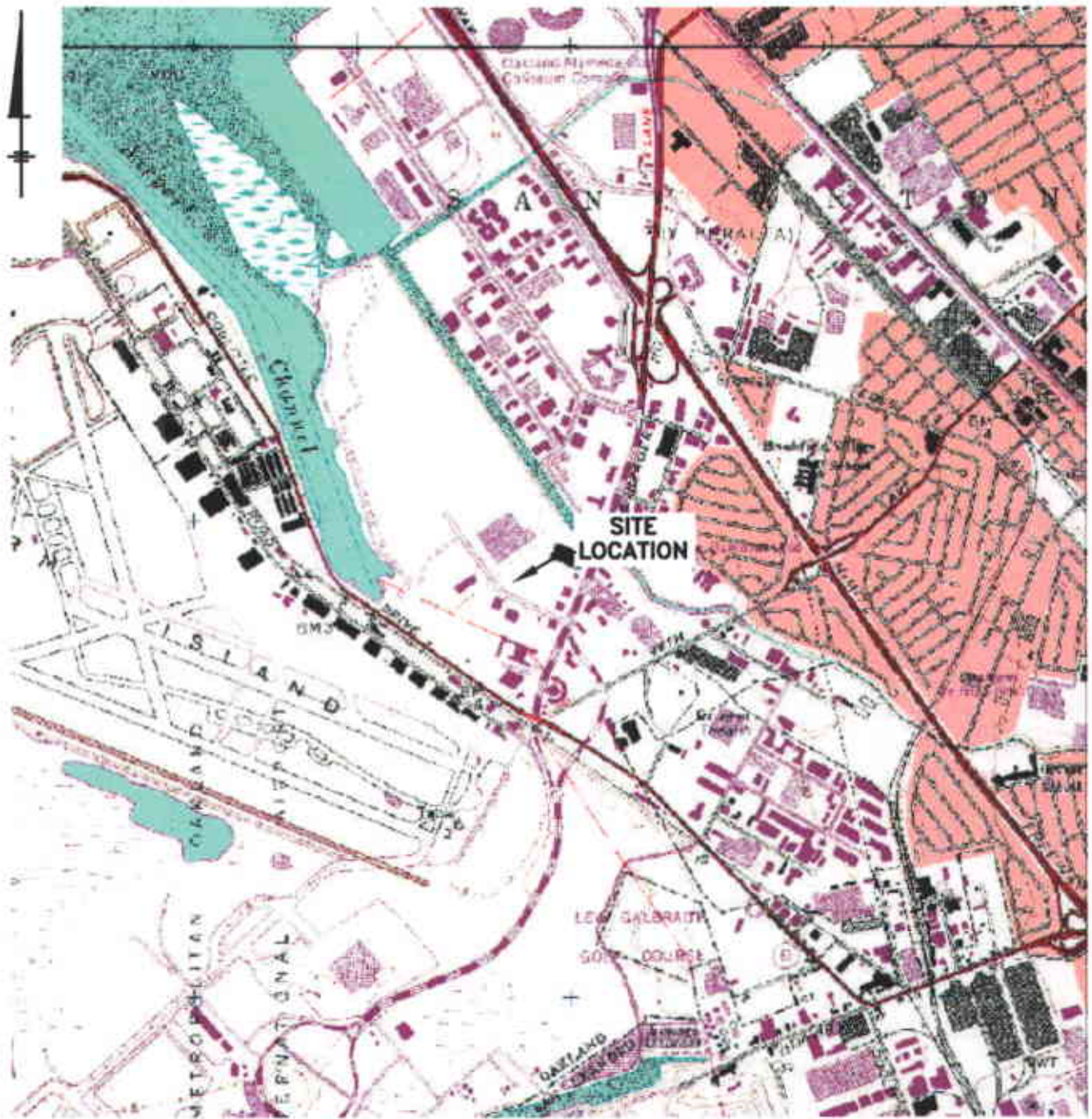
#### References:

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

***FIGURES***

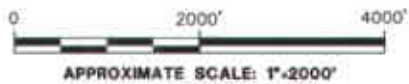
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**UPS-Oakland Center**



**NOTES:**

1. Base Map Source: USGS 7.5 Min. Topo. Quad., San Leandra, 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**

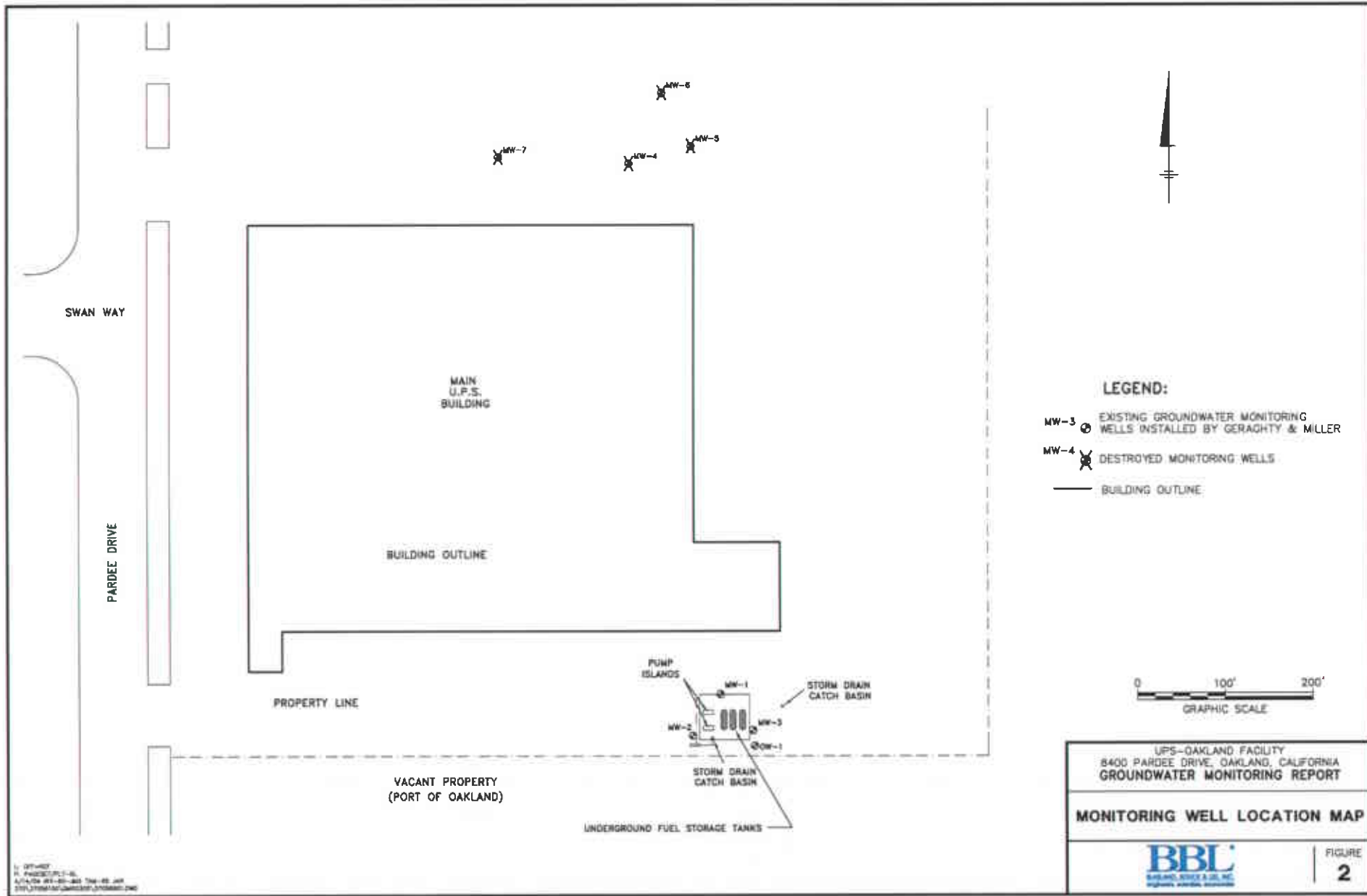


FIGURE

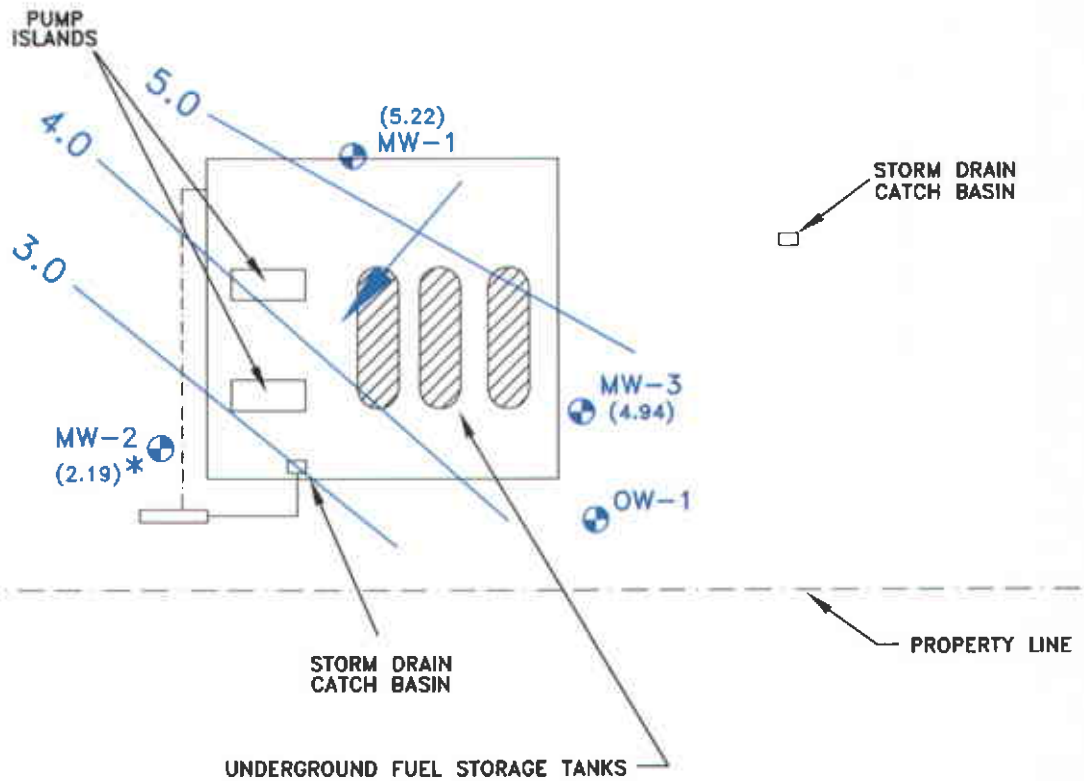
**1**

X: WEST-OAK.BMP  
 L: (LAYER)  
 P: PAGESET/PLT-AP1  
 4/14/05 RV--BS JMS TAM--BS JAN  
 370\37056100\DMRG305\37056IND1.DWG





UPS BUILDING



**LEGEND:**

MW-1 GROUNDWATER MONITORING WELL

(3.68) GROUNDWATER TABLE ELEVATION (FEET ABOVE MSL)

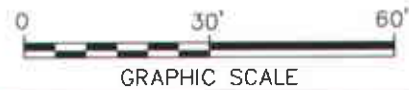
3.0 GROUNDWATER ELEVATION CONTOUR

\* 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.



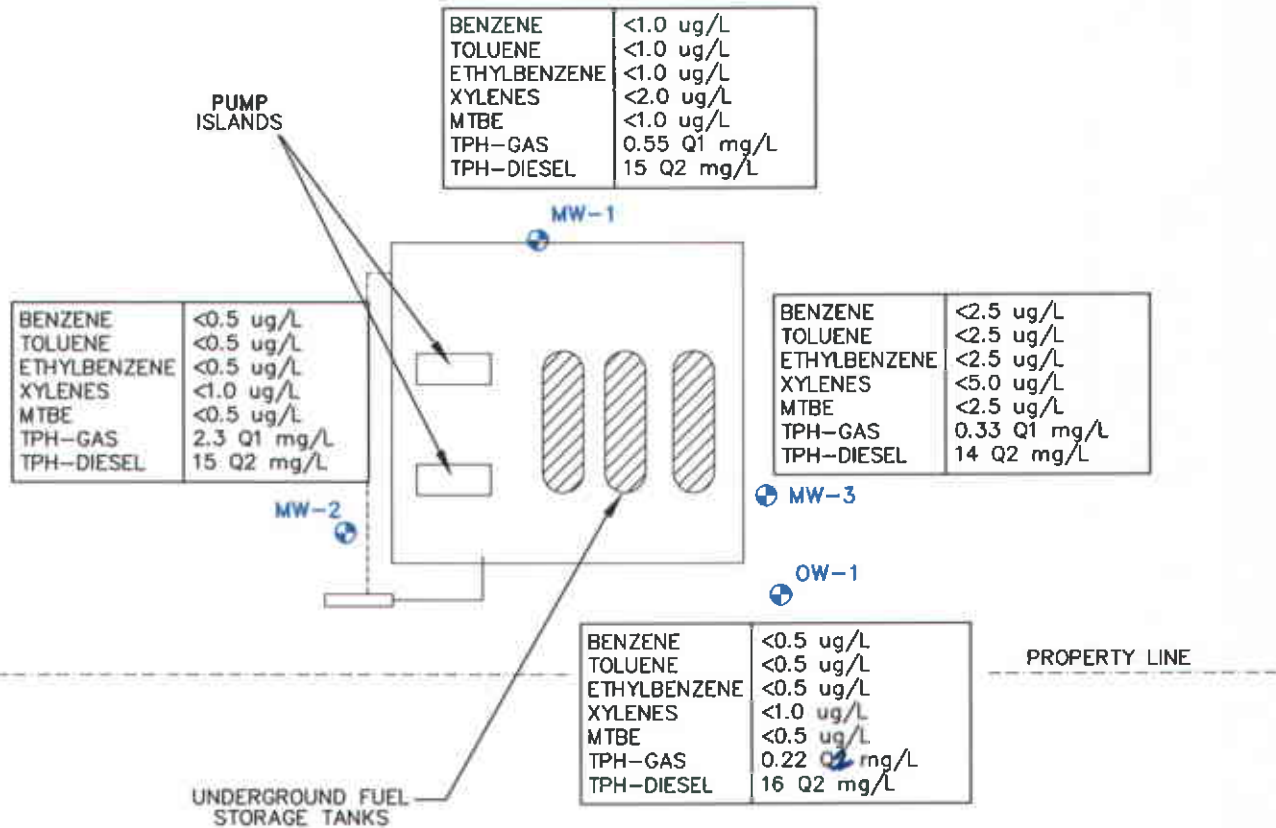
UPS-OAKLAND FACILITY  
8400 PARDEE DRIVE, OAKLAND, CALIFORNIA  
GROUNDWATER MONITORING REPORT

**GROUNDWATER CONTOUR MAP**  
**MARCH 23, 2005**



FIGURE  
**3**

UPS BUILDING



**LEGEND:**

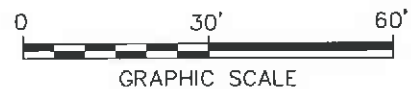
MW-1 EXISTING GROUNDWATER MONITORING WELLS INSTALLED BY GERAGHTY & MILLER

ug/L MICROGRAMS PER LITER

mg/L MILLIGRAMS PER LITER

Q1 HYDROCARBON REPORTED DOES NOT MATCH THE PATTEN OF LABORATORY GASOLINE STANDARD.

Q2 HYDROCARBON REPORTED DOES NOT MATCH THE PATTEN OF LABORATORY DIESEL STANDARD.



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8400 PARDEE DRIVE, OAKLAND, CALIFORNIA  
**GROUNDWATER MONITORING REPORT**

**GROUNDWATER QUALITY MAP**  
**MARCH 23, 2005**



FIGURE

**4**

X: (XREF)  
L: (LAYER)  
P: PAGESET/PLT-AP1  
4/14/05 IRV-BD JMS TAM-BS JAR  
370\37056100\GMR0305\37056C01.DWG

***TABLES***

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**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)
MW-1	7.43	8/28/1990	3.80	3.63	--	Sheen
		9/20/1990	3.99	3.44	-0.19	None
		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	None
		6/3/1998	NM	N/A	N/A	Sheen
		9/30/1999	3.75	3.68	N/A	Sheen
		10/11/2000	3.88	3.55	-0.13	Sheen
		9/3/2002	3.73	3.70	0.15	None
		10/22/2002	5.11	2.32	-1.38	0.05
		12/23/2002	3.51	3.92	1.60	None
		3/28/2003	3.52	3.91	-0.01	None
		6/20/2003	3.50	3.93	0.02	None
		7/14/2003	3.65	3.78	-0.15	None
		8/25/2003	3.87	3.56	-0.22	Sheen
		9/9/2003	4.02	3.41	-0.15	None
		9/25/2003	4.10	3.33	-0.08	None
		10/28/2003	4.29	3.14	-0.19	None
		11/18/2003	4.32	3.11	-0.03	None
		12/2/2003	4.34	3.09	-0.02	None
		1/27/2004	3.88	3.55	0.46	None
		2/24/2004	2.75	4.68	1.13	None
		3/29/2004	3.45	3.98	-0.70	None
		4/19/2004	3.55	3.88	-0.10	None
		5/20/2004	3.69	3.74	-0.14	None
		6/22/2004	3.81	3.62	-0.12	None
		7/27/2004	3.99	3.44	-0.18	None
		8/24/2004	4.14	3.29	-0.15	None
9/29/2004	4.32	3.11	-0.18	None		
10/25/2004	3.89	3.54	0.43	None		
12/15/2004	3.18	4.25	0.71	None		
1/24/2005	2.69	4.74	0.49	None		
2/23/2005	2.48	4.95	0.21	None		
3/23/2005	2.21	5.22	0.27	None		

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  
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**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	--	Sheen	
		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	N/A	N/A	N/A	0.25
		6/4/1997	6.02	1.13	N/A	N/A	Small globules
		9/30/1999	4.95	2.20	1.07	N/A	Sheen
		10/11/2000	4.97	2.18	-0.02	N/A	0.08
		9/3/2002	5.02	2.13	-0.05	N/A	0.07
		9/27/2002	4.89	2.26	0.13	N/A	0.09
		12/23/2002	4.25	2.90	0.64	N/A	0.04
		2/12/2003	4.26	2.89	-0.01	N/A	0.01
		3/28/2003	4.35	2.80	-0.09	N/A	0.01
		6/20/2003	4.55	2.60	-0.20	N/A	0.01
		7/14/2003	4.56	2.59	-0.01	N/A	0.00
		8/25/2003	4.79	2.36	-0.23	N/A	0.01
		9/9/2003	4.90	2.25	-0.11	N/A	0.01
		9/25/2003	4.97	2.18	-0.07	N/A	0.01
		10/28/2003	4.98	2.17	-0.01	N/A	0.04
		11/18/2003	4.83	2.32	0.15	N/A	0.00
		12/3/2003	4.87	2.28	-0.04	N/A	0.00
		1/27/2004	7.39	-0.24	-2.52	N/A	Sheen
		2/24/2004	4.56	2.59	2.83	N/A	0.01
		3/29/2004	4.24	2.91	0.32	N/A	0.01
		4/19/2004	4.50	2.65	-0.26	N/A	0.01
		5/20/2004	4.53	2.62	-0.03	N/A	None
		6/22/2004	4.65	2.50	-0.12	N/A	Sheen
		7/27/2004	4.80	2.35	-0.15	N/A	Sheen
8/24/2004	5.93	1.22	-1.13	N/A	None		
9/29/2004	5.00	2.15	0.93	N/A	0.02		
10/25/2004	4.68	2.47	0.32	N/A	Sheen		
12/15/2004	4.34	2.81	0.34	N/A	0.02		
1/24/2005	4.15	3.00	0.19	N/A	Sheen		
2/23/2005	4.95	2.20	-0.80	N/A	0.03		
3/23/2005	4.96	2.19	-0.01	N/A	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 1  
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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	--	Sheen	
		9/20/1990	3.99	3.43	-0.11	N/A	
		6/19/1991	3.49	3.93	0.50	N/A	
		7/23/1991	3.71	3.71	-0.22	N/A	
		8/26/1991	3.94	3.48	-0.23	N/A	
		11/18/1991	4.23	3.19	-0.29	N/A	
		2/3/1992	4.01	3.41	0.22	N/A	
		6/29/1992	3.40	4.02	0.61	N/A	
		6/23/1993	2.75	4.67	0.65	N/A	
		10/11/1993	3.84	3.58	-1.09	N/A	
		1/4/1994	3.40	4.02	0.44	N/A	
		5/10/1994	2.25	5.17	1.15	N/A	
		2/1/1995	2.43	4.99	-0.18	N/A	
		8/2/1995	3.20	4.22	-0.77	N/A	
		10/16/1995	3.72	3.70	-0.52	N/A	
		12/28/1995	3.56	3.86	0.16	N/A	
		6/4/1997	3.20	4.22	0.36	None	
		6/3/1998	NM	N/A	N/A	N/A	Sheen
		9/30/1999	3.72	3.70	-0.52	Sheen	
		10/11/2000	3.88	3.54	-0.16	Sheen	
		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	None			
6/22/2004	3.83	3.59	-0.18	None			
7/27/2004	3.98	3.44	-0.15	None			
8/24/2004	4.14	3.28	-0.16	None			
9/29/2004	4.30	3.12	-0.16	None			
10/25/2004	3.85	3.57	0.45	None			
12/15/2004	3.16	4.26	0.69	None			
1/24/2005	2.65	4.77	0.51	None			
2/23/2005	2.50	4.92	0.15	None			
3/23/2005	2.48	4.94	0.02	None			

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**

<b>Monitoring Well</b>	<b>Reference Elevation</b>	<b>Date Sampled</b>	<b>Depth to Groundwater (ft)</b>	<b>Groundwater Elevation (ft)</b>	<b>Change in Measurement (ft)</b>	<b>Product Thickness (ft)</b>
OW-1	N/A	6/4/1997	7.22	NA	NA	Trace
		9/30/1999	8.35	NA	NA	0.01
		10/11/2000	6.90	NA	NA	0.09
		10/22/2002	7.34	NA	NA	0.01
		9/27/2002	7.02	NA	NA	0.14
		12/23/2002	5.17	NA	NA	0.03
		1/16/2003	4.97	NA	NA	0.01
		2/12/2003	5.23	NA	NA	0.01
		3/28/2003	5.16	NA	NA	0.01
		6/20/2003	4.93	NA	NA	0.01
		7/14/2003	5.33	NA	NA	0.00
		8/28/2003	5.85	NA	NA	0.00
		9/9/2003	6.33	NA	NA	Sheen
		9/25/2003	6.52	NA	NA	0.01
		10/28/2003	7.26	NA	NA	0.03
		11/18/2003	7.29	NA	NA	0.00
		12/2/2003	7.23	NA	NA	0.03
		1/27/2004	7.96	NA	NA	0.01
		2/24/2004	6.26	NA	NA	0.02
		3/29/2004	6.08	NA	NA	0.02
		4/19/2004	6.29	NA	NA	0.03
		5/20/2004	6.16	NA	NA	None
		6/22/2004	6.37	NA	NA	Sheen
		7/27/2004	5.67	NA	NA	0.04
		8/24/2004	6.81	NA	NA	None
		9/29/2004	7.08	NA	NA	0.04
		10/25/2004	6.74	NA	NA	0.04
		12/15/2004	5.33	NA	NA	0.01
1/24/2005	3.98	NA	NA	None		
2/23/2005	3.44	NA	NA	0.01		
3/23/2005	3.34	NA	NA	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)	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	<b>3</b>	1.4	4	2.4	NA	NA	21	NA
	6/19/1991	<b>1.7</b>	0.7	0.5	0.9	NA	NA	7.1	NA
	7/23/1991	<b>1.6</b>	1.1	0.5	1.5	NA	0.22	8.7	NA
	8/26/1991	<b>180</b>	120	31	160	NA	NA	2.8	NA
	11/18/1991	<b>1.1</b>	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	<b>1.3</b>	<0.5	<0.5	<0.5	NA	NA	9.6	NA
	1/4/1994	<b>2.1</b>	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	<b>2.8</b>	<0.5	<0.5	<0.5	NA	0.83	15	NA
	12/28/1995	<b>2.1</b>	<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	<b>3.2</b>	<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	
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	<2.5	<2.5	<2.5	<50	<2.5	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	
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.

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	<b>13</b>	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	<b>1</b>	< 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	
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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Bold values indicate analytical detections.

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

I - 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	<b>530</b>	500	<b>6,200</b>	< 50	0.22	91	NM
	3/29/2004	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	0.510	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	
MCL	--	1	150	300	1,750	13	--	--	--

**Notes:**

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

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

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Bold values indicate analytical detections.

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**

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**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

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## 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	2/23/05	3/23/05					
Number of drum(s) empty:	1						
Number of drum(s) 1/4 full:	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:	2	1					
Are the drum(s) properly labeled?	Y	Y					
Drum ID & Contents:	SPH & H <sub>2</sub> O →						
If any drum(s) are partially or totally filled, what is the first use date:	11/24/04						

- 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	2/23/05	3/23/05					
Number of drums empty:	1						
Number of drum(s) 1/4 full:	1						
Number of drum(s) 1/2 full:							
Number of drum(s) 3/4 full:		1					
Number of drum(s) full:		1					
Total drum(s) on site:	2	2					
Are the drum(s) properly labeled?	Y	Y					
Drum ID & Contents:	SPH & H <sub>2</sub> O						

**LOCATION OF DRUM(S)**

Describe location of drum(s): East side of building behind trailer

FINAL STATUS							
Number of new drum(s) left on site this event	0	1					
Date of inspection:	2/23/05	3/23/05					
Drum(s) labelled properly:	Y	Y					
Logged by BTS Field Tech:	we	pwb					
Office reviewed by:		we					



# WELLHEAD INSPECTION CHECKLIST

Date 3-23-05 Client BB+L

Site Address 8400 Pardee Drive Oakland

Job Number 050323-DW-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	f							
MW-3	X							
DW-1							X	

NOTES: DW-1 - Rim is loose

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## WELL GAUGING DATA

Project # 050323-DW-3 Date 3-23-05 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 TOC
mw-1	4					2.21	14.00	↓
mw-2	4		4.94	.02	49	4.96	14.40	
mw-3	4					2.48	14.50	
DW-1	5		3.32	.02	77	3.34	18.40	

# WELL MONITORING DATA SHEET

Project #: <u>050323-DW-4</u>	Client: <u>BBTL</u>
Sampler: <u>DW</u>	Date: <u>3-23-05</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>2.21</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]: <u>4.56</u>	

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

$\frac{7.7 \text{ (Gals.)} \times 3}{\text{Specified Volumes}} = \frac{23.1 \text{ Gals.}}{\text{Calculated Volume}}$	<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
12:03	63.5	6.8	1012	410	7.7	gray
12:05	64.7	6.7	1481	122	15.4	clearer
12:07	64.9	6.7	1642	38	23.1	yellowish

Did well dewater? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Gallons actually evacuated: <u>23.1</u>
Sampling Date: <u>3-23-05</u> Sampling Time: <u>12:12</u> Depth to Water: <u>2.32</u>	
Sample I.D.: <u>MW-1</u> Laboratory: Kiff CalScience Other <u>STL</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): _____ @ _____ 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>050323-DW-4</u>	Client: <u>BB+L</u>
Sampler: <u>DW</u>	Date: <u>3-23-05</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): <del>4.96</del> <u>4.96</u>
Depth to Free Product: <u>4.94</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]: <u>6.83</u>	

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: \_\_\_\_\_

$\frac{6.1}{1} \text{ (Gals.)} \times \frac{3}{\text{Specified Volumes}} = \frac{18.3}{\text{Calculated Volume}} \text{ Gals.}$	<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 ( <del>F</del> or °C)	pH	Cond. (mS or <del>µS</del> )	Turbidity (NTUs)	Gals. Removed	Observations
13:14	62.7	6.6	4011	67	6.1	
			well dewatered @ 8 g/l			DTW = 12.55
13:52	62.1	6.8	3822	80		

Did well dewater?  Yes    No      Gallons actually evacuated: 8

Sampling Date: 3-23-05    Sampling Time: 13:52    Depth to Water: \_\_\_\_\_

Sample I.D.: MW-2      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 MONITORING DATA SHEET

Project #: <u>050323-DW-4</u>	Client: <u>BB+L</u>
Sampler: <u>DW</u>	Date: <u>3-23-05</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>2.48</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]: <u>4.88</u>	

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

<u>7.8</u> (Gals.) X <u>3</u> = _____ 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
<u>12:25</u>	<u>62.4</u>	<u>6.7</u>	<u>1892</u>	<u>56</u>	<u>7.8</u>	
	<u>well dewatered @ 8 gal DTW = 13.65</u>					
<u>13:30</u>	<u>62.7</u>	<u>6.8</u>	<u>1223</u>	<u>28</u>		

Did well dewater?  Yes    No    Gallons actually evacuated: 8

Sampling Date: 3-23-05    Sampling Time: 13:30    Depth to Water: 2.50

Sample I.D.: MW-3    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 MONITORING DATA SHEET

Project #: <u>050323-0W-4</u>	Client: <u>BB+L</u>
Sampler: <u>DW</u>	Date: <u>3-23-05</u>
Well I.D.: <u>0W-1</u>	Well Diameter: 2 3 4 6 8 <u>5"</u>
Total Well Depth (TD): <u>18.40</u>	Depth to Water (DTW): <u>3.54</u>
Depth to Free Product: <u>3.32</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]: <u>6.35</u>	

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: \_\_\_\_\_

<u>15.4</u> (Gals.) X	<u>3</u>	= <u>46.2</u> 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
<u>12:41</u>	<u>64.5</u>	<u>6.6</u>	<u>2359</u>	<u>82</u>	<u>15.4</u>	<u>shleen</u>
						<u>well dewatered @ 23 gals. DTW = 16.50</u>
<u>13:40</u>	<u>64.8</u>	<u>6.6</u>	<u>2270</u>	<u>91</u>	<u>-</u>	

Did well dewater?  Yes  No      Gallons actually evacuated: 23

Sampling Date: 3-23-05      Sampling Time: 13:40      Depth to Water: 10.89 (site dep)

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

***APPENDIX C***

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**Laboratory Analytical Results  
UPS-Oakland Center**

**Blasland, Bouck & Lee, Inc. Kennesaw**

April 11, 2005

975 Cobb Place Blvd., Ste. 311  
Kennesaw, GA 30144

Attn.: Hugh B. Devery

Project#: BTS#050323-DW-3

Project: UPS

Site: 8400 Pardee Drive, Oakland, CA

Dear Mr. Devery:

Attached is our report for your samples received on 03/24/2005 17:16

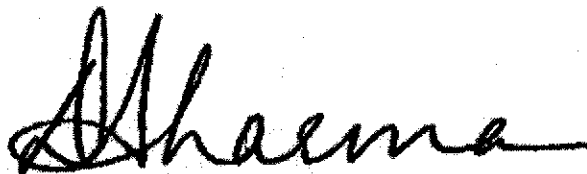
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 05/08/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: [dsharma@stl-inc.com](mailto:dsharma@stl-inc.com)

Sincerely,



Dimple Sharma  
Project Manager

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](http://www.stl-inc.com) \* CA DHS ELAP# 2496



**Diesel**

Blasland, Bouck & Lee, Inc. Kennesaw

Attn.: Hugh B. Devery

975 Cobb Place Blvd., Ste. 311

Kennesaw, GA 30144

Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3

UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-1	03/23/2005 12:12	Water	1
MW-2	03/23/2005 13:52	Water	2
MW-3	03/23/2005 13:30	Water	3
DW-1	03/23/2005 13:40	Water	4

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 \* CA DHS ELAP# 2496

03/31/2005 16:28



**Diesel**

Blasland, Bouck & Lee, Inc. Kennesaw

Attn.: Hugh B. Devery

975 Cobb Place Blvd., Ste. 311  
Kennesaw, GA 30144  
Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3  
UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

Prep(s): 3511	Test(s): 8015M
Sample ID: MW-2	Lab ID: 2005-03-0836 - 2
Sampled: 03/23/2005 13:52	Extracted: 3/29/2005 13:39
Matrix: Water	QC Batch#: 2005/03/29-02.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	15000	500	ug/L	10.00	03/30/2005 19:26	Q2
<i>Surrogate(s)</i> o-Terphenyl	NA	64-127	%	10.00	03/30/2005 19:26	S3

**Diesel**

Blasland, Bouck & Lee, Inc. Kennesaw

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Kennesaw, GA 30144  
Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3  
UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

Prep(s): 3511	Test(s): 8015M
Sample ID: MW-3	Lab ID: 2005-03-0836 - 3
Sampled: 03/23/2005 13:30	Extracted: 3/29/2005 13:39
Matrix: Water	QC Batch#: 2005/03/29-02.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	14000	500	ug/L	10.00	03/30/2005 19:54	Q2
<i>Surrogate(s)</i> o-Terphenyl	NA	64-127	%	10.00	03/30/2005 19:54	S3

Severn Trent Laboratories, Inc.

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Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

03/31/2005 16:28

Diesel

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Kennesaw, GA 30144  
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Project: BTS#050323-DW-3  
UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

Prep(s): 3511	Test(s): 8015M
Sample ID: DW-1 <i>ow r</i>	Lab ID: 2005-03-0836 - 4
Sampled: 03/23/2005 13:40	Extracted: 3/29/2005 13:39
Matrix: Water	QC Batch#: 2005/03/29-02.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	16000	500	ug/L	10.00	03/30/2005 13:22	Q2
<i>Surrogate(s)</i> o-Terphenyl	NA	64-127	%	10.00	03/30/2005 13:22	S3

**Diesel**

Blasland, Bouck & Lee, Inc. Kennesaw

Attn.: Hugh B. Devery

975 Cobb Place Blvd., Ste. 311

Kennesaw, GA 30144

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Project: BTS#050323-DW-3

UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

**Batch QC Report**

Prep(s): 3511

Method Blank

MB: 2005/03/29-02.10-001

Water

Test(s): 8015M

QC Batch # 2005/03/29-02.10

Date Extracted: 03/29/2005 13:39

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	03/29/2005 22:17	
<b>Surrogates(s)</b> o-Terphenyl	103.6	64-127	%	03/29/2005 22:17	

Severn Trent Laboratories, Inc.

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03/31/2005 16:28

**Diesel**

Blasland, Bouck & Lee, Inc. Kennesaw

Attn.: Hugh B. Devery

975 Cobb Place Blvd., Ste. 311  
Kennesaw, GA 30144  
Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3  
UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

**Batch QC Report**

Prep(s): 3511

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/03/29-02.10**

LCS 2005/03/29-02.10-002

Extracted: 03/29/2005

Analyzed: 03/29/2005 22:44

LCSD 2005/03/29-02.10-003

Extracted: 03/29/2005

Analyzed: 03/29/2005 23:11

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Diesel	584	584	680	85.9	85.9	0.0	60-150	25		
<b>Surrogates(s)</b> o-Terphenyl	1.18	1.17	1.25	94.4	93.3		64-127	0		

Severn Trent Laboratories, Inc.

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03/31/2005 16:28

**Diesel**

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Project: BTS#050323-DW-3

UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

---

**Legend and Notes**

---

**Result Flag**

Q2

Quantit. of unknown hydrocarbon(s) in sample based on diesel.

S3

Surrogate recovery not reportable due to required dilution.

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 \* CA DHS ELAP# 2496



**Fuel Oxygenates by 8260B**

Blasland, Bouck & Lee, Inc. Kennesaw

Attn.: Hugh B. Devery

975 Cobb Place Blvd., Ste. 311

Kennesaw, GA 30144

Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3

UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-1	03/23/2005 12:12	Water	1
MW-2	03/23/2005 13:52	Water	2
MW-3	03/23/2005 13:30	Water	3
DW-1	03/23/2005 13:40	Water	4

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 \* CA DHS ELAP# 2496

04/11/2005 10:59

Page 1 of 12

Fuel Oxygenates by 8260B

Blasland, Bouck & Lee, Inc. Kennesaw

Attn.: Hugh B. Devery

975 Cobb Place Blvd., Ste. 311  
Kennesaw, GA 30144  
Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3  
UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

Prep(s): 5030B Test(s): 8260B  
Sample ID: MW-1 Lab ID: 2005-03-0836 - 1  
Sampled: 03/23/2005 12:12 Extracted: 4/3/2005 21:51  
Matrix: Water QC Batch#: 2005/04/03-01.65  
Analysis Flag: L2 ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	550	50	ug/L	1.00	04/03/2005 21:51	Q1
Methyl tert-butyl ether (MTBE)	ND	1.0	ug/L	2.00	04/03/2005 21:51	
Benzene	ND	1.0	ug/L	2.00	04/03/2005 21:51	
Toluene	ND	1.0	ug/L	2.00	04/03/2005 21:51	
Ethylbenzene	ND	1.0	ug/L	2.00	04/03/2005 21:51	
Total xylenes	ND	2.0	ug/L	2.00	04/03/2005 21:51	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	91.2	73-130	%	2.00	04/03/2005 21:51	
Toluene-d8	102.3	81-114	%	2.00	04/03/2005 21:51	

**Fuel Oxygenates by 8260B**

Blasland, Bouck & Lee, Inc. Kennesaw

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975 Cobb Place Blvd., Ste. 311

Kennesaw, GA 30144

Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3

UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-2	Lab ID: 2005-03-0836 - 2
Sampled: 03/23/2005 13:52	Extracted: 4/3/2005 22:17
Matrix: Water	QC Batch#: 2005/04/03-01.65

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	2300	50	ug/L	1.00	04/03/2005 22:17	Q1
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	04/03/2005 22:17	
Benzene	ND	0.50	ug/L	1.00	04/03/2005 22:17	
Toluene	ND	0.50	ug/L	1.00	04/03/2005 22:17	
Ethylbenzene	ND	0.50	ug/L	1.00	04/03/2005 22:17	
Total xylenes	ND	1.0	ug/L	1.00	04/03/2005 22:17	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	92.0	73-130	%	1.00	04/03/2005 22:17	
Toluene-d8	95.5	81-114	%	1.00	04/03/2005 22:17	

**Fuel Oxygenates by 8260B**

Blasland, Bouck & Lee, Inc. Kennesaw

Attn.: Hugh B. Devery

975 Cobb Place Blvd., Ste. 311  
Kennesaw, GA 30144  
Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3  
UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

Prep(s): 5030B Test(s): 8260B  
Sample ID: MW-3 Lab ID: 2005-03-0836 - 3  
Sampled: 03/23/2005 13:30 Extracted: 4/4/2005 13:21  
Matrix: Water QC Batch#: 2005/04/04-01.66  
Analysis Flag: L2 ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	330	250	ug/L	5.00	04/04/2005 13:21	Q1
Methyl tert-butyl ether (MTBE)	ND	2.5	ug/L	5.00	04/04/2005 13:21	
Benzene	ND	2.5	ug/L	5.00	04/04/2005 13:21	
Toluene	ND	2.5	ug/L	5.00	04/04/2005 13:21	
Ethylbenzene	ND	2.5	ug/L	5.00	04/04/2005 13:21	
Total xylenes	ND	5.0	ug/L	5.00	04/04/2005 13:21	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	96.6	73-130	%	5.00	04/04/2005 13:21	
Toluene-d8	104.6	81-114	%	5.00	04/04/2005 13:21	

Sewern Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/11/2005 10:59

**Fuel Oxygenates by 8260B**

Blasland, Bouck & Lee, Inc. Kennesaw

Attn.: Hugh B. Devery

975 Cobb Place Blvd., Ste. 311  
Kennesaw, GA 30144  
Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3  
UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

Prep(s): 5030B	Test(s): 8260B
Sample ID: DW-1	Lab ID: 2005-03-0836 - 4
Sampled: 03/23/2005 13:40	Extracted: 4/3/2005 23:09
Matrix: Water	QC Batch#: 2005/04/03-01.65

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	220	50	ug/L	1.00	04/03/2005 23:09	Q1
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	04/03/2005 23:09	
Benzene	ND	0.50	ug/L	1.00	04/03/2005 23:09	
Toluene	ND	0.50	ug/L	1.00	04/03/2005 23:09	
Ethylbenzene	ND	0.50	ug/L	1.00	04/03/2005 23:09	
Total xylenes	ND	1.0	ug/L	1.00	04/03/2005 23:09	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	93.4	73-130	%	1.00	04/03/2005 23:09	
Toluene-d8	89.7	81-114	%	1.00	04/03/2005 23:09	

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 \* CA DHS ELAP# 2496

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**Fuel Oxygenates by 8260B**

Blasland, Bouck & Lee, Inc. Kennesaw

Attn.: Hugh B. Devery

975 Cobb Place Blvd., Ste. 311  
Kennesaw, GA 30144  
Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3  
UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2005/04/03-01.65-043

Water

Test(s): 8260B

QC Batch # 2005/04/03-01.65

Date Extracted: 04/03/2005 15:43

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/03/2005 15:43	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	04/03/2005 15:43	
Benzene	ND	0.5	ug/L	04/03/2005 15:43	
Toluene	ND	0.5	ug/L	04/03/2005 15:43	
Ethylbenzene	ND	0.5	ug/L	04/03/2005 15:43	
Total xylenes	ND	1.0	ug/L	04/03/2005 15:43	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	100.2	73-130	%	04/03/2005 15:43	
Toluene-d8	102.2	81-114	%	04/03/2005 15:43	

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**Fuel Oxygenates by 8260B**

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Attn.: Hugh B. Devery

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Kennesaw, GA 30144  
Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3  
UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2005/04/04-01.66-049

Water

Test(s): 8260B

QC Batch # 2005/04/04-01.66

Date Extracted: 04/04/2005 09:49

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/04/2005 09:49	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	04/04/2005 09:49	
Benzene	ND	0.5	ug/L	04/04/2005 09:49	
Toluene	ND	0.5	ug/L	04/04/2005 09:49	
Ethylbenzene	ND	0.5	ug/L	04/04/2005 09:49	
Total xylenes	ND	1.0	ug/L	04/04/2005 09:49	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	103.8	73-130	%	04/04/2005 09:49	
Toluene-d8	103.0	81-114	%	04/04/2005 09:49	

**Fuel Oxygenates by 8260B**

Blasland, Bouck & Lee, Inc. Kennesaw

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Project: BTS#050323-DW-3  
UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/04/03-01.65**

LCS 2005/04/03-01.65-018

Extracted: 04/03/2005

Analyzed: 04/03/2005 15:18

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	23.8		25.0	95.2			65-165	20		
Benzene	22.2		25.0	88.8			69-129	20		
Toluene	23.6		25.0	94.4			70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	418		500	83.6			73-130			
Toluene-d8	488		500	97.6			81-114			

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**Fuel Oxygenates by 8260B**

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Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3  
UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/04/04-01.66**

LCS 2005/04/04-01.66-023

Extracted: 04/04/2005

Analyzed: 04/04/2005 09:23

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	24.7		25.0	98.8			65-165	20		
Benzene	22.6		25.0	90.4			69-129	20		
Toluene	25.9		25.0	103.6			70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	467		500	93.4			73-130			
Toluene-d8	528		500	105.6			81-114			

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**Fuel Oxygenates by 8260B**

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Kennesaw, GA 30144  
Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3  
UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/04/03-01.65**

MS/MSD

Lab ID: 2005-03-0880 - 002

MS: 2005/04/03-01.65-038

Extracted: 04/03/2005

Analyzed: 04/03/2005 16:38

Dilution: 1.00

MSD: 2005/04/03-01.65-004

Extracted: 04/03/2005

Analyzed: 04/03/2005 17:04

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	97.1	105	77.9	25.0	76.8	108.4	34.1	65-165	20		R1
Benzene	26.3	18.8	ND	25.0	105.2	75.2	33.3	69-129	20		R1
Toluene	25.2	20.4	ND	25.0	100.8	81.6	21.1	70-130	20		R1
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	397	427		500	79.4	85.4		73-130			
Toluene-d8	473	466		500	94.6	93.2		81-114			

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**Fuel Oxygenates by 8260B**

Blasland, Bouck & Lee, Inc. Kennesaw

Attn.: Hugh B. Devery

975 Cobb Place Blvd., Ste. 311

Kennesaw, GA 30144

Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3

UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/04/04-01.66**

MS/MSD

Lab ID: 2005-03-0807 - 001

MS: 2005/04/04-01.66-050

Extracted: 04/04/2005

Analyzed: 04/04/2005 10:49

Dilution: 1.00

MSD: 2005/04/04-01.66-051

Extracted: 04/04/2005

Analyzed: 04/04/2005 11:15

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	28.4	28.4	5.016	25.0	93.5	93.5	0.0	69-129	20		
Toluene	285	283	255.115	25.0	119.5	111.5	6.9	70-130	20		
Methyl tert-butyl ether	26.7	27.0	3.238	25.0	93.8	95.0	1.3	65-165	20		
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	467	464		500	93.4	92.8		73-130	0		
Toluene-d8	533	530		500	106.6	106.0		81-114	0		

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Phone: (770) 428-9009 Fax: (770) 428-4004

Project: BTS#050323-DW-3

UPS

Received: 03/24/2005 17:16

Site: 8400 Pardee Drive, Oakland, CA

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**Legend and Notes**

---

**Analysis Flag**

L2

Reporting limits were raised due to high level of analyte present in the sample.

**Result Flag**

Q1

Quantit. of unknown hydrocarbon(s) in sample based on gasoline.

R1

Analyte RPD was out of QC limits.

# 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 103610 DHS #

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

EPA  RWOCB REGION \_\_\_\_\_  
 LIA  
 OTHER

CHAIN OF CUSTODY

BTS # 050323-DW-3

CLIENT Blasland, Bouck, & Lee, Inc.

SITE UPS

8400 Pardee Drive

Oakland, CA

C = COMPOSITE ALL CONTAINERS

TPH-Gro	BTEX	MTBE	(8260)	TPH-D	(8015)
X	X			X	X
X	X			X	X
X	X			X	X
X	X			X	X

SPECIAL INSTRUCTIONS

Invoice and Report to : Blasland, Bouck, & Lee, Inc.  
Attn: Hugh Devery  
707-428-9009

Low Detection levels requested

SAMPLE I.D.	DATE	TIME	MATRIX S=SOIL W=H <sub>2</sub> O	CONTAINERS TOTAL	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	3-23	1212	W	6	NEZ-Hall's HP 400's			
MW-2	↓	1352	↓	↓				
MW-3	↓	1330	↓	↓				
OW-1	↓	1340	↓	↓				

Temp. 20°

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED	
	3-23-05		Dave Walter	NO LATER THAN As contracted	
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
David C. Walt	3/24/05	1301	[Signature]	3/24/05	1301
[Signature]	3/24/05	1716	[Signature]	3/24/05	1716
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #		