

RECEIVED

9:46 am, Feb 01, 2012

**Alameda County
Environmental Health**



55 Glenlake Parkway, NE
Atlanta, GA 30328-3474

Ms. Barbara Jakub
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Subject:
Groundwater Monitoring Report
UPS Oakland Hub
8400 Pardee Drive, Oakland, CA 94621
Global ID T0600100939
State ID # 583
EPA ID # CAD 09707509

Dear Ms. Jakub:

Attached please find the Groundwater Monitoring for the above-referenced site. The report, which was prepared for United Parcel Service (UPS) by ARCADIS U.S., Inc. (ARCADIS), the second semi-annual groundwater monitoring event that was performed at the subject site on September 1, 2011.

I declare under penalty of perjury, that the information and/or recommendations contained in the attached Groundwater Monitoring and Injection Report are true and correct.

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

Sincerely,

United Parcel Service

A handwritten signature in blue ink that reads "Julie Straub".

Julie Straub
Remediation and Assessment Manager



Ms. Barbara Jakub
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Subject:
Groundwater Monitoring Report
UPS Oakland Hub
8400 Pardee Drive, Oakland, CA 94621
Global ID # T0600100939
State ID # 583
EPA ID # CAD 09707509

Dear Ms. Jakub:

On behalf of United Parcel Service (UPS), ARCADIS U.S., Inc. (ARCADIS) is pleased to submit the second semi-annual Groundwater Monitoring Report for the UPS Oakland Hub, located at 8400 Pardee Drive, Oakland, Alameda County, California. UPS is the responsible party for this diesel release, and is the tenant at the property. The property is owned by the Port of Oakland. Doug Herman is the contact with the Port of Oakland and is copied on this report.

Groundwater sampling was performed on September 1, 2011. **Figures 1, 2, and 3** illustrate the site location, facility layout and site map with monitoring wells and other details.

GROUNDWATER MONITORING

Groundwater samples were collected from groundwater monitoring wells MW-2, MW-3 MW-4, MW-8, MW-9, MW-10, and MW-11 on September 1, 2011. Water levels were measured prior to purging and sampling the wells. Purge water was monitored to document stabilization of pH, temperature, turbidity, and conductivity parameters (**Appendix A**).

Water Levels

The depth to water (DTW) in each well was gauged on September 1, 2011, prior to purging and the collection of the groundwater samples. DTW ranged from 3.67 feet below top of casing (ft-btoc) in monitoring well MW-8 to 8.35 ft-btoc in monitoring well MW-10. Historical groundwater gauging and elevation data is presented in **Table 1**.

ARCADIS US, INC.
1000 Cobb Place Boulevard
Northwest, Suite 500 A
Kennesaw, Georgia 30144
Tel 770.428.9009
Fax 770.428.4004
www.arcadis-us.com

ENVIRONMENT

Date:
January 27, 2012

Contact:
Hugh Devery

Phone:
404.952.1604

Email:
Hugh.Devery@arcadis-us.com

Our ref:
B0038398.0005

Imagine the result

A groundwater elevation map was prepared using the September 1, 2011 groundwater elevation data, and is presented as **Figure 4**. The apparent direction of groundwater flow was generally to the south-southeast.

The SOS® Passive Skimmers were installed in observation well OW-1, and monitoring wells MW-2 and MW-3. The Phase Separated Hydrocarbon (PSH) recovery data collected from June 2011 onwards is presented in **Table 2. Appendix B** shows the historical records of PSH detected during year 2004 through 2011 and the specifications for the SOS® Passive Skimmers. During the recent fieldwork, the PSH thickness of <0.01 feet was maintained in MW-2 and in the months of September and October the product was recovered at full integral holding capacity (20 oz). In MW-3 also, PSH was recovered at almost the full holding capacity. In OW-1, the height of the skimmer was readjusted to recover just below the full holding capacity each month. The skimmers are working well and PSH recovery has been conducted on a consistent basis.

Groundwater Quality

Groundwater samples collected from monitoring wells MW-2, MW-3, MW-4, MW-8, MW-9, MW-10, and MW-11 on September 1, 2011 were analyzed for total petroleum hydrocarbons-diesel range organics (TPH-DRO) by United States Environmental Protection Agency (EPA) Method 8015B. The samples were also analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary butyl ether (MTBE), and TPH-gasoline range organics (TPH-GRO) by EPA Method 8260B/CA LUFT. Analyses were conducted by TestAmerica Laboratories, Inc. (TestAmerica) in Pleasanton, California which is certified by the California Department of Health Services (CADHS) for environmental analyses. Historical groundwater analytical data is presented in **Table 3**. A groundwater quality map is presented as **Figure 5**. Laboratory analytical results and chain of custody documentation for the September 2011 sampling event are attached in **Appendix C**.

BTEX and MTBE were not detected at or above their respective maximum contaminant levels (MCLs) or environmental screening levels (ESLs) in monitoring wells MW-2, MW-3, MW-4, MW-8, MW-9, MW-10, or MW-11 during this groundwater monitoring event.

TPH-DRO was detected above the odor and taste threshold per the California Regional Water Quality Control Board regulations (100 micrograms per liter ($\mu\text{g/L}$)) and ESLs (100 $\mu\text{g/L}$ for drinking water and 210 $\mu\text{g/L}$ for non-drinking water) in monitoring wells MW-2 (4,600 $\mu\text{g/L}$), MW-3 (24,000 $\mu\text{g/L}$), MW-4 (7,700 $\mu\text{g/L}$), MW-9 (240 $\mu\text{g/L}$), MW-10 (250 $\mu\text{g/L}$), and MW-11 (1,100 $\mu\text{g/L}$). In MW-8, only the drinking

water ESL (100 µg/L) was exceeded at a concentration of 200 µg/L; however, it was below the non-drinking water ESL.

TPH-GRO was detected above the ESL (100 µg/L) for drinking water in monitoring wells MW-2 (140 µg/L), MW-3 (450 µg/L), and MW-4 (430 µg/L). The ESL for non-drinking water (210 µg/L) was exceeded only in monitoring wells MW-3 and MW-4.

Purge Water Handling

The purge water generated during the September 2011 groundwater sampling activities is currently drummed on site and is awaiting disposal. The manifest for this disposal will be attached in the 1st Semi-Annual report for 2012. In an attempt to reduce waste, the groundwater from future events will be passed through the Granulated Activated Carbon (GAC) bucket prior to being placed in a 55-gallon drum and the effluent will be sampled in an attempt to demonstrate that the effluent would be acceptable to be allowed to evaporate on an impermeable surface in an environmentally safe manner. This method has been used on other sites throughout California with great success.

SUMMARY

- The DTW ranged from 3.67 ft-btoc in monitoring well MW-8 to 8.35 ft-btoc in monitoring well MW-10. Groundwater elevations indicated that the apparent groundwater flow direction was generally to the south-southeast on September 1, 2011.
- BTEX and MTBE were not detected nor were they above their respective MCLs or ESLs in the sampled monitoring wells during this monitoring event.
- TPH-DRO was detected above the drinking water ESL in monitoring wells MW-2, MW-3, MW-4, MW-8, MW-9, MW-10, and MW-11.
- TPH-GRO was detected above the drinking water ESL in monitoring wells MW-2, MW-3, and MW-4.

RECOMMENDATIONS

ACEH issued a letter dated March 10, 2009, that stated UPS could discontinue analysis for BTEX and MTBE in their next semi-annual monitoring event but perform a one-time sample event for the lead scavengers ethylene dibromide (EDB) and ethylene dichloride (EDC). They also requested that naphthalene analysis be

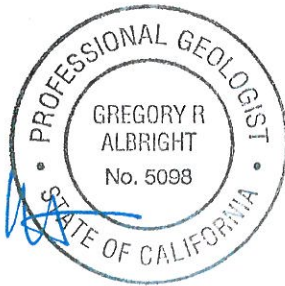
performed in areas of concern that formerly utilized diesel. They also requested the analysis of total dissolved solids on a one-time basis. ARCADIS completed the sampling per the 2009 letter. Results are presented in Table 3. ARCADIS recommends continued recovery of PSH and semi-annual groundwater sampling at this time. However, we recommend continuing to only analyzing the following parameters: TPH-DRO and TPH-GRO as these are the only parameters that currently and historically have exceeded past cleanup criteria and existing ESLs. This request is aligned with the State Water Resources Control Board's (State Water Board) cost reduction efforts and the ACEH 2009 correspondence.

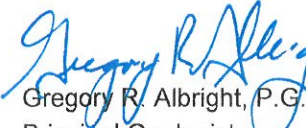
In addition, ARCADIS submitted a Corrective Action Plan (CAP) in January 2012 to reduce residual soil and groundwater impacts from the operation of former diesel USTs in this immediate area to concentrations that would be deemed protective to both humans and the environment, as specified in the petroleum low threat-closure policy. As such a risk assessment report should also be submitted to ACEH once State Regional Water Quality Board's Petroleum Low - Threat Closure Policy concentrations have been met to verify protection to human and the environment.


If you have any questions regarding this report, please do not hesitate to contact me at 404.952.1604. Please send correspondence regarding this report to Ms. Julie Straub of UPS at the address provided below. Please copy ARCADIS on any such correspondence.

Sincerely,

ARCADIS




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


Hugh Devery
Senior Geologist

Copies:

Julie Straub – UPS Corporate Plant Engineering; 55 Glenlake Parkway NE, Atlanta, GA 30328
Douglas Herman, Port of Oakland; 530 Water Street, Oakland, CA 94607

File

Figures

UPS – Oakland Hub

CITY:TAMPA D:\GIS\GROUPS\ENV141_0\BLAR_LD\090_PIC\090_PIC(090)_PM(R00) TM(090)_LYR(090)N\F\OFF\REF.
© ENVIRONMENTAL PAC 180033389 UPS Oakland 000000002and SA Civil Sept 2018 08385601.dwg LAYOUT: 2 SAVED: 12/3/2012 1:17 PM ACADVER: 18.05 (LMS TECH) PAGESETUP: PDF-APPLOTSTYLETABLE: PLTFULLCTBPLOTTED: 12/3/2012 1:18 PM BY: RICHARD S, JIM



PARDEE DRIVE

SWAN WAY

UPS PARKING

WAREHOUSE


FORMER UST PIT

SAN LEANDRO CHANNEL

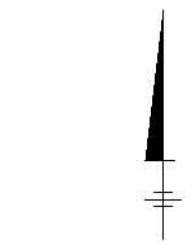


GRAPHIC SCALE

SOURCE: AERIAL PHOTOGRAPH PROVIDED BY GOOGLE EARTH PRO.

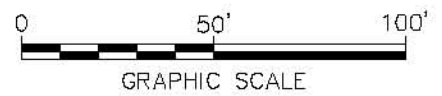
UPS-OAKLAND HUB 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA	
FACILITY LAYOUT MAP	
	FIGURE 2

CITY: TAMPA DIV: RUP65 DBUJAR LD:(Q/R) PIC:(Q/R) PM:(R) TM:(O/R) LYR:(O/R)N="OFF" REF=""
 G:\ENV\CA\TAMP\ACT\TBO\038388\UPS Oakland\0000000000\0002nd SA GNR Sept 2011\180038388801.dwg LAYOUT: 3\$SAVED: 12/23/2012 1:19 PM ACADVER: 18.00\$ (UAS TECH) PAGESETUP: P05-BLPLPLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 1/27/2012 1:28 PM BY: RICHARDS, JIM
 PROJECT NAME: UPS OAKLAND HUB
 AREA MAP: UPS Oakland Hub



LEGEND:

- MONITORING WELL
- TEMPORARY VACUUM TEST WELL
- ⊙ ABANDONED MONITORING WELL
- ▲ SOIL BORING LOCATION (2010)
- PROPERTY BOUNDARY
- E— UNDERGROUND ELECTRICAL LINE
- S— STORM WATER/SEWER LINE
- W— WATER/FIRE SERVICE/IRRIGATION
- UG— ELECTRIC/WATER LINE
- CATCH BASIN/STORM DRAIN
- LIGHT POST/ POWER POLE



UPS-OAKLAND HUB
8400 PARDEE DRIVE, OAKLAND, CALIFORNIA

SITE MAP

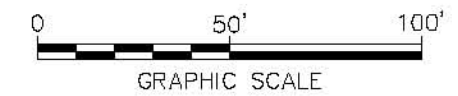
FIGURE

3

CITY: TAMPA DIV: RUP: 86 DB: JAR LD: (0) PIC: (0) PM: (0) TM: (0) LY: (0) ON: "" OFF: "" REF: ""
 G:\ENV\CAOTAMP\ACT\B00038888\UPS Oakland\0000000000000002nd SA GMR Sept 2011\180038888\001.dwg LAYOUT: 4SAVED: 12/27/2012 1:37 PM ACADVER: 18.05 (LMS TECH) PAGES: 1272012 1:38 PM BY: RICHARDS, JIM
 PROJECT NAME: UPS OAKLAND
 REF: UPS Oakland



- MONITORING WELL LOCATION
- ABANDONED MONITORING WELL
- PROPERTY BOUNDARY
- UNDERGROUND ELECTRICAL LINE
- STORM WATER/SEWER LINE
- WATER/FIRE SERVICE/IRRIGATION
- ELECTRIC/WATER LINE
- CATCH BASIN/STORM DRAIN
- LIGHT POST/ POWER POLE
- (5.78)** GROUNDWATER ELEVATION (FEET)
- GROUNDWATER ELEVATION CONTOUR
CONTOUR INTERVAL = 1.00 FOOT
- APPARENT DIRECTION OF GROUNDWATER FLOW



UPS-OAKLAND HUB
8400 PARDEE DRIVE, OAKLAND, CALIFORNIA

**GROUNDWATER CONTOUR MAP
SEPTEMBER 1, 2011**

FIGURE
4

Tables

UPS – Oakland Hub

**TABLE 1
HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

Monitoring Well	Reference Elevation	Date	Depth to	Groundwater	Change in	Product	Volume
			Groundwater	Elevation	Measurement	Thickness	Product Recovered
			(ft)	(ft)	(ft)	(ft)	(mL)
		8/28/1990	3.80	3.63	--	0.00	NR
		9/20/1990	3.99	3.44	-0.19	0.00	NR
		6/19/1991	3.47	3.96	0.52	NM	NR
		7/23/1991	3.70	3.73	-0.23	NM	NR
		8/26/1991	3.92	3.51	-0.22	NM	NR
		11/18/1991	4.21	3.22	-0.29	NM	NR
		2/3/1992	3.99	3.44	0.22	NM	NR
		6/29/1992	3.38	4.05	0.61	NM	NR
		6/23/1993	2.72	4.71	0.66	NM	NR
		10/11/1993	3.87	3.56	-1.15	NM	NR
		1/4/1994	3.34	4.09	0.53	NM	NR
		5/10/1994	2.14	5.29	1.20	NM	NR
		2/1/1995	1.84	5.59	0.30	NM	NR
		8/2/1995	3.10	4.33	-1.26	NM	NR
		10/16/1995	3.75	3.68	-0.65	NM	NR
		12/28/1995	3.56	3.87	0.19	NM	NR
		6/4/1997	3.16	4.27	0.40	0.00	NR
		9/30/1999	3.75	3.68	-0.59	0.00	NR
		10/11/2000	3.88	3.55	-0.13	0.00	NR
		9/3/2002	3.73	3.70	0.15	0.00	NR
		10/22/2002	5.11	2.32	-1.38	0.05	NR
		12/23/2002	3.51	3.92	1.60	0.00	NR
		3/28/2003	3.52	3.91	-0.01	0.00	NR
		5/30/2003	3.37	4.06	0.15	0.00	NR
		6/20/2003	3.50	3.93	-0.13	0.00	NR
		7/14/2003	3.65	3.78	-0.15	0.00	NR
		8/25/2003	3.87	3.56	-0.22	0.00	NR
		9/9/2003	4.02	3.41	-0.15	0.00	NR
		9/25/2003	4.10	3.33	-0.08	0.00	NR
		10/28/2003	4.29	3.14	-0.19	0.00	NR
		11/18/2003	4.32	3.11	-0.03	0.00	NR
		12/2/2003	4.34	3.09	-0.02	0.00	NR
		1/27/2004	3.88	3.55	0.46	0.00	NR
		2/24/2004	2.75	4.68	1.13	0.00	NR
		3/29/2004	3.45	3.98	-0.70	0.00	NR
		4/19/2004	3.55	3.88	-0.10	0.00	NR
		5/20/2004	3.69	3.74	-0.14	0.00	NR
		6/22/2004	3.81	3.62	-0.12	0.00	NR
		7/27/2004	3.99	3.44	-0.18	0.00	NR
		8/24/2004	4.14	3.29	-0.15	0.00	NR
		9/29/2004	4.32	3.11	-0.18	0.00	NR
		10/25/2004	3.89	3.54	0.43	0.00	NR
		12/15/2004	3.18	4.25	0.71	0.00	NR
		1/24/2005	2.69	4.74	0.49	0.00	NR
		2/23/2005	2.48	4.95	0.21	0.00	NR
		3/23/2005	2.21	5.22	0.27	0.00	NR
		4/29/2005	2.57	4.86	-0.36	0.00	NR
		5/27/2005	2.68	4.75	-0.11	0.00	NR
		6/29/2005	2.97	4.46	-0.29	0.00	NR
		7/20/2005	3.13	4.30	-0.16	0.00	NR
		8/24/2005	3.48	3.95	-0.35	0.00	NR
		9/27/2005	3.69	3.74	-0.21	0.00	NR
		10/19/2005	3.87	3.56	-0.18	0.00	NR
		11/29/2005	3.79	3.64	0.08	0.00	NR
		12/29/2005	3.08	4.35	0.71	0.00	NR
		1/31/2006	2.91	4.52	0.17	0.00	NR
		2/28/2006	2.84	4.59	0.07	0.00	NR
		3/27/2006	2.26	5.17	0.58	0.00	NR
		4/28/2006	2.40	5.03	-0.14	0.00	NR
		6/27/2006	3.09	4.34	-0.69	0.00	NR
		7/31/2006	3.35	4.08	-0.26	0.00	NR
		8/29/2006	3.60	3.83	-0.25	0.00	NR
		9/28/2006	3.90	3.53	-0.30	0.00	NR
		10/27/2006	3.97	3.46	-0.07	0.00	NR
		11/22/2006	3.64	3.79	0.33	0.00	NR
		12/26/2006	3.04	4.39	0.60	0.00	NR
		1/25/2007	3.26	4.17	-0.22	0.00	NR

MW-1

7.43

**TABLE 1
HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

Monitoring Well	Reference Elevation	Date	Depth to	Groundwater	Change in	Product	Volume
			Groundwater	Elevation	Measurement	Thickness	Product Recovered
			(ft)	(ft)	(ft)	(ft)	(mL)
MW-1	7.43	2/16/2007	3.12	4.31	0.14	0.00	NR
		3/19/2007	2.91	4.52	0.21	0.00	NR
		4/26/2007	2.93	4.50	-0.02	0.00	NR
		5/29/2007	3.15	4.28	-0.22	0.00	NR
		6/28/2007	3.42	4.01	-0.27	0.00	NR
		7/30/2007	3.60	3.83	-0.18	0.00	NR
		8/30/2007	3.85	3.58	-0.25	0.00	NR
		9/25/2007	4.00	3.43	-0.15	0.00	NR
		10/29/2007	4.05	3.38	-0.05	0.00	NR
		11/29/2007	4.10	3.33	-0.05	0.00	NR
		12/28/2007	3.80	3.63	0.30	0.00	NR
		1/24/2008	3.14	4.29	0.66	0.00	NR
		2/21/2008	2.44	4.99	0.70	0.00	NR
		3/28/2008	2.84	4.59	-0.40	0.00	NR
		4/30/2008	3.00	4.43	-0.16	0.00	NR
		5/29/2008	3.24	4.19	-0.24	0.00	NR
		6/25/2008	3.39	4.04	-0.15	0.00	NR
		7/29/2008	3.64	3.79	-0.25	0.00	NR
		8/27/2008	3.85	3.58	-0.21	0.00	NR
		9/30/2008	4.08	3.35	-0.23	0.00	NR
10/31/2008	4.20	3.23	-0.12	0.00	NR		
11/26/2008	4.14	3.29	0.06	0.00	NR		
12/30/2008	3.94	3.49	0.20	0.00	NR		
1/22/2009	3.93	3.50	0.01	0.00	NR		
4/3/2009			ABANDONED				
MW-2	7.15	8/28/1990	4.98	2.17	--	0.00	NR
		9/20/1990	4.94	2.21	0.04	N/A	NR
		6/19/1991	4.66	2.49	0.28	N/A	NR
		7/23/1991	4.81	2.34	-0.15	N/A	NR
		8/26/1991	4.89	2.26	-0.08	N/A	NR
		11/18/1991	4.93	2.22	-0.04	N/A	NR
		2/3/1992	4.44	2.71	0.49	N/A	NR
		6/29/1992	4.80	2.35	-0.36	N/A	NR
		6/23/1993	4.38	2.77	0.42	N/A	NR
		10/11/1993	5.20	1.95	-0.82	N/A	NR
		1/4/1994	4.56	2.59	0.64	N/A	NR
		5/10/1994	4.20	2.95	0.36	N/A	NR
		2/1/1995	4.00	3.15	0.20	N/A	NR
		8/2/1995	4.71	2.44	-0.71	N/A	NR
		10/16/1995	5.02	2.13	-0.31	N/A	NR
		12/28/1995	4.56	2.59	0.46	N/A	NR
		6/12/1996	NM	--	--	0.25	NR
		6/4/1997	6.02	1.13	-1.46	Small globules	NR
		9/30/1999	4.95	2.20	1.07	0.00	NR
		10/11/2000	4.97	2.18	-0.02	0.08	NR
		2/12/2002	4.26	2.89	0.71	0.01	24.00
		9/3/2002	5.02	2.13	-0.76	0.07	NR
		9/27/2002	4.89	2.26	0.13	0.09	222.30
		10/22/2002	5.11	2.04	-0.22	0.05	125.00
		12/23/2002	4.25	2.90	0.86	0.04	99.00
		1/16/2003	4.28	2.87	-0.03	0.02	49.00
		2/12/2003	4.26	2.89	0.02	0.01	24.00
		3/28/2003	4.35	2.80	-0.09	0.01	25.00
		5/30/2003	3.60	3.55	0.75	0.02	49.00
		6/20/2003	4.55	2.60	-0.95	0.01	NR
		7/14/2003	4.56	2.59	-0.01	0.00	NR
		8/25/2003	4.79	2.36	-0.23	0.01	25.00
		9/9/2003	4.90	2.25	-0.11	0.01	NR
		9/25/2003	4.97	2.18	-0.07	0.01	25.00
		10/28/2003	4.98	2.17	-0.01	0.04	104.00
		11/18/2003	4.83	2.32	0.15	0.00	NR
12/3/2003	4.87	2.28	-0.04	0.00	NR		
1/27/2004	7.39	-0.24	-2.52	0.00	NR		
2/24/2004	4.56	2.59	2.83	0.01	NR		
3/29/2004	4.24	2.91	0.32	0.01	NR		
4/19/2004	4.50	2.65	-0.26	0.01	25.00		
5/20/2004	4.53	2.62	-0.03	0.00	NR		

**TABLE 1
HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

Monitoring Well	Reference Elevation	Date	Depth to	Groundwater	Change in	Product	Volume
			Groundwater	Elevation	Measurement	Thickness	Product Recovered
			(ft)	(ft)	(ft)	(ft)	(mL)
MW-2	7.15	6/22/2004	4.65	2.50	-0.12	0.00	NR
		7/27/2004	4.80	2.35	-0.15	0.00	NR
		8/24/2004	5.93	1.22	-1.13	0.00	NR
		9/29/2004	5.00	2.15	0.93	0.02	50.00
		10/25/2004	4.68	2.47	0.32	0.00	NR
		12/15/2004	4.34	2.81	0.34	0.02	50.00
		1/24/2005	4.15	3.00	0.19	0.00	NR
		2/23/2005	4.95	2.20	-0.80	0.03	74.00
		3/23/2005	4.96	2.19	-0.01	0.02	49.00
		4/29/2005	4.23	2.92	0.73	0.10	246.00
		5/27/2005	4.20	2.95	0.03	0.02	50.00
		6/29/2005	4.29	2.86	-0.09	0.00	NR
		7/20/2005	4.48	2.67	-0.19	0.04	98.00
		8/24/2005	4.71	2.44	-0.23	0.00	NR
		9/27/2005	4.98	2.17	-0.27	0.03	70.00
		10/19/2005	5.08	2.07	-0.10	0.00	NR
		11/29/2005	4.68	2.47	0.40	0.01	NR
		12/29/2005	4.19	2.96	0.49	0.01	NR
		1/31/2006	4.05	3.10	0.14	0.00	NR
		2/28/2006	4.16	2.99	-0.11	0.00	25.00
		3/27/2006	4.11	3.04	0.05	0.01	NR
		4/28/2006	4.03	3.12	0.08	0.00	NR
		6/27/2006	4.45	2.70	-0.42	0.01	NR
		7/31/2006	4.60	2.55	-0.15	0.02	NR
		8/29/2006	4.84	2.31	-0.24	0.01	NR
		9/28/2006	4.96	2.19	-0.12	0.03	NR
		10/27/2006	4.98	2.17	-0.02	0.00	NR
		11/22/2006	4.58	2.57	0.40	0.00	NR
		12/26/2006	4.22	2.93	0.36	0.02	NR
		1/25/2007	4.44	2.71	-0.22	0.00	NR
		2/16/2007	4.13	3.02	0.31	0.00	NR
		3/19/2007	4.30	2.85	-0.17	0.01	NR
		4/26/2007	4.17	2.98	0.13	0.03	NR
		5/29/2007	4.42	2.73	-0.25	0.01	25.00
		6/28/2007	5.16	1.99	-0.74	0.01	25.00
		7/30/2007	4.71	2.44	0.45	0.00	NR
		8/30/2007	4.94	2.21	-0.23	0.03	NR
		9/25/2007	5.06	2.09	-0.12	0.01	25.00
		10/29/2007	4.75	2.40	0.31	0.01	25.00
		11/29/2007	4.69	2.46	0.06	0.00	NR
		12/28/2007	4.35	2.80	0.34	0.00	NR
		1/24/2008	4.08	3.07	0.27	0.00	NR
		2/21/2008	3.97	3.18	0.11	0.01	25.00
		3/28/2008	4.18	2.97	-0.21	0.00	NR
		4/30/2008	4.40	2.75	-0.22	0.00	NR
		5/29/2008	4.58	2.57	-0.18	0.01	20.00
		6/25/2008	4.58	2.57	0.00	0.00	NR
		7/29/2008	4.85	2.30	-0.27	0.00	NR
8/27/2008	4.89	2.26	-0.04	0.01	25.00		
9/30/2008	5.14	2.01	-0.25	0.04	98.00		
10/31/2008	5.23	1.92	-0.09	0.03	NR		
11/26/2008	4.74	2.41	0.49	0.04	NR		
12/30/2008	4.33	2.82	0.41	0.01	25.00		
1/22/2009	4.45	2.70	-0.12	0.01	25.00		
5/5/2010	4.03	5.60	2.90	0.13	NR		
10/29/2010	4.98	4.65	-0.95	0.08	NR		
2/25/2011	3.73	5.90	0.30	0.00	NR		
6/14/2011	4.23	5.40	-0.10	0.00	0.00		
7/19/2011	4.72	4.91	0.49	0.01	59.15		
8/18/2011	4.80	4.83	0.08	sheen	0.00		
9/1/2011	4.96	4.67	-0.16	sheen	0.00		
9/20/2011	5.08	4.56	-0.11	0.01	591.47		
10/19/2011	4.77	4.86	0.30	0.01	591.47		
11/22/2011	4.92	4.71	-0.15	0.01	532.32		
12/26/2011	4.92	4.71	0.00	0.01	532.32		

**TABLE 1
HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

Monitoring Well	Reference Elevation	Date	Depth to	Groundwater	Change in	Product	Volume
			Groundwater	Elevation	Measurement	Thickness	Product Recovered
			(ft)	(ft)	(ft)	(ft)	(mL)
		8/28/1990	3.88	3.54	--	0.00	NR
		9/20/1990	3.99	3.43	-0.11	0.00	NR
		6/19/1991	3.49	3.93	0.50	0.00	NR
		7/23/1991	3.71	3.71	-0.22	0.00	NR
		8/26/1991	3.94	3.48	-0.23	0.00	NR
		11/18/1991	4.23	3.19	-0.29	0.00	NR
		2/3/1992	4.01	3.41	0.22	0.00	NR
		6/29/1992	3.40	4.02	0.61	0.00	NR
		6/23/1993	2.75	4.67	0.65	0.00	NR
		10/11/1993	3.84	3.58	-1.09	0.00	NR
		1/4/1994	3.40	4.02	0.44	0.00	NR
		5/10/1994	2.25	5.17	1.15	0.00	NR
		2/1/1995	2.43	4.99	-0.18	0.00	NR
		8/2/1995	3.20	4.22	-0.77	0.00	NR
		10/16/1995	3.72	3.70	-0.52	0.00	NR
		12/28/1995	3.56	3.86	0.16	0.00	NR
		6/4/1997	3.20	4.22	0.36	0.00	NR
		6/3/1998	NM	--	--	0.00	
		9/30/1999	3.72	3.70	-0.52	0.00	NR
		10/11/2000	3.88	3.54	-0.16	0.00	NR
		9/3/2002	3.75	3.67	0.13	0.00	NR
		12/23/2002	3.50	3.92	0.25	0.00	NR
		3/28/2003	3.56	3.86	-0.06	0.00	NR
		5/30/2003	3.38	4.04	0.18	0.00	NR
		6/20/2003	3.52	3.90	-0.14	0.00	NR
		7/14/2003	3.65	3.77	-0.13	0.00	NR
		8/25/2003	3.99	3.43	-0.34	0.00	NR
		9/9/2003	3.99	3.43	0.00	0.00	NR
		9/25/2003	4.06	3.36	-0.07	0.00	NR
		10/28/2003	4.15	3.27	-0.09	0.00	NR
		11/18/2003	4.28	3.14	-0.13	0.00	NR
		12/2/2003	4.31	3.11	-0.03	0.00	NR
		1/27/2004	3.85	3.57	0.46	0.00	NR
		2/24/2004	3.70	3.72	0.15	0.00	NR
		3/29/2004	3.47	3.95	0.23	0.00	NR
		4/19/2004	3.55	3.87	-0.08	0.00	NR
		5/20/2004	3.65	3.77	-0.10	0.00	NR
		6/22/2004	3.83	3.59	-0.18	0.00	NR
		7/27/2004	3.98	3.44	-0.15	0.00	NR
		8/24/2004	4.14	3.28	-0.16	0.00	NR
		9/29/2004	4.30	3.12	-0.16	0.00	NR
		10/25/2004	3.85	3.57	0.45	0.00	NR
		12/15/2004	3.16	4.26	0.69	0.00	NR
		1/24/2005	2.65	4.77	0.51	0.00	NR
		2/23/2005	2.50	4.92	0.15	0.00	NR
		3/23/2005	2.48	4.94	0.02	0.00	NR
		4/29/2005	2.59	4.83	-0.11	0.00	NR
		5/27/2005	2.75	4.67	-0.16	0.00	NR
		6/29/2005	3.05	4.37	-0.30	0.00	NR
		7/20/2005	3.10	4.32	-0.05	0.00	NR
		8/24/2005	3.45	3.97	-0.35	0.00	NR
		9/27/2005	3.71	3.71	-0.26	0.00	NR
		10/19/2005	3.73	3.69	-0.02	0.00	NR
		11/29/2005	3.75	3.67	-0.02	0.00	NR
		12/29/2005	3.08	4.34	0.67	0.00	NR
		1/31/2006	2.99	4.43	0.09	0.00	NR
		2/28/2006	2.95	4.47	0.04	0.00	NR
		3/27/2006	2.60	4.82	0.35	0.00	NR
		4/28/2006	2.90	4.52	-0.30	0.00	NR
		6/27/2006	3.01	4.41	-0.11	0.00	NR
		7/31/2006	4.33	3.09	-1.32	0.00	NR
		8/29/2006	3.62	3.80	0.71	0.00	NR
		9/28/2006	3.80	3.62	-0.18	0.00	NR
		10/27/2006	3.90	3.52	-0.10	0.00	NR
		11/22/2006	3.60	3.82	0.30	0.00	NR
		12/26/2006	3.07	4.35	0.53	0.00	NR
		1/25/2007	3.25	4.17	-0.18	0.00	NR

MW-3

7.42

**TABLE 1
HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

Monitoring Well	Reference Elevation	Date	Depth to	Groundwater	Change in	Product	Volume
			Groundwater	Elevation	Measurement	Thickness	Product Recovered
			(ft)	(ft)	(ft)	(ft)	(mL)
MW-3	7.42	2/16/2007	3.09	4.33	0.16	0.00	NR
		3/19/2007	2.83	4.59	0.26	0.00	NR
		4/26/2007	2.94	4.48	-0.11	0.00	NR
		5/29/2007	3.18	4.24	-0.24	0.00	NR
		6/28/2007	3.41	4.01	-0.23	0.00	NR
		7/30/2007	3.62	3.80	-0.21	0.00	NR
		8/30/2007	3.84	3.58	-0.22	0.00	NR
		9/25/2007	4.03	3.39	-0.19	0.00	NR
		10/29/2007	4.06	3.36	-0.03	0.00	NR
		11/29/2007	4.10	3.32	-0.04	0.00	NR
		12/28/2007	3.78	3.64	0.32	0.00	NR
		1/24/2008	3.16	4.27	0.63	0.00	NR
		2/21/2008	2.41	5.02	0.75	0.00	NR
		3/28/2008	2.94	4.48	-0.54	0.00	NR
		4/30/2008	3.08	4.34	-0.14	0.00	NR
		5/29/2008	3.24	4.18	-0.16	0.00	NR
		6/25/2008	3.30	4.12	-0.06	0.00	NR
		7/29/2008	3.50	3.92	-0.20	0.00	NR
	8/27/2008	3.84	3.58	-0.34	0.00	NR	
	9/30/2008	4.03	3.39	-0.19	0.00	NR	
	10/31/2008	4.20	3.22	-0.17	0.00	NR	
	11/26/2008	4.23	3.19	-0.03	0.00	NR	
	12/30/2008	3.96	3.46	0.27	0.00	NR	
	1/22/2009	3.96	3.46	0.00	0.00	NR	
	5/5/2010	3.13	6.76	3.30	0.02	NR	
	10/29/2010	4.70	5.19	-1.57	0.00	NR	
	2/25/2011	1.54	8.35	3.16	0.02	NR	
	6/14/2011	3.25	6.64	-1.71	0.05	0.00	
7/19/2011	3.53	6.36	-0.28	0.02	532.32		
8/18/2011	3.98	5.91	-0.45	sheen	591.47		
9/1/2011	4.12	5.77	-0.14	sheen	591.47		
9/20/2011	4.41	5.48	-0.29	sheen	591.47		
10/19/2011	4.34	5.55	0.07	sheen	561.90		
11/22/2011	4.75	5.14	-0.41	sheen	532.32		
12/26/2011	4.70	5.19	0.05	sheen	532.32		
MW-4	9.77	5/5/2010	2.96	6.81	--	0.00	
		10/29/2010	4.53	5.24	-1.57	0.00	NR
		2/25/2011	1.34	8.43	3.19	0.00	NR
		9/1/2011	3.99	5.78	-2.65	0.00	NR
MW-8	8.22	5/5/2010	2.56	5.66	--	0.00	
		10/29/2010	4.39	3.83	-1.83	0.00	NR
		2/25/2011	2.69	5.53	1.70	0.00	NR
MW-9	14.63	9/1/2011	3.67	4.55	-0.98	0.00	NR
		5/5/2010	6.28	8.35	--	0.00	
		10/29/2010	6.28	8.35	0.00	0.00	NR
MW-10	9.68	2/25/2011	5.55	9.08	0.73	0.00	NR
		9/1/2011	6.05	8.58	-0.50	0.00	NR
		5/5/2010	8.28	1.40	--	0.00	
		10/29/2010	8.27	1.41	0.01	0.00	NR
MW-11	9.49	2/25/2011	4.45	5.23	3.82	0.00	NR
		9/1/2011	8.35	1.33	-3.90	0.00	NR
		5/5/2010	7.21	2.28	--	0.00	
OW-1	N/A	6/4/1997	7.22	NC	--	0.01	
		9/30/1999	8.35	NC	1.13	0.01	NR
		10/11/2000	6.90	NC	-1.45	0.09	NR
		2/12/2002	5.23	NC	-1.67	0.01	38.00
		9/27/2002	7.02	NC	1.79	0.14	345.78
		10/22/2002	7.34	NC	0.32	0.01	40.00
		12/23/2002	5.17	NC	-2.17	0.03	167.00
		1/16/2003	4.97	NC	-0.20	0.01	40.00
		2/12/2003	5.23	NC	0.26	0.01	38.00
		3/28/2003	5.16	NC	-0.07	0.01	25.00
		5/30/2003	4.41	NC	-0.75	0.02	77.00
6/20/2003	4.93	NC	0.52	0.01	NR		

**TABLE 1
HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

Monitoring Well	Reference Elevation	Date	Depth to	Groundwater	Change in	Product	Volume
			Groundwater	Elevation	Measurement	Thickness	Product Recovered
			(ft)	(ft)	(ft)	(ft)	(mL)
		7/14/2003	5.33	NC	0.40	0.00	NR
		8/25/2003	5.85	NC	0.52	0.00	NR
		9/9/2003	6.33	NC	0.48	0.00	NR
		9/25/2003	6.52	NC	0.19	0.01	25.00
		10/28/2003	7.26	NC	0.74	0.03	176.00
		11/18/2003	7.29	NC	0.03	0.00	NR
		12/2/2003	7.23	NC	-0.06	0.03	NR
		1/27/2004	7.96	NC	0.73	0.01	NR
		2/24/2004	6.26	NC	-1.70	0.02	NR
		3/29/2004	6.08	NC	-0.18	0.02	NR
		4/19/2004	6.29	NC	0.21	0.03	116.00
		5/20/2004	6.16	NC	-0.13	0.00	NR
		6/22/2004	6.37	NC	0.21	0.00	NR
		7/27/2004	5.67	NC	-0.70	0.04	225.00
		8/24/2004	6.81	NC	1.14	0.00	NR
		9/29/2004	7.08	NC	0.27	0.04	153.00
		10/25/2004	6.74	NC	-0.34	0.04	NR
		12/15/2004	5.33	NC	-1.41	0.04	155.00
		1/24/2005	3.98	NC	-1.35	0.00	NR
		2/23/2005	3.44	NC	-0.54	0.01	NR ⁵
		3/23/2005	3.34	NC	-0.10	0.02	77.00
		4/29/2005	6.89	NC	3.55	0.13	501.00
		5/27/2005	7.18	NC	0.29	0.11	425.00
		6/29/2005	7.12	NC	-0.06	0.10	450.00
		7/20/2005	7.20	NC	0.08	0.10	556.00
		8/24/2005	7.15	NC	-0.05	0.06	249.00
		9/27/2005	7.43	NC	0.28	0.12	450.00
		10/19/2005	7.48	NC	0.05	0.11	425.00
		11/29/2005	7.00	NC	-0.48	0.04	NR
		12/29/2005	5.22	NC	-1.78	0.00	NR
		1/31/2006	5.64	NC	0.42	0.00	NR
		2/28/2006	6.53	NC	0.89	0.01	39.00
		3/27/2006	5.80	NC	-0.73	0.01	NR
		4/28/2006	6.39	NC	0.59	0.00	NR
		6/27/2006	7.82	NC	1.43	0.06	NR
		7/31/2006	5.82	NC	-2.00	0.05	NR
		8/29/2006	7.05	NC	1.23	0.07	NR
		9/28/2006	7.10	NC	0.05	0.02	NR
		10/27/2006	7.27	NC	0.17	0.02	NR
		11/22/2006	7.05	NC	-0.22	0.02	NR
		12/26/2006	6.73	NC	-0.32	0.03	NR
		1/25/2007	7.15	NC	0.42	0.00	NR
		2/16/2007	7.71	NC	0.56	0.01	NR
		3/19/2007	6.77	NC	-0.94	0.02	NR
		4/26/2007	6.66	NC	-0.11	0.01	NR
		5/29/2007	6.86	NC	0.20	0.02	76.00
		6/28/2007	6.97	NC	0.11	0.20	75.00
		7/30/2007	7.06	NC	0.09	0.01	NR
		8/30/2007	7.25	NC	0.19	0.03	NR
		9/25/2007	7.25	NC	0.00	0.03	115.00
		10/29/2007	7.43	NC	0.18	0.02	78.00
		11/29/2007	7.37	NC	-0.06	0.00	NR
		12/28/2007	7.28	NC	-0.09	0.01	40.00
		1/24/2008	6.61	NC	-0.67	0.01	38.00
		2/21/2008	6.33	NC	-0.28	0.01	37.00
		3/28/2008	6.80	NC	0.47	0.01	NR
		4/30/2008	7.44	NC	0.64	0.03	166.90
		5/29/2008	7.09	NC	-0.35	0.01	38.00
		6/25/2008	7.07	NC	-0.02	0.02	112.00
		7/29/2008	7.34	NC	0.27	0.00	NR
		8/27/2008	7.28	NC	-0.06	0.02	78.00
		9/30/2008	7.82	NC	0.54	0.03	167.00
		10/31/2008	7.31	NC	-0.51	0.01	NR
		11/26/2008	6.93	NC	-0.38	0.01	NR
		12/30/2008	7.25	NC	0.32	0.02	112.00
		1/22/2009	7.05	NC	-0.20	0.01	56.00

OW-1

N/A

**TABLE 1
HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

Monitoring Well	Reference Elevation	Date	Depth to	Groundwater	Change in	Product	Volume
			Groundwater	Elevation	Measurement	Thickness	Product Recovered
			(ft)	(ft)	(ft)	(ft)	(mL)
OW-1	9.55	5/5/2010	7.08	2.47	--	0.06	NR
		10/29/2010	7.37	2.18	-0.29	0.08	NR
		2/25/2011	6.17	3.38	1.20	0.05	NR
		6/14/2011	6.78	2.77	-0.61	0.08	0.00
		7/19/2011	7.30	2.25	-0.52	0.20	118.29
		8/18/2011	7.35	2.20	-0.05	0.03	147.87
		9/1/2011	7.35	2.20	0.00	0.03	147.87
		9/20/2011	7.41	2.14	-0.06	0.04	591.47
		10/19/2011	7.42	2.13	-0.01	0.03	532.32
		11/22/2011	7.09	2.46	0.33	0.03	29.57
		12/26/2011	7.32	2.23	-0.23	0.02	147.87

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; NR = No Recovery
 5. SPH detected but amount insufficient to bail
- Volume of product recovered on 9/27/02 and 3/23/05 calculated based on measurements from field data sheets

**TABLE 2
PSH Recovery Event**

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

Monitoring Well	Date Collected	Time	Well Size	Depth to Water(foot)	Depth to Product (foot)	Product Thickness (inches)	Amount of product recovered from the Skimmer	Amount of water from the Skimmer	Notes
OW-1	12/20/2011	12:20	6"	7.32	7.30	0.02	5 OZ	-	0.75 yellow and 4.25 black
	11/22/2011	1:00	6"	7.09	7.06	0.03	1 OZ	-	Black liquid
	10/19/2011	12:20	6"	7.42	7.45	0.03	6 OZ Black 12 OZ Yellow	-	Black with strong odor, rainbow bubbles, yellow slightly translucent
	9/20/2011	12:20	6"	7.41	7.37	0.04	20 OZ	-	Yellow, strong odor, semi-translucent with layer of black liquid
	9/1/2011	9:06	6"	7.35	7.32	0.03	0	-	
	8/18/2011	2:20	6"	7.35	7.38	0.03	5 OZ	0	Black liquid with a strong odor
	7/19/2011	2:45	6"	7.3	7.1	0.2	4 OZ	16 OZ	16 OZ Yellow brown black substance on top 4 OZ Brownish-black both with strong odor
	6/14/2011	3:25	6"	6.78	6.7	0.08	-	20 OZ	No separation, strong odor, yellowish
MW-2	12/20/2011	12:30	4"	4.92	4.91	0.01	18 OZ	-	Pretty Clear-Slightly Yellowish
	11/22/2011	1:20	4"	4.92	-	-	18 OZ	-	Yellowish liquid-odor
	10/19/2011	12:30	4"	4.77	4.78	0.01	20 OZ Yellow Translucent	-	Yellow translucent, strong odor. Clack sediments
	9/20/2011	12:30	4"	5.075	5.07	-	20 OZ	-	Yellow, strong odor with layer of black liquid translucent but more transparent, black sheen on top and black particulates floating
	9/1/2011	9:00	4"	4.96	-	-	0	-	
	8/18/2011	2:50	4"	4.8	-	sheen	0	0	Little black liquid strong odor
	7/19/2011	3:15	4"	4.72	4.71	0.1	2 OZ	0	Black yellowish liquid
	6/14/2011	3:15	4"	4.23	4.2	0.03	0	0	Nothing inside well, black sludge
MW-3	12/20/2011	12:45	4"	4.7	-	-	18 OZ	-	Translucent & yellow with black particles, odor.
	11/22/2011	1:30	4"	4.75	-	-	18 OZ	-	Yellowish, odor
	10/19/2011	12:45	4"	4.34	-	-	19 OZ Yellow	-	Translucent & strong odor, Clearer than other wells
	9/20/2011	12:45	4"	4.41	4.41	0.05	20 OZ	-	Yellow, strong odor, with layer of black liquid translucent but more transparent
	9/1/2011	9:11	4"	4.12	-	sheen	0	-	
	8/18/2011	2:35	4"	3.98	-	sheen	20	-	Slightly translucent yellow strong odor
	7/19/2011	3:30	4"	3.53	3.51	0.2	18 OZ	0	Yellowish with little black liquid
	6/14/2011	3:00	4"	3.25	3.2	0.05	sheen	18 OZ	Top of the skimmers have buildups

Note: PSH = Phase Separated Hydrocarbons

**TABLE 3
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 µg/L	TPH as diesel µg/L	D.O. (mg/L)	EDB µg/L	1,2-DCA µg/L	Naphthalene µg/L	TDS (mg/L)
MW-3	8/26/1990	0.50	0.80	4.30	2.30	NA	NA	18,000	NA	NA	NA	NA	NA
	6/19/1991	0.40	0.40	1.70	1.40	NA	NA	1,300	NA	NA	NA	NA	NA
	7/23/1991	0.30	<0.3	1.50	0.50	NA	330	6,800	NA	NA	NA	NA	NA
	8/26/1991	13.00	13.00	5.80	26.00	NA	NA	<50	NA	NA	NA	NA	NA
	11/18/1991	0.60	<0.3	<0.3	<0.3	NA	NA	2,500	NA	NA	NA	NA	NA
	2/3/1992	0.40	<0.3	1.30	0.60	NA	NA	1,100	NA	NA	NA	NA	NA
	6/29/1992	<0.3	<0.3	1.30	0.30	NA	NA	3,200	NA	NA	NA	NA	NA
	6/23/1993	<0.5	<0.5	<0.5	<0.5	NA	NA	8,100	NA	NA	NA	NA	NA
	10/11/1993	1.00	<0.5	1.50	2.40	NA	NA	7,100	NA	NA	NA	NA	NA
	1/4/1994	<0.5	<0.5	1.60	<0.5	NA	NA	7,400	NA	NA	NA	NA	NA
	5/10/1994	<0.5	<0.5	<0.5	<0.5	NA	NA	5,700	NA	NA	NA	NA	NA
	2/1/1995	<1.0	<1.0	2.70	4.10	NA	810	10,000	NA	NA	NA	NA	NA
	8/2/1995	<0.5	<0.5	<0.5	<0.5	NA	1200	6,500	NA	NA	NA	NA	NA
	10/16/1995	<0.5	<0.5	<0.5	<0.5	NA	930	9,800	NA	NA	NA	NA	NA
	12/28/1995	<0.5	<0.5	<0.5	<0.5	NA	690	11,000	NA	NA	NA	NA	NA
	6/4/1997	NA	NA	NA	NA	NA	NA	34,000	0.84	NA	NA	NA	NA
	9/30/1999	<0.5	0.60	0.70	1.20	<3.0	1300	8,700	8.60	NA	NA	NA	NA
	10/11/2000	<0.5	<0.5	<0.5	<1.0	<5.0	430	20,000	0.51	NA	NA	NA	NA
	9/3/2002	<0.5	<0.5	<0.5	<0.5	<0.5	2,300	14,000	NA	NA	NA	NA	NA
	3/28/2003	<2.5	<2.5	<2.5	<5.0	<2.5	2,500	19,000	NA	NA	NA	NA	NA
	9/9/2003	<0.5	<0.5	<0.5	<1.0	<0.5	700	73,000	NA	NA	NA	NA	NA
	4/19/2004	<0.50	<0.50	<0.50	<1.0	<0.50	99	14,000 ndp	NA	NA	NA	NA	NA
	9/29/2004	<2.5	<2.5	<2.5	<5.0	<2.5	390 g	10,000 ndp	NA	NA	NA	NA	NA
	1/24/2005	<2.5	<2.5	<2.5	<5.0	<2.5	330 G1	14,000 G2	NA	NA	NA	NA	NA
	11/29/2005	<1.0	<1.0	<1.0	<2.0	<1.0	1,200	8,300	NA	NA	NA	NA	NA
	3/27/2006	<1.0	<1.0	<1.0	<2.0	<1.0	430	13,000	NA	NA	NA	NA	NA
	9/28/2006	<1.0	<1.0	<1.0	<2.0	<1.0	370	17,000	NA	NA	NA	NA	NA
	3/19/2007	<1.0	<1.0	<1.0	<2.0	<1.0	510	26,000	NA	NA	NA	NA	NA
	9/25/2007	<1.0	<1.0	<1.0	<2.0	<1.0	390	11,000	NA	NA	NA	NA	NA
	3/28/2008	<0.50	<0.50	<0.50	<1.0	<0.50	280	21,000	NA	NA	NA	NA	NA
	9/30/2008	<0.50	<0.50	<0.50	<1.0	<0.50	270	9,500	NA	NA	NA	NA	NA
	5/5/2010	NA	NA	NA	NA	NA	<150	24,000	NA	<0.50	<0.50	2.2	910
	2/25/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/1/2011	<0.50	1.70	<0.50	2.1	<0.50	450	24,000	NA	NA	NA	NA	NA
	5/5/2010	NA	NA	NA	NA	NA	<50	5,200	NA	<0.50	<0.50	<1.0	1,100
	10/29/2010	<0.5	<0.5	<0.5	<1.0	<0.5	150	2,000	NA	NA	NA	<1.0	NA
	2/25/2011	<0.50	<0.50	<0.50	<1.0	<0.50	250	24,000	NA	NA	NA	NA	NA
	9/1/2011	<0.50	<0.50	<0.50	<1.0	<0.50	430	7,700	NA	NA	NA	NA	NA
	5/5/2010	NA	NA	NA	NA	NA	<50	70	NA	<0.50	<0.50	<1.0	2,900
	10/29/2010	<0.5	<0.5	<0.5	<1.0	<0.5	<50	1100	NA	NA	NA	<1.0	NA
2/25/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	280	NA	NA	NA	NA	NA	
9/1/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	200	NA	NA	NA	NA	NA	
5/5/2010	NA	NA	NA	NA	NA	<50	110	NA	<0.50	<0.50	<1.0	6,200	
2/25/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	580	NA	NA	NA	NA	NA	
9/1/2011	<0.50	0.55	<0.50	<1.0	<0.50	<50	240	NA	NA	NA	NA	NA	
5/5/2010	NA	NA	NA	NA	NA	<50	110	NA	<0.50	<0.50	<1.0	2,100	
10/29/2010	<0.5	<0.5	<0.5	<1.0	<0.5	<50	650	NA	NA	NA	<1.0	NA	
2/25/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	5,600	NA	NA	NA	NA	NA	
9/1/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	250	NA	NA	NA	NA	NA	
5/5/2010	NA	NA	NA	NA	NA	<50	430	NA	<0.50	<0.50	<1.0	10,000	
10/29/2010	<0.5	<0.5	<0.5	<1.0	<0.5	<50	7200	NA	NA	NA	<1.0	NA	
2/25/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	1,900	NA	NA	NA	NA	NA	
9/1/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	1,100	NA	NA	NA	NA	NA	

**TABLE 3
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 µg/L	TPH as diesel µg/L	D.O. (mg/L)	EDB µg/L	1,2-DCA µg/L	Naphthalene µg/L	TDS (mg/L)
OW-1	6/23/1993	< 0.5	< 0.5	< 0.5	31.00	NA	NA	34,000,000	NA	NA	NA	NA	NA
	6/4/1997	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA
	9/30/1999	< 2.0	< 2.0	< 2.0	4.20	< 12.0	8,300	28,000,000	9.70	NA	NA	NA	NA
	9/30/1999	< 1.0	< 1.0	1.90	8.90	< 6.0	2,900	340,000	--	NA	NA	NA	NA
	10/11/2000	< 0.5	< 0.5	< 0.5	< 1.0	< 5.0	2,100	58,000	0.74	NA	NA	NA	NA
	9/27/2002	0.6J	< 2.5	< 2.5	< 2.5	< 2.5	17,000	23,000	NA	NA	NA	NA	NA
	3/28/2003	< 50	< 50	< 50	< 100	< 50	820	81,000	NA	NA	NA	NA	NA
	9/29/2003	< 50	530.00	500.00	6,200.00	< 50	220	91,000	NA	NA	NA	NA	NA
	3/29/2004	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	510	280,000 ndp	NA	NA	NA	NA	NA
	9/29/2004	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	2,800 q	440,000 ndp	NA	NA	NA	NA	NA
	1/24/2005	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	220 Q1	16,000 Q2	NA	NA	NA	NA	NA
	11/29/2005	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	650	30,000	NA	NA	NA	NA	NA
	3/27/2006	< 13	< 13	< 13	< 25	< 13	< 1,300	55,000	NA	NA	NA	NA	NA
	9/28/2006	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	820	130,000	NA	NA	NA	NA	NA
	9/19/2007	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	460	75,000	NA	NA	NA	NA	NA
	9/25/2007	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	< 200	42,000	NA	NA	NA	NA	NA
	9/30/2008	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	1,700	120,000	NA	NA	NA	NA	NA
	9/30/2008	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	340	180,000	NA	NA	NA	NA	NA
	5/5/2010	NA	NA	NA	NA	NA	74	7,000	NA	< 0.50	< 0.50	< 1.0	1,800
	2/25/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/1/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

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 8/26/90 and 12/26/95 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.

* = Not an MCL; Odor and taste threshold per the California Regional Water Quality Control Board regulations

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

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

RWQCB ESLs = Regional Water Quality Control Board ESLs for Environmental Concerns at Sites with Contaminated Soil and Groundwater INTERIM FINAL - November 2007 (Revised May 2008) San Francisco Bay Region, CA

Appendix A

UPS – Oakland Hub
Groundwater Parameters and Field Notes

WELL GAUGING DATA

Project # 11090-1-WW1 Date 9/1/11 Client ARCADIS

Site 8400 PARADISE DR, OAKLAND, CA

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-2	0900	4	ODOR SHEEN	—			4.96	14.27		SKIMMER
MW-3	0911	4	ODOR SHEEN	—			4.12	14.60		SKIMMER
MW-4	0813	2	ODOR	—			3.99	16.88		
MW-8	0850	2	ODOR	—			3.67	12.24		
MW-9	0856	2	ODOR	—			6.05	13.24		
MW-10	0931	2	ODOR	—			8.35	12.18		
MW-11	0836	2	ODOR	—			6.05	12.49		
OW-1	0906	6	SHEEN ODOR	7.32	0.03		7.35	5PM detected		SKIMMER
* SKIMMERS REACHED PRIOR TO GAUGING (45 MINS)										

WELL MONITORING DATA SHEET

Project #: <u>110901-WW1</u>	Client: <u>ARCADIS</u>
Sampler: <u>ww</u>	Date: <u>9/1/11</u>
Well I.D.: <u>MW-2</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): <u>14.27</u>	Depth to Water (DTW): <u>4.96</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>6.82</u>	

Purge Method: Bailer Disposible Bailer ⁽²⁾ Waterra Peristaltic Extraction Pump Other _____
 Positive Air Displacement Electric Submersible

Sampling Method: Bailer Disposible Bailer Extraction Port Dedicated Tubing Other: _____

6.1 (Gals.) X 3 = 18.3 Gals.
 1 Case Volume Specified Volumes Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1108	22.4	7.14	4852	>1000	6.1	sheen, odor
1109	22.8	7.00	4131	>1000	12.2	
1110	23.0	7.01	4240	>1000	18.3	

Did well dewater? Yes No Gallons actually evacuated: 18.3

Sampling Date: 9/1/11 Sampling Time: 1310 Depth to Water: 9.07 (2412)

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

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 #: 110901-WW1	Client: ARCADIS
Sampler: WW	Date: 9/1/11
Well I.D.: MW-3	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 14.60	Depth to Water (DTW): 4.12
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.98	

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: _____

6.8 (Gals.) X 3 = 18.4 Gals.	Well Diameter	Multiplier	Well Diameter	Multiplier
1 Case Volume	Specified Volumes	Calculated Volume		
	1"	0.04	4"	0.65
	2"	0.16	6"	1.47
	3"	0.37	Other	radius ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1058	23.1	7.70	1404	58	6.8	
WELL	DEWATERED	ATERED @	11 GALS			
1230	25.5	8.72	1378	28	—	lite yellow

Did well dewater? Yes No Gallons actually evacuated: 11

Sampling Date: 9/1/11 Sampling Time: 1230 Depth to Water: 4.14

Sample I.D.: MW-3 Laboratory: Kiff CalScience Other TA-SF

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 #: 110901-WW1	Client: ARCADIS
Sampler: WW	Date: 9/1/11
Well I.D.: MW-4	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 1688	Depth to Water (DTW): 3.99
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.57	

Purge Method: Bailer Disposable Bailer Waterra Peristaltic Extraction Pump Other _____

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

$2.1 \text{ (Gals.)} \times 3 = 6.3 \text{ Gals.}$	<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>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163	
Well Diameter	Multiplier	Well Diameter	Multiplier															
1"	0.04	4"	0.65															
2"	0.16	6"	1.47															
3"	0.37	Other	radius ² * 0.163															
1 Case Volume	Specified Volumes	Calculated Volume																

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1034	22.7	8.03	1628	>1000	2.1	odor
1038	23.8	7.62	1514	>1000	4.2	"
1042	23.8	7.56	1470	>1000	6.3	"

Did well dewater? Yes No Gallons actually evacuated: **6.3**

Sampling Date: **9/1/11** Sampling Time: **1050** Depth to Water: **4.02**

Sample I.D.: **MW-4** Laboratory: Kiff CalScience Other **TA-SF**

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>110901-WW1</u>	Client: <u>ARCADIS</u>
Sampler: <u>WW</u>	Date: <u>9/1/11</u>
Well I.D.: <u>MW-8</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u>12.24</u>	Depth to Water (DTW): 12.2 <u>3.67</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>5.38</u>	

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

<u>1.4</u> (Gals.) X	<u>3</u>	= <u>4.2</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 ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1116	23.7	7.23	4419	114	1.4	yellow
1120	22.5	7.03	7457	221	2.8	"
1123	21.9	7.20	9900	654	4.2	

Did well dewater? Yes No Gallons actually evacuated: 4.2

Sampling Date: 9/1/11 Sampling Time: 1325 Depth to Water: 7.96 (2 HR)

Sample I.D.: MW-8 Laboratory: Kiff CalScience Other TA-SF

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>110901-WW1</u>	Client: <u>ARCADIS</u>
Sampler: <u>WW</u>	Date: <u>9/1/11</u>
Well I.D.: <u>MW-9</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u>13.24</u>	Depth to Water (DTW): <u>6.85</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>7.49</u>	

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

1.2 (Gals.) X 3 = 3.6 Gals.
 1 Case Volume Specified Volumes Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1133	24.2	7.55	10.16	138	1.2	lite yellow
1135	23.8	6.90	23.78	320	2.4	
1137	23.4	6.91	23.58	897	3.6	

Did well dewater? Yes No Gallons actually evacuated: 3.6

Sampling Date: 9/1/11 Sampling Time: 1340 Depth to Water: 11.15 2HR

Sample I.D.: MW-9 Laboratory: Kiff CalScience Other: TA-SF

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 #: 110901-WW1	Client: ARCADIS
Sampler: WW	Date: 9/1/11
Well I.D.: MW-10	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth (TD): 12.18	Depth to Water (DTW): 8.35
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.12	

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

0.6 (Gals.) X	3 Specified Volumes	= 1.8 Gals. Calculated Volume
----------------------	----------------------------	--------------------------------------

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0940	23.4	7.02	9298	110	0.6	yellow
0941	23.1	7.08	9499	241	1.2	"
0942	22.9	7.22	9334	505	1.8	"

Did well dewater? Yes No Gallons actually evacuated: **1.8**

Sampling Date: **9/1/11** Sampling Time: **0950** Depth to Water: **9.00**

Sample I.D.: **MW-10** Laboratory: Kiff CalScience Other **TA-SF**

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>110901-WW1</u>	Client: <u>ARCADIS</u>
Sampler: <u>WW</u>	Date: <u>9/1/11</u>
Well I.D.: <u>MW-11</u>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth (TD): <u>12.99</u>	Depth to Water (DTW): <u>6.05</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>7.34</u>	

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

1.0 (Gals.) X 3 = 3.0 Gals.
 1 Case Volume Specified Volumes Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1001	21.8	7.48	6160	231	1	yellow
1003	21.5	7.14	7434	969	2	
1005	21.8	7.20	7444	>1000	3	

Did well dewater? Yes No Gallons actually evacuated: 3

Sampling Date: 9/1/11 Sampling Time: 1220 Depth to Water: 8.23

Sample I.D.: MW-11 Laboratory: Kiff CalScience Other: TA-SF

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 #: 110901-WW1	Client: ARCADIS
Sampler: WW	Date: 9/1/11
Well I.D.: DW-1	Well Diameter: 2 3 4 <u>6</u> 8
Total Well Depth (TD): —	Depth to Water (DTW): 7.35
Depth to Free Product: 7.32	Thickness of Free Product (feet): 0.03
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

(Gals.) X 3 = _____ Gals.
 1 Case Volume Specified Volumes Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* SPH detected						
— NO SAMPLE TAKEN						

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: 9/1/11 Sampling Time: _____ Depth to Water: _____

Sample I.D.: _____ Laboratory: Kiff CalScience Other TA-SF

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

WELLHEAD INSPECTION CHECKLIST

Date 9/1/11 Client ARCADIS

Site Address 8400 PARKER DR. OAKLAND, CA

Job Number 110901-WW1 Technician MAN

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-2	O							
MW-3	P							
MW-4	X							
MW-8	X							
MW-9	P							
MW-10	P							
MW-11	P							
OW-1	X							

NOTES: _____

SPH or Purge Water Drum Log

Client: ARADIS

Site Address: 3400 PARDEE DR. OAKLAND, CA

STATUS OF DRUM(S) UPON ARRIVAL

Date	9/1/11				
Number of drum(s) empty:					
Number of drum(s) 1/4 full:					
Number of drum(s) 1/2 full:					
Number of drum(s) 3/4 full:					
Number of drum(s) full:					
Total drum(s) on site:	0				
Are the drum(s) properly labeled?					
Drum ID & Contents:					
If any drum(s) are partially or totally filled, what is the first use date:					

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

STATUS OF DRUM(S) UPON DEPARTURE

Date	9/1/11				
Number of drums empty:					
Number of drum(s) 1/4 full:					
Number of drum(s) 1/2 full:					
Number of drum(s) 3/4 full:	1				
Number of drum(s) full:					
Total drum(s) on site:	1				
Are the drum(s) properly labeled?	Yes				
Drum ID & Contents:	Drum 420				

LOCATION OF DRUM(S)

Describe location of drum(s): DRUM STORAGE AREA

FINAL STATUS

Number of new drum(s) left on site this event					
Date of inspection:	9/1/11				
Drum(s) labelled properly:	Yes				
Logged by BTS Field Tech:	WYD				
Office reviewed by:	WYD				

ARCADIS

Appendix B

UPS – Oakland Hub
Laboratory Analytical Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica San Francisco
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-37293-1
Client Project/Site: UPS-Oakland

For:
ARCADIS U.S. Inc
1000 Cobb Place Blvd NW
Suite 500-A
Kennesaw, Georgia 30144

Attn: Ms. Jennifer LeBeau



Authorized for release by:
09/08/2011 03:39:15 PM

Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

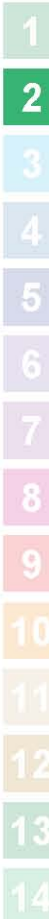


Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Detection Summary	5
Client Sample Results	6
QC Sample Results	13
QC Association Summary	16
Lab Chronicle	17
Certification Summary	19
Method Summary	20
Sample Summary	21
Chain of Custody	22
Receipt Checklists	23

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit (Dioxin)
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or method detection limit if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Job ID: 720-37293-1

Laboratory: TestAmerica San Francisco

Narrative

Job Narrative
720-37293-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

GC Semi VOA

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Client Sample ID: MW-2

Lab Sample ID: 720-37293-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.59		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Ethylbenzene	0.98		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Toluene	4.9		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Xylenes, Total	10		1.0		ug/L	1		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	140		50		ug/L	1		8260B/CA_LUFTM	Total/NA
Diesel Range Organics [C10-C28]	4600		51		ug/L	1		8015B	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 720-37293-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	1.7		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Xylenes, Total	2.1		1.0		ug/L	1		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	450		50		ug/L	1		8260B/CA_LUFTM	Total/NA
Diesel Range Organics [C10-C28]	24000		500		ug/L	10		8015B	Total/NA

Client Sample ID: MW-4

Lab Sample ID: 720-37293-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C5-C12	430		50		ug/L	1		8260B/CA_LUFTM	Total/NA
Diesel Range Organics [C10-C28]	7700		140		ug/L	3		8015B	Total/NA

Client Sample ID: MW-8

Lab Sample ID: 720-37293-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	200		50		ug/L	1		8015B	Total/NA

Client Sample ID: MW-9

Lab Sample ID: 720-37293-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.55		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Diesel Range Organics [C10-C28]	240		47		ug/L	1		8015B	Total/NA

Client Sample ID: MW-10

Lab Sample ID: 720-37293-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	250		51		ug/L	1		8015B	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 720-37293-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1100		51		ug/L	1		8015B	Total/NA

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Client Sample ID: MW-2
Date Collected: 09/01/11 13:10
Date Received: 09/01/11 16:45

Lab Sample ID: 720-37293-1
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/03/11 15:14	1
Benzene	0.59		0.50		ug/L			09/03/11 15:14	1
Ethylbenzene	0.98		0.50		ug/L			09/03/11 15:14	1
Toluene	4.9		0.50		ug/L			09/03/11 15:14	1
Xylenes, Total	10		1.0		ug/L			09/03/11 15:14	1
Gasoline Range Organics (GRO) -C5-C12	140		50		ug/L			09/03/11 15:14	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		67 - 130					09/03/11 15:14	1
1,2-Dichloroethane-d4 (Surr)	93		67 - 130					09/03/11 15:14	1
Toluene-d8 (Surr)	97		70 - 130					09/03/11 15:14	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4600		51		ug/L		09/02/11 13:47	09/06/11 11:09	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	55		23 - 156				09/02/11 13:47	09/06/11 11:09	1

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Client Sample ID: MW-3

Lab Sample ID: 720-37293-2

Date Collected: 09/01/11 12:30

Matrix: Water

Date Received: 09/01/11 16:45

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/03/11 15:43	1
Benzene	ND		0.50		ug/L			09/03/11 15:43	1
Ethylbenzene	ND		0.50		ug/L			09/03/11 15:43	1
Toluene	1.7		0.50		ug/L			09/03/11 15:43	1
Xylenes, Total	2.1		1.0		ug/L			09/03/11 15:43	1
Gasoline Range Organics (GRO) -C5-C12	450		50		ug/L			09/03/11 15:43	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		67 - 130		09/03/11 15:43	1
1,2-Dichloroethane-d4 (Surr)	86		67 - 130		09/03/11 15:43	1
Toluene-d8 (Surr)	97		70 - 130		09/03/11 15:43	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	24000		500		ug/L		09/02/11 13:47	09/06/11 17:33	10

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	0	D	23 - 156	09/02/11 13:47	09/06/11 17:33	10

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Client Sample ID: MW-4

Lab Sample ID: 720-37293-3

Date Collected: 09/01/11 10:50

Matrix: Water

Date Received: 09/01/11 16:45

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/03/11 16:12	1
Benzene	ND		0.50		ug/L			09/03/11 16:12	1
Ethylbenzene	ND		0.50		ug/L			09/03/11 16:12	1
Toluene	ND		0.50		ug/L			09/03/11 16:12	1
Xylenes, Total	ND		1.0		ug/L			09/03/11 16:12	1
Gasoline Range Organics (GRO) -C5-C12	430		50		ug/L			09/03/11 16:12	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130		09/03/11 16:12	1
1,2-Dichloroethane-d4 (Surr)	93		67 - 130		09/03/11 16:12	1
Toluene-d8 (Surr)	99		70 - 130		09/03/11 16:12	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	7700		140		ug/L		09/02/11 13:47	09/06/11 17:58	3

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	89		23 - 156	09/02/11 13:47	09/06/11 17:58	3

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Client Sample ID: MW-8
 Date Collected: 09/01/11 13:25
 Date Received: 09/01/11 16:45

Lab Sample ID: 720-37293-4
 Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/03/11 16:41	1
Benzene	ND		0.50		ug/L			09/03/11 16:41	1
Ethylbenzene	ND		0.50		ug/L			09/03/11 16:41	1
Toluene	ND		0.50		ug/L			09/03/11 16:41	1
Xylenes, Total	ND		1.0		ug/L			09/03/11 16:41	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			09/03/11 16:41	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130					09/03/11 16:41	1
1,2-Dichloroethane-d4 (Surr)	88		67 - 130					09/03/11 16:41	1
Toluene-d8 (Surr)	97		70 - 130					09/03/11 16:41	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	200		50		ug/L		09/02/11 13:47	09/06/11 18:47	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	100		23 - 156				09/02/11 13:47	09/06/11 18:47	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Client Sample ID: MW-9

Lab Sample ID: 720-37293-5

Date Collected: 09/01/11 13:45

Matrix: Water

Date Received: 09/01/11 16:45

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/03/11 18:37	1
Benzene	ND		0.50		ug/L			09/03/11 18:37	1
Ethylbenzene	ND		0.50		ug/L			09/03/11 18:37	1
Toluene	0.55		0.50		ug/L			09/03/11 18:37	1
Xylenes, Total	ND		1.0		ug/L			09/03/11 18:37	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			09/03/11 18:37	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130					09/03/11 18:37	1
1,2-Dichloroethane-d4 (Surr)	102		67 - 130					09/03/11 18:37	1
Toluene-d8 (Surr)	97		70 - 130					09/03/11 18:37	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	240		47		ug/L		09/02/11 13:47	09/06/11 13:42	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	82		23 - 156				09/02/11 13:47	09/06/11 13:42	1

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Client Sample ID: MW-10

Lab Sample ID: 720-37293-6

Date Collected: 09/01/11 09:50

Matrix: Water

Date Received: 09/01/11 16:45

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/03/11 19:05	1
Benzene	ND		0.50		ug/L			09/03/11 19:05	1
Ethylbenzene	ND		0.50		ug/L			09/03/11 19:05	1
Toluene	ND		0.50		ug/L			09/03/11 19:05	1
Xylenes, Total	ND		1.0		ug/L			09/03/11 19:05	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			09/03/11 19:05	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130		09/03/11 19:05	1
1,2-Dichloroethane-d4 (Surr)	100		67 - 130		09/03/11 19:05	1
Toluene-d8 (Surr)	97		70 - 130		09/03/11 19:05	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	250		51		ug/L		09/02/11 13:47	09/06/11 15:56	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	93		23 - 156	09/02/11 13:47	09/06/11 15:56	1

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Client Sample ID: MW-11

Lab Sample ID: 720-37293-7

Date Collected: 09/01/11 12:20

Matrix: Water

Date Received: 09/01/11 16:45

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/03/11 19:34	1
Benzene	ND		0.50		ug/L			09/03/11 19:34	1
Ethylbenzene	ND		0.50		ug/L			09/03/11 19:34	1
Toluene	ND		0.50		ug/L			09/03/11 19:34	1
Xylenes, Total	ND		1.0		ug/L			09/03/11 19:34	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			09/03/11 19:34	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		67 - 130		09/03/11 19:34	1
1,2-Dichloroethane-d4 (Surr)	100		67 - 130		09/03/11 19:34	1
Toluene-d8 (Surr)	98		70 - 130		09/03/11 19:34	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1100		51		ug/L		09/02/11 13:47	09/06/11 16:20	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	73		23 - 156	09/02/11 13:47	09/06/11 16:20	1

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-98472/4

Matrix: Water

Analysis Batch: 98472

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/03/11 11:09	1
Benzene	ND		0.50		ug/L			09/03/11 11:09	1
Ethylbenzene	ND		0.50		ug/L			09/03/11 11:09	1
Toluene	ND		0.50		ug/L			09/03/11 11:09	1
Xylenes, Total	ND		1.0		ug/L			09/03/11 11:09	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			09/03/11 11:09	1

Surrogate	MB % Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		67 - 130		09/03/11 11:09	1
1,2-Dichloroethane-d4 (Surr)	83		67 - 130		09/03/11 11:09	1
Toluene-d8 (Surr)	96		70 - 130		09/03/11 11:09	1

Lab Sample ID: LCS 720-98472/5

Matrix: Water

Analysis Batch: 98472

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Methyl tert-butyl ether	25.0	20.2		ug/L		81	62 - 130
Benzene	25.0	25.5		ug/L		102	82 - 127
Ethylbenzene	25.0	28.9		ug/L		116	86 - 135
Toluene	25.0	27.8		ug/L		111	83 - 129
m-Xylene & p-Xylene	50.0	60.3		ug/L		121	70 - 142
o-Xylene	25.0	28.0		ug/L		112	89 - 136

Surrogate	LCS % Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	77		67 - 130
Toluene-d8 (Surr)	97		70 - 130

Lab Sample ID: LCS 720-98472/7

Matrix: Water

Analysis Batch: 98472

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	500	458		ug/L		92	62 - 117

Surrogate	LCS % Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	85		67 - 130
Toluene-d8 (Surr)	97		70 - 130

Lab Sample ID: LCSD 720-98472/6

Matrix: Water

Analysis Batch: 98472

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	20.6		ug/L		82	62 - 130	2	20

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-98472/6

Matrix: Water

Analysis Batch: 98472

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	25.0	25.0		ug/L		100	82 - 127	2	20
Ethylbenzene	25.0	28.0		ug/L		112	86 - 135	3	20
Toluene	25.0	27.2		ug/L		109	83 - 129	2	20
m-Xylene & p-Xylene	50.0	58.7		ug/L		117	70 - 142	3	20
o-Xylene	25.0	27.5		ug/L		110	89 - 136	2	20

Surrogate	LCSD % Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	81		67 - 130
Toluene-d8 (Surr)	96		70 - 130

Lab Sample ID: LCSD 720-98472/8

Matrix: Water

Analysis Batch: 98472

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12	500	424		ug/L		85	62 - 117	8	20

Surrogate	LCSD % Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	86		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-98424/1-A

Matrix: Water

Analysis Batch: 98499

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 98424

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		09/02/11 13:47	09/06/11 09:51	1

Surrogate	MB % Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	102		23 - 156	09/02/11 13:47	09/06/11 09:51	1

Lab Sample ID: LCS 720-98424/2-A

Matrix: Water

Analysis Batch: 98499

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 98424

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics [C10-C28]	2500	1640		ug/L		66	40 - 150

Surrogate	LCS % Recovery	LCS Qualifier	Limits
p-Terphenyl	106		23 - 156

QC Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 720-98424/3-A
 Matrix: Water
 Analysis Batch: 98499

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 98424

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	1510		ug/L		60	40 - 150	8	35

Surrogate	% Recovery	LCSD Qualifier	LCSD Limits
p-Terphenyl	103		23 - 156

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

GC/MS VOA

Analysis Batch: 98472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37293-1	MW-2	Total/NA	Water	8260B/CA_LUFT MS	
720-37293-2	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
720-37293-3	MW-4	Total/NA	Water	8260B/CA_LUFT MS	
720-37293-4	MW-8	Total/NA	Water	8260B/CA_LUFT MS	
720-37293-5	MW-9	Total/NA	Water	8260B/CA_LUFT MS	
720-37293-6	MW-10	Total/NA	Water	8260B/CA_LUFT MS	
720-37293-7	MW-11	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-98472/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-98472/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-98472/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-98472/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-98472/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

GC Semi VOA

Prep Batch: 98424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37293-1	MW-2	Total/NA	Water	3510C	
720-37293-2	MW-3	Total/NA	Water	3510C	
720-37293-3	MW-4	Total/NA	Water	3510C	
720-37293-4	MW-8	Total/NA	Water	3510C	
720-37293-5	MW-9	Total/NA	Water	3510C	
720-37293-6	MW-10	Total/NA	Water	3510C	
720-37293-7	MW-11	Total/NA	Water	3510C	
LCS 720-98424/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-98424/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-98424/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 98499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-37293-1	MW-2	Total/NA	Water	8015B	98424
720-37293-2	MW-3	Total/NA	Water	8015B	98424
720-37293-3	MW-4	Total/NA	Water	8015B	98424
720-37293-4	MW-8	Total/NA	Water	8015B	98424
720-37293-5	MW-9	Total/NA	Water	8015B	98424
720-37293-6	MW-10	Total/NA	Water	8015B	98424
720-37293-7	MW-11	Total/NA	Water	8015B	98424
LCS 720-98424/2-A	Lab Control Sample	Total/NA	Water	8015B	98424
LCSD 720-98424/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	98424
MB 720-98424/1-A	Method Blank	Total/NA	Water	8015B	98424

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Client Sample ID: MW-2

Lab Sample ID: 720-37293-1

Date Collected: 09/01/11 13:10

Matrix: Water

Date Received: 09/01/11 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	98472	09/03/11 15:14	LL	TAL SF
Total/NA	Prep	3510C			98424	09/02/11 13:47	RU	TAL SF
Total/NA	Analysis	8015B		1	98499	09/06/11 11:09	DH	TAL SF

Client Sample ID: MW-3

Lab Sample ID: 720-37293-2

Date Collected: 09/01/11 12:30

Matrix: Water

Date Received: 09/01/11 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	98472	09/03/11 15:43	LL	TAL SF
Total/NA	Prep	3510C			98424	09/02/11 13:47	RU	TAL SF
Total/NA	Analysis	8015B		10	98499	09/06/11 17:33	DH	TAL SF

Client Sample ID: MW-4

Lab Sample ID: 720-37293-3

Date Collected: 09/01/11 10:50

Matrix: Water

Date Received: 09/01/11 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	98472	09/03/11 16:12	LL	TAL SF
Total/NA	Prep	3510C			98424	09/02/11 13:47	RU	TAL SF
Total/NA	Analysis	8015B		3	98499	09/06/11 17:58	DH	TAL SF

Client Sample ID: MW-8

Lab Sample ID: 720-37293-4

Date Collected: 09/01/11 13:25

Matrix: Water

Date Received: 09/01/11 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	98472	09/03/11 16:41	LL	TAL SF
Total/NA	Prep	3510C			98424	09/02/11 13:47	RU	TAL SF
Total/NA	Analysis	8015B		1	98499	09/06/11 18:47	DH	TAL SF

Client Sample ID: MW-9

Lab Sample ID: 720-37293-5

Date Collected: 09/01/11 13:45

Matrix: Water

Date Received: 09/01/11 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	98472	09/03/11 18:37	LL	TAL SF
Total/NA	Prep	3510C			98424	09/02/11 13:47	RU	TAL SF
Total/NA	Analysis	8015B		1	98499	09/06/11 13:42	DH	TAL SF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Client Sample ID: MW-10

Lab Sample ID: 720-37293-6

Date Collected: 09/01/11 09:50

Matrix: Water

Date Received: 09/01/11 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	98472	09/03/11 19:05	LL	TAL SF
Total/NA	Prep	3510C			98424	09/02/11 13:47	RU	TAL SF
Total/NA	Analysis	8015B		1	98499	09/06/11 15:56	DH	TAL SF

Client Sample ID: MW-11

Lab Sample ID: 720-37293-7

Date Collected: 09/01/11 12:20

Matrix: Water

Date Received: 09/01/11 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	98472	09/03/11 19:34	LL	TAL SF
Total/NA	Prep	3510C			98424	09/02/11 13:47	RU	TAL SF
Total/NA	Analysis	8015B		1	98499	09/06/11 16:20	DH	TAL SF

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica San Francisco	California	State Program	9	2496

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL SF
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF

Protocol References:

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

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

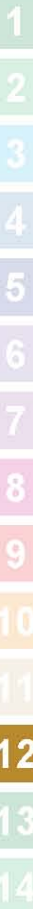
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: UPS-Oakland

TestAmerica Job ID: 720-37293-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-37293-1	MW-2	Water	09/01/11 13:10	09/01/11 16:45
720-37293-2	MW-3	Water	09/01/11 12:30	09/01/11 16:45
720-37293-3	MW-4	Water	09/01/11 10:50	09/01/11 16:45
720-37293-4	MW-8	Water	09/01/11 13:25	09/01/11 16:45
720-37293-5	MW-9	Water	09/01/11 13:45	09/01/11 16:45
720-37293-6	MW-10	Water	09/01/11 09:50	09/01/11 16:45
720-37293-7	MW-11	Water	09/01/11 12:20	09/01/11 16:45



BLAINE

TECH SERVICES, INC.

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

720-37293

TA - SF 133035 DHS #

CONDUCT ANALYSIS TO DETECT

LAB

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

- EPA
- LIA
- OTHER
- RWQCB REGION _____

SPECIAL INSTRUCTIONS

Invoice and Report to : Arcadis U.S., Inc.
Attn: Hugh Devery hugh.devery@arcadis-us.com
770-428-9009

Low Detection levels requested

CHAIN OF CUSTODY
BTS # 110901-wwi

CLIENT
ARCADIS U.S., Inc.

SITE
UPS

8400 Pardee Drive

Oakland, CA

SAMPLE I.D.	DATE	TIME	MATRIX	TOTAL	CONTAINERS	C = COMPOSITE ALL CONTAINERS	TPH-Gro, BTEX, MTBE (8260)	TPH-D (8015)											ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #			
			S= SOIL W=H ₂ O																						
MW-2	9/1/11	1310	W	5			0	0																	
MW-3		1230					0	0																	
MW-4		1050					0	0																	
MW-8		1325					0	0																	
MW-9		1345					0	0																	
MW-10		0950					0	0																	
MW-11		1220					0	0																	

SAMPLING COMPLETED	DATE 9/1/11	TIME 1345	SAMPLING PERFORMED BY	WILLIAM WONG	RESULTS NEEDED	NO LATER THAN	Standard TAT	36°C
RELEASED BY	DATE 9/1/11	TIME 1505	RECEIVED BY	SAMORÉ	DATE 9/1/11	TIME 1505		
RELEASED BY	DATE 9/1/11	TIME 1525	RECEIVED BY	(TASE)	DATE 9/1/11	TIME 1525		
RELEASED BY	DATE 09/01/11	TIME 1645	RECEIVED BY		DATE 9/1/11	TIME 1645		
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #					

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-37293-1

Login Number: 37293

List Source: TestAmerica San Francisco

List Number: 1

Creator: Apostol, Anita

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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	
Sample Preservation Verified.	N/A	
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

