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By Alameda County Environmental Health 9:23 am, Sep 27, 2016



Mr. Keith Nowell  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502

Subject:  
Second Semiannual 2016 Groundwater Monitoring Report  
UPS Oakland Hub  
8400 Pardee Drive, Oakland, CA 94621  
Global ID #T0600100939  
State ID #583  
USEPA ID #CAD 09707509

Dear Mr. Nowell:

Attached please find the *Second Semiannual 2016 Groundwater Monitoring Report* for the above-referenced site (the Site). The report, which was prepared for United Parcel Service (UPS) by Arcadis U.S., Inc., presents the results of the semiannual groundwater monitoring event that was performed at the Site on August 18, 2016. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached *Second Semiannual 2016 Groundwater Monitoring Report* are true and correct.

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

Sincerely,

United Parcel Service

*Mario Valdes*

Mario Valdes  
Remediation and Assessment Manager

Enclosure



# SECOND SEMIANNUAL 2016 GROUNDWATER MONITORING REPORT

UPS Oakland Hub  
8400 Pardee Drive  
Oakland, California

September 23, 2016

## SECOND SEMIANNUAL 2016 GROUNDWATER MONITORING REPORT



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Mark A. Myers  
Geologist 2

UPS Oakland Hub  
8400 Pardee Drive  
Oakland, California

Prepared for:  
United Parcel Service



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Jennifer Halcomb-LeBeau  
Project Geologist

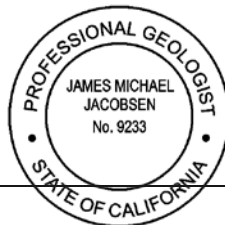
Prepared by:  
Arcadis U.S., Inc.  
100 Montgomery Street  
Suite 300  
San Francisco  
California 94104  
Tel 415 374 2744  
Fax 415 374 2745

Our Ref.:  
B0038398.0026



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James M. Jacobsen  
Project Geologist  
Professional Geologist – CA No. 9233



Date:  
September 23, 2016

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## ACRONYMS AND ABBREVIATIONS

amsl	above mean sea level
Arcadis	Arcadis U.S., Inc.
BTEX	benzene, toluene, ethylbenzene, and total xylenes
COCs	constituents-of-concern
ESL	environmental screening level
FP	free product
µg/L	micrograms per liter
MTBE	methyl tert-butyl ether
PAH	polycyclic aromatic hydrocarbon
RWQCB	Regional Water Quality Control Board
SGC	silica gel cleanup
TDS	total dissolved solids
TPH-DRO	total petroleum hydrocarbons as diesel range organics
TPH-GRO	total petroleum hydrocarbons as gasoline range organics
UPS	United Parcel Service
USEPA	United States Environmental Protection Agency

## 1 INTRODUCTION

On behalf of United Parcel Service (UPS), Arcadis U.S., Inc. (Arcadis) is submitting this Second Semiannual 2016 Groundwater Monitoring Report for the UPS Oakland Hub located at 8400 Pardee Drive in Oakland, California (the site; **Figure 1**). This report summarizes groundwater monitoring activities conducted on August 18 and 19, 2016, in accordance with the Corrective Action Plan (Arcadis 2011).

## 2 BACKGROUND

Historical aerial photographs from 1937 to the present indicate that the site, which UPS leases from the Port of Oakland, was originally a tidal marsh. In 1968, the site and site vicinity were raised above mean sea level (amsl), with what is suspected to be imported fill, and graded. This artificial fill has been documented to be present in both the northern and southern former fueling areas at depths ranging from 2 to 10 feet below ground surface. Currently, the grade at the site is approximately 10 feet amsl. The site is located on a narrow peninsula south of San Leandro Bay.

The site is used as an active package distribution facility and for vehicle maintenance. The area around the site is characterized by medium to heavy industrial use and includes the nearby Oakland International Airport.

Detailed historical information has been provided in previous reports. A facility layout map and site map are included as **Figure 2** and **Figure 3**, respectively.

## 3 GROUNDWATER MONITORING ACTIVITIES

Groundwater monitoring activities were completed at the site on August 18, 2016. Depth to product, if present, and depth to water were measured in monitoring and injection wells prior to sample collection using an oil-water interface probe.

Groundwater samples were collected for laboratory analysis from twenty-one (21) monitoring wells MW-3, MW-4, MW-8, MW-9, MW-10, MW-11, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, MW-23, MW-25, MW-26, MW-27, MW-28, and MW-29 and four (4) injection wells IW-3, IW-4, IW-5, and IW-6. Groundwater samples were not collected from monitoring wells MW-2, MW-12, MW-22, and MW-24, observation well OW-1, and injection wells IW-1 and IW-2 due to the presence of free product (FP).

Prior to sampling and while purging the monitoring wells, groundwater parameters (pH, temperature, turbidity, and conductivity) were monitored to evaluate stabilization. Samples were collected after three monitoring well casing volumes were removed or after the well dewatered. If a well dewatered, standard procedure was followed, which entailed allowing the monitoring well to recharge for at least two hours or to 80 percent of the initial casing volume, whichever scenario occurred first. Purge water was containerized in United States Department of Transportation-approved 55-gallon steel drum(s), sealed, and labeled. The purged water will be characterized and profiled for transportation for disposal. Information regarding the waste event will be provided in a subsequent submittal. Copies of the groundwater gauging and sampling logs are provided in **Appendix A**.

Groundwater samples collected during the sampling event were submitted to TestAmerica Laboratories, Inc. in Pleasanton, California, for analysis of the following constituents-of-concern (COCs):

- Benzene, toluene, ethylbenzene, and total xylenes (BTEX); methyl tert-butyl ether (MTBE); and naphthalene by United States Environmental Protection Agency (USEPA) Method 8260B
- Total petroleum hydrocarbons as diesel range organics (TPH-DRO) with and without silica gel cleanup (SGC) by USEPA Method 8015B
- Total petroleum hydrocarbons in the gasoline range organics (TPH-GRO) by USEPA Method 8260B/California Leaking Underground Fuel Tank
- Naphthalene by USEPA Method 8260 and USEPA Method 8270
- Polycyclic aromatic hydrocarbons (PAHs) by USEPA Method 8270
- Dissolved methane by RSK-175
- Total dissolved solids (TDS) by SM2540

## 4 GROUNDWATER MONITORING RESULTS

The following subsections summarize the results of groundwater monitoring activities completed at the site during the reporting period.

### 4.1 Well Gauging Results

On August 18, 2016, groundwater elevations ranged from 0.86 foot amsl in monitoring well MW-10 to 6.94 feet amsl in monitoring well MW-9. Depth to groundwater ranged from 3.91 feet below ground surface (bgs) in monitoring well MW-8 to 8.82 ft bgs in monitoring well MW-10. During the monitoring event, measurable FP was detected in four monitoring wells (MW-2, MW-12, MW-22, and MW-24), one observation well (OW-1), and two injection wells (IW-1 and IW-2). Measurable FP thicknesses ranged from a minimum of 0.02 foot in monitoring wells MW-2 and MW-22 to a maximum of 0.34 foot in monitoring well MW-24. As of August 18, 2016 approximately 9.93 gallons of FP had been removed from the site; however, no FP was removed during this reporting period.

Historical groundwater gauging and elevation data are summarized in **Table 1**. A groundwater contour map prepared using groundwater elevation data and is presented as **Figure 4**. The direction of groundwater flow was generally to the southeast during the monitoring event with a northeast component caused by the former underground storage tank pit. The groundwater flow direction is generally consistent with historical data. Well gauging data are included in field documents provided in **Appendix A**.

### 4.2 Groundwater Sampling Results

Detected concentrations of COCs were compared to the California Regional Water Quality Control Board (RWQCB) San Francisco Bay Region Environmental Screening Levels (Tier 1 ESLs; RWQCB Feb. 2016). At the request of RWQCB, TPH-DRO was analyzed with and without SCG and naphthalene was

analyzed by USEPA Methods 8260 and 8270. The laboratory analytical results for the August 2016 groundwater monitoring event are summarized as follows:

- BTEX and MTBE were not detected at concentrations exceeding the drinking water RWQCB ESLs.
- TPH-GRO was detected at concentrations exceeding the RWQCB ESL of 100 micrograms per liter ( $\mu\text{g/L}$ ) in monitoring wells MW-3 (270  $\mu\text{g/L}$ ), MW-8 (270  $\mu\text{g/L}$ ), and MW-21 (290  $\mu\text{g/L}$ ) and in injection wells IW-4 (400  $\mu\text{g/L}$ ), IW-5 (610  $\mu\text{g/L}$ ), and IW-6 (220  $\mu\text{g/L}$ ).
- TPH-DRO with SGC concentrations exceeded the drinking water RWQCB ESL of 100  $\mu\text{g/L}$  in monitoring wells MW-3 (970  $\mu\text{g/L}$ ), MW-4 (670  $\mu\text{g/L}$ ), MW-19 (180  $\mu\text{g/L}$ ), MW-20 (130  $\mu\text{g/L}$ ), MW-21 (1,700  $\mu\text{g/L}$ ), MW-23 (1,400  $\mu\text{g/L}$ ), and MW-25 (1,300  $\mu\text{g/L}$ ) and in injection wells IW-4 (14,000  $\mu\text{g/L}$ ), IW-5 (50,000  $\mu\text{g/L}$ ), and IW-6 (1,200  $\mu\text{g/L}$ ). TPH-DRO results without silica gel cleanup are included in **Table 2**.
- Naphthalene, analyzed by USEPA Method 8270, was detected exceeding the drinking water RWQCB ESL of 0.12  $\mu\text{g/L}$  in monitoring wells MW-3 (0.53  $\mu\text{g/L}$ ), MW-4 (0.36  $\mu\text{g/L}$ ), MW-8 (4.7  $\mu\text{g/L}$ ), MW-13 (0.13  $\mu\text{g/L}$ ), MW-19 (0.28  $\mu\text{g/L}$ ), MW-21 (0.86  $\mu\text{g/L}$ ), MW-23 (0.94  $\mu\text{g/L}$ ), MW-25 (240  $\mu\text{g/L}$ ), MW-28 (0.23  $\mu\text{g/L}$ ), and MW-29 (0.21  $\mu\text{g/L}$ ) and in injection wells IW-3 (0.20  $\mu\text{g/L}$ ), IW-4 (1  $\mu\text{g/L}$ ), IW-5 (3.6  $\mu\text{g/L}$ ), and IW-6 (0.33  $\mu\text{g/L}$ ).
- Fluorene was detected at concentrations exceeding the drinking water RWQCB ESL of 3.9  $\mu\text{g/L}$  in monitoring wells MW-3 (4.3  $\mu\text{g/L}$ ), MW-25 (49  $\mu\text{g/L}$ ) and in injection well IW-5 (13  $\mu\text{g/L}$ ).
- Acenaphthene was detected at a concentration exceeding the drinking water RWQCB ESL of 20  $\mu\text{g/L}$  in monitoring well MW-25 (57  $\mu\text{g/L}$ ).
- Anthracene was detected at a concentration exceeding the drinking water RWQCB ESL of 0.73  $\mu\text{g/L}$  in monitoring well MW-25 (7.9  $\mu\text{g/L}$ ).
- Benzo(a)anthracene was detected at a concentration exceeding the drinking water RWQCB ESL of 0.027  $\mu\text{g/L}$  in monitoring well MW-25 (2.4  $\mu\text{g/L}$ ).
- Chrysene was detected at a concentration exceeding the drinking water RWQCB ESL of 0.49  $\mu\text{g/L}$  in monitoring well MW-25 (2  $\mu\text{g/L}$ ).
- Fluoranthene was detected at a concentration exceeding the drinking water RWQCB ESL of 8  $\mu\text{g/L}$  in monitoring well MW-25 (21  $\mu\text{g/L}$ ).
- Phenanthrene was detected at a concentration exceeding the drinking water RWQCB ESL of 4.6  $\mu\text{g/L}$  in monitoring well MW-25 (83  $\mu\text{g/L}$ ).
- Pyrene was detected at a concentration exceeding the drinking water RWQCB ESL of 2  $\mu\text{g/L}$  in monitoring well MW-25 (10  $\mu\text{g/L}$ ).
- Dissolved methane was detected in all monitoring and injection wells that were sampled with concentrations ranging from 1,600 to 6,300  $\mu\text{g/L}$ .

Analytical data for the August 18, 2016 sampling event are summarized in **Table 2** and **Table 3** and depicted on **Figure 5**. Laboratory analytical results and chain-of-custody documentation for the sampling event are included in **Appendix B**.



## 5 SUMMARY

The following is a summary of data and evaluations related to the groundwater monitoring activities completed during the reporting period:

- Local groundwater elevations ranged between 0.86 and 6.94 feet amsl. The apparent groundwater flow direction was generally to the southeast; however, exhibits a northeast component in the area of monitoring well MW-12. These observations are generally consistent with historical gauging data.
- Measurable FP was detected in four monitoring wells (MW-2, MW-12, MW-22, and MW-24), two injection wells (IW-1 and IW-2), and one observation well (OW-1) during the August 18, 2016, monitoring event. FP thicknesses ranged from 0.02 to 0.34 foot. Free product appears to be stable in thickness and wells present.
- Vapor phase methane was detected within the headspace of the monitoring and injection wells that were screened. The highest concentrations were detected at monitoring well MW-24 and ranged from 12.6 to 55.2 percent by volume (**Table 4**).
- BTEX and MTBE concentrations were not detected exceeding the RWQCB ESLs for drinking water.
- TPH-GRO was detected at concentrations exceeding the RWQCB ESL for drinking water in monitoring wells MW-3, MW-8, and MW-21 and in injection wells IW-4, IW-5, and IW-6.
- TPH-DRO with SGC was detected at concentrations exceeding the RWQCB ESL in monitoring wells MW-3, MW-4, MW-19, MW-20, MW-21, MW-23, and MW-25 and in injection wells IW-4, IW-5, and IW-6.
- Fluorene was detected at concentrations exceeding the RWQCB ESL in monitoring wells MW-3 and MW-25, and in injection well IW-5.
- Acenaphthene, anthracene, benzo(a)anthracene, chrysene, fluoranthene, phenanthrene and pyrene were detected exceeding their respectively RWQCB ESLs in monitoring well MW-25.
- Naphthalene, using USEPA Method 8270, was detected at concentrations exceeding the RWQCB ESL for drinking water in monitoring wells MW-3, MW-4, MW-8, MW-13, MW-19, MW-21, MW-23, MW-25, MW-28, and MW-29, and in injection wells IW-3, IW-4, IW-5, and IW-6.
- Dissolved phase concentrations are stable.

## 6 RECOMMENDATIONS

Arcadis will continue to perform groundwater monitoring on a semiannual basis at the site. Groundwater monitoring will continue to include monitoring for the presence of dissolved methane. Vapor phase methane readings will also be taken from the wellhead from monitoring ports using a portable personal air sampling pump or syringe and analyzed using a multi-gas meter fitted with a carbon filter. This additional data are being collected to evaluate the explosive hazard associated with the potential buildup of methane gas.

Because carbon filters cannot remove all hydrocarbon interferences, a scope of work is being developed to directly sample soil gas for methane with the installation of soil vapor probes. The locations that will be

targeted for the collection of soil gas samples will include the southwest side of the air express building and the northeast corner of the warehouse. These locations coincide with monitoring wells exhibiting FP; therefore, the soil gas data will be most reflective of the potential methane hazard related to the biogenesis process.

Arcadis will be conducting the additional subsurface investigation east of borings FPB-16 and FPB-17 (MW-26 and MW-27), north of borings FPB-18 and FPB-19 (MW-28 and MW-29), and south of boring FPB-8 (MW-19). These borings are being advanced to complete the tasks outlined in the July 2015 Work Plan and subsequent Field Investigation and Second Semiannual Groundwater Monitoring Report. Arcadis' goal is to fully characterize site conditions prior to recommending a path forward.

## 7 REFERENCES

- Arcadis. 2011. Corrective Action Plan, UPS Oakland Hub, 8400 Pardee Drive, Oakland, California. December.
- Arcadis. 2015. Field Investigation and Second Semiannual Groundwater Monitoring Report. November.
- RWQCB. 2016. Environmental Screening Levels ([http://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/esl.shtml](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.shtml)). February.

# TABLES



**Table 1**  
**Historical Groundwater Elevation Summary**  
UPS Oakland Hub  
8400 Pardee Drive, Oakland, California  
Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-1	7.43	8/28/1990	3.80	3.63	0.00	NR
		9/20/1990	3.99	3.44	0.00	NR
		6/19/1991	3.47	3.96	NM	NR
		7/23/1991	3.70	3.73	NM	NR
		8/26/1991	3.92	3.51	NM	NR
		11/18/1991	4.21	3.22	NM	NR
		2/3/1992	3.99	3.44	NM	NR
		6/29/1992	3.38	4.05	NM	NR
		6/23/1993	2.72	4.71	NM	NR
		10/11/1993	3.87	3.56	NM	NR
		1/4/1994	3.34	4.09	NM	NR
		5/10/1994	2.14	5.29	NM	NR
		2/1/1995	1.84	5.59	NM	NR
		8/2/1995	3.10	4.33	NM	NR
		10/16/1995	3.75	3.68	NM	NR
		12/28/1995	3.56	3.87	NM	NR
		6/4/1997	3.16	4.27	0.00	NR
		9/30/1999	3.75	3.68	0.00	NR
		10/11/2000	3.88	3.55	0.00	NR
		9/3/2002	3.73	3.70	0.00	NR
		10/22/2002	5.11	2.36	0.05	NR
		12/23/2002	3.51	3.92	0.00	NR
		3/28/2003	3.52	3.91	0.00	NR
		5/30/2003	3.37	4.06	0.00	NR
		6/20/2003	3.50	3.93	0.00	NR
		7/14/2003	3.65	3.78	0.00	NR
		8/25/2003	3.87	3.56	0.00	NR
		9/9/2003	4.02	3.41	0.00	NR
		9/25/2003	4.10	3.33	0.00	NR
		10/28/2003	4.29	3.14	0.00	NR
		11/18/2003	4.32	3.11	0.00	NR
		12/2/2003	4.34	3.09	0.00	NR
		1/27/2004	3.88	3.55	0.00	NR
		2/24/2004	2.75	4.68	0.00	NR
		3/29/2004	3.45	3.98	0.00	NR
		4/19/2004	3.55	3.88	0.00	NR
		5/20/2004	3.69	3.74	0.00	NR
		6/22/2004	3.81	3.62	0.00	NR
		7/27/2004	3.99	3.44	0.00	NR
		8/24/2004	4.14	3.29	0.00	NR
9/29/2004	4.32	3.11	0.00	NR		
10/25/2004	3.89	3.54	0.00	NR		
12/15/2004	3.18	4.25	0.00	NR		
1/24/2005	2.69	4.74	0.00	NR		
2/23/2005	2.48	4.95	0.00	NR		
3/23/2005	2.21	5.22	0.00	NR		
4/29/2005	2.57	4.86	0.00	NR		
5/27/2005	2.68	4.75	0.00	NR		
6/29/2005	2.97	4.46	0.00	NR		
7/20/2005	3.13	4.30	0.00	NR		
8/24/2005	3.48	3.95	0.00	NR		
9/27/2005	3.69	3.74	0.00	NR		
10/19/2005	3.87	3.56	0.00	NR		
11/29/2005	3.79	3.64	0.00	NR		
12/29/2005	3.08	4.35	0.00	NR		
1/31/2006	2.91	4.52	0.00	NR		
2/28/2006	2.84	4.59	0.00	NR		
3/27/2006	2.26	5.17	0.00	NR		

**Table 1**  
**Historical Groundwater Elevation Summary**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-1	7.43	4/28/2006	2.40	5.03	0.00	NR
		6/27/2006	3.09	4.34	0.00	NR
		7/31/2006	3.35	4.08	0.00	NR
		8/29/2006	3.60	3.83	0.00	NR
		9/28/2006	3.90	3.53	0.00	NR
		10/27/2006	3.97	3.46	0.00	NR
		11/22/2006	3.64	3.79	0.00	NR
		12/26/2006	3.04	4.39	0.00	NR
		1/25/2007	3.26	4.17	0.00	NR
		2/16/2007	3.12	4.31	0.00	NR
		3/19/2007	2.91	4.52	0.00	NR
		4/26/2007	2.93	4.50	0.00	NR
		5/29/2007	3.15	4.28	0.00	NR
		6/28/2007	3.42	4.01	0.00	NR
		7/30/2007	3.60	3.83	0.00	NR
		8/30/2007	3.85	3.58	0.00	NR
		9/25/2007	4.00	3.43	0.00	NR
		10/29/2007	4.05	3.38	0.00	NR
		11/29/2007	4.10	3.33	0.00	NR
		12/28/2007	3.80	3.63	0.00	NR
		1/24/2008	3.14	4.29	0.00	NR
		2/21/2008	2.44	4.99	0.00	NR
		3/28/2008	2.84	4.59	0.00	NR
		4/30/2008	3.00	4.43	0.00	NR
		5/29/2008	3.24	4.19	0.00	NR
		6/25/2008	3.39	4.04	0.00	NR
		7/29/2008	3.64	3.79	0.00	NR
		8/27/2008	3.85	3.58	0.00	NR
		9/30/2008	4.08	3.35	0.00	NR
		10/31/2008	4.20	3.23	0.00	NR
11/26/2008	4.14	3.29	0.00	NR		
12/30/2008	3.94	3.49	0.00	NR		
1/22/2009	3.93	3.50	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	NA	NR
		6/19/1991	4.66	2.49	NA	NR
		7/23/1991	4.81	2.34	NA	NR
		8/26/1991	4.89	2.26	NA	NR
		11/18/1991	4.93	2.22	NA	NR
		2/3/1992	4.44	2.71	NA	NR
		6/29/1992	4.80	2.35	NA	NR
		6/23/1993	4.38	2.77	NA	NR
		10/11/1993	5.20	1.95	NA	NR
		1/4/1994	4.56	2.59	NA	NR
		5/10/1994	4.20	2.95	NA	NR
		2/1/1995	4.00	3.15	NA	NR
		8/2/1995	4.71	2.44	NA	NR
		10/16/1995	5.02	2.13	NA	NR
		12/28/1995	4.56	2.59	NA	NR
		6/12/1996	NM	--	0.25	NR
		6/4/1997	6.02	1.13	Small globules	NR
		9/30/1999	4.95	2.20	0.00	NR
		10/11/2000	4.97	2.25	0.08	NR
		2/12/2002	4.26	2.90	0.01	24.00
		9/3/2002	5.02	2.19	0.07	NR
		9/27/2002	4.89	2.34	0.09	222.30
10/22/2002	5.11	2.08	0.05	125.00		

**Table 1**  
**Historical Groundwater Elevation Summary**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-2	7.15	12/23/2002	4.25	2.93	0.04	99.00
		1/16/2003	4.28	2.89	0.02	49.00
		2/12/2003	4.26	2.90	0.01	24.00
		3/28/2003	4.35	2.81	0.01	25.00
		5/30/2003	3.60	3.57	0.02	49.00
		6/20/2003	4.55	2.61	0.01	NR
		7/14/2003	4.56	2.59	0.00	NR
		8/25/2003	4.79	2.37	0.01	25.00
		9/9/2003	4.90	2.26	0.01	NR
		9/25/2003	4.97	2.19	0.01	25.00
		10/28/2003	4.98	2.20	0.04	104.00
		11/18/2003	4.83	2.32	0.00	NR
		12/3/2003	4.87	2.28	0.00	NR
		1/27/2004	7.39	-0.24	0.00	NR
		2/24/2004	4.56	2.60	0.01	NR
		3/29/2004	4.24	2.92	0.01	NR
		4/19/2004	4.50	2.66	0.01	25.00
		5/20/2004	4.53	2.62	0.00	NR
		6/22/2004	4.65	2.50	0.00	NR
		7/27/2004	4.80	2.35	0.00	NR
		8/24/2004	5.93	1.22	0.00	NR
		9/29/2004	5.00	2.17	0.02	50.00
		10/25/2004	4.68	2.47	0.00	NR
		12/15/2004	4.34	2.83	0.02	50.00
		1/24/2005	4.15	3.00	0.00	NR
		2/23/2005	4.95	2.23	0.03	74.00
		3/23/2005	4.96	2.21	0.02	49.00
		4/29/2005	4.23	3.01	0.10	246.00
		5/27/2005	4.20	2.97	0.02	50.00
		6/29/2005	4.29	2.86	0.00	NR
		7/20/2005	4.48	2.70	0.04	98.00
		8/24/2005	4.71	2.44	0.00	NR
		9/27/2005	4.98	2.20	0.03	70.00
		10/19/2005	5.08	2.07	0.00	NR
		11/29/2005	4.68	2.48	0.01	NR
		12/29/2005	4.19	2.97	0.01	NR
		1/31/2006	4.05	3.10	0.00	NR
		2/28/2006	4.16	2.99	0.00	25.00
		3/27/2006	4.11	3.05	0.01	NR
		4/28/2006	4.03	3.12	0.00	NR
		6/27/2006	4.45	2.71	0.01	NR
		7/31/2006	4.60	2.57	0.02	NR
		8/29/2006	4.84	2.32	0.01	NR
9/28/2006	4.96	2.22	0.03	NR		
10/27/2006	4.98	2.17	0.00	NR		
11/22/2006	4.58	2.57	0.00	NR		
12/26/2006	4.22	2.95	0.02	NR		
1/25/2007	4.44	2.71	0.00	NR		
2/16/2007	4.13	3.02	0.00	NR		
3/19/2007	4.30	2.86	0.01	NR		
4/26/2007	4.17	3.01	0.03	NR		
5/29/2007	4.42	2.74	0.01	25.00		
6/28/2007	5.16	2.00	0.01	25.00		
7/30/2007	4.71	2.44	0.00	NR		
8/30/2007	4.94	2.24	0.03	NR		
9/25/2007	5.06	2.10	0.01	25.00		

**Table 1**  
**Historical Groundwater Elevation Summary**  
UPS Oakland Hub  
8400 Pardee Drive, Oakland, California  
Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-2	7.15	10/29/2007	4.75	2.41	0.01	25.00
		11/29/2007	4.69	2.46	0.00	NR
		12/28/2007	4.35	2.80	0.00	NR
		1/24/2008	4.08	3.07	0.00	NR
		2/21/2008	3.97	3.19	0.01	25.00
		3/28/2008	4.18	2.97	0.00	NR
		4/30/2008	4.40	2.75	0.00	NR
		5/29/2008	4.58	2.58	0.01	20.00
		6/25/2008	4.58	2.57	0.00	NR
		7/29/2008	4.85	2.30	0.00	NR
		8/27/2008	4.89	2.27	0.01	25.00
		9/30/2008	5.14	2.04	0.04	98.00
		10/31/2008	5.23	1.95	0.03	NR
		11/26/2008	4.74	2.44	0.04	NR
		12/30/2008	4.33	2.83	0.01	25.00
	1/22/2009	4.45	2.71	0.01	25.00	
	5/5/2010	4.03	5.71	0.13	NR	
	10/29/2010	4.98	4.72	0.08	NR	
	2/25/2011	3.73	5.90	0.00	NR	
	6/14/2011	4.23	5.40	0.00	0.00	
	7/19/2011	4.72	4.92	0.01	59.15	
	8/18/2011	4.80	4.83	sheen	0.00	
	9/1/2011	4.96	4.67	sheen	0.00	
	9/20/2011	5.08	4.55	0.01	591.47	
	10/19/2011	4.77	4.87	0.01	591.47	
	11/22/2011	4.92	4.72	0.01	532.32	
	12/26/2011	4.92	4.72	0.01	532.32	
	1/23/2012	5.20	4.67	0.28	561.83	
	2/15/2012	5.16	4.50	0.03	591.40	
	2/29/2012	4.75	4.90	0.02	NR	
	3/19/2012	4.42	5.21	0.00	NR	
	5/1/2012	4.18	5.48	0.03	532.32	
	6/5/2012	4.61	5.03	0.01	NR	
	7/3/2012	4.91	4.75	0.03	532.32	
	8/1/2012	4.93	4.71	0.01	NR	
	8/3/2012	4.985	4.69	0.05	591.47	
	10/25/2012	5.49	4.16	0.02	5.0	
	11/19/2012	5.21	4.42	0.00	25.0	
	12/20/2012	5.76	3.88	0.01	2.0	
	1/24/2013	4.81	4.82	0.00	0.0	
	2/25/2013	NM	--	--	--	
	2/26/2013	4.73	4.90	0.00	5.0	
	4/14/2013	NM	--	--	--	
	4/22/2013	4.69	4.94	0.00	5.0	
	5/15/2013	NM	-	-	-	
	5/30/2013	4.99	4.65	0.01	5.0	
6/26/2013	5.23	4.40	0.00	NR		
7/22/2013	5.15	4.53	0.06	NR		
8/12/2013	5.15	4.50	0.02	0.0		
9/25/2013	5.13	4.50	0.00	0.0		
10/28/2013	5.39	4.25	0.01	5.0		
11/27/2013	5.20	4.45	0.02	NR		
12/27/2013	5.52	4.11	0.00	0.0		
1/29/2014	5.50	4.15	0.02	0.0		
2/5/2014	5.45	4.18	0.00	0.0		
3/28/2014	4.43	5.20	0.00	NR		
4/29/2014	4.71	4.94	0.02	5.0		
	9.63					

**Table 1**  
**Historical Groundwater Elevation Summary**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-2	9.63	5/28/2014	4.69	4.94	0.00	NR
		6/27/2014	5.01	4.73	0.13	NR
		7/31/2014	4.99	4.71	0.08	0.0
		8/29/2014	5.30	4.35	0.02	NR
		9/23/2014	4.82	4.89	0.09	5.0
		10/22/2014	5.08	4.63	0.09	0.0
		12/29/2014	4.44	5.19	0.00	0.0
		1/30/2015	4.61	5.06	0.05	0.0
		2/5/2015	4.61	5.03	0.01	25
		9/1/2015	5.04	4.59	0.00	NR
		2/26/2016	4.21	5.42	sheen	NR
		8/18/2016	5.00	4.65	0.02	180
MW-2 Product recovered prior to skimmer installation (Pre 6/14/2011):						1826.30
MW-2 Product recovered post-skimmer installation (Post 6/14/2011):						5383.07
MW-2 Total product recovered:						7209.37
MW-3	7.42	8/28/1990	3.88	3.54	0.00	NR
		9/20/1990	3.99	3.43	0.00	NR
		6/19/1991	3.49	3.93	0.00	NR
		7/23/1991	3.71	3.71	0.00	NR
		8/26/1991	3.94	3.48	0.00	NR
		11/18/1991	4.23	3.19	0.00	NR
		2/3/1992	4.01	3.41	0.00	NR
		6/29/1992	3.40	4.02	0.00	NR
		6/23/1993	2.75	4.67	0.00	NR
		10/11/1993	3.84	3.58	0.00	NR
		1/4/1994	3.40	4.02	0.00	NR
		5/10/1994	2.25	5.17	0.00	NR
		2/1/1995	2.43	4.99	0.00	NR
		8/2/1995	3.20	4.22	0.00	NR
		10/16/1995	3.72	3.70	0.00	NR
		12/28/1995	3.56	3.86	0.00	NR
		6/4/1997	3.20	4.22	0.00	NR
		6/3/1998	NM	--	0.00	NM
		9/30/1999	3.72	3.70	0.00	NR
		10/11/2000	3.88	3.54	0.00	NR
		9/3/2002	3.75	3.67	0.00	NR
		12/23/2002	3.50	3.92	0.00	NR
		3/28/2003	3.56	3.86	0.00	NR
		5/30/2003	3.38	4.04	0.00	NR
		6/20/2003	3.52	3.90	0.00	NR
		7/14/2003	3.65	3.77	0.00	NR
		8/25/2003	3.99	3.43	0.00	NR
		9/9/2003	3.99	3.43	0.00	NR
		9/25/2003	4.06	3.36	0.00	NR
		10/28/2003	4.15	3.27	0.00	NR
		11/18/2003	4.28	3.14	0.00	NR
		12/2/2003	4.31	3.11	0.00	NR
		1/27/2004	3.85	3.57	0.00	NR
2/24/2004	3.70	3.72	0.00	NR		
3/29/2004	3.47	3.95	0.00	NR		
4/19/2004	3.55	3.87	0.00	NR		
5/20/2004	3.65	3.77	0.00	NR		
6/22/2004	3.83	3.59	0.00	NR		
7/27/2004	3.98	3.44	0.00	NR		
8/24/2004	4.14	3.28	0.00	NR		
9/29/2004	4.30	3.12	0.00	NR		
10/25/2004	3.85	3.57	0.00	NR		
12/15/2004	3.16	4.26	0.00	NR		



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UPS Oakland Hub  
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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-3	7.42	1/24/2005	2.65	4.77	0.00	NR
		2/23/2005	2.50	4.92	0.00	NR
		3/23/2005	2.48	4.94	0.00	NR
		4/29/2005	2.59	4.83	0.00	NR
		5/27/2005	2.75	4.67	0.00	NR
		6/29/2005	3.05	4.37	0.00	NR
		7/20/2005	3.10	4.32	0.00	NR
		8/24/2005	3.45	3.97	0.00	NR
		9/27/2005	3.71	3.71	0.00	NR
		10/19/2005	3.73	3.69	0.00	NR
		11/29/2005	3.75	3.67	0.00	NR
		12/29/2005	3.08	4.34	0.00	NR
		1/31/2006	2.99	4.43	0.00	NR
		2/28/2006	2.95	4.47	0.00	NR
		3/27/2006	2.60	4.82	0.00	NR
		4/28/2006	2.90	4.52	0.00	NR
		6/27/2006	3.01	4.41	0.00	NR
		7/31/2006	4.33	3.09	0.00	NR
		8/29/2006	3.62	3.80	0.00	NR
		9/28/2006	3.80	3.62	0.00	NR
		10/27/2006	3.90	3.52	0.00	NR
		11/22/2006	3.60	3.82	0.00	NR
		12/26/2006	3.07	4.35	0.00	NR
		1/25/2007	3.25	4.17	0.00	NR
		2/16/2007	3.09	4.33	0.00	NR
		3/19/2007	2.83	4.59	0.00	NR
		4/26/2007	2.94	4.48	0.00	NR
		5/29/2007	3.18	4.24	0.00	NR
		6/28/2007	3.41	4.01	0.00	NR
		7/30/2007	3.62	3.80	0.00	NR
		8/30/2007	3.84	3.58	0.00	NR
		9/25/2007	4.03	3.39	0.00	NR
		10/29/2007	4.06	3.36	0.00	NR
		11/29/2007	4.10	3.32	0.00	NR
		12/28/2007	3.78	3.64	0.00	NR
		1/24/2008	3.16	4.26	0.00	NR
		2/21/2008	2.41	5.01	0.00	NR
		3/28/2008	2.94	4.48	0.00	NR
		4/30/2008	3.08	4.34	0.00	NR
		5/29/2008	3.24	4.18	0.00	NR
		6/25/2008	3.30	4.12	0.00	NR
		7/29/2008	3.50	3.92	0.00	NR
		8/27/2008	3.84	3.58	0.00	NR
9/30/2008	4.03	3.39	0.00	NR		
10/31/2008	4.20	3.22	0.00	NR		
11/26/2008	4.23	3.19	0.00	NR		
12/30/2008	3.96	3.46	0.00	NR		
1/22/2009	3.96	3.46	0.00	NR		
5/5/2010	3.13	4.31	0.02	NR		
10/29/2010	4.70	5.19	0.00	NR		
2/25/2011	1.54	8.37	0.02	NR		
6/14/2011	3.25	6.68	0.05	NR		
7/19/2011	3.53	6.38	0.02	532.32		
8/18/2011	3.98	5.91	sheen	591.47		
9/1/2011	4.12	5.77	sheen	591.47		
9/20/2011	4.41	5.48	sheen	591.47		
10/19/2011	4.34	5.55	sheen	561.90		
11/22/2011	4.75	5.14	sheen	532.32		

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 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-3	9.89	12/26/2011	4.70	5.19	sheen	532.32
		1/23/2012	4.11	5.79	0.01	532.26
		2/15/2012	4.90	5.01	0.02	591.40
		2/29/2012	4.14	5.78	0.03	NR
		3/19/2012	2.98	6.91	0.00	NR
		5/1/2012	2.91	6.99	0.01	532.32
		6/5/2012	3.80	6.09	0.00	NR
		7/3/2012	4.22	5.68	0.01	532.32
		8/1/2012	4.58	5.31	0.00	NR
		8/3/2012	4.61	5.28	0.00	532.32
		10/25/2012	5.20	4.69	0.00	NR
		11/19/2012	4.90	4.99	0.00	NR
		12/20/2012	4.00	5.89	0.00	NR
		1/24/2013	3.95	5.94	0.00	NR
		2/25/2013	NM	--	--	--
		2/26/2013	4.25	5.64	0.00	NR
		4/14/2013	NM	--	--	--
		4/22/2013	4.54	5.35	0.00	10.00
		5/15/2013	NM	-	-	-
		5/30/2013	5.01	4.89	0.01	10.00
		6/26/2013	5.13	4.77	0.01	NR
		7/22/2013	5.48	4.41	0.00	NR
		8/12/2013	5.44	4.45	0.00	NR
		9/25/2013	5.50	4.39	0.00	NR
		10/28/2013	5.62	4.27	0.00	NR
		11/27/2013	5.67	4.24	0.02	2.00
		12/27/2013	5.80	4.11	0.02	2.00
		1/29/2014	5.90	4.03	0.05	NR
		2/5/2014	5.84	4.08	0.04	2.00
		3/28/2014	4.74	5.16	0.01	NR
		4/29/2014	4.12	5.77	0.00	NR
		5/28/2014	4.45	5.44	0.00	5.00
		6/27/2014	5.60	4.29	0.00	NR
		7/31/2014	4.74	5.15	0.00	NR
		8/29/2014	5.00	4.89	0.00	NR
9/23/2014	5.20	4.69	0.00	NR		
10/22/2014	5.72	4.17	0.00	NR		
12/29/2014	3.58	6.31	0.00	NR		
1/30/2015	4.03	5.86	0.00	NR		
2/5/2015	4.22	5.67	0.00	NR		
9/1/2015	4.93	4.96	0.00	NR		
2/26/2016	3.96	5.94	0.01	NR		
8/18/2016	4.71	5.18	0.00	NR		
MW-3 Product recovered prior to skimmer installation (Pre 6/14/2011):						0.00
MW-3 Product recovered post-skimmer installation (Post 6/14/2011):						6684.89
MW-3 Total product recovered:						6684.89
MW-4	9.77	5/5/2010	2.96	6.81	0.00	NR
		10/29/2010	4.53	5.24	0.00	NR
		2/25/2011	1.34	8.43	0.00	NR
		9/1/2011	3.99	5.78	0.00	NR
		2/29/2012	3.91	5.86	0.00	NR
		3/19/2012	2.81	6.96	0.00	NR
		6/5/2012	3.59	6.18	0.00	NR
		8/1/2012	4.45	5.33	0.01	NR
		2/25/2013	NM	--	--	--
		2/26/2013	4.09	5.69	0.01	NR
		4/14/2013	NM	--	--	--
5/15/2013	NM	--	--	--		

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 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-4	9.77	7/22/2013	5.10	4.67	0.00	NR
		8/12/2013	5.25	4.52	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	6.03	3.74	0.00	NR
		2/5/2014	5.64	4.13	0.00	NR
		3/28/2014	4.57	5.20	0.00	NR
		4/29/2014	3.98	5.79	0.00	NR
		5/28/2014	4.72	5.05	0.00	NR
		6/27/2014	4.37	5.40	0.00	NR
		7/31/2014	4.61	5.16	0.00	NR
		8/29/2014	4.84	4.93	0.00	NR
		9/23/2014	5.22	4.55	0.00	NR
		10/22/2014	5.25	4.52	0.00	NR
		12/29/2014	3.32	6.45	0.00	NR
		1/30/2015	3.98	5.79	0.00	NR
		2/5/2015	4.03	5.74	0.00	NR
		9/1/2015	4.80	4.97	0.00	NR
10/14/2015	5.15	4.62	0.00	NR		
2/26/2016	3.79	5.98	0.00	NR		
8/18/2016	4.52	5.25	0.00	NR		
MW-8	8.22	5/5/2010	2.56	5.66	0.00	NR
		10/29/2010	4.39	3.83	0.00	NR
		2/25/2011	2.69	5.53	0.00	NR
		9/1/2011	3.67	4.55	0.00	NR
		2/29/2012	3.63	4.59	0.00	NR
		3/19/2012	3.37	4.85	0.00	NR
		6/5/2012	3.15	5.07	0.00	NR
		8/1/2012	3.77	4.45	0.00	NR
		2/25/2013	NM	--	NM	--
		2/26/2013	3.38	4.84	0.00	NR
		4/14/2013	NM	--	NM	--
		5/15/2013	NM	--	NM	--
		7/22/2013	3.90	4.32	0.00	NR
		8/12/2013	4.08	4.14	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	4.73	3.49	0.00	NR
		2/5/2014	4.50	3.72	0.00	NR
		3/28/2014	3.34	4.88	0.00	NR
		4/29/2014	2.98	5.24	0.00	NR
		5/28/2014	3.20	5.02	0.00	NR
		6/27/2014	3.53	4.69	0.00	NR
		7/31/2014	3.76	4.46	0.00	NR
		8/29/2014	4.03	4.19	0.00	NR
		9/23/2014	4.02	4.20	0.00	NR
		10/22/2014	4.39	3.83	0.00	NR
		12/29/2014	3.87	4.35	0.00	NR
		1/30/2015	3.09	5.13	0.00	NR
2/5/2015	3.36	4.86	0.00	NR		
9/1/2015	3.99	4.23	0.00	NR		
2/26/2016	2.95	5.27	0.00	NR		
3/30/2016	2.40	5.82	0.00	NR		

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8400 Pardee Drive, Oakland, California  
Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-8	8.22	4/27/2016	2.64	5.58	0.00	NR
		5/31/2016	3.10	5.12	0.00	NR
		6/30/2016	3.46	4.76	0.00	NR
		7/28/2016	3.83	4.39	0.00	NR
		8/18/2016	3.91	4.31	0.00	NR
MW-9	14.63	5/5/2010	6.28	8.35	0.00	NR
		10/29/2010	6.28	8.35	0.00	NR
		2/25/2011	5.55	9.08	0.00	NR
		9/1/2011	6.05	8.58	0.00	NR
		2/29/2012	5.98	8.65	0.00	NR
		3/19/2012	5.68	8.95	0.00	NR
		6/5/2012	3.76	10.87	0.00	NR
		8/1/2012	6.11	8.52	0.00	NR
		2/25/2013	NM	--	NM	--
		2/26/2013	5.91	8.72	0.00	NR
		4/14/2013	NM	--	NM	--
		5/15/2013	NM	--	NM	--
		7/22/2013	6.13	8.50	0.00	NR
		8/12/2013	6.29	8.34	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
11/27/2013	NM	--	NM	--		
12/27/2013	NM	--	NM	--		
MW-9	11.10	1/29/2014	7.15	3.95	0.00	NR
		2/5/2014	6.80	4.30	0.00	NR
		3/28/2014	5.13	5.97	0.00	NR
		4/29/2014	5.68	5.42	0.00	NR
		5/28/2014	5.57	5.53	0.00	NR
		6/27/2014	6.01	5.09	0.00	NR
		7/31/2014	6.12	4.98	0.00	NR
		8/29/2014	6.38	4.72	0.00	NR
		9/23/2014	6.29	4.81	0.00	NR
		10/22/2014	7.15	3.95	0.00	NR
		12/29/2014	5.58	5.52	0.00	NR
		1/30/2015	5.62	5.48	0.00	NR
		2/5/2015	6.00	5.10	0.00	NR
		9/1/2015	6.25	4.85	0.00	NR
		10/14/2015	6.55	4.55	0.00	NR
		2/26/2016	5.72	5.38	0.00	NR
		3/30/2016	5.20	5.90	0.00	NR
		4/27/2016	5.01	6.09	0.00	NR
		5/31/2016	5.50	5.60	0.00	NR
6/30/2016	3.96	7.14	0.00	NR		
7/28/2016	6.13	4.97	0.00	NR		
8/18/2016	4.16	6.94	0.00	NR		
MW-10	9.68	5/5/2010	8.28	1.40	0.00	NR
		10/29/2010	8.27	1.41	0.00	NR
		2/25/2011	4.45	5.23	0.00	NR
		9/1/2011	8.35	1.33	0.00	NR
		2/29/2012	8.32	1.36	0.00	NR
		3/19/2012	7.11	2.57	0.00	NR
		6/5/2012	8.20	1.48	0.00	NR
		8/1/2012	8.34	1.35	0.01	NR
		2/25/2013	NM	--	NM	--
		2/26/2013	8.28	1.40	0.00	NR
4/14/2013	NM	--	NM	--		

**Table 1**  
**Historical Groundwater Elevation Summary**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-10	9.68	5/15/2013	NM	--	NM	--
		7/22/2013	8.31	1.37	0.00	NR
		8/12/2013	8.64	1.04	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	9.43	0.25	0.00	NR
		2/5/2014	9.41	0.27	0.00	NR
		3/28/2014	8.18	1.50	0.00	NR
		4/29/2014	8.21	1.47	0.00	NR
		5/28/2014	5.59	4.09	0.00	NR
		6/27/2014	8.29	1.39	0.00	NR
		7/31/2014	8.31	1.37	0.00	NR
		8/29/2014	8.30	1.38	0.00	NR
		9/23/2014	NM	--	NM	--
		10/22/2014	8.29	1.39	0.00	NR
		12/29/2014	7.21	2.47	0.00	NR
		1/30/2015	7.88	1.80	0.00	NR
		2/5/2015	8.23	1.45	0.00	NR
		9/1/2015	8.27	1.41	0.00	NR
		2/26/2016	7.52	2.16	0.00	NR
		3/30/2016	6.39	3.29	0.00	NR
		4/27/2016	8.07	1.61	0.00	NR
5/31/2016	7.66	2.02	0.00	NR		
6/30/2016	4.99	4.69	0.00	NR		
7/28/2016	8.43	1.25	0.00	NR		
8/18/2016	8.82	0.86	0.00	NR		
MW-11	9.49	5/5/2010	7.21	2.28	0.00	NR
		10/29/2010	6.83	2.66	0.00	NR
		2/25/2011	2.83	6.66	0.00	NR
		9/1/2011	6.05	3.44	0.00	NR
		2/29/2012	5.89	3.60	0.00	NR
		3/19/2012	8.88	0.61	0.00	NR
		6/5/2012	5.68	3.81	0.00	NR
		8/1/2012	6.16	3.34	0.01	NR
		2/25/2013	NM	--	NM	--
		2/26/2013	5.96	3.53	0.00	NR
		4/14/2013	NM	--	NM	--
		5/15/2013	NM	--	NM	--
		7/22/2013	6.05	3.44	0.00	NR
		8/12/2013	6.43	3.06	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	7.06	2.43	0.00	NR
		2/5/2014	6.98	2.51	0.00	NR
		3/28/2014	5.21	4.28	0.00	NR
		4/29/2014	5.43	4.06	0.00	NR
		5/28/2014	5.59	3.90	0.00	NR
		6/27/2014	5.84	3.65	0.00	NR
7/31/2014	6.09	3.40	0.00	NR		
8/29/2014	6.30	3.19	0.00	NR		
9/23/2014	6.48	3.01	0.00	NR		
10/22/2014	6.03	3.46	0.00	NR		
12/29/2014	4.00	5.49	0.00	NR		

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**Historical Groundwater Elevation Summary**  
 UPS Oakland Hub  
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 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-11	9.49	1/30/2015	5.44	4.05	0.00	NR
		2/5/2015	5.69	3.80	0.00	NR
		9/1/2015	6.27	3.22	0.00	NR
		10/14/2015	6.71	2.78	0.00	NR
		2/26/2016	5.04	4.46	0.01	NR
		3/30/2016	4.83	4.66	0.00	NR
		4/27/2016	4.89	4.60	0.00	NR
		5/31/2016	5.37	4.12	0.00	NR
		6/30/2016	5.31	4.18	0.00	NR
		7/28/2016	5.92	3.57	0.00	NR
MW-12	9.43	8/18/2016	6.14	3.35	0.00	NR
		3/19/2012	4.40	5.18	0.18	NR
		6/5/2012	6.31	3.73	0.72	NR
		8/1/2012	7.39	3.23	1.40	NR
		8/3/2012	7.15	3.39	1.30	NR
		10/25/2012	6.74	3.30	0.72	NR
		11/19/2012	6.45	3.66	0.80	NR
		12/20/2012	5.90	4.30	0.90	NR
		1/24/2013	6.53	3.91	1.19	725.00
		2/25/2013	6.55	3.77	1.05	ND
		2/26/2013	7.75	1.72	0.05	30.00
		4/14/2013	5.70	3.94	0.25	ND
		4/22/2013	6.27	3.55	0.46	278.00
		5/15/2013	6.51	3.28	0.42	ND
		5/30/2013	6.67	2.97	0.25	151.00
6/26/2013	6.82	2.89	0.33	200.00		
7/22/2013	6.69	2.88	0.16	97.00		
MW-12	9.43	8/12/2013	6.73	2.84	0.17	0.00
		9/25/2013	6.83	3.04	0.52	322.00
		10/28/2013	6.83	2.93	0.39	236.00
		11/27/2013	6.86	3.09	0.61	606.00
		12/27/2013	6.75	2.80	0.14	84.00
		1/29/2014	6.80	2.93	0.35	200.00
		2/5/2014	6.82	2.91	0.35	212.00
		3/28/2014	5.95	3.82	0.40	242.00
		4/29/2014	5.49	4.20	0.31	188.00
		5/28/2014	5.37	4.28	0.26	157.00
		6/27/2014	5.29	4.55	0.48	400.00
		7/31/2014	5.79	3.99	0.41	1009.00
		8/29/2014	5.80	3.84	0.25	151.00
		9/23/2014	6.00	3.74	0.37	275.00
		10/22/2014	6.04	3.72	0.39	300.00
		12/29/2014	4.94	4.63	0.16	NR
		1/30/2015	5.00	4.81	0.45	200
		2/5/2015	4.87	4.65	0.11	66
		9/1/2015	5.87	4.04	0.57	NR
		9/25/2015	6.21	3.82	0.71	NR
		2/26/2016	4.53	5.50	0.70	NR
		3/30/2016	4.57	4.86	0.00	NR
		4/27/2016	4.36	5.29	0.26	NR
		5/31/2016	4.75	4.81	0.15	NR
		6/30/2016	5.03	4.72	0.38	NR
		7/28/2016	5.51	4.35	0.50	NR
		8/18/2016	5.23	4.27	0.08	100.00
MW-12 Total product recovered:						6229.00
MW-13	9.10	3/19/2012	3.56	5.54	--	NR

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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-13	9.10	6/5/2012	4.50	4.60	0.00	NR
		8/1/2012	5.15	3.96	0.01	NR
		2/25/2013	4.61	4.49	0.00	NR
		2/26/2013	3.40	5.70	--	NR
		4/14/2013	4.88	4.22	0.00	NR
		5/15/2013	5.26	3.84	0.00	NR
		7/22/2013	5.58	3.52	0.00	NR
		8/12/2013	5.69	3.41	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	6.47	2.63	0.00	NR
		2/5/2014	5.80	3.30	0.00	NR
		3/28/2014	4.84	4.26	0.00	NR
		4/29/2014	4.35	4.75	0.00	NR
		5/28/2014	4.34	4.76	0.00	NR
		6/27/2014	4.58	4.52	0.00	NR
		7/31/2014	4.63	4.47	0.00	NR
		8/29/2014	4.86	4.24	0.00	NR
		9/23/2014	4.91	4.19	0.00	NR
		10/22/2014	4.99	4.11	0.00	NR
		12/29/2014	4.24	4.86	0.00	NR
		1/30/2015	4.07	5.03	0.00	NR
		2/5/2015	4.12	4.98	0.00	NR
		9/1/2015	4.61	4.49	0.00	NR
		2/26/2016	3.61	5.49	0.00	NR
		3/30/2016	3.83	5.27	0.00	NR
		4/27/2016	4.03	5.07	0.00	NR
		5/31/2016	3.33	5.77	0.00	NR
6/30/2016	4.39	4.71	0.00	NR		
7/28/2016	4.34	4.76	0.00	NR		
8/18/2016	4.56	4.54	0.00	NR		
MW-14	9.29	3/19/2012	1.86	7.43	--	NR
		6/5/2012	2.53	6.76	--	NR
		8/1/2012	3.69	5.61	0.01	NR
		2/25/2013	NM	--	--	--
		2/26/2013	2.66	6.63	--	NR
		4/14/2013	NM	--	--	--
		5/15/2012	NM	-	-	-
		7/22/2013	4.56	4.73	0.00	NR
		8/12/2013	6.05	3.24	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	5.38	3.91	0.00	NR
		2/5/2014	5.10	4.19	0.00	NR
		3/28/2014	1.64	7.65	0.00	NR
		4/29/2014	1.74	7.55	0.00	NR
		5/28/2014	3.09	6.20	0.00	NR
		6/27/2014	3.49	5.80	0.00	NR
		7/31/2014	3.92	5.37	0.00	NR
8/29/2014	4.50	4.79	0.00	NR		
9/23/2014	5.49	3.80	0.00	NR		
10/22/2014	4.00	5.29	0.00	NR		
12/29/2014	1.68	7.61	0.00	NR		

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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-14	9.29	1/30/2015	3.03	6.26	0.00	NR
		2/5/2015	3.29	6.00	0.00	NR
		9/1/2015	4.23	5.06	0.00	NR
		2/26/2016	1.82	7.47	0.00	NR
		3/30/2016	1.63	7.66	0.00	NR
		4/27/2016	0.74	8.55	0.00	NR
		5/31/2016	1.80	7.49	0.00	NR
		6/30/2016	NM	--	NM	NR
		7/28/2016	3.84	5.45	0.00	NR
MW-15	9.44	8/18/2016	3.99	5.30	0.00	NR
		9/1/2015	4.78	4.66	0.00	NR
		9/25/2015	5.00	4.44	0.00	NR
		10/14/2015	5.12	4.32	0.00	NR
		2/26/2016	3.81	5.63	0.00	NR
		3/30/2016	3.78	5.66	0.00	NR
		4/27/2016	3.13	6.31	0.00	NR
		5/31/2016	4.01	5.43	0.00	NR
		6/30/2016	4.34	5.10	0.00	NR
MW-16	9.57	7/28/2016	4.57	4.87	0.00	NR
		8/18/2016	4.71	4.73	0.00	NR
		9/1/2015	8.86	0.71	0.00	NR
		9/25/2015	7.18	2.39	0.00	NR
		10/14/2015	6.37	3.20	0.00	NR
		2/26/2016	2.71	6.86	0.00	NR
		3/30/2016	3.31	6.26	0.00	NR
		4/27/2016	3.50	6.07	0.00	NR
		5/31/2016	4.45	5.12	0.00	NR
MW-17	9.02	6/30/2016	4.79	4.78	0.00	NR
		7/28/2016	5.18	4.39	0.00	NR
		8/18/2016	5.32	4.25	0.00	NR
		9/1/2015	11.18	-2.16	0.00	NR
		9/25/2015	9.16	-0.14	0.00	NR
		2/26/2016	7.38	1.64	0.00	NR
		3/30/2016	4.20	4.82	0.00	NR
		4/27/2016	4.38	4.64	0.00	NR
		5/31/2016	7.62	1.40	0.00	NR
MW-18	9.92	6/30/2016	4.98	4.04	0.00	NR
		7/28/2016	7.62	1.40	0.00	NR
		8/18/2016	7.32	1.70	0.00	NR
		9/1/2015	8.24	1.68	0.00	NR
		9/25/2015	6.64	3.28	0.00	NR
		10/14/2015	6.31	3.61	0.00	NR
		2/26/2016	3.60	6.32	0.00	NR
		3/30/2016	2.98	6.94	0.00	NR
		4/27/2016	2.74	7.18	0.00	NR
MW-19	9.64	5/31/2016	3.98	5.94	0.00	NR
		6/30/2016	4.71	5.21	0.00	NR
		7/28/2016	4.94	4.98	0.00	NR
		8/18/2016	5.22	4.70	0.00	NR
		9/1/2015	8.75	0.89	0.00	NR
		9/25/2015	8.08	1.56	0.00	NR
		2/26/2016	2.54	7.10	0.00	NR
		3/30/2016	1.56	8.08	0.00	NR
		4/27/2016	0.81	8.83	0.00	NR



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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-20	9.69	9/1/2015	4.72	4.97	0.00	NR
		10/14/2015	5.12	4.57	0.00	NR
		2/26/2016	3.84	5.85	0.00	NR
		3/30/2016	3.44	6.25	0.00	NR
		4/27/2016	3.50	6.19	0.00	NR
		5/31/2016	3.93	5.76	0.00	NR
		6/30/2016	4.05	5.64	0.00	NR
		7/28/2016	4.40	5.29	0.00	NR
MW-21	9.43	9/1/2015	4.57	4.86	0.00	NR
		2/26/2016	3.54	5.89	0.00	NR
		3/30/2016	2.89	6.54	0.00	NR
		4/27/2016	2.24	7.19	0.00	NR
		5/31/2016	4.16	5.27	0.00	NR
		6/30/2016	3.75	5.68	0.00	NR
		7/28/2016	4.32	5.11	0.00	NR
		8/18/2016	4.42	5.01	0.00	NR
MW-22	9.47	9/1/2015	4.87	4.60	0.00	NR
		10/14/2015	5.31	4.16	0.00	NR
		2/26/2016	3.83	5.64	0.00	NR
		3/30/2016	3.32	6.15	0.00	NR
		4/27/2016	2.97	6.50	0.00	NR
		5/31/2016	3.62	5.85	0.00	NR
		6/30/2016	4.32	5.15	0.19	NR
		7/28/2016	4.60	4.87	0.01	NR
MW-23	10.83	9/1/2015	6.79	4.04	0.00	NR
		9/25/2015	7.00	3.83	0.00	NR
		10/14/2015	7.11	3.72	0.00	NR
		2/26/2016	5.69	5.14	0.00	NR
		3/30/2016	5.10	5.73	0.00	NR
		4/27/2016	4.80	6.03	0.00	NR
		5/31/2016	5.80	5.03	0.00	NR
		6/30/2016	6.13	4.70	0.00	NR
MW-24	9.14	9/1/2015	5.12	4.02	0.00	NR
		9/25/2015	5.56	3.58	0.26	NR
		2/26/2016	4.00	5.14	0.50	NR
		3/30/2016	3.98	5.16	0.38	NR
		4/27/2016	3.70	5.44	0.00	NR
		5/31/2016	4.35	4.79	0.79	NR
		6/30/2016	4.75	4.39	0.61	NR
		7/28/2016	5.10	4.04	0.34	NR
MW-25	8.42	9/1/2015	5.81	2.61	0.00	NR
		2/26/2016	5.42	3.00	0.00	NR
		3/30/2016	5.02	3.40	0.00	NR
		4/27/2016	3.18	5.24	0.00	NR
		5/31/2016	5.73	2.69	0.00	NR
		6/30/2016	5.58	2.84	0.00	NR
		7/28/2016	5.74	2.68	0.00	NR
		8/18/2016	5.77	2.65	0.00	NR
MW-26	8.86	9/1/2015	4.97	3.89	0.00	NR
		9/25/2015	5.15	3.71	0.00	NR
		2/26/2016	3.54	5.32	0.00	NR
		3/30/2016	3.10	5.76	0.00	NR
		4/27/2016	3.20	5.66	0.00	NR

**Table 1**  
**Historical Groundwater Elevation Summary**  
UPS Oakland Hub  
8400 Pardee Drive, Oakland, California  
Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-26	8.86	5/31/2016	3.29	5.57	0.00	NR
		6/30/2016	4.11	4.75	0.00	NR
		7/28/2016	4.49	4.37	0.00	NR
		8/18/2016	4.68	4.18	0.00	NR
MW-27	9.16	9/1/2015	4.70	4.46	0.00	NR
		9/25/2015	4.87	4.29	0.00	NR
		2/26/2016	3.30	5.86	0.00	NR
		3/30/2016	2.99	6.17	0.00	NR
		4/27/2016	3.01	6.15	0.00	NR
		5/31/2016	3.71	5.45	0.00	NR
		6/30/2016	4.14	5.02	0.00	NR
		7/28/2016	4.36	4.80	0.00	NR
		8/18/2016	4.53	4.63	0.00	NR
MW-28	11.52	9/1/2015	7.56	3.96	0.00	NR
		2/26/2016	7.34	4.18	0.00	NR
		3/30/2016	7	4.52	0.00	NR
		4/27/2016	8.8	2.72	0.00	NR
		5/31/2016	6.94	4.58	0.00	NR
		6/30/2016	6.13	5.39	0.00	NR
		7/28/2016	7.4	4.12	0.00	NR
		8/18/2016	7.38	4.14	0.00	NR
MW-29	10.38	9/1/2015	6.63	3.75	0.00	NR
		2/26/2016	6.16	4.22	0.00	NR
		3/30/2016	5.83	4.55	0.00	NR
		4/27/2016	6.64	3.74	0.00	NR
		5/31/2016	5.93	4.45	0.00	NR
		6/30/2016	NM	NC	NM	NR
		7/28/2016	NM	NC	NM	NR
		8/18/2016	6.4	3.98	0.00	NR
OW-1	NA	6/4/1997	7.22	NC	0.01	NR
		9/30/1999	8.35	NC	0.01	NR
		10/11/2000	6.90	NC	0.09	NR
		2/12/2002	5.23	NC	0.01	38.00
		9/27/2002	7.02	NC	0.14	345.78
		10/22/2002	7.34	NC	0.01	40.00
		12/23/2002	5.17	NC	0.03	167.00
		1/16/2003	4.97	NC	0.01	40.00
		2/12/2003	5.23	NC	0.01	38.00
		3/28/2003	5.16	NC	0.01	25.00
		5/30/2003	4.41	NC	0.02	77.00
		6/20/2003	4.93	NC	0.01	NR
		7/14/2003	5.33	NC	0.00	NR
		8/25/2003	5.85	NC	0.00	NR
		9/9/2003	6.33	NC	0.00	NR
		9/25/2003	6.52	NC	0.01	25.00
		10/28/2003	7.26	NC	0.03	176.00
		11/18/2003	7.29	NC	0.00	NR
		12/2/2003	7.23	NC	0.03	NR
		1/27/2004	7.96	NC	0.01	NR
		2/24/2004	6.26	NC	0.02	NR
		3/29/2004	6.08	NC	0.02	NR
		4/19/2004	6.29	NC	0.03	116.00
		5/20/2004	6.16	NC	0.00	NR
		6/22/2004	6.37	NC	0.00	NR
7/27/2004	5.67	NC	0.04	225.00		
8/24/2004	6.81	NC	0.00	NR		
9/29/2004	7.08	NC	0.04	153.00		
10/25/2004	6.74	NC	0.04	NR		

**Table 1**  
**Historical Groundwater Elevation Summary**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
OW-1	NA	12/15/2004	5.33	NC	0.04	155.00
		1/24/2005	3.98	NC	0.00	NR
		2/23/2005	3.44	NC	0.01	NR
		3/23/2005	3.34	NC	0.02	77.00
		4/29/2005	6.89	NC	0.13	501.00
		5/27/2005	7.18	NC	0.11	425.00
		6/29/2005	7.12	NC	0.10	450.00
		7/20/2005	7.20	NC	0.10	556.00
		8/24/2005	7.15	NC	0.06	249.00
		9/27/2005	7.43	NC	0.12	450.00
		10/19/2005	7.48	NC	0.11	425.00
		11/29/2005	7.00	NC	0.04	NR
		12/29/2005	5.22	NC	0.00	NR
		1/31/2006	5.64	NC	0.00	NR
		2/28/2006	6.53	NC	0.01	39.00
		3/27/2006	5.80	NC	0.01	NR
		4/28/2006	6.39	NC	0.00	NR
		6/27/2006	7.82	NC	0.06	NR
		7/31/2006	5.82	NC	0.05	NR
		8/29/2006	7.05	NC	0.07	NR
		9/28/2006	7.10	NC	0.02	NR
		10/27/2006	7.27	NC	0.02	NR
		11/22/2006	7.05	NC	0.02	NR
		12/26/2006	6.73	NC	0.03	NR
		1/25/2007	7.15	NC	0.00	NR
		2/16/2007	7.71	NC	0.01	NR
		3/19/2007	6.77	NC	0.02	NR
		4/26/2007	6.66	NC	0.01	NR
		5/29/2007	6.86	NC	0.02	76.00
		6/28/2007	6.97	NC	0.20	75.00
		7/30/2007	7.06	NC	0.01	NR
		8/30/2007	7.25	NC	0.03	NR
		9/25/2007	7.25	NC	0.03	115.00
		10/29/2007	7.43	NC	0.02	78.00
		11/29/2007	7.37	NC	0.00	NR
		12/28/2007	7.28	NC	0.01	40.00
		1/24/2008	6.61	NC	0.01	38.00
		2/21/2008	6.33	NC	0.01	37.00
		3/28/2008	6.80	NC	0.01	NR
		4/30/2008	7.44	NC	0.03	166.90
		5/29/2008	7.09	NC	0.01	38.00
		6/25/2008	7.07	NC	0.02	112.00
7/29/2008	7.34	NC	0.00	NR		
8/27/2008	7.28	NC	0.02	78.00		
9/30/2008	7.82	NC	0.03	167.00		
10/31/2008	7.31	NC	0.01	NR		
11/26/2008	6.93	NC	0.01	NR		
12/30/2008	7.25	NC	0.02	112.00		
1/22/2009	7.05	NC	0.01	56.00		
5/5/2010	7.08	2.52	0.06	NR		
10/29/2010	7.37	2.25	0.08	NR		
2/25/2011	6.17	3.42	0.05	NR		
6/14/2011	6.78	2.84	0.08	0.00		
7/19/2011	7.30	2.42	0.20	118.29		
8/18/2011	7.35	2.23	0.03	147.87		

**Table 1**  
**Historical Groundwater Elevation Summary**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
OW-1	9.55	9/1/2011	7.35	2.23	0.03	147.87
		9/20/2011	7.41	2.17	0.04	591.47
		10/19/2011	7.42	2.16	0.03	532.32
		11/22/2011	7.09	2.49	0.03	29.57
		12/26/2011	7.32	2.25	0.02	147.87
		1/23/2012	6.90	2.91	0.30	532.26
		2/15/2012	7.32	2.25	0.02	591.40
		2/29/2012	7.54	2.08	0.08	NR
		3/19/2012	7.25	2.31	0.01	NR
		5/1/2012	7.14	2.42	0.01	532.32
		6/5/2012	8.55	1.01	0.01	NR
		7/3/2012	7.63	1.95	0.04	295.70
		8/1/2012	7.81	1.74	0.00	NR
		8/3/2012	7.50	2.17	0.14	591.47
		10/25/2012	7.34	2.23	0.02	5.0
		11/19/2012	7.26	2.46	0.20	10.0
		12/20/2012	6.93	2.65	0.03	5.0
		1/24/2013	6.89	2.69	0.03	10.0
		2/25/2013	NM	--	--	--
		2/26/2013	7.72	1.86	0.03	15.0
		4/14/2013	NM	--	--	--
		4/22/2013	7.68	1.90	0.03	15.0
		5/15/2013	NM	-	-	-
		5/30/2013	7.50	2.09	0.05	20.0
		6/26/2013	7.56	2.03	0.05	NR
		7/22/2013	7.84	1.80	0.10	5.0
		8/12/2013	7.55	2.01	0.01	NR
		9/25/2013	7.36	2.22	0.03	10.0
		10/28/2013	7.10	2.50	0.06	5.0
		11/27/2013	7.16	2.44	0.06	10.0
		12/27/2013	7.33	2.25	0.04	5.0
		1/29/2014	7.02	2.57	0.05	25.0
		2/5/2014	8.40	1.18	0.03	10.0
		3/28/2014	7.15	2.41	0.01	2.0
		4/29/2014	5.48	4.08	0.01	5.0
		5/28/2014	7.74	1.86	0.06	10.0
		6/27/2014	7.61	1.97	0.03	5.0
		7/31/2014	7.66	1.93	0.05	50.0
		8/29/2014	7.36	2.24	0.06	NR
		9/23/2014	7.25	2.34	0.05	5.0
10/22/2014	7.83	1.73	0.01	0.0		
12/29/2014	7.34	2.21	0.00	NR		
1/30/2015	7.10	2.46	0.01	5.0		
2/5/2015	7.49	2.12	0.07	60		
9/1/2015	7.76	1.88	0.11	NR		
2/26/2016	7.13	2.50	0.09	NR		
3/30/2016	5.20	4.43	0.09	NR		
4/27/2016	7.46	2.23	0.16	NR		
5/31/2016	7.39	2.30	0.16	NR		
6/30/2016	7.50	2.22	0.20	NR		
7/28/2016	7.45	2.13	0.04	NR		
8/18/2016	7.6	2.00	0.06	600.00		
OW-1 Product recovered prior to skimmer installation (Pre 6/14/2011):						5943.68
OW-1 Product recovered post-skimmer installation (Post 6/14/2011):						5150.41
OW-1 Total product recovered:						11094.09

**Table 1**  
**Historical Groundwater Elevation Summary**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
IW-1	9.50	3/19/2012	4.38	5.12	0.00	NR
		6/5/2012	6.24	3.76	0.59	NR
		8/1/2012	7.29	3.26	1.23	NR
		8/3/2012	7.01	3.43	1.10	NR
		10/25/2012	7.05	3.30	1.00	NR
		11/19/2012	6.50	3.77	0.90	NR
		12/20/2012	5.85	4.28	0.74	NR
		1/24/2013	6.54	3.92	1.13	690.00
		2/25/2013	6.50	3.72	0.85	ND
		2/26/2013	8.72	1.55	0.91	550.00
		4/14/2013	5.64	4.57	0.84	ND
		4/22/2013	6.56	3.50	0.66	400.00
		5/15/2013	6.79	2.91	0.23	ND
		5/30/2013	6.93	2.97	0.47	284.00
		6/26/2013	6.98	2.98	0.54	327.00
		7/22/2013	6.89	2.92	0.36	218.00
		8/12/2013	6.95	3.07	0.61	370.00
		9/25/2013	6.73	3.05	0.33	205.00
		10/28/2013	6.76	2.94	0.24	145.00
		11/27/2013	6.80	3.19	0.58	351.00
		12/27/2013	6.71	2.99	0.24	145.00
		1/29/2014	6.69	2.93	0.14	150.00
		2/5/2014	6.69	2.90	0.11	66.00
		3/28/2014	5.64	4.02	0.19	115.00
		4/29/2014	5.31	4.23	0.05	30.00
		5/28/2014	5.20	4.39	0.10	60.00
		6/27/2014	5.64	4.09	0.27	180.00
		7/31/2014	5.70	3.99	0.22	542.00
IW-1	9.50	8/29/2014	5.77	3.85	0.14	NR
		9/23/2014	5.97	3.67	0.16	100.00
		10/22/2014	7.70	1.85	0.06	100.00
		12/29/2014	5.24	4.58	0.38	NR
		1/30/2015	5.10	4.49	0.10	20.00
		2/5/2015	5.15	4.62	0.32	844
		9/1/2015	6.05	4.04	0.69	NR
		2/26/2016	4.91	5.19	0.70	NR
		3/30/2016	4.69	5.49	0.80	NR
		4/27/2016	6.51	2.99	0.00	NR
		5/31/2016	5.43	4.57	0.59	NR
		6/30/2016	5.59	4.68	0.91	NR
		7/28/2016	6.02	4.32	0.99	NR
8/18/2016	5.32	4.28	0.12	100		
IW-1 Total product recovered:						5992.00
IW-2	9.02	3/19/2012	4.15	4.87	0.00	NR
		6/5/2012	4.76	4.26	0.00	NR
		8/1/2012	5.54	3.48	0.00	NR
		2/25/2013	7.04	1.98	0.00	NR
		2/26/2013	5.85	3.17	0.00	NR
		4/14/2013	5.16	3.86	0.00	NR
		5/15/2013	5.21	3.81	0.00	NR
		7/22/2013	5.60	3.42	0.00	NR
		8/12/2013	5.71	3.31	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--

**Table 1**  
**Historical Groundwater Elevation Summary**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
IW-2	9.02	12/27/2013	NM	--	NM	--
		1/29/2014	6.37	2.65	0.00	NR
		2/5/2014	6.05	2.97	0.00	NR
		3/28/2014	5.13	3.89	0.00	NR
		4/29/2014	4.63	4.39	0.00	NR
		5/28/2014	4.60	4.42	0.00	NR
		6/27/2014	4.94	4.08	0.00	NR
		7/31/2014	5.13	3.89	0.00	NR
		8/29/2014	5.31	3.71	0.00	NR
		9/23/2014	5.49	3.53	0.00	NR
		10/22/2014	5.60	3.46	0.05	25.00
		12/29/2014	4.88	4.14	0.00	NR
		1/30/2015	4.20	5.02	0.23	250.00
		2/5/2015	4.67	4.36	0.01	6.00
		9/1/2015	5.40	4.22	0.70	NR
		9/25/2015	5.78	3.54	0.35	NR
		2/26/2016	4.52	5.11	0.72	NR
		3/30/2016	4.01	5.22	0.25	NR
		4/27/2016	4.16	4.86	0.00	NR
		5/31/2016	5.60	3.86	0.52	NR
6/30/2016	4.66	4.56	0.24	NR		
7/28/2016	5.04	4.13	0.18	NR		
8/18/2016	5.1	4.02	0.12	100		
IW-2 Total product recovered:						381.00
IW-3	8.93	3/19/2012	4.23	4.70	0.00	NR
		6/5/2012	3.82	5.11	0.00	NR
		8/1/2012	4.77	4.16	0.00	NR
		2/25/2013	5.90	3.03	0.00	NR
		2/26/2013	4.42	4.51	0.00	NR
		4/14/2013	NM	--	--	--
		5/15/2012	NM	--	--	--
		7/22/2013	4.80	4.13	0.00	NR
		8/12/2013	5.23	3.70	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	5.63	3.30	0.00	NR
		2/5/2014	5.83	3.10	0.00	NR
		3/28/2014	4.80	4.13	0.00	NR
		4/29/2014	4.24	4.69	0.00	NR
		5/28/2014	3.99	4.94	0.00	NR
		6/27/2014	4.33	4.60	0.00	NR
		7/31/2014	4.61	4.32	0.00	NR
		8/29/2014	4.86	4.07	0.00	NR
		9/23/2014	4.99	3.94	0.00	NR
		10/22/2014	5.01	3.92	0.00	NR
		12/29/2014	4.70	4.23	0.00	NR
		1/30/2015	4.70	4.23	0.00	NR
		2/5/2015	4.37	4.56	0.00	NR
		9/1/2015	4.80	4.13	0.00	NR
		2/26/2016	3.78	5.15	0.00	NR
3/30/2016	3.02	5.91	0.00	NR		
4/27/2016	5.18	3.75	0.00	NR		
5/31/2016	3.64	5.29	0.00	NR		
6/30/2016	4.01	4.92	0.00	NR		
7/28/2016	4.58	4.35	0.00	NR		

**Table 1**  
**Historical Groundwater Elevation Summary**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
IW-3	8.93	8/18/2016	4.69	4.24	0.00	NR
IW-4	9.96	3/19/2012	3.00	6.96	0.00	NR
		6/5/2012	3.77	6.19	0.00	NR
		8/1/2012	4.64	5.33	0.01	NR
		2/25/2013	NM	--	--	--
		2/26/2013	4.29	5.68	0.01	NR
		4/14/2013	NM	--	--	--
		5/15/2013	NM	--	--	--
		7/22/2013	NM	--	--	--
		8/12/2013	5.45	4.51	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	5.87	4.09	0.00	NR
		2/5/2014	6.86	3.10	0.00	NR
		3/28/2014	5.24	4.72	0.00	NR
		4/29/2014	4.19	5.77	0.00	NR
5/28/2014	4.79	5.17	0.00	NR		
6/27/2014	5.04	4.92	0.00	NR		
7/31/2014	4.78	5.18	0.00	NR		
IW-4	9.96	8/29/2014	5.02	4.94	0.00	NR
		9/23/2014	5.14	4.82	0.00	NR
		10/22/2014	5.29	4.67	0.00	NR
		12/29/2014	3.80	6.16	0.00	NR
		1/30/2015	4.49	5.47	0.00	NR
		2/5/2015	4.22	5.74	0.00	NR
		9/1/2015	4.97	4.99	0.00	NR
		9/25/2015	5.21	4.75	0.00	NR
		2/26/2016	3.98	5.98	0.00	NR
		3/30/2016	NM	--	NM	NR
		4/27/2016	3.47	6.49	0.00	NR
		5/31/2016	3.90	6.06	0.00	NR
		6/30/2016	4.25	5.71	0.00	NR
7/28/2016	4.61	5.35	0.00	NR		
8/18/2016	4.71	5.25	0.00	NR		
IW-5	9.88	3/19/2012	2.92	6.96	0.00	NR
		6/5/2012	3.68	6.20	0.00	NR
		8/1/2012	4.72	5.16	0.00	NR
		2/25/2013	NM	--	--	--
		2/26/2013	4.58	5.30	0.00	NR
		4/14/2013	NM	--	--	--
		5/15/2013	NM	--	--	--
		7/22/2013	5.38	4.50	0.00	NR
		8/12/2013	5.25	4.63	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	6.15	3.73	0.00	NR
		2/5/2014	6.91	2.97	0.00	NR
		3/28/2014	5.13	4.75	0.00	NR
		4/29/2014	4.27	5.61	0.00	NR
5/28/2014	4.44	5.44	0.00	NR		
6/27/2014	4.65	5.23	0.00	NR		
7/31/2014	4.88	5.00	0.00	NR		
8/29/2014	5.10	4.78	0.00	NR		

**Table 1**  
**Historical Groundwater Elevation Summary**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
IW-5	9.88	9/23/2014	5.22	4.66	0.00	NR
		10/22/2014	4.79	5.09	0.00	NR
		12/29/2014	3.61	6.27	0.00	NR
		1/30/2015	4.11	5.77	0.00	NR
		2/5/2015	4.31	5.57	0.00	NR
		2/26/2016	4.07	5.81	0.00	NR
		3/30/2016	3.78	6.10	0.00	NR
		4/27/2016	3.03	6.85	0.00	NR
		5/31/2016	3.83	6.05	0.00	NR
		6/30/2016	4.34	5.54	0.00	NR
		7/28/2016	4.73	5.15	0.00	NR
8/18/2016	4.81	5.07	0.00	NR		
IW-6	9.67	9/1/2015	5.04	4.84	0.00	NR
		3/19/2012	3.15	6.52	0.00	NR
		6/5/2012	3.74	5.93	0.00	NR
		8/1/2012	4.36	5.32	0.01	NR
		2/25/2013	NM	--	NM	--
		2/26/2013	4.10	5.57	0.00	NR
		4/14/2013	NM	--	NM	--
		5/15/2013	NM	--	NM	--
		7/22/2013	5.09	4.58	0.00	NR
		8/12/2013	5.23	4.44	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	5.75	3.92	0.00	NR
		2/5/2014	5.55	4.12	0.00	NR
		3/28/2014	3.93	5.74	0.00	NR
4/29/2014	3.71	5.96	0.00	NR		
5/28/2014	3.90	5.77	0.00	NR		
IW-6	9.67	6/27/2014	4.54	5.13	0.00	NR
		7/31/2014	4.81	4.86	0.00	NR
		8/29/2014	5.00	4.67	0.00	NR
		9/23/2014	5.03	4.64	0.00	NR
		10/22/2014	4.78	4.89	0.00	NR
		12/29/2014	3.20	6.47	0.00	NR
		1/30/2015	4.04	5.63	0.00	NR
		2/5/2015	3.70	5.97	0.00	NR
		9/1/2015	4.96	4.71	0.00	NR
		2/26/2016	3.29	6.38	sheen	NR
		3/30/2016	3.57	6.10	0.00	NR
		4/27/2016	2.79	6.88	0.00	NR
		5/31/2016	3.05	6.62	0.00	NR
		6/30/2016	4.09	5.58	0.00	NR
7/28/2016	4.58	5.09	0.00	NR		
8/18/2016	4.78	4.89	0.00	NR		



**Table 1**  
**Historical Groundwater Elevation Summary**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
Total product recovered from skimmers (MW-2, MW-3, and OW-1):						
Total product recovered prior to skimmer installation (mL):						7,770.0
Total product recovered prior to skimmer installation (oz):						262.0
Total product recovered prior to skimmer installation (gal):						2.05
Total product recovered post-skimmer installation (mL):						17,218.4
Total product recovered post-skimmer installation (oz):						582.0
Total product recovered post-skimmer installation (gal):						4.55
Total product recovered from wells without skimmers (mL):						12,602.0
Total product recovered from wells without skimmers (oz):						430.0
Total product recovered from wells without skimmers (gal):						3.36
Total product recovered (mL):						37,590.4
Total product recovered (oz):						1,271.0
Total product recovered (gal):						9.93

**Notes:**

\* Reference elevation surveyed relative to mean sea level and California State Coordinate System, Zone III.

1. Volume of product recovered on 9/27/02 and 3/23/05 calculated based on measurements from field data sheets.
2. Corrected groundwater elevation = top of casing elevation - depth to water + (product thickness x 0.85)
3. Sources: Geraghty and Miller 1990; Blasland, Bouck & Lee 1996

-- = no data

ft amsl = feet above mean sea level

ft btoc = feet below top of casing

gal = gallons

HVE = high vacuum extraction

mL = milliliters

oz = ounces

NA = not available

NC = not calculated

ND = not determined; due to the method used for HVE, a distinction could not be made between the volume of water and volume of product recovered

NM = not measured

NR = not recovered

**Table 2**  
**Groundwater Monitoring Results**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

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)	Conductivity (µS/cm)	Methane (µg/L)	Naphthalene (µg/L)	TDS (mg/L)
<b>Field Analysis</b>	--	--	--	--	--	--	--	--	<b>5,000</b>	--	--	<b>3,000</b>
<b>Tier 1 ESL</b>	--	<b>1</b>	<b>40</b>	<b>12.6726</b>	<b>20</b>	<b>5</b>	<b>100</b>	<b>100</b>	--	--	<b>0.165158</b>	--
MW-3	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<b>270</b>	<b>14000 / 970*</b>	2,231	3,700	<b>1.6</b>	1,300
MW-4	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	58	<b>8000 / 670*</b>	1,877	6,300	<b>1.8</b>	1,300
MW-8	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<b>270</b>	<b>130 / &lt;49*</b>	<b>9,654</b>	1,600	<b>7.7</b>	<b>5,100</b>
MW-9	8/19/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>160 / &lt;54*</b>	<b>19,840</b>	8,000	<1.0	<b>14,000</b>
MW-10	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>200 / &lt;52*</b>	<b>11,320</b>	2,900	<1.0	<b>6300</b>
MW-11	8/19/2016	<0.50	<0.50	<0.50	<1.0	<0.50	63	<b>870 / &lt;52*</b>	8,166	11,000	<1.0	<b>4,000</b>
MW-13	8/19/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>850 / &lt;51*</b>	1,954	12,000	<1.0	1,400
MW-14	8/19/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>58 / &lt;54*</b>	9,803	8,700	<1.0	<b>5,900</b>
MW-15	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	54	<b>510 / &lt;51*</b>	<b>5,137</b>	4,300	<1.0	1,800
MW-16	8/19/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>430 / &lt;53*</b>	10,340	9,700	<1.0	<b>5,300</b>
MW-17	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>&lt;52 / &lt;52*</b>	<b>12,540</b>	3,500	<1.0	<b>7,100</b>
MW-18	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>750 / &lt;51*</b>	4,725	3,700	<1.0	<b>3,600</b>
MW-19	8/19/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>980 / 180*</b>	9,086	6,400	<1.0	<b>5,200</b>
MW-20	8/19/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>4200 / 130*</b>	4,681	5,900	<1.0	2,400
MW-21	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<b>290</b>	<b>7200 / 1700*</b>	3,478	6,100	<b>1.3</b>	1,900
MW-23	8/19/2016	<0.50	<0.50	<0.50	<1.0	<0.50	78	<b>3400 / 1400*</b>	2,351	9,900	<b>2.3</b>	1,700
MW-25	8/18/2016	<2.5	<2.5	<2.5	<5.0	<2.5	<250	<b>3700 / 1300*</b>	4,260	3,800	<b>310</b>	2,300
MW-26	8/19/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>220 / &lt;51*</b>	2,389	11,000	0.11	1,600
MW-27	8/19/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>590 / &lt;51*</b>	3,249	6,900	<1.0	2,000
MW-28	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>1500 / 66*</b>	4,816	3500	<1.0	3,000
MW-29	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>780 / 75*</b>	2,587	3500	<1.0	1,100
IW-3	8/19/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<b>480 / &lt;53*</b>	2,710	8,600	<1.0	1,900
IW-4	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<b>400</b>	<b>25000 / 14000*</b>	2,195	5,400	<b>1.5</b>	1,400
IW-5	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<b>610</b>	<b>55000 / 50000*</b>	2,450	5,400	<b>2.5</b>	1,600
IW-6	8/18/2016	<0.50	<0.50	<0.50	<1.0	<0.50	<b>220</b>	<b>4100 / 1200*</b>	<b>15,810</b>	2,000	<b>1.2</b>	<b>12,000</b>

See notes on Page 2.

**Table 2**  
**Groundwater Monitoring Results**  
UPS Oakland Hub  
8400 Pardee Drive, Oakland, California  
Global ID #T0600100939

**Notes:**

1. **Bold values indicate analytical detections above groundwater ESL.**

2. ESLs = Regional Water Quality Control Board Environmental Screening Levels for Environmental Concerns at Sites with Contaminated Soil and Groundwater  
INTERIM FINAL - February 2016, San Francisco Bay Region, California.

-- = no data

< = less than

ESL = environmental screening level

mg/L = milligrams per liter

µg/L = micrograms per liter

µS/cm = microSiemens per centimeter

MTBE = methyl tert-butyl ether

NM = not measured

NS = not sampled

TDS = total dissolved solids

TPH = total petroleum hydrocarbon

\* = Analysis performed using Silica Gel Cleanup

**Table 3**  
**Groundwater Monitoring Results for PAHs**  
 UPS Oakland Hub  
 8400 Pardee Drive, Oakland, California  
 Global ID #T0600100939

Monitoring Well	Date	Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Anthracene (µg/L)	Benzo(a)-anthracene (µg/L)	Benzo(b)-fluoranthene (µg/L)	Benzo(k)-fluoranthene (µg/L)	Benzo(g,h,i)-perylene (µg/L)	Benzo(a)-pyrene (µg/L)	Chrysene (µg/L)	Dibenz(a,h)-anthracene (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Indeno-(1,2,3-c,d)pyrene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)	Naphthalene (µg/L)
Tier 1 ESL	--	20	30	0.73	0.027	0.035	0.049	0.1	0.014	0.049	0.011	8	3.9	0.049	4.6	2	0.12
MW-1	4/3/2009																
		ABANDONED															
MW-3	8/18/2016	1.3	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	4.3	<0.10	2.4	0.11	0.53
MW-4	8/18/2016	0.46	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	1.7	<0.10	0.12	<0.10	0.36
MW-8	8/18/2016	0.72	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.31	<0.10	0.14	<0.10	4.70
MW-9	8/19/2016	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
MW-10	8/18/2016	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-11	8/19/2016	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
MW-13	8/19/2016	0.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.3	<0.10	<0.10	<0.10	0.13
MW-14	8/19/2016	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
MW-15	8/18/2016	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-16	8/19/2016	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
MW-17	8/18/2016	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-18	8/18/2016	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-19	8/19/2016	0.28	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.33	<0.10	0.28	<0.10	0.28
MW-20	8/19/2016	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098
MW-21	8/18/2016	1.7	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	5	<0.10	1.60	<0.10	0.86
MW-23	8/19/2016	0.75	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	1.3	<0.097	0.93	<0.097	0.94
MW-25	8/18/2016	57	<1.0	7.9	2.4	<1.0	<1.0	<1.0	<1.0	2	<1.0	21	49	<1.0	83	10.0	240
MW-26	8/19/2016	0.31	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.18	<0.10	0.26	<0.10	0.11
MW-27	8/19/2016	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-28	8/18/2016	0.49	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.17	0.21	<0.10	0.4	0.16	0.23
MW-29	8/18/2016	0.27	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.21
IW-3	8/19/2016	1.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.67	<0.10	0.38	<0.10	0.20
IW-4	8/18/2016	2.9	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.36	6.4	<0.20	2.1	0.47	1
IW-5	8/18/2016	7.2	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	13	<1.1	9.3	<1.1	3.6
IW-6	8/18/2016	0.71	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	1.5	<0.10	0.61	<0.10	0.33

**Notes:**

1. Bold values indicate analytical detections above groundwater ESL.

2. ESLs = Regional Water Quality Control Board Environmental Screening Levels for Environmental Concerns at Sites with Contaminated Soil and Groundwater INTERIM FINAL - February 2016, San Francisco Bay Region, CA

< = less than

ESL = environmental screening level

PAHs = polycyclic aromatic hydrocarbons

µg/L = micrograms per liter

**Table 4**  
**Wellhead Methane Screening Summary**  
**UPS-Oakland Hub**  
**8400 Pardee Drive, Oakland, California**  
**Global ID #T0600100939**

Monitoring Well	Date	Depth to Groundwater (ft btoc)	Depth to SPH (ft btoc)	Depth to Screen (ft btoc)	Exposed Screen (ft)	Methane (%)
MW-12	9/1/2015	5.87	5.30	1.87	3.43	9.8
	9/25/2015	6.21	5.50		3.63	5.6
	10/30/2015	6.62	5.77		3.90	22.0
	11/25/2015	6.14	5.90		4.03	19.9
	12/31/2015	5.37	4.66		2.79	25.0
	1/29/2016	4.69	4.13		2.26	--
	2/26/2016	4.53	3.83		1.96	--
	3/30/2016	4.57	--		2.70	--
	4/27/2016	4.36	4.10		2.23	--
	5/31/2016	4.75	4.60		2.73	--
	6/30/2016	5.03	4.65		2.78	--
	7/28/2016	5.51	5.01		3.14	16.1
	8/18/2016	5.23	5.15		3.28	--
MW-15	9/1/2015	4.70	--	2.35	2.35	33.3
	9/25/2015	5.00	--		2.65	21.3
	10/30/2015	5.26	--		2.91	15.8
	11/25/2015	5.01	--		2.66	16.0
	12/31/2015	3.57	--		1.22	0.0
	1/29/2016	3.31	--		0.96	29.6
	2/26/2016	3.81	--		1.46	0.0
	3/30/2016	3.78	--		1.43	15.1
	4/27/2016	3.13	--		0.78	--
	5/31/2016	4.01	--		1.66	0.0
	6/30/2016	4.34	--		1.99	5.2
	7/28/2016	4.57	--		2.22	3.0
8/18/2016	4.71	--	2.36			
MW-16	9/1/2015	9.02	--	2.40	6.62	28.7
	9/25/2015	7.18	--		4.78	19.5
	10/30/2015	6.17	--		3.77	4.1
	11/25/2015	4.22	--		1.82	5.0
	12/31/2015	3.74	--		1.34	3.3
	1/29/2016	3.19	--		0.79	--
	2/26/2016	2.71	--		0.31	--
	3/30/2016	3.31	--		0.91	--
	4/27/2016	3.50	--		1.10	4.6
	5/31/2016	4.45	--		2.05	3.8
	6/30/2016	4.79	--		2.39	10.3
	7/28/2016	5.18	--		2.78	11.5
8/18/2016	5.32	--	2.92	--		

**Table 4**  
**Wellhead Methane Screening Summary**  
**UPS-Oakland Hub**  
**8400 Pardee Drive, Oakland, California**  
**Global ID #T0600100939**

Monitoring Well	Date	Depth to Groundwater (ft btoc)	Depth to SPH (ft btoc)	Depth to Screen (ft btoc)	Exposed Screen (ft)	Methane (%)
MW-17	9/1/2015	10.50	--	2.78	7.72	0.0
	9/25/2015	9.16	--		6.38	0.0
	10/30/2015	7.63	--		4.85	0.0
	11/25/2015	7.20	--		4.42	0.0
	12/31/2015	6.85	--		4.07	0.0
	1/29/2016	2.34	--		-0.44	--
	2/26/2016	7.38	--		4.60	0.0
	3/30/2016	4.20	--		1.42	0.0
	4/27/2016	4.38	--		1.60	0.0
	5/31/2016	7.62	--		4.84	0.0
	6/30/2016	4.98	--		2.20	0.00
	7/28/2016	7.62	--		4.84	0.0
	8/18/2016	7.32	--		4.54	--
MW-18	9/1/2015	9.14	--	2.50	6.64	15.4
	9/25/2015	6.64	--		4.14	1.6
	10/30/2015	6.30	--		3.80	0.0
	11/25/2015	4.80	--		2.30	0.0
	12/31/2015	4.27	--		1.77	0.0
	1/29/2016	3.21	--		0.71	--
	2/26/2016	3.60	--		1.10	0.0
	3/30/2016	2.98	--		0.48	--
	4/27/2016	2.74	--		0.24	--
	5/31/2016	3.98	--		1.48	0.0
	6/30/2016	4.71	--		2.21	5.0
	7/28/2016	4.94	--		2.44	2.1
	8/18/2016	5.22	--		2.72	--
MW-19	9/1/2015	7.25	--	2.96	4.29	1.4
	9/25/2015	8.08	--		5.12	1.7
	10/30/2015	7.42	--		4.46	0.8
	11/25/2015	7.29	--		4.33	1.0
	12/31/2015	6.30	--		3.34	0.0
	1/29/2016	1.82	--		-1.14	--
	2/26/2016	2.54	--		-0.42	--
	3/30/2016	1.56	--		-1.40	--
	4/27/2016	0.81	--		-2.15	--
	5/31/2016	4.79	--		1.83	0.0
	6/30/2016	4.70	--		1.74	0.3
	7/28/2016	5.22	--		2.26	0.0
	8/18/2016	5.47	--		2.51	--

**Table 4**  
**Wellhead Methane Screening Summary**  
**UPS-Oakland Hub**  
**8400 Pardee Drive, Oakland, California**  
**Global ID #T0600100939**

Monitoring Well	Date	Depth to Groundwater (ft btoc)	Depth to SPH (ft btoc)	Depth to Screen (ft btoc)	Exposed Screen (ft)	Methane (%)
MW-23	9/1/2015	7.70	--	2.65	5.05	35.0
	9/25/2015	7.00	--		4.35	31.8
	10/30/2015	7.28	--		4.63	29.5
	11/25/2015	7.12	--		4.47	33.0
	12/31/2015	6.35	--		3.70	22.9
	1/29/2016	5.04	--		2.39	32.3
	2/26/2016	5.69	--		3.04	20.0
	3/30/2016	5.10	--		2.45	21.3
	4/27/2016	4.80	--		2.15	25.2
	5/31/2016	5.80	--		3.15	26.5
	6/30/2016	6.13	--		3.48	32.0
	7/28/2016	6.49	--		3.84	33.3
	8/18/2016	6.62	--		3.97	--
MW-24	9/1/2015	4.99	--	1.90	3.09	55.2
	9/25/2015	5.56	--		3.66	36.8
	10/30/2015	6.03	5.56		3.66	14.2
	11/25/2015	5.89	5.46		3.56	12.6
	12/31/2015	5.15	5.02		3.12	16.4
	1/29/2016	4.32	4.12		2.22	41.1
	2/26/2016	4.00	3.5		1.60	24.8
	3/30/2016	3.98	3.6		1.70	32
	4/27/2016	3.70	--		1.80	31.4
	5/31/2016	4.35	3.56		1.66	26.2
	6/30/2016	4.75	4.41		2.51	45.0
	7/28/2016	5.10	4.76		2.86	49.5
	8/18/2016	5.24	4.9		3.00	--
MW-26	9/1/2015	4.83	--	2.90	1.93	17.9
	9/25/2015	5.15	--		2.25	19.5
	10/30/2015	5.41	--		2.51	16.7
	11/25/2015	5.20	--		2.30	17.3
	12/31/2015	5.12	--		2.22	16.1
	1/29/2016	3.41	--		0.51	--
	2/26/2016	3.54	--		0.64	--
	3/30/2016	3.10	--		0.20	--
	4/27/2016	3.20	--		0.30	--
	5/31/2016	3.29	--		0.39	--
	6/30/2016	4.11	--		1.21	29.0
	7/28/2016	4.49	--		1.59	26.9
8/18/2016	4.68	--	1.78	--		

**Table 4**  
**Wellhead Methane Screening Summary**  
**UPS-Oakland Hub**  
**8400 Pardee Drive, Oakland, California**  
**Global ID #T0600100939**

Monitoring Well	Date	Depth to Groundwater (ft btoc)	Depth to SPH (ft btoc)	Depth to Screen (ft btoc)	Exposed Screen (ft)	Methane (%)
MW-27	9/1/2015	4.60	--	2.73	1.87	20.1
	9/25/2015	4.87	--		2.14	6.5
	10/30/2015	5.11	--		2.38	6.0
	11/25/2015	5.08	--		2.35	7.5
	12/31/2015	4.20	--		1.47	4.9
	1/29/2016	3.71	--		0.98	4.9
	2/26/2016	3.30	--		0.57	--
	3/30/2016	2.99	--		0.26	--
	4/27/2016	3.01	--		0.28	--
	5/31/2016	3.71	--		0.98	--
	6/30/2016	4.14	--		1.41	13.6
	7/28/2016	4.36	--		1.63	9.6
	8/18/2016	4.53	--		1.80	--
IW-2	9/1/2015	5.40	4.70	2.00	2.70	0.8
	9/25/2015	5.78	5.43		3.43	0.0
	10/30/2015	6.08	5.63		3.63	0.2
	11/25/2015	5.91	5.50		3.50	0.0
	12/31/2015	4.56	4.16		2.16	6.9
	1/29/2016	4.13	--		2.13	0.0
	2/26/2016	4.52	3.80		1.80	0.1
	3/30/2016	4.01	3.76		1.76	0
	4/27/2016	4.16	--		2.16	0.0
	5/31/2016	5.60	5.08		3.08	--
	6/30/2016	4.66	4.42		2.42	7.3
	7/28/2016	5.04	4.86		2.86	5.2
	8/18/2016	5.1	4.98		2.98	--

**Notes:**

Wells purged of one case volume using a Gilair personal air sampling pump.

All screening results collected with an Landtec brand GEM 2000 portable gas monitor.

-- = no SPH detected

ft btoc = feet below top of casing

ft = feet

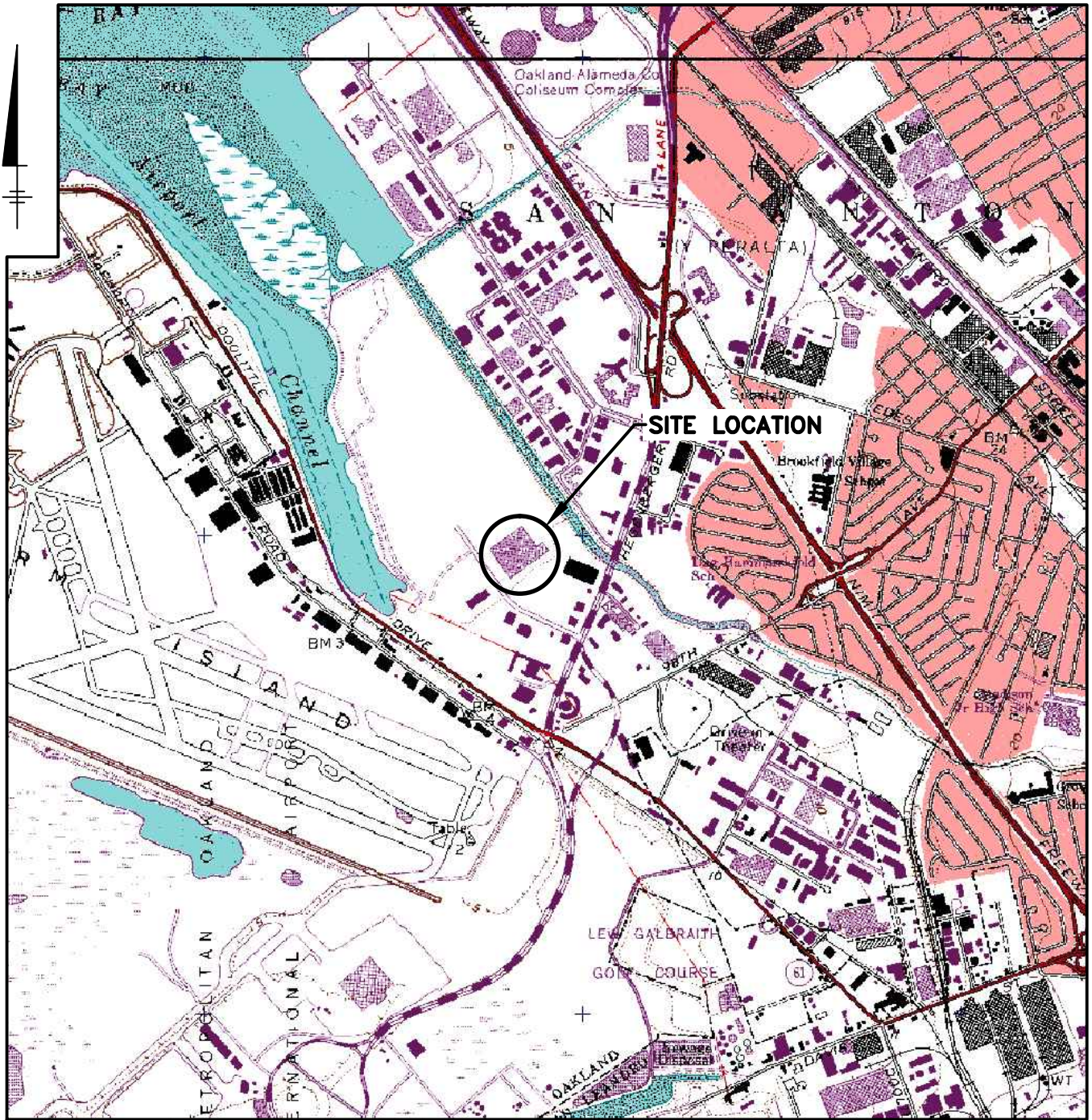
SPH = separate phase hydrocarbon



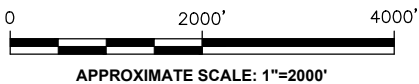
# FIGURES



CITY:TMAPA-FL DIV:GROUP:85 DB:JAR LD:(Opt) PIC:(Opt) PM:(Recd) TM:(Opt) LYR:(Opt) OFF:REF  
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 XREFS: IMAGES: PROJECTNAME: --- UPS-OAK.bmp



Source: USGS 7.5 Min. Topo. Quad., San Leandro, Calif. (1993)



UPS OAKLAND HUB  
 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA  
 GLOBAL ID #T0600100939

**SITE LOCATION MAP**

CITY: TAMPA DIV: GROUP: ENV-141 DB: JAR LD: (Opt) PIC: (Opt) PM: (Reqd) TR: (Opt) LVR: (Option) OFF: REF: C:\ENV\CAD\TAMPACT\B0038398 UPS Oakland\GMR Aug 2016\B0038398\_26\_400-NOZ.dwg LAYOUT: 2 SAVED: 9/23/2016 4:47 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 9/23/2016 4:47 PM BY: RICHARDS, JIM



LEGEND

- AREA OF CONCERN
  - PROPERTY BOUNDARY
  - UST UNDERGROUND STORAGE TANK
- 0      200'      400'
- GRAPHIC SCALE

UPS OAKLAND HUB  
 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA  
**GLOBAL ID #T0600100939**

**FACILITY LAYOUT MAP**

SOURCE: AERIAL PHOTOGRAPH PROVIDED BY GOOGLE EARTH PRO.

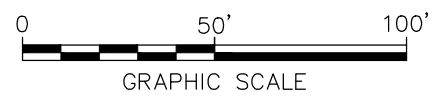
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**LEGEND**

- MONITORING WELL
- TEMPORARY VACUUM TEST WELL
- PHASE I INJECTION WELL
- ABANDONED MONITORING WELL
- ▲ SOIL BORING (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
- UST UNDERGROUND STORAGE TANK

NOTE: SOIL BORING FPB-1, FPB-5, FPB-7 AND FPB-12 WERE ADVANCED IN AUGUST 2015.



UPS OAKLAND HUB  
 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA  
**GLOBAL ID #T0600100939**

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SITE MAP

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Design & Consultancy  
 for natural and built assets

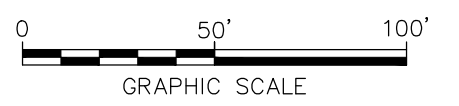
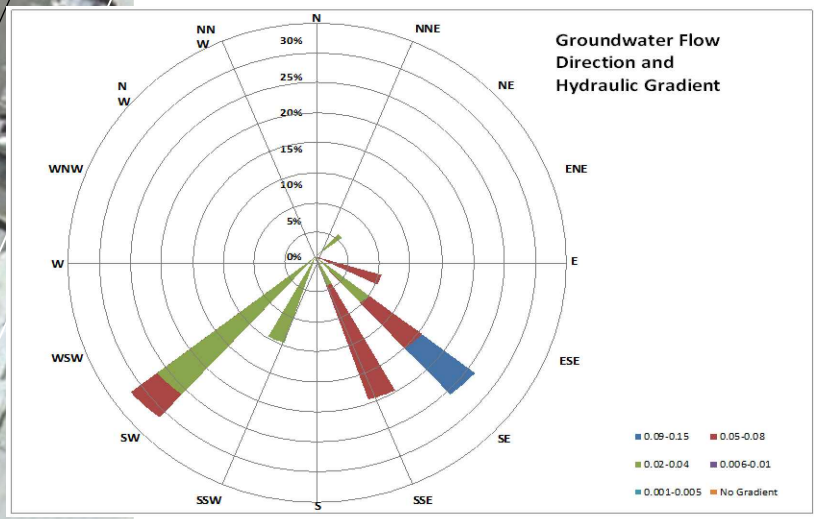
FIGURE  
**3**

CITY:TAMPA DIV:GROUP:85 DB:JAR LD:(Ort) PIC:(Ort) PM:(Reed) TM:(Ort) LVR:(Ort) LYS:(Ort) OFF=REF  
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**LEGEND**

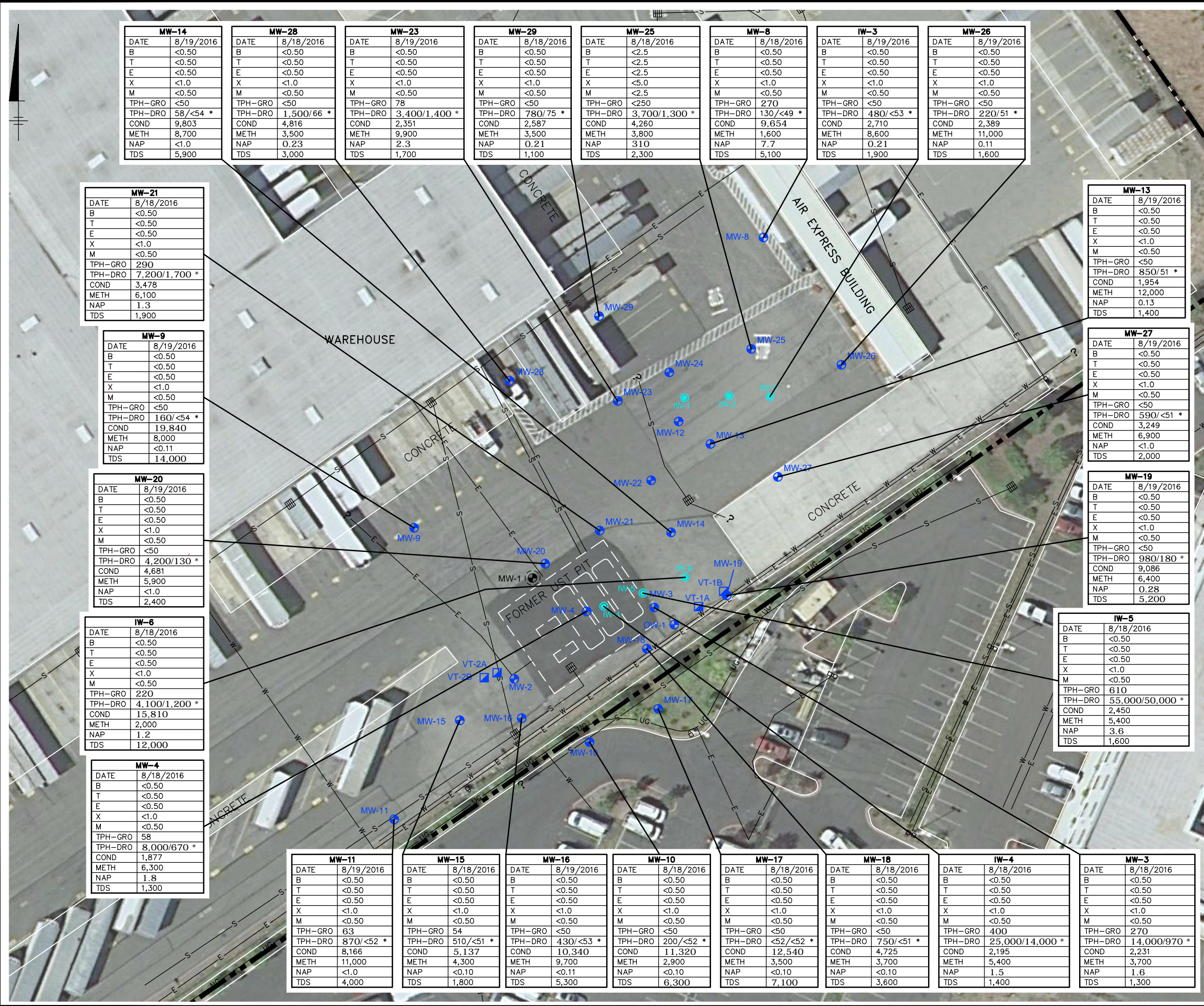
- MONITORING WELL
- TEMPORARY VACUUM TEST WELL
- PHASE I INJECTION WELL
- ABANDONED MONITORING WELL
- PROPERTY BOUNDARY
- UNDERGROUND ELECTRICAL LINE
- STORM WATER/SEWER LINE
- WATER/FIRE SERVICE/IRRIGATION
- ELECTRIC/WATER LINE
- CATCH BASIN/STORM DRAIN
- LIGHT POST/POWER POLE
- UST
- WATER-TABLE ELEVATION CONTOUR  
DASHED WHERE INFERRED  
CONTOUR INTERVAL = 1 FOOT
- (4.65) WATER-TABLE ELEVATION (FEET)
- APPARENT DIRECTION OF GROUNDWATER FLOW



UPS OAKLAND HUB  
 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA  
**GLOBAL ID #T0600100939**

**GROUNDWATER CONTOUR MAP  
 AUGUST 18 AND 19, 2016**

CITY:TAMPA DIV:GROUP:85 DB:JAR LD:(Ort) PIC:(Ort) PM:(Recd) TM:(Ort) LVR:(Ort) LMS:TECH ACAD:VER: 19.1S (LMS TECH) PAGES:SETUP: 19.1S (LMS TECH) PLOTTED: 9/23/2016 5:54 PM BY: RICHARDS, JIM



- LEGEND**
- MONITORING WELL
  - TEMPORARY VACUUM TEST WELL
  - PHASE I INJECTION WELL
  - ABANDONED MONITORING WELL
  - — — — — PROPERTY BOUNDARY
  - ▣ CATCH BASIN/STORM DRAIN
  - ⊠ LIGHT POST/POWER POLE
  - E — UNDERGROUND ELECTRICAL LINE
  - S — STORM WATER/SEWER LINE
  - W — WATER/FIRE SERVICE/IRRIGATION
  - UG — ELECTRIC/WATER LINE
  - ⊠ UST UNDERGROUND STORAGE TANK

SAMPLE LOCATION	
DATE	SAMPLE DATE
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
M	METHYL TERT-BUTYL ETHER
TPH-GRO	TOTAL PETROLEUM HYDROCARBON GASOLINE
TPH-DRO	TOTAL PETROLEUM HYDROCARBON DIESEL
COND	CONDUCTIVITY
METH	METHANE
NAP	NAPHTHALENE
TDS	TOTAL DISSOLVED SOLIDS

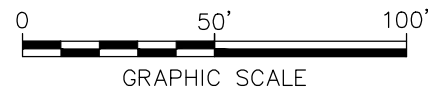
ALL RESULTS REPORTED IN MICROGRAMS PER LITER (µg/L), EXCEPT TDS REPORTED IN MILLIGRAMS PER LITER (mg/L) AND CONDUCTIVITY REPORTED IN MICROSIEMENS PER CENTIMETER (µS).

< = INDICATES THAT THE COMPOUND WAS ANALYZED FOR BUT NOT DETECTED

BOLD VALUES INDICATE THE CONCENTRATION EXCEEDS THE SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) ENVIRONMENTAL SCREENING LEVEL (ESL) FOR RESIDENTIAL PROPERTIES WHERE GROUNDWATER IS NOT A CURRENT OR POTENTIAL SOURCE OF DRINKING WATER.

MONITORING WELL MW-12, OBSERVATION WELL OW-1, AND INJECTION WELLS IW-1 AND IW-2 NOT SAMPLED DUE TO MEASURABLE FREE PRODUCT.

3,700/1,100 \* = TPH-DRO ANALYSIS PERFORMED WITHOUT AND WITH SILICA GEL CLEANUP



UPS OAKLAND HUB  
8400 PARDEE DRIVE, OAKLAND, CALIFORNIA  
**GLOBAL ID #T0600100939**

**GROUNDWATER QUALITY MAP  
AUGUST 18 AND 19, 2016**



# APPENDIX A

## Groundwater Gauging and Sampling Logs



## WELL GAUGING DATA

Project # 160330-NDI

Date 3/30/16

Client Arcadis

Site 8400 Pardee 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 <del>TOB</del>	Notes
MW-2	1157	2		4.00	0.10		4.10	-		
MW-3	1215	2					4.09	14.49		
MW-4	1200	2					3.13	-		
MW-8	1030	2					2.40	12.23		
MW-9	1105	2					5.20	13.26		
MW-10	1015	2					6.39	12.26		
MW-11	1150	2					4.83	12.50		
MW-12	1219	2					4.57	9.03		mm
MW-13	1124	2					3.83	9.11		
MW-14	1120	2					1.63	9.27		
MW-15	1152	2					3.78	10.33		mm
MW-16	1156	2					3.31	10.38		↓
MW-17	1223	2					4.20	-		
MW-18	1205	2					2.98	10.55		
MW-19	1212	2					1.56	9.96		↓
MW-20	1040	2					3.44	11.57		
MW-21	1035	2					2.89	11.67	↓	



## WELL GAUGING DATA

Project # 160330-ND1 Date 3/30/16 Client Arcadis

Site 8400 Pardee 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-22	1130	2					3.32	11.26		
MW-23	1053	2					5.10	11.57		MM
MW-24	1045	2		3.60	0.38		3.98	-		MM
MW-25	1038	2					5.02	11.56		
MW-26	1025	2					3.10	12.81		MM
MW-27	1110	2					2.99	12.84		MM
MW-28	1055	2					7.00	11.52		
MW-29	1056	2					5.83	-		
OW-1	1225	6		5.11	0.09		5.20	-		
IW-1	1230	2		3.89	0.80		4.69	-		
IW-2	1233	2		3.76	0.25		4.01	-		MM
IW-3	1115	2					3.02	9.13	↓	
IW-4	Unable to access			- Parked over by trailer						mm
IW-5	1236	2					3.78	-	↓	
IW-6	1240	2					3.57	-	↓	

# WELL MONITORING DATA SHEET

Project #: 160330-ND1	Client: Arcadis
Sampler: ND	Date: 3/30/16
Well I.D.: MW-15	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 10.33	Depth to Water (DTW): 3.78
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

_____ (Gals.) X _____	=	_____ 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
1300	(1)	case	volume =	2,289 mL		
	Purged	2500	mL w/ Gill	Air 5	(2000 mL/m)	
1302	Switched to	Gem	2000			
1310	Reading stabilized @			15.1%		

Did well dewater?    Yes    No    Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_    Sampling Time: \_\_\_\_\_    Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_    Laboratory:    Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time    Duplicate I.D. (if applicable): \_\_\_\_\_

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

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

O.R.P. (if req'd):    Pre-purge: \_\_\_\_\_ mV    Post-purge: \_\_\_\_\_ mV

## WELL MONITORING DATA SHEET

Project #: 160330-ND1	Client: Arcadis
Sampler: NT	Date: 3/30/16
Well I.D.: MW-17	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth (TD): -	Depth to Water (DTW): 4.20
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

_____ (Gals.) X _____ = _____ Gals. 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1313	(1)	Case volume =		2543 mL		
1315	Purged	3,000 mL w/ GilAir 5		(24000 mL/min)		
	Switched to Gem 2000					
1319	Reading stabilized @		0%			

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

## WELL MONITORING DATA SHEET

Project #: 160330-ND1	Client: Arcadis
Sampler: ND	Date: 3/30/16
Well I.D.: MW-23	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth (TD): 11.57	Depth to Water (DTW): 5.10
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

~~Water~~  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

	(Gals.) X _____	= _____	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
1323	(1)	case volume =	3,088 mL			
		Purged 4000 mL w/	GilAir 5 (2000 mL/min)			
1325		Switch to Gem 2000				
1328		Readings stabilized @	21.31			

Did well dewater? Yes No Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:		mg/L	Post-purge:		mg/L
O.R.P. (if req'd):	Pre-purge:		mV	Post-purge:		mV

## WELL MONITORING DATA SHEET

Project #: 160330-ND1	Client: Arcadis
Sampler: ND	Date: 3/30/16
Well I.D.: MW-24	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth (TD): -	Depth to Water (DTW): 3.98
Depth to Free Product: 3.60	Thickness of Free Product (feet): 0.38
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

Other: \_\_\_\_\_

<p>(Gals.) X _____ = _____ Gals.</p> <p>1 Case Volume      Specified Volumes      Calculated Volume</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
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
1335	(1)	case volume =		2,180 mL		
1337	Purged	2,500 mL w/		GilAir 5	(2000 ml/min)	
		Switched to Gem 2000				
1345	Readings	stabilized @		[32%]		

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

# WELL MONITORING DATA SHEET

Project #: 160330-ND1	Client: Arcadis
Sampler: ND	Date: 3/30/16
Well I.D.: 1W-2	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 4.07
Depth to Free Product: 3.76	Thickness of Free Product (feet): 0.25
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

Other: \_\_\_\_\_

_____ (Gals.) X _____	=	_____ Gals.
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
1348	(1) case volume = 2277 mL					
	Purged 2,500 mL w/ GillNet 5 (2000 mL/min)					
1352	Switched to Gem2900					
1400	Readings stabilized @				0.1	

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory: Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## WELLHEAD INSPECTION CHECKLIST

Client Arcadis Date 3/30/16

Site Address 8400 Pardee Dr. - Oakland, CA

Job Number 160330-ND1 Technician ND

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-2	X							
MW-3	X	X						
MW-4	X							
MW-8	X							
MW-9	X	X						
MW-10	X							
MW-11	X							
MW-12	X							
MW-13						X		
MW-14	X	X						
MW-15						X		
MW-16		X						
MW-17	X							
MW-18	X							
MW-19	X	X						
MW-20	X							

NOTES: MW-13: 1/2 bolts missing  
MW-15: 3/2 bolts stripped

# WELLHEAD INSPECTION CHECKLIST

Client Arcadis Date 3/30/16

Site Address 8400 Pardee Dr. - Oakland, CA

Job Number 160330-ND1 Technician ND

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-21	X							
MW-22							X	
MW-23	X	X						
MW-24	X	X						
MW-25	X							
MW-26	X							
MW-27	X	X						
MW-28	X							
MW-29	X							
OW-1	X							
IW-1	X							
IW-2						X		
IW-3	X	X						
IW-4	X							
IW-5	X							
IW-6	X							

NOTES: IW-2 : 1/2 bolts stripped  
MW-22 : 1/2 bolt missing



### WELL GAUGING DATA

Project # 1100427-DS2 Date 4-27-16 Client Arcadis

Site 8400 Paradise Ave, 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	1159	2	Yes	3.34	0.15	-	3.49	-		
mw-3	1144	2	No				3.40	14.50		
mw-4	1155	2	No				2.84	-		
mw-8	1231	2	No				2.64	12.24		
mw-9	1234	2	No				5.01	13.26		
mw-10	1220	2	No				8.07	12.25		
mw-11	1238	2	No				4.89	12.50		
* mw-12	1240	2	Yes	4.10			4.36	9.03		MM
mw-13	1244	2	No	<del>4.10</del>			<del>4.36</del> 4.03	9.10		
mw-14	1142	2	No				0.74	9.27		
mw-15	1202	2	No				3.13	10.33		MM
mw-16	1248	2	No				3.50	10.38		MM
mw-17	1224	2	No				<del>4.38</del> 2.32	-		MM
mw-18	12.54	2	No				2.74	10.55		MM
mw-19	1148	2	No				0.81	9.96		MM
mw-20	1250	2	No				3.50	11.57		
mw-21	1206	2	No				2.24	11.06		

## WELL GAUGING DATA

Project # 166427-DS2 Date 4-27-16 Client Arcadis

Site 8400 Pardee Ave. Downard, 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-22	1200	2	NO				2.97	11.26	↓	
mw-23	1211	2	NO				4.80	14.58		MM
mw-24	1215	2	NO				3.70	10.80		MM
mw-25	1136	2	N				3.18	<del>11.50</del> 12.24		
mw-26	1133	2	N				3.20	<del>12.81</del> 13.26		MM
mw-27	1130	2	N				3.01	12.85		MM
mw-28	1255	2	NO				8.80	11.50		
mw-29	1300	2	NO				6.64	<del>9.03</del> (2)		
ow-1	1150	6	YES	7.30	0.16		7.40	-		
IW-1	1308	2	NO				6.81	-		
IW-2	1315	2	NO				4.16	-		MM
IW-3	1308	2	NO				5.18	9.13		
IW-4	1157	2	NO				3.47	9.00		MM
IW-5	1152	2	NO				3.03	-		
IW-6	1305	2	NO				2.79	-		

## WELL MONITORING DATA SHEET

Project #: <u>160427-DS2</u>	Client: <u>Arcadis</u>
Sampler: <u>DS</u>	Date: <u>4-27-16</u>
Well I.D.: <u>MW-16</u>	Well Diameter: 2 3 4 6 8 <u>    </u>
Total Well Depth (TD): <u>10.38</u>	Depth to Water (DTW): <u>3.50</u>
Depth to Free Product: <u>-</u>	Thickness of Free Product (feet): <u>-</u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer      Water  
 Disposable Bailer      Peristaltic  
 Positive Air Displacement      Extraction Pump  
 Electric Submersible      Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other: \_\_\_\_\_

(Gals.) X \_\_\_\_\_ = \_\_\_\_\_ Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1350	(1)	Case	Volume	= 2119	≈ 2200 ml	
1353		purged 2200 mL w/ Gil Air (2000 mL/min)				
		Switched to Bem 5000				
1358	Reading	Stabilized @ 4.6% CH <sub>4</sub>				

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory:    Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## WELL MONITORING DATA SHEET

Project #: <u>160427-DS2</u>	Client: <u>Arcadis</u>
Sampler: <u>DS</u>	Date: <u>4-27-16</u>
Well I.D.: <u>MW-17</u>	Well Diameter: <u>(2)</u> 3 4 6 8 <u>   </u>
Total Well Depth (TD): <u>   </u>	Depth to Water (DTW): <u>4.38</u>
Depth to Free Product: <u>   </u>	Thickness of Free Product (feet): <u>   </u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

$\frac{\text{Gals.}}{\text{Specified Volumes}} \times \text{I Case Volume} = \text{Calculated Volume Gals.}$	<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 (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1415	(1)	case volume	= 2052 mL			
1417		purged 2055 mL w/ gill Air (2000 mL/min)				
1419		switched to Gem5000				
1423		Reading stabilized @ 0% CH4				

Did well dewater? Yes No	Gallons actually evacuated:
Sampling Date:	Sampling Time: Depth to Water:
Sample I.D.:	Laboratory: Kiff CalScience Other <u>   </u>
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: <u>   </u> mg/L	Post-purge: <u>   </u> mg/L
O.R.P. (if req'd): Pre-purge: <u>   </u> mV	Post-purge: <u>   </u> mV

## WELL MONITORING DATA SHEET

Project #: 160427-DS2	Client: Arcadis
Sampler: DS	Date: 4-27-16
Well I.D.: MW-23	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 11.48	Depth to Water (DTW): 4.80
Depth to Free Product: <u>4</u>	Thickness of Free Product (feet): <u>—</u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1430	(1) case		volume = 2900		8 mL	
1432	purged		3000 mL		w/ gal Air (2000 mL/min)	
1434	switched to		Gem 5000			
143	stabilized @		25.2%		CH <sub>4</sub>	

Did well dewater? Yes No Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

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

O.R.P. (if req'd): Pre-purge: \_\_\_\_\_ mV Post-purge: \_\_\_\_\_ mV

## WELL MONITORING DATA SHEET

Project #: 160427-DS7	Client: Arcadis
Sampler: PS	Date: 4-27-16
Well I.D.: MW-24	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 10.80	Depth to Water (DTW): 3.20
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

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
1440						(1) case volume = 2240 mL
1441						purged 2300 mL w/ gal Air (2000 mL/min)
						switched to Gem 5008
1446						stabilized @ 31.4 % CH4

Did well dewater?    Yes    No                      Gallons actually evacuated:

Sampling Date:                      Sampling Time:                      Depth to Water:

Sample I.D.:                                      Laboratory:    Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable):                      @                      Duplicate I.D. (if applicable):

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

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

O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV
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## WELL MONITORING DATA SHEET

Project #: <u>160427-DS2</u>	Client: <u>Arcadis</u>
Sampler: <u>DS</u>	Date: <u>4-27-16</u>
Well I.D.: <u>JW-2</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>—</u>	Depth to Water (DTW): <u>4.16</u>
Depth to Free Product: <u>—</u>	Thickness of Free Product (feet): <u>—</u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

_____ (Gals.) X _____ = _____ Gals. 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1450	(1)	case	volume = 25	9.29 mL		
1452						purged 1 case volume = 2000 mL w/ 0.1 Air (2000 mL/min)
						switched to Gen 5000
1455						Reading stabilized @ 0% CH4

Did well dewater?      Yes      No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory: Kiff      CalScience      Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELLHEAD INSPECTION CHECKLIST

Client Arcadis Date 4-27-16  
 Site Address 8400 parade Ave., Oakland CA  
 Job Number 160427-032 Technician DS

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
mw-2	✓							
mw-3	✓							
mw-4	✓							
mw-8	✓							
mw-9	✓							
mw-10	✓							
mw-11	✓							
mw-12	✓							
mw-13	✓							
mw-14	✓							
mw-15	✓							
mw-16	✓							
mw-17	✓							
mw-18	✓							
mw-19	✓							
mw-20	✓							

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



# WELLHEAD INSPECTION CHECKLIST

Client Arcadis Date 4-27-16  
 Site Address 8400 Fardee Ave, Oakland, CA  
 Job Number 160427-DSR Technician PS

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
mw-21	✓							
mw-22	✓							
mw-23	✓							
mw-24	✓							
mw-25	✓							
mw-26	✓							
mw-27	✓							
mw-28	✓							
mw-29	✓							
ow-1	✓							
IW-1	✓							
IW-2	✓							
IW-3	✓							
IW-4	✓							
IW-5	✓							
IW-6	✓							

NOTES:

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## WELL GAUGING DATA

Project # 160531-NDI Date 5/31/16 Client Arcadis

Site UPS Oakland - 8400 Pardee 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 <u>FOC</u>	Notes	
MW-2	1243	4		4.19	0.01		4.20	-	↓		
MW-3	1420	4		4.03	0.01		4.04	-			
MW-4	1308	2					3.87	-			
MW-8	1155	2					3.10	-			
MW-9	1230	2					5.50	-			
MW-10	1130	2					7.66	-			
MW-11	1235	2					5.37	-			
MW-12	1340	2		4.60	0.15		4.75	-			MM
MW-13	1430	2					3.33	-			
MW-14	1313	2					1.80	-			
MW-15	1440	2					4.01	-			MM
MW-16	1245	2					4.45	-			MM
MW-17	1350	2					7.62	-			MM
MW-18	1355	2					3.98	-			MM
MW-19	1251	2					4.79	-			MM
MW-20	1435	2					3.93	-			
MW-21	1256	2					4.16	-			

## WELL GAUGING DATA

Project # 160531 - NDI Date 5/31/16 Client Arcadis

Site UPS Oakland - 8400 Pardee 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 <u>TOC</u>	Notes
MW-22	1320	2					3.62	—	TOC	
MW-23	1220	2					5.80	—	<del>TOC</del>	MM
MW-24	1215	2		3.56	0.79		4.35	—	<del>TOC</del>	MM
MW-25	1410	2					5.73	—	TOC	
MW-26	1200	2					3.29	—	<del>TOC</del>	MM
MW-27	1150	2					3.71	—	<del>TOC</del>	MM
MW-28	1230	2					6.94	—	                   ↓	
MW-29	1210	2					5.93	—		
OW-1	1445	6		7.23	0.16		7.39	—		
IW-1	1300	2		4.84	0.59		5.43	—		
IW-2	1450	2		5.08	0.52		5.60	—		MM
IW-3	1145	2					3.64	—		
IW-4	1325	2					3.90	—		MM
IW-5	1455	2					3.83	—		
IW-6	1305	2					3.05	—		

## WELL MONITORING DATA SHEET

Project #: 160531-ND2	Client: Arcadis
Sampler: ND	Date: 5/31/16
Well I.D.: MW-15	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth (TD): -	Depth to Water (DTW): 4.01
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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	(Gals.) X _____ = _____ Gals.	
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1 case volume = 2428						
Purged 3000 mL w/ Gil Air 15 @ 2800 mL/min						
Switched to Gem 5000						
Methane readings stable @				0.0%		

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

## WELL MONITORING DATA SHEET

Project #: 160531-ND2	Client: Arcadis
Sampler: ND	Date: 5/31/16
Well I.D.: NW-16	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): -	Depth to Water (DTW): 4.45
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	<del>                     Waterra                      Peristaltic                      Extraction Pump                      Other _____                 </del>	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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_____ (Gals.) X _____ = _____ Gals. I 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
I case volume = 2694 mL						
Purged 3000 mL w/ Gen Air 5						
Switch to Gem 5000						
Methane readings stable @ 3.8%						

Did well dewater?    Yes    No                      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory:    Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## WELL MONITORING DATA SHEET

Project #: 160531-ND2	Client: Arcadis
Sampler: ND	Date: 5/31/16
Well I.D.: MW-17	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth (TD): -	Depth to Water (DTW): 7.62
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Water  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

_____ (Gals.) X _____ = _____ 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
1 case volume = 4614 mL						
Purged 5000 mL w/ Gil Air 5 @ 2500 ml/min						
Switched to Gem 5000						
Methane reading stable @ 0.0%						

Did well dewater?    Yes    No    Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_    Sampling Time: \_\_\_\_\_    Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_    Laboratory: Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time    Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## WELL MONITORING DATA SHEET

Project #: 160531-ND2	Client: Arcadis
Sampler: ND	Date: 5/31/16
Well I.D.: MW-18	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth (TD): -	Depth to Water (DTW): 3.98
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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_____ (Gals.) X _____ = _____ Gals.   Case Volume                      Specified Volumes                      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
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
1 case volume = 2410 mL						
Purged 3000 mL w/ Gil Air 5 @ 2500 mL/min						
Switch to Gem 5000						
Methane readings stable @ 0.0%						

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

## WELL MONITORING DATA SHEET

Project #: 160531-ND2	Client: Arcadis
Sampler: ND	Date: 5/31/16
Well I.D.: MW-19	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): -	Depth to Water (DTW): 4.79
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

_____ (Gals.) X _____ = _____ Gals. I 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
1 case volume = 2900 mL						
Purged 3000 mL w/ Gil Air 5 @ 2000 ml/min						
Switch to Gem 5000						
Methane readings stable @ 10.01						

Did well dewater?    Yes    No                      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_                      Sampling Time: \_\_\_\_\_                      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_                      Laboratory:    Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time                      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV



## WELL MONITORING DATA SHEET

Project #: 160531-ND2	Client: Arcadis
Sampler: ND	Date: 5/31/16
Well I.D.: MW-23	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth (TD): -	Depth to Water (DTW): 5.80
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

_____ (Gals.) X _____	= _____ 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
1 case	volume =		3512 mL			
Purged	4000 mL		w/ Gil Air 5 @ 2500 mL/min			
Switch	to Gem 5000					
Methane	reading	stable	@	26.5		

Did well dewater? Yes No Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## WELL MONITORING DATA SHEET

Project #: 160531-ND2	Client: Arcadis
Sampler: ND	Date: 5/31/16
Well I.D.: MW-24	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): -	Depth to Water (DTW): 4.35
Depth to Free Product: 3.56	Thickness of Free Product (feet): 0.79
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1 case volume = 2155 mL						
Purged 3000 mL w/ Gil Air 5 @ 2000 ml/min						
Switched to Gem 5000						
Methane reading stable @ 26.2%						

Did well dewater? Yes No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELLHEAD INSPECTION CHECKLIST

Client Arcadis Date 5/31/16

Site Address 8400 Pardee Dr. - Oakland, CA

Job Number 160531-ND1 Technician ND

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-2	X							
MW-3	X							
MW-4	X							
MW-8						X		
MW-9	X							
MW-10	X							
MW-11						X		
MW-12	X							
MW-13	X							
MW-14	X							
MW-15						X		
MW-16	X							
MW-17	X							
MW-18	X							
MW-19	X							
MW-20	X							

NOTES: MW-8: 2 1/2 bolts stripped, MW-11: 2 1/2 bolts stripped  
 MW-15: 1/2 bolts stripped

# WELLHEAD INSPECTION CHECKLIST

Client Arcadis Date 5/31/16  
 Site Address 8400 Pardee Dr. - Oakland, CA  
 Job Number 160531-ND1 Technician ND

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-21	✓							
MW-22	✓							
MW-23	X							
MW-24	X							
MW-25						X		
MW-26	X							
MW-27	X					X		
MW-28	X							
MW-29	X							
OW-1						X		
IW-1	X							
IW-2	X							
IW-3						X		
IW-4						X		
IW-5	X							
IW-6						X		

NOTES: IW-3: 2/2 bolts missing, MW-27: 1/2 tabs broken  
 IW-4: 2/2 tabs broken, 2/2 bolts missing, OW-1: 2/2 tabs broken  
 IW-6: 2/2 bolts, 1/2 tabs, MW-25: 1/2 bolts stripped

## WELL GAUGING DATA

Project # 100030-DS2 Date 6-30-10 Client Ancadis

Site 8400 Pardee Ave 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	1246	2		4.71	.07		4.78	-		
MW-3	1251	2					4.24	14.49		
MW-4	1300	2						-		
MW-8	1253	2					3.46	12.23		
MW-9	1306	2					3.96	13.25		
MW-10	1255	2					4.99	12.26		
MW-11	1307	2					5.31	12.50		
MW-12	1331	2		4.05	.38		5.03	-		MM
MW-13	1316	2					4.39	9.11		
MW-14	*	well damaged over								
MW-15	1324	2					4.34	10.34		MM
MW-16	1327	2					4.79	10.40		↓
MW-17	1330	2					4.98	-		
MW-18	1321	2					4.71	10.55		
MW-19	1332	2					4.70	9.96		
MW-20	1320	2					4.05	11.56		
MW-21	1347	2					3.75	11.68		

## WELL GAUGING DATA

Project # 160630-DS2 Date 6-30-16 Client Arcadis

Site 8400 Powell Ave, 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-22	1338	2		4.13	.19		4.32	-		
MW-23	1309	2					6.13	11.57		MM
MW-24	1301	2		4.14	.61		4.75	-		MM
MW-25	1257	2					5.98	11.55		
MW-26	1249	2					4.11	12.80		MM
MW-27	1246	2					4.14	12.85		MM
MW-28	1315	2					6.13	11.53		
MW-29	*	well		parked	over					
OW-1	1337	2		7.30	.20		<del>7.30</del> 7.50	7.50		
IW-1	1340	2		4.68	.91		5.59	-		
IW-2	1342	2		4.42	.24		4.66	-		MM
IW-3	1344	2		4.00	.01		4.01	-		
IW-4	1346	2					4.25	-		MM
IW-5	1349	2					4.34	-		
IW-6	1351	2					4.09	-		

# WELL MONITORING DATA SHEET

Project #: 166630-DS2	Client: Arcadis
Sampler: DS	Date: 6-30-16
Well I.D.: mw-15	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 10.34	Depth to Water (DTW): 4.34
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

Other: \_\_\_\_\_

	(Gals.) X _____ = _____ Gals.	
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
1427	(1)					Case Volume = 3.632 mL
						Purge 4000 mL w/ g/l Air 5 (2000 mL/min)
1429						switched to Gen 2000
1431						Reading stabilize @ 5.2%

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory: Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

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

O.R.P. (if req'd):    Pre-purge: \_\_\_\_\_ mV      Post-purge: \_\_\_\_\_ mV

## WELL MONITORING DATA SHEET

Project #: 160630-DS2	Client: Arcadis
Sampler: DS	Date: 6-30-16
Well I.D.: MW-10	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 10.40	Depth to Water (DTW): 4.79
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

$(\text{Gals.}) \times \text{Specified Volumes} = \text{Calculated Volume}$	<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
1234	(1)					CV. = 3396ml
						purge 4000 ml @ 3000ml/min w/ g/l Air
1236						switched to gem 2000
1239						Reading stabilized @ 10.3%

Did well dewater?    Yes    No      Gallons actually evacuated:

Sampling Date:      Sampling Time:      Depth to Water:

Sample I.D.:      Laboratory: Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): @ Time      Duplicate I.D. (if applicable):

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV



# WELL MONITORING DATA SHEET

Project #: 160630-DS1	Client: Arcadis
Sampler: DS	Date: 6-30-16
Well I.D.: mw-17	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): -	Depth to Water (DTW): 4.98
Depth to Free Product: -	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method:  Bailer  Disposable Bailer  Positive Air Displacement  Electric Submersible

Water:  Peristaltic  Extraction Pump  Other

Sampling Method:  Bailer  Disposable Bailer  Extraction Port  Dedicated Tubing

Other: \_\_\_\_\_

(Gals.) X \_\_\_\_\_ = \_\_\_\_\_ 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
1540		(1)	case volume =			
						purged 3000 mL w/ gal Air @ 3000 mL/min
1541						switched to gem 2000
1543						reading stabilized @ 0.01

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory:  Kiff     CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: 160630-552	Client: Arradis
Sampler: DS	Date: 6-30-16
Well I.D.: mw-18	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 1055	Depth to Water (DTW): 4.71
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: -	

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

(Gals.) X \_\_\_\_\_ = \_\_\_\_\_ Gals.  
 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
1444			(1) C.V.	g = 3535 mL		
						purged 4000 mL w/ gill for 2000 (3000 mL/min)
1445						switched to gpm 8000
1450						stabilized @ 5.0%

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory: Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: 160630.05	Client: Arcadis
Sampler: DS	Date: 6-30-16
Well I.D.: MW-19	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 9.96	Depth to Water (DTW): 4.70
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

Other: \_\_\_\_\_

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

(Gals.) X \_\_\_\_\_ = \_\_\_\_\_ Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1251	(1)	C.V. =	3184 mL			
						purged 4000 mL w/gal air @ 3000 mL/min
1252						switched to gem 2000
1257						stabilized @ 0.3%

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory: Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: <u>160630-D52</u>	Client: <u>Arcadis</u>
Sampler: <u>DS</u>	Date: <u>6-30-16</u>
Well I.D.: <u>MW-23</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>11.57</u>	Depth to Water (DTW): <u>6.13</u>
Depth to Free Product: <u>—</u>	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> <u>HACH</u>
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

(Gals.) X \_\_\_\_\_ = \_\_\_\_\_ Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1259</u>	<u>(1)</u>					<u>C.V. = 32.93 mL</u>
						<u>Purged 4,000 mL w gillair @ 3000 mL/min</u>
<u>1230</u>						<u>switched to sum 2000</u>
						<u>Reading stabilized @ <del>32.0</del> 32.0%</u>

Did well dewater?    Yes    No                      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: 1100626-DS2	Client: Arcadis
Sampler: DS	Date: 6-30-16
Well I.D.: MW 24	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): -	Depth to Water (DTW): 4.75
Depth to Free Product: 4.14	Thickness of Free Product (feet): -
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waters  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other: \_\_\_\_\_

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

(Gals.) X \_\_\_\_\_ = \_\_\_\_\_ Gals.

1 Case Volume      Specified Volumes      Calculated Volume

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1505		(1)	C.V = 2875 mL			
						purged 3000 mL w/ gill Air @ 3000 mL/min
1506						switched to gem 2000
1510						Reading stabilized @ <del>2.5</del> 4.5% (DS)

Did well dewater?    Yes    No                      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory: Kiri    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

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

O.R.P. (if req'd):      Pre-purge: \_\_\_\_\_ mV      Post-purge: \_\_\_\_\_ mV

# WELL MONITORING DATA SHEET

Project #: <u>100630-DS2</u>	Client: <u>ArCADIS</u>
Sampler: <u>DS</u>	Date: <u>6-30-16</u>
Well I.D.: <u>MW-20</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>12.80</u>	Depth to Water (DTW): <u>4.11</u>
Depth to Free Product: <u>-</u>	Thickness of Free Product (feet): <u>-</u>
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

(Gals.) X \_\_\_\_\_ = \_\_\_\_\_ Gals.

I Case Volume      Specified Volumes      Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1512</u>		<u>(1)</u>	<u>CV. = 2,488 mL</u>			
						<u>purged 3000 mL w/ gila Air @ 3000 mL/min</u>
<u>1513</u>						<u>switched to gAM 2000</u>
<u>1515</u>						<u>Reading stabilized @ <u>29%</u></u>

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory: Kiff CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: 166030-DS1	Client: Arcadis
Sampler: DS	Date: 6-30-14
Well I.D.: MW-22	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): 12.85	Depth to Water (DTW): 4.14
Depth to Free Product: -	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: -	

Purge Method:  Bailer       Watera      Sampling Method:  Bailer  
 Disposable Bailer       Peristaltic       Disposable Bailer  
 Positive Air Displacement       Extraction Pump       Extraction Port  
 Electric Submersible      Other: \_\_\_\_\_       Dedicated Tubing  
 Other: \_\_\_\_\_

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

(Gals.) X \_\_\_\_\_ = \_\_\_\_\_ Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1523		(1)	C.V. = 2507		ml	
						purged 3000 ml w gill Air @ 300 ml/min
1524						switched to gem 200's
1527						Reading stabilized @ 13.6%

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory: Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: 160630-DS2	Client: Arradis
Sampler: DS	Date: 6-30-16
Well I.D.: IW-2	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): -	Depth to Water (DTW): 4.66
Depth to Free Product: 4.42	Thickness of Free Product (feet): -
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: -	

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

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

(Gals.) X \_\_\_\_\_ = \_\_\_\_\_ Gals.  
 I Case Volume      Specified Volumes      Calculated Volume

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1529		(1)	C.V = 2821 mL			
						purged 3000 mL w/ air @ 300 mL/min
1530						switched to gem 2000
1534						Reading stabilized @ 7.3%

Did well dewater?      Yes      No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory: Kiff      CalScience      Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV



# WELLHEAD INSPECTION CHECKLIST

Client Arcadis Date 6-30-16  
 Site Address 8400 perdee Avenue, Oakland, CA  
 Job Number 100630-PS2 Technician JS

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-2	X							
MW-3	X							
MW-4	X							
MW-8	X							
MW-9	X							
MW-10	X							
MW-11	X							
MW-12	X					X		
MW-13	X					X		
MW-14	X							
MW-15	X							
MW-16	X							
MW-17	X							
MW-18	X							
MW-19	X							
MW-20	X							

NOTES: MW-12 + MW-13 (missing lid)

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# WELLHEAD INSPECTION CHECKLIST

Client Arcadis Date 6-30-10  
 Site Address 8400 Jardee Dr., Oakland, CA  
 Job Number 100630-DS2 Technician DS

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
mw-21	X							
mw-22	X							
mw-23	X							
mw-24	X							
mw-25	X							
mw-26	X							
mw-27	X							
mw-28	X							
mw-29	X							
ow-1	X							
Iw-1						X		
Iw-2	X							
Iw-3	X							
Iw-4	X							
Iw-5	X							
Iw-6	X							

NOTES: Iw-1 + 3 (-2/2 bolts)

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## WELL GAUGING DATA

Project # 160728-002 Date 7/28/16 Client AZCAIS

Site 8400 PARDEL DR. OAKLAND

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-2	1128	4		4.76	0.14	365	4.90	—	↑	
MW-3	1140	4					4.54	14.50	↑	
MW-4	1132	2					4.48	15.80	↑	
MW-8	1112	2					3.83	12.20	↑	
MW-9	1120	2					6.13	13.25	↑	
MW-10	1247	2					8.43	12.25	↑	
MW-11	1122	2					5.92	12.56	↑	
MW-12	1152	2		5.01	0.50	360	5.51	—	↑	
MW-13	1200	2					4.34	9.13	↑	
MW-14	1147	2					3.84	9.26	↑	
MW-15	1124	2					4.57	10.30	↑	
MW-16	1126	2					5.18	10.37	↑	
MW-17	1249	2					7.62	12.63	↑	
MW-18	1138	2					4.94	10.54	↑	
MW-19	1214	2					5.22	9.98	↑	
MW-20	1134	2					4.40	11.55	↑	
MW-21	1136	2					4.32	11.70	↓	

## WELL GAUGING DATA

Project # 160720-CU2 Date 7/20/16 Client AREAS

Site 8400 PARCEE DR, OAKLAND

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or <u>TOC</u>	Notes
MW-22	1149	2	Sheen	4.59 Sheen	0.01	0ml	4.60	—		
MW-23	1115	2					6.49	11.54		
MW-24	1210	2		4.76	0.34	250	5.10	—		
MW-25	1113	2					5.74	11.54		
MW-26	1110	2					4.49	12.83		
MW-27	1105	2					4.36	12.83		
MW-28	1118	2					7.40	11.50		
MW-29	TRAILER		PARCEES OVER			NO ACCESS	—	—		
OW-1	1215	6		7.41	0.04	250	7.45	—		
1W-1	1208	2		5.03	0.99	640	6.02	—		
1W-2	1204	2		4.86	0.18	150	5.04	—		
1W-3	1202	2					4.58	9.10		
1W-4	1146	2					4.61	9.50		
1W-5	1141	2					4.73	9.30		
1W-6	1144	2					4.58	9.31	↓	

# WELL MONITORING DATA SHEET

Project #: 160720-CM	Client: ARCADIS
Sampler: CM	Date: 7/20/16
Well I.D.: MW-2	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 4.90
Depth to Free Product: 4.76	Thickness of Free Product (feet): 0.14
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer      Watertra      Sampling Method: Bailer  
 Disposable Bailer      Peristaltic      Disposable Bailer  
 Positive Air Displacement      Extraction Pump      Extraction Port  
 Electric Submersible      Other MASTERFLUX      Dedicated Tubing

$$\frac{\text{Gals.}}{\text{Case Volume}} \times \frac{\text{Specified Volumes}}{\text{Specified Volumes}} = \frac{\text{Gals.}}{\text{Calculated Volume}}$$

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
*	~36.5					~ 36.5 m of SPH BAILED w/ MASTERFLUX
*						DEPLOY SKINNER

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory:    Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

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

O.R.P. (if req'd):    Pre-purge: \_\_\_\_\_ mV      Post-purge: \_\_\_\_\_ mV

# WELL MONITORING DATA SHEET

Project #: 170628.ew	Client: ARENDIS
Sampler: CW	Date: 7/28/16
Well I.D.: MW-3	Well Diameter: 2 3 ④ 6 8
Total Well Depth (TD): 14.50	Depth to Water (DTW): 4.54
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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(Gals.) X	=	Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
*	DEPLOY		Skimmer			

Did well dewater? Yes No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
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O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV
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# WELL MONITORING DATA SHEET

Project #: 160720-CW2	Client: ARCADIS
Sampler: cu	Date: 7/22/10
Well I.D.: MW-12	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 5.51
Depth to Free Product: 5.01	Thickness of Free Product (feet): 0.50
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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(Gals.) X	=	Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1448	(1)	CASE VOLUME =		3034 m		
1450	PURGED	3100 m @ 2000 ml/min w/ GILANE				
1452	STABLE	READING @		16.1 %	CW4	
X ~ 360 m OF SPH BAILED W/ MASTER FLEX						
Did well dewater?		Yes	<input checked="" type="radio"/> No	Gallons actually evacuated:		
Sampling Date:		Sampling Time:		Depth to Water:		
Sample I.D.:				Laboratory: Kiff CalScience Other _____		
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:						
EB I.D. (if applicable):		@	Time	Duplicate I.D. (if applicable):		
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:						
D.O. (if req'd):		Pre-purge:	mg/L	Post-purge:	mg/L	
O.R.P. (if req'd):		Pre-purge:	mV	Post-purge:	mV	

# WELL MONITORING DATA SHEET

Project #: 160728-002	Client: AREADIS
Sampler: CN	Date: 7/20/16
Well I.D.: mw-15	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 4.57
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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	(Gals.) X _____	=		Gals.
1 Case Volume	Specified Volumes		Calculated Volume	

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1335	(1) CASE					VOLUME: 2767 ml
1338	PURGE	7.0	2800 m	@ 2000 ml/min		w/ GILAMZ
1340	STABLE		READING	@ 3.0%		CH <sub>4</sub>

Did well dewater? Yes No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
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O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV
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# WELL MONITORING DATA SHEET

Project #: 160720-002	Client: ARCADIS
Sampler: CU	Date: 7/28/10
Well I.D.: mw-16	Well Diameter: ② 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 5.18
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: RVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Water  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

	(Gals.) X _____ = _____ 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
1350	(1) CASE	VOLUME =		3137 ml		
1353	PURGED	3200 ml	@ 2000 ml/min	w/ GILBERT		
1355	STABLE	READING @	11.5 %	CH4		

Did well dewater? Yes No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

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

O.R.P. (if req'd): Pre-purge: \_\_\_\_\_ mV Post-purge: \_\_\_\_\_ mV

# WELL MONITORING DATA SHEET

Project #: 160728-CR2	Client: ARCADIS
Sampler: CR	Date: 7/28/16
Well I.D.: MV-17	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 7.62
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

Other: \_\_\_\_\_

	(Gals.) X	=	Gals.
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
1310	(1)					CASE VOLUME = 4615 ml
1315						PURGE 4700 ml @ 2000 ml/min w/ GILTYPE
1320						STABLE @ 0.0% CHL

Did well dewater? Yes  No  Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

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

O.R.P. (if req'd): Pre-purge: \_\_\_\_\_ mV Post-purge: \_\_\_\_\_ mV

# WELL MONITORING DATA SHEET

Project #: 160720.002	Client: ARCADIS
Sampler: CK	Date: 7/20/12
Well I.D.: mw-10	Well Diameter: ② 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 4.94
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: <input checked="" type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Positive Air Displacement <input type="checkbox"/> Electric Submersible	Waterra <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump <input type="checkbox"/> Other	Sampling Method: <input checked="" type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing Other:
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(Gals.) X	=	Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1401	(1) CASE		Volume =	2992 ml		
1403	PURGED		3000 ml @ 2000 ml/min			w/ GILAMP
1405	STABLE		READING @ 2.1			% CH <sub>4</sub>

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

# WELL MONITORING DATA SHEET

Project #: 160728-CUZ	Client: ARCADIS
Sampler: Cu	Date: 7/28/16
Well I.D.: mw-19	Well Diameter: ② 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 5.22
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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(Gals.) X	=	Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1410	(1) CASE VOLUME			3161 mL		
1413	PURGED		3200 m @	200 m/min	w/ GILBERT	
1415	STABLE		READING:	0.0 % CH <sub>4</sub>		

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

# WELL MONITORING DATA SHEET

Project #: 160729-cuz	Client: AREADON
Sampler: CK	Date: 7/20/16
Well I.D.: mw-23	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 6.49
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterera Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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(Gals.) X	=	Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1442	(1)	CASE VOLUME =		3930 ml		
1444	PURGED 4000 ml @ 2000 ml/min w/ GLAIR					
1446	STABLE READING @		33.3	% CH4		

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

# WELL MONITORING DATA SHEET

Project #: 160728.002	Client: APCADIS
Sampler: CU	Date: 7/28/16
Well I.D.: MW-24	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD):	Depth to Water (DTW): 5.10
Depth to Free Product: 4.76	Thickness of Free Product (feet): 0.34
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

Other: \_\_\_\_\_

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1435	(1) CASE					VOLUME = 2883 ml
1437	PURGE					2900 ml @ 2000 ml/min w/ GILTR
1439	STABLE					READING @ 49.5 % CHY
	* ~250 ml					SPIA BAILER w/ MASTER FLGX

Did well dewater? Yes  No  Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

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

O.R.P. (if req'd): Pre-purge: \_\_\_\_\_ mV Post-purge: \_\_\_\_\_ mV

# WELL MONITORING DATA SHEET

Project #: 160728-002	Client: ARCADIS
Sampler: CK	Date: 7/28/11
Well I.D.: mw. 26	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 4.49
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Water  
 Peristaltic  
 Extraction Pump  
 Other

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other:

/	(Gals.) X	/	=	/	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
1427	(1) CASE		VOLUME =	2720 ml		
1429	PURGED		2800 ml	@ 2000 ml/min w/ GILAIR		
1431	STABLE		READING @	26.9 %	CITY	

Did well dewater? Yes  No  Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

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

O.R.P. (if req'd): Pre-purge: \_\_\_\_\_ mV Post-purge: \_\_\_\_\_ mV

# WELL MONITORING DATA SHEET

Project #: 16072E-CU2	Client: AREAS
Sampler: CU	Date: 7/28/11
Well I.D.: MW. 27	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD):	Depth to Water (DTW): 4.36
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: <u>Bailer</u> Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other	Sampling Method: <u>Bailer</u> Disposable Bailer Extraction Port Dedicated Tubing Other:
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(Gals.) X	=	Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1420	(i)	CASE	VOLUME	266/0		
1423		PURGED	2700 m @	2000 m/min	w/	GILAIR
1425		STABLE	READING @	9.6	%	CH4

Did well dewater? Yes  No  Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

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

O.R.P. (if req'd): Pre-purge: \_\_\_\_\_ mV Post-purge: \_\_\_\_\_ mV



# WELL MONITORING DATA SHEET

Project #: 160728-022	Client: ARCADIS
Sampler: CU	Date: 7/22/16
Well I.D.: 1W.2	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD):	Depth to Water (DTW): 5.04
Depth to Free Product: 4.86	Thickness of Free Product (feet): 0.18
Referenced to: <del>PVE</del> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

Other: \_\_\_\_\_

	(Gals.) X _____ = _____ Gals.	
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
1454	(1)	CASE	VOLUME =	2943 ml		
1456	PURGE	3000 m	@ 2000 m/min		W/ GLASS	
1458	STABLE	READING =	5.2	% CHL		
* ~ 150 m OF SPH BAILED W/ MASTER FLEX						

Did well dewater? Yes  No  Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff  CalScience  Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

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

O.R.P. (if req'd): Pre-purge: \_\_\_\_\_ mV Post-purge: \_\_\_\_\_ mV

# WELL MONITORING DATA SHEET

Project #: 160728-01	Client: ARCADIS
Sampler: CW	Date: 7/28/16
Well I.D.: OW-1	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 7.45
Depth to Free Product: 7.41	Thickness of Free Product (feet): 0.04
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

Other: \_\_\_\_\_

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
*	~ 25	m	OF SPH	Bailer w/	MASTER FLEX	
*	DEPLOY	SUBMETER				

Did well dewater?    Yes    No    Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_    Sampling Time: \_\_\_\_\_    Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_    Laboratory:    Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time    Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: 160728-CK1	Client: A2LEAD
Sampler: CK	Date: 7/26/16
Well I.D.: 1W-1	Well Diameter: 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 6.02
Depth to Free Product: 5.03	Thickness of Free Product (feet): 0.99
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

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

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
X	~64.0					OF SPH BAILED W/ MASTER FLO

Did well dewater?    Yes    No      Gallons actually evacuated:

Sampling Date:      Sampling Time:      Depth to Water:

Sample I.D.:      Laboratory:    Kiff    CalScience    Other

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

EB I.D. (if applicable):      @      Time      Duplicate I.D. (if applicable):

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

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

O.R.P. (if req'd):    Pre-purge:      mV      Post-purge:      mV

# WELLHEAD INSPECTION CHECKLIST

Client AREADIS Date 7/26/11  
 Site Address 8100 PARDEE DR, OAKLAND  
 Job Number 160728-cw2 Technician CU

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-2						X		
MW-3						X		
MW-4	X							
MW-8	X							
MW-9						X		
MW-10	X							
MW-11						X		
MW-12						X		
MW-13						X		
MW-14						X		
MW-15	X							
MW-16	X							
MW-17	X							
MW-18	X							
MW-19	X							
MW-20	X							

**NOTES:** MW-9 = 1/2 bolts missing; MW-11 = 2/2 tabs stripped; MW-2 = 2/2 bolts missing; MW-3 = 2/2 tabs stripped, well cap crushed; MW-14 = 2/2 tabs stripped; MW-12 = 1/2 bolts missing; MW-13 = 2/2 bolts missing, wrong wellbox lid;

## WELL GAUGING DATA

Project # 160218-CV1 Date 8/18/16 Client ARCADIS

Site 8400 PARDEE DR., OAKLAND

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-2	0952	4	odor	4.98	0.02	180	5.00	—		Skimmer
MW-3	1029	4					4.71	14.50		Skimmer
MW-4	1012	2					4.52	15.80		
MW-8	0951	2					3.91	12.18		
MW-9	1021	2					4.16	13.26		
MW-10	1030	2					8.82	12.24		
MW-11	0957	2					6.14	12.54		
MW-12	1003	2	odor	5.15	0.09	100	5.23	—		
MW-13	1014	2					4.56	9.12		
MW-14	1003	2					3.99	9.25		
MW-15	1001	2					4.71	10.30		
MW-16	1004	2					5.32	10.35		
MW-17	1034	2					7.32	12.43		
MW-18	1007	2					5.22	10.52		
MW-19	1005	2					5.47	9.98		
MW-20	1017	2					4.51	11.54		
MW-21	0959	2					4.42	11.70		

## WELL GAUGING DATA

Project # 160819-CK1 Date 8/18/16 Client ARCADIS

Site 8400 PARDEE DR, OAKLAND

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOS	Notes
MW-22	0957	2	odor	4.78	0.02	50	4.80	—		
MW-23	0955	2					6.62	11.52		
MW-24	1024	2	odor	4.90	0.34	250	5.24	—		
MW-25	1011	2					5.77	11.54		
MW-26	0949	2					4.68	12.02		
MW-27	1007	2					4.53	12.03		
MW-28	0957	2	odor				7.38	11.48		
MW-29	0953	2					6.40	11.64		
OW-1	0945	6	odor	7.54	0.06	600	7.60	—		Skipped
IW-1	1010	2	odor	5.20	0.12	100	5.32	—		
IW-2	1014	2	odor	4.98	0.12	100	5.10	—		
IW-3	1009	2					4.69	9.11		
IW-4	1010	2					4.71	9.50		
IW-5	1026	2					4.81	9.29		
IW-6	1001	2					4.78	9.30		

# METHANE MONITORING

Client ARCADIS Date 8/18/16

Site Address 8400 PARDEE DR, OAKLAND

Job Number 160819-001 Technician CK

Well ID	DTW	2000 ml/min 34 ml/sec	1 CV (ML)	SECONDS PURGE	VOLUME PURGED (ML)	CH <sub>4</sub> (%)	TIME		
		✓							
MW-12	5.15	✓	3119	94	3200	4.0	1111		
MW-17	7.32	✓	4433	133	4500	0.1	1158		
1W-2	4.98	✓	3016	92	3100	8.2	1106		
MW-24	4.90	✓	2967	89	3000	35.3	1051		
MW-26	4.68	✓	2834	89	3000	22.3	1045		
MW-27	4.53	✓	2743	83	2800	0.8	1118		
MW-23	6.62	✓	4009	121	4100	30.4	1058		
MW-19	5.47	✓	3313	100	3400	0.0	1124		
MW-15	4.71	✓	2852	86	2900	3.8	1139		
MW-16	5.32	✓	3222	98	3300	10.8	1131		
MW-18	5.22	✓	3161	94	3200	0.0	1147		

NOTES: \* PURGE RATE = 2000 ml/min OR 34 ml/sec

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# WELL MONITORING DATA SHEET

Project #: 160812-CH	Client: AREAS
Sampler: CH	Date: 8/19/16
Well I.D.: MW 2	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 5.02
Depth to Free Product: 4.92	Thickness of Free Product (feet): 0.02
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method:  Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Water  
 Peristaltic  
 Extraction Pump  
 Other

Sampling Method:  Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

	(Gals.) X _____ = _____ 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
* Empty						SKIMMER ~ 150 ml SPIA
* BAIL						PRODUCT FROM WELL w/ MASTER FLEX
						@ 4.92 ~ 30 ml SPIA REMOVED
						TOTAL PRODUCT REMOVED ~ 180 ml

Did well dewater? Yes  No  Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): @ \_\_\_\_\_ Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV



# WELL MONITORING DATA SHEET

Project #: 160218-CW1	Client: AREADS
Sampler: CW	Date: 8/18/16
Well I.D.: MW-3	Well Diameter: 2 3 ④ 6 8
Total Well Depth (TD): 14.50	Depth to Water (DTW): 4.71
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]: 6.67	

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: \_\_\_\_\_

6.4 (Gals.) X 3 = 19.2 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
1315	26.5	7.00	2231	64	6.5	yellow / op or
	DEWATERED	@	7.5 gal		7.5	
1340	26.6	6.93	2198	58	—	yellow / op or

Did well dewater? (Yes) No      Gallons actually evacuated: 7.5

Sampling Date: 8/18/16      Sampling Time: 1340      Depth to Water: 4.75

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

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

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 #: 160818-CK1	Client: Arcadis
Sampler: Colin Rowland	Date: 8/18/16
Well I.D.: MW-4	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 15.80	Depth to Water (DTW): 4.71
Depth to Free Product: —	Thickness of Free Product (feet): <del>6.93</del> OR
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]: 6.93	

Purge Method: <u>Bailer</u> <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Positive Air Displacement <input type="checkbox"/> Electric Submersible	Waterra <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump Other: _____	Sampling Method: <u>Bailer</u> <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing Other: _____
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1.8 (Gals.) X 3 = 5.4 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
1313	24.2	7.25	2018	48	1.8	clear
1318	25.0	6.86	1858	44	3.6	↓
1323	26.1	6.82	1877	42	5.4	

Did well dewater? Yes  No  Gallons actually evacuated: 5.4

Sampling Date: 8/18/16      Sampling Time: 1332      Depth to Water: 4.75

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

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5)      Other: see 10C

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 #: 160818-CK1	Client: Arcadis
Sampler: GR	Date: 8/18/2016
Well I.D.: MW-8	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 12.18	Depth to Water (DTW): 3.91
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]: 5.58	

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

1.3 (Gals.) X	3	= 3.9 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1147	24.7	6.68	3118	17	1.5	
1149	23.7	6.75	5748	13	3.0	
1152	22.4	6.82	9654	28	4.5	
1154	—	well	dewatered	@	4.8	

Did well dewater? Yes No      Gallons actually evacuated: 4.8

Sampling Date: 8/18/16      Sampling Time: 1415      Depth to Water: 9.54 (>2hrs)

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

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

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 #: 160818-CK1	Client: Arcadis
Sampler: Colin Rowland	Date: 8/18/16
Well I.D.: MW-9	Well Diameter: ② 3 4 6 8
Total Well Depth (TD): 13.26	Depth to Water (DTW): 4.16
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]: 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

1.5 (Gals.) X 3' = 4.5 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
1138	26.7	6.52	10.67	28	1.5	clear
1142	29.4	6.35	16.88	9	3.0	
1145	dewatered		at 3.4 gal			
1100	23.3	7.03	19.84	27	—	clear

Did well dewater? Yes No      Gallons actually evacuated: 3.4

Sampling Date: 8/19/16      Sampling Time: 1100      Depth to Water: 7.25 (242)

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

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

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 #: 160819-ck1	Client: AREADIS
Sampler: cu	Date: 8/12/16
Well I.D.: mw-10	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 12.24	Depth to Water (DTW): 9.82
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]: 9.50	

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: \_\_\_\_\_

0.5 (Gals.) X 3 = 1.5 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
1220	24.3	7.03	11.32	25	0.5	4640W
1222	24.4	7.03	11.70	40	1.0	↓
1224	24.4	7.04	11.72	49	1.5	NOT @ 80%

Did well dewater? Yes  No      Gallons actually evacuated: 1.5

Sampling Date: 8/12/16      Sampling Time: 1240      Depth to Water: 9.38 (SITING WAIT)

Sample I.D.: mw-10      Laboratory: Kiff CalScience Other: LA-SF

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

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 #: 160818-CK1	Client: Arcadis
Sampler: Colin Rowland	Date: 8/18/16
Well I.D.: MW-11	Well Diameter: ② 3 4 6 8
Total Well Depth (TD): 12.54	Depth to Water (DTW): 6.14
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]: 7.42	

Purge Method: Bailer  
Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Water: Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

1.1 (Gals.) X 3 = 3.3 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 <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1109	25.5	5.98	5617	64	1.1	cloudy
1113	25.0	6.34	6604	32	2.2	↓
1117	24.9	6.55	8166	126	3.3	↓
* not	80%	DTW	11.55			

Did well dewater? Yes  No  Gallons actually evacuated: 3.3

Sampling Date: 8/19/16      Sampling Time: 0945      Depth to Water: 9.95 (2HR)

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

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

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 #: 160818-cu	Client: AREADIS
Sampler: cu	Date: 8/19/16
Well I.D.: rw-12	Well Diameter: ② 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 5.23
Depth to Free Product: 5.15	Thickness of Free Product (feet): 0.08
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

(Gals.) X \_\_\_\_\_ = \_\_\_\_\_ Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
	BAILED	SPH	FROM WELL W/ MASTER FLEX			
	~100	m	SPH SPENT			

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_    Sampling Time: \_\_\_\_\_    Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_    Laboratory: Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time    Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV





# WELL MONITORING DATA SHEET

Project #: 160818-CK1	Client: Arcadis
Sampler: GR	Date: 8/18/2016
Well I.D.: MW-14	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 9.25	Depth to Water (DTW): 3.99
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]: 5.04	

Purge Method: Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Positive Air Displacement <input type="checkbox"/> Electric Submersible	Waterra <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump Other: _____	Sampling Method: Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing Other: _____
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0.8 (Gals.) X 3 = 2.4 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
1333	25.6	6.87	2797	20	1.0	
1335	25.3	6.50	9785	9	2.0	
1338	—	well	dewatered	0	2.3	
1025	24.8	6.67	9803	30	Grab	yellow

Did well dewater?  Yes    No    Gallons actually evacuated: 2.3

Sampling Date: 8/18/16    Sampling Time: 1025    Depth to Water: 6.10 (2HR)

Sample I.D.: MW-14    Laboratory: Kiff CalScience Other: TA-SR

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

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 #: 160818-CK1	Client: Arcadis
Sampler: Colin Rowland	Date: 8/18/16
Well I.D.: MW-15	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 10.30	Depth to Water (DTW): 4.71
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]: 5.83	

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waterra  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

0.9 (Gals.) X 1.8 = 2.7 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
1201	29.6	7.30	2446	76	0.9	clear
1205	24.6	6.64	3252	55	1.8	
1208	24.3	6.48	5137	80	2.7	↓

Did well dewater? Yes  No  Gallons actually evacuated: 2.7

Sampling Date: 8/18/16      Sampling Time: 1215      Depth to Water: 5.72

Sample I.D.: MW-15      Laboratory: Kiff CalScience      Other: TA-SE

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

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 #: 160818-CK1	Client: Arcadis
Sampler: Colin Rowland	Date: 8/18/10
Well I.D.: MW-16	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 10.35	Depth to Water (DTW): 5.32
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]: 6.33	

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Water  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

0.8 (Gals.) X 3 = 2.4 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
1250	25.3	6.86	3147	53	0.8	clear
1253	24.8	6.48	6227	45	1.6	
1256	24.0	6.4	10.34 mS	180	2.4	↓
* not	80%	DTW: 4.37				

Did well dewater? Yes  No  Gallons actually evacuated: 2.4

Sampling Date: 8/19/10      Sampling Time: 1005      Depth to Water: 7.23 (242)

Sample I.D.: MW-16      Laboratory: Kiff CalScience Other TA-SE

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

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 #: 160818-CK1	Client: ARCADIS
Sampler: CK	Date: 8/19/16
Well I.D.: MW-17	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 12.63	Depth to Water (DTW): 7.32
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]: 8.30	

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: \_\_\_\_\_

0.8	(Gals.) X	3	=	2.4	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
1206	21.9	7.13	12.50	98	0.8	YELLOW
1208	21.9	7.14	12.54	171	1.6	↓
	DEWATERED		1.8 gal	—	1.8	
1300	21.9	7.10	12.48	101	—	YELLOW

Did well dewater? Yes No      Gallons actually evacuated: 1.8

Sampling Date: 8/19/16      Sampling Time: 1300      Depth to Water: 8.10

Sample I.D.: MW-17      Laboratory: Kiff CalScience Other TA-SF

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

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 #: 160018-001	Client: ARCADIS
Sampler: CW	Date: 8/10/16
Well I.D.: MW-18	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 10.52	Depth to Water (DTW): 5.22
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: RVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.22	

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

0.9 (Gals.) X 3 = 2.7 Gals.  
 I Case Volume      Specified Volumes      Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1400	25.2	6.75	4725	353	0.8	cloudy
1402	25.0	6.69	6021	522	1.6	cloudy
			De-aerated @ 2.0 gal	—	2.0	
1440	29.6	6.63	6103	421	—	cloudy

Did well dewater?  Yes     No      Gallons actually evacuated: 2.0

Sampling Date: 8/10/16    Sampling Time: 1440    Depth to Water: 5.60

Sample I.D.: MW-18      Laboratory: Kiff CalScience    Other: TA-SF

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

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 #: 160318-CK1	Client: ARCADIS
Sampler: CK	Date: 9/19/16
Well I.D.: MW-19	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 9.98	Depth to Water (DTW): 5.47
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]: 6.37	

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waterria  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

0.7 (Gals.) X 3 = 2.1 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
0740	23.3	7.01	9093	328	0.7	cloudy
0742	23.5	7.07	9094	402	1.4	↓
0744	23.9	7.06	9086	410	2.1	↓
						NOT @ 80%

Did well dewater?  Yes  No      Gallons actually evacuated: 2.1

Sampling Date: 9/19/16      Sampling Time: 1120      Depth to Water: 6.03

Sample I.D.: MW-19      Laboratory: Kiff CalScience Other TA-SF

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

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 #: 160919-001	Client: ARCADIS
Sampler: OR	Date: 8/10/16
Well I.D.: MW-20	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 11.54	Depth to Water (DTW): 4.51
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]: 5.92	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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1.1 (Gals.) X 3 = 3.3 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 <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1415	25.6	6.95	8360	145	1.1	cloudy
	Dewatered @ 2.0			—	2.0	
1040	24.7	7.10	4681	80	—	cloudy

Did well dewater? (Yes) No      Gallons actually evacuated: 2.0

Sampling Date: 8/10/16      Sampling Time: 1040      Depth to Water: 4.61

Sample I.D.: MW-20      Laboratory: Kiff CalScience (Other) 7A-SF

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

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 #: 160818-GR1	Client: Arcadis
Sampler: GR	Date: 8/18/2016
Well I.D.: MW-21	Well Diameter: $\varnothing$ 3 4 6 8 _____
Total Well Depth (TD): 11.70	Depth to Water (DTW): 4.42
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]: 5.88	

Purge Method: Bailer  
Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Water  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1322	25.0	6.81	2202	>1000	1.5	odor
1325	24.2	6.63	5547	>1000	3.0	
1327	—	well	dewatered	@	3.5	
1435	24.6	6.86	3478	261	Grab	

Did well dewater? Yes No      Gallons actually evacuated: 3.5

Sampling Date: 8/18/16      Sampling Time: 1435      Depth to Water: 4.53

Sample I.D.: MW-21      Laboratory: Kiff CalScience Other TA-SF

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

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 #: 160810-ck1	Client: AREADIS
Sampler: ck	Date: 8/19/16
Well I.D.: m. 22	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD):	Depth to Water (DTW): 4.00
Depth to Free Product: 4.70	Thickness of Free Product (feet): 0.02
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer      Watera      Sampling Method: Bailer  
 Disposable Bailer      Peristaltic      Disposable Bailer  
 Positive Air Displacement      Extraction Pump      Extraction Port  
 Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

$$\frac{\text{Gals.}}{\text{Case Volume}} \times \frac{\text{Gals.}}{\text{Specified Volumes}} = \frac{\text{Gals.}}{\text{Calculated Volume}}$$

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
*						NO SOLID OF PRODUCT. REMOVED w/ MASH FLEX

Did well dewater?    Yes    No      Gallons actually evacuated:

Sampling Date: \_\_\_\_\_ Sampling Time: \_\_\_\_\_ Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_ Laboratory: Kiff CalScience Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: 160818-CK1	Client: ARCADIS
Sampler: CK	Date: 8/19/16
Well I.D.: MW-23	Well Diameter: ② 3 4 6 8
Total Well Depth (TD): 11.52	Depth to Water (DTW): 6.62
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]: 7.60	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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0.8	(Gals.) X 3	= 2.4 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
0925	25.7	7.60	2390	189	0.8	clear/cloudy
0927	25.8	7.56	2368	232	1.6	↓ ↓
	DE-WATER @ 2.0 gal				2.0	
1315	25.3	7.50	2351	74	←	yellow

Did well dewater? (Yes) No      Gallons actually evacuated: 2.0

Sampling Date: 8/19/16      Sampling Time: 1315      Depth to Water: \_\_\_\_\_

Sample I.D.: MW-23      Laboratory: Kiff CalScience      Other: TA-SF

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

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
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O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV
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# WELL MONITORING DATA SHEET

Project #: 160818-CH1	Client: ARCADIS
Sampler: CU	Date: 8/19/16
Well I.D.: MW-24	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 5.24
Depth to Free Product: 4.90	Thickness of Free Product (feet): 0.34
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: <del>Bailer</del> <del>Disposable Bailer</del> <del>Positive Air Displacement</del> <del>Electric Submersible</del>	<del>Water</del> <del>Peristaltic</del> <del>Extraction Pump</del> Other: _____	Sampling Method: <del>Bailer</del> <del>Disposable Bailer</del> <del>Extraction Port</del> <del>Dedicated Tubing</del> Other: _____
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(Gals.) X	=	Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
X	~ 25		OF SPH	removed w/	MASTER FLEX	

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

# WELL MONITORING DATA SHEET

Project #: 160818-CK1	Client: Arcadis
Sampler: GR	Date: 8/18/2016
Well I.D.: MW-25	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 11.54	Depth to Water (DTW): 5.77
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]: 6.92	

Purge Method: Bailer  
Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waterra  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

0.9 (Gals.) X 3 = 2.7 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
1210	23.3	6.71	4273	>1000	1.0	odor
1212	23.6	6.69	4126	>1000	2.0	
1214	23.4	6.67	4260	>1000	3.0	DTW - 5.87

Did well dewater? Yes No Gallons actually evacuated: 3.0

Sampling Date: 8/18/16 Sampling Time: 1220 Depth to Water: 5.87

Sample I.D.: MW-25 Laboratory: Kiff CalScience Other TA-SF

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

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 #: 160819-CK1	Client: ARCADIS
Sampler: CK	Date: 8/19/16
Well I.D.: MW-26	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 12.82	Depth to Water (DTW): 4.69
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]: 6.31	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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1.3 (Gals.) X	3	= 3.9 Gals.
I Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0820	25.5	6.64	2498	138	1.3	yellow
0823	25.4	6.94	2460	302	2.6	↓
			Dewatered @ 2.8 gal	—	2.8	
1205	24.8	6.98	2389	101	—	yellow
Did well dewater? (Yes) No		Gallons actually evacuated: 2.8				
Sampling Date: 8/19/16		Sampling Time: 1205		Depth to Water: 6.60 (2112)		
Sample I.D.: MW-26		Laboratory: Kiff CalScience Other: T/SF				
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEC COC						
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 #: 160218-001	Client: ARCADIS
Sampler: OK	Date: 8/19/16
Well I.D.: mw-27	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 12.83	Depth to Water (DTW): 4.53
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]: 6.19	

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: \_\_\_\_\_

1.3 (Gals.) X 3 = 3.9 Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0758	24.7	7.03	3293	98	1.3	yellow
0801	24.8	7.04	3276	169	2.6	↓
			3.0 gal	—	3.0	
1145	24.3	7.00	3249	84	—	yellow

Did well dewater?  Yes    No      Gallons actually evacuated: 3.0

Sampling Date: 8/19/16      Sampling Time: 1145      Depth to Water: 6.43 (2112)

Sample I.D.: MW-27      Laboratory: Kiff CalScience      Other: TA-SF

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

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 #: 160818-CK1	Client: Arcadis
Sampler: GR	Date: 8/18/2016
Well I.D.: MW-28	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 11.48	Depth to Water (DTW): 7.38
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]: 8.20	

Purge Method: Bailer  
Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waterra  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

0.7	(Gals.) X	<u>3</u>	=	<u>2.1</u>	Gals.
I Case Volume		Specified Volumes		Calculated Volume	

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1241	22.3	6.67	4806	>1000	1.0	
1243	22.4	6.67	4811	>1000	2.0	
1245	22.3	6.68	4816	>1000	3.0	DTW - 7.56

Did well dewater? Yes No Gallons actually evacuated: 3.0

Sampling Date: 8/18/16 Sampling Time: 1250 Depth to Water: 7.56

Sample I.D.: MW-28 Laboratory: Kiff CalScience Other TA-SR

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

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 #: 160818 - <b>CK1</b>	Client: <i>Arcadis</i>
Sampler: <i>GR</i>	Date: <i>8/18/2016</i>
Well I.D.: <i>MW-29</i>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <i>11.64</i>	Depth to Water (DTW): <i>6.40</i>
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]: <i>7.45</i>	

Purge Method: Bailer      Disposable Bailer      Water      Sampling Method: Bailer  
    Positive Air Displacement      Peristaltic      Disposable Bailer  
    Electric Submersible      Extraction Pump      Extraction Port  
    Other \_\_\_\_\_      Other \_\_\_\_\_      Dedicated Tubing

*0.8* (Gals.) X 3 = 2.4 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 <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
<i>1118</i>	<i>21.4</i>	<i>7.05</i>	<i>1712</i>	<i>865</i>	<i>1.0</i>	<i>odor</i>
<i>1120</i>	<i>21.3</i>	<i>7.01</i>	<i>1921</i>	<i>827</i>	<i>2.0</i>	
<i>1122</i>	<i>20.8</i>	<i>7.00</i>	<i>2587</i>	<i>&gt;1000</i>	<i>3.0</i>	
<i>1124</i>	<i>—</i>	<i>well</i>	<i>dewatered</i>	<i>—</i>	<i>3.3</i>	

Did well dewater? Yes No      Gallons actually evacuated: *3.3*

Sampling Date: *8/18/16*      Sampling Time: *1135*      Depth to Water: *7.40 (short wait)*

Sample I.D.: *MW-29*      Laboratory: Kiff CalScience Other *TA-SF*

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

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 #: 160812-001	Client: Arcadis
Sampler: CU	Date: 8/19/16
Well I.D.: 0W-1	Well Diameter: 2 3 4 <u>6</u> 8
Total Well Depth (TD): _____	Depth to Water (DTW): 7.60
Depth to Free Product: 0.74	Thickness of Free Product (feet): 0.06
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

$$\frac{\text{Case Volume (Gals.)} \times \text{Specified Volumes}}{\text{Specified Volumes}} = \text{Calculated Volume (Gals.)}$$

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
X	Empty					Skimmer n 200m of product.
X						n 400 m of product removed w/ MASTER FLEX
						<del>400</del> TOTAL PRODUCT REMOVED n 600m

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory: Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
	O.R.P. (if req'd):	mV		Post-purge:

# WELL MONITORING DATA SHEET

Project #: 16088-cu	Client: ARCADIS
Sampler: cu	Date: 8/19/16
Well I.D.: 1W-1	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD):	Depth to Water (DTW): 5.72
Depth to Free Product: 8.20	Thickness of Free Product (feet): 0.12
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: <del>Bailer</del> <del>Disposable Bailer</del> <del>Positive Air Displacement</del> <del>Electric Submersible</del>	Waterra <del>Peristaltic</del> <del>Extraction Pump</del> Other: _____	Sampling Method: <del>Bailer</del> <del>Disposable Bailer</del> <del>Extraction Port</del> <del>Dedicated Tubing</del> Other: _____
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(Gals.) X	=	Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
*	N/A	10.0	SPILL REMOVED w/ MASTER FLEX			

Did well dewater?    Yes    No                      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_                      Sampling Time: \_\_\_\_\_                      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_                      Laboratory:    Kiff    CalScience    Other: \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time                      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
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O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV
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## WELL MONITORING DATA SHEET

Project #: 160818-CW4	Client: ARCADIS
Sampler: CU	Date: 8/19/16
Well I.D.: 1W-2	Well Diameter: 2 3 4 6 8 _____
Total Well Depth (TD): _____	Depth to Water (DTW): 5.10
Depth to Free Product: 4.98	Thickness of Free Product (feet): 0.12
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

Other: \_\_\_\_\_

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
*	~100m	OF	SPH	REMOVED	w/	MASTER FLEX

Did well dewater?    Yes     No       Gallons actually evacuated: \_\_\_\_\_

Sampling Date: \_\_\_\_\_      Sampling Time: \_\_\_\_\_      Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_      Laboratory: Kiff    CalScience    Other \_\_\_\_\_

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

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: 160918-CK1	Client: ARCADIS
Sampler: CW	Date: 8/19/16
Well I.D.: 1W-3	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 9.11	Depth to Water (DTW): 4.69
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]: 5.87	

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

$0.7 \text{ (Gals.)} \times 3 = 2.1 \text{ Gals.}$ 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
0838	24.8	7.10	2810	54	0.7	yellow
0840	24.9	6.96	2760	108	1.4	↓
	DEWATERED		1.8 gal	—	1.8	
1230	25.4	6.97	2710	38	—	yellow

Did well dewater? Yes No      Gallons actually evacuated: 1.8

Sampling Date: 8/19/16      Sampling Time: 1230      Depth to Water: 5.90 (242)

Sample I.D.: 1W-3      Laboratory: Kiff CalScience Other TA-SF

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

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 #: 160818-CK1	Client: Arcadis
Sampler: Colin Rowland	Date: 8/18/16
Well I.D.: IW-4	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 9.50	Depth to Water (DTW): 4.71
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]: 5.67	

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: \_\_\_\_\_

$$0.75 \text{ (Gals.)} \times 3 = 2.25 \text{ Gals.}$$

I Case Volume      Specified Volumes      Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
1351	25.5	7.30	1791	42	0.75	clear
1354	24.3	6.98	2103	219	1.5	↓
1357	23.9	6.88	2195	266	2.25	

Did well dewater? Yes  No  Gallons actually evacuated: 2.25

Sampling Date: 8/18/16      Sampling Time: 1405      Depth to Water: 4.75

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

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

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 #: 160818-CK1	Client: ARCADIS
Sampler: CK	Date: 9/18/11
Well I.D.: 1W-5	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 9.29	Depth to Water (DTW): 4.91
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.71	

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: \_\_\_\_\_

0.7	(Gals.) X	3	=	2.1	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
1324	26.1	6.90	2301	167	0.7	ODOR / yellow
1326	26.1	6.89	2450	529	1.4	↓ ↓
1328	26.1	6.89	2455	610	2.1	↓ ↓

Did well dewater? Yes (No)      Gallons actually evacuated: 2.1

Sampling Date: 9/18/11      Sampling Time: 1330      Depth to Water: 4.95

Sample I.D.: 1W-5      Laboratory: Kiff CalScience (Other) TA-SE

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

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 #: 160818 - CK1	Client: Arcadis
Sampler: GR	Date: 8/18/2016
Well I.D.: IW-6	Well Diameter: ② 3 4 6 8
Total Well Depth (TD): 9.30	Depth to Water (DTW): 4.78
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]: 5.68	

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

0.7 (Gals.) X 3 = 2.1 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
1348	26.5	6.51	15.41	>1000	1.0	
1350	26.2	6.51	15.76	>1000	2.0	
1352	26.3	6.51	15.81	>1000	3.0	DTW - 9.01

Did well dewater? Yes No      Gallons actually evacuated: 3.0

Sampling Date: 8/18/16      Sampling Time: 1455      Depth to Water: 5.67

Sample I.D.: IW-6      Laboratory: Kiff CalScience Other TA-SF

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

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

Page \_\_\_\_ of \_\_\_\_

Client ARCADIS Date 8/10/10

Site Address 8400 PARDEE DR, OAKLAND

Job Number 160218-CM1 Technician eu/or/lor

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-28					NL			
MW-29					NL			
MW-23					NL			
MW-25					NL			
IW-3					NL	X		
MW-27					NL	X		
MW-21					NL			
MW-19					NL			
IW-6					NL	X		
MW-8					NL	X		
MW-26					NL			
MW-13					NL	X		
MW-14					NL	X		
MW-2					NL	X		
MW-3	X				NL			
MW-4	X				NL			

NOTES: MW-8 = 2 1/2 tabs Stripped; IW-3 = 2 1/2 bolts missing;  
 MW-27 = 1/2 tabs broken off; IW-6 = 2 1/2 tabs Stripped;  
 MW-14 = 1/2 bolts missing; MW-13 = 2 1/2 bolts missing + lid replaced w/ steel plate  
 MW-2 - 2 1/2 bolts



# WELLHEAD INSPECTION CHECKLIST

Client ARCADIS Date 8/18/16

Site Address 8400 PARDEE DR, OAKLAND

Job Number 160018-001 Technician CK / GR / CK

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
Mw-9	X				ML			
Mw-10	X				ML			
Mw-11	X				ML			
Mw-12					ML	X		
Mw-15	V				ML			
Mw-16	X				ML			
Mw-17	X				ML			
Mw-18	X				ML			
Mw-20	X				ML			
Mw-22					ML	X		
Mw-24	X				ML			
OW-1	X				ML			
Iw-1	X				ML			
Iw-2	X				ML			
Iw-4	X				ML			
Iw-5	V				ML			

NOTES: OW-1 2/2 TABS BROKEN MW-22 1/2 TABS BROKEN  
Iw-2 STEEL LIND NO BOLTS MW-12 2/2 TABS STRIPPED

# WELLHEAD INSPECTION CHECKLIST

Client AREADIS Date 7/28/14  
 Site Address 2400 PARDEE DR, OAKLAND  
 Job Number 160720-002 Technician CU

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-21	X							
MW-22						X		
MW-23	X							
MW-24	X							
MW-25	X							
MW-26	X							
MW-27						X		
MW-28	X							
MW-29								
DW-1						X		
IW-1						X		
IW-2						X		
IW-3	X							
IW-4						X		
IW-5						X		
IW-6						X		

NOTES: MW-27 1/2 TABS BROKEN; IW-5 = 2/2 tabs broken;  
IW-6 = 2/2 tabs stripped; IW-4 = 2/2 tabs broken; MW-22 = 1/2  
TABS BROKEN; IW-3 = 2/2 BOLTS MISSING; IW-2 = 2/2 BOLTS MISSING, WRONG W/;  
IW-1 = 2/2 BOLTS MISSING; 2/2 TABS BROKEN; DW-1 = 2/2 TABS BROKEN;

# APPENDIX B

Laboratory Analytical Data



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

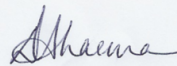
## ANALYTICAL REPORT

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

TestAmerica Job ID: 720-74030-1  
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:  
8/25/2016 4:40:28 PM

Dimple Sharma, Senior Project Manager  
(925)484-1919  
[dimple.sharma@testamericainc.com](mailto:dimple.sharma@testamericainc.com)

### LINKS

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*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.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

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

TestAmerica Job ID: 720-74030-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

### GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

### 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.
X	Surrogate is outside control limits

### General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
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: 720-74030-1

## Job ID: 720-74030-1

### Laboratory: TestAmerica Pleasanton

#### Narrative

#### Job Narrative 720-74030-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/18/2016 4:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 4.1° C, 5.0° C, 5.5° C, 5.9° C and 6.0° C.

#### GC/MS VOA

Method 8260B: The following samples were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory: MW-10 (720-74030-1), MW-17 (720-74030-2), IW-6 (720-74030-6), MW-8 (720-74030-8), MW-28 (720-74030-9) and MW-25 (720-74030-10).

Method 8260B: Surrogate recovery for the following sample was outside the upper control limit: MW-29 (720-74030-14). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method 8270C SIM: Surrogate recovery for the following samples was outside control limits: MW-17 (720-74030-2), IW-5 (720-74030-3), MW-3 (720-74030-4), IW-6 (720-74030-6), MW-21 (720-74030-7), MW-28 (720-74030-9) and MW-25 (720-74030-10), MW-4 (720-74030-11) and IW-4 (720-74030-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270C SIM: The following sample required a dilution due to the nature of the sample matrix: IW-5 (720-74030-3) and MW-25 (720-74030-10). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### GC Semi VOA

Method 8015B: The following samples required a dilution due to the nature of the sample matrix: IW-5 (720-74030-3), MW-3 (720-74030-4) and IW-4 (720-74030-13). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8015B: The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: IW-5 (720-74030-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

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

TestAmerica Job ID: 720-74030-1

## Client Sample ID: MW-10

## Lab Sample ID: 720-74030-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane (TCD)	2.9		1.0		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	200		52		ug/L	1		8015B	Total/NA
Total Dissolved Solids	6300		33		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-17

## Lab Sample ID: 720-74030-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane (TCD)	3.5		1.0		mg/L	1		RSK-175	Total/NA
Total Dissolved Solids	7100		50		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: IW-5

## Lab Sample ID: 720-74030-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	2.5		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	610		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	3.6		1.1		ug/L	10		8270C SIM	Total/NA
Acenaphthene	7.2		1.1		ug/L	10		8270C SIM	Total/NA
Fluorene	13		1.1		ug/L	10		8270C SIM	Total/NA
Phenanthrene	9.3		1.1		ug/L	10		8270C SIM	Total/NA
Methane (TCD)	5.4		1.0		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	55000		1100		ug/L	20		8015B	Total/NA
Diesel Range Organics [C10-C28]	50000		1100		ug/L	20		8015B	Silica Gel Cleanup
Total Dissolved Solids	1600		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-3

## Lab Sample ID: 720-74030-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.6		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	270		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	0.53		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	1.3		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	4.3		0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	2.4		0.10		ug/L	1		8270C SIM	Total/NA
Pyrene	0.11		0.10		ug/L	1		8270C SIM	Total/NA
Methane (TCD)	3.7		1.0		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	14000		510		ug/L	10		8015B	Total/NA
Diesel Range Organics [C10-C28]	970		51		ug/L	1		8015B	Silica Gel Cleanup
Total Dissolved Solids	1300		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-18

## Lab Sample ID: 720-74030-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane (TCD)	3.7		1.0		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	750		51		ug/L	1		8015B	Total/NA
Total Dissolved Solids	3600		25		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton



# Detection Summary

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

TestAmerica Job ID: 720-74030-1

## Client Sample ID: IW-6

## Lab Sample ID: 720-74030-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.2		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	220		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	0.33		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.71		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	1.5		0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.61		0.10		ug/L	1		8270C SIM	Total/NA
Methane (TCD)	2.0		1.0		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	4100		49		ug/L	1		8015B	Total/NA
Diesel Range Organics [C10-C28]	1200		49		ug/L	1		8015B	Silica Gel Cleanup
Total Dissolved Solids	12000		100		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-21

## Lab Sample ID: 720-74030-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.3		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	290		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	0.86		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	1.7		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	5.0		0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	1.6		0.10		ug/L	1		8270C SIM	Total/NA
Methane (TCD)	6.1		1.0		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	7200		99		ug/L	2		8015B	Total/NA
Diesel Range Organics [C10-C28]	1700		49		ug/L	1		8015B	Silica Gel Cleanup
Total Dissolved Solids	1900		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-8

## Lab Sample ID: 720-74030-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	7.7		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	270		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	4.7		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.72		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.31		0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.14		0.10		ug/L	1		8270C SIM	Total/NA
Methane (TCD)	1.6		1.0		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	130		49		ug/L	1		8015B	Total/NA
Total Dissolved Solids	5100		33		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-28

## Lab Sample ID: 720-74030-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.23		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.49		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.21		0.10		ug/L	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

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

TestAmerica Job ID: 720-74030-1

## Client Sample ID: MW-28 (Continued)

## Lab Sample ID: 720-74030-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.40		0.10		ug/L	1		8270C SIM	Total/NA
Fluoranthene	0.17		0.10		ug/L	1		8270C SIM	Total/NA
Pyrene	0.16		0.10		ug/L	1		8270C SIM	Total/NA
Methane (TCD)	3.5		1.0		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	1500		50		ug/L	1		8015B	Total/NA
Diesel Range Organics [C10-C28]	66		50		ug/L	1		8015B	Silica Gel Cleanup
Total Dissolved Solids	3000		17		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-25

## Lab Sample ID: 720-74030-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	310		5.0		ug/L	5		8260B/CA_LUFT MS	Total/NA
Naphthalene	240		10		ug/L	100		8270C SIM	Total/NA
Acenaphthene	57		1.0		ug/L	10		8270C SIM	Total/NA
Fluorene	49		1.0		ug/L	10		8270C SIM	Total/NA
Phenanthrene	83		1.0		ug/L	10		8270C SIM	Total/NA
Anthracene	7.9		1.0		ug/L	10		8270C SIM	Total/NA
Benzo[a]anthracene	2.4		1.0		ug/L	10		8270C SIM	Total/NA
Chrysene	2.0		1.0		ug/L	10		8270C SIM	Total/NA
Fluoranthene	21		1.0		ug/L	10		8270C SIM	Total/NA
Pyrene	10		1.0		ug/L	10		8270C SIM	Total/NA
Methane (TCD)	3.8		1.0		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	3700		50		ug/L	1		8015B	Total/NA
Diesel Range Organics [C10-C28]	1300		50		ug/L	1		8015B	Silica Gel Cleanup
Total Dissolved Solids	2300		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-4

## Lab Sample ID: 720-74030-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.8		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	58		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	0.36		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.46		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	1.7		0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.12		0.10		ug/L	1		8270C SIM	Total/NA
Methane (TCD)	6.3		1.0		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	8000		100		ug/L	2		8015B	Total/NA
Diesel Range Organics [C10-C28]	670		51		ug/L	1		8015B	Silica Gel Cleanup
Total Dissolved Solids	1300		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-15

## Lab Sample ID: 720-74030-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C5-C12	54		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Methane (TCD)	4.3		1.0		mg/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

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

TestAmerica Job ID: 720-74030-1

## Client Sample ID: MW-15 (Continued)

## Lab Sample ID: 720-74030-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	510		51		ug/L	1		8015B	Total/NA
Total Dissolved Solids	1800		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: IW-4

## Lab Sample ID: 720-74030-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.5		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	400		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	1.0		0.20		ug/L	2		8270C SIM	Total/NA
Acenaphthene	2.9		0.20		ug/L	2		8270C SIM	Total/NA
Fluorene	6.4		0.20		ug/L	2		8270C SIM	Total/NA
Phenanthrene	2.1		0.20		ug/L	2		8270C SIM	Total/NA
Fluoranthene	0.36		0.20		ug/L	2		8270C SIM	Total/NA
Pyrene	0.47		0.20		ug/L	2		8270C SIM	Total/NA
Methane (TCD)	5.4		1.0		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	25000		250		ug/L	5		8015B	Total/NA
Diesel Range Organics [C10-C28]	14000		250		ug/L	5		8015B	Silica Gel Cleanup
Total Dissolved Solids	1400		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-29

## Lab Sample ID: 720-74030-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.21		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.27		0.10		ug/L	1		8270C SIM	Total/NA
Methane (TCD)	3.5		1.0		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	780		50		ug/L	1		8015B	Total/NA
Diesel Range Organics [C10-C28]	75		50		ug/L	1		8015B	Silica Gel Cleanup
Total Dissolved Solids	1100		10		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-10**  
**Date Collected: 08/18/16 12:40**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-1**  
**Matrix: Water**

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/23/16 16:01	1
Benzene	ND		0.50		ug/L			08/23/16 16:01	1
Ethylbenzene	ND		0.50		ug/L			08/23/16 16:01	1
Naphthalene	ND		1.0		ug/L			08/23/16 16:01	1
Toluene	ND		0.50		ug/L			08/23/16 16:01	1
Xylenes, Total	ND		1.0		ug/L			08/23/16 16:01	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/23/16 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		67 - 130		08/23/16 16:01	1
1,2-Dichloroethane-d4 (Surr)	120		72 - 130		08/23/16 16:01	1
Toluene-d8 (Surr)	97		70 - 130		08/23/16 16:01	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Acenaphthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Fluorene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Phenanthrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	74		29 - 120	08/24/16 11:48	08/24/16 21:33	1
Terphenyl-d14	68		45 - 120	08/24/16 11:48	08/24/16 21:33	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	2.9		1.0		mg/L			08/22/16 10:50	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		52		ug/L		08/22/16 10:53	08/22/16 19:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	83		23 - 156	08/22/16 10:53	08/22/16 19:16	1

### Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		52		ug/L		08/22/16 18:31	08/24/16 19:36	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-10**  
**Date Collected: 08/18/16 12:40**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-1**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 5	08/22/16 18:31	08/24/16 19:36	1
p-Terphenyl	81		31 - 150	08/22/16 18:31	08/24/16 19:36	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6300		33		mg/L			08/23/16 03:34	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-17**  
**Date Collected: 08/18/16 13:00**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-2**  
**Matrix: Water**

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/23/16 17:29	1
Benzene	ND		0.50		ug/L			08/23/16 17:29	1
Ethylbenzene	ND		0.50		ug/L			08/23/16 17:29	1
Naphthalene	ND		1.0		ug/L			08/23/16 17:29	1
Toluene	ND		0.50		ug/L			08/23/16 17:29	1
Xylenes, Total	ND		1.0		ug/L			08/23/16 17:29	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/23/16 17:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		67 - 130					08/23/16 17:29	1
1,2-Dichloroethane-d4 (Surr)	113		72 - 130					08/23/16 17:29	1
Toluene-d8 (Surr)	99		70 - 130					08/23/16 17:29	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Acenaphthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Fluorene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Phenanthrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	57		29 - 120				08/24/16 11:48	08/24/16 21:57	1
Terphenyl-d14	43	X	45 - 120				08/24/16 11:48	08/24/16 21:57	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	3.5		1.0		mg/L			08/22/16 11:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		52		ug/L		08/22/16 10:53	08/22/16 19:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	73		23 - 156				08/22/16 10:53	08/22/16 19:40	1

### Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		52		ug/L		08/22/16 18:31	08/24/16 20:06	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-17**  
**Date Collected: 08/18/16 13:00**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-2**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 5	08/22/16 18:31	08/24/16 20:06	1
p-Terphenyl	78		31 - 150	08/22/16 18:31	08/24/16 20:06	1

<b>General Chemistry</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	7100		50		mg/L			08/23/16 03:37	1

- 1
- 2
- 3
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- 11
- 12
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- 14
- 15

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: IW-5**  
**Date Collected: 08/18/16 13:30**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-3**  
**Matrix: Water**

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/23/16 17:58	1
Benzene	ND		0.50		ug/L			08/23/16 17:58	1
Ethylbenzene	ND		0.50		ug/L			08/23/16 17:58	1
<b>Naphthalene</b>	<b>2.5</b>		1.0		ug/L			08/23/16 17:58	1
Toluene	ND		0.50		ug/L			08/23/16 17:58	1
Xylenes, Total	ND		1.0		ug/L			08/23/16 17:58	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>610</b>		50		ug/L			08/23/16 17:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	110		67 - 130		08/23/16 17:58	1
1,2-Dichloroethane-d4 (Surr)	112		72 - 130		08/23/16 17:58	1
Toluene-d8 (Surr)	99		70 - 130		08/23/16 17:58	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>3.6</b>		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
<b>Acenaphthene</b>	<b>7.2</b>		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
Acenaphthylene	ND		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
<b>Fluorene</b>	<b>13</b>		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
<b>Phenanthrene</b>	<b>9.3</b>		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
Anthracene	ND		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
Benzo[a]anthracene	ND		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
Chrysene	ND		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
Benzo[a]pyrene	ND		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
Benzo[b]fluoranthene	ND		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
Benzo[k]fluoranthene	ND		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
Benzo[g,h,i]perylene	ND		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
Indeno[1,2,3-cd]pyrene	ND		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
Fluoranthene	ND		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
Pyrene	ND		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10
Dibenz(a,h)anthracene	ND		1.1		ug/L		08/24/16 11:48	08/25/16 13:33	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69		29 - 120	08/24/16 11:48	08/25/16 13:33	10
Terphenyl-d14	36	X	45 - 120	08/24/16 11:48	08/25/16 13:33	10

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>5.4</b>		1.0		mg/L			08/22/16 11:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>55000</b>		1100		ug/L		08/22/16 10:53	08/23/16 16:19	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	0	X D	23 - 156	08/22/16 10:53	08/23/16 16:19	20

### Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>50000</b>		1100		ug/L		08/22/16 18:31	08/24/16 20:33	20

TestAmerica Pleasanton



# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: IW-5**

**Date Collected: 08/18/16 13:30**

**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-3**

**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 5	08/22/16 18:31	08/24/16 20:33	20
p-Terphenyl	0	XD	31 - 150	08/22/16 18:31	08/24/16 20:33	20

<b>General Chemistry</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1600		10		mg/L			08/23/16 03:41	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-3**  
**Date Collected: 08/18/16 13:40**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-4**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/25/16 13:01	1
Benzene	ND		0.50		ug/L			08/25/16 13:01	1
Ethylbenzene	ND		0.50		ug/L			08/25/16 13:01	1
<b>Naphthalene</b>	<b>1.6</b>		1.0		ug/L			08/25/16 13:01	1
Toluene	ND		0.50		ug/L			08/25/16 13:01	1
Xylenes, Total	ND		1.0		ug/L			08/25/16 13:01	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>270</b>		50		ug/L			08/25/16 13:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130					08/25/16 13:01	1
1,2-Dichloroethane-d4 (Surr)	103		72 - 130					08/25/16 13:01	1
Toluene-d8 (Surr)	99		70 - 130					08/25/16 13:01	1

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>0.53</b>		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
<b>Acenaphthene</b>	<b>1.3</b>		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
<b>Fluorene</b>	<b>4.3</b>		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
<b>Phenanthrene</b>	<b>2.4</b>		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
<b>Pyrene</b>	<b>0.11</b>		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 22:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	39		29 - 120				08/24/16 11:48	08/24/16 22:44	1
Terphenyl-d14	40	X	45 - 120				08/24/16 11:48	08/24/16 22:44	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>3.7</b>		1.0		mg/L			08/22/16 11:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>14000</b>		510		ug/L		08/22/16 10:53	08/23/16 15:49	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	0	X D	23 - 156				08/22/16 10:53	08/23/16 15:49	10

## Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>970</b>		51		ug/L		08/22/16 18:31	08/24/16 23:39	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-3**  
**Date Collected: 08/18/16 13:40**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-4**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 5	08/22/16 18:31	08/24/16 23:39	1
p-Terphenyl	75		31 - 150	08/22/16 18:31	08/24/16 23:39	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			08/23/16 03:52	1

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-18**  
**Date Collected: 08/18/16 14:40**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-5**  
**Matrix: Water**

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/25/16 14:58	1
Benzene	ND		0.50		ug/L			08/25/16 14:58	1
Ethylbenzene	ND		0.50		ug/L			08/25/16 14:58	1
Naphthalene	ND		1.0		ug/L			08/25/16 14:58	1
Toluene	ND		0.50		ug/L			08/25/16 14:58	1
Xylenes, Total	ND		1.0		ug/L			08/25/16 14:58	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/25/16 14:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		67 - 130		08/25/16 14:58	1
1,2-Dichloroethane-d4 (Surr)	104		72 - 130		08/25/16 14:58	1
Toluene-d8 (Surr)	98		70 - 130		08/25/16 14:58	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Acenaphthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Fluorene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Phenanthrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	40		29 - 120	08/24/16 11:48	08/24/16 23:08	1
Terphenyl-d14	46		45 - 120	08/24/16 11:48	08/24/16 23:08	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	3.7		1.0		mg/L			08/22/16 11:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	750		51		ug/L		08/22/16 10:53	08/23/16 00:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	67		23 - 156	08/22/16 10:53	08/23/16 00:08	1

### Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		51		ug/L		08/22/16 18:31	08/24/16 20:35	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-18**  
**Date Collected: 08/18/16 14:40**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-5**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.04		0 - 5	08/22/16 18:31	08/24/16 20:35	1
p-Terphenyl	82		31 - 150	08/22/16 18:31	08/24/16 20:35	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	3600		25		mg/L			08/23/16 03:59	1

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: IW-6**

**Lab Sample ID: 720-74030-6**

**Date Collected: 08/18/16 14:55**

**Matrix: Water**

**Date Received: 08/18/16 16:35**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/23/16 22:36	1
Benzene	ND		0.50		ug/L			08/23/16 22:36	1
Ethylbenzene	ND		0.50		ug/L			08/23/16 22:36	1
<b>Naphthalene</b>	<b>1.2</b>		1.0		ug/L			08/23/16 22:36	1
Toluene	ND		0.50		ug/L			08/23/16 22:36	1
Xylenes, Total	ND		1.0		ug/L			08/23/16 22:36	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>220</b>		50		ug/L			08/23/16 22:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130		08/23/16 22:36	1
1,2-Dichloroethane-d4 (Surr)	102		72 - 130		08/23/16 22:36	1
Toluene-d8 (Surr)	109		70 - 130		08/23/16 22:36	1

**Method: 8270C SIM - PAHs by GCMS (SIM)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>0.33</b>		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
<b>Acenaphthene</b>	<b>0.71</b>		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
<b>Fluorene</b>	<b>1.5</b>		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
<b>Phenanthrene</b>	<b>0.61</b>		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
Pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	50		29 - 120	08/24/16 11:48	08/24/16 23:32	1
Terphenyl-d14	28	X	45 - 120	08/24/16 11:48	08/24/16 23:32	1

**Method: RSK-175 - Dissolved Gases (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>2.0</b>		1.0		mg/L			08/22/16 11:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>4100</b>		49		ug/L		08/22/16 10:53	08/22/16 22:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	62		23 - 156	08/22/16 10:53	08/22/16 22:06	1

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>1200</b>		49		ug/L		08/22/16 18:31	08/24/16 19:45	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: IW-6**

**Date Collected: 08/18/16 14:55**

**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-6**

**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	1		0 - 5	08/22/16 18:31	08/24/16 19:45	1
p-Terphenyl	59		31 - 150	08/22/16 18:31	08/24/16 19:45	1

<b>General Chemistry</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	12000		100		mg/L			08/23/16 04:03	1

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-21**

**Date Collected: 08/18/16 14:35**

**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-7**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/23/16 23:04	1
Benzene	ND		0.50		ug/L			08/23/16 23:04	1
Ethylbenzene	ND		0.50		ug/L			08/23/16 23:04	1
<b>Naphthalene</b>	<b>1.3</b>		1.0		ug/L			08/23/16 23:04	1
Toluene	ND		0.50		ug/L			08/23/16 23:04	1
Xylenes, Total	ND		1.0		ug/L			08/23/16 23:04	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>290</b>		50		ug/L			08/23/16 23:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130		08/23/16 23:04	1
1,2-Dichloroethane-d4 (Surr)	94		72 - 130		08/23/16 23:04	1
Toluene-d8 (Surr)	109		70 - 130		08/23/16 23:04	1

**Method: 8270C SIM - PAHs by GCMS (SIM)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>0.86</b>		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
<b>Acenaphthene</b>	<b>1.7</b>		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
<b>Fluorene</b>	<b>5.0</b>		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
<b>Phenanthrene</b>	<b>1.6</b>		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
Pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 23:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	44		29 - 120	08/24/16 11:48	08/24/16 23:55	1
Terphenyl-d14	38	X	45 - 120	08/24/16 11:48	08/24/16 23:55	1

**Method: RSK-175 - Dissolved Gases (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>6.1</b>		1.0		mg/L			08/22/16 12:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>7200</b>		99		ug/L		08/22/16 10:53	08/23/16 13:19	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	65		23 - 156	08/22/16 10:53	08/23/16 13:19	2

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>1700</b>		49		ug/L		08/22/16 18:31	08/25/16 00:08	1

TestAmerica Pleasanton



# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-21**  
**Date Collected: 08/18/16 14:35**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-7**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 5	08/22/16 18:31	08/25/16 00:08	1
p-Terphenyl	78		31 - 150	08/22/16 18:31	08/25/16 00:08	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1900		10		mg/L			08/23/16 04:06	1

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-8**  
**Date Collected: 08/18/16 14:15**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-8**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/23/16 23:31	1
Benzene	ND		0.50		ug/L			08/23/16 23:31	1
Ethylbenzene	ND		0.50		ug/L			08/23/16 23:31	1
<b>Naphthalene</b>	<b>7.7</b>		1.0		ug/L			08/23/16 23:31	1
Toluene	ND		0.50		ug/L			08/23/16 23:31	1
Xylenes, Total	ND		1.0		ug/L			08/23/16 23:31	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>270</b>		50		ug/L			08/23/16 23:31	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	98		67 - 130					08/23/16 23:31	1
1,2-Dichloroethane-d4 (Surr)	103		72 - 130					08/23/16 23:31	1
Toluene-d8 (Surr)	106		70 - 130					08/23/16 23:31	1

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>4.7</b>		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
<b>Acenaphthene</b>	<b>0.72</b>		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
<b>Fluorene</b>	<b>0.31</b>		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
<b>Phenanthrene</b>	<b>0.14</b>		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
Pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:19	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	67		29 - 120				08/24/16 11:48	08/25/16 00:19	1
Terphenyl-d14	62		45 - 120				08/24/16 11:48	08/25/16 00:19	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>1.6</b>		1.0		mg/L			08/22/16 12:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>130</b>		49		ug/L		08/22/16 10:53	08/22/16 20:04	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
p-Terphenyl	82		23 - 156				08/22/16 10:53	08/22/16 20:04	1

## Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		49		ug/L		08/22/16 18:31	08/24/16 19:36	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-8**  
**Date Collected: 08/18/16 14:15**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-8**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 5	08/22/16 18:31	08/24/16 19:36	1
p-Terphenyl	77		31 - 150	08/22/16 18:31	08/24/16 19:36	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5100		33		mg/L			08/23/16 04:10	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-28**  
**Date Collected: 08/18/16 12:50**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-9**  
**Matrix: Water**

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/23/16 23:59	1
Benzene	ND		0.50		ug/L			08/23/16 23:59	1
Ethylbenzene	ND		0.50		ug/L			08/23/16 23:59	1
Naphthalene	ND		1.0		ug/L			08/23/16 23:59	1
Toluene	ND		0.50		ug/L			08/23/16 23:59	1
Xylenes, Total	ND		1.0		ug/L			08/23/16 23:59	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/23/16 23:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	112		67 - 130					08/23/16 23:59	1
1,2-Dichloroethane-d4 (Surr)	117		72 - 130					08/23/16 23:59	1
Toluene-d8 (Surr)	109		70 - 130					08/23/16 23:59	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.23		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Acenaphthene	0.49		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Fluorene	0.21		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Phenanthrene	0.40		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Fluoranthene	0.17		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Pyrene	0.16		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 00:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		29 - 120				08/24/16 11:48	08/25/16 00:43	1
Terphenyl-d14	38	X	45 - 120				08/24/16 11:48	08/25/16 00:43	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	3.5		1.0		mg/L			08/22/16 13:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1500		50		ug/L		08/22/16 10:53	08/22/16 21:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	71		23 - 156				08/22/16 10:53	08/22/16 21:18	1

### Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	66		50		ug/L		08/22/16 18:31	08/24/16 20:06	1

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# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-28**  
**Date Collected: 08/18/16 12:50**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-9**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 5	08/22/16 18:31	08/24/16 20:06	1
p-Terphenyl	67		31 - 150	08/22/16 18:31	08/24/16 20:06	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	3000		17		mg/L			08/23/16 04:14	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-25**

**Date Collected: 08/18/16 12:20**

**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-10**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		2.5		ug/L			08/24/16 00:27	5
Benzene	ND		2.5		ug/L			08/24/16 00:27	5
Ethylbenzene	ND		2.5		ug/L			08/24/16 00:27	5
<b>Naphthalene</b>	<b>310</b>		5.0		ug/L			08/24/16 00:27	5
Toluene	ND		2.5		ug/L			08/24/16 00:27	5
Xylenes, Total	ND		5.0		ug/L			08/24/16 00:27	5
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/L			08/24/16 00:27	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	117		67 - 130					08/24/16 00:27	5
1,2-Dichloroethane-d4 (Surr)	100		72 - 130					08/24/16 00:27	5
Toluene-d8 (Surr)	92		70 - 130					08/24/16 00:27	5

**Method: 8270C SIM - PAHs by GCMS (SIM)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>240</b>		10		ug/L		08/24/16 11:48	08/25/16 13:57	100
<b>Acenaphthene</b>	<b>57</b>		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
Acenaphthylene	ND		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
<b>Fluorene</b>	<b>49</b>		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
<b>Phenanthrene</b>	<b>83</b>		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
<b>Anthracene</b>	<b>7.9</b>		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
<b>Benzo[a]anthracene</b>	<b>2.4</b>		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
<b>Chrysene</b>	<b>2.0</b>		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
Benzo[a]pyrene	ND		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
Benzo[b]fluoranthene	ND		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
Benzo[k]fluoranthene	ND		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
Benzo[g,h,i]perylene	ND		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
Indeno[1,2,3-cd]pyrene	ND		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
<b>Fluoranthene</b>	<b>21</b>		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
<b>Pyrene</b>	<b>10</b>		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
Dibenz(a,h)anthracene	ND		1.0		ug/L		08/24/16 11:48	08/25/16 14:44	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	0	X	29 - 120				08/24/16 11:48	08/25/16 13:57	100
2-Fluorobiphenyl	45		29 - 120				08/24/16 11:48	08/25/16 14:44	10
Terphenyl-d14	0	X	45 - 120				08/24/16 11:48	08/25/16 13:57	100
Terphenyl-d14	24	X	45 - 120				08/24/16 11:48	08/25/16 14:44	10

**Method: RSK-175 - Dissolved Gases (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>3.8</b>		1.0		mg/L			08/22/16 13:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>3700</b>		50		ug/L		08/22/16 10:53	08/22/16 21:42	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
p-Terphenyl	69		23 - 156				08/22/16 10:53	08/22/16 21:42	1

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# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-25**

**Date Collected: 08/18/16 12:20**

**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-10**

**Matrix: Water**

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1300		50		ug/L	-	08/22/16 18:31	08/24/16 19:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.5		0 - 5	08/22/16 18:31	08/24/16 19:45	1
p-Terphenyl	71		31 - 150	08/22/16 18:31	08/24/16 19:45	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2300		10		mg/L	-		08/23/16 04:17	1



# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-4**  
**Date Collected: 08/18/16 13:32**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-11**  
**Matrix: Water**

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/24/16 00:54	1
Benzene	ND		0.50		ug/L			08/24/16 00:54	1
Ethylbenzene	ND		0.50		ug/L			08/24/16 00:54	1
<b>Naphthalene</b>	<b>1.8</b>		1.0		ug/L			08/24/16 00:54	1
Toluene	ND		0.50		ug/L			08/24/16 00:54	1
Xylenes, Total	ND		1.0		ug/L			08/24/16 00:54	1
<b>Gasoline Range Organics (GRO)</b>	<b>58</b>		50		ug/L			08/24/16 00:54	1

### -C5-C12

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		67 - 130		08/24/16 00:54	1
1,2-Dichloroethane-d4 (Surr)	105		72 - 130		08/24/16 00:54	1
Toluene-d8 (Surr)	104		70 - 130		08/24/16 00:54	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>0.36</b>		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
<b>Acenaphthene</b>	<b>0.46</b>		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
<b>Fluorene</b>	<b>1.7</b>		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
<b>Phenanthrene</b>	<b>0.12</b>		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
Pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 13:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	56		29 - 120	08/24/16 11:48	08/25/16 13:09	1
Terphenyl-d14	60		45 - 120	08/24/16 11:48	08/25/16 13:09	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>6.3</b>		1.0		mg/L			08/22/16 13:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>8000</b>		100		ug/L		08/22/16 10:53	08/23/16 00:07	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	81		23 - 156	08/22/16 10:53	08/23/16 00:07	2

### Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>670</b>		51		ug/L		08/22/16 18:31	08/25/16 00:37	1

TestAmerica Pleasanton



# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-4**

**Date Collected: 08/18/16 13:32**

**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-11**

**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 5	08/22/16 18:31	08/25/16 00:37	1
p-Terphenyl	79		31 - 150	08/22/16 18:31	08/25/16 00:37	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			08/23/16 04:21	1

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-15**  
**Date Collected: 08/18/16 12:15**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-12**  
**Matrix: Water**

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/24/16 01:22	1
Benzene	ND		0.50		ug/L			08/24/16 01:22	1
Ethylbenzene	ND		0.50		ug/L			08/24/16 01:22	1
Naphthalene	ND		1.0		ug/L			08/24/16 01:22	1
Toluene	ND		0.50		ug/L			08/24/16 01:22	1
Xylenes, Total	ND		1.0		ug/L			08/24/16 01:22	1
<b>Gasoline Range Organics (GRO)</b>	<b>54</b>		50		ug/L			08/24/16 01:22	1

### -C5-C12

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130		08/24/16 01:22	1
1,2-Dichloroethane-d4 (Surr)	113		72 - 130		08/24/16 01:22	1
Toluene-d8 (Surr)	115		70 - 130		08/24/16 01:22	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Acenaphthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Fluorene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Phenanthrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 01:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69		29 - 120	08/24/16 11:48	08/25/16 01:54	1
Terphenyl-d14	51		45 - 120	08/24/16 11:48	08/25/16 01:54	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>4.3</b>		1.0		mg/L			08/22/16 14:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>510</b>		51		ug/L		08/22/16 10:53	08/22/16 21:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	70		23 - 156	08/22/16 10:53	08/22/16 21:42	1

### Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		51		ug/L		08/22/16 18:31	08/24/16 20:35	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-15**  
**Date Collected: 08/18/16 12:15**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-12**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.004		0 - 5	08/22/16 18:31	08/24/16 20:35	1
p-Terphenyl	84		31 - 150	08/22/16 18:31	08/24/16 20:35	1

<b>General Chemistry</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1800		10		mg/L			08/23/16 04:25	1



# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: IW-4**  
**Date Collected: 08/18/16 14:05**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-13**  
**Matrix: Water**

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/24/16 01:49	1
Benzene	ND		0.50		ug/L			08/24/16 01:49	1
Ethylbenzene	ND		0.50		ug/L			08/24/16 01:49	1
<b>Naphthalene</b>	<b>1.5</b>		1.0		ug/L			08/24/16 01:49	1
Toluene	ND		0.50		ug/L			08/24/16 01:49	1
Xylenes, Total	ND		1.0		ug/L			08/24/16 01:49	1
<b>Gasoline Range Organics (GRO)</b>	<b>400</b>		50		ug/L			08/24/16 01:49	1

### -C5-C12

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		67 - 130		08/24/16 01:49	1
1,2-Dichloroethane-d4 (Surr)	105		72 - 130		08/24/16 01:49	1
Toluene-d8 (Surr)	81		70 - 130		08/24/16 01:49	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>1.0</b>		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
<b>Acenaphthene</b>	<b>2.9</b>		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
Acenaphthylene	ND		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
<b>Fluorene</b>	<b>6.4</b>		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
<b>Phenanthrene</b>	<b>2.1</b>		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
Anthracene	ND		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
Benzo[a]anthracene	ND		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
Chrysene	ND		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
Benzo[a]pyrene	ND		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
Benzo[b]fluoranthene	ND		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
Benzo[k]fluoranthene	ND		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
Benzo[g,h,i]perylene	ND		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
Indeno[1,2,3-cd]pyrene	ND		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
<b>Fluoranthene</b>	<b>0.36</b>		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
<b>Pyrene</b>	<b>0.47</b>		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2
Dibenz(a,h)anthracene	ND		0.20		ug/L		08/24/16 11:48	08/25/16 14:20	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	54		29 - 120	08/24/16 11:48	08/25/16 14:20	2
Terphenyl-d14	37	X	45 - 120	08/24/16 11:48	08/25/16 14:20	2

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>5.4</b>		1.0		mg/L			08/22/16 14:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>25000</b>		250		ug/L		08/22/16 10:53	08/22/16 22:30	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	0	X D	23 - 156	08/22/16 10:53	08/22/16 22:30	5

### Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>14000</b>		250		ug/L		08/22/16 18:31	08/24/16 21:46	5

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: IW-4**

**Lab Sample ID: 720-74030-13**

**Date Collected: 08/18/16 14:05**

**Matrix: Water**

**Date Received: 08/18/16 16:35**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 5	08/22/16 18:31	08/24/16 21:46	5
p-Terphenyl	0	XD	31 - 150	08/22/16 18:31	08/24/16 21:46	5

<b>General Chemistry</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1400		10		mg/L			08/23/16 04:28	1

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-29**  
**Date Collected: 08/18/16 11:35**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-14**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/24/16 02:17	1
Benzene	ND		0.50		ug/L			08/24/16 02:17	1
Ethylbenzene	ND		0.50		ug/L			08/24/16 02:17	1
Naphthalene	ND		1.0		ug/L			08/24/16 02:17	1
Toluene	ND		0.50		ug/L			08/24/16 02:17	1
Xylenes, Total	ND		1.0		ug/L			08/24/16 02:17	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/25/16 12:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	133	X	67 - 130					08/24/16 02:17	1
4-Bromofluorobenzene	93		67 - 130					08/25/16 12:32	1
1,2-Dichloroethane-d4 (Surr)	105		72 - 130					08/24/16 02:17	1
1,2-Dichloroethane-d4 (Surr)	105		72 - 130					08/25/16 12:32	1
Toluene-d8 (Surr)	104		70 - 130					08/24/16 02:17	1
Toluene-d8 (Surr)	95		70 - 130					08/25/16 12:32	1

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.21		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Acenaphthene	0.27		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Fluorene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Phenanthrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 02:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	59		29 - 120				08/24/16 11:48	08/25/16 02:41	1
Terphenyl-d14	45		45 - 120				08/24/16 11:48	08/25/16 02:41	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	3.5		1.0		mg/L			08/22/16 14:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	780		50		ug/L		08/22/16 10:53	08/22/16 20:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	75		23 - 156				08/22/16 10:53	08/22/16 20:53	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-29**

**Lab Sample ID: 720-74030-14**

**Date Collected: 08/18/16 11:35**

**Matrix: Water**

**Date Received: 08/18/16 16:35**

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	75		50		ug/L	-	08/22/16 18:31	08/24/16 20:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.3		0 - 5	08/22/16 18:31	08/24/16 20:09	1
p-Terphenyl	70		31 - 150	08/22/16 18:31	08/24/16 20:09	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10		mg/L	-		08/23/16 04:32	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Surrogate Summary

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

TestAmerica Job ID: 720-74030-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (67-130)	12DCE (72-130)	TOL (70-130)
720-74030-1	MW-10	92	120	97
720-74030-1 MS	MW-10	109	114	104
720-74030-1 MSD	MW-10	110	109	104
720-74030-2	MW-17	102	113	99
720-74030-3	IW-5	110	112	99
720-74030-4	MW-3	99	103	99
720-74030-5	MW-18	97	104	98
720-74030-6	IW-6	99	102	109
720-74030-6 MS	IW-6	99	95	103
720-74030-6 MSD	IW-6	98	97	109
720-74030-7	MW-21	99	94	109
720-74030-8	MW-8	98	103	106
720-74030-9	MW-28	112	117	109
720-74030-10	MW-25	117	100	92
720-74030-11	MW-4	101	105	104
720-74030-12	MW-15	100	113	115
720-74030-13	IW-4	103	105	81
720-74030-14	MW-29	133 X	105	104
720-74030-14	MW-29	93	105	95
LCS 720-208055/5	Lab Control Sample	106	101	104
LCS 720-208055/7	Lab Control Sample	103	102	103
LCS 720-208109/6	Lab Control Sample	96	88	99
LCS 720-208109/8	Lab Control Sample	97	97	102
LCS 720-208222/5	Lab Control Sample	95	102	99
LCS 720-208222/7	Lab Control Sample	95	103	98
LCSD 720-208055/6	Lab Control Sample Dup	107	102	104
LCSD 720-208055/8	Lab Control Sample Dup	104	101	104
LCSD 720-208109/7	Lab Control Sample Dup	93	96	100
LCSD 720-208109/9	Lab Control Sample Dup	92	93	101
LCSD 720-208222/6	Lab Control Sample Dup	93	101	100
LCSD 720-208222/8	Lab Control Sample Dup	96	103	98
MB 720-208055/4	Method Blank	94	102	100
MB 720-208109/5	Method Blank	94	92	100
MB 720-208222/4	Method Blank	93	101	96

**Surrogate Legend**

- BFB = 4-Bromofluorobenzene
- 12DCE = 1,2-Dichloroethane-d4 (Surr)
- TOL = Toluene-d8 (Surr)

## Method: 8270C SIM - PAHs by GCMS (SIM)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		FBP (29-120)	TPH (45-120)
720-74030-1	MW-10	74	68
720-74030-2	MW-17	57	43 X
720-74030-3	IW-5	69	36 X

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# Surrogate Summary

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

TestAmerica Job ID: 720-74030-1

## Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	FBP (29-120)	TPH (45-120)
720-74030-4	MW-3	39	40 X
720-74030-5	MW-18	40	46
720-74030-6	IW-6	50	28 X
720-74030-7	MW-21	44	38 X
720-74030-8	MW-8	67	62
720-74030-9	MW-28	63	38 X
720-74030-10	MW-25	0 X	0 X
720-74030-10	MW-25	45	24 X
720-74030-11	MW-4	56	60
720-74030-12	MW-15	69	51
720-74030-13	IW-4	54	37 X
720-74030-14	MW-29	59	45
LCS 720-208168/2-A	Lab Control Sample	76	70
LCSD 720-208168/3-A	Lab Control Sample Dup	64	66
MB 720-208168/1-A	Method Blank	68	80

#### Surrogate Legend

FBP = 2-Fluorobiphenyl

TPH = Terphenyl-d14

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PTP1 (23-156)
720-74030-1	MW-10	83
720-74030-2	MW-17	73
720-74030-3	IW-5	0 X D
720-74030-4	MW-3	0 X D
720-74030-5	MW-18	67
720-74030-6	IW-6	62
720-74030-7	MW-21	65
720-74030-8	MW-8	82
720-74030-9	MW-28	71
720-74030-10	MW-25	69
720-74030-11	MW-4	81
720-74030-12	MW-15	70
720-74030-13	IW-4	0 X D
720-74030-14	MW-29	75
LCS 720-208007/2-A	Lab Control Sample	80
LCSD 720-208007/3-A	Lab Control Sample Dup	90
MB 720-208007/1-A	Method Blank	72

#### Surrogate Legend

PTP = p-Terphenyl

# Surrogate Summary

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

TestAmerica Job ID: 720-74030-1

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

Matrix: Water

Prep Type: Silica Gel Cleanup

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	NDA1 (0-5)	PTP1 (31-150)
720-74030-1	MW-10	0	81
720-74030-2	MW-17	0	78
720-74030-3	IW-5	0	0 X D
720-74030-4	MW-3	0	75
720-74030-5	MW-18	0.04	82
720-74030-6	IW-6	1	59
720-74030-7	MW-21	0	78
720-74030-8	MW-8	0	77
720-74030-9	MW-28	0	67
720-74030-10	MW-25	0.5	71
720-74030-11	MW-4	0	79
720-74030-12	MW-15	0.004	84
720-74030-13	IW-4	0	0 X D
720-74030-14	MW-29	0.3	70
LCS 720-208048/2-A	Lab Control Sample		82
LCSD 720-208048/3-A	Lab Control Sample Dup		78
MB 720-208048/1-A	Method Blank	0.007	65

#### Surrogate Legend

NDA = Capric Acid (Surr)

PTP = p-Terphenyl

# QC Sample Results

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

TestAmerica Job ID: 720-74030-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

**Lab Sample ID: MB 720-208055/4**  
**Matrix: Water**  
**Analysis Batch: 208055**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/23/16 08:44	1
Benzene	ND		0.50		ug/L			08/23/16 08:44	1
Ethylbenzene	ND		0.50		ug/L			08/23/16 08:44	1
Naphthalene	ND		1.0		ug/L			08/23/16 08:44	1
Toluene	ND		0.50		ug/L			08/23/16 08:44	1
Xylenes, Total	ND		1.0		ug/L			08/23/16 08:44	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/23/16 08:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		67 - 130		08/23/16 08:44	1
1,2-Dichloroethane-d4 (Surr)	102		72 - 130		08/23/16 08:44	1
Toluene-d8 (Surr)	100		70 - 130		08/23/16 08:44	1

**Lab Sample ID: LCS 720-208055/5**  
**Matrix: Water**  
**Analysis Batch: 208055**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MTBE	25.0	23.4		ug/L		93	62 - 130
Benzene	25.0	25.8		ug/L		103	79 - 130
Ethylbenzene	25.0	26.1		ug/L		104	80 - 120
Naphthalene	25.0	23.5		ug/L		94	50 - 130
Toluene	25.0	24.8		ug/L		99	78 - 120
m-Xylene & p-Xylene	25.0	26.1		ug/L		104	70 - 142
o-Xylene	25.0	25.9		ug/L		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	106		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	104		70 - 130

**Lab Sample ID: LCS 720-208055/7**  
**Matrix: Water**  
**Analysis Batch: 208055**

**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	556		ug/L		111	71 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	103		67 - 130
1,2-Dichloroethane-d4 (Surr)	102		72 - 130
Toluene-d8 (Surr)	103		70 - 130

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# QC Sample Results

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

TestAmerica Job ID: 720-74030-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-208055/6**

**Matrix: Water**

**Analysis Batch: 208055**

**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
MTBE	25.0	24.8		ug/L		99	62 - 130	6	20
Benzene	25.0	26.2		ug/L		105	79 - 130	1	20
Ethylbenzene	25.0	26.5		ug/L		106	80 - 120	1	20
Naphthalene	25.0	25.5		ug/L		102	50 - 130	8	20
Toluene	25.0	25.3		ug/L		101	78 - 120	2	20
m-Xylene & p-Xylene	25.0	26.1		ug/L		105	70 - 142	0	20
o-Xylene	25.0	26.5		ug/L		106	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	107		67 - 130
1,2-Dichloroethane-d4 (Surr)	102		72 - 130
Toluene-d8 (Surr)	104		70 - 130

**Lab Sample ID: LCSD 720-208055/8**

**Matrix: Water**

**Analysis Batch: 208055**

**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	551		ug/L		110	71 - 125	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	104		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	104		70 - 130

**Lab Sample ID: 720-74030-1 MS**

**Matrix: Water**

**Analysis Batch: 208055**

**Client Sample ID: MW-10**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
MTBE	ND		25.0	27.5		ug/L		110	60 - 138
Benzene	ND		25.0	26.3		ug/L		105	60 - 140
Ethylbenzene	ND		25.0	25.9		ug/L		103	60 - 140
Naphthalene	ND		25.0	28.9		ug/L		115	56 - 140
Toluene	ND		25.0	24.4		ug/L		97	60 - 140
m-Xylene & p-Xylene	ND		25.0	25.5		ug/L		102	60 - 140
o-Xylene	ND		25.0	26.5		ug/L		106	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	109		67 - 130
1,2-Dichloroethane-d4 (Surr)	114		72 - 130
Toluene-d8 (Surr)	104		70 - 130

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# QC Sample Results

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

TestAmerica Job ID: 720-74030-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-74030-1 MSD**

**Matrix: Water**

**Analysis Batch: 208055**

**Client Sample ID: MW-10**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MTBE	ND		25.0	26.6		ug/L		106	60 - 138	3	20
Benzene	ND		25.0	25.9		ug/L		104	60 - 140	2	20
Ethylbenzene	ND		25.0	25.4		ug/L		101	60 - 140	2	20
Naphthalene	ND		25.0	27.3		ug/L		109	56 - 140	6	20
Toluene	ND		25.0	24.2		ug/L		97	60 - 140	1	20
m-Xylene & p-Xylene	ND		25.0	25.0		ug/L		100	60 - 140	2	20
o-Xylene	ND		25.0	26.0		ug/L		104	60 - 140	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	110		67 - 130
1,2-Dichloroethane-d4 (Surr)	109		72 - 130
Toluene-d8 (Surr)	104		70 - 130

**Lab Sample ID: MB 720-208109/5**

**Matrix: Water**

**Analysis Batch: 208109**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/23/16 19:24	1
Benzene	ND		0.50		ug/L			08/23/16 19:24	1
Ethylbenzene	ND		0.50		ug/L			08/23/16 19:24	1
Naphthalene	ND		1.0		ug/L			08/23/16 19:24	1
Toluene	ND		0.50		ug/L			08/23/16 19:24	1
Xylenes, Total	ND		1.0		ug/L			08/23/16 19:24	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/23/16 19:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		67 - 130		08/23/16 19:24	1
1,2-Dichloroethane-d4 (Surr)	92		72 - 130		08/23/16 19:24	1
Toluene-d8 (Surr)	100		70 - 130		08/23/16 19:24	1

**Lab Sample ID: LCS 720-208109/6**

**Matrix: Water**

**Analysis Batch: 208109**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MTBE	25.0	21.5		ug/L		86	62 - 130
Benzene	25.0	24.4		ug/L		98	79 - 130
Ethylbenzene	25.0	24.6		ug/L		99	80 - 120
Naphthalene	25.0	21.2		ug/L		85	50 - 130
Toluene	25.0	25.1		ug/L		100	78 - 120
m-Xylene & p-Xylene	25.0	24.5		ug/L		98	70 - 142
o-Xylene	25.0	24.0		ug/L		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	96		67 - 130

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# QC Sample Results

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

TestAmerica Job ID: 720-74030-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-208109/6**  
**Matrix: Water**  
**Analysis Batch: 208109**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

	LCS %Recovery	LCS Qualifier	Limits
<i>1,2-Dichloroethane-d4 (Surr)</i>	88		72 - 130
<i>Toluene-d8 (Surr)</i>	99		70 - 130

**Lab Sample ID: LCS 720-208109/8**  
**Matrix: Water**  
**Analysis Batch: 208109**

**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	531		ug/L		106	71 - 125

	LCS %Recovery	LCS Qualifier	Limits
<i>4-Bromofluorobenzene</i>	97		67 - 130
<i>1,2-Dichloroethane-d4 (Surr)</i>	97		72 - 130
<i>Toluene-d8 (Surr)</i>	102		70 - 130

**Lab Sample ID: LCSD 720-208109/7**  
**Matrix: Water**  
**Analysis Batch: 208109**

**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
MTBE	25.0	25.1		ug/L		100	62 - 130	15	20
Benzene	25.0	24.6		ug/L		98	79 - 130	1	20
Ethylbenzene	25.0	23.7		ug/L		95	80 - 120	4	20
Naphthalene	25.0	23.7		ug/L		95	50 - 130	11	20
Toluene	25.0	24.0		ug/L		96	78 - 120	4	20
m-Xylene & p-Xylene	25.0	23.5		ug/L		94	70 - 142	4	20
o-Xylene	25.0	23.4		ug/L		93	70 - 130	3	20

	LCSD %Recovery	LCSD Qualifier	Limits
<i>4-Bromofluorobenzene</i>	93		67 - 130
<i>1,2-Dichloroethane-d4 (Surr)</i>	96		72 - 130
<i>Toluene-d8 (Surr)</i>	100		70 - 130

**Lab Sample ID: LCSD 720-208109/9**  
**Matrix: Water**  
**Analysis Batch: 208109**

**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	539		ug/L		108	71 - 125	1	20

	LCSD %Recovery	LCSD Qualifier	Limits
<i>4-Bromofluorobenzene</i>	92		67 - 130
<i>1,2-Dichloroethane-d4 (Surr)</i>	93		72 - 130
<i>Toluene-d8 (Surr)</i>	101		70 - 130

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# QC Sample Results

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

TestAmerica Job ID: 720-74030-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-74030-6 MS**

**Matrix: Water**

**Analysis Batch: 208109**

**Client Sample ID: IW-6**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
MTBE	ND		25.0	25.4		ug/L		102	60 - 138	
Benzene	ND		25.0	26.0		ug/L		103	60 - 140	
Ethylbenzene	ND		25.0	24.4		ug/L		97	60 - 140	
Naphthalene	1.2		25.0	24.5		ug/L		93	56 - 140	
Toluene	ND		25.0	24.6		ug/L		98	60 - 140	
m-Xylene & p-Xylene	ND		25.0	24.2		ug/L		97	60 - 140	
o-Xylene	ND		25.0	24.4		ug/L		97	60 - 140	
<b>MS MS</b>										
Surrogate	%Recovery		Qualifier	Limits						
4-Bromofluorobenzene	99			67 - 130						
1,2-Dichloroethane-d4 (Surr)	95			72 - 130						
Toluene-d8 (Surr)	103			70 - 130						

**Lab Sample ID: 720-74030-6 MSD**

**Matrix: Water**

**Analysis Batch: 208109**

**Client Sample ID: IW-6**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier							
MTBE	ND		25.0	26.2		ug/L		105	60 - 138	3	20	
Benzene	ND		25.0	25.6		ug/L		101	60 - 140	2	20	
Ethylbenzene	ND		25.0	23.8		ug/L		95	60 - 140	2	20	
Naphthalene	1.2		25.0	25.7		ug/L		98	56 - 140	5	20	
Toluene	ND		25.0	24.7		ug/L		98	60 - 140	0	20	
m-Xylene & p-Xylene	ND		25.0	23.6		ug/L		95	60 - 140	3	20	
o-Xylene	ND		25.0	23.8		ug/L		94	60 - 140	3	20	
<b>MSD MSD</b>												
Surrogate	%Recovery		Qualifier	Limits								
4-Bromofluorobenzene	98			67 - 130								
1,2-Dichloroethane-d4 (Surr)	97			72 - 130								
Toluene-d8 (Surr)	109			70 - 130								

**Lab Sample ID: MB 720-208222/4**

**Matrix: Water**

**Analysis Batch: 208222**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
MTBE	ND		0.50		ug/L			08/25/16 08:37	1
Benzene	ND		0.50		ug/L			08/25/16 08:37	1
Ethylbenzene	ND		0.50		ug/L			08/25/16 08:37	1
Naphthalene	ND		1.0		ug/L			08/25/16 08:37	1
Toluene	ND		0.50		ug/L			08/25/16 08:37	1
Xylenes, Total	ND		1.0		ug/L			08/25/16 08:37	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/25/16 08:37	1
<b>MB MB</b>									
Surrogate	%Recovery		Qualifier	Limits		Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene	93			67 - 130			08/25/16 08:37	1	

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# QC Sample Results

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

TestAmerica Job ID: 720-74030-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-208222/4**  
**Matrix: Water**  
**Analysis Batch: 208222**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	101		72 - 130		08/25/16 08:37	1
Toluene-d8 (Surr)	96		70 - 130		08/25/16 08:37	1

**Lab Sample ID: LCS 720-208222/5**  
**Matrix: Water**  
**Analysis Batch: 208222**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MTBE	25.0	28.3		ug/L		113	62 - 130
Benzene	25.0	25.7		ug/L		103	79 - 130
Ethylbenzene	25.0	24.7		ug/L		99	80 - 120
Naphthalene	25.0	24.4		ug/L		98	50 - 130
Toluene	25.0	24.3		ug/L		97	78 - 120
m-Xylene & p-Xylene	25.0	24.7		ug/L		99	70 - 142
o-Xylene	25.0	24.4		ug/L		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	102		72 - 130
Toluene-d8 (Surr)	99		70 - 130

**Lab Sample ID: LCS 720-208222/7**  
**Matrix: Water**  
**Analysis Batch: 208222**

**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	523		ug/L		105	71 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: LCSD 720-208222/6**  
**Matrix: Water**  
**Analysis Batch: 208222**

**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
MTBE	25.0	26.4		ug/L		106	62 - 130	7	20
Benzene	25.0	25.8		ug/L		103	79 - 130	0	20
Ethylbenzene	25.0	24.8		ug/L		99	80 - 120	1	20
Naphthalene	25.0	23.7		ug/L		95	50 - 130	3	20
Toluene	25.0	24.4		ug/L		98	78 - 120	0	20
m-Xylene & p-Xylene	25.0	24.7		ug/L		99	70 - 142	0	20
o-Xylene	25.0	24.5		ug/L		98	70 - 130	0	20

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# QC Sample Results

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

TestAmerica Job ID: 720-74030-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-208222/6**  
**Matrix: Water**  
**Analysis Batch: 208222**

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

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	93		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	100		70 - 130

**Lab Sample ID: LCSD 720-208222/8**  
**Matrix: Water**  
**Analysis Batch: 208222**

**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	530		ug/L		106	71 - 125	1	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		72 - 130
Toluene-d8 (Surr)	98		70 - 130

## Method: 8270C SIM - PAHs by GCMS (SIM)

**Lab Sample ID: MB 720-208168/1-A**  
**Matrix: Water**  
**Analysis Batch: 208219**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 208168**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Acenaphthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Fluorene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Phenanthrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorobiphenyl	68		29 - 120	08/24/16 11:48	08/24/16 21:10	1
Terphenyl-d14	80		45 - 120	08/24/16 11:48	08/24/16 21:10	1

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# QC Sample Results

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

TestAmerica Job ID: 720-74030-1

## Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

**Lab Sample ID: LCS 720-208168/2-A**  
**Matrix: Water**  
**Analysis Batch: 208219**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 208168**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Naphthalene	10.0	7.49		ug/L		75	19 - 120
Acenaphthene	10.0	7.44		ug/L		74	24 - 120
Acenaphthylene	10.0	7.74		ug/L		77	24 - 120
Fluorene	10.0	7.63		ug/L		76	27 - 120
Phenanthrene	10.0	7.80		ug/L		78	31 - 120
Anthracene	10.0	7.99		ug/L		80	44 - 120
Benzo[a]anthracene	10.0	7.77		ug/L		78	48 - 120
Chrysene	10.0	7.52		ug/L		75	47 - 120
Benzo[a]pyrene	10.0	6.68		ug/L		67	43 - 120
Benzo[b]fluoranthene	10.0	6.71		ug/L		67	42 - 120
Benzo[k]fluoranthene	10.0	6.03		ug/L		60	42 - 120
Benzo[g,h,i]perylene	10.0	4.72		ug/L		47	35 - 120
Indeno[1,2,3-cd]pyrene	10.0	5.02		ug/L		50	36 - 120
Fluoranthene	10.0	8.65		ug/L		86	43 - 120
Pyrene	10.0	8.30		ug/L		83	47 - 120
Dibenz(a,h)anthracene	10.0	4.95		ug/L		49	33 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	76		29 - 120
Terphenyl-d14	70		45 - 120

**Lab Sample ID: LCSD 720-208168/3-A**  
**Matrix: Water**  
**Analysis Batch: 208219**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 208168**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Naphthalene	10.0	6.02		ug/L		60	19 - 120	22	35
Acenaphthene	10.0	6.08		ug/L		61	24 - 120	20	35
Acenaphthylene	10.0	6.23		ug/L		62	24 - 120	22	35
Fluorene	10.0	6.27		ug/L		63	27 - 120	20	35
Phenanthrene	10.0	6.67		ug/L		67	31 - 120	16	35
Anthracene	10.0	6.99		ug/L		70	44 - 120	13	35
Benzo[a]anthracene	10.0	7.28		ug/L		73	48 - 120	7	35
Chrysene	10.0	7.06		ug/L		71	47 - 120	6	35
Benzo[a]pyrene	10.0	6.19		ug/L		62	43 - 120	8	35
Benzo[b]fluoranthene	10.0	6.54		ug/L		65	42 - 120	3	35
Benzo[k]fluoranthene	10.0	5.64		ug/L		56	42 - 120	7	35
Benzo[g,h,i]perylene	10.0	4.39		ug/L		44	35 - 120	7	35
Indeno[1,2,3-cd]pyrene	10.0	4.73		ug/L		47	36 - 120	6	35
Fluoranthene	10.0	7.84		ug/L		78	43 - 120	10	35
Pyrene	10.0	7.74		ug/L		77	47 - 120	7	35
Dibenz(a,h)anthracene	10.0	4.63		ug/L		46	33 - 120	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	64		29 - 120
Terphenyl-d14	66		45 - 120

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# QC Sample Results

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

TestAmerica Job ID: 720-74030-1

## Method: RSK-175 - Dissolved Gases (GC)

**Lab Sample ID: MB 440-350932/8**  
**Matrix: Water**  
**Analysis Batch: 350932**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (FID)	ND		0.00099		mg/L			08/22/16 10:21	1
Methane (TCD)	ND		1.0		mg/L			08/22/16 10:21	1

**Lab Sample ID: LCS 440-350932/4**  
**Matrix: Water**  
**Analysis Batch: 350932**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	4.19	3.75		mg/L		89	80 - 120

**Lab Sample ID: LCS 440-350932/6**  
**Matrix: Water**  
**Analysis Batch: 350932**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (FID)	0.0839	0.0917		mg/L		109	80 - 120

**Lab Sample ID: LCSD 440-350932/5**  
**Matrix: Water**  
**Analysis Batch: 350932**

**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
Methane (TCD)	4.19	3.91		mg/L		93	80 - 120	4	20

**Lab Sample ID: LCSD 440-350932/7**  
**Matrix: Water**  
**Analysis Batch: 350932**

**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
Methane (FID)	0.0839	0.0827		mg/L		99	80 - 120	10	20

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

**Lab Sample ID: MB 720-208007/1-A**  
**Matrix: Water**  
**Analysis Batch: 207989**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 208007**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		08/22/16 10:53	08/22/16 23:43	1

Surrogate	%Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	72		23 - 156	08/22/16 10:53	08/22/16 23:43	1

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# QC Sample Results

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

TestAmerica Job ID: 720-74030-1

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

**Lab Sample ID: LCS 720-208007/2-A**

**Matrix: Water**

**Analysis Batch: 207989**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 208007**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2500	1940		ug/L		78	34 - 115
<b>Surrogate</b>		<b>LCS %Recovery</b>	<b>LCS Qualifier</b>				<b>Limits</b>
<i>p-Terphenyl</i>		80					23 - 156

**Lab Sample ID: LCSD 720-208007/3-A**

**Matrix: Water**

**Analysis Batch: 207989**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 208007**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	2100		ug/L		84	34 - 115	8	35
<b>Surrogate</b>		<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>				<b>Limits</b>		
<i>p-Terphenyl</i>		90					23 - 156		

**Lab Sample ID: MB 720-208048/1-A**

**Matrix: Water**

**Analysis Batch: 208134**

**Client Sample ID: Method Blank**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 208048**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		08/22/16 18:31	08/24/16 22:11	1
<b>Surrogate</b>		<b>MB %Recovery</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Capric Acid (Surr)</i>		0.007					08/22/16 18:31	08/24/16 22:11	1
<i>p-Terphenyl</i>		65					08/22/16 18:31	08/24/16 22:11	1

**Lab Sample ID: LCS 720-208048/2-A**

**Matrix: Water**

**Analysis Batch: 208134**

**Client Sample ID: Lab Control Sample**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 208048**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2500	1410		ug/L		57	32 - 119
<b>Surrogate</b>		<b>LCS %Recovery</b>	<b>LCS Qualifier</b>				<b>Limits</b>
<i>p-Terphenyl</i>		82					31 - 150

**Lab Sample ID: LCSD 720-208048/3-A**

**Matrix: Water**

**Analysis Batch: 208134**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 208048**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	1330		ug/L		53	32 - 119	6	35

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# QC Sample Results

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

TestAmerica Job ID: 720-74030-1

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

**Lab Sample ID: LCSD 720-208048/3-A**  
**Matrix: Water**  
**Analysis Batch: 208134**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 208048**

Surrogate	LCS D %Recovery	LCS D Qualifier	Limits
p-Terphenyl	78		31 - 150

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID: MB 500-348805/1**  
**Matrix: Water**  
**Analysis Batch: 348805**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			08/23/16 03:19	1

**Lab Sample ID: LCS 500-348805/2**  
**Matrix: Water**  
**Analysis Batch: 348805**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	294		mg/L		118	80 - 120

**Lab Sample ID: 720-74030-3 MS**  
**Matrix: Water**  
**Analysis Batch: 348805**

**Client Sample ID: IW-5**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1600		250	1910	4	mg/L		118	75 - 125

**Lab Sample ID: 720-74030-3 DU**  
**Matrix: Water**  
**Analysis Batch: 348805**

**Client Sample ID: IW-5**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1600		1630		mg/L		0.7	5

**Lab Sample ID: 720-74030-4 DU**  
**Matrix: Water**  
**Analysis Batch: 348805**

**Client Sample ID: MW-3**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1300		1360		mg/L		2	5

# QC Association Summary

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

TestAmerica Job ID: 720-74030-1

## GC/MS VOA

### Analysis Batch: 208055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-1	MW-10	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-2	MW-17	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-3	IW-5	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-208055/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-208055/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-208055/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-208055/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-208055/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-1 MS	MW-10	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-1 MSD	MW-10	Total/NA	Water	8260B/CA_LUFT MS	

### Analysis Batch: 208109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-6	IW-6	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-7	MW-21	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-8	MW-8	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-9	MW-28	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-10	MW-25	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-11	MW-4	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-12	MW-15	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-13	IW-4	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-14	MW-29	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-208109/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-208109/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-208109/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-208109/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-208109/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-6 MS	IW-6	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-6 MSD	IW-6	Total/NA	Water	8260B/CA_LUFT MS	

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# QC Association Summary

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

TestAmerica Job ID: 720-74030-1

## GC/MS VOA (Continued)

### Analysis Batch: 208222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-4	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-5	MW-18	Total/NA	Water	8260B/CA_LUFT MS	
720-74030-14	MW-29	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-208222/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-208222/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-208222/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-208222/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-208222/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	

## GC/MS Semi VOA

### Prep Batch: 208168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-1	MW-10	Total/NA	Water	3510C	
720-74030-2	MW-17	Total/NA	Water	3510C	
720-74030-3	IW-5	Total/NA	Water	3510C	
720-74030-4	MW-3	Total/NA	Water	3510C	
720-74030-5	MW-18	Total/NA	Water	3510C	
720-74030-6	IW-6	Total/NA	Water	3510C	
720-74030-7	MW-21	Total/NA	Water	3510C	
720-74030-8	MW-8	Total/NA	Water	3510C	
720-74030-9	MW-28	Total/NA	Water	3510C	
720-74030-10	MW-25	Total/NA	Water	3510C	
720-74030-11	MW-4	Total/NA	Water	3510C	
720-74030-12	MW-15	Total/NA	Water	3510C	
720-74030-13	IW-4	Total/NA	Water	3510C	
720-74030-14	MW-29	Total/NA	Water	3510C	
MB 720-208168/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-208168/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-208168/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 208219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-1	MW-10	Total/NA	Water	8270C SIM	208168
720-74030-2	MW-17	Total/NA	Water	8270C SIM	208168
720-74030-4	MW-3	Total/NA	Water	8270C SIM	208168
720-74030-5	MW-18	Total/NA	Water	8270C SIM	208168
720-74030-6	IW-6	Total/NA	Water	8270C SIM	208168
720-74030-7	MW-21	Total/NA	Water	8270C SIM	208168
720-74030-8	MW-8	Total/NA	Water	8270C SIM	208168
720-74030-9	MW-28	Total/NA	Water	8270C SIM	208168
720-74030-12	MW-15	Total/NA	Water	8270C SIM	208168
720-74030-14	MW-29	Total/NA	Water	8270C SIM	208168
MB 720-208168/1-A	Method Blank	Total/NA	Water	8270C SIM	208168

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# QC Association Summary

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

TestAmerica Job ID: 720-74030-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 208219 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-208168/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	208168
LCSD 720-208168/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	208168

### Analysis Batch: 208257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-3	IW-5	Total/NA	Water	8270C SIM	208168
720-74030-10	MW-25	Total/NA	Water	8270C SIM	208168
720-74030-10	MW-25	Total/NA	Water	8270C SIM	208168
720-74030-11	MW-4	Total/NA	Water	8270C SIM	208168
720-74030-13	IW-4	Total/NA	Water	8270C SIM	208168

## GC VOA

### Analysis Batch: 350932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-1	MW-10	Total/NA	Water	RSK-175	
720-74030-2	MW-17	Total/NA	Water	RSK-175	
720-74030-3	IW-5	Total/NA	Water	RSK-175	
720-74030-4	MW-3	Total/NA	Water	RSK-175	
720-74030-5	MW-18	Total/NA	Water	RSK-175	
720-74030-6	IW-6	Total/NA	Water	RSK-175	
720-74030-7	MW-21	Total/NA	Water	RSK-175	
720-74030-8	MW-8	Total/NA	Water	RSK-175	
720-74030-9	MW-28	Total/NA	Water	RSK-175	
720-74030-10	MW-25	Total/NA	Water	RSK-175	
720-74030-11	MW-4	Total/NA	Water	RSK-175	
720-74030-12	MW-15	Total/NA	Water	RSK-175	
720-74030-13	IW-4	Total/NA	Water	RSK-175	
720-74030-14	MW-29	Total/NA	Water	RSK-175	
MB 440-350932/8	Method Blank	Total/NA	Water	RSK-175	
LCS 440-350932/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 440-350932/6	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 440-350932/5	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 440-350932/7	Lab Control Sample Dup	Total/NA	Water	RSK-175	

## GC Semi VOA

### Analysis Batch: 207987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-1	MW-10	Total/NA	Water	8015B	208007
720-74030-2	MW-17	Total/NA	Water	8015B	208007
720-74030-6	IW-6	Total/NA	Water	8015B	208007
720-74030-8	MW-8	Total/NA	Water	8015B	208007
720-74030-9	MW-28	Total/NA	Water	8015B	208007
720-74030-10	MW-25	Total/NA	Water	8015B	208007
720-74030-11	MW-4	Total/NA	Water	8015B	208007

### Analysis Batch: 207989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-12	MW-15	Total/NA	Water	8015B	208007

TestAmerica Pleasanton



# QC Association Summary

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

TestAmerica Job ID: 720-74030-1

## GC Semi VOA (Continued)

### Analysis Batch: 207989 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-13	IW-4	Total/NA	Water	8015B	208007
720-74030-14	MW-29	Total/NA	Water	8015B	208007
MB 720-208007/1-A	Method Blank	Total/NA	Water	8015B	208007
LCS 720-208007/2-A	Lab Control Sample	Total/NA	Water	8015B	208007
LCSD 720-208007/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	208007

### Analysis Batch: 207990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-5	MW-18	Total/NA	Water	8015B	208007

### Prep Batch: 208007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-1	MW-10	Total/NA	Water	3510C	
720-74030-2	MW-17	Total/NA	Water	3510C	
720-74030-3	IW-5	Total/NA	Water	3510C	
720-74030-4	MW-3	Total/NA	Water	3510C	
720-74030-5	MW-18	Total/NA	Water	3510C	
720-74030-6	IW-6	Total/NA	Water	3510C	
720-74030-7	MW-21	Total/NA	Water	3510C	
720-74030-8	MW-8	Total/NA	Water	3510C	
720-74030-9	MW-28	Total/NA	Water	3510C	
720-74030-10	MW-25	Total/NA	Water	3510C	
720-74030-11	MW-4	Total/NA	Water	3510C	
720-74030-12	MW-15	Total/NA	Water	3510C	
720-74030-13	IW-4	Total/NA	Water	3510C	
720-74030-14	MW-29	Total/NA	Water	3510C	
MB 720-208007/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-208007/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-208007/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Prep Batch: 208048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-1	MW-10	Silica Gel Cleanup	Water	3510C SGC	
720-74030-2	MW-17	Silica Gel Cleanup	Water	3510C SGC	
720-74030-3	IW-5	Silica Gel Cleanup	Water	3510C SGC	
720-74030-4	MW-3	Silica Gel Cleanup	Water	3510C SGC	
720-74030-5	MW-18	Silica Gel Cleanup	Water	3510C SGC	
720-74030-6	IW-6	Silica Gel Cleanup	Water	3510C SGC	
720-74030-7	MW-21	Silica Gel Cleanup	Water	3510C SGC	
720-74030-8	MW-8	Silica Gel Cleanup	Water	3510C SGC	
720-74030-9	MW-28	Silica Gel Cleanup	Water	3510C SGC	
720-74030-10	MW-25	Silica Gel Cleanup	Water	3510C SGC	
720-74030-11	MW-4	Silica Gel Cleanup	Water	3510C SGC	
720-74030-12	MW-15	Silica Gel Cleanup	Water	3510C SGC	
720-74030-13	IW-4	Silica Gel Cleanup	Water	3510C SGC	
720-74030-14	MW-29	Silica Gel Cleanup	Water	3510C SGC	
MB 720-208048/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-208048/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-208048/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

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# QC Association Summary

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

TestAmerica Job ID: 720-74030-1

## GC Semi VOA (Continued)

### Analysis Batch: 208061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-3	IW-5	Total/NA	Water	8015B	208007
720-74030-4	MW-3	Total/NA	Water	8015B	208007
720-74030-7	MW-21	Total/NA	Water	8015B	208007

### Analysis Batch: 208131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-1	MW-10	Silica Gel Cleanup	Water	8015B	208048
720-74030-2	MW-17	Silica Gel Cleanup	Water	8015B	208048
720-74030-4	MW-3	Silica Gel Cleanup	Water	8015B	208048
720-74030-5	MW-18	Silica Gel Cleanup	Water	8015B	208048
720-74030-7	MW-21	Silica Gel Cleanup	Water	8015B	208048
720-74030-11	MW-4	Silica Gel Cleanup	Water	8015B	208048

### Analysis Batch: 208132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-8	MW-8	Silica Gel Cleanup	Water	8015B	208048
720-74030-9	MW-28	Silica Gel Cleanup	Water	8015B	208048
720-74030-12	MW-15	Silica Gel Cleanup	Water	8015B	208048

### Analysis Batch: 208133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-10	MW-25	Silica Gel Cleanup	Water	8015B	208048
720-74030-13	IW-4	Silica Gel Cleanup	Water	8015B	208048
720-74030-14	MW-29	Silica Gel Cleanup	Water	8015B	208048

### Analysis Batch: 208134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-3	IW-5	Silica Gel Cleanup	Water	8015B	208048
720-74030-6	IW-6	Silica Gel Cleanup	Water	8015B	208048
MB 720-208048/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	208048
LCS 720-208048/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	208048
LCSD 720-208048/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	208048

## General Chemistry

### Analysis Batch: 348805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-1	MW-10	Total/NA	Water	SM 2540C	
720-74030-2	MW-17	Total/NA	Water	SM 2540C	
720-74030-3	IW-5	Total/NA	Water	SM 2540C	
720-74030-4	MW-3	Total/NA	Water	SM 2540C	
720-74030-5	MW-18	Total/NA	Water	SM 2540C	
720-74030-6	IW-6	Total/NA	Water	SM 2540C	
720-74030-7	MW-21	Total/NA	Water	SM 2540C	
720-74030-8	MW-8	Total/NA	Water	SM 2540C	
720-74030-9	MW-28	Total/NA	Water	SM 2540C	
720-74030-10	MW-25	Total/NA	Water	SM 2540C	
720-74030-11	MW-4	Total/NA	Water	SM 2540C	
720-74030-12	MW-15	Total/NA	Water	SM 2540C	
720-74030-13	IW-4	Total/NA	Water	SM 2540C	

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# QC Association Summary

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

TestAmerica Job ID: 720-74030-1

## General Chemistry (Continued)

### Analysis Batch: 348805 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74030-14	MW-29	Total/NA	Water	SM 2540C	
MB 500-348805/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-348805/2	Lab Control Sample	Total/NA	Water	SM 2540C	
720-74030-3 MS	IW-5	Total/NA	Water	SM 2540C	
720-74030-3 DU	IW-5	Total/NA	Water	SM 2540C	
720-74030-4 DU	MW-3	Total/NA	Water	SM 2540C	

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# Lab Chronicle

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-10**  
**Date Collected: 08/18/16 12:40**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208055	08/23/16 16:01	JRM	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/24/16 21:33	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 10:50	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208131	08/24/16 19:36	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		1	207987	08/22/16 19:16	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 03:34	CLB	TAL CHI

**Client Sample ID: MW-17**  
**Date Collected: 08/18/16 13:00**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208055	08/23/16 17:29	JRM	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/24/16 21:57	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 11:07	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208131	08/24/16 20:06	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		1	207987	08/22/16 19:40	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 03:37	CLB	TAL CHI

**Client Sample ID: IW-5**  
**Date Collected: 08/18/16 13:30**  
**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208055	08/23/16 17:58	JRM	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		10	208257	08/25/16 13:33	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 11:19	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		20	208134	08/24/16 20:33	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		20	208061	08/23/16 16:19	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 03:41	CLB	TAL CHI

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# Lab Chronicle

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

TestAmerica Job ID: 720-74030-1

## Client Sample ID: MW-3

Date Collected: 08/18/16 13:40

Date Received: 08/18/16 16:35

## Lab Sample ID: 720-74030-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208222	08/25/16 13:01	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/24/16 22:44	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 11:32	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208131	08/24/16 23:39	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		10	208061	08/23/16 15:49	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 03:52	CLB	TAL CHI

## Client Sample ID: MW-18

Date Collected: 08/18/16 14:40

Date Received: 08/18/16 16:35

## Lab Sample ID: 720-74030-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208222	08/25/16 14:58	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/24/16 23:08	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 11:45	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208131	08/24/16 20:35	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		1	207990	08/23/16 00:08	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 03:59	CLB	TAL CHI

## Client Sample ID: IW-6

Date Collected: 08/18/16 14:55

Date Received: 08/18/16 16:35

## Lab Sample ID: 720-74030-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/23/16 22:36	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/24/16 23:32	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 11:58	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208134	08/24/16 19:45	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		1	207987	08/22/16 22:06	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 04:03	CLB	TAL CHI

TestAmerica Pleasanton

# Lab Chronicle

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-21**

**Date Collected: 08/18/16 14:35**

**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-7**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/23/16 23:04	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/24/16 23:55	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 12:25	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208131	08/25/16 00:08	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		2	208061	08/23/16 13:19	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 04:06	CLB	TAL CHI

**Client Sample ID: MW-8**

**Date Collected: 08/18/16 14:15**

**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-8**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/23/16 23:31	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/25/16 00:19	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 12:38	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208132	08/24/16 19:36	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		1	207987	08/22/16 20:04	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 04:10	CLB	TAL CHI

**Client Sample ID: MW-28**

**Date Collected: 08/18/16 12:50**

**Date Received: 08/18/16 16:35**

**Lab Sample ID: 720-74030-9**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/23/16 23:59	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/25/16 00:43	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 13:33	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208132	08/24/16 20:06	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		1	207987	08/22/16 21:18	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 04:14	CLB	TAL CHI

TestAmerica Pleasanton

# Lab Chronicle

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: MW-25**

**Lab Sample ID: 720-74030-10**

**Date Collected: 08/18/16 12:20**

**Matrix: Water**

**Date Received: 08/18/16 16:35**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		5	208109	08/24/16 00:27	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		100	208257	08/25/16 13:57	MQL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		10	208257	08/25/16 14:44	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 13:46	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208133	08/24/16 19:45	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		1	207987	08/22/16 21:42	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 04:17	CLB	TAL CHI

**Client Sample ID: MW-4**

**Lab Sample ID: 720-74030-11**

**Date Collected: 08/18/16 13:32**

**Matrix: Water**

**Date Received: 08/18/16 16:35**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/24/16 00:54	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208257	08/25/16 13:09	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 13:58	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208131	08/25/16 00:37	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		2	207987	08/23/16 00:07	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 04:21	CLB	TAL CHI

**Client Sample ID: MW-15**

**Lab Sample ID: 720-74030-12**

**Date Collected: 08/18/16 12:15**

**Matrix: Water**

**Date Received: 08/18/16 16:35**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/24/16 01:22	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/25/16 01:54	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 14:11	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208132	08/24/16 20:35	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		1	207989	08/22/16 21:42	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 04:25	CLB	TAL CHI

TestAmerica Pleasanton

# Lab Chronicle

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

TestAmerica Job ID: 720-74030-1

**Client Sample ID: IW-4**

**Lab Sample ID: 720-74030-13**

**Date Collected: 08/18/16 14:05**

**Matrix: Water**

**Date Received: 08/18/16 16:35**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/24/16 01:49	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		2	208257	08/25/16 14:20	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 14:24	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		5	208133	08/24/16 21:46	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		5	207989	08/22/16 22:30	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 04:28	CLB	TAL CHI

**Client Sample ID: MW-29**

**Lab Sample ID: 720-74030-14**

**Date Collected: 08/18/16 11:35**

**Matrix: Water**

**Date Received: 08/18/16 16:35**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208222	08/25/16 12:32	LPL	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/24/16 02:17	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/25/16 02:41	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	350932	08/22/16 14:37	ART	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208133	08/24/16 20:09	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 10:53	NDU	TAL PLS
Total/NA	Analysis	8015B		1	207989	08/22/16 20:53	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348805	08/23/16 04:32	CLB	TAL CHI

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200  
 TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022  
 TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



# Certification Summary

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

TestAmerica Job ID: 720-74030-1

## Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18

## Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2903	04-30-18
Georgia	State Program	4	N/A	04-30-17
Georgia	State Program	4	939	04-30-17
Hawaii	State Program	9	N/A	04-30-17
Illinois	NELAP	5	100201	04-30-17
Indiana	State Program	5	C-IL-02	04-30-17
Iowa	State Program	7	82	05-01-18
Kansas	NELAP	7	E-10161	10-31-16 *
Kentucky (UST)	State Program	4	66	04-30-17
Kentucky (WW)	State Program	4	KY90023	12-31-16 *
Mississippi	State Program	4	N/A	04-30-17
New York	NELAP	2	12019	04-01-17
North Carolina (WW/SW)	State Program	4	291	12-31-16 *
North Dakota	State Program	8	R-194	04-30-17
Oklahoma	State Program	6	8908	08-31-16 *
South Carolina	State Program	4	77001	04-30-16 *
USDA	Federal		P330-15-00038	02-11-18
Wisconsin	State Program	5	999580010	08-31-16 *
Wyoming	State Program	8	8TMS-Q	04-30-17

## Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-17
Arizona	State Program	9	AZ0671	10-13-16
California	LA Cty Sanitation Districts	9	10256	01-31-17 *
California	State Program	9	CA ELAP 2706	06-30-18
Guam	State Program	9	Cert. No. 12.002r	01-23-17
Hawaii	State Program	9	N/A	01-29-17
Kansas	NELAP Secondary AB	7	E-10420	07-31-16 *
Nevada	State Program	9	CA015312016-2	07-31-17 *
New Mexico	State Program	6	N/A	01-29-17
Northern Mariana Islands	State Program	9	MP0002	01-29-17
Oregon	NELAP	10	4028	01-29-17
USDA	Federal		P330-09-00080	07-08-18
Washington	State Program	10	C900	09-03-16

\* Certification renewal pending - certification considered valid.

TestAmerica Pleasanton

# Method Summary

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

TestAmerica Job ID: 720-74030-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL PLS
8270C SIM	PAHs by GCMS (SIM)	SW846	TAL PLS
RSK-175	Dissolved Gases (GC)	RSK	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI

#### Protocol References:

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab  
SM = "Standard Methods For The Examination Of Water And Wastewater",  
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200  
TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022  
TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

# Sample Summary

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

TestAmerica Job ID: 720-74030-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-74030-1	MW-10	Water	08/18/16 12:40	08/18/16 16:35
720-74030-2	MW-17	Water	08/18/16 13:00	08/18/16 16:35
720-74030-3	IW-5	Water	08/18/16 13:30	08/18/16 16:35
720-74030-4	MW-3	Water	08/18/16 13:40	08/18/16 16:35
720-74030-5	MW-18	Water	08/18/16 14:40	08/18/16 16:35
720-74030-6	IW-6	Water	08/18/16 14:55	08/18/16 16:35
720-74030-7	MW-21	Water	08/18/16 14:35	08/18/16 16:35
720-74030-8	MW-8	Water	08/18/16 14:15	08/18/16 16:35
720-74030-9	MW-28	Water	08/18/16 12:50	08/18/16 16:35
720-74030-10	MW-25	Water	08/18/16 12:20	08/18/16 16:35
720-74030-11	MW-4	Water	08/18/16 13:32	08/18/16 16:35
720-74030-12	MW-15	Water	08/18/16 12:15	08/18/16 16:35
720-74030-13	IW-4	Water	08/18/16 14:05	08/18/16 16:35
720-74030-14	MW-29	Water	08/18/16 11:35	08/18/16 16:35

# BLAINE

TECH SERVICES, INC.

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

CHAIN OF CUSTODY  
 BTS # 160818-241

CLIENT  
 ARCADIS U.S., Inc.

SITE  
 UPS

8400 Pardee Drive

Oakland, CA

SAMPLE I.D.	DATE	TIME	MATRIX FOS H <sub>2</sub> S	CONTAINERS TOTAL	CONDUCT ANALYSIS TO DETECT				
					TPH-Gro, BTEX, MTBE, Naphthalene (8260)	DRO with and without SGC (8015M)	Disslved Methane (RSK-175)	TDS (SM2540)	PAH's, Naththalene (8270)

C = COMPOSITE ALL CONTAINERS

SAMPLE I.D.	DATE	TIME	MATRIX FOS H <sub>2</sub> S	CONTAINERS TOTAL	TPH-Gro, BTEX, MTBE, Naphthalene (8260)	DRO with and without SGC (8015M)	Disslved Methane (RSK-175)	TDS (SM2540)	PAH's, Naththalene (8270)	LAB	TA - SF	DHS #
Mw-10	8/18/16	1240	W	11	Mix	X	X	X	X			
Mw-17		1300	W	11	Mix	X	X	X	X			
Mw-5		1330	W	11	Mix	X	X	X	X			
Mw-3		1310	W	11	Mix	X	X	X	X			
Mw-18		1440	W	11	Mix	X	X	X	X			
Mw-6		1455	W	11	Mix	X	X	X	X			
Mw-21		1435	W	11	Mix	X	X	X	X			
Mw-8		1415	W	11	Mix	X	X	X	X			
Mw-28		1250	W	11	Mix	X	X	X	X			
Mw-25		1220	W	11	Mix	X	X	X	X			

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED	NO LATER THAN
	8/18/16	1500	Cohen	Standard TAT	

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>[Signature]</i>	8/18/16	1535	<i>[Signature]</i>	8/18/16	1535
<i>[Signature]</i>	8/18/16	1635	<i>[Signature]</i>	8/18/16	1635

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	LAB
720-74030 Chain of Custody				60, 5-9, 5.5, 4.1, 5.0°C

LAB TA - SF DHS #  
 ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND  
 EPA  
 LIA  
 OTHER  
 RWQCB REGION \_\_\_\_\_

SPECIAL INSTRUCTIONS  
 Invoice and Report to : Arcadis U.S., Inc.  
 Attn: Hugh Devery [hugh.devery@arcadis-us.com](mailto:hugh.devery@arcadis-us.com)  
 770-428-9009

**Low Detection levels requested**

ADDL INFORMATION	STATUS	CONDITION	LAB SAMPLE #
			1
			2
			3
			4
			5
			6
			7
			8
			9
			10

# BLAINE

TECH SERVICES, INC

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

CHAIN OF CUSTODY  
 BTS # 160818-CK1

CLIENT  
 ARCADIS U.S., Inc.

SITE  
 UPS

8400 Pardee Drive

Oakland, CA

CONDUCT ANALYSIS TO DETECT

<input checked="" type="checkbox"/>	TPH-Gro, BTEX, MTBE, Naphthalene (8260)
<input checked="" type="checkbox"/>	DRO with and without SGC (8015M)
<input checked="" type="checkbox"/>	Disslved Methane (RSK-175)
<input checked="" type="checkbox"/>	TDS (SM2540)
<input checked="" type="checkbox"/>	PAH's, Naththalene (8270)

LAB TA - SF  
 ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND  
 EPA  
 LIA  
 OTHER  
 RWQCB REGION  
 170497  
 DHS #

SPECIAL INSTRUCTIONS  
**720-74030**

Invoice and Report to : Arcadis U.S., Inc.

Attn: Hugh Devery [hugh.devery@arcadis-us.com](mailto:hugh.devery@arcadis-us.com)

770-428-9009

**Low Detection levels requested**

SAMPLE ID.	DATE	TIME	MATRIX Fl So H <sub>2</sub> S	CONTAINERS TOTAL	RESULTS NEEDED		STATUS	CONDITION	LAB SAMPLE #
					NO LATER THAN	Standard TAT			
MW-4	8/18/16	1332	W	11	Mix				11
MW-15	8/18/16	1215	W	11	Mix				12
IW-4	8/18/16	1405	W	11	Mix				13
MW-29	8/19/16	1135	W	11	Mix				14

SAMPLING DATE TIME SAMPLING PERFORMED BY  
 8/19/16 1500 Colin Rowland

RELEASED BY [Signature] DATE 8/19/16 TIME 1635 RECEIVED BY [Signature] DATE 8/18/16 TIME 1635  
 RELEASED BY [Signature] DATE 8/19/16 TIME 1535 RECEIVED BY [Signature] DATE 8/18/16 TIME 1535

SHIPPED VIA DATE SENT TIME SENT COOLER #

<b>Client Information (Sub Contract Lab)</b>		Sampler: Sharma, Dimple		Carrier Tracking No(s): 720-30054.1	
Client Contact: TestAmerica Laboratories, Inc		Lab PM: Sharma, Dimple		COC No: 720-30054.1	
Shipping/Receiving		Phone: dimple.sharma@testamericainc.com		Page: Page 1 of 2	
Company: TestAmerica Laboratories, Inc		Due Date Requested: 8/24/2016		Job #: 720-74030-1	
Address: 17461 Derian Ave, Suite 100, Irvine		TAT Requested (days):		Preservation Codes:	
City: Irvine		PO #:		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
State, Zip: CA, 92614-5817		WO #:		Other:	
Phone: 949-261-1022(Tel) 949-260-3297(Fax)		Project #:		Total Number of containers	
Email:		SSOW#:		Special Instructions/Note:	
Project Name: UFS-Oakland		Field Filtered Sample (Yes or No)		Analysis Requested	
Site:		Perform MS/MSD (Yes or No)		Return To Client <input type="checkbox"/> Archive For _____ Months	
<b>Sample Identification - Client ID (Lab ID)</b>		Field Filled Sample (Yes or No)		Special Instructions/QC Requirements:	
MW-10 (720-74030-1)		Sample Date		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
MW-17 (720-74030-2)		Sample Time		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/>	
MW-5 (720-74030-3)		Sample Matrix		Special Instructions/QC Requirements:	
MW-3 (720-74030-4)		Sample Type (C=Comp, G=grab)		Method of Shipment:	
MW-18 (720-74030-5)		Sample Preservation Code		Received by: _____ Company: _____	
MW-6 (720-74030-6)		Sample Time		Received by: _____ Company: _____	
MW-21 (720-74030-7)		Sample Matrix		Received by: _____ Company: _____	
MW-8 (720-74030-8)		Sample Type (C=Comp, G=grab)		Cooler Temperature(s) °C and Other Remarks: 3-8/3-6 #178	
MW-28 (720-74030-9)		Sample Preservation Code		Custody Seal No.: _____	
MW-25 (720-74030-10)		Sample Time		Date: 8/25/2016	
MW-4 (720-74030-11)		Sample Matrix		Date: 8/19/16 1430	
<b>Possible Hazard Identification</b>		Sample Type (C=Comp, G=grab)		Date: 8/19/16 1430	
Unconfirmed		Sample Preservation Code		Date: 8/19/16 1430	
Deliverable Requested: I, II, III, IV, Other (specify)		Sample Time		Date: 8/19/16 1430	
Empty Kit Relinquished by: _____		Sample Matrix		Date: 8/19/16 1430	
Relinquished by: _____		Sample Type (C=Comp, G=grab)		Date: 8/19/16 1430	
Relinquished by: _____		Sample Preservation Code		Date: 8/19/16 1430	
Relinquished by: _____		Sample Time		Date: 8/19/16 1430	



**Chain of Custody Record**

<b>Client Information (Sub Contract Lab)</b>		Lab PM: Sharma, Dimple		Carrier Tracking No(s):	
Client Contact: Shipping/Receiving		E-Mail: dimple.sharma@testamericainc.com		COC No: 720-30054.2	
Company: TestAmerica Laboratories, Inc		Address: 17461 Derian Ave, Suite 100, Irvine, CA, 92614-5817		Page: Page 2 of 2	
Due Date Requested: 8/24/2016		TAT Requested (days):		Job #: 720-74030-1	
FO #: 949-261-1022(Tel) 949-260-3297(Fax)		Project #: 72000550		Preservation Codes:	
WO #: 72000550		SSOW#: 72000550		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (Specify)	
Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> RSK 175/ Methane		Analysis Requested		Special Instructions/Note:	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Seawater, On-waste, Soil)	Total Number of Containers
MW-15 (720-74030-12)	8/18/16	12:15 Pacific	Water	Water	3
IW-4 (720-74030-13)	8/18/16	14:05 Pacific	Water	Water	3
MW-29 (720-74030-14)	8/18/16	11:35 Pacific	Water	Water	3
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Special Instructions/QC Requirements:					
Empty Kit Relinquished by: <i>J Mac</i> Relinquished by: <i>J Mac</i> Relinquished by: _____ Relinquished by: _____		Date: 8/19/16 14:30 Date/Time: 8/19/16 14:30 Date/Time: _____ Date/Time: _____		Method of Shipment: Received by: _____ Company Received by: _____ Company Received by: _____ Company Cooler Temperature(s) (C and Other) Remarks: 2-8/3-6 #78	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Primary Deliverable Rank: 2		Time: _____	



**TestAmerica Pleasanton**

1220 Quarry Lane  
 Pleasanton, CA 94566  
 Phone (925) 484-1919 Fax (925) 600-3002

**Chain of Custody Record**



**TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information (Sub Contract Lab)</b>		Sampler:		Lab PM: Sharma, Dimple		Carrier Tracking No(s):		COC No: 720-30053.1			
Client Contact: Shipping/Receiving		Phone:		E-Mail: dimple.sharma@testamericainc.com				Page: Page 1 of 2			
Company: TestAmerica Laboratories, Inc.						<b>Analysis Requested</b>		Job #: 720-74030-1			
Address: 2417 Bond Street,		Due Date Requested: 8/24/2016		Field Filtered Sample (Yes or No) Perform MSD (Yes or No) 2540C				Total Number of Containers		<b>Preservation Codes:</b> A - HCL                      M - Hexane B - NaOH                    N - None C - Zn Acetate            O - AsNaO2 D - Nitric Acid            P - Na2O4S E - NaHSO4                Q - Na2SO3 F - MeOH                    R - Na2S2O3 G - Amchlor                S - H2SO4 H - Ascorbic Acid        T - TSP Dodecahydrate I - Ice                         U - Acetone J - DI Water                V - MCAA K - EDTA                    W - pH 4-5 L - EDA                      Z - other (specify)	
City: University Park		TAT Requested (days):									
State, Zip: IL, 60484		PO #:									
Phone: 708-534-5200(Tel) 708-534-5211(Fax)		WO #:									
Email:		Project #: 72000550									
Project Name: UPS-Oakland		SSOW#:									
Site:											
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)</b>		<b>Special Instructions/Note:</b>	
						<b>Preservation Code:</b>					
MW-10 (720-74030-1)		8/18/16		12:40 Pacific				Water			
MW-17 (720-74030-2)		8/18/16		13:00 Pacific				Water			
IW-5 (720-74030-3)		8/18/16		13:30 Pacific				Water			
MW-3 (720-74030-4)		8/18/16		13:40 Pacific				Water			
MW-18 (720-74030-5)		8/18/16		14:40 Pacific				Water			
IW-6 (720-74030-6)		8/18/16		14:55 Pacific				Water			
MW-21 (720-74030-7)		8/18/16		14:35 Pacific				Water			
MW-8 (720-74030-8)		8/18/16		14:15 Pacific				Water			
MW-28 (720-74030-9)		8/18/16		12:50 Pacific				Water			
MW-25 (720-74030-10)		8/18/16		12:20 Pacific				Water			
MW-4 (720-74030-11)		8/18/16		13:32 Pacific				Water			
<b>Possible Hazard Identification</b>						<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>					
Unconfirmed						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)				Primary Deliverable Rank: 2		Special Instructions/QC Requirements:					
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:					
Relinquished by: <i>[Signature]</i>		Date/Time: 8/19/16 1430		Company: <i>[Signature]</i>		Received by: <i>[Signature]</i>		Date/Time: 8/22/16 0915		Company: <i>[Signature]</i>	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 0.2							







# Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-74030-1

**Login Number: 74030**

**List Source: TestAmerica Pleasanton**

**List Number: 1**

**Creator: Bullock, Tracy**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-74030-1

**Login Number: 74030**  
**List Number: 3**  
**Creator: Scott, Sherri L**

**List Source: TestAmerica Chicago**  
**List Creation: 08/22/16 09:12 AM**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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	0.2
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 containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-74030-1

**Login Number: 74030**

**List Number: 2**

**Creator: Garcia, Veronica G**

**List Source: TestAmerica Irvine**

**List Creation: 08/20/16 12:51 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

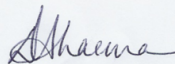
## ANALYTICAL REPORT

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

TestAmerica Job ID: 720-74045-1  
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:  
9/2/2016 3:49:16 PM

Dimple Sharma, Senior Project Manager  
(925)484-1919  
[dimple.sharma@testamericainc.com](mailto:dimple.sharma@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://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.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

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

TestAmerica Job ID: 720-74045-1

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

### General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
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: 720-74045-1

## Job ID: 720-74045-1

### Laboratory: TestAmerica Pleasanton

#### Narrative

#### Job Narrative 720-74045-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/19/2016 4:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 4.0° C, 4.5° C, 4.6° C and 4.7° C.

#### GC/MS VOA

Method 8260B: The following samples were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-11 (720-74045-1), MW-16 (720-74045-2), MW-9 (720-74045-5), MW-26 (720-74045-8) and IW-3 (720-74045-9).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC/MS Semi VOA

Method 8270C SIM: Surrogate recovery for the following samples was outside control limits: MW-11 (720-74045-1), MW-19 (720-74045-6), MW-27 (720-74045-7), MW-26 (720-74045-8), MW-13 (720-74045-10) and MW-23 (720-74045-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC VOA

Method RSK-175: The following samples were improperly preserved in the field: MW-11 (720-74045-1), MW-16 (720-74045-2), MW-9 (720-74045-5), MW-26 (720-74045-8), IW-3 (720-74045-9), MW-13 (720-74045-10) and MW-23 (720-74045-11). Although the samples were preserved with hydrochloric acid, the pH on the test strip read between 3 and 7, and the samples exhibited extreme effervescence. As there is no reference to an unpreserved holding time and the samples were analyzed within 14 days, no holding time violation is noted. RSK-175 batch 280-340541 Details are as follow:

720-74045-01	pH 6-7
720-74045-02	pH 2-3
720-74045-05	pH 6-7
720-74045-08	pH 4-5
720-74045-09	pH 6-7
720-74045-10	pH 2-3
720-74045-11	pH 4-5

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

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

TestAmerica Job ID: 720-74045-1

## Client Sample ID: MW-11

## Lab Sample ID: 720-74045-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO)	63		50		ug/L	1		8260B/CA_LUFT	Total/NA
-C5-C12								MS	
Methane	11000		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	870		52		ug/L	1		8015B	Total/NA
Total Dissolved Solids	4000		25		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-16

## Lab Sample ID: 720-74045-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	9700		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	430		53		ug/L	1		8015B	Total/NA
Total Dissolved Solids	5300		33		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-14

## Lab Sample ID: 720-74045-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	8700		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	58		54		ug/L	1		8015B	Total/NA
Total Dissolved Solids	5900		33		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-20

## Lab Sample ID: 720-74045-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	5900		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	4200		49		ug/L	1		8015B	Total/NA
Diesel Range Organics [C10-C28]	130		49		ug/L	1		8015B	Silica Gel
Total Dissolved Solids	2400		10		mg/L	1		SM 2540C	Cleanup Total/NA

## Client Sample ID: MW-9

## Lab Sample ID: 720-74045-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	8000		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	160		54		ug/L	1		8015B	Total/NA
Total Dissolved Solids	14000		100		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-19

## Lab Sample ID: 720-74045-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.28		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.28		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.33		0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.28		0.10		ug/L	1		8270C SIM	Total/NA
Methane	6400		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	980		52		ug/L	1		8015B	Total/NA
Diesel Range Organics [C10-C28]	180		52		ug/L	1		8015B	Silica Gel
Total Dissolved Solids	5200		33		mg/L	1		SM 2540C	Cleanup Total/NA

## Client Sample ID: MW-27

## Lab Sample ID: 720-74045-7

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

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

TestAmerica Job ID: 720-74045-1

## Client Sample ID: MW-27 (Continued)

## Lab Sample ID: 720-74045-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	6900		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	590		51		ug/L	1		8015B	Total/NA
Total Dissolved Solids	2000		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-26

## Lab Sample ID: 720-74045-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.11		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.31		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.18		0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.26		0.10		ug/L	1		8270C SIM	Total/NA
Methane	11000		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	220		51		ug/L	1		8015B	Total/NA
Total Dissolved Solids	1600		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: IW-3

## Lab Sample ID: 720-74045-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.20		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	1.2		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.67		0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.38		0.10		ug/L	1		8270C SIM	Total/NA
Methane	8600		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	480		53		ug/L	1		8015B	Total/NA
Total Dissolved Solids	1900		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-13

## Lab Sample ID: 720-74045-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.13		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.25		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.30		0.10		ug/L	1		8270C SIM	Total/NA
Methane	12000		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	850		51		ug/L	1		8015B	Total/NA
Total Dissolved Solids	1400		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-23

## Lab Sample ID: 720-74045-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	2.3		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	78		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	0.94		0.097		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.75		0.097		ug/L	1		8270C SIM	Total/NA
Fluorene	1.3		0.097		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.93		0.097		ug/L	1		8270C SIM	Total/NA
Methane	9900		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	3400		47		ug/L	1		8015B	Total/NA
Diesel Range Organics [C10-C28]	1400		47		ug/L	1		8015B	Silica Gel Cleanup

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-23 (Continued)**

**Lab Sample ID: 720-74045-11**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	1700		10		mg/L	1		SM 2540C	Total/NA

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This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-11**

**Date Collected: 08/19/16 09:45**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-1**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/24/16 02:45	1
Benzene	ND		0.50		ug/L			08/24/16 02:45	1
Ethylbenzene	ND		0.50		ug/L			08/24/16 02:45	1
Naphthalene	ND		1.0		ug/L			08/24/16 02:45	1
Toluene	ND		0.50		ug/L			08/24/16 02:45	1
Xylenes, Total	ND		1.0		ug/L			08/24/16 02:45	1
<b>Gasoline Range Organics (GRO)</b>	<b>63</b>		50		ug/L			08/24/16 02:45	1
<b>-C5-C12</b>									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		67 - 130		08/24/16 02:45	1
1,2-Dichloroethane-d4 (Surr)	110		72 - 130		08/24/16 02:45	1
Toluene-d8 (Surr)	104		70 - 130		08/24/16 02:45	1

**Method: 8270C SIM - PAHs by GCMS (SIM)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Acenaphthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Acenaphthylene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Fluorene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Phenanthrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Anthracene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Benzo[a]anthracene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Chrysene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Benzo[a]pyrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Benzo[b]fluoranthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Benzo[k]fluoranthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Benzo[g,h,i]perylene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Indeno[1,2,3-cd]pyrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Fluoranthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Pyrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1
Dibenz(a,h)anthracene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	39		29 - 120	08/24/16 11:48	08/25/16 03:05	1
Terphenyl-d14	37	X	45 - 120	08/24/16 11:48	08/25/16 03:05	1

**Method: RSK-175 - Dissolved Gases (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane</b>	<b>11000</b>		5.0		ug/L			09/01/16 18:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>870</b>		52		ug/L		08/25/16 10:34	08/26/16 12:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	79		23 - 156	08/25/16 10:34	08/26/16 12:33	1

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		52		ug/L		08/25/16 17:48	08/26/16 16:15	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-11**  
**Date Collected: 08/19/16 09:45**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-1**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.0002		0 - 5	08/25/16 17:48	08/26/16 16:15	1
p-Terphenyl	71		31 - 150	08/25/16 17:48	08/26/16 16:15	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	4000		25		mg/L			08/24/16 03:09	1

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- 2
- 3
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- 14
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# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-16**  
**Date Collected: 08/19/16 10:05**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-2**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/24/16 03:12	1
Benzene	ND		0.50		ug/L			08/24/16 03:12	1
Ethylbenzene	ND		0.50		ug/L			08/24/16 03:12	1
Naphthalene	ND		1.0		ug/L			08/24/16 03:12	1
Toluene	ND		0.50		ug/L			08/24/16 03:12	1
Xylenes, Total	ND		1.0		ug/L			08/24/16 03:12	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/24/16 03:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		67 - 130		08/24/16 03:12	1
1,2-Dichloroethane-d4 (Surr)	106		72 - 130		08/24/16 03:12	1
Toluene-d8 (Surr)	102		70 - 130		08/24/16 03:12	1

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Acenaphthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Acenaphthylene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Fluorene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Phenanthrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Anthracene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Benzo[a]anthracene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Chrysene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Benzo[a]pyrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Benzo[b]fluoranthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Benzo[k]fluoranthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Benzo[g,h,i]perylene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Indeno[1,2,3-cd]pyrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Fluoranthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Pyrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1
Dibenz(a,h)anthracene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	55		29 - 120	08/24/16 11:48	08/25/16 03:29	1
Terphenyl-d14	49		45 - 120	08/24/16 11:48	08/25/16 03:29	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	9700		5.0		ug/L			09/01/16 18:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	430		53		ug/L		08/25/16 10:34	08/25/16 23:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	81		23 - 156	08/25/16 10:34	08/25/16 23:37	1

## Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		53		ug/L		08/25/16 17:48	08/26/16 16:40	1

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# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-16**  
**Date Collected: 08/19/16 10:05**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-2**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.05		0 - 5	08/25/16 17:48	08/26/16 16:40	1
p-Terphenyl	74		31 - 150	08/25/16 17:48	08/26/16 16:40	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5300		33		mg/L			08/24/16 03:12	1

# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-14**  
**Date Collected: 08/19/16 10:25**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-3**  
**Matrix: Water**

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/24/16 03:40	1
Benzene	ND		0.50		ug/L			08/24/16 03:40	1
Ethylbenzene	ND		0.50		ug/L			08/24/16 03:40	1
Naphthalene	ND		1.0		ug/L			08/24/16 03:40	1
Toluene	ND		0.50		ug/L			08/24/16 03:40	1
Xylenes, Total	ND		1.0		ug/L			08/24/16 03:40	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/24/16 03:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		67 - 130		08/24/16 03:40	1
1,2-Dichloroethane-d4 (Surr)	109		72 - 130		08/24/16 03:40	1
Toluene-d8 (Surr)	102		70 - 130		08/24/16 03:40	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Acenaphthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Acenaphthylene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Fluorene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Phenanthrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Anthracene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Benzo[a]anthracene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Chrysene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Benzo[a]pyrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Benzo[b]fluoranthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Benzo[k]fluoranthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Benzo[g,h,i]perylene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Indeno[1,2,3-cd]pyrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Fluoranthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Pyrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1
Dibenz(a,h)anthracene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 03:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	43		29 - 120	08/24/16 11:48	08/25/16 03:52	1
Terphenyl-d14	61		45 - 120	08/24/16 11:48	08/25/16 03:52	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	8700		5.0		ug/L			09/01/16 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]	58		54		ug/L		08/25/16 10:34	08/25/16 23:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	95		23 - 156	08/25/16 10:34	08/25/16 23:12	1

### Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		54		ug/L		08/25/16 17:48	08/26/16 17:04	1

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# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-14**  
**Date Collected: 08/19/16 10:25**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-3**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.004		0 - 5	08/25/16 17:48	08/26/16 17:04	1
p-Terphenyl	84		31 - 150	08/25/16 17:48	08/26/16 17:04	1

<b>General Chemistry</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5900		33		mg/L			08/24/16 03:15	1

- 1
- 2
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# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-20**  
**Date Collected: 08/19/16 10:40**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-4**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/24/16 04:08	1
Benzene	ND		0.50		ug/L			08/24/16 04:08	1
Ethylbenzene	ND		0.50		ug/L			08/24/16 04:08	1
Naphthalene	ND		1.0		ug/L			08/24/16 04:08	1
Toluene	ND		0.50		ug/L			08/24/16 04:08	1
Xylenes, Total	ND		1.0		ug/L			08/24/16 04:08	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/24/16 04:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		67 - 130		08/24/16 04:08	1
1,2-Dichloroethane-d4 (Surr)	109		72 - 130		08/24/16 04:08	1
Toluene-d8 (Surr)	101		70 - 130		08/24/16 04:08	1

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Acenaphthene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Acenaphthylene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Fluorene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Phenanthrene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Anthracene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Benzo[a]anthracene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Chrysene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Benzo[a]pyrene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Benzo[b]fluoranthene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Benzo[k]fluoranthene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Benzo[g,h,i]perylene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Indeno[1,2,3-cd]pyrene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Fluoranthene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Pyrene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1
Dibenz(a,h)anthracene	ND		0.098		ug/L		08/24/16 11:48	08/25/16 04:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	61		29 - 120	08/24/16 11:48	08/25/16 04:16	1
Terphenyl-d14	46		45 - 120	08/24/16 11:48	08/25/16 04:16	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	5900		5.0		ug/L			09/01/16 18:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4200		49		ug/L		08/25/16 10:34	08/26/16 00:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	85		23 - 156	08/25/16 10:34	08/26/16 00:25	1

## Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	130		49		ug/L		08/25/16 17:48	08/26/16 17:28	1

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# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-20**  
**Date Collected: 08/19/16 10:40**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-4**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.3		0 - 5	08/25/16 17:48	08/26/16 17:28	1
p-Terphenyl	88		31 - 150	08/25/16 17:48	08/26/16 17:28	1

General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids	2400		10		mg/L			08/24/16 03:19	1	

- 1
- 2
- 3
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- 14
- 15

# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-9**  
**Date Collected: 08/19/16 11:00**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-5**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/24/16 04:35	1
Benzene	ND		0.50		ug/L			08/24/16 04:35	1
Ethylbenzene	ND		0.50		ug/L			08/24/16 04:35	1
Naphthalene	ND		1.0		ug/L			08/24/16 04:35	1
Toluene	ND		0.50		ug/L			08/24/16 04:35	1
Xylenes, Total	ND		1.0		ug/L			08/24/16 04:35	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/24/16 04:35	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	101		67 - 130					08/24/16 04:35	1
1,2-Dichloroethane-d4 (Surr)	81		72 - 130					08/24/16 04:35	1
Toluene-d8 (Surr)	102		70 - 130					08/24/16 04:35	1

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Acenaphthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Acenaphthylene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Fluorene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Phenanthrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Anthracene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Benzo[a]anthracene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Chrysene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Benzo[a]pyrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Benzo[b]fluoranthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Benzo[k]fluoranthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Benzo[g,h,i]perylene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Indeno[1,2,3-cd]pyrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Fluoranthene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Pyrene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
Dibenz(a,h)anthracene	ND		0.11		ug/L		08/24/16 11:48	08/25/16 04:40	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	47		29 - 120				08/24/16 11:48	08/25/16 04:40	1
Terphenyl-d14	50		45 - 120				08/24/16 11:48	08/25/16 04:40	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	8000		5.0		ug/L			09/01/16 18:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	160		54		ug/L		08/25/16 10:34	08/25/16 22:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
p-Terphenyl	92		23 - 156				08/25/16 10:34	08/25/16 22:48	1

## Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		54		ug/L		08/25/16 17:48	08/26/16 17:52	1

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# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-9**  
**Date Collected: 08/19/16 11:00**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-5**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.0002		0 - 5	08/25/16 17:48	08/26/16 17:52	1
p-Terphenyl	90		31 - 150	08/25/16 17:48	08/26/16 17:52	1

<b>General Chemistry</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	14000		100		mg/L			08/24/16 03:22	1

- 1
- 2
- 3
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- 5
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- 11
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- 13
- 14
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# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-19**  
**Date Collected: 08/19/16 11:20**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-6**  
**Matrix: Water**

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/24/16 05:03	1
Benzene	ND		0.50		ug/L			08/24/16 05:03	1
Ethylbenzene	ND		0.50		ug/L			08/24/16 05:03	1
Naphthalene	ND		1.0		ug/L			08/24/16 05:03	1
Toluene	ND		0.50		ug/L			08/24/16 05:03	1
Xylenes, Total	ND		1.0		ug/L			08/24/16 05:03	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/24/16 05:03	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	102		67 - 130					08/24/16 05:03	1
1,2-Dichloroethane-d4 (Surr)	107		72 - 130					08/24/16 05:03	1
Toluene-d8 (Surr)	102		70 - 130					08/24/16 05:03	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>0.28</b>		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
<b>Acenaphthene</b>	<b>0.28</b>		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
<b>Fluorene</b>	<b>0.33</b>		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
<b>Phenanthrene</b>	<b>0.28</b>		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
Pyrene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/25/16 05:03	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	53		29 - 120				08/24/16 11:48	08/25/16 05:03	1
Terphenyl-d14	36	X	45 - 120				08/24/16 11:48	08/25/16 05:03	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane</b>	<b>6400</b>		5.0		ug/L			09/01/16 19:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>980</b>		52		ug/L		08/25/16 10:34	08/26/16 01:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
p-Terphenyl	74		23 - 156				08/25/16 10:34	08/26/16 01:37	1

### Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>180</b>		52		ug/L		08/25/16 17:48	08/26/16 18:17	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-19**  
**Date Collected: 08/19/16 11:20**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-6**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.2		0 - 5	08/25/16 17:48	08/26/16 18:17	1
p-Terphenyl	72		31 - 150	08/25/16 17:48	08/26/16 18:17	1

<b>General Chemistry</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5200		33		mg/L			08/24/16 03:25	1

- 1
- 2
- 3
- 4
- 5
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- 8
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- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-27**

**Date Collected: 08/19/16 11:45**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-7**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/27/16 01:53	1
Benzene	ND		0.50		ug/L			08/27/16 01:53	1
Ethylbenzene	ND		0.50		ug/L			08/27/16 01:53	1
Naphthalene	ND		1.0		ug/L			08/27/16 01:53	1
Toluene	ND		0.50		ug/L			08/27/16 01:53	1
Xylenes, Total	ND		1.0		ug/L			08/27/16 01:53	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/27/16 01:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		67 - 130		08/27/16 01:53	1
1,2-Dichloroethane-d4 (Surr)	103		72 - 130		08/27/16 01:53	1
Toluene-d8 (Surr)	102		70 - 130		08/27/16 01:53	1

**Method: 8270C SIM - PAHs by GCMS (SIM)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Acenaphthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Acenaphthylene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Fluorene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Phenanthrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Benzo[a]anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Chrysene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Benzo[a]pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	73		29 - 120	08/25/16 10:23	08/25/16 19:30	1
Terphenyl-d14	44	X	45 - 120	08/25/16 10:23	08/25/16 19:30	1

**Method: RSK-175 - Dissolved Gases (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	6900		5.0		ug/L			09/01/16 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]	590		51		ug/L		08/25/16 10:34	08/26/16 00:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	82		23 - 156	08/25/16 10:34	08/26/16 00:01	1

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		51		ug/L		08/25/16 17:48	08/26/16 18:41	1

TestAmerica Pleasanton



# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-27**  
**Date Collected: 08/19/16 11:45**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-7**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.007		0 - 5	08/25/16 17:48	08/26/16 18:41	1
p-Terphenyl	74		31 - 150	08/25/16 17:48	08/26/16 18:41	1

<b>General Chemistry</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2000		10		mg/L			08/24/16 03:29	1

# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-26**

**Date Collected: 08/19/16 12:05**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-8**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/27/16 02:22	1
Benzene	ND		0.50		ug/L			08/27/16 02:22	1
Ethylbenzene	ND		0.50		ug/L			08/27/16 02:22	1
Naphthalene	ND		1.0		ug/L			08/27/16 02:22	1
Toluene	ND		0.50		ug/L			08/27/16 02:22	1
Xylenes, Total	ND		1.0		ug/L			08/27/16 02:22	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/27/16 02:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		67 - 130		08/27/16 02:22	1
1,2-Dichloroethane-d4 (Surr)	102		72 - 130		08/27/16 02:22	1
Toluene-d8 (Surr)	102		70 - 130		08/27/16 02:22	1

**Method: 8270C SIM - PAHs by GCMS (SIM)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.11		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Acenaphthene	0.31		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Acenaphthylene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Fluorene	0.18		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Phenanthrene	0.26		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Benzo[a]anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Chrysene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Benzo[a]pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		29 - 120	08/25/16 10:23	08/25/16 19:54	1
Terphenyl-d14	41	X	45 - 120	08/25/16 10:23	08/25/16 19:54	1

**Method: RSK-175 - Dissolved Gases (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	11000		5.0		ug/L			09/01/16 19:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	220		51		ug/L		08/25/16 10:34	08/26/16 00:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	92		23 - 156	08/25/16 10:34	08/26/16 00:49	1

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		51		ug/L		08/25/16 17:48	08/26/16 19:05	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-26**  
**Date Collected: 08/19/16 12:05**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-8**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.002		0 - 5	08/25/16 17:48	08/26/16 19:05	1
p-Terphenyl	80		31 - 150	08/25/16 17:48	08/26/16 19:05	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1600		10		mg/L			08/24/16 03:39	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: IW-3**

**Date Collected: 08/19/16 12:30**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-9**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/27/16 02:51	1
Benzene	ND		0.50		ug/L			08/27/16 02:51	1
Ethylbenzene	ND		0.50		ug/L			08/27/16 02:51	1
Naphthalene	ND		1.0		ug/L			08/27/16 02:51	1
Toluene	ND		0.50		ug/L			08/27/16 02:51	1
Xylenes, Total	ND		1.0		ug/L			08/27/16 02:51	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/27/16 02:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		67 - 130		08/27/16 02:51	1
1,2-Dichloroethane-d4 (Surr)	103		72 - 130		08/27/16 02:51	1
Toluene-d8 (Surr)	101		70 - 130		08/27/16 02:51	1

**Method: 8270C SIM - PAHs by GCMS (SIM)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.20		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Acenaphthene	1.2		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Acenaphthylene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Fluorene	0.67		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Phenanthrene	0.38		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Benzo[a]anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Chrysene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Benzo[a]pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	66		29 - 120	08/25/16 10:23	08/25/16 20:18	1
Terphenyl-d14	46		45 - 120	08/25/16 10:23	08/25/16 20:18	1

**Method: RSK-175 - Dissolved Gases (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	8600		5.0		ug/L			09/01/16 19:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	480		53		ug/L		08/25/16 10:34	08/26/16 01:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	101		23 - 156	08/25/16 10:34	08/26/16 01:13	1

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		53		ug/L		08/25/16 17:48	08/26/16 19:29	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: IW-3**

**Date Collected: 08/19/16 12:30**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-9**

**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.0006		0 - 5	08/25/16 17:48	08/26/16 19:29	1
p-Terphenyl	93		31 - 150	08/25/16 17:48	08/26/16 19:29	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1900		10		mg/L			08/24/16 03:42	1

# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-13**  
**Date Collected: 08/19/16 12:50**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-10**  
**Matrix: Water**

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/27/16 03:20	1
Benzene	ND		0.50		ug/L			08/27/16 03:20	1
Ethylbenzene	ND		0.50		ug/L			08/27/16 03:20	1
Naphthalene	ND		1.0		ug/L			08/27/16 03:20	1
Toluene	ND		0.50		ug/L			08/27/16 03:20	1
Xylenes, Total	ND		1.0		ug/L			08/27/16 03:20	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/27/16 03:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		67 - 130					08/27/16 03:20	1
1,2-Dichloroethane-d4 (Surr)	101		72 - 130					08/27/16 03:20	1
Toluene-d8 (Surr)	101		70 - 130					08/27/16 03:20	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.13		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Acenaphthene	0.25		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Acenaphthylene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Fluorene	0.30		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Phenanthrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Benzo[a]anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Chrysene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Benzo[a]pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 20:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	61		29 - 120				08/25/16 10:23	08/25/16 20:41	1
Terphenyl-d14	42	X	45 - 120				08/25/16 10:23	08/25/16 20:41	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	12000		5.0		ug/L			09/01/16 20:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	850		51		ug/L		08/22/16 16:00	08/22/16 21:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	68		23 - 156				08/22/16 16:00	08/22/16 21:18	1

### Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		51		ug/L		08/22/16 18:31	08/24/16 20:33	1

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# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-13**  
**Date Collected: 08/19/16 12:50**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-10**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.02		0 - 5	08/22/16 18:31	08/24/16 20:33	1
p-Terphenyl	86		31 - 150	08/22/16 18:31	08/24/16 20:33	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1400		10		mg/L			08/24/16 03:46	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-23**  
**Date Collected: 08/19/16 13:15**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-11**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/27/16 03:49	1
Benzene	ND		0.50		ug/L			08/27/16 03:49	1
Ethylbenzene	ND		0.50		ug/L			08/27/16 03:49	1
<b>Naphthalene</b>	<b>2.3</b>		1.0		ug/L			08/27/16 03:49	1
Toluene	ND		0.50		ug/L			08/27/16 03:49	1
Xylenes, Total	ND		1.0		ug/L			08/27/16 03:49	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>78</b>		50		ug/L			08/27/16 03:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		67 - 130		08/27/16 03:49	1
1,2-Dichloroethane-d4 (Surr)	101		72 - 130		08/27/16 03:49	1
Toluene-d8 (Surr)	102		70 - 130		08/27/16 03:49	1

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>0.94</b>		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
<b>Acenaphthene</b>	<b>0.75</b>		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
Acenaphthylene	ND		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
<b>Fluorene</b>	<b>1.3</b>		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
<b>Phenanthrene</b>	<b>0.93</b>		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
Anthracene	ND		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
Benzo[a]anthracene	ND		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
Chrysene	ND		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
Benzo[a]pyrene	ND		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
Benzo[b]fluoranthene	ND		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
Benzo[k]fluoranthene	ND		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
Benzo[g,h,i]perylene	ND		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
Indeno[1,2,3-cd]pyrene	ND		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
Fluoranthene	ND		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
Pyrene	ND		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1
Dibenz(a,h)anthracene	ND		0.097		ug/L		08/25/16 10:23	08/25/16 21:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	53		29 - 120	08/25/16 10:23	08/25/16 21:05	1
Terphenyl-d14	35	X	45 - 120	08/25/16 10:23	08/25/16 21:05	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane</b>	<b>9900</b>		5.0		ug/L			09/01/16 20:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>3400</b>		47		ug/L		08/22/16 16:00	08/22/16 22:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	67		23 - 156	08/22/16 16:00	08/22/16 22:06	1

## Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>1400</b>		47		ug/L		08/22/16 18:31	08/24/16 20:58	1

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# Client Sample Results

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-23**  
**Date Collected: 08/19/16 13:15**  
**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-11**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	4		0 - 5	08/22/16 18:31	08/24/16 20:58	1
p-Terphenyl	79		31 - 150	08/22/16 18:31	08/24/16 20:58	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1700		10		mg/L			08/24/16 03:49	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Surrogate Summary

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

TestAmerica Job ID: 720-74045-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (67-130)	12DCE (72-130)	TOL (70-130)
720-74045-1	MW-11	103	110	104
720-74045-2	MW-16	103	106	102
720-74045-3	MW-14	101	109	102
720-74045-4	MW-20	101	109	101
720-74045-5	MW-9	101	81	102
720-74045-6	MW-19	102	107	102
720-74045-7	MW-27	95	103	102
720-74045-8	MW-26	94	102	102
720-74045-9	IW-3	95	103	101
720-74045-10	MW-13	96	101	101
720-74045-11	MW-23	96	101	102
LCS 720-208109/6	Lab Control Sample	96	88	99
LCS 720-208109/8	Lab Control Sample	97	97	102
LCS 720-208351/6	Lab Control Sample	101	98	103
LCS 720-208351/8	Lab Control Sample	101	101	104
LCSD 720-208109/7	Lab Control Sample Dup	93	96	100
LCSD 720-208109/9	Lab Control Sample Dup	92	93	101
LCSD 720-208351/7	Lab Control Sample Dup	99	101	102
LCSD 720-208351/9	Lab Control Sample Dup	101	100	103
MB 720-208109/5	Method Blank	94	92	100
MB 720-208351/5	Method Blank	96	102	102

#### Surrogate Legend

BFB = 4-Bromofluorobenzene  
12DCE = 1,2-Dichloroethane-d4 (Surr)  
TOL = Toluene-d8 (Surr)

## Method: 8270C SIM - PAHs by GCMS (SIM)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		FBP (29-120)	TPH (45-120)
720-74045-1	MW-11	39	37 X
720-74045-2	MW-16	55	49
720-74045-3	MW-14	43	61
720-74045-4	MW-20	61	46
720-74045-5	MW-9	47	50
720-74045-6	MW-19	53	36 X
720-74045-7	MW-27	73	44 X
720-74045-8	MW-26	63	41 X
720-74045-9	IW-3	66	46
720-74045-10	MW-13	61	42 X
720-74045-11	MW-23	53	35 X
LCS 720-208168/2-A	Lab Control Sample	76	70
LCS 720-208246/2-A	Lab Control Sample	61	65
LCSD 720-208168/3-A	Lab Control Sample Dup	64	66
LCSD 720-208246/3-A	Lab Control Sample Dup	64	60
MB 720-208168/1-A	Method Blank	68	80

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# Surrogate Summary

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

TestAmerica Job ID: 720-74045-1

## Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	FBP (29-120)	TPH (45-120)
MB 720-208246/1-A	Method Blank	83	80

#### Surrogate Legend

FBP = 2-Fluorobiphenyl

TPH = Terphenyl-d14

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PTP1 (23-156)
720-74045-1	MW-11	79
720-74045-2	MW-16	81
720-74045-3	MW-14	95
720-74045-4	MW-20	85
720-74045-5	MW-9	92
720-74045-6	MW-19	74
720-74045-7	MW-27	82
720-74045-8	MW-26	92
720-74045-9	IW-3	101
720-74045-10	MW-13	68
720-74045-11	MW-23	67
LCS 720-208007/2-A	Lab Control Sample	80
LCS 720-208247/2-A	Lab Control Sample	93
LCSD 720-208007/3-A	Lab Control Sample Dup	90
LCSD 720-208247/3-A	Lab Control Sample Dup	97
MB 720-208007/1-A	Method Blank	72
MB 720-208247/1-A	Method Blank	93

#### Surrogate Legend

PTP = p-Terphenyl

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

Matrix: Water

Prep Type: Silica Gel Cleanup

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	NDA1 (0-5)	PTP1 (31-150)
720-74045-1	MW-11	0.0002	71
720-74045-2	MW-16	0.05	74
720-74045-3	MW-14	0.004	84
720-74045-4	MW-20	0.3	88
720-74045-5	MW-9	0.0002	90
720-74045-6	MW-19	0.2	72
720-74045-7	MW-27	0.007	74
720-74045-8	MW-26	0.002	80
720-74045-9	IW-3	0.0006	93
720-74045-10	MW-13	0.02	86
720-74045-11	MW-23	4	79

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# Surrogate Summary

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

TestAmerica Job ID: 720-74045-1

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

Matrix: Water

Prep Type: Silica Gel Cleanup

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	NDA1 (0-5)	PTP1 (31-150)
LCS 720-208048/2-A	Lab Control Sample		82
LCS 720-208285/2-A	Lab Control Sample		87
LCSD 720-208048/3-A	Lab Control Sample Dup		78
LCSD 720-208285/3-A	Lab Control Sample Dup		95
MB 720-208048/1-A	Method Blank	0.007	65
MB 720-208285/1-A	Method Blank	0.002	89

#### Surrogate Legend

NDA = Capric Acid (Surr)

PTP = p-Terphenyl

# QC Sample Results

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

TestAmerica Job ID: 720-74045-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

**Lab Sample ID: MB 720-208109/5**  
**Matrix: Water**  
**Analysis Batch: 208109**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/23/16 19:24	1
Benzene	ND		0.50		ug/L			08/23/16 19:24	1
Ethylbenzene	ND		0.50		ug/L			08/23/16 19:24	1
Naphthalene	ND		1.0		ug/L			08/23/16 19:24	1
Toluene	ND		0.50		ug/L			08/23/16 19:24	1
Xylenes, Total	ND		1.0		ug/L			08/23/16 19:24	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/23/16 19:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		67 - 130		08/23/16 19:24	1
1,2-Dichloroethane-d4 (Surr)	92		72 - 130		08/23/16 19:24	1
Toluene-d8 (Surr)	100		70 - 130		08/23/16 19:24	1

**Lab Sample ID: LCS 720-208109/6**  
**Matrix: Water**  
**Analysis Batch: 208109**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MTBE	25.0	21.5		ug/L		86	62 - 130
Benzene	25.0	24.4		ug/L		98	79 - 130
Ethylbenzene	25.0	24.6		ug/L		99	80 - 120
Naphthalene	25.0	21.2		ug/L		85	50 - 130
Toluene	25.0	25.1		ug/L		100	78 - 120
m-Xylene & p-Xylene	25.0	24.5		ug/L		98	70 - 142
o-Xylene	25.0	24.0		ug/L		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	88		72 - 130
Toluene-d8 (Surr)	99		70 - 130

**Lab Sample ID: LCS 720-208109/8**  
**Matrix: Water**  
**Analysis Batch: 208109**

**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	531		ug/L		106	71 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	97		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		72 - 130
Toluene-d8 (Surr)	102		70 - 130

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# QC Sample Results

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

TestAmerica Job ID: 720-74045-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-208109/7**  
**Matrix: Water**  
**Analysis Batch: 208109**

**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
MTBE	25.0	25.1		ug/L		100	62 - 130	15	20
Benzene	25.0	24.6		ug/L		98	79 - 130	1	20
Ethylbenzene	25.0	23.7		ug/L		95	80 - 120	4	20
Naphthalene	25.0	23.7		ug/L		95	50 - 130	11	20
Toluene	25.0	24.0		ug/L		96	78 - 120	4	20
m-Xylene & p-Xylene	25.0	23.5		ug/L		94	70 - 142	4	20
o-Xylene	25.0	23.4		ug/L		93	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	93		67 - 130
1,2-Dichloroethane-d4 (Surr)	96		72 - 130
Toluene-d8 (Surr)	100		70 - 130

**Lab Sample ID: LCSD 720-208109/9**  
**Matrix: Water**  
**Analysis Batch: 208109**

**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	539		ug/L		108	71 - 125	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	92		67 - 130
1,2-Dichloroethane-d4 (Surr)	93		72 - 130
Toluene-d8 (Surr)	101		70 - 130

**Lab Sample ID: MB 720-208351/5**  
**Matrix: Water**  
**Analysis Batch: 208351**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			08/26/16 19:08	1
Benzene	ND		0.50		ug/L			08/26/16 19:08	1
Ethylbenzene	ND		0.50		ug/L			08/26/16 19:08	1
Naphthalene	ND		1.0		ug/L			08/26/16 19:08	1
Toluene	ND		0.50		ug/L			08/26/16 19:08	1
Xylenes, Total	ND		1.0		ug/L			08/26/16 19:08	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/26/16 19:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		67 - 130		08/26/16 19:08	1
1,2-Dichloroethane-d4 (Surr)	102		72 - 130		08/26/16 19:08	1
Toluene-d8 (Surr)	102		70 - 130		08/26/16 19:08	1

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# QC Sample Results

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

TestAmerica Job ID: 720-74045-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-208351/6**

**Matrix: Water**

**Analysis Batch: 208351**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MTBE	25.0	27.2		ug/L		109	62 - 130
Benzene	25.0	27.6		ug/L		110	79 - 130
Ethylbenzene	25.0	26.9		ug/L		108	80 - 120
Naphthalene	25.0	25.2		ug/L		101	50 - 130
Toluene	25.0	26.8		ug/L		107	78 - 120
m-Xylene & p-Xylene	25.0	27.1		ug/L		108	70 - 142
o-Xylene	25.0	27.0		ug/L		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	98		72 - 130
Toluene-d8 (Surr)	103		70 - 130

**Lab Sample ID: LCS 720-208351/8**

**Matrix: Water**

**Analysis Batch: 208351**

**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	523		ug/L		105	71 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	104		70 - 130

**Lab Sample ID: LCSD 720-208351/7**

**Matrix: Water**

**Analysis Batch: 208351**

**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
MTBE	25.0	28.8		ug/L		115	62 - 130	6	20
Benzene	25.0	27.6		ug/L		110	79 - 130	0	20
Ethylbenzene	25.0	26.4		ug/L		105	80 - 120	2	20
Naphthalene	25.0	26.1		ug/L		104	50 - 130	4	20
Toluene	25.0	26.7		ug/L		107	78 - 120	0	20
m-Xylene & p-Xylene	25.0	26.4		ug/L		106	70 - 142	2	20
o-Xylene	25.0	26.4		ug/L		105	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	102		70 - 130

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-74045-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-208351/9**

**Matrix: Water**

**Analysis Batch: 208351**

**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	515		ug/L		103	71 - 125	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		72 - 130
Toluene-d8 (Surr)	103		70 - 130

## Method: 8270C SIM - PAHs by GCMS (SIM)

**Lab Sample ID: MB 720-208168/1-A**

**Matrix: Water**

**Analysis Batch: 208219**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 208168**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Acenaphthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Acenaphthylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Fluorene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Phenanthrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Benzo[a]anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Chrysene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Benzo[a]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Fluoranthene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Pyrene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/24/16 11:48	08/24/16 21:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	68		29 - 120	08/24/16 11:48	08/24/16 21:10	1
Terphenyl-d14	80		45 - 120	08/24/16 11:48	08/24/16 21:10	1

**Lab Sample ID: LCS 720-208168/2-A**

**Matrix: Water**

**Analysis Batch: 208219**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 208168**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	10.0	7.49		ug/L		75	19 - 120
Acenaphthene	10.0	7.44		ug/L		74	24 - 120
Acenaphthylene	10.0	7.74		ug/L		77	24 - 120
Fluorene	10.0	7.63		ug/L		76	27 - 120
Phenanthrene	10.0	7.80		ug/L		78	31 - 120
Anthracene	10.0	7.99		ug/L		80	44 - 120

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# QC Sample Results

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

TestAmerica Job ID: 720-74045-1

## Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

**Lab Sample ID: LCS 720-208168/2-A**  
**Matrix: Water**  
**Analysis Batch: 208219**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 208168**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	10.0	7.77		ug/L		78	48 - 120
Chrysene	10.0	7.52		ug/L		75	47 - 120
Benzo[a]pyrene	10.0	6.68		ug/L		67	43 - 120
Benzo[b]fluoranthene	10.0	6.71		ug/L		67	42 - 120
Benzo[k]fluoranthene	10.0	6.03		ug/L		60	42 - 120
Benzo[g,h,i]perylene	10.0	4.72		ug/L		47	35 - 120
Indeno[1,2,3-cd]pyrene	10.0	5.02		ug/L		50	36 - 120
Fluoranthene	10.0	8.65		ug/L		86	43 - 120
Pyrene	10.0	8.30		ug/L		83	47 - 120
Dibenz(a,h)anthracene	10.0	4.95		ug/L		49	33 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	76		29 - 120
Terphenyl-d14	70		45 - 120

**Lab Sample ID: LCSD 720-208168/3-A**  
**Matrix: Water**  
**Analysis Batch: 208219**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 208168**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	10.0	6.02		ug/L		60	19 - 120	22	35
Acenaphthene	10.0	6.08		ug/L		61	24 - 120	20	35
Acenaphthylene	10.0	6.23		ug/L		62	24 - 120	22	35
Fluorene	10.0	6.27		ug/L		63	27 - 120	20	35
Phenanthrene	10.0	6.67		ug/L		67	31 - 120	16	35
Anthracene	10.0	6.99		ug/L		70	44 - 120	13	35
Benzo[a]anthracene	10.0	7.28		ug/L		73	48 - 120	7	35
Chrysene	10.0	7.06		ug/L		71	47 - 120	6	35
Benzo[a]pyrene	10.0	6.19		ug/L		62	43 - 120	8	35
Benzo[b]fluoranthene	10.0	6.54		ug/L		65	42 - 120	3	35
Benzo[k]fluoranthene	10.0	5.64		ug/L		56	42 - 120	7	35
Benzo[g,h,i]perylene	10.0	4.39		ug/L		44	35 - 120	7	35
Indeno[1,2,3-cd]pyrene	10.0	4.73		ug/L		47	36 - 120	6	35
Fluoranthene	10.0	7.84		ug/L		78	43 - 120	10	35
Pyrene	10.0	7.74		ug/L		77	47 - 120	7	35
Dibenz(a,h)anthracene	10.0	4.63		ug/L		46	33 - 120	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	64		29 - 120
Terphenyl-d14	66		45 - 120

**Lab Sample ID: MB 720-208246/1-A**  
**Matrix: Water**  
**Analysis Batch: 208257**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 208246**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Acenaphthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1

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# QC Sample Results

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

TestAmerica Job ID: 720-74045-1

## Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

**Lab Sample ID: MB 720-208246/1-A**  
**Matrix: Water**  
**Analysis Batch: 208257**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 208246**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Fluorene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Phenanthrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Benzo[a]anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Chrysene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Benzo[a]pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Benzo[b]fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Benzo[k]fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Fluoranthene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Pyrene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		08/25/16 10:23	08/25/16 19:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	83		29 - 120	08/25/16 10:23	08/25/16 19:07	1
Terphenyl-d14	80		45 - 120	08/25/16 10:23	08/25/16 19:07	1

**Lab Sample ID: LCS 720-208246/2-A**  
**Matrix: Water**  
**Analysis Batch: 208257**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 208246**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Naphthalene	10.0	6.90		ug/L		69	19 - 120
Acenaphthene	10.0	7.26		ug/L		73	24 - 120
Acenaphthylene	10.0	7.55		ug/L		76	24 - 120
Fluorene	10.0	7.29		ug/L		73	27 - 120
Phenanthrene	10.0	7.39		ug/L		74	31 - 120
Anthracene	10.0	7.64		ug/L		76	44 - 120
Benzo[a]anthracene	10.0	7.32		ug/L		73	48 - 120
Chrysene	10.0	7.06		ug/L		71	47 - 120
Benzo[a]pyrene	10.0	6.10		ug/L		61	43 - 120
Benzo[b]fluoranthene	10.0	6.16		ug/L		62	42 - 120
Benzo[k]fluoranthene	10.0	5.43		ug/L		54	42 - 120
Benzo[g,h,i]perylene	10.0	4.25		ug/L		42	35 - 120
Indeno[1,2,3-cd]pyrene	10.0	4.65		ug/L		47	36 - 120
Fluoranthene	10.0	7.95		ug/L		79	43 - 120
Pyrene	10.0	7.66		ug/L		77	47 - 120
Dibenz(a,h)anthracene	10.0	4.58		ug/L		46	33 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	61		29 - 120
Terphenyl-d14	65		45 - 120

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-74045-1

## Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

**Lab Sample ID:** LCSD 720-208246/3-A  
**Matrix:** Water  
**Analysis Batch:** 208257

**Client Sample ID:** Lab Control Sample Dup  
**Prep Type:** Total/NA  
**Prep Batch:** 208246

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Naphthalene	10.0	5.99		ug/L		60	19 - 120	14	35
Acenaphthene	10.0	6.19		ug/L		62	24 - 120	16	35
Acenaphthylene	10.0	6.32		ug/L		63	24 - 120	18	35
Fluorene	10.0	6.39		ug/L		64	27 - 120	13	35
Phenanthrene	10.0	6.63		ug/L		66	31 - 120	11	35
Anthracene	10.0	6.97		ug/L		70	44 - 120	9	35
Benzo[a]anthracene	10.0	6.86		ug/L		69	48 - 120	7	35
Chrysene	10.0	6.57		ug/L		66	47 - 120	7	35
Benzo[a]pyrene	10.0	5.63		ug/L		56	43 - 120	8	35
Benzo[b]fluoranthene	10.0	5.45		ug/L		55	42 - 120	12	35
Benzo[k]fluoranthene	10.0	5.37		ug/L		54	42 - 120	1	35
Benzo[g,h,i]perylene	10.0	3.80		ug/L		38	35 - 120	11	35
Indeno[1,2,3-cd]pyrene	10.0	4.21		ug/L		42	36 - 120	10	35
Fluoranthene	10.0	7.68		ug/L		77	43 - 120	3	35
Pyrene	10.0	7.01		ug/L		70	47 - 120	9	35
Dibenz(a,h)anthracene	10.0	4.18		ug/L		42	33 - 120	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	64		29 - 120
Terphenyl-d14	60		45 - 120

## Method: RSK-175 - Dissolved Gases (GC)

**Lab Sample ID:** MB 280-340541/5  
**Matrix:** Water  
**Analysis Batch:** 340541

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		5.0		ug/L			09/01/16 17:38	1

**Lab Sample ID:** LCS 280-340541/6  
**Matrix:** Water  
**Analysis Batch:** 340541

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Methane	146	154		ug/L		105	75 - 125

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

**Lab Sample ID:** MB 720-208007/1-A  
**Matrix:** Water  
**Analysis Batch:** 207989

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 208007

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		08/22/16 10:53	08/22/16 23:43	1

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# QC Sample Results

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

TestAmerica Job ID: 720-74045-1

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

**Lab Sample ID: MB 720-208007/1-A**  
**Matrix: Water**  
**Analysis Batch: 207989**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 208007**

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
p-Terphenyl	72		23 - 156	08/22/16 10:53	08/22/16 23:43	1

**Lab Sample ID: LCS 720-208007/2-A**  
**Matrix: Water**  
**Analysis Batch: 207989**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 208007**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
p-Terphenyl	80		23 - 156

**Lab Sample ID: LCSD 720-208007/3-A**  
**Matrix: Water**  
**Analysis Batch: 207989**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 208007**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
p-Terphenyl	90		23 - 156

**Lab Sample ID: MB 720-208247/1-A**  
**Matrix: Water**  
**Analysis Batch: 208295**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 208247**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		50		ug/L		08/25/16 10:34	08/26/16 11:05	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
p-Terphenyl	93		23 - 156	08/25/16 10:34	08/26/16 11:05	1

**Lab Sample ID: LCS 720-208247/2-A**  
**Matrix: Water**  
**Analysis Batch: 208295**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 208247**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
p-Terphenyl	93		23 - 156

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-74045-1

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

**Lab Sample ID: LCSD 720-208247/3-A**

**Matrix: Water**

**Analysis Batch: 208295**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 208247**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	2040		ug/L		82	34 - 115	7	35
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>						
<i>p-Terphenyl</i>		97					23 - 156		

**Lab Sample ID: MB 720-208048/1-A**

**Matrix: Water**

**Analysis Batch: 208134**

**Client Sample ID: Method Blank**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 208048**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		08/22/16 18:31	08/24/16 22:11	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Capric Acid (Surr)</i>		0.007					08/22/16 18:31	08/24/16 22:11	1
<i>p-Terphenyl</i>		65					08/22/16 18:31	08/24/16 22:11	1

**Lab Sample ID: LCS 720-208048/2-A**

**Matrix: Water**

**Analysis Batch: 208134**

**Client Sample ID: Lab Control Sample**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 208048**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	1410		ug/L		57	32 - 119		
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>						
<i>p-Terphenyl</i>		82					31 - 150		

**Lab Sample ID: LCSD 720-208048/3-A**

**Matrix: Water**

**Analysis Batch: 208134**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 208048**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	1330		ug/L		53	32 - 119	6	35
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>						
<i>p-Terphenyl</i>		78					31 - 150		

**Lab Sample ID: MB 720-208285/1-A**

**Matrix: Water**

**Analysis Batch: 208301**

**Client Sample ID: Method Blank**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 208285**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		08/25/16 17:48	08/26/16 15:51	1

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# QC Sample Results

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

TestAmerica Job ID: 720-74045-1

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

**Lab Sample ID: MB 720-208285/1-A**  
**Matrix: Water**  
**Analysis Batch: 208301**

**Client Sample ID: Method Blank**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 208285**

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Capric Acid (Surr)	0.002		0 - 5	08/25/16 17:48	08/26/16 15:51	1
p-Terphenyl	89		31 - 150	08/25/16 17:48	08/26/16 15:51	1

**Lab Sample ID: LCS 720-208285/2-A**  
**Matrix: Water**  
**Analysis Batch: 208301**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 208285**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
p-Terphenyl	87		31 - 150

**Lab Sample ID: LCSD 720-208285/3-A**  
**Matrix: Water**  
**Analysis Batch: 208301**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 208285**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
p-Terphenyl	95		31 - 150

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID: MB 500-348991/1**  
**Matrix: Water**  
**Analysis Batch: 348991**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	ND		10		mg/L			08/24/16 03:02	1

**Lab Sample ID: LCS 500-348991/2**  
**Matrix: Water**  
**Analysis Batch: 348991**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

**Lab Sample ID: 720-74045-7 MS**  
**Matrix: Water**  
**Analysis Batch: 348991**

**Client Sample ID: MW-27**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-74045-1

## Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 720-74045-7 DU  
 Matrix: Water  
 Analysis Batch: 348991

Client Sample ID: MW-27  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	2000		2070		mg/L		2	5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# QC Association Summary

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

TestAmerica Job ID: 720-74045-1

## GC/MS VOA

### Analysis Batch: 208109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-1	MW-11	Total/NA	Water	8260B/CA_LUFT MS	
720-74045-2	MW-16	Total/NA	Water	8260B/CA_LUFT MS	
720-74045-3	MW-14	Total/NA	Water	8260B/CA_LUFT MS	
720-74045-4	MW-20	Total/NA	Water	8260B/CA_LUFT MS	
720-74045-5	MW-9	Total/NA	Water	8260B/CA_LUFT MS	
720-74045-6	MW-19	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-208109/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-208109/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-208109/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-208109/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-208109/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	

### Analysis Batch: 208351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-7	MW-27	Total/NA	Water	8260B/CA_LUFT MS	
720-74045-8	MW-26	Total/NA	Water	8260B/CA_LUFT MS	
720-74045-9	IW-3	Total/NA	Water	8260B/CA_LUFT MS	
720-74045-10	MW-13	Total/NA	Water	8260B/CA_LUFT MS	
720-74045-11	MW-23	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-208351/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-208351/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-208351/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-208351/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-208351/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	

## GC/MS Semi VOA

### Prep Batch: 208168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-1	MW-11	Total/NA	Water	3510C	
720-74045-2	MW-16	Total/NA	Water	3510C	
720-74045-3	MW-14	Total/NA	Water	3510C	
720-74045-4	MW-20	Total/NA	Water	3510C	
720-74045-5	MW-9	Total/NA	Water	3510C	
720-74045-6	MW-19	Total/NA	Water	3510C	

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# QC Association Summary

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

TestAmerica Job ID: 720-74045-1

## GC/MS Semi VOA (Continued)

### Prep Batch: 208168 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-208168/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-208168/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-208168/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 208219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-1	MW-11	Total/NA	Water	8270C SIM	208168
720-74045-2	MW-16	Total/NA	Water	8270C SIM	208168
720-74045-3	MW-14	Total/NA	Water	8270C SIM	208168
720-74045-4	MW-20	Total/NA	Water	8270C SIM	208168
720-74045-5	MW-9	Total/NA	Water	8270C SIM	208168
720-74045-6	MW-19	Total/NA	Water	8270C SIM	208168
MB 720-208168/1-A	Method Blank	Total/NA	Water	8270C SIM	208168
LCS 720-208168/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	208168
LCSD 720-208168/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	208168

### Prep Batch: 208246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-7	MW-27	Total/NA	Water	3510C	
720-74045-8	MW-26	Total/NA	Water	3510C	
720-74045-9	IW-3	Total/NA	Water	3510C	
720-74045-10	MW-13	Total/NA	Water	3510C	
720-74045-11	MW-23	Total/NA	Water	3510C	
MB 720-208246/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-208246/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-208246/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 208257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-7	MW-27	Total/NA	Water	8270C SIM	208246
720-74045-8	MW-26	Total/NA	Water	8270C SIM	208246
720-74045-9	IW-3	Total/NA	Water	8270C SIM	208246
720-74045-10	MW-13	Total/NA	Water	8270C SIM	208246
720-74045-11	MW-23	Total/NA	Water	8270C SIM	208246
MB 720-208246/1-A	Method Blank	Total/NA	Water	8270C SIM	208246
LCS 720-208246/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	208246
LCSD 720-208246/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	208246

## GC VOA

### Analysis Batch: 340541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-1	MW-11	Total/NA	Water	RSK-175	
720-74045-2	MW-16	Total/NA	Water	RSK-175	
720-74045-3	MW-14	Total/NA	Water	RSK-175	
720-74045-4	MW-20	Total/NA	Water	RSK-175	
720-74045-5	MW-9	Total/NA	Water	RSK-175	
720-74045-6	MW-19	Total/NA	Water	RSK-175	
720-74045-7	MW-27	Total/NA	Water	RSK-175	
720-74045-8	MW-26	Total/NA	Water	RSK-175	

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# QC Association Summary

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

TestAmerica Job ID: 720-74045-1

## GC VOA (Continued)

### Analysis Batch: 340541 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-9	IW-3	Total/NA	Water	RSK-175	
720-74045-10	MW-13	Total/NA	Water	RSK-175	
720-74045-11	MW-23	Total/NA	Water	RSK-175	
MB 280-340541/5	Method Blank	Total/NA	Water	RSK-175	
LCS 280-340541/6	Lab Control Sample	Total/NA	Water	RSK-175	

## GC Semi VOA

### Analysis Batch: 207989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-10	MW-13	Total/NA	Water	8015B	208007
720-74045-11	MW-23	Total/NA	Water	8015B	208007
MB 720-208007/1-A	Method Blank	Total/NA	Water	8015B	208007
LCS 720-208007/2-A	Lab Control Sample	Total/NA	Water	8015B	208007
LCS 720-208007/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	208007

### Prep Batch: 208007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-10	MW-13	Total/NA	Water	3510C	
720-74045-11	MW-23	Total/NA	Water	3510C	
MB 720-208007/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-208007/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 720-208007/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Prep Batch: 208048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-10	MW-13	Silica Gel Cleanup	Water	3510C SGC	
720-74045-11	MW-23	Silica Gel Cleanup	Water	3510C SGC	
MB 720-208048/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-208048/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-208048/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 208133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-10	MW-13	Silica Gel Cleanup	Water	8015B	208048
720-74045-11	MW-23	Silica Gel Cleanup	Water	8015B	208048

### Analysis Batch: 208134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-208048/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	208048
LCS 720-208048/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	208048
LCS 720-208048/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	208048

### Analysis Batch: 208228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-2	MW-16	Total/NA	Water	8015B	208247
720-74045-3	MW-14	Total/NA	Water	8015B	208247
720-74045-4	MW-20	Total/NA	Water	8015B	208247
720-74045-5	MW-9	Total/NA	Water	8015B	208247
720-74045-6	MW-19	Total/NA	Water	8015B	208247

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# QC Association Summary

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

TestAmerica Job ID: 720-74045-1

## GC Semi VOA (Continued)

### Analysis Batch: 208228 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-7	MW-27	Total/NA	Water	8015B	208247
720-74045-8	MW-26	Total/NA	Water	8015B	208247
720-74045-9	IW-3	Total/NA	Water	8015B	208247

### Prep Batch: 208247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-1	MW-11	Total/NA	Water	3510C	
720-74045-2	MW-16	Total/NA	Water	3510C	
720-74045-3	MW-14	Total/NA	Water	3510C	
720-74045-4	MW-20	Total/NA	Water	3510C	
720-74045-5	MW-9	Total/NA	Water	3510C	
720-74045-6	MW-19	Total/NA	Water	3510C	
720-74045-7	MW-27	Total/NA	Water	3510C	
720-74045-8	MW-26	Total/NA	Water	3510C	
720-74045-9	IW-3	Total/NA	Water	3510C	
MB 720-208247/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-208247/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-208247/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Prep Batch: 208285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-1	MW-11	Silica Gel Cleanup	Water	3510C SGC	
720-74045-2	MW-16	Silica Gel Cleanup	Water	3510C SGC	
720-74045-3	MW-14	Silica Gel Cleanup	Water	3510C SGC	
720-74045-4	MW-20	Silica Gel Cleanup	Water	3510C SGC	
720-74045-5	MW-9	Silica Gel Cleanup	Water	3510C SGC	
720-74045-6	MW-19	Silica Gel Cleanup	Water	3510C SGC	
720-74045-7	MW-27	Silica Gel Cleanup	Water	3510C SGC	
720-74045-8	MW-26	Silica Gel Cleanup	Water	3510C SGC	
720-74045-9	IW-3	Silica Gel Cleanup	Water	3510C SGC	
MB 720-208285/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-208285/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-208285/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 208294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-1	MW-11	Total/NA	Water	8015B	208247

### Analysis Batch: 208295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-208247/1-A	Method Blank	Total/NA	Water	8015B	208247
LCS 720-208247/2-A	Lab Control Sample	Total/NA	Water	8015B	208247
LCSD 720-208247/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	208247

### Analysis Batch: 208301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-1	MW-11	Silica Gel Cleanup	Water	8015B	208285
720-74045-2	MW-16	Silica Gel Cleanup	Water	8015B	208285
720-74045-3	MW-14	Silica Gel Cleanup	Water	8015B	208285
720-74045-4	MW-20	Silica Gel Cleanup	Water	8015B	208285
720-74045-5	MW-9	Silica Gel Cleanup	Water	8015B	208285

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# QC Association Summary

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

TestAmerica Job ID: 720-74045-1

## GC Semi VOA (Continued)

### Analysis Batch: 208301 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-6	MW-19	Silica Gel Cleanup	Water	8015B	208285
720-74045-7	MW-27	Silica Gel Cleanup	Water	8015B	208285
720-74045-8	MW-26	Silica Gel Cleanup	Water	8015B	208285
720-74045-9	IW-3	Silica Gel Cleanup	Water	8015B	208285
MB 720-208285/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	208285
LCS 720-208285/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	208285
LCS 720-208285/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	208285

## General Chemistry

### Analysis Batch: 348991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74045-1	MW-11	Total/NA	Water	SM 2540C	
720-74045-2	MW-16	Total/NA	Water	SM 2540C	
720-74045-3	MW-14	Total/NA	Water	SM 2540C	
720-74045-4	MW-20	Total/NA	Water	SM 2540C	
720-74045-5	MW-9	Total/NA	Water	SM 2540C	
720-74045-6	MW-19	Total/NA	Water	SM 2540C	
720-74045-7	MW-27	Total/NA	Water	SM 2540C	
720-74045-8	MW-26	Total/NA	Water	SM 2540C	
720-74045-9	IW-3	Total/NA	Water	SM 2540C	
720-74045-10	MW-13	Total/NA	Water	SM 2540C	
720-74045-11	MW-23	Total/NA	Water	SM 2540C	
MB 500-348991/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-348991/2	Lab Control Sample	Total/NA	Water	SM 2540C	
720-74045-7 MS	MW-27	Total/NA	Water	SM 2540C	
720-74045-7 DU	MW-27	Total/NA	Water	SM 2540C	

# Lab Chronicle

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-11**

**Date Collected: 08/19/16 09:45**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/24/16 02:45	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/25/16 03:05	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	340541	09/01/16 18:15	MPS	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			208285	08/25/16 17:48	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208301	08/26/16 16:15	JXL	TAL PLS
Total/NA	Prep	3510C			208247	08/25/16 10:34	NDU	TAL PLS
Total/NA	Analysis	8015B		1	208294	08/26/16 12:33	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348991	08/24/16 03:09	CLB	TAL CHI

**Client Sample ID: MW-16**

**Date Collected: 08/19/16 10:05**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/24/16 03:12	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/25/16 03:29	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	340541	09/01/16 18:26	MPS	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			208285	08/25/16 17:48	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208301	08/26/16 16:40	JXL	TAL PLS
Total/NA	Prep	3510C			208247	08/25/16 10:34	NDU	TAL PLS
Total/NA	Analysis	8015B		1	208228	08/25/16 23:37	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348991	08/24/16 03:12	CLB	TAL CHI

**Client Sample ID: MW-14**

**Date Collected: 08/19/16 10:25**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/24/16 03:40	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/25/16 03:52	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	340541	09/01/16 18:37	MPS	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			208285	08/25/16 17:48	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208301	08/26/16 17:04	JXL	TAL PLS
Total/NA	Prep	3510C			208247	08/25/16 10:34	NDU	TAL PLS
Total/NA	Analysis	8015B		1	208228	08/25/16 23:12	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348991	08/24/16 03:15	CLB	TAL CHI

TestAmerica Pleasanton

# Lab Chronicle

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-20**

**Date Collected: 08/19/16 10:40**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-4**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/24/16 04:08	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/25/16 04:16	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	340541	09/01/16 18:41	MPS	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			208285	08/25/16 17:48	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208301	08/26/16 17:28	JXL	TAL PLS
Total/NA	Prep	3510C			208247	08/25/16 10:34	NDU	TAL PLS
Total/NA	Analysis	8015B		1	208228	08/26/16 00:25	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348991	08/24/16 03:19	CLB	TAL CHI

**Client Sample ID: MW-9**

**Date Collected: 08/19/16 11:00**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-5**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/24/16 04:35	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/25/16 04:40	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	340541	09/01/16 18:45	MPS	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			208285	08/25/16 17:48	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208301	08/26/16 17:52	JXL	TAL PLS
Total/NA	Prep	3510C			208247	08/25/16 10:34	NDU	TAL PLS
Total/NA	Analysis	8015B		1	208228	08/25/16 22:48	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348991	08/24/16 03:22	CLB	TAL CHI

**Client Sample ID: MW-19**

**Date Collected: 08/19/16 11:20**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-6**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208109	08/24/16 05:03	LPL	TAL PLS
Total/NA	Prep	3510C			208168	08/24/16 11:48	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208219	08/25/16 05:03	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	340541	09/01/16 19:01	MPS	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			208285	08/25/16 17:48	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208301	08/26/16 18:17	JXL	TAL PLS
Total/NA	Prep	3510C			208247	08/25/16 10:34	NDU	TAL PLS
Total/NA	Analysis	8015B		1	208228	08/26/16 01:37	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348991	08/24/16 03:25	CLB	TAL CHI

TestAmerica Pleasanton

# Lab Chronicle

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-27**

**Date Collected: 08/19/16 11:45**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-7**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208351	08/27/16 01:53	LPL	TAL PLS
Total/NA	Prep	3510C			208246	08/25/16 10:23	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208257	08/25/16 19:30	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	340541	09/01/16 19:05	MPS	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			208285	08/25/16 17:48	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208301	08/26/16 18:41	JXL	TAL PLS
Total/NA	Prep	3510C			208247	08/25/16 10:34	NDU	TAL PLS
Total/NA	Analysis	8015B		1	208228	08/26/16 00:01	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348991	08/24/16 03:29	CLB	TAL CHI

**Client Sample ID: MW-26**

**Date Collected: 08/19/16 12:05**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-8**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208351	08/27/16 02:22	LPL	TAL PLS
Total/NA	Prep	3510C			208246	08/25/16 10:23	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208257	08/25/16 19:54	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	340541	09/01/16 19:09	MPS	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			208285	08/25/16 17:48	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208301	08/26/16 19:05	JXL	TAL PLS
Total/NA	Prep	3510C			208247	08/25/16 10:34	NDU	TAL PLS
Total/NA	Analysis	8015B		1	208228	08/26/16 00:49	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348991	08/24/16 03:39	CLB	TAL CHI

**Client Sample ID: IW-3**

**Date Collected: 08/19/16 12:30**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-9**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208351	08/27/16 02:51	LPL	TAL PLS
Total/NA	Prep	3510C			208246	08/25/16 10:23	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208257	08/25/16 20:18	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	340541	09/01/16 19:36	MPS	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			208285	08/25/16 17:48	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208301	08/26/16 19:29	JXL	TAL PLS
Total/NA	Prep	3510C			208247	08/25/16 10:34	NDU	TAL PLS
Total/NA	Analysis	8015B		1	208228	08/26/16 01:13	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348991	08/24/16 03:42	CLB	TAL CHI

TestAmerica Pleasanton

# Lab Chronicle

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

TestAmerica Job ID: 720-74045-1

**Client Sample ID: MW-13**

**Date Collected: 08/19/16 12:50**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-10**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208351	08/27/16 03:20	LPL	TAL PLS
Total/NA	Prep	3510C			208246	08/25/16 10:23	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208257	08/25/16 20:41	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	340541	09/01/16 20:25	MPS	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208133	08/24/16 20:33	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 16:00	NDU	TAL PLS
Total/NA	Analysis	8015B		1	207989	08/22/16 21:18	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348991	08/24/16 03:46	CLB	TAL CHI

**Client Sample ID: MW-23**

**Date Collected: 08/19/16 13:15**

**Date Received: 08/19/16 16:45**

**Lab Sample ID: 720-74045-11**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208351	08/27/16 03:49	LPL	TAL PLS
Total/NA	Prep	3510C			208246	08/25/16 10:23	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	208257	08/25/16 21:05	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	340541	09/01/16 20:29	MPS	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			208048	08/22/16 18:31	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	208133	08/24/16 20:58	JXL	TAL PLS
Total/NA	Prep	3510C			208007	08/22/16 16:00	NDU	TAL PLS
Total/NA	Analysis	8015B		1	207989	08/22/16 22:06	JXL	TAL PLS
Total/NA	Analysis	SM 2540C		1	348991	08/24/16 03:49	CLB	TAL CHI

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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



# Certification Summary

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

TestAmerica Job ID: 720-74045-1

## Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18

## Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2903	04-30-18
Georgia	State Program	4	N/A	04-30-17
Georgia	State Program	4	939	04-30-17
Hawaii	State Program	9	N/A	04-30-17
Illinois	NELAP	5	100201	04-30-17
Indiana	State Program	5	C-IL-02	04-30-17
Iowa	State Program	7	82	05-01-18
Kansas	NELAP	7	E-10161	10-31-16 *
Kentucky (UST)	State Program	4	66	04-30-17
Kentucky (WW)	State Program	4	KY90023	12-31-16 *
Mississippi	State Program	4	N/A	04-30-17
New York	NELAP	2	12019	04-01-17
North Carolina (WW/SW)	State Program	4	291	12-31-16 *
North Dakota	State Program	8	R-194	04-30-17
Oklahoma	State Program	6	8908	08-31-17 *
South Carolina	State Program	4	77001	04-30-16 *
USDA	Federal		P330-15-00038	02-11-18
Wisconsin	State Program	5	999580010	08-31-17
Wyoming	State Program	8	8TMS-Q	04-30-17

## Laboratory: TestAmerica Denver

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-17
A2LA	ISO/IEC 17025		2907.01	10-31-17
Alabama	State Program	4	40730	09-30-12 *
Alaska (UST)	State Program	10	UST-30	04-05-17
Arizona	State Program	9	AZ0713	12-19-16
Arkansas DEQ	State Program	6	88-0687	06-01-17
California	State Program	9	2513	08-31-16 *
Connecticut	State Program	1	PH-0686	09-30-16
Florida	NELAP	4	E87667	06-30-16 *
Georgia	State Program	4	N/A	01-09-17
Illinois	NELAP	5	200017	04-30-17
Iowa	State Program	7	370	11-30-16
Kansas	NELAP	7	E-10166	04-30-17
Louisiana	NELAP	6	02096	06-30-17
Maine	State Program	1	CO0002	03-03-17
Minnesota	NELAP	5	8-999-405	12-31-16
Nevada	State Program	9	CO0026	07-31-17
New Hampshire	NELAP	1	205310	04-28-17
New Jersey	NELAP	2	CO004	06-30-17
New York	NELAP	2	11964	04-01-17
North Carolina (WW/SW)	State Program	4	358	12-31-16

\* Certification renewal pending - certification considered valid.

TestAmerica Pleasanton

# Certification Summary

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

TestAmerica Job ID: 720-74045-1

## Laboratory: TestAmerica Denver (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
North Dakota	State Program	8	R-034	01-09-17
Oklahoma	State Program	6	8614	08-31-16 *
Oregon	NELAP	10	4025	01-09-17
Pennsylvania	NELAP	3	68-00664	07-31-17
South Carolina	State Program	4	72002001	01-09-17
Texas	NELAP	6	T104704183-15-11	09-30-16
USDA	Federal		P330-13-00369	12-17-16
Utah	NELAP	8	CO00026	07-31-16 *
Virginia	NELAP	3	460232	06-14-17
Washington	State Program	10	C583	08-03-17
West Virginia DEP	State Program	3	354	11-30-16
Wisconsin	State Program	5	999615430	08-31-16 *
Wyoming (UST)	A2LA	8	2907.01	10-31-17

\* Certification renewal pending - certification considered valid.

TestAmerica Pleasanton

# Method Summary

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

TestAmerica Job ID: 720-74045-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL PLS
8270C SIM	PAHs by GCMS (SIM)	SW846	TAL PLS
RSK-175	Dissolved Gases (GC)	RSK	TAL DEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI

#### Protocol References:

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab  
SM = "Standard Methods For The Examination Of Water And Wastewater",  
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200  
TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100  
TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

# Sample Summary

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

TestAmerica Job ID: 720-74045-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-74045-1	MW-11	Water	08/19/16 09:45	08/19/16 16:45
720-74045-2	MW-16	Water	08/19/16 10:05	08/19/16 16:45
720-74045-3	MW-14	Water	08/19/16 10:25	08/19/16 16:45
720-74045-4	MW-20	Water	08/19/16 10:40	08/19/16 16:45
720-74045-5	MW-9	Water	08/19/16 11:00	08/19/16 16:45
720-74045-6	MW-19	Water	08/19/16 11:20	08/19/16 16:45
720-74045-7	MW-27	Water	08/19/16 11:45	08/19/16 16:45
720-74045-8	MW-26	Water	08/19/16 12:05	08/19/16 16:45
720-74045-9	IW-3	Water	08/19/16 12:30	08/19/16 16:45
720-74045-10	MW-13	Water	08/19/16 12:50	08/19/16 16:45
720-74045-11	MW-23	Water	08/19/16 13:15	08/19/16 16:45



**BLAINE**  
 TECH SERVICES, INC.  
 1680 ROGERS AVENUE  
 SAN JOSE, CALIFORNIA 95112-1105  
 FAX (408) 573-7771  
 PHONE (408) 573-0555

720-74045

170528 1472

9/2/2016

CHAIN OF CUSTODY  
 CLIENT: ARCADIS U.S., Inc.  
 SITE: UPS  
 8400 Pardee Drive  
 Oakland, CA

SAMPLE ID.	DATE	TIME	MATRIX	CONTAINERS
Mw-11	8/19/16	0945	W	11
Mw-16		1005	W	11
Mw-14		1025	W	11
Mw-20		1040	W	11
Mw-9		1100	W	11
Mw-19		1120	W	11
Mw-27		1145	W	11
Mw-26		1205	W	11
Mw-3		1230	W	11
Mw-13		1250	W	11

C = COMPOSITE ALL CONTAINERS

CONDUCT ANALYSIS TO DETECT	TPH-Gro, BTEX, MTBE, Naphthalene (8260)	DRO with and without SGC (8015M)	Disslved Methane (RSK-175)	TDS (SM2540)	PAH's, Natththalene (8270)
Mw-11	X	X	X	X	X
Mw-16	X	X	X	X	X
Mw-14	X	X	X	X	X
Mw-20	X	X	X	X	X
Mw-9	X	X	X	X	X
Mw-19	X	X	X	X	X
Mw-27	X	X	X	X	X
Mw-26	X	X	X	X	X
Mw-3	X	X	X	X	X
Mw-13	X	X	X	X	X

SAMPLING COMPLETED  
 DATE: 8/19/16  
 TIME: 1330

RECEIVED BY: *Cathy K. Carter*  
 DATE: 8/19/16  
 TIME: 1540

RESULTS NEEDED  
 NO LATER THAN: Standard TAT  
 DATE: 8/19/16  
 TIME: 1540

RELEASED BY: *[Signature]*  
 DATE: 8/19/16  
 TIME: 1045

RECEIVED BY: *[Signature]*  
 DATE: 8/19/16  
 TIME: 1645

RECEIVED BY: *[Signature]*  
 DATE: 8/19/16  
 TIME: 1645

SHIPPED VIA: \_\_\_\_\_ DATE SENT: \_\_\_\_\_ TIME SENT: \_\_\_\_\_ COOLER #: \_\_\_\_\_

4.5, 4.7, 4.6, 9.0


LAB TA - SF DHS #  
 ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND  
 EPA  
 LIA  
 OTHER  
 RWOCB REGION \_\_\_\_\_

SPECIAL INSTRUCTIONS  
 Invoice and Report to : Arcadis U.S., Inc.  
 Attn: Hugh Devery [hugh.devery@arcadis-us.com](mailto:hugh.devery@arcadis-us.com)  
 770-428-9009

**Low Detection levels requested**

ADDL INFORMATION STATUS CONDITION LAB SAMPLE #

720-74045 Chain of Custody





**Chain of Custody Record**



Client Information (Sub Contract Lab)		Lab PM:		Carrier Tracking No(s):					
Client Contact: Shipping/Receiving		Sharma, Dimple		720-30077.1					
Company: TestAmerica Laboratories, Inc.		E-Mail: dimple.sharma@testamericainc.com		Page: Page 1 of 1					
Address: 4955 Yarrow Street, City: State, Zip: CO, 80002		Due Date Requested: 8/25/2016		Job #: 720-74045-1					
Phone: 303-736-0100(Tel) 303-431-7171(Fax)		TAT Requested (days):		Preservation Codes:					
Email:		PO #:		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (Specify)					
Project Name: UPS-Oakland		Project #: 72000550		Other:					
Site:		ISSOW#:							
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=oil, T=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform M/MSD (Yes or No)	RSK, 175/ Methane	Total Number of containers	Special Instructions/Note:
MW-11 (720-74045-1)	8/19/16	09:45 Pacific		Water	X	X		3	
MW-16 (720-74045-2)	8/19/16	10:05 Pacific		Water	X	X		3	
MW-14 (720-74045-3)	8/19/16	10:25 Pacific		Water	X	X		3	
MW-20 (720-74045-4)	8/19/16	10:40 Pacific		Water	X	X		3	
MW-9 (720-74045-5)	8/19/16	11:00 Pacific		Water	X	X		3	
MW-19 (720-74045-6)	8/19/16	11:20 Pacific		Water	X	X		3	
MW-27 (720-74045-7)	8/19/16	11:45 Pacific		Water	X	X		3	
MW-26 (720-74045-8)	8/19/16	12:05 Pacific		Water	X	X		3	
IW-3 (720-74045-9)	8/19/16	12:30 Pacific		Water	X	X		3	
MW-13 (720-74045-10)	8/19/16	12:50 Pacific		Water	X	X		3	
MW-23 (720-74045-11)	8/19/16	13:15 Pacific		Water	X	X		3	
<b>Possible Hazard Identification</b>									
Unconfirmed									
Deliverable Requested: I, II, III, V, Other (specify)									
Primary Deliverable Rank: 2									
Date:									
Empty Kit Relinquished by:									
Relinquished by: <i>John Mullen</i>									
Date/Time: 8-22-16 1600									
Relinquished by: <i>Leah Potts</i>									
Date/Time: 8-23-16 0915									
Relinquished by:									
Date/Time:									
Relinquished by:									
Date/Time:									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No									
Custody Seal No.:									
Cooler Temperature(s) °C and Other Remarks: 1.4 IR 5 0.0 RP 8-23-16									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months									
Special Instructions/OC Requirements:									
Time:									
Method of Shipment:									







# Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-74045-1

**Login Number: 74045**  
**List Number: 1**  
**Creator: Arauz, Dennis**

**List Source: TestAmerica Pleasanton**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-74045-1

**Login Number: 74045**  
**List Number: 2**  
**Creator: Sanchez, Ariel M**

**List Source: TestAmerica Chicago**  
**List Creation: 08/23/16 11:27 AM**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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	1.6
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 containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-74045-1

**Login Number: 74045**  
**List Number: 3**  
**Creator: Pottruff, Reed W**

**List Source: TestAmerica Denver**  
**List Creation: 08/23/16 12:07 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Headspace larger than 1/4".
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Arcadis U.S., Inc.

100 Montgomery Street

Suite 300

San Francisco, California 94104

Tel 415 374 2744

Fax 415 374 2745

[www.arcadis.com](http://www.arcadis.com)