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55 Glenlake Parkway, NE  
Atlanta, GA 30328-3474

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

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

Dear Ms. Jakub:

Attached please find the Groundwater Monitoring and High-Vacuum Extraction (HVE) Events Report for the above-referenced site. The report, which was prepared for United Parcel Service by ARCADIS U.S., Inc., includes the semi-annual groundwater monitoring and HVE events that were performed at the subject site in 2013.

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

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

Sincerely,

United Parcel Service

A handwritten signature in blue ink, appearing to read "PH".

Paul Harper  
Corporate Remediation Program Manager

Ms. Dilan Roe  
Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, California 94502

ARCADIS US, INC.  
100 Montgomery Street, Suite 300  
San Francisco, California 94104  
Tel 415.374.2744  
Fax 415.374.2745  
[www.arcadis-us.com](http://www.arcadis-us.com)

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Groundwater Monitoring and High-Vacuum Extraction Report  
UPS Oakland Hub  
8400 Pardee Drive, Oakland, CA 94621  
Global ID # T0600100939  
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ENVIRONMENT

Dear Ms. Roe:

Date:  
September 30, 2013

On behalf of United Parcel Service (UPS), ARCADIS U.S., Inc. (ARCADIS) is pleased to submit this Groundwater Monitoring and High-Vacuum Extraction (HVE) Report, which documents the first and second semi-annual 2013 groundwater monitoring and HVE events performed at the UPS Oakland Hub, located at 8400 Pardee Drive, Oakland, Alameda County, California (**Figures 1, 2, and 3**).

Contact:  
Hollis Phillips

Phone:  
415.432.6903

Email:  
[Hollis.Phillips@arcadis-us.com](mailto:Hollis.Phillips@arcadis-us.com)

Our ref:  
B0038398.0013

## Background

Historical aerial photographs from 1937 to the present indicate that the 8400 Pardee Drive property that UPS leases from the Port of Oakland was originally a tidal marsh. In 1968, the site was raised above mean sea level (amsl) with suspect imported fill and graded. This artificial historical fill has been documented in both the northern and southern former fueling areas, at depths ranging from 2 to 10 feet (ft). Currently, the grade at the property is approximately 10 ft amsl and is located on a narrow peninsula south of San Leandro Bay.

Based on the aerial photographs, there were no structures on the property until 1975, when the current UPS facility was constructed. The southern former fueling area (current release area), was visible in the photographs from 1985. Detailed historical information since 1985 has been provided in previous reports.

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

Imagine the result

In 2010, multiple soil and groundwater investigation activities were performed, including HVEs, a preferential pathway study, a well survey, and soil and groundwater sampling. These activities were documented in the Summary of Soil and Groundwater Investigation Activities Report dated February 15, 2011 (ARCADIS, 2011a), which was submitted to the Alameda County Department of Environmental Health (ACDEH). This report was updated in 2012 (Revised Summary of Soil and Groundwater Investigation Activities Report [ARCADIS, 2012]) to include information about the newly installed monitoring and injection wells at the site.

In 2011, ARCADIS submitted a Corrective Action Plan (CAP ARCADIS, 2011b) to address residual soil and groundwater impacts in the immediate area of the former diesel underground storage tanks (USTs). The proposed corrective action was the installation of injection wells and to conduct injection events which would be implemented to reduce concentrations to levels that would protect both humans and the environment, as specified in the State Water Resources Control Board's (SWRCB's) Low-Threat Underground Storage Tank Case Closure Policy (Low-Threat Closure Policy) adopted by the SWRCB on May 1, 2012 and effective August 17, 2012 (SWRCB 2012). A risk assessment report will be submitted to ACDEH when the levels stated in this policy are achieved.

### **2013 Groundwater Monitoring and Analysis**

During the first semi-annual groundwater monitoring event, which took place on February 26, 2013, groundwater samples were collected from monitoring wells MW-2, MW-3, MW-4, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, and MW-14 and injection wells IW-1, IW-2, IW-3, IW-4, IW-5, and IW-6. Groundwater samples were not collected from monitoring well OW-1 due to the presence of free product. Water levels were measured prior to purging and sampling the wells.

During the second semi-annual groundwater monitoring event, which took place on July 22-23, 2013, groundwater samples were collected from monitoring wells MW-3, MW-4, MW-8, MW-9, MW-10, MW-11, MW-13, and MW-14 and injection wells IW-2, IW-3, IW-5, and IW-6. Groundwater samples were not collected from wells MW-2, MW-12, OW-1, or IW-1 due to the presence of free product. In addition, access to injection well IW-4 was obstructed by a large trailer, which could not be moved; therefore, no sample was taken. Water levels were measured prior to purging and sampling the wells.

During low-flow purging of the wells groundwater parameters (pH, temperature, turbidity, and conductivity parameters) were monitored to evaluate stabilization.

When groundwater parameters varied less than  $\pm 10\%$  samples were collected (**Appendix A**).

Groundwater samples during the February and July 2013 monitoring events were analyzed for:

- TPH-diesel range organics (TPH-DRO) by United States Environmental Protection Agency (EPA) Method 8015B;
- benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary butyl ether (MTBE), and naphthalene by US EPA Method 8260;
- and TPH-gasoline range organics (TPH-GRO) by US EPA Method 8260B/California Leaking Underground Fuel Tank.

Analyses were conducted by TestAmerica Laboratories, Inc. in Pleasanton, California, which is certified by the California Department of Health Services for environmental analyses. Additional analysis of specific conductivity (field analysis), methane, nitrate as nitrogen, magnesium, sulfate, sulfide, iron, and total dissolved solids (TDS) were conducted.

During the July 2013 groundwater monitoring event the samples were analyzed for TPH-DRO with silica gel cleanup.

Purge water was contained in Department of Transportation-approved drums for subsequent disposal.

#### Water Levels

The depth to water in each well was gauged on February 26 and July 22, 2013 prior to purging and groundwater sample collection. The groundwater elevations during the February 2013 monitoring event ranged from 0.78 ft amsl in injection well IW-1 to 8.72 ft amsl in monitoring well MW-9. Groundwater elevations during the July 2013 monitoring event ranged from 1.37 ft amsl in monitoring well MW-10 to 8.50 ft amsl in monitoring well MW-9.

Historical groundwater gauging and elevation data (including the HVE events) are presented in **Table 1**. Groundwater elevation maps were prepared using the February and July 2013, groundwater elevation data and are presented as **Figure 4A** and **Figure 4B**, respectively. The direction of groundwater flow was generally to the southeast during both monitoring events, which is consistent with historical groundwater flow.

SOS<sup>®</sup> Passive Skimmers were installed in observation well OW-1 and monitoring wells MW-2 and MW-3 in April 2011. The monthly skimmer free product recovery data collected from June 2011 to July 2013 are presented in **Table 1**, which also includes the historical records of free product thickness and volume recovered since 1990. During the February 26, 2013 monthly skimmer free product recovery event, 15 milliliters (mL) of free product were removed from OW-1 and 5.0 mL were removed from monitoring well MW-2. There was no free product was observed in monitoring well MW-3. The skimmers are operating effectively, and free product has been recovered on a consistent basis. As of July 22, 2013, approximately 7.14 gallons of free product have been removed from the site. Approximately 2.05 gallons were removed prior to the installation of the skimmers, and 4.27 gallons have been removed since the skimmers were installed, with an additional 0.83 gallons being removed from the wells that do not contain skimmers. The specifications for the SOS<sup>®</sup> Passive Skimmers are presented in **Appendix B**.

During the February and July 2013, monitoring events, free product was observed in monitoring well MW-12 and injection well IW-1. Free product was removed from these wells using a disposable bailer. Thirty mL of free product was removed from monitoring well MW-12 during the February monitoring event and 97 mL were removed during the July monitoring event. Five hundred fifty mL were removed from injection well IW-1 during the February monitoring event and 218 mL were removed during the July monitoring event.

### Groundwater Quality

During the February 2013 monitoring event, groundwater samples were collected from monitoring wells MW-2, MW-3, MW-4, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, and MW-14 and injection wells IW-1, IW-2, IW-3, IW-4, IW-5, and IW-6. During the July 2013 monitoring event, groundwater samples were collected from monitoring wells MW-3, MW-4, MW-8, MW-9, MW-10, MW-11, MW-13, and MW-14 and injection wells IW-2, IW-3, IW-5, and IW-6. Injection well IW-5 was re-sampled on August 12, 2013 for TPH-DRO with silica gel cleanup due to an observed increase during the July monitoring event.

Historical groundwater analytical data are presented in **Table 2**. Groundwater data for the February and July 2013 monitoring events are presented on **Figure 5A** and **Figure 5B**, respectively. Laboratory analytical results and chain-of-custody documentation for these monitoring events are provided in **Appendix C**.

## Contaminant Data

This section of the report focuses on presenting the results of laboratory analysis for contaminant data including BTEX, MTBE, TPH-GRO, TPH-DRO, and Naphthalene.

BTEX and MTBE – During both the February and July 2013 monitoring events, BTEX and MTBE concentrations were either below their respective San Francisco Bay Region environmental screening levels (ESLs) in the wells that were sampled.

TPH-GRO – During the February 2013 monitoring event, TPH-GRO was detected above the ESL (100 micrograms per liter [ $\mu\text{g/L}$ ]) for drinking water in the following wells MW-2 (910  $\mu\text{g/L}$ ), MW-3 (200  $\mu\text{g/L}$ ), MW-12 (2,500  $\mu\text{g/L}$ ), IW-1 (32,000  $\mu\text{g/L}$ ), IW-4 (5,600  $\mu\text{g/L}$ ), IW-5 (3,200  $\mu\text{g/L}$ ), and IW-6 (120  $\mu\text{g/L}$ ). During the July 2013 monitoring event, TPH-GRO was detected above the ESL for drinking water in MW-3 (290  $\mu\text{g/L}$ ). During the February event TPH-GRO exceeded the non-drinking water, ESL (210  $\mu\text{g/L}$ ) in MW-2, MW-12, IW-1, IW-4, and IW-5, and in MW-3 during the July event.

TPH-DRO – During the February 2013 monitoring event, TPH-DRO was detected above the ESLs (100  $\mu\text{g/L}$  for drinking water and 210  $\mu\text{g/L}$  for non-drinking water) in the following wells: MW-2 (3,800  $\mu\text{g/L}$ ), MW-3 (12,000  $\mu\text{g/L}$ ), MW-4 (9,900  $\mu\text{g/L}$ ), MW-8 (280  $\mu\text{g/L}$ ), MW-9 (320  $\mu\text{g/L}$ ), MW-10 (440  $\mu\text{g/L}$ ), MW-11 (1,200  $\mu\text{g/L}$ ), MW-12 (24,000  $\mu\text{g/L}$ ), MW-13 (880  $\mu\text{g/L}$ ), MW-14 (230  $\mu\text{g/L}$ ), IW-1 (59,000  $\mu\text{g/L}$ ), IW-2 (6,200  $\mu\text{g/L}$ ), IW-3 (1,100  $\mu\text{g/L}$ ), IW-4 (34,000  $\mu\text{g/L}$ ), IW-5 (25,000  $\mu\text{g/L}$ ), and IW-6 (4,800  $\mu\text{g/L}$ ).

During the July 2013 sampling event, TPH-DRO was detected above the ESL for drinking water in monitoring wells MW-3 (7,000  $\mu\text{g/L}$ ), MW-4 (1,100  $\mu\text{g/L}$ ), and injection wells IW-2 (3,400  $\mu\text{g/L}$ ), IW-5 (39,000  $\mu\text{g/L}$ ) and IW-6 (970). TPH-DRO data for injection well IW-5 is from the re-sampling event on August 12, 2013.

Naphthalene – During the February 2013 monitoring event, naphthalene concentrations were detected at or above ESLs (17  $\mu\text{g/L}$  for drinking water and 24  $\mu\text{g/L}$  for non-drinking water) in injection wells IW-1 (42  $\mu\text{g/L}$ ), IW-2 (480  $\mu\text{g/L}$ ), IW-3 (430  $\mu\text{g/L}$ ), and IW-4 (24  $\mu\text{g/L}$ ). In July 2013, naphthalene was detected at or above ESLs in injection wells IW-2 (430  $\mu\text{g/L}$ ) and IW-3 (150  $\mu\text{g/L}$ ). Concentrations were below the ESLs for both drinking water and non-drinking water in all other monitoring and injection wells.

### Biogeochemical Indicator Parameter Data

This section of the report focuses on the biogeochemical indicator parameters (nitrate, iron, sulfate, sulfide and methane).

Aquifers impacted by petroleum hydrocarbons are typically anaerobic because dissolved oxygen (DO) is energetically favorable, and is preferentially consumed by indigenous microbes during aerobic oxidation of the petroleum hydrocarbons, which serves as an electron donor in the microbial metabolism reactions. Following the depletion of oxygen, alternative electron acceptors (i.e., nitrate, iron, manganese, sulfate, and carbon dioxide) are utilized in the continued oxidation of petroleum hydrocarbons. The anaerobic oxidation of petroleum hydrocarbons under various dominant electron-accepting processes (e.g., sulfate-reduction, iron-reducing, methanogenesis, etc.) is well-founded in the literature (Finneran, et al., 2001; Aronson and Howard, 1997; and Beller, et al., 1992).

Anaerobic processes generally occur at slower kinetic rates than that observed with oxygen. Non-oxygen electron acceptors can be advantageous to oxygen as they can be highly soluble, can be supplied at elevated dissolved concentrations, and have minimal abiotic or non-target reactions that typically limit oxygen persistence in the subsurface. For example, the higher concentrations of sulfate that can be maintained in a petroleum hydrocarbon impacted aquifer accompanied by electron acceptor persistence allows for effective hydrocarbon degradation. Comparatively, active oxygen sparging approaches are fundamentally limited by low oxygen solubility in groundwater and gas transfer inefficiencies that limit the effective dissolved oxygen concentrations typically maintained in engineered aerobic reactive zones. While the kinetic rates of anaerobic oxidation may be slower than aerobic oxidation, a natural attenuation approach relying on anaerobic processes can be cost-effective for addressing petroleum hydrocarbons.

Nitrate as nitrogen – Concentrations during the February and July 2013 monitoring events were below the laboratory reporting limit of 230 µg/L. Groundwater at the site has been analyzed for nitrate since August 2012 and all samples submitted to nitrate analysis have been below the laboratory reporting limit. Given the elevated concentrations of hydrocarbons and the strong anaerobic conditions at the site, it is not surprising that the concentration of nitrate is low. After oxygen, nitrate is a thermodynamically favorable electron acceptor that can be readily used by microbes in numerous petroleum hydrocarbon oxidation metabolisms.

Iron – During the February and July 2013 monitoring events, iron concentrations ranged from 560 µg/L in monitoring well MW-13 to 42,000 µg/L in injection well IW-6

and from 1,500 µg/L in injection well IW-3 to 45,000 µg/L in injection well IW-6, respectively. Groundwater at the site has been analyzed for iron since March 2012, and in general the concentrations have ranged from approximately 1,000 to approximately 45,000 µg /L. Initial iron concentrations from MW-13 and all of the injection wells ranged as high as 210,000 to 390,000 µg /L in March 2012, but this was likely related to sediment from the newly installed and developed wells. Iron (in the form of ferrous [Fe<sup>2+</sup>] or ferric [Fe<sup>3+</sup>]) can be an indicator as to the redox condition of the groundwater. The presence of iron as ferric iron (along with other biogeochemical data) is an indication of more oxidizing groundwater and ferrous iron (along with other biogeochemical data) is an indication of more reducing groundwater. Ferric iron is slightly soluble and typically total iron is a representation of ferric iron. Ferrous iron is highly soluble and typically dissolved iron is a representation of ferrous iron. Future sampling for iron at the site will evaluate total iron and dissolved iron to discern the difference in the oxidation state of the iron.

Sulfate – During the February 2013 monitoring event, sulfate concentrations ranged from less than 1,000 µg/L in monitoring wells MW-2, MW-3, MW-8, MW-11, and injection wells IW-1, IW-2, and IW-3 to 66,000 µg/L in monitoring well MW-14. During the July 2013 event, sulfate concentrations ranged from less than 1,000 µg/L in monitoring wells MW-3, MW-4, MW-8, MW-9 and MW-10 and injection wells IW-2 and IW-6 to 2,100 µg/L in monitoring well MW-13. Similarly with nitrate and iron, the presence of sulfate suggests some available electron acceptors to facilitate anaerobic oxidation of petroleum hydrocarbons. The sulfur element in sulfate is the most oxidized form of sulfur, and as microbes use sulfate to facilitate the oxidation of hydrocarbons, electrons are transferred to the sulfur and it creates sulfide. Therefore, looking at sulfate and sulfide (along with other biogeochemical data) can provide clues as to the redox condition of the water. Depending on the environmental setting, background sulfate concentrations can range from 10,000 µg /L (typical) to 1,000,000 µg /L (tidally influenced areas). The ambient concentrations of sulfate at this site are generally within the typical range, and the numerous locations below laboratory reporting limits indicates that most of the available sulfate has been utilized in the natural anaerobic oxidation of petroleum hydrocarbons.

Sulfide – During the February 2013 monitoring event, sulfide concentrations ranged from less than 1,000 µg/L in monitoring wells MW-2, MW-3, MW-8, MW-9, MW-10, MW-12 , and MW-14 and injection wells IW-1 and IW-5 to 8,200 µg/L in injection well IW-3. During the July 2013 event, sulfide concentrations ranged from less than 1,000 µg/L in monitoring wells MW-3, MW-4, MW-9, MW-10, MW-11, MW-12 and MW-13 to 6,200 µg/L in injection well IW-6. Sulfide is highly reactive with available metals in the aquifer (e.g., iron) and as a result in most anaerobic aquifers the observed concentrations of sulfide are below 1,000 µg /L. This is because the sulfide

forms insoluble compounds with the metals and is therefore no longer present in groundwater. Observations of sulfide in groundwater in excess of 1,000 µg /L with iron concentrations in excess of 10,000 µg /L are considerable because this implies that enough sulfide is present to react with the iron and still be detected in groundwater. Because sulfide is the result of anaerobic reduction of sulfate and oxidation of petroleum hydrocarbons, concentrations of sulfide above 1,000 µg /L provide strong evidence of naturally occurring anaerobic hydrocarbon oxidation.

Methane – During the February and July 2013 monitoring events, methane concentrations ranged from 1,400 µg/L in monitoring well MW-2 to 4,100 µg/L in monitoring well MW-3, and from 3,900 µg/L in injection well IW-2 to 13,000 µg/L in monitoring well MW-13, respectively. These are similar concentrations to the 2012 results, which is the only other time methane has been analyzed. The solubility of methane in water at ambient temperature is approximately 20,000 to 25,000 µg /L, and methane concentrations above 1,000 µg /L in groundwater are generally indicative of anaerobic processes. All of the concentrations of methane presented in **Table 2** indicate elevated concentrations of methane (above 1,000 µg /L); however, not all of the wells with methane have the same elevated petroleum hydrocarbon concentrations. For example, methane concentrations observed at MW-8, MW-9, MW-10, and MW-14 range from 2,000 to 7,700 µg /L, and these wells represent some of the lowest TPH-GRO and TPH-DRO concentrations on site A possible explanation for this is a slow groundwater velocity that is not bringing oxygen from upgradient into the plume. Biological oxidation of methane in the presence of oxygen is a well recognized process. It is not advised to disrupt the anaerobic conditions at the site, and methane will be addressed over time as oxygen infiltrates the former source areas.

TDS – During the February and July 2013 monitoring events, TDS concentrations ranged from 630 mg/L in monitoring well MW-3 to 8,900 mg/L in monitoring well MW-9, and from 720 mg/L in monitoring well MW-3 to 16,000 mg/L in monitoring well MW-9, respectively. The RWQCB generally limit drinking water sources to 3,000 milligrams per liter (mg/L) TDS to be protective. Groundwater at the site is not a drinking water source, and numerous locations exceed the 3,000 mg/L standard (MW-8, MW-9, MW-10, MW-11, MW-14, IW-2, and IW-6).

## HVE Activities

Icon Environmental Services, Inc. from Union City, CA performed HVE activities, with ARCADIS oversight, on February 25, April 4, and May 5, 2013. The HVE product recovery activities were performed on MW-12, MW-13, IW-1, IW-2, and IW-3.

Groundwater and free product were extracted from monitoring and injection wells, and were pumped into the HVE storage truck. Groundwater extracted during these events was disposed of by Icon Environmental on February 25, April 4, and June 15, 2013. Waste manifests for the extraction can be found in **Appendix D**. Field notes from the HVE event are in **Appendix E** and include photoionization detector (PID) readings, total gallons extracted during the event, and depth to product.

A brief summary of the activities conducted during each of these events is provided below.

- February 25 – Prior to conducting the HVE activities, depth to water (DTW) and depth to product (DTP) measurements were collected at IW-1, IW-2, IW-3, MW-12, and MW-13. No free product was found at IW-2, IW-3, or MW-13. Approximate free product thicknesses of 0.85 feet and 1.05 feet were observed at IW-1 and MW-12, respectively. Extraction was conducted at IW-1 and MW-12. At IW-1, approximately 825 gallons were extracted at an approximate rate of 5.5 gallons per minute (gpm). At MW-12, approximately 275 gallons were extracted at an approximate rate of 1.5 gpm. The HVE activities were limited to one day. While extracting from MW-12, an approximate decrease in the water table of 2.41 feet was observed 12.30 feet away at IW-1. During the extraction, photoionization detector (PID) readings did not increase significantly and this is likely attributed to the low volatility of the TPH-DRO. HVE can be effective at enhancing volatility of lower molecular weight higher volatile petroleum hydrocarbons like BTEX, but is less effective for TPH-DRO.
- April 4 – Prior to conducting HVE activities, DTW and DTP measurements were collected at IW-1, IW-2, MW-12, and MW-13. No free product thickness was observed at IW-2 or MW-13. Approximate free product thicknesses of 0.84 feet and 0.25 feet were observed at IW-1 and MW-12, respectively. The February and April HVE activities were separated by 38 days, and, qualitatively, the free product thickness at IW-1 returned faster than MW-12. Extraction was conducted at IW-1 and MW-12 with an applied vacuum that ranged from 20 to 26 inches of mercury (in Hg). The observed PID response at the vacuum truck ranged from 1.2 to 7.3 parts per million (ppm), which is considered low in the presence of free product and supports the low volatility of TPH-DRO. At IW-1, approximately 500 gallons were extracted at an approximate rate of 4.2 gpm. At MW-12, approximately 180 gallons were extracted at an approximate rate of 1.5 gpm. During extraction at each location, water drawdown and imposed vacuum were observed at distances of 12.30 feet to 25.22 feet. The imposed vacuum at IW-1 resulted in a lower magnitude of vacuum response (0.14 to 1.22 inches of water [in w.c.]) and a lower magnitude of drawdown (up to 5.52 feet). In fact, the DTW at MW-13 (25.22 feet

away) was observed to increase which is an indication of observed vacuum response but not drawdown response. The imposed vacuum at MW-12 resulted in a higher magnitude of vacuum response (0.67 to 11.61 in w.c.) and a higher magnitude of drawdown (up to 5.80 feet). Additionally, extraction from MW-12 resulted in drawdown at MW-13. The differences in response to imposed vacuum and the difference in the thicknesses of the free product from the February to April events at IW-1 and MW-12 suggest that HVE removal at IW-1 is generally less effective than MW-12. However, HVE removal in general does not appear to be overly effective because TPH-DRO is the driving contaminant and is minimally influenced by enhanced volatility.

- May 5 – Prior to conducting HVE activities, DTW and DTP measurements were collected at IW-1, IW-2, MW-12, and MW-13. No free product thickness was observed at IW-2 or MW-13. Approximate free product thicknesses of 0.23 feet and 0.42 feet were observed at IW-1 and MW-12, respectively. The April and May HVE activities were separated by 31 days; however, due to the difference in extraction time and volume during the April event it is not appropriate to qualitatively compare free product thickness return over this time period. Extraction was conducted at IW-1 and MW-12 with an applied vacuum of approximately 9 inches of mercury (in Hg). The observed PID response at the vacuum truck ranged from 74.8 to 425 ppm, which is considered low in the presence of free product and supports the low volatility of TPH-DRO. These PID responses are the highest observed over the three HVE events. At IW-1, approximately 560 gallons were extracted at an approximate rate of 3.75 gpm. At MW-12, approximately 190 gallons were extracted at an approximate rate of 1.6 gpm. During extraction at each location, water drawdown and imposed vacuum were observed at distances of 12.30 feet to 25.22 feet. The imposed vacuum at IW-1 resulted in a lower magnitude of vacuum response (0.07 to 1.88 inches of water [in w.c.]) and a lower magnitude of drawdown (up to 0.45 feet). The imposed vacuum at MW-12 resulted in a higher magnitude of vacuum response (0.41 to 16.09 in w.c.) and a higher magnitude of drawdown (up to 1.05 feet).

Cumulatively, approximately 1,890 gallons and 645 gallons of groundwater was extracted from IW-1 and MW-12, respectively. Over the course of three HVE events, imposed vacuums of 9 to 20 in Hg were applied with minimal PID response from the recovered soil gas. Prior to conducting HVE events, the measured free product thicknesses were approximately 0.85 and 1.05 feet at IW-1 and MW-12, respectively. The most recent free product thicknesses from August 12 2013 are 0.61 and 0.17 at IW-1 and MW-12, respectively. This indicates that the HVE events were marginally successful at reducing the overall thickness of free product, but based on the modest

recovery and negligible PID response, HVE does not appear to be a worthwhile investment for petroleum hydrocarbon removal.

Bail down testing was conducted as part of the April HVE event, although because the free product thickness was less than 1 foot, the results may not accurately reflect true free product migration. The results of the test from IW-1 suggested an free product transmissivity value of 0.52 square feet per day ( $\text{ft}^2/\text{d}$ ), which implies minimal free product migration and corroborates the minimal recovery during the HVE events.

### **Summary**

- The groundwater elevations during the February 2013 monitoring event ranged from 0.78 ft amsl in II IW-1 to 8.72 ft amsl in MW-9. Groundwater elevations during the July 22, 2013 monitoring event ranged from 1.37 ft amsl in monitoring well MW-10 to 8.50 ft amsl in monitoring well MW-9.
- Groundwater elevations indicated that the apparent groundwater flow direction was generally to the southeast on February 26 and July 22, 2013.
- BTEX and MTBE were not detected above their respective ESLs in the sampled monitoring wells during the February and July monitoring events, which is consistent with previous events.
- TPH-GRO was detected above the ESL for drinking water in wells MW-2, MW-3, MW-12, IW-1, IW-4, IW-5, and IW-6 during the February 2013 sampling event. During the July 2013 monitoring event, TPH-GRO was detected above the ESL for drinking water in MW-3. The ESL for non-drinking water was exceeded during the February monitoring event in MW-2, MW-12, IW-1, IW-4, and IW-5, and during the July monitoring event in MW-3.
- TPH-DRO was detected above ESLs in MW-2, MW-3, MW-4, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, IW-1, IW-2, IW-3, IW-4, IW-5, and IW-6. During the July 2013 sampling event, TPH-DRO was detected above the ESL for drinking water in MW-3, MW-4, IW-2, IW-5 and IW-6.

### **Recommendations**

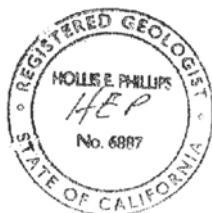
In October 2013 ARCADIS will conduct an additional soil a groundwater investigation in accordance with the *Revised Work Plan for Separate Phase Hydrocarbon Characterization and Dissolved Phase Plume Delineation* (ARCADIS 2013). A Conceptual Site Model will be submitted to ACEH by December 6, 2013.

If you have any questions regarding this report, please do not hesitate to contact me at 415.432.6903. Please send correspondence regarding this report to Mr. Paul Harper of UPS at the address provided below. Please copy ARCADIS on all correspondence.

Sincerely,

ARCADIS U.S., Inc.

Hollis E. Phillips, PG  
Project Manager  
California PG No. 6887



Attachments:

- |            |                                                                         |
|------------|-------------------------------------------------------------------------|
| Figure 1   | Site Location Map                                                       |
| Figure 2   | Facility Layout Map                                                     |
| Figure 3   | Site Map                                                                |
| Figure 4A  | Groundwater Contour Map February 26, 2013                               |
| Figure 4B  | Groundwater Contour Map July 22, 2013                                   |
| Figure 5A  | Groundwater Quality Map February 26, 2013                               |
| Figure 5 B | Groundwater Quality Map July 22-23, 2013                                |
| Table 1    | Historical Groundwater Elevation Summary                                |
| Table 2    | Historical Groundwater Monitoring Results and Baseline Sampling Summary |
| Appendix A | Field Data Sheets                                                       |
| Appendix B | SOS® Passive Skimmers Specifications                                    |
| Appendix C | Laboratory Analytical Results and Chain-of-Custody Documentation        |
| Appendix D | Waste Manifest                                                          |
| Appendix E | HVE Field Notes                                                         |

Copies:

Paul Harper – UPS Corporate Plant Engineering; 55 Glenlake Parkway NE, Atlanta, GA 30328

Douglas Herman -Port of Oakland; 530 Water Street, Oakland, CA 94607

File

## References:

ARCADIS, Inc (ARCADIS) 2011. *Summary of Soil and Groundwater Investigation Activities Report*. February 15, 2011.

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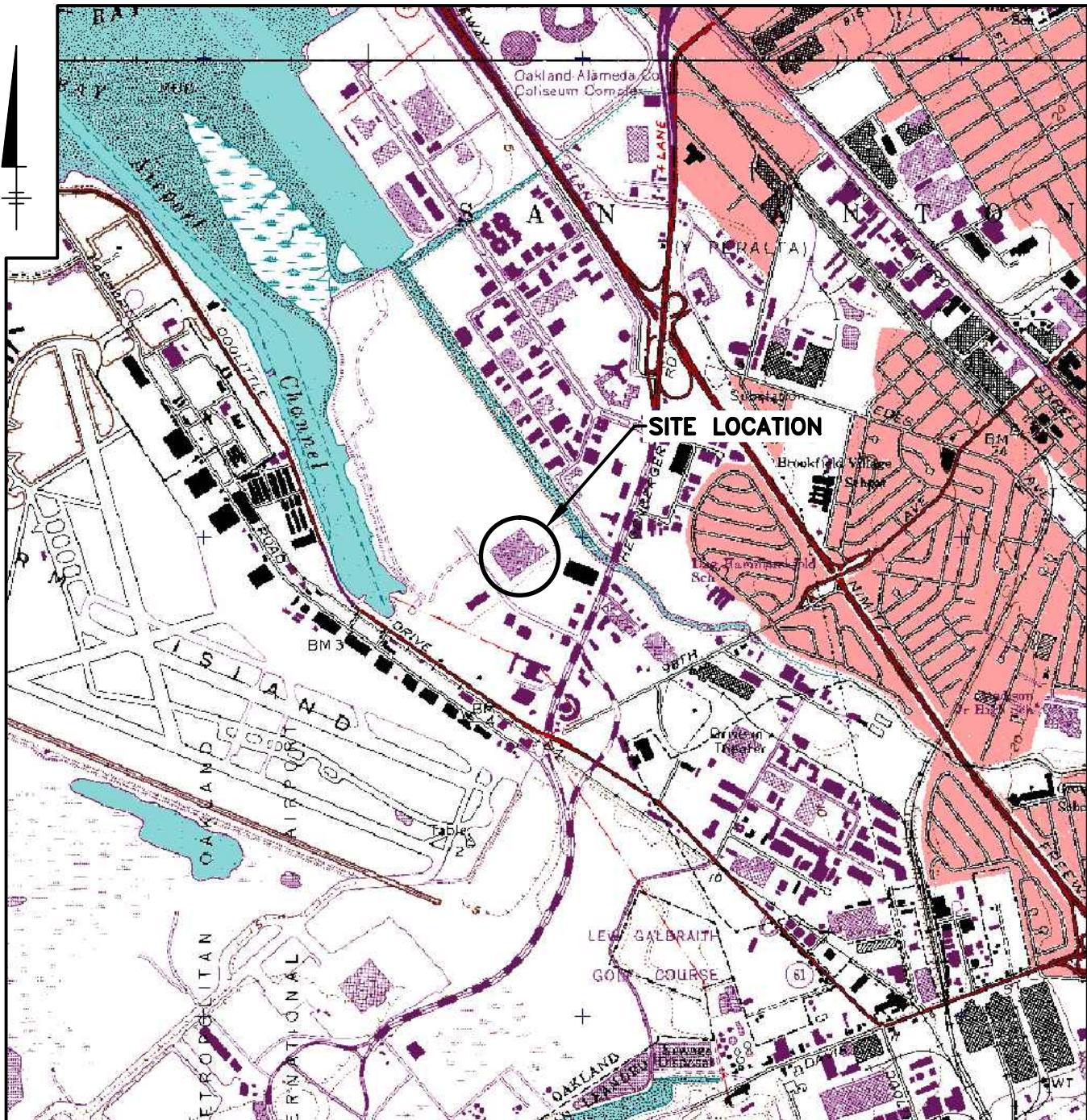
State Water Resources Control Board. 2012b. Low-Threat Underground Storage Tank Case Closure Policy. Adopted May 1, 2012, Effective August 17, 2012.

([http://www.swrcb.ca.gov/ust/ltr\\_cls\\_pclcy.shtml](http://www.swrcb.ca.gov/ust/ltr_cls_pclcy.shtml))

**ARCADIS**

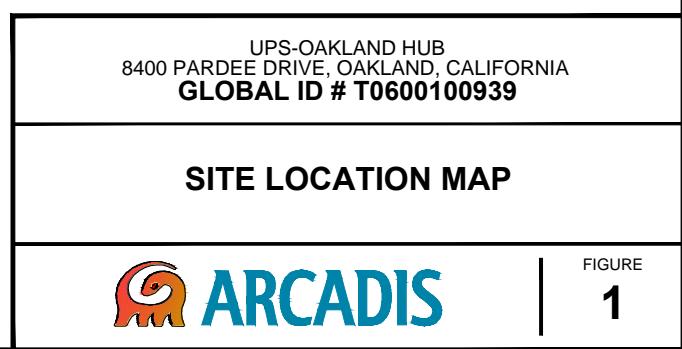
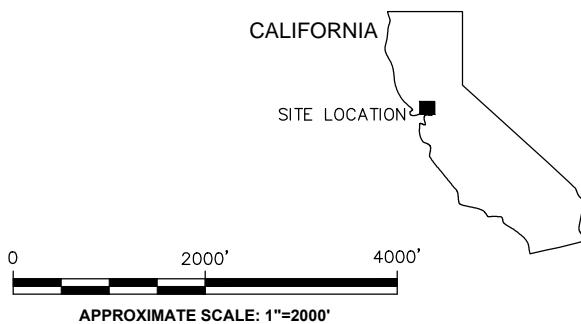
**Figures**

UPS – Oakland Hub



NOTES:

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





PROJECT NAME: ---  
AREA MAP:jf9  
UPSOakland.jpg

----- PROPERTY BOUNDARY

0 200' 400'

GRAPHIC SCALE

SOURCE: AERIAL PHOTOGRAPH PROVIDED BY GOOGLE EARTH PRO.

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

## FACILITY LAYOUT MAP

 **ARCADIS**

FIGURE  
**2**





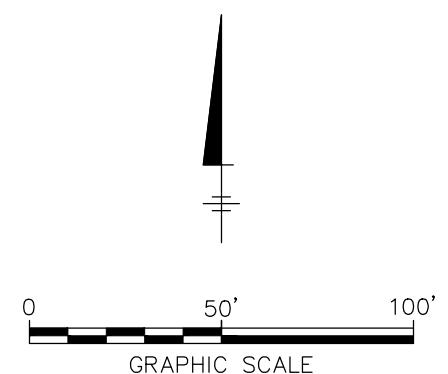
UPS-OAKLAND HUB  
 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA  
 GLOBAL ID # T0600100939

GROUNDWATER CONTOUR MAP  
 FEBRUARY 26, 2013



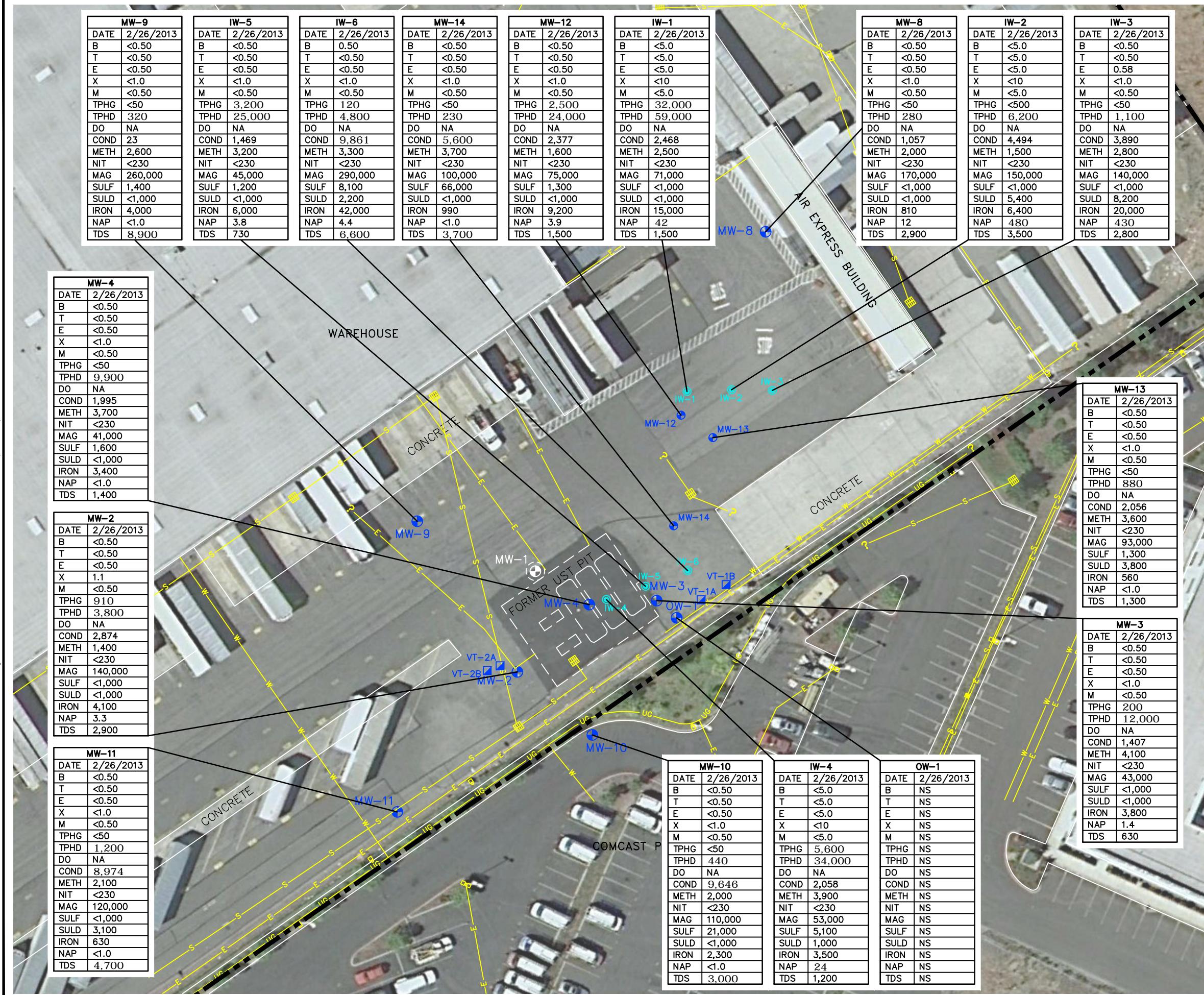
**LEGEND**

- MONITORING WELL
- TEMPORARY VACUUM TEST WELL
- PHASE I INJECTION WELL
- ABANDONED MONITORING WELL
- 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
- 6' — WATER-TABLE ELEVATION CONTOUR DASHED WHERE INFERRED CONTOUR INTERVAL = 2.0 FEET
- (6.63) — WATER-TABLE ELEVATION (FEET)
- ↔ APPARENT DIRECTION OF GROUNDWATER FLOW
- \* DATA NOT USED FOR CONTOURING



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

GROUNDWATER CONTOUR MAP  
 JULY 23, 2013



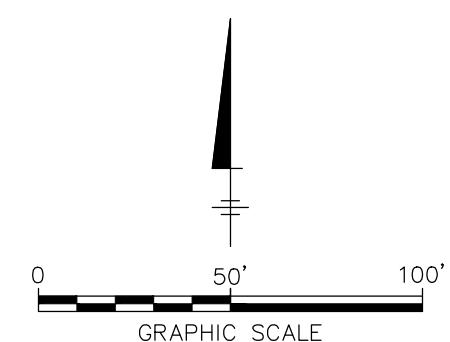
ALL RESULTS REPORTED IN MICROGRAMS PER LITER ( $\mu\text{g/L}$ ),  
D.O. AND TDS REPORTED IN MILLIGRAMS PER LITER (mg/L),  
CONDUCTIVITY REPORTED IN MICROSIEGMENS ( $\mu\text{S}$ )

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

I = THE REPORTED VALUE IS BETWEEN THE LABORATORY METHOD DETECTION LIMIT (MDL) AND THE LABORATORY PRACTICAL QUANTITATION LIMIT (PQL)

BOLD VALUES INDICATE THE CONCENTRATION EXCEEDS THE CLEANUP TARGET LEVEL LISTED IN TABLE I OF CHAPTER 62-777 F.A.C.

NS = NOT SAMPLED



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

GROUNDWATER QUALITY MAP  
FEBRUARY 26, 2013

MW-9	
DATE	7/23/2013
B	<0.50
T	<0.50
E	<0.50
X	<1.0
M	<0.50
TPHG	<50
TPHD	<52
DO	NA
COND	12,700
METH	5,400
NIT	<230
MAG	390,000
SULF	<1,000
SULD	<1,000
IRON	11,000
NAP	<1.0
TDS	16,000

IW-5	
DATE	7/23/2011
B	<0.50
T	<0.50
E	<0.50
X	<1.0
M	<0.50
TPHG	3,500
TPHD	35,000
DO	NA
COND	1,316
METH	13,000
NIT	<230
MAG	6,300
SULF	<1,000
SULD	5,800
IRON	7,400
NAP	5.0
TDS	830

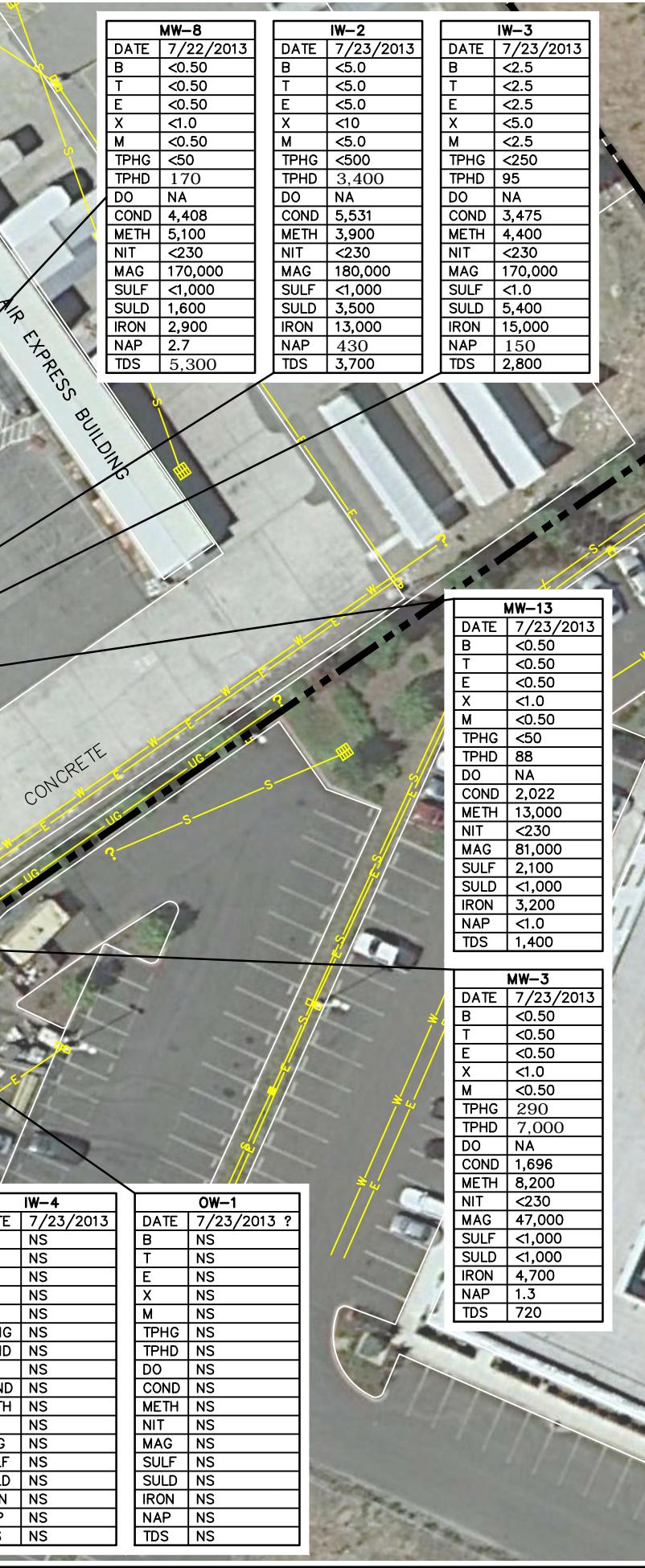
IW-6	
DATE	7/23/20
B	<0.50
T	<0.50
E	<0.50
X	<1.0
M	<0.50
TPHG	110
TPHD	970
DO	NA
COND	14,451
METH	8,200
NIT	<230
MAG	410,000
SULF	<1,000
SULD	6,200
IRON	45,000
NAP	9.9
TDS	10,000

MW-14	
DATE	7/23/20
B	<0.50
T	<0.50
E	<0.50
X	<1.0
M	<0.50
TPHG	<50
TPHD	<56
DO	NA
COND	5,497
METH	6,000
NIT	NA
MAG	NA
SULF	NA
SULD	NA
IRON	NA
NAP	<1.0
TDS	NA

MW-12	
DATE	7/23/2
B	NS
T	NS
E	NS
X	NS
M	NS
TPHG	NS
TPHD	NS
DO	NS
COND	NS
METH	NS
NIT	NS
MAG	NS
SULF	NS
SULD	NS
IRON	NS
NAP	NS
TDS	NS

	IW-1
DATE	7/23/
B	NS
T	NS
E	NS
X	NS
M	NS
TPHG	NS
TPHD	NS
DO	NS
COND	NS
METH	NS
NIT	NS
MAG	NS
SULF	NS
SULD	NS
IRON	NS
NAP	NS
TDS	NS

13  
MW-8



	<b>MW-E</b>
DATE	7/2/01
B	<0.5
T	<0.5
E	<0.5
X	<1.0
M	<0.5
TPHG	<500
TPHD	170
DO	NA
COND	4,400
METH	5,100
NIT	<230
MAG	170,
SULF	<1,000
SULD	1,600
IRON	2,900
NAP	2.7
TDS	5,300

IW-2	
/2013	DATE 7/23/
	B <5.0
	T <5.0
	E <5.0
	X <10
	M <5.0
	TPHG <500
	TPHD 3,400
	DO NA
	COND 5,531
	METH 3,900
	NIT <230
00	MAG 180,000
0	SULF <1,000
	SULD 3,500
	IRON 13,000
	NAP 430
	TDS 3,700

IW-3	
DATE	7/23/20
B	<2.5
T	<2.5
E	<2.5
X	<5.0
M	<2.5
TPHG	<250
TPHD	95
DO	NA
COND	3,475
METH	4,400
NIT	<230
MAG	170,000
SULF	<1.0
SULD	5,400
IRON	15,000
NAP	150
TDS	2,800

## LEGEND

-  MONITORING WELL
  -  TEMPORARY VACUUM TEST WELL
  -  PHASE I INJECTION WELL
  -  ABANDONED MONITORING WELL
  -  PROPERTY BOUNDARY
  -  CATCH BASIN/STORM DRAIN
  -  LIGHT POST/ POWER POLE

SAMPLE LOCATION	
DATE	SAMPLE DATE
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLEMES
M	METHYL TERT-BUTYL ETHER
TPHG	TPH GASOLINE
TPHD	TPH DIESEL
DO	DISSOLVED OXYGEN
COND	CONDUCTIVITY
METH	METHANE
NIT	NITRATE AS NITROGEN
MAG	MAGNESIUM
SULF	SULFATE
SULD	SULFIDE
IRON	IRON
NAP	NAPHTHALENE
TDS	TOTAL DISSOLVED SOLIDS

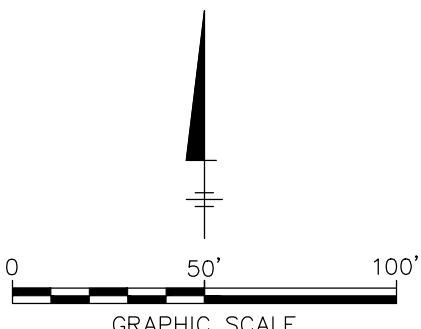
ALL RESULTS REPORTED IN MICROGRAMS PER LITER ( $\mu\text{g/L}$ ),  
D.O. AND TDS REPORTED IN MILLIGRAMS PER LITER (mg/L),  
CONDUCTIVITY REPORTED IN MICROSIEMENS ( $\mu\text{s}$ )

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

I = THE REPORTED VALUE IS BETWEEN THE LABORATORY METHOD DETECTION LIMIT (MDL) AND THE LABORATORY PRACTICAL QUANTITATION LIMIT (PQL)

BOLD VALUES INDICATE THE CONCENTRATION EXCEEDS THE CLEANUP TARGET LEVEL LISTED IN TABLE I OF CHAPTER 62, 772, EAC

NS = NOT SAMPLED



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

# **GROUNDWATER QUALITY MAP**

## **JULY 22-23, 2013**

**ARCADIS**

**Tables**

UPS – Oakland Hub

**TABLE 1**  
**HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

Monitoring Well	Reference Elevation* (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	2.32	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
		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

**TABLE 1**  
**HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

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	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	N/A	NR
		6/19/1991	4.66	2.49	N/A	NR
		7/23/1991	4.81	2.34	N/A	NR
		8/26/1991	4.89	2.26	N/A	NR
		11/18/1991	4.93	2.22	N/A	NR
		2/3/1992	4.44	2.71	N/A	NR
		6/29/1992	4.80	2.35	N/A	NR
		6/23/1993	4.38	2.77	N/A	NR
		10/11/1993	5.20	1.95	N/A	NR
		1/4/1994	4.56	2.59	N/A	NR
		5/10/1994	4.20	2.95	N/A	NR
		2/1/1995	4.00	3.15	N/A	NR
		8/2/1995	4.71	2.44	N/A	NR
		10/16/1995	5.02	2.13	N/A	NR
		12/28/1995	4.56	2.59	N/A	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	2.18	0.08	NR
		2/12/2002	4.26	2.89	0.01	24.00
		9/3/2002	5.02	2.13	0.07	NR
		9/27/2002	4.89	2.26	0.09	222.30
		10/22/2002	5.11	2.04	0.05	125.00
		12/23/2002	4.25	2.90	0.04	99.00
		1/16/2003	4.28	2.87	0.02	49.00
		2/12/2003	4.26	2.89	0.01	24.00
		3/28/2003	4.35	2.80	0.01	25.00
		5/30/2003	3.60	3.55	0.02	49.00
		6/20/2003	4.55	2.60	0.01	NR
		7/14/2003	4.56	2.59	0.00	NR
		8/25/2003	4.79	2.36	0.01	25.00
		9/9/2003	4.90	2.25	0.01	NR
		9/25/2003	4.97	2.18	0.01	25.00
		10/28/2003	4.98	2.17	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	2.59	0.01	NR
		3/29/2004	4.24	2.91	0.01	NR
		4/19/2004	4.50	2.65	0.01	25.00
		5/20/2004	4.53	2.62	0.00	NR

**TABLE 1**  
**HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

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	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	2.15	0.02	50.00
		10/25/2004	4.68	2.47	0.00	NR
		12/15/2004	4.34	2.81	0.02	50.00
		1/24/2005	4.15	3.00	0.00	NR
		2/23/2005	4.95	2.20	0.03	74.00
		3/23/2005	4.96	2.19	0.02	49.00
		4/29/2005	4.23	2.92	0.10	246.00
		5/27/2005	4.20	2.95	0.02	50.00
		6/29/2005	4.29	2.86	0.00	NR
		7/20/2005	4.48	2.67	0.04	98.00
		8/24/2005	4.71	2.44	0.00	NR
		9/27/2005	4.98	2.17	0.03	70.00
		10/19/2005	5.08	2.07	0.00	NR
		11/29/2005	4.68	2.47	0.01	NR
		12/29/2005	4.19	2.96	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	3.04	0.01	NR
		4/28/2006	4.03	3.12	0.00	NR
		6/27/2006	4.45	2.70	0.01	NR
		7/31/2006	4.60	2.55	0.02	NR
		8/29/2006	4.84	2.31	0.01	NR
		9/28/2006	4.96	2.19	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	2.93	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	2.85	0.01	NR
		4/26/2007	4.17	2.98	0.03	NR
		5/29/2007	4.42	2.73	0.01	25.00
		6/28/2007	5.16	1.99	0.01	25.00
		7/30/2007	4.71	2.44	0.00	NR
		8/30/2007	4.94	2.21	0.03	NR
		9/25/2007	5.06	2.09	0.01	25.00
		10/29/2007	4.75	2.40	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	3.18	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	2.57	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	2.26	0.01	25.00
		9/30/2008	5.14	2.01	0.04	98.00
		10/31/2008	5.23	1.92	0.03	NR
		11/26/2008	4.74	2.41	0.04	NR
		12/30/2008	4.33	2.82	0.01	25.00
		1/22/2009	4.45	2.70	0.01	25.00

**TABLE 1**  
**HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

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	5/5/2010	4.03	5.60	0.13	NR	
		10/29/2010	4.98	4.65	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	4.91	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	4.56	0.01	591.47	
		10/19/2011	4.77	4.86	0.01	591.47	
		11/22/2011	4.92	4.71	0.01	532.32	
		12/26/2011	4.92	4.71	0.01	532.32	
		1/23/2012	5.20	4.43	0.28	561.83	
		2/15/2012	5.16	4.47	0.03	591.40	
		2/29/2012	4.75	4.88	0.02	NR	
		3/19/2012	4.42	5.21	0.00	NR	
		5/1/2012	4.18	5.45	0.03	532.32	
		6/5/2012	4.61	5.02	0.01	NR	
		7/3/2012	4.91	4.72	0.03	532.32	
		8/1/2012	4.93	4.70	0.01	NR	
		8/3/2012	4.985	4.65	0.05	591.47	
		10/25/2012	5.49	4.14	0.02	5.0	
		11/19/2012	5.21	4.42	0.00	25.0	
		12/20/2012	5.76	3.87	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	4.64	0.01	5.0	
		6/26/2013	5.23	4.40	0.00	NR	
		7/22/2013	5.15	4.48	0.06	NR	
		8/12/2013	5.15	4.48	0.02	0.0	
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):						5163.07	
MW-2 Total product recovered:						6989.37	

**TABLE 1**  
**HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

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	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
		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

**TABLE 1**  
**HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

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	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	4.27	0.00	NR	
		2/21/2008	2.41	5.02	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	
MW-3	9.89	5/5/2010	3.13	6.76	0.02	NR	
		10/29/2010	4.70	5.19	0.00	NR	
		2/25/2011	1.54	8.35	0.02	NR	
		6/14/2011	3.25	6.64	0.05	NR	
		7/19/2011	3.53	6.36	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	
		12/26/2011	4.70	5.19	sheen	532.32	
		1/23/2012	4.11	5.78	0.01	532.26	
		2/15/2012	4.90	4.99	0.02	591.40	
		2/29/2012	4.14	5.75	0.03	NR	
		3/19/2012	2.98	6.91	0.00	NR	
		5/1/2012	2.91	6.98	0.01	532.32	
		6/5/2012	3.80	6.09	0.00	NR	
		7/3/2012	4.22	5.67	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	4.88	0.01	10.00	
		6/26/2013	5.13	4.76	0.01	NR	
		7/22/2013	5.48	4.41	0.00	NR	
		8/12/2013	5.44	4.45	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):						6673.89	
MW-3 Total product recovered:						6673.89	

**TABLE 1**  
**HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

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	5/5/2010	2.96	6.81	0.00	
		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	5.32	0.01	NR
		2/25/2013	NM	--	--	--
		2/26/2013	4.09	5.68	0.01	NR
		4/14/2013	NM	--	--	--
		5/15/2013	NM	-	-	-
		7/22/2013	5.10	4.67	0.00	NR
		8/12/2013	5.25	4.52	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	--	--	--
		2/26/2013	3.38	4.84	0.00	NR
		4/14/2013	NM	--	--	--
		5/15/2013	NM	-	-	-
		7/22/2013	3.90	4.32	0.00	NR
		8/12/2013	4.08	4.14	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	--	--	--
		2/26/2013	5.91	8.72	0.00	NR
		4/14/2013	NM	--	--	--
		5/15/2013	NM	-	-	-
		7/22/2013	6.13	8.50	0.00	NR
		8/12/2013	6.29	8.34	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	1.34	0.01	NR
		2/25/2013	NM	--	--	--
		2/26/2013	8.28	1.40	0.00	NR
		4/14/2013	NM	--	--	--
		5/15/2013	NM	-	-	-
		7/22/2013	8.31	1.37	0.00	NR
		8/12/2013	8.64	1.04	0.00	NR

**TABLE 1**  
**HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

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	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	3.33	0.01	NR
		2/25/2013	NM	--	--	--
		2/26/2013	5.96	3.53	0.00	NR
		4/14/2013				
		5/15/2013	NM	-	-	-
		7/22/2013	6.05	3.44	0.00	NR
		8/12/2013	6.43	3.06	0.00	NR
MW-12	9.43	3/19/2012	4.40	5.03	0.18	NR
		6/5/2012	6.31	3.12	0.72	NR
		8/1/2012	7.39	2.04	1.40	NR
		8/3/2012	7.15	2.28	1.30	NR
		10/25/2012	6.74	2.69	0.72	NR
		11/19/2012	6.45	2.98	0.80	NR
		12/20/2012	5.90	3.53	0.90	NR
		1/24/2013	6.53	2.90	1.19	725.00
		2/25/2013	6.55	2.88	1.05	ND
		2/26/2013	7.75	1.68	0.05	30.00
		4/14/2013	5.70	3.73	0.25	ND
		4/22/2013	6.27	3.16	0.46	278.00
		5/15/2013	6.51	2.92	0.42	ND
		5/30/2013	6.67	2.76	0.25	151.00
		6/26/2013	6.82	2.61	0.33	200.00
		7/22/2013	6.69	2.74	0.16	97.00
		8/12/2013	6.73	2.70	0.17	0.00
MW-12 Total product recovered:						1184.00
MW-13	9.10	3/19/2012	3.56	5.54	--	NR
		6/5/2012	4.50	4.60	0.00	NR
		8/1/2012	5.15	3.95	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
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	5.60	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
OW-1	N/A	3/19/2012	6.05	3.24	0.00	NR
		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

**TABLE 1**  
**HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

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	N/A	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
		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 <sup>5</sup>
		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

**TABLE 1**  
**HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

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	5/5/2010	7.08	2.47	0.06	NR	
		10/29/2010	7.37	2.18	0.08	NR	
		2/25/2011	6.17	3.38	0.05	NR	
		6/14/2011	6.78	2.77	0.08	0.00	
		7/19/2011	7.30	2.25	0.20	118.29	
		8/18/2011	7.35	2.20	0.03	147.87	
		9/1/2011	7.35	2.20	0.03	147.87	
		9/20/2011	7.41	2.14	0.04	591.47	
		10/19/2011	7.42	2.13	0.03	532.32	
		11/22/2011	7.09	2.46	0.03	29.57	
		12/26/2011	7.32	2.23	0.02	147.87	
		1/23/2012	6.90	2.65	0.30	532.26	
		2/15/2012	7.32	2.23	0.02	591.40	
		2/29/2012	7.54	2.01	0.08	NR	
		3/19/2012	7.25	2.30	0.01	NR	
		5/1/2012	7.14	2.41	0.01	532.32	
		6/5/2012	8.55	1.00	0.01	NR	
		7/3/2012	7.63	1.92	0.04	295.70	
		8/1/2012	7.81	1.74	0.00	NR	
		8/3/2012	7.50	2.05	0.14	591.47	
		10/25/2012	7.34	2.21	0.02	5.0	
		11/19/2012	7.26	2.29	0.20	10.0	
		12/20/2012	6.93	2.62	0.03	5.0	
		1/24/2013	6.89	2.66	0.03	10.0	
		2/25/2013	NM	--	--	--	
		2/26/2013	7.72	1.83	0.03	15.0	
		4/14/2013	NM	--	--	--	
		4/22/2013	7.68	1.87	0.03	15.0	
		5/15/2013	NM	-	-	-	
		5/30/2013	7.50	2.05	0.05	20.0	
		6/26/2013	7.56	1.99	0.05	NR	
		7/22/2013	7.84	1.71	0.10	5.0	
		8/12/2013	7.55	2.00	0.01	NR	
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):						4338.41	
OW-1 Total product Recovered:						10282.09	
IW-1	9.50	3/19/2012	4.38	5.12	0.00	NR	
		6/5/2012	6.24	3.26	0.59	NR	
		8/1/2012	7.29	2.21	1.23	NR	
		8/3/2012	7.01	2.49	1.10	NR	
		10/25/2012	7.05	2.45	1.00	NR	
		11/19/2012	6.50	3.00	0.90	NR	
		12/20/2012	5.85	3.65	0.74	NR	
		1/24/2013	6.54	2.96	1.13	690.00	
		2/25/2013	6.50	3.00	0.85	ND	
		2/26/2013	8.72	0.78	0.91	550.00	
		4/14/2013	5.64	3.86	0.84	ND	
		4/22/2013	6.56	2.94	0.66	400.00	
		5/15/2013	6.79	2.71	0.23	ND	
		5/30/2013	6.93	2.57	0.47	284.00	
		6/26/2013	6.98	2.52	0.54	327.00	
		7/22/2013	6.89	2.61	0.36	218.00	
		8/12/2013	6.95	2.55	0.61	370.00	
IW-1 Total product Recovered:						1924.00	

**TABLE 1**  
**HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

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	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
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	--	--	--
		5/15/2013	NM	-	-	-
		7/22/2013	4.80	4.13	0.00	NR
		8/12/2013	5.23	3.70	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	5.32	0.01	NR
		2/25/2013	NM	-	-	-
		2/26/2013	4.29	5.67	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
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

**TABLE 1**  
**HISTORICAL GROUNDWATER ELEVATION SUMMARY**

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

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-6	9.67	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	5.31	0.01	NR	
		2/25/2013	NM	-	-	-	
		2/26/2013	4.10	5.57	0.00	NR	
		4/14/2013	NM	--	--	--	
		5/15/2013	NM	-	-	-	
		7/22/2013	5.09	4.58	0.00	NR	
		8/12/2013	5.23	4.44	0.00	NR	
Total product recovered from skimmers (MW-2, MW-3 and OW-1):							
Total product recovered prior to skimmer installation (mL):							
7770.0							
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):							
16175.4							
Total product recovered post skimmer installation (oz):							
546.0							
Total product recovered post skimmer installation (gal):							
4.27							
Total product recovered from wells without skimmers (mL):							
3108.00							
Total product recovered from wells without skimmers (oz):							
106.00							
Total product recovered from wells without skimmers (gal):							
0.83							
Total product recovered (mL):							
27053.4							
Total product recovered (oz):							
914.0							
Total product recovered (gal):							
7.14							

Notes:

\* Reference elevation surveyed relative to mean sea level and California State Coordinate System, Zone III (NAD83)

2. Sources: Geraghty and Miller, 1996; BBL

3. Acronyms and Abbreviations: NM = Not measured; NC = Not calculated; N/A= Not Available; NR = No Recovery

4. ft-btoc = feet below top of casing

5. ft-amsl = feet above mean sea level

6. NR = not recovered

7. mL = milliliters

8. oz = ounces

9. gal = gallons

10 - = no data

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

12. Volume of product recovered on 9/27/02 and 3/23/05 calculated based on measurements from field data sheets

**TABLE 2**  
**HISTORICAL GROUNDWATER MONITORING RESULTS AND BASELINE SAMPLING SUMMARY**  
 UPS-OAKLAND HUB  
 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA  
 STATE ID # 583

Monitoring Well	Date	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	MTBE µg/L	TPH as gasoline µg/L	TPH as diesel µg/L	D.O. (mg/L)	Temperature °C	pH	Conductivity µS	EDB µg/L	1,2-DCA µg/L	Methane µg/L	Nitrate as Nitrogen µg/L	Magnesium µg/L	Sulfate µg/L	Sulfide µg/L	Iron µg/L	Naphthalene µg/L	TDS (mg/L)
Field Analysis	--	--	--	--	--	--	--	--	--	5,000	--	--	--	--	--	--	--	--	--	--	3,000	
ESL - Drinking Water	--	1	40	30	20	5	100	100	--	--	--	--	0.05	0.5	--	--	--	--	--	17	--	
ESL - Non-Drinking Water	--	46	130	43	100	1800	210	210	--	--	--	--	150	200	--	--	--	--	--	24	--	
MW-1	8/28/1990	3.00	1.40	4.00	2.40	NA	NA	21,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/19/1991	1.70	0.70	0.50	0.90	NA	NA	7,100	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	7/23/1991	1.60	1.10	0.50	1.50	NA	NA	220	8,700	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/26/1991	180.00	120.00	31.00	160.00	NA	NA	2,800	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	11/18/1991	1.10	0.40	0.50	< 0.3	NA	NA	6,600	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2/3/1992	0.90	< 0.3	0.80	0.70	NA	NA	2,200	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/29/1992	0.80	0.40	0.40	0.90	NA	NA	2,100	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/23/1993	0.66	< 0.5	0.50	< 0.5	NA	NA	3,200	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10/11/1993	1.30	< 0.5	< 0.5	< 0.5	NA	NA	9,600	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1/4/1994	2.10	0.65	1.30	2.10	NA	NA	12,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	5/10/1994	0.54	0.53	< 0.5	1.10	NA	NA	6,400	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2/1/1995	< 1.0	< 1.0	1.00	< 1.0	NA	510	10,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	510	8,700	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10/16/1995	2.80	< 0.5	< 0.5	< 0.5	NA	830	15,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	12/28/1995	2.10	< 0.5	< 0.5	< 0.5	NA	560	15,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/4/1997	NA	NA	NA	NA	NA	NA	28,000	0.76	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/30/1999	< 0.5	0.60	< 0.5	1.80	< 3.0	1,600	28,000	9.90	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10/11/2000	< 0.5	< 0.5	< 0.5	< 1.0	< 5	260	21,000	0.39	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/3/2002	< 0.5	< 0.5	< 0.5	0.50	< 0.5	1.00	38,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/28/2003	< 5	< 5	< 5	< 10	< 5.0	250	35,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/9/2003	< 0.5	< 0.5	< 1.0	0.60	440	11,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4/19/2004	3.20	< 2.5	< 2.5	< 5.0	< 2.5	280	24,000 ndp	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/29/2004	< 1.0	< 1.0	< 1.0	< 2.0	2.10	1,400 g	150,000 ndp	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/23/2005	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	550 Q1	15,000 Q2	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	11/29/2005	< 0.50	< 0.50	< 0.50	< 1.0	0.94	310	7,800	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/27/2006	< 0.50	< 0.50	< 0.50	< 1.0	0.62	420	11,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/28/2006	< 0.50	< 0.50	< 0.50	< 1.0	0.87	220	28,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/19/2007	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	940	11,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/25/2007	< 0.50	< 0.50	< 0.50	1.1	< 0.50	240	9,700	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/28/2008	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	55	13,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/30/2008	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	280	9,800	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4/3/2009																					
MW-2	8/28/1990	0.60	0.40	0.60	0.70	NA	NA	3,500	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/19/1991	0.50	< 0.3	< 0.3	< 0.3	NA	NA	< 500	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	7/23/1991	0.70	< 0.3	< 0.3	< 0.3	NA	NA	< 500	660	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/26/1991	0.70	< 0.3	< 0.3	< 0.3	NA	NA	< 500	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	11/18/1991	0.80	< 0.3	< 0.3	< 0.3	NA	NA	3,200	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2/3/1992	0.70	< 0.3	< 0.3	0.50	NA	NA	400	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/29/1992	0.60	< 0.3	< 0.3	< 0.3	NA																

**TABLE 2**  
**HISTORICAL GROUNDWATER MONITORING RESULTS AND BASELINE SAMPLING SUMMARY**  
UPS-OAKLAND HUB  
8400 PARDEE DRIVE, OAKLAND, CALIFORNIA  
STATE ID # 583

Monitoring Well	Date	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	MTBE µg/L	TPH as gasoline µg/L	TPH as diesel µg/L	D.O. (mg/L)	Temperature °C	pH	Conductivity µS	EDB µg/L	1,2-DCA µg/L	Methane µg/L	Nitrate as Nitrogen µg/L	Magnesium µg/L	Sulfate µg/L	Sulfide µg/L	Iron µg/L	Naphthalene µg/L	TDS (mg/L)
Field Analysis	--	--	--	--	--	--	--	--	--	5,000	--	--	--	--	--	--	--	--	--	--	3,000	
ESL - Drinking Water	--	1	40	30	20	5	100	100	--	--	--	--	0.05	0.5	--	--	--	--	--	17	--	
ESL - Non-Drinking Water	--	46	130	43	100	1800	210	210	--	--	--	--	150	200	--	--	--	--	--	24	--	
MW-3	8/28/1990	0.50	0.80	4.30	2.30	NA	NA	18,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/19/1991	0.40	0.40	1.70	1.40	NA	NA	1,300	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	7/23/1991	0.30	< 0.3	1.50	0.50	NA	330	6,800	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/26/1991	13.00	13.00	5.80	26.00	NA	NA	<50	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	11/18/1991	0.60	< 0.3	< 0.3	< 0.3	NA	NA	2,500	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2/3/1992	0.40	< 0.3	1.30	0.60	NA	NA	1,100	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/29/1992	< 0.3	< 0.3	1.30	0.30	NA	NA	3,200	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/23/1993	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	8,100	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10/11/1993	1.00	< 0.5	1.50	2.40	NA	NA	7,100	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1/4/1994	< 0.5	< 0.5	1.60	< 0.5	NA	NA	7,400	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	5/10/1994	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	5,700	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2/1/1995	< 1.0	< 1.0	2.70	4.10	NA	810	10,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	1200	6,500	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10/16/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	930	9,800	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	12/28/1995	< 0.5	< 0.5	< 0.5	< 0.5	NA	690	11,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/4/1997	NA	NA	NA	NA	NA	NA	34,000	0.84	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/30/1999	< 0.5	0.60	0.70	1.20	< 3.0	1300	8,700	8.60	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10/11/2000	< 0.5	< 0.5	< 0.5	< 1.0	< 5.0	430	20,000	0.51	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/3/2002	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2,300	14,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/28/2003	< 25	< 25	< 25	< 50	< 25	2,500	19,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/9/2003	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	700	73,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4/19/2004	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	99	14,000 ndp	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/29/2004	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	390 g	10,000 ndp	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1/24/2005	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	330 Q1	14,000 Q2	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	11/29/2005	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	1,200	8,300	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/27/2006	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	430	13,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/28/2006	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	370	17,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/19/2007	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	510	26,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/25/2007	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	390	11,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/28/2008	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	280	21,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/30/2008	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	270	9,500	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	5/5/2010	NA	NA	NA	NA	NA	<150	24,000	NA	NM	NM	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	2.2	910	
	2/25/2011	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/1/2011	< 0.50	1.70	< 0.50	2.1	< 0.50	450	24,000	NA	NM	1,378	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2/29/2012	< 0.50	< 0.50	< 0.50	1.3	< 0.50	520	13,000	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	2.1	NA	
	3/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NA	NA	NA	NA	47,000	7,900	NA	5,800	NA	770 H	
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/1/2012	< 0.50	< 0.50	< 0.50	1.1	< 0.50	1,200	43,000	NA	NM	NM	NA	NA	NA	NA	3,200	<230	NA	<1,0			

**TABLE 2**  
**HISTORICAL GROUNDWATER MONITORING RESULTS AND BASELINE SAMPLING SUMMARY**  
UPS-OAKLAND HUB  
8400 PARDEE DRIVE, OAKLAND, CALIFORNIA  
STATE ID # 583

Monitoring Well	Date	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	MTBE µg/L	TPH as gasoline µg/L	TPH as diesel µg/L	D.O. (mg/L)	Temperature °C	pH	Conductivity µS	EDB µg/L	1,2-DCA µg/L	Methane µg/L	Nitrate as Nitrogen µg/L	Magnesium µg/L	Sulfate µg/L	Sulfide µg/L	Iron µg/L	Naphthalene µg/L	TDS (mg/L)
Field Analysis	--	--	--	--	--	--	--	--	--	5,000	--	--	--	--	--	--	--	--	--	--	3,000	
ESL - Drinking Water	--	1	40	30	20	5	100	100	--	--	--	--	0.05	0.5	--	--	--	--	--	17	--	
ESL - Non-Drinking Water	--	46	130	43	100	1800	210	210	--	--	--	--	150	200	--	--	--	--	--	24	--	
MW-10	5/5/2010	NA	NA	NA	NA	<50	110	NA	NM	NM	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	<1.0	2,100	
	10/29/2010	<0.5	<0.5	<0.5	<1.0	<0.5	<50	650	NA	NM	9,550	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	
	2/25/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	5,600	NA	NM	3,508	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/1/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	250	NA	NM	9,334	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2/29/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	170	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	
	3/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.61	NM	NM	3,540	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	280	NA	NM	NM	NA	NA	2,800	<230 H	NA	<1,000	<1,000	4,200	NA	3,700	
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	440	NA	18.20	7.43	9,646	NA	2,000	<230	110,000	21,000	<1,000	2,300	<1.0	3,000	
	7/22/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	62	NA	22.83	6.84	9,721	<0.50	<0.50	7,700	<230	210,000	1,900	<1,000	7,700	<1.0	5,200
MW-11	5/5/2010	NA	NA	NA	NA	<50	430	NA	NM	NM	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	<1.0	10,000	
	10/29/2010	<0.5	<0.5	<0.5	<1.0	<0.5	<50	7,200	NA	NM	17,500	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	
	2/25/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	1,900	NA	NM	525	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/1/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	1,100	NA	NM	7,444	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2/29/2012	0.53	<0.50	<0.50	<1.0	<0.50	<50	1,200	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	
	3/19/2012	NA	NA	NA	NA	NA	NA	NA	NM	NM	3,097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.91	NM	NM	860	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	860	NA	NM	NM	NA	NA	2,800	<230 H	NA	<1,000	1,400	3,900	NA	4,900	
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	1,200	NA	17.80	7.32	8,974	NA	2,100	<230	120,000	<1,000	3,100	630	<1.0	4,700	
	7/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	78	NA	21.83	6.76	9,905	<0.50	<0.50	7,000	<230	180,000	<1,000	5,900	<1.0	5,700	
MW-12	3/19/2012	NA	NA	NA	NA	NA	NA	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/1/2012	NS	NS	NS	NS	NS	NS	NS	NS	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	2,500	24,000	NA	18.50	7.37	2,377	NA	NA	1,600	<230	75,000	1,300	<1,000	9,200	3.9	1,500
MW-13	7/23/2013	NS	NS	NS	NS	NS	NS	NS	NS	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/19/2012	NA	NA	NA	NA	NA	NA	NA	690	NA	NM	NA	NA	NA	NA	NA	NA	NA	NA	390,000	NA	
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.52	NM	NM	2,972	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/1/2012	<0.50	<0.50	<0.50	1.0	<0.50	<50	750	NA	NM	NM	NA	NA	4,500	<230 H	98,000	3,300	4,300	1,100	NA	1,400	
MW-14	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	880	NA	17.70	7.46	2,056	NA	NA	3,600	<230	93,000	1,300	3,800	560	<1.0	1,300
	7/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	88	NA	25.78	6.90	2,022	<0.50	<0.50	13,000	<230	81,000	2,100	<1,000	3,200	<1.0	1,400
	3/19/2012	NA	NA	NA	NA	NA	NA	NA	260	NA	NM	NA	NA	NA	NA	NA	NA	NA	NA	9,100	NA	
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.96	NM	NM	4,872	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OW-1	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	370	NA	NM	NM	NA	NA	2,200	<230 H	270,000	53,000	4,500	9,100	NA	8,700	
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	230	NA	15.80	6.36	5,600	NA	NA	3,700	<230	100,000	66,000	<1,000	990	<1.0	3,700
	7/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<56	NA	26.00	6.53	5,497	<0.50	<0.50	6,000	NA	NA	NA	NA	NA	<1.0	NA
	6/23/1993	<0.5	<0.																			

**TABLE 2**  
**HISTORICAL GROUNDWATER MONITORING RESULTS AND BASELINE SAMPLING SUMMARY**  
UPS-OAKLAND HUB  
8400 PARDEE DRIVE, OAKLAND, CALIFORNIA  
STATE ID # 583

Monitoring Well	Date	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Total Xylenes µg/L	MTBE µg/L	TPH as gasoline µg/L	TPH as diesel µg/L	D.O. (mg/L)	Temperature °C	pH	Conductivity µS	EDB µg/L	1,2-DCA µg/L	Methane µg/L	Nitrate as Nitrogen µg/L	Magnesium µg/L	Sulfate µg/L	Sulfide µg/L	Iron µg/L	Naphthalene µg/L	TDS (mg/L)
Field Analysis	--	--	--	--	--	--	--	--	--	5,000	--	--	--	--	--	--	--	--	--	--	3,000	
ESL - Drinking Water	--	1	40	30	20	5	100	100	--	--	--	--	0.05	0.5	--	--	--	--	--	17	--	
ESL - Non-Drinking Water	--	46	130	43	100	1800	210	210	--	--	--	--	150	200	--	--	--	--	--	24	--	
IW-1	3/19/2012	NA	NA	NA	NA	NA	16,000	NA	NM	NM	NA	NA	NA	NA	97,000	4,500	NA	210,000	NA	1,500 H		
	4/19/2012	NA	NA	NA	NA	NA	NA	0.48	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	8/1/2012	NS	NS	NS	NS	NS	NS	NS	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	2/26/2013	<5.0	<5.0	<5.0	<10	<5.0	<b>32,000</b>	<b>59,000</b>	NA	18.80	7.28	2,468	NA	NA	2,500	<230	71,000	<1,000	<1,000	15,000	<b>42</b>	1,500
	7/23/2013	NS	NS	NS	NS	NS	NS	NS	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
IW-2	3/19/2012	NA	NA	NA	NA	NA	NA	NA	2,500	NA	NM	NA	NA	NA	NA	95,000	99,000	NA	8,200	NA	3,000	
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.51	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/1/2012	<5.0	<5.0	0.74	1.4	<0.50	130	3,000	NA	NM	NM	NA	NA	4,500	<230	180,000	4,000	6,400	8,000	NA	2,800	
	2/26/2013	<5.0	<5.0	<5.0	<10	<5.0	<500	<b>6,200</b>	NA	17.90	7.45	4,494	NA	NA	1,500	<230	150,000	<1,000	5,400	6,400	<b>480</b>	3,500
	7/23/2013	<5.0	<5.0	<5.0	<10	<5.0	<500	<b>3,400</b>	NA	25.28	6.46	5,531	<5.0	<5.0	3,900	<230	180,000	<1,000	3,500	13,000	<b>430</b>	3,700
IW-3	3/19/2012	NA	NA	NA	NA	NA	NA	NA	2,400	NA	NM	NM	NA	NA	NA	110,000	43,000	NA	30,000	NA	3,100	
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	0.61	NM	NM	2,471	NA	NA	NA	NA	NA	NA	NA	NA	
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	91	650	NA	NM	NM	NA	NA	3,800	<230	130,000	<1,000	2,200	16,000	NA	2,700	
	2/26/2013	<0.50	<0.50	0.58	<1.0	<0.50	<50	<b>1,100</b>	NA	17.70	7.02	3,890	NA	NA	2,800	<230	140,000	<1,000	8,200	20,000	<b>430</b>	2,800
	7/23/2013	<2.5	<2.5	<2.5	<5.0	<2.5	<250	95	NA	25.56	6.79	3,475	<2.5	<2.5	4,400	<230	170,000	<1.0	5,400	15,000	<b>150</b>	2,800
IW-4	3/19/2012	NA	NA	NA	NA	NA	NA	NA	110,000	NA	NM	NM	NA	NA	NA	190,000	17,000	NA	350,000	NA	1,400 H	
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	0.45	NM	NM	1,809	NA	NA	NA	NA	NA	NA	NA	NA	
	8/1/2012	<0.50	0.76	<0.50	<1.0	<0.50	160	250,000	NA	NM	NM	NA	NA	1,900	<230 H	300,000	5,300	12,000	1,700	NA	1,100	
	2/26/2013	<5.0	<5.0	<5.0	<10	<5.0	<b>5,600</b>	<b>34,000</b>	NA	17.00	7.02	2,058	NA	NA	3,900	<230	53,000	5,100	1,000	3,500	<b>24</b>	1,200
	7/23/2013	NS	NS	NS	NS	NS	NS	NS	NA	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
IW-5	3/19/2012	NA	NA	NA	NA	NA	NA	NA	220,000	NA	NM	NM	NA	NA	NA	NA	150,000	25,000	NA	270,000	NA	910 H
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.70	NM	NM	1,253	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	920	36,000	NA	NM	NM	NA	NA	6,200	<230 H	85,000	<1,000	2,300	4,900	NA	810 H	
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<b>3,200</b>	<b>25,000</b>	NA	16.10	7.17	1,469	NA	NA	3,200	<230	45,000	1,200	<1,000	6,000	3.8	730
	7/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<b>3,500</b>	<b>35,000</b>	NA	26.06	6.75	1,316	<0.50	<0.50	13,000	<230	6,300	<1,000	5,800	7,400	5.0	830
	8/12/2013	NA	NA	NA	NA	NA	NA	<b>39,000</b>	NA	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA		
IW-6	3/19/2012	NA	NA	NA	NA	NA	NA	NA	6,100	NA	NM	NM	NA	NA	NA	NA	270,000	48,000	NA	270,000	NA	6,200
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.77	NM	NM	7,377	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	280	5,600	NA	NM	NM	NA	NA	NA	2,500	<230 H	300,000	2,100	10,000	43,000	NA	8,500
	2/26/2013	0.50	<0.50	<0.50	<1.0	<0.50	120	4,800	NA	16.10	6.56	9,861	NA	NA	3,300	<230	290,000	8,100	2,200	42,000	4.4	6,600
	7/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<b>110</b>	<b>970</b>	NA	25.17	6.48	<b>14,451</b>	<0.50	<0.50	8,200	<230	410,000	<1,000	6,200	45,000	9.9	<b>10,000</b>

**Notes:**

1. µg/L = micrograms per liter

2. mg/L = milligrams per liter

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

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

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

6. -- = no data

7. MCL = maximum concentration level

8. µS = micro siemens

9. TDS = total dissolved solids

10. D.O. = Dissolved Oxygen

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

12. **Bold values indicate analytical detections above drinking water but below non-drinking water MCL.**

13. **B**

**ARCADIS**

## **Appendix A**

UPS – Oakland Hub  
Field Data Sheets

# WELL GAUGING DATA

Project # 130220-PC1 Date 2-26-13 Client Aradis

Site VPS Oakland - 3400 Pader 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	0805	4		-		5*	4.73	14.34		
MW-3	0736	4		-			4.25	14.47		
MW-4	0740	2		-			4.09	15.88		
MW-8	0735	2					3.38	12.29		
MW-9	0740	2					3.91	13.30		
MW-10	0950	2					8.28	17.70		
MW-11	0755	2					5.96	12.49		
MW-12	0810	2	5/6	4.70	0.05	30	7.75	9.11		
MW-13	0814	2					3.40	9.05		
MW-14	0822	2					2.66	9.27		
OW-1	0746	6	5/6	7.69	0.03	15*	7.72	-		
FW-1	0817	2	5/6	7.81	0.91	550	8.72	9.16		
IW-2	0742	2					5.85	9.09		
IW-3	0738	2					4.42	9.20		
IW-4	0753	2		-			4.29	9.92		
IW-5	0804	2					4.58	9.52		
IW-6	0759	2					4.10	9.33		

\* Volume removed from skimmer

# WELLHEAD INSPECTION CHECKLIST

Page 1 of 2

Date 2-26-13 Client Arcadis  
 Site Address UPS Oakland 8400 Purdee Dr. Oakland  
 Job Number 130226-PCI Technician PC, BP.

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-2	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							
OW-1	X							
IW-1	X							
IW-2	X							
IW-3	X							
IW-4							X	
IW-5	X						X	

NOTES: IW-5 2 1/2 tabs & bulb missing

# WELLHEAD INSPECTION CHECKLIST

Page 2 of 2

Date 2-26-13 Client Allard, S.

Site Address UPS Oakland 8400 Parcelo Dr.

Job Number 130226-PC Technician PC BP

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

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## WELL MONITORING DATA SHEET

Project #: 130226-PC1	Client: Arcadis @ UPS Oakland				
Sampler: PC BP, BW	Date: 2/26/2013				
Well I.D.: MW-2	Well Diameter: 2 3 4 6 8				
Total Well Depth (TD): 14.34	Depth to Water (DTW): 4.73				
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]: 6.15					

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	$\text{radius}^2 * 0.163$

Time	Temp (°F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1102	17.1	7.90	3641	121	6.2	
1104		well aerated				
1315	18.2	7.62	2847	141	—	

Did well dewater?  Yes No Gallons actually evacuated: 25

Sampling Date: 2/26/13 Sampling Time: 1345 Depth to Water: 5.97

Sample I.D.: MW-2 Laboratory: Test America / EMLab

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

Raine Tech Services, Inc. 1680 Rogers Ave. San Jose, CA 95112 (408) 572-0555

# WELL MONITORING DATA SHEET

Project #: 130227-DW	Client: Arcadis	
Sampler: DW	Date: 2/27/13	
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 _____	
Total Well Depth (TD):	Depth to Water (DTW):	
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: \_\_\_\_\_

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
*	≈ 5 ml of product removed from Skimmer					
*	≈ 480 ml of water removed from Skimmer					
*	Replaced Skimmer as found					

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 #:	130226-PC1		Client:	Arcadis @ UPS Oakland			
Sampler:	PO, BP, BW		Date:	2/26/2013			
Well I.D.:	MW-3		Well Diameter:	3	4	6	8
Total Well Depth (TD):	14.47		Depth to Water (DTW):	4.25			
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]: 6.29							

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

6.6 (Gals.) X 3 = 19.8 Gals.  
 1 Case Volume Specified Volumes Calculated Volume

Time	Temp (°F or °C)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
0940	66.9	7.04	1694	243	6.6	
0942		well dewatered				
1430	66.7	7.96	1407	62	~	

Did well dewater?	<input checked="" type="checkbox"/> Yes	No	Gallons actually evacuated:	7.5
Sampling Date:	2/26/13	Sampling Time:	1430	Depth to Water: 4.61

Sample I.D.:	MW-3	Laboratory:	Test America / EMLab
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Analyzed for:	TPH-G	BTEX	MTBE	TPH-D	Oxygenates (5)	Other:
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EB I.D. (if applicable):	@	Time	Duplicate I.D. (if applicable):
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Analyzed for:	TPH-G	BTEX	MTBE	TPH-D	Oxygenates (5)	Other:
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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 #:	B0227-DW4		Client:	Arcadis					
Sampler:	DW		Date:	2/27/13					
Well I.D.:	MW-3		Well Diameter:	2	3	4	6	8	_____
Total Well Depth (TD):			Depth to Water (DTW):						
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
(Gals.) X		=	Other:	
1 Case Volume	Specified Volumes	Calculated Volume	Well Diameter	Multiplier
			1"	0.04
			2"	0.16
			3"	0.37
			4"	0.65
			6"	1.47
			Other	radius <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
	*	No product		removed from skimmer		
	*	~ 580 ml of water removed		from Skimmer		
	*	Replaced Skimmer as found				

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 #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: (PC) BP, BW	Date: 2/26/2013		
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8		
Total Well Depth (TD): 15.88	Depth to Water (DTW): 4.09		
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]: 6.45			

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

1.9 (Gals.) X 3 = 5.7 Gals.  
 1 Case Volume Specified Volumes Calculated Volume

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0955	55	7.13	2059	>1000	1.9	
1000	6.6	7.25	2109	>1000	3.8	
1007	6.7	7.09	1995	>1000	5.7	

Did well dewater? Yes  No Gallons actually evacuated: 5.7

Sampling Date: 2/26/13 Sampling Time: 1445 Depth to Water: 5.21

Sample I.D.: MW-4 Laboratory: Test America / EMLab

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 #: 130226-PCI	Client: Arcadis @ UPS Oakland		
Sampler: PC BP, BW	Date: 2/26/2013		
Well I.D.: MW-8	Well Diameter: ② 3 4 6 8		
Total Well Depth (TD): 12.29	Depth to Water (DTW): 3.38		
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]: 5.16			

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

1.4 (Gals.) X 3 = 4.2 Gals.  
 1 Case Volume Specified Volumes Calculated Volume

Time	Temp °F or °C	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1020	17.4	6.16	5963	50	1.4	
1026	18.1	6.86	10.14 ms	70	2.8	
1030	18.1	6.94	10.57	876	4.2	

Did well dewater? Yes  No      Gallons actually evacuated: 4.2

Sampling Date: 2/26/13      Sampling Time: 1515      Depth to Water: 7.70(265)

Sample I.D.: MW-8      Laboratory: Test America / EMLab

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 #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: <input checked="" type="checkbox"/> BP, BW	Date: 2/26/2013		
Well I.D.: MW-9	Well Diameter: <input checked="" type="checkbox"/> 2    3    4    6    8		
Total Well Depth (TD): 13.30	Depth to Water (DTW): 5.91		
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]: 7.39			

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1048	18.3	7.18	8962	33	1.2	
1052	18.9	6.73	19.05 <sub>ms</sub>	50	2.4	
1058	19.3	6.75	22.83	230	3.6	

Did well dewater? Yes  No Gallons actually evacuated: 3.6

Sampling Date: 2/26/13 Sampling Time: 1500 Depth to Water: 7.94

Sample I.D.: MW-9 Laboratory: Test America / EMLab

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 #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: PC BP BW	Date: 2/26/2013		
Well I.D.: MN-10	Well Diameter: 2 3 4 6 8		
Total Well Depth (TD): 12.20	Depth to Water (DTW): 8.28		
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]: 9.06			

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1010	17.5	7.40	9865	270	0.6	cloudy yellow
1013	18.0	7.39	9645	517	1.2	"
1016	18.2	7.43	9646	581	1.8	"
1330						

Did well dewater? Yes  No  Gallons actually evacuated: 1.8

Sampling Date: 2/26/13 Sampling Time: 1330 Depth to Water: 8.28

Sample I.D.: MN-10 Laboratory: Test America / EMLab

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 #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: PC, BP BW	Date: 2/26/2013		
Well I.D.: MW-11	Well Diameter: 2 3 4 6 8		
Total Well Depth (TD): 12.49	Depth to Water (DTW): 5.96		
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]: 7.26			

Purge Method: Bailer Disposable Bailer	Waterra Peristaltic	Sampling Method: Bailer Disposable Bailer																
Positive Air Displacement	Extraction Pump	Extraction Port																
Electric Submersible	Other _____	Dedicated Tubing																
		Other: _____																
$1.0 \text{ (Gals.)} \times 3 = 3.0 \text{ Gals.}$ 1 Case Volume Specified Volumes Calculated Volume		<table border="1"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multipplier</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	Multipplier	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	Multipplier															
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
0945	74	7.26	8001	0.96	1.0	cloudy
0948	72	7.31	8331	>1000	2.0	black grey
0952	78	7.32	8974	>1000	3.0	" "

Did well dewater?	Yes	No	Gallons actually evacuated:	3.0
Sampling Date: 2/26/13	Sampling Time: 1345		Depth to Water:	10.08 (2w)

Sample I.D.: MW-11	Laboratory: Test America / EMLab
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Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5)	Other:
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EB I.D. (if applicable):	@	Time	Duplicate I.D. (if applicable):
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Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5)	Other:
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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 #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: PC, BP, BW	Date: 2/26/2013		
Well I.D.: MW-12	Well Diameter: (2) 3 4 6 8		
Total Well Depth (TD): —	Depth to Water (DTW): 7.75		
Depth to Free Product: 7.70	Thickness of Free Product (feet): 0.05		
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
• Bailed appx	30 mL SPH			4 2 gallons H <sub>2</sub> O		

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: 2/26/13 Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Test America / EMLab

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 #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: PC, BP, BW	Date: 2/26/2013		
Well I.D.: MW-12	Well Diameter: <input checked="" type="radio"/> 2" 3" 4" 6" 8"		
Total Well Depth (TD): 9.11	Depth to Water (DTW): 7.75		
Depth to Free Product: 7.70	Thickness of Free Product (feet): 0.05		
Referenced to: PVC	Grade	D.O. Meter (if req'd): YSI	HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.02			

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: *New tubing*

1 Case Volume	Specified Volumes	Calculated Volume	Well Diameter	Multiplier	Well Diameter	Multiplier
0.2	(Gals.) X 3	= 0.6 Gals.	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
1103	18.3	7.61	2560	7000	0.2	black odor
1106	18.5	7.43	2394	7000	0.4	↓
1109	18.5	7.37	2377	7000	0.6	↓

Did well dewater? Yes  No Gallons actually evacuated: 0.6

Sampling Date: 2/26/13 Sampling Time: 1410 Depth to Water: 7.82

Sample I.D.: MW-12 Laboratory: Test America / EMLab

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 #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: PC, BP, BW	Date: 2/26/2013		
Well I.D.: MN-13	Well Diameter: (2) 3 4 6 8		
Total Well Depth (TD): 9.05	Depth to Water (DTW): 3.40		
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]: 4.53			

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 \_\_\_\_\_

$$\frac{0.90 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3}{\text{Specified Volumes}} = \frac{2.7}{\text{Calculated Volume}} \text{ Gals.}$$

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
0858	17.9	7.48	2070	>1000	0.9	black cloudy
0901	18.1	7.53	2096	>1000	1.8	" "
0904	Well Dewatered	0	2.0	Gallons		
1440	17.7	7.46	2056	>1000	—	

Did well dewater?  Yes No Gallons actually evacuated: 2.0

Sampling Date: 2/26/13 Sampling Time: 1440 Depth to Water: 7.42 (7m)

Sample I.D.: MN-13 Laboratory: Test America / EMLab

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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Blaine Tech Services, Inc. 1680 Rogers Ave. San Jose, CA 95112

(408) 573-0555

\* Sample collected, insufficient pH

13/11 L.M.

# WELL MONITORING DATA SHEET

Project #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: PC BP, BW	Date: 2/26/2013		
Well I.D.: MW-14	Well Diameter: (2) 3 4 6 8		
Total Well Depth (TD): 9.27	Depth to Water (DTW): 2.66		
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]: 3.8			

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:	
$\frac{1 \text{ (Gals.)} \times 3}{\text{1 Case Volume}} = \frac{3 \text{ Gals.}}{\text{Specified Volumes}}$		Calculated Volume	Well Diameter	Multiplier
			1"	0.04
			2"	0.16
			3"	0.37
			4"	0.65
			6"	1.47
			Other	$\text{radius}^2 * 0.163$

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0840	44.5	6.12	2447	545	1.1	
0843	45.6	6.24	5291	879	2.2	
0846	45.8	6.36	5600	>10000	3.3	

Did well dewater? Yes  Gallons actually evacuated: 3.3

Sampling Date: 2/26/13 Sampling Time: 1330 Depth to Water: 7.43

Sample I.D.: MW-14 Laboratory: Test America / EMLab

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 #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: PC, BP, BW	Date: 2/26/2013		
Well I.D.: 0w-1	Well Diameter: 2 3 4 <b>6</b> 8		
Total Well Depth (TD): ~	Depth to Water (DTW): 4.72		
Depth to Free Product: 7.69	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 <input type="text"/> = <input type="text"/> 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
				SPH in well - No sample		

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: 2/26/13 Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Test America / EMLab

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 #: 130227-DW4	Client: Arcadis		
Sampler: DW	Date: 2/27/13		
Well I.D.: DW-1	Well Diameter: 2 3 4 <u>6</u> 8		
Total Well Depth (TD):	Depth to Water (DTW):		
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  
 Waterjet  
 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
				* $\approx$ 5 ml of product removed from Skimmer		
				* $\approx$ 285 ml of water removed from Skimmer		
				* Replaced Skimmer as found		

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 #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: PC, BP, BW	Date: 2/26/2013		
Well I.D.: Tw-1	Well Diameter: 2 3 4 6 8		
Total Well Depth (TD): 9.16	Depth to Water (DTW): 8.72		
Depth to Free Product: 7.81	Thickness of Free Product (feet): 0.91		
Referenced to:	PVC	Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.81			

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: New 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

0.1 (Gals.) X 3 = 0.3 Gals.  
 1 Case Volume Specified Volumes Calculated Volume

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1113	18.8	7.79	2481	>1000	0.1	sweet, odor, brown
1114	18.8	7.78	2477	>1000	0.2	↓ ↓ ↓
1116	18.8	7.78	2468	>1000	0.3	↓ ↓ ↓

Did well dewater? Yes  No Gallons actually evacuated: 0.3

Sampling Date: 2/26/13 Sampling Time: 3:50 Depth to Water: 8.90

Sample I.D.: Tw-1 Laboratory: Test America / EMLab

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

## ELL MONITORING DATA SHEET

Project #: 130226-PC1	Client: Arcadis @ UPS Oakland				
Sampler: PC, BP, BW	Date: 2/26/2013				
Well I.D.: IW-Z	Well Diameter: (2) 3 4 6 8				
Total Well Depth (TD): 9.09	Depth to Water (DTW): 5.85				
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]:			6.49		

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

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other:

<u>0.5</u>	(Gals.) X	<u>3</u>	=	<u>1.5</u>	Gals.
1 Case Volume	Specified Volumes		Calculated Volume		

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0915	17.7	7.36	4271	>1000	0.5	black cloudy
0918	17.9	7.58	4423	>1000	1.0	light screen
0920	17.9	7.45	4484	>1000	1.5	+
						almost decontaminated

Did well dewater? Yes  No  Gallons actually evacuated:

Sampling Date: 2/26/13 Sampling Time: 1500 Depth to Water: 6.56 (ZHL)

Sample I.D.: IW-2 Laboratory: Test America / EMLab

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:	$\frac{\text{mg}}{\text{L}}$	Post-purge:	$\frac{\text{mg}}{\text{L}}$
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: PC, BP, BW	Date: 2/26/2013		
Well I.D.: IN-3	Well Diameter: 2 3 4 6 8		
Total Well Depth (TD): 9.90	Depth to Water (DTW): 4.42		
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]: 5.51

Purge Method: Bailer Disposable Bailer	Waterra Peristaltic	Sampling Method: Bailer 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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0842	17.0	6.94	3602	831	0.9	black cloudy
0845	17.5	7.00	3781	>1000	1.8	↓
0848	17.7	7.02	3890	>1000	2.7	↓

Did well dewater? Yes  No Gallons actually evacuated: 2.7

Sampling Date: 2/26/13 Sampling Time: 1405 Depth to Water: 5.51

Sample I.D.: IN-3 Laboratory: Test America / EMLab

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 #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: PC BP, BW	Date: 2/26/2013		
Well I.D.: TW-4	Well Diameter: (2) 3 4 6 8		
Total Well Depth (TD): 9.92	Depth to Water (DTW): 4.29		
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]: 5.42			

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0920	66.6	7.00	2130	>1000	0.9	Sheen, odor
0924	66.8	7.01	2036	>1000	1.8	
0927	70	7.02	2058	>1000	2.7	

Did well dewater? Yes  No Gallons actually evacuated: 2.7

Sampling Date: 2/26/13 Sampling Time: 1415 Depth to Water: 4.86

Sample I.D.: TW-4 Laboratory: Test America / EMLab

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 #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: PC, BP, BW	Date: 2/26/2013		
Well I.D.: IW-5	Well Diameter: ② 3 4 6 8		
Total Well Depth (TD): 9.52	Depth to Water (DTW): 4.56		
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]: 5.57			

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

0.8 (Gals.) X 3 = 2.4 Gals.  
 1 Case Volume Specified Volumes Calculated Volume

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0908	15.5	7.60	2149	>1000	0.8	sheen, cedar
0912	16.2	7.27	1544	>1000	1.6	" "
1915	16.1	7.17	1469	>1000	2.4	" "

Did well dewater? Yes  No Gallons actually evacuated: 2.4

Sampling Date: 2/26/13 Sampling Time: 1400 Depth to Water: 4.40

Sample I.D.: IW-5 Laboratory: Test America / EMLab

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 #: 130226-PC1	Client: Arcadis @ UPS Oakland		
Sampler: PC BP, BW	Date: 2/26/2013		
Well I.D.: TW-6	Well Diameter: ② 3 4 6 8		
Total Well Depth (TD): 9.33	Depth to Water (DTW): 4.10		
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]: 5.15			

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
0.8 (Gals.) X 3 = 2.4 Gals.	1"	0.04	4"	0.65
1 Case Volume Specified Volumes Calculated Volume	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
0855	14.4	6.83	6007	>1000	0.8	
0858	15.7	6.63	9087	>1000	1.6	
0902	16.1	6.56	9861	>1000	2.4	

Did well dewater? Yes  Gallons actually evacuated: 2.4

Sampling Date: 2/26/13 Sampling Time: 1345 Depth to Water: 5.02

Sample I.D.: TW-6 Laboratory: Test America / EMLab

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

**BLAINE**  
TECH SERVICES,

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

CHAIN OF CUSTODY	
BTS # 130226-Pc	
CLIENT	ARCADIS U.S., Inc.
SITE	UPS
8400 Pardee Drive	
Oakland, CA	

SAMPLE I.D.	DATE	TIME	MATRIX	CONTAINERS
			SOIL W/H <sub>2</sub> O	TOTAL
IW-1	2/26/13	1350	W	1 1x125mL pol.
IW-2		1500	W	1
IW-3		1405	W	1
IW-4		1415	W	1
IW-5	7	1400	W	1
IW-6	7	1345	W	3
			(B)	

**BLAINE**

TECH SERVICES, INC.

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

DHS #

## CONDUCT ANALYSIS TO DETECT

LAB

TA - SF

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

- EPA  
 LIA  
 OTHER

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

CHAIN OF CUSTODY	
BTS # 130226-PCI	
CLIENT	ARCADIS U.S., Inc.
SITE	UPS
8400 Pardee Drive	
Oakland, CA	

C = COMPOSITE ALL CONTAINERS

HPC Short Hold

## 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

SAMPLE I.D.	DATE	TIME	S = SOIL W=H <sub>2</sub> O	MATRIX	TOTAL	250 mL	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-2	2-26-13	1545	W	1			X			
MW-3		1430	W	1			X			
MW-4		1445	W	1			X			
MW-8		1515	W	1			X			
MW-9		1500	W	1	1500	(P)	X			
MW-10		1330	W	1			X			
MW-11		1345	W	1			X			
MW-12		1420	W	1			X			
MW-13		1440	W	1			X			
MW-14		1330	W	1			X			

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	B.Panell P.Cornish B.Wicks	RESULTS NEEDED NO LATER THAN	Standard TAT
2-23-13	1515					

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>Hugh Devery</i>	2/26/13	7:35	<i>meadi purdy</i>	2/26/13	17:35

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	

**BLAINE**  
TECH SERVICES, INC.

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

DHS #

CHAIN OF CUSTODY	
BTS # <u>130226-PC1</u>	
CLIENT	ARCADIS U.S., Inc.
SITE	UPS
8400 Pardee Drive	
Oakland, CA	

CONDUCT ANALYSIS TO DETECT					LAB	TA - SF								
					ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND			DHS #						
					<input type="checkbox"/> EPA	<input type="checkbox"/> LIA	<input type="checkbox"/> OTHER	RWQCB REGION						
					SPECIAL INSTRUCTIONS									
					Invoice and Report to : Arcadis U.S., Inc. Attn: Hugh Devery <u>hugh.devery@arcadis-us.com</u> 770-428-9009									
					<b>Low Detection levels requested</b>									
SAMPLE I.D.	DATE	TIME	S= SOIL W=H <sub>2</sub> O	MATRIX	CONTAINERS	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #					
					C = COMPOSITE ALL CONTAINERS									
MW-2	2-26-13	1500	W	TOTAL	Asst	TPH-Gro, BTEX, MTBE, Naphthalene (8260)	DRO	Methane	Nitrate as N & Sulfate	Sulfide	Total Diss. Iron (Field Filtered)	TDS	Magnesium	
MW-3		1430	W	+ <sup>13</sup>		X	X	X	X	X	X	X	X	
MW-4		1445	W	+ <sup>13</sup>		X	X	X	X	X	X	X	X	
MW-8		1515	W	+ <sup>13</sup>		X	X	X	X	X	X	X	X	
MW-9		1500	W			X	X	X	X	X	X	X	X	
MW-10		1330	W	+ <sup>13</sup>		X	X	X	X	X	X	X	X	
MW-11		1345	W	+ <sup>13</sup>		X	X	X	X	X	X	X	X	
MW-12		1420	W	+ <sup>13</sup>		X	X	X	X	X	X	X	X	
MW-13		1440	W	+ <sup>13</sup>		X	X	X	X	X	X	X	X	* Filled 1/2 LAGER FOR DRO
MW-14		1530	W	+ <sup>13</sup>		X	X	X	X	X	X	X	X	
SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY		RESULTS NEEDED NO LATER THAN			Standard TAT						
RELEASED BY			P. Cornish, B. Weeks, B. Pace II											
RELEASED BY			DATE	TIME	RECEIVED BY			DATE	TIME					
RELEASED BY			2/26/13	1815	Jeff (sc)			2/26/13	1815					
RELEASED BY			DATE	TIME	RECEIVED BY			DATE	TIME					
RELEASED BY			2/27/13	1050	Jeff (TMS)			2/27/13	1050					
SHIPPED VIA			DATE SENT	TIME SENT	COOLER #									

# BLAINE

TECH SERVICES, INC.

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

CHAIN OF CUSTODY	BTS #	130226-PC1
CLIENT	ARCADIS U.S., Inc.	
SITE	UPS	
	8400 Pardee Drive	
	Oakland, CA	

#### **CONDUCT ANALYSIS TO DETECT**

LAB

TA - SE

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**

SAMPLING COMPLETED	DATE <u>2/26/13</u>	TIME	SAMPLING PERFORMED BY <u>P. Corrigan, B. Powell, B. Weeks</u>	RESULTS NEEDED NO LATER THAN		
RELEASED BY <u>Nic</u>	DATE <u>2/26/13</u>	TIME <u>1815</u>	RECEIVED BY <u>Daryl (sc)</u>	DATE <u>2/26/13</u>	TIME <u>1815</u>	
RELEASED BY <u>Sando Casadion</u>	DATE <u>2/27/13</u>	TIME <u>1050</u>	RECEIVED BY <u>Daryl (TAP)</u>	DATE <u>02/27/13</u>	TIME <u>1050</u>	
RELEASED BY <u>BTS</u>	DATE	TIME	RECEIVED BY	DATE	TIME	

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	

# TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME			PROJECT NUMBER				
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP. °C	INITIALS
Myron L pHmeter	6207034	2/20/13 @ 0620	pH 7.00 pH 10.00 pH 4.00	7.01 10.02 3.99	Y Y Y	13.7 13.8 13.7	BP
Hach Turbidimeter	BT5002	2/20/13 @ 0625	0, 1, 20 100, 800NTU's 104, 808NTU's	0, 1, 21 85	—	—	BP
Myron L	6210227	2/20/13 0600	417 (0.7H 3102 NTU)	4.01 (7.01) 0.00 3899	Y Y	12.4 12.5	R

## WELL GAUGING DATA

Project # 136728-0n1 Date 7/22/13 Client Arcadio

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-2	1040	4		5.15	0.06		5.21	—		
MW-3	1029	4					5.48	14.50		
MW-4	1054	2					5.10	16.55		
MW-8	0823	2					3.90	12.25		
MW-9	0819	2					6.13	13.25		
MW-10	1111	2					8.51	12.25		
MW-11	1059	2					6.05	12.60		
MW-12	1045	2		6.53	0.16	97	6.69	—		
MW-13	1047	2					5.58	9.00		
MW-14	1035	2					4.56	9.22		
OW-1	1025	2		7.74	0.10	5	7.84	—		
JW-1	1050	2		6.53	0.36	218	6.89	—		
JW-2	0833	2					5.60	9.00		
JW-3	0828	2					4.80	9.10		
JW-4	—	Trailer Parked	On Well				—	—		
JW-5	0837	2					5.38	9.75		
JW-6	1032	2					5.09	9.15	✓	

# WELLHEAD INSPECTION CHECKLIST

Page 1 of 1

Client Arcadis Date 7/22/13  
 Site Address 8400 Pardee Dr., Oakland CA  
 Job Number 130722-M1 Technician Daniel Allen

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							
OW-1	X							
IW-1	X							
IW-2	X							
IW-3	X							
IW-4	X							
IW-5	X							

NOTES:

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# WELL MONITORING DATA SHEET

Project #:	130722-Dw 1	Site:	UPS Oakland
Sampler:	Dw	Date:	7/23/13
Well I.D.:	MW-3	Well Diameter:	2 3 4 6 8
Total Well Depth (TD):	14.50	Depth to Water (DTW):	5.48
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:		7.28	

Purge Method:

- Disposable Bailer
- Positive Air Displacement
- Electric Submersible

Waterra  
2" Rediflo pump  
Extraction Pump  
Other \_\_\_\_\_

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

Flow Rate=

$$\frac{5.8 \text{ (Gals.)} \times 3}{1 \text{ Case Volume}} = \frac{17.4}{\text{Specified Volumes}} \text{ Gals. Calculated Volume}$$

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
1049	78.9	7.04	1527	—	0.47	—	—	Pre-Purge
1056	77.1	7.26	1915	95	—	—	5.8	
1057	well	dewatered @	7.0 gals					
1120	77.5	7.16	1696	66	0.35	—	—	Post-Purge

Did well dewater?  Yes No Gallons actually evacuated: 7.0

Sampling Date: 7/23/13 Sampling Time: 1120 Depth to Water: 7.20

Sample I.D.: MW-3 Laboratory: TA-SF

Analyzed for: SEE COC Other:

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

FB I.D. (if applicable): @ Time Analyzed for:

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 #:	B6722-DW1		Site:	UPS Oakland				
Sampler:	DW		Date:	7/23/13				
Well I.D.:	MW-3		Well Diameter:	2	3	(4)	6	8
Total Well Depth (TD):	14.50		Depth to Water (DTW):	5.48				
Depth to Free Product:			Thickness of Free Product (feet):					
Referenced to:	PVC	Grade	Flow Cell Type:					
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:								

Purge Method:

Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waterra  
 2" Rediflo pump  
 Extraction Pump  
 Other

Sampling Method:

Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other:

Flow Rate= \_\_\_\_\_

$$\frac{\text{____ (Gals.) X } \text{____}}{\text{1 Case Volume}} = \frac{\text{____ Gals.}}{\text{Specified Volumes}}$$

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)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
*	Emptied Skimmer							
*	0ml SPH removed							
*	400ml water removed							
*	Replaced Skimmer as found							

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: / / Sampling Time: : : Depth to Water:

Sample I.D.: Laboratory:

Analyzed for: Other:

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

FB I.D. (if applicable): @ Time Analyzed for:

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 #:	130722-DW1	Site:	UPS Oakland
Sampler:	DW	Date:	7/22/13
Well I.D.:	MW-4	Well Diameter:	(2) 3 4 6 8
Total Well Depth (TD):	16.55	Depth to Water (DTW):	5.10
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 7.39			

Purge Method:

Disposable Bailer  
Positive Air Displacement  
Electric Submersible

Waterra  
2" Rediflo pump  
Extraction Pump  
Other \_\_\_\_\_

Sampling Method:  
 Disposable Bailer  
Extraction Port  
Dedicated Tubing

Flow Rate=

$$\frac{1.8 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3 \text{ Specified Volumes}}{} = \frac{5.4 \text{ Gals.}}{\text{Calculated Volume}}$$

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)	pH	Cond. (mS or $\mu\text{S}$ )	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
1328	76.2	7.30	1337	—	0.24	—	—	Pre-Purge
1332	74.4	7.22	2118	93	—	—	1.8	Sheen
1334	75.5	7.02	1710	129	—	—	3.6	11
1336	75.6	6.96	1741	320	—	—	5.4	11
1340	76.2	7.05	1789	—	0.44	—	—	Post-Purge

Did well dewater? Yes  No Gallons actually evacuated: 5.4

Sampling Date: 7/22/13 Sampling Time: 1340 Depth to Water: 5.10

Sample I.D.: MW-4 Laboratory: TA-SR

Analyzed for: SEE COC Other:

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

FB I.D. (if applicable): @ Time Analyzed for:

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 #:	130722-DW1	Site:	UPS Oakland
Sampler:	DW	Date:	7/22/13
Well I.D.:	MW-8	Well Diameter:	(2) 3 4 6 8
Total Well Depth (TD):	12.25	Depth to Water (DTW):	3.90
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.57			

Purge Method:

Disposable Bailer  
Positive Air Displacement  
Electric Submersible

Waterra  
2" Rediflo pump  
Extraction Pump  
Other \_\_\_\_\_

Sampling Method:

Disposable Bailer  
Extraction Port  
Dedicated Tubing

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

Flow Rate= \_\_\_\_\_

$$\frac{1.3 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3 \text{ Specified Volumes}}{\text{Calculated Volume}} = 9.0 \text{ Gals.}$$

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)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
1218	78.0	6.71	3857	—	0.31	—	—	Pre-Purge
1223	74.4	6.80	4846	157	—	—	1.3	
1224	72.1	6.73	4979	173	—	—	2.6	
1225	Well	Dewatered	C	3.0	gals			
1425	73.0	6.87	4217	—	0.50	—	—	Post-Purge
1425	72.6	6.81	4408	104	—	—	—	

Did well dewater? Yes No Gallons actually evacuated: 3.0

Sampling Date: 7/22/13 Sampling Time: 1425 Depth to Water: 9.23(2hr)

Sample I.D.: MW-8 Laboratory: TA-SF

Analyzed for: SBE CO C Other: \_\_\_\_\_

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

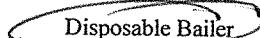
FB I.D. (if applicable): @ Time Analyzed for:

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 #:	130722-DW1		Site:	UPS Oakland	
Sampler:	DW		Date:	7/22/13	
Well I.D.:	MW-9		Well Diameter:	2	3 4 6 8
Total Well Depth (TD):	13.25		Depth to Water (DTW):	6.13	
Depth to Free Product:			Thickness of Free Product (feet):		
Referenced to:	PVC	Grade	Flow Cell Type:	YS1556	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 7.55					

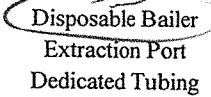
Purge Method:



Positive Air Displacement  
Electric Submersible

Waterra  
2" Rediflo pump  
Extraction Pump  
Other \_\_\_\_\_

Sampling Method:



Flow Rate=

$$\frac{1.1 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3}{\text{Specified Volumes}} = \frac{3.3 \text{ Gals.}}{\text{Calculated Volume}}$$

Well Diameter	Multipier	Well Diameter	Multipier
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)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
1242	78.5	6.63	8692	—	0.28	—	—	Pre-purge
1245	76.7	6.58	9118	63	—	—	1.1	
1246	76.2	6.48	16,80 ms	85	—	—	2.2	
1246	well	dewatered	C	2.5	gals			DTW = 12.96
1020	76.0	6.51	12700	75	0.43	—	—	Post-purge
1020								

Did well dewater?  Yes      No      Gallons actually evacuated: 2.5

Sampling Date: 7/23/13      Sampling Time: 1020      Depth to Water: 9.60 (8' ex + 1')

Sample I.D.: MW-9      Laboratory: TA-SF

Analyzed for: SEE COC      Other:

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

FB I.D. (if applicable): @ Time      Analyzed for:

D.O. (if req'd):	Pre-purge:	$\text{mg/L}$	Post-purge:	$\text{mg/L}$
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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 #:	130722-DW1		Site:	UPS Oakland	
Sampler:	Dw		Date:	7/22/13	
Well I.D.:	MW-10		Well Diameter:	(2) 3 4 6 8	
Total Well Depth (TD):	12.25		Depth to Water (DTW):	8.31	
Depth to Free Product:			Thickness of Free Product (feet):		
Referenced to:	PVC	Grade	Flow Cell Type:	VSI 556	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.16					

Purge Method:

Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waterra  
 2" Rediflo pump  
 Extraction Pump  
 Other \_\_\_\_\_

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

Flow Rate=

$$\frac{0.6 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3 \text{ Specified Volumes}}{} = \frac{1.8 \text{ Gals.}}{\text{Calculated Volume}}$$

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)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
1120	72.1	6.77	11667	—	1.44	—	—	Pre-purge
1127	72.9	6.82	10.10ms	109	—	—	0.6	
1128	72.8	6.76	9849	161	—	—	1.2	
1129	72.7	6.74	9815	204	—	—	1.8	
1135	73.1	6.84	9721	—	0.84	—	—	Post-purge

Did well dewater? Yes  No Gallons actually evacuated: 1.8

Sampling Date: 7/22/13 Sampling Time: 1135 Depth to Water: 9.05

Sample I.D.: MW-10 Laboratory: TA-SF

Analyzed for: SFE COC Other:

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

FB I.D. (if applicable): @ Time Analyzed for:

D.O. (if req'd):	Pre-purge:	$\text{mg/L}$	Post-purge:	$\text{mg/L}$
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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 #:	130722-0w1	Site:	UPS Oakland
Sampler:	DW	Date:	7/22/13
Well I.D.:	MW-11	Well Diameter:	(2) 3 4 6 8
Total Well Depth (TD):	12.60	Depth to Water (DTW):	6.05
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 7.36			

Purge Method:

Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waterra  
 2" Rediflo pump  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method:  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Flow Rate=

$$\frac{1.0 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3}{\text{Specified Volumes}} = \frac{3.0 \text{ Gals.}}{\text{Calculated Volume}}$$

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)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
1305	74.0	6.92	8450	—	0.59	—	—	Pre-purge
1308	74.1	6.89	8141	105	—	—	1.0	
1309	72.8	6.78	9124	130	—	—	2.0	
1310	well		dewatered		2.55 gals	15	DTW = 12.27	
0940	71.3	6.76	9905	897	0.26	—	—	Post-purge

Did well dewater?  Yes No Gallons actually evacuated: 2.5

Sampling Date: 7/23/13 Sampling Time: 0940 Depth to Water: 9.21 (Next Day)

Sample I.D.: MW-11 Laboratory: TA-SF

Analyzed for: SEE COC Other:

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

FB I.D. (if applicable): @ Time Analyzed for:

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 #:	136728-DW1		Site:	UPS Oakland	
Sampler:	DW		Date:	7/23/13	
Well I.D.:	MW-12		Well Diameter:	2	3 4 6 8
Total Well Depth (TD):	—		Depth to Water (DTW):	6.69	
Depth to Free Product:	6.53		Thickness of Free Product (feet):	0.16	
Referenced to:	PVC	Grade	Flow Cell Type:		
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:					

Purge Method:

Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waterra  
 2" Rediflo pump  
 Extraction Pump  
 Other

Sampling Method:

Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Flow Rate=

$$\frac{(\text{Gals.}) \times \text{Specified Volumes}}{\text{1 Case Volume}} = \text{Calculated Volume}$$

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	$\text{radius}^2 * 0.163$

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
*	Purged 97 ml of SPLIT + 0.5 scf's water							
*	Slowly lowered tubing until thick black							
	SPLIT Observed, Continued purging until water							
	was only coming out.							

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory:

Analyzed for: Other:

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

FB I.D. (if applicable): @ Time Analyzed for:

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 #:	130722-Dw1		Site:	UPS Oakland	
Sampler:	Dw		Date:	7/22/13	
Well I.D.:	MW-13		Well Diameter:	2	3 4 6 8
Total Well Depth (TD):	9.00		Depth to Water (DTW):	5.58	
Depth to Free Product:			Thickness of Free Product (feet):		
Referenced to:	PVC	Grade	Flow Cell Type:	YSI 556	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.26					

Purge Method:

Disposable Bailer  
Positive Air Displacement  
Electric Submersible

Waterra  
2" Rediflo pump  
Extraction Pump  
Other \_\_\_\_\_

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

Flow Rate=

$$\frac{0.5 \text{ (Gals.)} \times 3}{1 \text{ Case Volume} \quad \text{Specified Volumes}} = \frac{1.5}{\text{Calculated Volume}}$$

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)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
1457	78.4	7.04	2141	—	0.21	—	—	Pre-Purge
1459	78.5	7.23	2037	397	—	—	0.5	
1501	78.0	6.98	2178	71000	—	—	1.0	DTW = 8.70
1501	well dewatered			@	129 gals			
0915	78.4	6.90	2022	+50	0.36	—	—	Post-Purge

Did well dewater?  Yes No Gallons actually evacuated: 1.2

Sampling Date: 7/23/13 Sampling Time: 6915 Depth to Water: 6.20

Sample I.D.: MW-13 Laboratory: TA-SF

Analyzed for: SEE COC Other: \_\_\_\_\_

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

FB I.D. (if applicable): @ Time Analyzed for:

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 #:	136722-DW1		Site: UPS Oakland
Sampler:	DW		Date: 7/23/13
Well I.D.:	MW-14		Well Diameter: 2 3 4 6 8
Total Well Depth (TD):	9.22		Depth to Water (DTW): 4.56
Depth to Free Product:			Thickness of Free Product (feet):
Referenced to:	PVC	Grade	Flow Cell Type: YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.49			

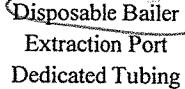
Purge Method:



Positive Air Displacement  
Electric Submersible

Waterra  
2" Rediflo pump  
Extraction Pump  
Other \_\_\_\_\_

Sampling Method:



Dedicated Tubing

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

Flow Rate=

$$\frac{0.7 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3 \text{ Specified Volumes}}{} = \frac{2.1 \text{ Gals.}}{\text{Calculated Volume}}$$

Well Diameter	Multipier	Well Diameter	Multipier
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)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
0816	79.7	6.40	6424	—	0.35	—	—	Pre-Purge
0819	78.3	6.61	5317	85	—	—	0.7	
0820	78.6	6.34	12.64ms	152	—	—	1.4	
0820	Well	dewatered	@		1.5	gals		
14130	78.8	6.53	5497	98	0.49	—	—	Post-Purge

Did well dewater?  Yes No Gallons actually evacuated: 1.5

Sampling Date: 7/23/13 Sampling Time: 1430 Depth to Water: 7.08(2hr)

Sample I.D.: MW-14 Laboratory: TA-SF

Analyzed for: SEE COC Other:

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

FB I.D. (if applicable): @ Time Analyzed for:

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

# WELL MONITORING DATA SHEET

Project #:	130722-0w)			Site: UPS Oakland
Sampler:	Pw			Date: 7/23/13
Well I.D.:	0w-1			Well Diameter: 2 3 4 (6) 8
Total Well Depth (TD):	—			Depth to Water (DTW): 7.84
Depth to Free Product:	7.74			Thickness of Free Product (feet): 0, 10
Referenced to:	PVC	Grade	Flow Cell Type:	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:				

Purge Method:

Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waterra  
 2" Rediflo pump  
 Extraction Pump  
 Other

Sampling Method:

Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other:

Flow Rate=

$$\frac{(\text{Gals.})}{\text{1 Case Volume}} \times \frac{\text{Specified Volumes}}{=} \frac{\text{Gals.}}{\text{Calculated Volume}}$$

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)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
*	Emptied			Skimmer				
*	Sml of SPH removed							
*	550 ml of water removed							
*	Replaced Skimmer as Found							
*	No Sample Taken							

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory:

Analyzed for: Other:

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

FB I.D. (if applicable): @ Time Analyzed for:

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>BO723-DW1</u>	Site: <u>UPS Oakland</u>
Sampler: <u>DW</u>	Date: <u>7/23/13</u>
Well I.D.: <u>IW-1</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u>—</u>	Depth to Water (DTW): <u>6.89</u>
Depth to Free Product: <u>6.53</u>	Thickness of Free Product (feet): <u>0.36</u>
Referenced to: PVC Grade	Flow Cell Type:
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method:	Sampling Method:	Other:		
<input checked="" type="checkbox"/> Disposable Bailer <input checked="" type="checkbox"/> Positive Air Displacement <input checked="" type="checkbox"/> Electric Submersible	<input checked="" type="checkbox"/> Waterra <input checked="" type="checkbox"/> 2" Rediflo pump <input checked="" type="checkbox"/> Extraction Pump <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Disposable Bailer <input checked="" type="checkbox"/> Extraction Port <input checked="" type="checkbox"/> Dedicated Tubing		
Flow Rate= <u>—</u>				
(Gals.) X <u>—</u> = <u>—</u> Gals.	Well Diameter	Multiplier	Well Diameter	Multiplier
1 Case Volume Specified Volumes Calculated Volume	1"	0.04	4"	0.65
	2"	0.16	6"	1.47
	3"	0.37	Other	$\text{radius}^2 * 0.163$

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
*	Purged	218 ml	of SP17 + 1.0 gals water					
*	Slowly lowered tubing until thick black SP17							
	Observed, Continued purging until only water was coming out.							

Did well dewater?	Yes	No	Gallons actually evacuated:		
Sampling Date:	Sampling Time:		Depth to Water:		
Sample I.D.:	Laboratory:				
Analyzed for:	Other:				
EB I.D. (if applicable):	@ <u>Time</u>	Duplicate I.D. (if applicable):			
FB I.D. (if applicable):	@ <u>Time</u>	Analyzed for:			
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 #:	130722-Dw1	Site:	UPS Oakland
Sampler:	Dw	Date:	7/23/13
Well I.D.:	IW-2	Well Diameter:	2 3 4 6 8
Total Well Depth (TD):	9.00	Depth to Water (DTW):	5.60
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.28			

Purge Method:

Disposable Bailer

Waterra

Sampling Method:

Positive Air Displacement  
Electric Submersible

2" Rediflo pump  
Extraction Pump

Disposable Bailer  
Extraction Port  
Dedicated Tubing

Other \_\_\_\_\_

Other:

Flow Rate= \_\_\_\_\_

$$\frac{0.5 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3}{\text{Specified Volumes}} = \frac{1.5}{\text{Calculated Volume}} \text{ Gals.}$$

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)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
0845	78.0	6.32	5968	—	0.68	—	—	Pre-Purge
0848	77.9	6.82	5259	>1000	—	—	0.5	
0849	77.7	6.76	5455	>1000	—	—	1.0	
0849	well dewatered @				,25 gals			
1320	77.5	6.46	5531	>1000	0.48	—	—	Post-Purge

Did well dewater?  Yes No Gallons actually evacuated: 1.2

Sampling Date: 7/23/13 Sampling Time: 1320 Depth to Water: 6.25

Sample I.D.: IW-2 Laboratory: TA-SF

Analyzed for: SEE COC Other:

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

FB I.D. (if applicable): @ Time Analyzed for:

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 #:	130722-Dw1	Site:	UPS Oakland
Sampler:	Dw	Date:	7/23/13
Well I.D.:	IW-3	Well Diameter:	2 3 4 6 8
Total Well Depth (TD):	9.10	Depth to Water (DTW):	4.80
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.66			

Purge Method:

Disposable Bailer

Positive Air Displacement  
Electric Submersible

Waterra  
2" Rediflo pump  
Extraction Pump  
Other \_\_\_\_\_

Sampling Method:

Disposable Bailer

Extraction Port  
Dedicated Tubing

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

Flow Rate= \_\_\_\_\_

$$\frac{0.7 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3}{\text{Specified Volumes}} = \frac{2.1}{\text{Calculated Volume}}$$

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)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
0830	79.7	6.72	3336	—	0.30	—	—	Pre-Purge
0833	77.8	6.84	3400	71000	—	—	0.7	
0834	78.4	6.76	3545	71000	—	—	1.4	
0835	well dewatered						1.8 gals	
1300	78.0	6.79	3475	751	0.52	—	—	Post-Purge

Did well dewater?  Yes No Gallons actually evacuated: 1.8

Sampling Date: 7/23/13 Sampling Time: 1300 Depth to Water: 5.51

Sample I.D.: IW-3 Laboratory: TA-SF

Analyzed for: SEB COC Other: \_\_\_\_\_

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

FB I.D. (if applicable): @ Time Analyzed for:

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 #:	130722-Dw1		Site:	UPS Baskland					
Sampler:	PC		Date:	7/23/13					
Well I.D.:	TW-4		Well Diameter:	2	3	4	6	8	
Total Well Depth (TD):			Depth to Water (DTW):						
Depth to Free Product:			Thickness of Free Product (feet):						
Referenced to:	PVC	Grade	Flow Cell Type:						
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:									

Purge Method:

Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waterra  
 2" Rediflo pump  
 Extraction Pump  
 Other

Sampling Method:

Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Other:

Flow Rate=

$$\frac{(\text{Gals.})}{\text{1 Case Volume}} \times \frac{\text{Specified Volumes}}{} = \frac{\text{Calculated Volume}}{}$$

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	$\text{radius}^2 * 0.163$

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
		*	Large Trailer Parked over well. Was Not able to get trailer moved					
		*	No Sample Taken					

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory:

Analyzed for: Other:

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

FB I.D. (if applicable): @ Time Analyzed for:

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 #:	130722-aw1	Site:	OPS Oakland
Sampler:	Dw	Date:	7/23/13
Well I.D.:	IW-5	Well Diameter:	(2) 3 4 6 8
Total Well Depth (TD):	9.75	Depth to Water (DTW):	5.38
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:		6.25	

Purge Method:

Disposable Bailer

Waterra

Sampling Method:

Positive Air Displacement  
 Electric Submersible

2" Rediflo pump  
Extraction Pump

Disposable Bailer  
Extraction Port  
Dedicated Tubing

Other \_\_\_\_\_

Other:

Flow Rate=

$$\frac{0.7 \text{ (Gals.)} \times 3}{1 \text{ Case Volume}} = \frac{2.1}{\text{Specified Volumes}} \text{ Gals. Calculated Volume}$$

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

Time	Temp (°F)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
0739	79.1	6.61	1145	—	0.72	—	—	Pre-Purge
0742	78.5	6.91	1138	>1000	—	—	0.7	
0743	78.2	6.65	1381	>1000	—	—	1.4	
0744	78.4	6.61	1377	>1000	—	—	2.1	
0750	78.9	6.75	1316	—	0.49	—	—	Post-Purge

Did well dewater?

Yes

No

Gallons actually evacuated:

2.1

Sampling Date:

Sampling Time:

Depth to Water:

5.39

Sample I.D.:

IW-5

Laboratory:

TA-SF

Analyzed for: SEE COC

Other:

EB I.D. (if applicable):

@ Time

Duplicate I.D. (if applicable):

RI.D. (if applicable):

@ Time

Analyzed for:

(if req'd):

Pre-purge:

mg/L

Post-purge:

mg/L

(if req'd):

Pre-purge:

mV

Post-purge:

mV

# WELL MONITORING DATA SHEET

Project #:	30722-DW	Site:	UPS Oakland
Sampler:	DW	Date:	7/23/13
Well I.D.:	IW-6	Well Diameter:	(2) 3 4 6 8
Total Well Depth (TD):	9.15	Depth to Water (DTW):	5.09
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.90			

Purge Method:

Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waterra  
 2" Rediflo pump  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method:  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

Flow Rate=

$$\frac{0.6 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3 \text{ Specified Volumes}}{} = \frac{1.8 \text{ Gals.}}{\text{Calculated Volume}}$$

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)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
0859	80.4	6.44	14375	—	0.61	—	—	Pre-Purge
0902	77.8	6.43	14,18ms	71000	—	—	0.6	
0903	78.1	6.38	14,98ms	71000	—	—	1.2	
0903		well dewatered			(2)	1.5 sals		
1400	77.3	6.48	14451	71000	0.53	—	—	Post-Purge

Did well dewater?  Yes No Gallons actually evacuated: 1.5

Sampling Date: 7/23/13 Sampling Time: 1400 Depth to Water: 5.40

Sample I.D.: IW-6 Laboratory: TA-SF

Analyzed for: SEF CEC Other:

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

FB I.D. (if applicable): @ Time Analyzed for:

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

**BLAINE**

TECH SERVICES, INC.

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

## CHAIN OF CUSTODY

BTS # 130722-0w1

CLIENT

ARCADIS U.S., Inc.

SITE

UPS

8400 Pardee Drive

Oakland, CA

SAMPLE I.D.	DATE	TIME	MATRIX S= SOIL W=H <sub>2</sub> O	CONTAINERS
				C = COMPOSITE ALL CONTAINERS
MW-14	7/23/13	1430	W	9 mix

				TPH-Gro, BTEX, MTBE, Naphthalene, 1,2-DCS, EDB (8260)	DRO w/ SGC	Methane	Nitrate, Sulfate, TDS (Short holds)	Sulfide	Total Diss. Iron, Manganese (Field Filtered)	Magnesium	PAH's	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #	
IW-4		1400		X X X X X X X X X X X X												
IW-3		1300		X X X X X X X X X X X X												
IW-2		1320		X X X X X X X X X X X X												
MW-3		1120		X Y X X X X X X X X X X												
MW-9		1020		X X V X X X X X X X X												
MW-11		0940		X Y V X X X X X X X X												
MW-13		0915		X X V X X X X X X X X												
IW-5	↓	0750	↓	X Y X V X X X X X X												

SAMPLING COMPLETED	DATE 7/23/13	TIME 1430	SAMPLING PERFORMED BY <i>Daniel Allen</i>	RESULTS NEEDED NO LATER THAN Standard TAT
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RELEASED BY <i>Mr. Allen</i>	DATE 7/23/13	TIME 1705	RECEIVED BY <i>Mr. Allen</i>	DATE 7/23/13	TIME 1705
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RELEASED BY <i>Mr. Allen</i>	DATE 7/23/13	TIME 1705	RECEIVED BY <i>Steve JAP</i>	DATE 07/23/13	TIME 1705
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RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
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SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	
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LAB	TA - SF	DHS #
ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND		
<input type="checkbox"/> EPA <input type="checkbox"/> LIA <input type="checkbox"/> OTHER		
<input type="checkbox"/> 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

# BLAINE

TECH SERVICES, INC.

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

CHAIN OF CUSTODY		BTS # 130722-0w		
CLIENT	ARCADIS U.S., Inc.			
SITE	UPS			
	8400 Pardee Drive			
	Oakland, CA			
SAMPLE I.D.	DATE	TIME	MATRIX SOIL H <sub>2</sub> O	CONTAINERS TOTAL

C = COMPOSITE ALL CONTAINERS

SAMPLING COMPLETED	DATE <u>7/22/13</u>	TIME <u>1425</u>	SAMPLING PERFORMED BY	<u>Daniel Allen</u>	RESULTS NEEDED NO LATER THAN	Standard TAT	
RELEASED BY	<u>Mr. Cee</u>	DATE <u>7/22/13</u>	TIME <u>1630</u>	RECEIVED BY	<u>Mr. Cee</u>	DATE <u>7/22/13</u>	TIME <u>1630</u>
RELEASED BY		DATE	TIME	RECEIVED BY		DATE	TIME
RELEASED BY		DATE	TIME	RECEIVED BY		DATE	TIME
SHIPPED VIA		DATE SENT	TIME SENT	COOLER #			

# TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME			UPS Oakland		PROJECT NUMBER		
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%	TEMP. F°	INITIALS
VSI 556	CH100352	7/22/13 @ 06:15	Do 100%	100.6	Yes	68	DW
			pH 7, 10, 4	7.00 7.03 4.01	Yes	66	DW
			3900us/cm	3905	Yes	64	NW
ultranometer II	60212898		pH 7, 10, 4	7.10, 4	Yes	64	DW
			3900us/cm	3900	Yes	66	NW
		7/23/13 @ 06:10	Do 100%	100.2	Yes	69	PW
			pH 7, 10, 4	7.002 7.006 4.05	Yes	66	PW
			3900us/cm	3900	Yes	66	DW
ultranometer II			pH 7, 10, 4	7.10, 4	Yes	66	DW
			3900us/cm	3900	Yes	66	DW

**ARCADIS**

## **Appendix B**

UPS – Oakland Hub  
SOS<sup>®</sup> Passive Skimmers Specifications

## SOS® Passive Skimmers



### For Low Recovery Wells

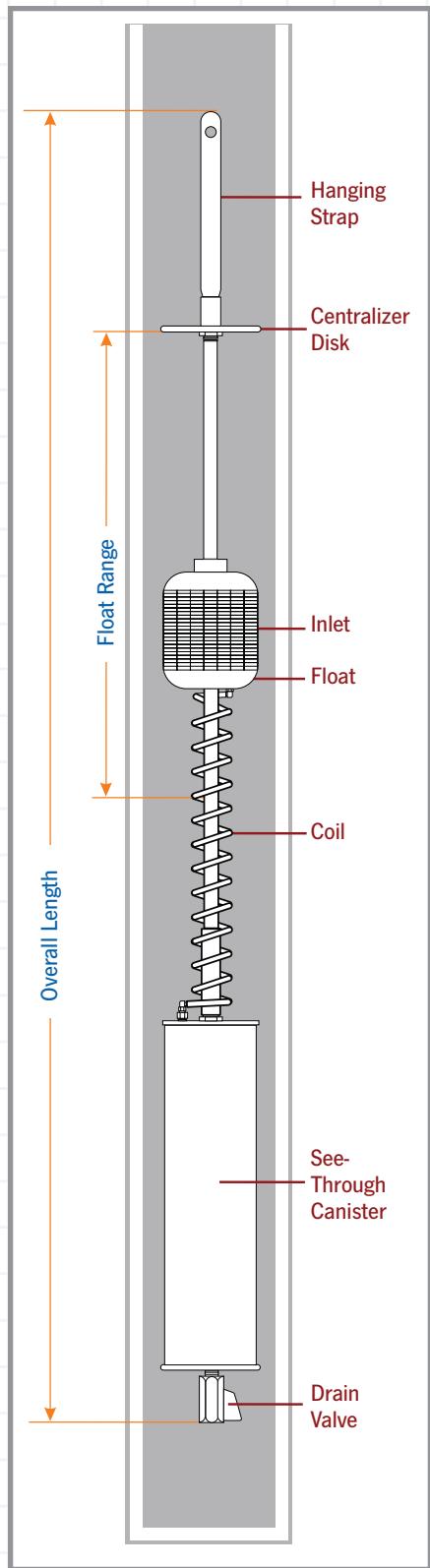
The QED family of Passive Skimmers has been designed for free product recovery applications in sites where active pumping systems are not applicable due to existing conditions or extreme low permeability formations. The floating intake head follows the groundwater fluctuations in the recovery well, allowing only the free-floating phase (LNAPL) to be captured, without taking water, and stored in the built-in reservoir for further manual transfer to a tank.

Passive Skimmers are available for 2" (50 mm) and 4" (100 mm) extraction wells, with different reservoir capacities.

### Advantages

1. Simple systems for extreme low recovery applications.
2. Inexpensive option if active system is not practical.

## SOS® Passive Skimmers



### Specifications

Model No.	2 in. SOS 301079	2 in. SOS 301080	4 in. SOS 301032	4 in. SOS 301033
<b>Canister Volume</b>	20 oz. (600 cc)	30 oz. (900 cc)	101 oz. (3,000 cc)	203 oz. (6,000 cc)
<b>Well Diameter</b>	2 in. (5 cm)	2 in. (5 cm)	4 in. (10 cm)	4 in. (10 cm)
<b>Float Travel Range</b>	12 in. (30 cm)	12 in. (30 cm)	18 in. (46 cm)	18 in. (46 cm)
<b>Overall Length</b>	65 in. (165 cm)	48 in. (122 cm)	119 in. (302 cm)	11 in. (28 cm)

<b>LNAPL Fluid Density</b>	< 1.0 SG
<b>Kinematic Viscosity @ 50 °F (10 °C)</b>	200 centistokes
<b>Recommended Initial LNAPL Layer</b>	> .25 in. (> .64 cm)
<b>Residual LNAPL Layer</b>	0.25 in. (.64 cm)
<b>Suitable Types of LNAPL</b>	Gasoline, jet fuel
<b>Materials</b>	Stainless steel, Viton®, PVC, brass, closed cell foam.

Viton is registered trademark of DuPont Dow Elastomers.



### Characterize Your Specific Site

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**ARCADIS**

## **Appendix C**

UPS – Oakland Hub  
Laboratory Analytical Results and Chain-of-Custody Documentation

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# 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: 720-48033-1

Client Project/Site: UPS-Oakland

For:

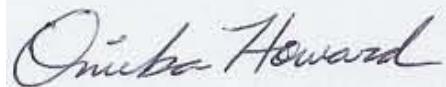
ARCADIS U.S. Inc

1000 Cobb Place Blvd NW

Suite 500-A

Kennesaw, Georgia 30144

Attn: Ms. Jennifer LeBeau



Authorized for release by:

3/13/2013 6:49:57 PM

Onieka Howard

Project Manager I

[onieka.howard@testamericainc.com](mailto:onieka.howard@testamericainc.com)

Designee for

Dimple Sharma

Project Manager I

[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: 720-48033-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
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

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

dw	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)
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)

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## Case Narrative

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

TestAmerica Job ID: 720-48033-1

### Job ID: 720-48033-1

Laboratory: TestAmerica Pleasanton

#### Narrative

##### Job Narrative 720-48033-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 2/27/2013 12:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 2.4° C, 2.6° C, 2.9° C, 3.3° C and 4.2° C.

Except:

The Chain-of-Custody (COC) was not properly filled out. (#5) MW-9 received only 1-amber 1L 1/2 full for DRO (Note: There is a green check mark on the COC for this sample), COC lists (#9) MW-13 as only 1/2 full for DRO, MW-13 was received full. Sample MW-9 and MW-13 no duplicate amber 1L's were received.

MW-2 sample time does not match COC sample time: label lists 15:45, COC lists 15:00.

#### GC/MS VOA

Method(s) 8260B: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 131679 exceeded control limits for the following analyte: MTBE.

No other analytical or quality issues were noted.

#### GC Semi VOA

Method(s) 8015B: Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported: MW-2 (720-48033-1), IW-1 (720-48033-11), MW-12 (720-48033-8), IW-4 (720-48033-14), and IW-5 (720-48033-15).

No other analytical or quality issues were noted.

#### Air - GC VOA

No analytical or quality issues were noted.

#### Metals

No other analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

## Detection Summary

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

TestAmerica Job ID: 720-48033-1

### Client Sample ID: MW-2

### Lab Sample ID: 720-48033-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	3.3		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Xylenes, Total	1.1		1.0		ug/L	1		MS	
Gasoline Range Organics (GRO)	910		50		ug/L	1		8260B/CA_LUFT	Total/NA
-C5-C12					MS				
Methane (TCD)	1.4		0.00099		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	38000		990		ug/L	20		8015B	Total/NA
Magnesium	140		0.20		mg/L	1		6010B	Total/NA
Iron	4.1		0.20		mg/L	1		6010B	Dissolved
Total Dissolved Solids	2900		17		mg/L	1		SM 2540C	Total/NA

### Client Sample ID: MW-3

### Lab Sample ID: 720-48033-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.4		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO)	200		50		ug/L	1		MS	
-C5-C12					8260B/CA_LUFT				Total/NA
Methane (TCD)	4.1		0.00099		mg/L	1		MS	
Diesel Range Organics [C10-C28]	12000		100		ug/L	2		RSK-175	Total/NA
Magnesium	43		0.20		mg/L	1		8015B	Total/NA
Iron	3.8		0.20		mg/L	1		6010B	Dissolved
Total Dissolved Solids	630		10		mg/L	1		6010B	Total/NA
					SM 2540C				

### Client Sample ID: MW-4

### Lab Sample ID: 720-48033-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane (TCD)	3.7		0.00099		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	9900		100		ug/L	2		8015B	Total/NA
Magnesium	41		0.20		mg/L	1		6010B	Total/NA
Iron	3.4		0.20		mg/L	1		6010B	Dissolved
Sulfate	1.6		1.0		mg/L	1		300.0	Total/NA
Total Dissolved Solids	1400		10		mg/L	1		SM 2540C	Total/NA

### Client Sample ID: MW-8

### Lab Sample ID: 720-48033-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	12		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Methane (TCD)	2.0		0.00099		mg/L	1		MS	
Diesel Range Organics [C10-C28]	280		51		ug/L	1		RSK-175	Total/NA
Magnesium	170		0.20		mg/L	1		8015B	Total/NA
Iron	0.81		0.20		mg/L	1		6010B	Dissolved
Sulfide	1.5		1.0		mg/L	1		376.1	Total/NA
Total Dissolved Solids	2900		17		mg/L	1		6010B	Total/NA

### Client Sample ID: MW-9

### Lab Sample ID: 720-48033-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane (TCD)	2.6		0.00099		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	320		93		ug/L	1		8015B	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: 720-48033-1

## Client Sample ID: MW-9 (Continued)

## Lab Sample ID: 720-48033-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	260		0.20		mg/L	1		6010B	Total/NA
Iron	4.0		0.20		mg/L	1		6010B	Dissolved
Sulfate	1.4		1.0		mg/L	1		300.0	Total/NA
Total Dissolved Solids	8900		100		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-10

## Lab Sample ID: 720-48033-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane (TCD)	2.0		0.00099		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	440		51		ug/L	1		8015B	Total/NA
Magnesium	110		0.20		mg/L	1		6010B	Total/NA
Iron	2.3		0.20		mg/L	1		6010B	Dissolved
Sulfate	21		10		mg/L	10		300.0	Total/NA
Total Dissolved Solids	3000		25		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-11

## Lab Sample ID: 720-48033-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane (TCD)	2.1		0.00099		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	1200		50		ug/L	1		8015B	Total/NA
Magnesium	120		0.20		mg/L	1		6010B	Total/NA
Iron	0.63		0.20		mg/L	1		6010B	Dissolved
Sulfide	3.1		1.0		mg/L	1		376.1	Total/NA
Total Dissolved Solids	4700		33		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-12

## Lab Sample ID: 720-48033-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	3.9		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	2500		500		ug/L	10		8260B/CA_LUFT MS	Total/NA
Methane (TCD)	1.6		0.00099		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	24000		1000		ug/L	20		8015B	Total/NA
Magnesium	75		0.20		mg/L	1		6010B	Total/NA
Iron	9.2		0.20		mg/L	1		6010B	Dissolved
Sulfate	1.3		1.0		mg/L	1		300.0	Total/NA
Total Dissolved Solids	1500		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-13

## Lab Sample ID: 720-48033-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane (TCD)	3.6		0.00099		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	880		100		ug/L	2		8015B	Total/NA
Magnesium	93		0.20		mg/L	1		6010B	Total/NA
Iron	0.56		0.20		mg/L	1		6010B	Dissolved
Sulfate	1.3		1.0		mg/L	1		300.0	Total/NA
Sulfide	3.8		1.0		mg/L	1		376.1	Total/NA
Total Dissolved Solids	1300		10		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: 720-48033-1

## Client Sample ID: MW-14

## Lab Sample ID: 720-48033-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane (TCD)	3.7		0.00099		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	230		54		ug/L	1		8015B	Total/NA
Magnesium	100		0.20		mg/L	1		6010B	Total/NA
Iron	0.99		0.20		mg/L	1		6010B	Dissolved
Sulfate	66		10		mg/L	10		300.0	Total/NA
Total Dissolved Solids	3700		25		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: IW-1

## Lab Sample ID: 720-48033-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	42		10		ug/L	10		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	32000		500		ug/L	10		8260B/CA_LUFT MS	Total/NA
Methane (TCD)	2.5		0.00099		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	59000		990		ug/L	20		8015B	Total/NA
Magnesium	71		0.20		mg/L	1		6010B	Total/NA
Iron	15		0.20		mg/L	1		6010B	Dissolved
Total Dissolved Solids	1500		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: IW-2

## Lab Sample ID: 720-48033-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	480		10		ug/L	10		8260B/CA_LUFT MS	Total/NA
Methane (TCD)	1.5		0.00099		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	6200		100		ug/L	2		8015B	Total/NA
Magnesium	150		0.20		mg/L	1		6010B	Total/NA
Iron	6.4		0.20		mg/L	1		6010B	Dissolved
Sulfide	5.4		1.0		mg/L	1		376.1	Total/NA
Total Dissolved Solids	3500		25		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: IW-3

## Lab Sample ID: 720-48033-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.58		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	430		20		ug/L	20		8260B/CA_LUFT MS	Total/NA
Methane (TCD)	2.8		0.00099		mg/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	1100		50		ug/L	1		8015B	Total/NA
Magnesium	140		0.20		mg/L	1		6010B	Total/NA
Iron	20		0.20		mg/L	1		6010B	Dissolved
Sulfide	8.2		1.0		mg/L	1		376.1	Total/NA
Total Dissolved Solids	2800		17		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: IW-4

## Lab Sample ID: 720-48033-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	24		10		ug/L	10		8260B/CA_LUFT MS	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: 720-48033-1

### Client Sample ID: IW-4 (Continued)

**Lab Sample ID: 720-48033-14**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO)	5600		500		ug/L		10	8260B/CA_LUFT	Total/NA
-C5-C12					MS				
Methane (TCD)	3.9		0.00099		mg/L	1	RSK-175	Total/NA	
Diesel Range Organics [C10-C28]	34000		500		ug/L	10	8015B	Total/NA	
Magnesium	53		0.20		mg/L	1	6010B	Total/NA	
Iron	3.5		0.20		mg/L	1	6010B	Dissolved	
Sulfate	5.1		1.0		mg/L	1	300.0	Total/NA	
Sulfide	1.0		1.0		mg/L	1	376.1	Total/NA	
Total Dissolved Solids	1200		10		mg/L	1	SM 2540C	Total/NA	

### Client Sample ID: IW-5

**Lab Sample ID: 720-48033-15**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	3.8		1.0		ug/L		1	8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO)	3200		50		ug/L		1	MS	
-C5-C12					8260B/CA_LUFT			Total/NA	
Methane (TCD)	3.2		0.00099		mg/L	1	RSK-175	Total/NA	
Diesel Range Organics [C10-C28]	25000		500		ug/L	10	8015B	Total/NA	
Magnesium	45		0.20		mg/L	1	6010B	Total/NA	
Iron	6.0		0.20		mg/L	1	6010B	Dissolved	
Sulfate	1.2		1.0		mg/L	1	300.0	Total/NA	
Total Dissolved Solids	730		10		mg/L	1	SM 2540C	Total/NA	

### Client Sample ID: IW-6

**Lab Sample ID: 720-48033-16**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.50		0.50		ug/L		1	8260B/CA_LUFT	Total/NA
Naphthalene	4.4		1.0		ug/L		1	MS	
Gasoline Range Organics (GRO)	120		50		ug/L		1	8260B/CA_LUFT	Total/NA
-C5-C12					MS				
Methane (TCD)	3.3		0.00099		mg/L	1	RSK-175	Total/NA	
Diesel Range Organics [C10-C28]	4800		100		ug/L	2	8015B	Total/NA	
Magnesium	290		0.20		mg/L	1	6010B	Total/NA	
Iron	42		0.20		mg/L	1	6010B	Dissolved	
Sulfate	8.1		1.0		mg/L	1	300.0	Total/NA	
Sulfide	2.2		1.0		mg/L	1	376.1	Total/NA	
Total Dissolved Solids	6600		50		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: 720-48033-1

## Client Sample ID: MW-2

Date Collected: 02/26/13 15:00  
Date Received: 02/27/13 12:40

## Lab Sample ID: 720-48033-1

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	0.50		ug/L			03/05/13 14:41	1
Benzene	ND		0.50		ug/L			03/05/13 14:41	1
Ethylbenzene	ND		0.50		ug/L			03/05/13 14:41	1
Naphthalene	3.3		1.0		ug/L			03/05/13 14:41	1
Toluene	ND		0.50		ug/L			03/05/13 14:41	1
Xylenes, Total	1.1		1.0		ug/L			03/05/13 14:41	1
Gasoline Range Organics (GRO) -C5-C12	910		50		ug/L			03/05/13 14:41	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	93			67 - 130				03/05/13 14:41	1
1,2-Dichloroethane-d4 (Surr)	107			75 - 138				03/05/13 14:41	1
Toluene-d8 (Surr)	112			70 - 130				03/05/13 14:41	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	1.4		0.00099		mg/L			02/28/13 18:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	38000		990		ug/L		03/04/13 09:10	03/05/13 12:29	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	0	XD	23 - 156				03/04/13 09:10	03/05/13 12:29	20

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	140		0.20		mg/L		02/28/13 21:03	03/02/13 00:40	1

### Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4.1		0.20		mg/L		02/28/13 21:55	03/01/13 14:02	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/27/13 17:57	1
Sulfate	ND		1.0		mg/L			02/27/13 17:57	1
Sulfide	ND		1.0		mg/L			03/04/13 21:20	1
Total Dissolved Solids	2900		17		mg/L			03/02/13 16:44	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: MW-3**

**Lab Sample ID: 720-48033-2**

**Matrix: Water**

**Date Collected: 02/26/13 14:30**

**Date Received: 02/27/13 12:40**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	0.50		ug/L			03/05/13 15:08	1
Benzene	ND		0.50		ug/L			03/05/13 15:08	1
Ethylbenzene	ND		0.50		ug/L			03/05/13 15:08	1
<b>Naphthalene</b>	<b>1.4</b>		1.0		ug/L			03/05/13 15:08	1
Toluene	ND		0.50		ug/L			03/05/13 15:08	1
Xylenes, Total	ND		1.0		ug/L			03/05/13 15:08	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>200</b>		50		ug/L			03/05/13 15:08	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					03/05/13 15:08	1
1,2-Dichloroethane-d4 (Surr)	101		75 - 138					03/05/13 15:08	1
Toluene-d8 (Surr)	101		70 - 130					03/05/13 15:08	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>4.1</b>		0.00099		mg/L			02/28/13 18:23	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>12000</b>		100		ug/L		03/04/13 09:10	03/05/13 12:58	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>p-Terphenyl</i>	38		23 - 156				03/04/13 09:10	03/05/13 12:58	2

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Magnesium</b>	<b>43</b>		0.20		mg/L		02/28/13 21:03	03/02/13 00:45	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>3.8</b>		0.20		mg/L		02/28/13 21:55	03/01/13 14:07	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/27/13 18:31	1
Sulfate	ND		1.0		mg/L			02/27/13 18:31	1
Sulfide	ND		1.0		mg/L			03/04/13 21:27	1
<b>Total Dissolved Solids</b>	<b>630</b>		10		mg/L			03/02/13 16:47	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: MW-4**

**Lab Sample ID: 720-48033-3**

Date Collected: 02/26/13 14:45

Matrix: Water

Date Received: 02/27/13 12:40

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	0.50		ug/L			03/05/13 14:15	1
Benzene	ND		0.50		ug/L			03/05/13 14:15	1
Ethylbenzene	ND		0.50		ug/L			03/05/13 14:15	1
Naphthalene	ND		1.0		ug/L			03/05/13 14:15	1
Toluene	ND		0.50		ug/L			03/05/13 14:15	1
Xylenes, Total	ND		1.0		ug/L			03/05/13 14:15	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/05/13 14:15	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	91		67 - 130					03/05/13 14:15	1
1,2-Dichloroethane-d4 (Surr)	112		75 - 138					03/05/13 14:15	1
Toluene-d8 (Surr)	94		70 - 130					03/05/13 14:15	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	3.7		0.00099		mg/L			02/28/13 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]	9900		100		ug/L		03/04/13 09:10	03/05/13 13:31	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
p-Terphenyl	41		23 - 156				03/04/13 09:10	03/05/13 13:31	2

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	41		0.20		mg/L		02/28/13 21:03	03/02/13 00:50	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3.4		0.20		mg/L		02/28/13 21:55	03/01/13 14:12	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/27/13 19:40	1
Sulfate	1.6		1.0		mg/L			02/27/13 19:40	1
Sulfide	ND		1.0		mg/L			03/04/13 21:30	1
Total Dissolved Solids	1400		10		mg/L			03/02/13 16:49	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: MW-8**

**Lab Sample ID: 720-48033-4**

**Matrix: Water**

Date Collected: 02/26/13 15:15

Date Received: 02/27/13 12:40

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	0.50		ug/L			03/05/13 15:34	1
Benzene	ND		0.50		ug/L			03/05/13 15:34	1
Ethylbenzene	ND		0.50		ug/L			03/05/13 15:34	1
<b>Naphthalene</b>	<b>12</b>		1.0		ug/L			03/05/13 15:34	1
Toluene	ND		0.50		ug/L			03/05/13 15:34	1
Xylenes, Total	ND		1.0		ug/L			03/05/13 15:34	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/05/13 15:34	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	103		67 - 130					03/05/13 15:34	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 138					03/05/13 15:34	1
Toluene-d8 (Surr)	102		70 - 130					03/05/13 15:34	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>		0.00099		mg/L			02/28/13 18:50	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>280</b>		51		ug/L		03/04/13 09:10	03/05/13 13:31	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				03/04/13 09:10	03/05/13 13:31	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Magnesium</b>	<b>170</b>		0.20		mg/L		02/28/13 21:03	03/02/13 00:55	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>0.81</b>		0.20		mg/L		02/28/13 21:55	03/01/13 14:16	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/27/13 20:49	1
Sulfate	ND		1.0		mg/L			02/27/13 20:49	1
<b>Sulfide</b>	<b>1.5</b>		1.0		mg/L			03/04/13 21:32	1
<b>Total Dissolved Solids</b>	<b>2900</b>		17		mg/L			03/02/13 16:52	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: MW-9**

**Lab Sample ID: 720-48033-5**

Date Collected: 02/26/13 15:00

Matrix: Water

Date Received: 02/27/13 12:40

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	0.50		ug/L			03/05/13 15:59	1
Benzene	ND		0.50		ug/L			03/05/13 15:59	1
Ethylbenzene	ND		0.50		ug/L			03/05/13 15:59	1
Naphthalene	ND		1.0		ug/L			03/05/13 15:59	1
Toluene	ND		0.50		ug/L			03/05/13 15:59	1
Xylenes, Total	ND		1.0		ug/L			03/05/13 15:59	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/05/13 15:59	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					03/05/13 15:59	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 138					03/05/13 15:59	1
Toluene-d8 (Surr)	102		70 - 130					03/05/13 15:59	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	2.6		0.00099		mg/L			02/28/13 19:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	320		93		ug/L		03/04/13 09:10	03/05/13 14:00	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	81		23 - 156				03/04/13 09:10	03/05/13 14:00	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	260		0.20		mg/L		02/28/13 21:03	03/02/13 01:00	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4.0		0.20		mg/L		02/28/13 21:55	03/01/13 14:21	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/27/13 21:23	1
Sulfate	1.4		1.0		mg/L			02/27/13 21:23	1
Sulfide	ND		1.0		mg/L			03/04/13 21:35	1
Total Dissolved Solids	8900		100		mg/L			03/02/13 16:54	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: MW-10**

**Lab Sample ID: 720-48033-6**

**Matrix: Water**

Date Collected: 02/26/13 13:30

Date Received: 02/27/13 12:40

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	0.50		ug/L			03/05/13 16:25	1
Benzene	ND		0.50		ug/L			03/05/13 16:25	1
Ethylbenzene	ND		0.50		ug/L			03/05/13 16:25	1
Naphthalene	ND		1.0		ug/L			03/05/13 16:25	1
Toluene	ND		0.50		ug/L			03/05/13 16:25	1
Xylenes, Total	ND		1.0		ug/L			03/05/13 16:25	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/05/13 16:25	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					03/05/13 16:25	1
1,2-Dichloroethane-d4 (Surr)	101		75 - 138					03/05/13 16:25	1
Toluene-d8 (Surr)	96		70 - 130					03/05/13 16:25	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	2.0		0.00099		mg/L			02/28/13 19:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	440		51		ug/L		03/04/13 09:10	03/05/13 14:30	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	80		23 - 156				03/04/13 09:10	03/05/13 14:30	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	110		0.20		mg/L		02/28/13 21:03	03/02/13 01:04	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2.3		0.20		mg/L		02/28/13 21:55	03/01/13 14:25	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/27/13 21:57	1
Sulfate	21		10		mg/L			02/27/13 22:15	10
Sulfide	ND		1.0		mg/L			03/04/13 21:37	1
Total Dissolved Solids	3000		25		mg/L			03/02/13 16:57	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: MW-11**

**Lab Sample ID: 720-48033-7**

Date Collected: 02/26/13 13:45

Matrix: Water

Date Received: 02/27/13 12:40

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	0.50		ug/L			03/05/13 16:51	1
Benzene	ND		0.50		ug/L			03/05/13 16:51	1
Ethylbenzene	ND		0.50		ug/L			03/05/13 16:51	1
Naphthalene	ND		1.0		ug/L			03/05/13 16:51	1
Toluene	ND		0.50		ug/L			03/05/13 16:51	1
Xylenes, Total	ND		1.0		ug/L			03/05/13 16:51	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/05/13 16:51	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	99		67 - 130					03/05/13 16:51	1
1,2-Dichloroethane-d4 (Surr)	96		75 - 138					03/05/13 16:51	1
Toluene-d8 (Surr)	100		70 - 130					03/05/13 16:51	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	2.1		0.00099		mg/L			02/28/13 19:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1200		50		ug/L		03/04/13 09:10	03/05/13 14:59	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	62		23 - 156				03/04/13 09:10	03/05/13 14:59	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	120		0.20		mg/L		02/28/13 21:03	03/02/13 01:09	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.63		0.20		mg/L		02/28/13 21:55	03/01/13 14:30	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/27/13 22:32	1
Sulfate	ND		1.0		mg/L			02/27/13 22:32	1
Sulfide	3.1		1.0		mg/L			03/04/13 21:40	1
Total Dissolved Solids	4700		33		mg/L			03/02/13 17:00	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: MW-12**

**Lab Sample ID: 720-48033-8**

Date Collected: 02/26/13 14:20

Matrix: Water

Date Received: 02/27/13 12:40

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	0.50		ug/L			03/05/13 17:18	1
Benzene	ND		0.50		ug/L			03/05/13 17:18	1
Ethylbenzene	ND		0.50		ug/L			03/05/13 17:18	1
<b>Naphthalene</b>	<b>3.9</b>		1.0		ug/L			03/05/13 17:18	1
Toluene	ND		0.50		ug/L			03/05/13 17:18	1
Xylenes, Total	ND		1.0		ug/L			03/05/13 17:18	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>2500</b>		500		ug/L			03/07/13 13:16	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	0	X	67 - 130					03/05/13 17:18	1
4-Bromofluorobenzene	99		67 - 130					03/07/13 13:16	10
1,2-Dichloroethane-d4 (Surr)	101		75 - 138					03/05/13 17:18	1
1,2-Dichloroethane-d4 (Surr)	99		75 - 138					03/07/13 13:16	10
Toluene-d8 (Surr)	102		70 - 130					03/05/13 17:18	1
Toluene-d8 (Surr)	99		70 - 130					03/07/13 13:16	10

## 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>		0.00099		mg/L			02/28/13 20:56	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>24000</b>		1000		ug/L		03/04/13 09:10	03/05/13 16:19	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
p-Terphenyl	0	XD	23 - 156				03/04/13 09:10	03/05/13 16:19	20

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Magnesium</b>	<b>75</b>		0.20		mg/L		02/28/13 21:03	03/02/13 01:14	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>9.2</b>		0.20		mg/L		02/28/13 21:55	03/01/13 14:35	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/27/13 23:08	1
<b>Sulfate</b>	<b>1.3</b>		1.0		mg/L			02/27/13 23:08	1
Sulfide	ND		1.0		mg/L			03/04/13 21:42	1
<b>Total Dissolved Solids</b>	<b>1500</b>		10		mg/L			03/02/13 17:02	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: MW-13**

**Lab Sample ID: 720-48033-9**

**Matrix: Water**

Date Collected: 02/26/13 14:40

Date Received: 02/27/13 12:40

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/06/13 04:16	1
Benzene	ND		0.50		ug/L			03/06/13 04:16	1
Ethylbenzene	ND		0.50		ug/L			03/06/13 04:16	1
Naphthalene	ND		1.0		ug/L			03/06/13 04:16	1
Toluene	ND		0.50		ug/L			03/06/13 04:16	1
Xylenes, Total	ND		1.0		ug/L			03/06/13 04:16	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/06/13 04:16	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	99		67 - 130					03/06/13 04:16	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 138					03/06/13 04:16	1
Toluene-d8 (Surr)	101		70 - 130					03/06/13 04:16	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	3.6		0.00099		mg/L			02/28/13 21:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	880		100		ug/L		03/04/13 09:10	03/05/13 16:48	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
p-Terphenyl	81		23 - 156				03/04/13 09:10	03/05/13 16:48	2

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	93		0.20		mg/L		02/28/13 21:03	03/02/13 01:19	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.56		0.20		mg/L		02/28/13 21:55	03/01/13 14:39	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/28/13 00:16	1
Sulfate	1.3		1.0		mg/L			02/28/13 00:16	1
Sulfide	3.8		1.0		mg/L			03/04/13 21:45	1
Total Dissolved Solids	1300		10		mg/L			03/02/13 17:05	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: MW-14**

**Lab Sample ID: 720-48033-10**

**Matrix: Water**

Date Collected: 02/26/13 13:30

Date Received: 02/27/13 12:40

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/06/13 04:44	1
Benzene	ND		0.50		ug/L			03/06/13 04:44	1
Ethylbenzene	ND		0.50		ug/L			03/06/13 04:44	1
Naphthalene	ND		1.0		ug/L			03/06/13 04:44	1
Toluene	ND		0.50		ug/L			03/06/13 04:44	1
Xylenes, Total	ND		1.0		ug/L			03/06/13 04:44	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/06/13 04:44	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	95		67 - 130					03/06/13 04:44	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 138					03/06/13 04:44	1
Toluene-d8 (Surr)	101		70 - 130					03/06/13 04:44	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	3.7		0.00099		mg/L			02/28/13 21:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	230		54		ug/L		03/04/13 09:10	03/06/13 11:15	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	112		23 - 156				03/04/13 09:10	03/06/13 11:15	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	100		0.20		mg/L		02/28/13 21:03	03/02/13 01:32	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.99		0.20		mg/L		02/28/13 21:55	03/01/13 14:43	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/28/13 00:51	1
Sulfate	66		10		mg/L			02/28/13 01:08	10
Sulfide	ND		1.0		mg/L			03/04/13 21:47	1
Total Dissolved Solids	3700		25		mg/L			03/03/13 23:22	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: IW-1**

**Lab Sample ID: 720-48033-11**

**Matrix: Water**

**Date Collected: 02/26/13 13:50**

**Date Received: 02/27/13 12:40**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/L			03/08/13 18:44	10
Benzene	ND		5.0		ug/L			03/08/13 18:44	10
Ethylbenzene	ND		5.0		ug/L			03/08/13 18:44	10
<b>Naphthalene</b>	<b>42</b>		10		ug/L			03/08/13 18:44	10
Toluene	ND		5.0		ug/L			03/08/13 18:44	10
Xylenes, Total	ND		10		ug/L			03/08/13 18:44	10
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>32000</b>		500		ug/L			03/08/13 18:44	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	106		67 - 130					03/08/13 18:44	10
1,2-Dichloroethane-d4 (Surr)	98		75 - 138					03/08/13 18:44	10
Toluene-d8 (Surr)	98		70 - 130					03/08/13 18:44	10

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>2.5</b>		0.00099		mg/L			02/28/13 21:36	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>59000</b>		990		ug/L		03/04/13 09:10	03/05/13 17:46	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>p-Terphenyl</i>	0	XD	23 - 156				03/04/13 09:10	03/05/13 17:46	20

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Magnesium</b>	<b>71</b>		0.20		mg/L		02/28/13 21:03	03/02/13 01:37	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>15</b>		0.20		mg/L		02/28/13 21:55	03/01/13 14:57	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/28/13 01:25	1
Sulfate	ND		1.0		mg/L			02/28/13 01:25	1
Sulfide	ND		1.0		mg/L			03/04/13 21:50	1
<b>Total Dissolved Solids</b>	<b>1500</b>		10		mg/L			03/03/13 23:25	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: IW-2**

**Lab Sample ID: 720-48033-12**

Date Collected: 02/26/13 15:00

Matrix: Water

Date Received: 02/27/13 12:40

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/L			03/06/13 05:40	10
Benzene	ND		5.0		ug/L			03/06/13 05:40	10
Ethylbenzene	ND		5.0		ug/L			03/06/13 05:40	10
<b>Naphthalene</b>	<b>480</b>		10		ug/L			03/06/13 05:40	10
Toluene	ND		5.0		ug/L			03/06/13 05:40	10
Xylenes, Total	ND		10		ug/L			03/06/13 05:40	10
Gasoline Range Organics (GRO) -C5-C12	ND		500		ug/L			03/06/13 05:40	10
<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					03/06/13 05:40	10
1,2-Dichloroethane-d4 (Surr)	108		75 - 138					03/06/13 05:40	10
Toluene-d8 (Surr)	105		70 - 130					03/06/13 05:40	10

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>1.5</b>		0.00099		mg/L			02/28/13 21:50	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>6200</b>		100		ug/L		03/04/13 09:10	03/05/13 18:15	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>p-Terphenyl</i>	54		23 - 156				03/04/13 09:10	03/05/13 18:15	2

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Magnesium</b>	<b>150</b>		0.20		mg/L		02/28/13 21:03	03/02/13 01:41	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>6.4</b>		0.20		mg/L		02/28/13 21:55	03/01/13 15:01	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/28/13 01:59	1
Sulfate	ND		1.0		mg/L			02/28/13 01:59	1
<b>Sulfide</b>	<b>5.4</b>		1.0		mg/L			03/04/13 21:52	1
<b>Total Dissolved Solids</b>	<b>3500</b>		25		mg/L			03/03/13 23:27	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: IW-3**

Date Collected: 02/26/13 14:05

Date Received: 02/27/13 12:40

**Lab Sample ID: 720-48033-13**

Matrix: Water

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/06/13 06:08	1
Benzene	ND		0.50		ug/L			03/06/13 06:08	1
<b>Ethylbenzene</b>	<b>0.58</b>		0.50		ug/L			03/06/13 06:08	1
<b>Naphthalene</b>	<b>430</b>		20		ug/L			03/07/13 17:53	20
Toluene	ND		0.50		ug/L			03/06/13 06:08	1
Xylenes, Total	ND		1.0		ug/L			03/06/13 06:08	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/06/13 06:08	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	104		67 - 130					03/06/13 06:08	1
4-Bromofluorobenzene	86		67 - 130					03/07/13 17:53	20
1,2-Dichloroethane-d4 (Surr)	110		75 - 138					03/06/13 06:08	1
1,2-Dichloroethane-d4 (Surr)	102		75 - 138					03/07/13 17:53	20
Toluene-d8 (Surr)	104		70 - 130					03/06/13 06:08	1
Toluene-d8 (Surr)	96		70 - 130					03/07/13 17:53	20

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>2.8</b>		0.00099		mg/L			02/28/13 22:04	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>1100</b>		50		ug/L		03/04/13 09:10	03/05/13 18:44	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	72		23 - 156				03/04/13 09:10	03/05/13 18:44	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Magnesium</b>	<b>140</b>		0.20		mg/L		02/28/13 21:03	03/02/13 01:46	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>20</b>		0.20		mg/L		02/28/13 21:55	03/01/13 15:06	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/28/13 02:34	1
Sulfate	ND		1.0		mg/L			02/28/13 02:34	1
<b>Sulfide</b>	<b>8.2</b>		1.0		mg/L			03/04/13 21:55	1
<b>Total Dissolved Solids</b>	<b>2800</b>		17		mg/L			03/03/13 23:30	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: IW-4**

**Lab Sample ID: 720-48033-14**

Date Collected: 02/26/13 14:15

Matrix: Water

Date Received: 02/27/13 12:40

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/L			03/08/13 05:06	10
Benzene	ND		5.0		ug/L			03/08/13 05:06	10
Ethylbenzene	ND		5.0		ug/L			03/08/13 05:06	10
<b>Naphthalene</b>	<b>24</b>		10		ug/L			03/08/13 05:06	10
Toluene	ND		5.0		ug/L			03/08/13 05:06	10
Xylenes, Total	ND		10		ug/L			03/08/13 05:06	10
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>5600</b>		500		ug/L			03/08/13 05:06	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	107		67 - 130					03/08/13 05:06	10
1,2-Dichloroethane-d4 (Surr)	105		75 - 138					03/08/13 05:06	10
Toluene-d8 (Surr)	102		70 - 130					03/08/13 05:06	10

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>3.9</b>		0.00099		mg/L			02/28/13 22:17	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>34000</b>		500		ug/L		03/04/13 09:10	03/07/13 01:09	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>p-Terphenyl</i>	0	<i>D X</i>	23 - 156				03/04/13 09:10	03/07/13 01:09	10

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Magnesium</b>	<b>53</b>		0.20		mg/L		02/28/13 21:03	03/02/13 01:51	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>3.5</b>		0.20		mg/L		02/28/13 21:55	03/01/13 15:10	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/28/13 03:42	1
Sulfate	5.1		1.0		mg/L			02/28/13 03:42	1
Sulfide	1.0		1.0		mg/L			03/04/13 21:57	1
Total Dissolved Solids	1200		10		mg/L			03/03/13 23:32	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: IW-5**

**Lab Sample ID: 720-48033-15**

**Matrix: Water**

Date Collected: 02/26/13 14:00

Date Received: 02/27/13 12:40

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/08/13 05:34	1
Benzene	ND		0.50		ug/L			03/08/13 05:34	1
Ethylbenzene	ND		0.50		ug/L			03/08/13 05:34	1
<b>Naphthalene</b>	<b>3.8</b>		1.0		ug/L			03/08/13 05:34	1
Toluene	ND		0.50		ug/L			03/08/13 05:34	1
Xylenes, Total	ND		1.0		ug/L			03/08/13 05:34	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>3200</b>		50		ug/L			03/08/13 05:34	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	117		67 - 130					03/08/13 05:34	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 138					03/08/13 05:34	1
Toluene-d8 (Surr)	105		70 - 130					03/08/13 05:34	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane (TCD)</b>	<b>3.2</b>		0.00099		mg/L			02/28/13 22:33	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>		500		ug/L		03/04/13 09:10	03/07/13 01:38	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>p-Terphenyl</i>	0	<i>D X</i>	23 - 156				03/04/13 09:10	03/07/13 01:38	10

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Magnesium</b>	<b>45</b>		0.20		mg/L		02/28/13 21:03	03/02/13 01:56	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>6.0</b>		0.20		mg/L		02/28/13 21:55	03/01/13 15:15	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/28/13 04:17	1
<b>Sulfate</b>	<b>1.2</b>		1.0		mg/L			02/28/13 04:17	1
Sulfide	ND		1.0		mg/L			03/04/13 22:00	1
<b>Total Dissolved Solids</b>	<b>730</b>		10		mg/L			03/03/13 23:35	1

# Client Sample Results

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

TestAmerica Job ID: 720-48033-1

**Client Sample ID: IW-6**

**Lab Sample ID: 720-48033-16**

**Matrix: Water**

Date Collected: 02/26/13 13:45

Date Received: 02/27/13 12:40

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/08/13 06:02	1
Benzene	0.50		0.50		ug/L			03/08/13 06:02	1
Ethylbenzene	ND		0.50		ug/L			03/08/13 06:02	1
Naphthalene	4.4		1.0		ug/L			03/08/13 06:02	1
Toluene	ND		0.50		ug/L			03/08/13 06:02	1
Xylenes, Total	ND		1.0		ug/L			03/08/13 06:02	1
Gasoline Range Organics (GRO) -C5-C12	120		50		ug/L			03/08/13 06:02	1
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		67 - 130					03/08/13 06:02	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 138					03/08/13 06:02	1
Toluene-d8 (Surr)	107		70 - 130					03/08/13 06:02	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	3.3		0.00099		mg/L			02/28/13 22:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4800		100		ug/L		03/04/13 09:10	03/07/13 02:07	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	67		23 - 156				03/04/13 09:10	03/07/13 02:07	2

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	290		0.20		mg/L		02/28/13 21:03	03/02/13 02:00	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	42		0.20		mg/L		02/28/13 21:55	03/01/13 15:19	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			02/28/13 04:51	1
Sulfate	8.1		1.0		mg/L			02/28/13 04:51	1
Sulfide	2.2		1.0		mg/L			03/04/13 22:02	1
Total Dissolved Solids	6600		50		mg/L			03/03/13 23:37	1

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# QC Sample Results

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

TestAmerica Job ID: 720-48033-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

**Lab Sample ID:** MB 720-131679/4

**Matrix:** Water

**Analysis Batch:** 131679

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			03/05/13 08:54	1
Benzene	ND		0.50		ug/L			03/05/13 08:54	1
Ethylbenzene	ND		0.50		ug/L			03/05/13 08:54	1
Naphthalene	ND		1.0		ug/L			03/05/13 08:54	1
Toluene	ND		0.50		ug/L			03/05/13 08:54	1
Xylenes, Total	ND		1.0		ug/L			03/05/13 08:54	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/05/13 08:54	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	91		67 - 130		03/05/13 08:54	1
1,2-Dichloroethane-d4 (Surr)	111		75 - 138		03/05/13 08:54	1
Toluene-d8 (Surr)	99		70 - 130		03/05/13 08:54	1

**Lab Sample ID:** LCS 720-131679/5

**Matrix:** Water

**Analysis Batch:** 131679

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
	Added								
Methyl tert-butyl ether	25.0		25.0		ug/L		100	62 - 130	
Benzene	25.0		22.4		ug/L		90	79 - 130	
Ethylbenzene	25.0		22.7		ug/L		91	80 - 120	
Naphthalene	25.0		20.3		ug/L		81	70 - 130	
Toluene	25.0		23.0		ug/L		92	78 - 120	
m-Xylene & p-Xylene	50.0		46.9		ug/L		94	70 - 142	
o-Xylene	25.0		22.5		ug/L		90	70 - 130	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	87		67 - 130
1,2-Dichloroethane-d4 (Surr)	105		75 - 138
Toluene-d8 (Surr)	121		70 - 130

**Lab Sample ID:** LCS 720-131679/9

**Matrix:** Water

**Analysis Batch:** 131679

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
	Added								
Gasoline Range Organics (GRO) -C5-C12	500		489		ug/L		98	62 - 120	
Surrogate									
4-Bromofluorobenzene	103		67 - 130						
1,2-Dichloroethane-d4 (Surr)	103		75 - 138						
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: 720-48033-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-131679/10**

**Matrix: Water**

**Analysis Batch: 131679**

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

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec.	RPD	RPD Limit
		Result	Qualifier			%Rec		
Gasoline Range Organics (GRO) -C5-C12	500	454		ug/L		91	62 - 120	8 20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	106		75 - 138
Toluene-d8 (Surr)	95		70 - 130

**Lab Sample ID: LCSD 720-131679/6**

**Matrix: Water**

**Analysis Batch: 131679**

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

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec.	RPD	RPD Limit
		Result	Qualifier			%Rec		
Methyl tert-butyl ether	25.0	19.0	*	ug/L		76	62 - 130	27 20
Benzene	25.0	23.7		ug/L		95	79 - 130	6 20
Ethylbenzene	25.0	26.3		ug/L		105	80 - 120	15 20
Naphthalene	25.0	19.8		ug/L		79	70 - 130	3 20
Toluene	25.0	27.0		ug/L		108	78 - 120	16 20
m-Xylene & p-Xylene	50.0	47.0		ug/L		94	70 - 142	0 20
o-Xylene	25.0	24.3		ug/L		97	70 - 130	8 20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	90		67 - 130
1,2-Dichloroethane-d4 (Surr)	99		75 - 138
Toluene-d8 (Surr)	102		70 - 130

**Lab Sample ID: 720-48033-3 MS**

**Matrix: Water**

**Analysis Batch: 131679**

**Client Sample ID: MW-4**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.
	Result	Qualifier	Added	Result	Qualifier			%Rec
Methyl tert-butyl ether	ND	*	25.0	25.4		ug/L		102
Benzene	ND		25.0	23.4		ug/L		94
Ethylbenzene	ND		25.0	24.4		ug/L		97
Naphthalene	ND		25.0	24.4		ug/L		96
Toluene	ND		25.0	25.1		ug/L		100
m-Xylene & p-Xylene	ND		50.0	50.2		ug/L		100
o-Xylene	ND		25.0	25.9		ug/L		104

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	102		75 - 138
Toluene-d8 (Surr)	112		70 - 130

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# QC Sample Results

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

TestAmerica Job ID: 720-48033-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-48033-3 MSD**

**Matrix: Water**

**Analysis Batch: 131679**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD Limit								
	Result	Qualifier	Added	Result	Qualifier														
Methyl tert-butyl ether	ND	*	25.0	23.9		ug/L	95	60 - 138	6	20									
Benzene	ND		25.0	24.8		ug/L	99	60 - 140	5	20									
Ethylbenzene	ND		25.0	22.6		ug/L	90	60 - 140	7	20									
Naphthalene	ND		25.0	21.2		ug/L	83	56 - 140	14	20									
Toluene	ND		25.0	25.9		ug/L	104	60 - 140	3	20									
m-Xylene & p-Xylene	ND		50.0	46.8		ug/L	94	60 - 140	7	20									
o-Xylene	ND		25.0	24.1		ug/L	97	60 - 140	7	20									
<b>Surrogate</b>																			
4-Bromofluorobenzene	102	%Recovery	Qualifier	<b>Limits</b>															
1,2-Dichloroethane-d4 (Surr)	110			67 - 130															
Toluene-d8 (Surr)	124			75 - 138															
<b>Surrogate</b>																			
4-Bromofluorobenzene	99	%Recovery	Qualifier	<b>Limits</b>															
1,2-Dichloroethane-d4 (Surr)	106			67 - 130															
Toluene-d8 (Surr)	103			75 - 138															

**Lab Sample ID: MB 720-131732/5**

**Matrix: Water**

**Analysis Batch: 131732**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			03/05/13 19:52	1
Benzene	ND		0.50		ug/L			03/05/13 19:52	1
Ethylbenzene	ND		0.50		ug/L			03/05/13 19:52	1
Naphthalene	ND		1.0		ug/L			03/05/13 19:52	1
Toluene	ND		0.50		ug/L			03/05/13 19:52	1
Xylenes, Total	ND		1.0		ug/L			03/05/13 19:52	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/05/13 19:52	1
<b>Surrogate</b>									
4-Bromofluorobenzene	99	%Recovery	Qualifier	<b>Limits</b>					
1,2-Dichloroethane-d4 (Surr)	106			67 - 130					
Toluene-d8 (Surr)	103			75 - 138					

**Lab Sample ID: LCS 720-131732/6**

**Matrix: Water**

**Analysis Batch: 131732**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Methyl tert-butyl ether	25.0	26.5		ug/L		106	62 - 130
Benzene	25.0	23.4		ug/L		94	79 - 130
Ethylbenzene	25.0	23.6		ug/L		94	80 - 120
Naphthalene	25.0	21.9		ug/L		87	70 - 130
Toluene	25.0	23.6		ug/L		95	78 - 120
m-Xylene & p-Xylene	50.0	50.7		ug/L		101	70 - 142
o-Xylene	25.0	24.9		ug/L		100	70 - 130
<b>Surrogate</b>							
4-Bromofluorobenzene	111	%Recovery	Qualifier	<b>Limits</b>		67 - 130	

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

# QC Sample Results

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

TestAmerica Job ID: 720-48033-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-131732/6**

**Matrix: Water**

**Analysis Batch: 131732**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102				75 - 138
Toluene-d8 (Surr)	108				70 - 130

**Lab Sample ID: LCS 720-131732/8**

**Matrix: Water**

**Analysis Batch: 131732**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	%Rec.	Unit	D	%Rec	Limits
	Added	Result	Qualifier		ug/L			
Gasoline Range Organics (GRO)	500	490						62 - 120
-C5-C12								

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	108				67 - 130
1,2-Dichloroethane-d4 (Surr)	103				75 - 138
Toluene-d8 (Surr)	108				70 - 130

**Lab Sample ID: LCSD 720-131732/7**

**Matrix: Water**

**Analysis Batch: 131732**

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

Analyte	Spike	LCSD	LCSD	%Rec.	RPD	Limit	Unit	D	%Rec
	Added	Result	Qualifier				ug/L		
Methyl tert-butyl ether	25.0	25.9			103	62 - 130		2	20
Benzene	25.0	23.4			93	79 - 130		0	20
Ethylbenzene	25.0	23.6			95	80 - 120		0	20
Naphthalene	25.0	21.7			87	70 - 130		1	20
Toluene	25.0	23.6			95	78 - 120		0	20
m-Xylene & p-Xylene	50.0	50.5			101	70 - 142		0	20
o-Xylene	25.0	24.9			99	70 - 130		0	20

Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	109				67 - 130
1,2-Dichloroethane-d4 (Surr)	99				75 - 138
Toluene-d8 (Surr)	107				70 - 130

**Lab Sample ID: LCSD 720-131732/9**

**Matrix: Water**

**Analysis Batch: 131732**

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

Analyte	Spike	LCSD	LCSD	%Rec.	RPD	Limit	Unit	D	%Rec
	Added	Result	Qualifier				ug/L		
Gasoline Range Organics (GRO)	500	491			98	62 - 120		0	20
-C5-C12									

Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	107				67 - 130
1,2-Dichloroethane-d4 (Surr)	104				75 - 138
Toluene-d8 (Surr)	108				70 - 130

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# QC Sample Results

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

TestAmerica Job ID: 720-48033-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID:** MB 720-131850/4

**Matrix:** Water

**Analysis Batch:** 131850

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			03/07/13 09:41	1
Benzene	ND		0.50		ug/L			03/07/13 09:41	1
Ethylbenzene	ND		0.50		ug/L			03/07/13 09:41	1
Naphthalene	ND		1.0		ug/L			03/07/13 09:41	1
Toluene	ND		0.50		ug/L			03/07/13 09:41	1
Xylenes, Total	ND		1.0		ug/L			03/07/13 09:41	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/07/13 09:41	1

**MB MB**

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	94		67 - 130		03/07/13 09:41	1
1,2-Dichloroethane-d4 (Surr)	99		75 - 138		03/07/13 09:41	1
Toluene-d8 (Surr)	100		70 - 130		03/07/13 09:41	1

**Lab Sample ID:** LCS 720-131850/5

**Matrix:** Water

**Analysis Batch:** 131850

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike		LCS	LCS	Unit	D	%Rec	Limits	%Rec.
	Added	Result							
Methyl tert-butyl ether	25.0	27.9		ug/L			112	62 - 130	
Benzene	25.0	25.5		ug/L			102	79 - 130	
Ethylbenzene	25.0	24.9		ug/L			100	80 - 120	
Naphthalene	25.0	22.9		ug/L			91	70 - 130	
Toluene	25.0	24.4		ug/L			98	78 - 120	
m-Xylene & p-Xylene	50.0	51.0		ug/L			102	70 - 142	
o-Xylene	25.0	27.0		ug/L			108	70 - 130	

**LCS LCS**

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	98		75 - 138
Toluene-d8 (Surr)	101		70 - 130

**Lab Sample ID:** LCS 720-131850/7

**Matrix:** Water

**Analysis Batch:** 131850

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike		LCS	LCS	Unit	D	%Rec	Limits	%Rec.
	Added	Result							
Gasoline Range Organics (GRO) -C5-C12	500	467		ug/L			93	62 - 120	

**LCS LCS**

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		75 - 138
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: 720-48033-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-131850/6**

**Matrix: Water**

**Analysis Batch: 131850**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	29.5		ug/L		118	62 - 130	5	20
Benzene	25.0	25.5		ug/L		102	79 - 130	0	20
Ethylbenzene	25.0	24.3		ug/L		97	80 - 120	2	20
Naphthalene	25.0	24.6		ug/L		98	70 - 130	7	20
Toluene	25.0	24.1		ug/L		96	78 - 120	1	20
m-Xylene & p-Xylene	50.0	49.5		ug/L		99	70 - 142	3	20
o-Xylene	25.0	26.4		ug/L		106	70 - 130	2	20

**Surrogate**      **LCSD %Recovery**      **LCSD Qualifier**      **Limits**

4-Bromofluorobenzene	102		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		75 - 138
Toluene-d8 (Surr)	102		70 - 130

**Lab Sample ID: LCSD 720-131850/8**

**Matrix: Water**

**Analysis Batch: 131850**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)	500	454		ug/L		91	62 - 120	3	20
-C5-C12									
<b>Surrogate</b>	<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
4-Bromofluorobenzene	98		67 - 130						
1,2-Dichloroethane-d4 (Surr)	98		75 - 138						
Toluene-d8 (Surr)	101		70 - 130						

**Lab Sample ID: MB 720-131897/4**

**Matrix: Water**

**Analysis Batch: 131897**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/07/13 19:43	1
Benzene	ND		0.50		ug/L			03/07/13 19:43	1
Ethylbenzene	ND		0.50		ug/L			03/07/13 19:43	1
Naphthalene	ND		1.0		ug/L			03/07/13 19:43	1
Toluene	ND		0.50		ug/L			03/07/13 19:43	1
Xylenes, Total	ND		1.0		ug/L			03/07/13 19:43	1
Gasoline Range Organics (GRO)	ND		50		ug/L			03/07/13 19:43	1
-C5-C12									
<b>Surrogate</b>	<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	91		67 - 130					03/07/13 19:43	1
1,2-Dichloroethane-d4 (Surr)	102		75 - 138					03/07/13 19:43	1
Toluene-d8 (Surr)	98		70 - 130					03/07/13 19:43	1

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# QC Sample Results

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

TestAmerica Job ID: 720-48033-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-131897/5**

**Matrix: Water**

**Analysis Batch: 131897**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier			%Rec	
Methyl tert-butyl ether	25.0	30.8		ug/L	123	62 - 130	
Benzene	25.0	26.0		ug/L	104	79 - 130	
Ethylbenzene	25.0	26.7		ug/L	107	80 - 120	
Naphthalene	25.0	23.5		ug/L	94	70 - 130	
Toluene	25.0	26.6		ug/L	106	78 - 120	
m-Xylene & p-Xylene	50.0	57.3		ug/L	115	70 - 142	
o-Xylene	25.0	28.2		ug/L	113	70 - 130	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	111		67 - 130
1,2-Dichloroethane-d4 (Surr)	104		75 - 138
Toluene-d8 (Surr)	106		70 - 130

**Lab Sample ID: LCS 720-131897/7**

**Matrix: Water**

**Analysis Batch: 131897**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier			%Rec	
Gasoline Range Organics (GRO)	500	522		ug/L	104	62 - 120	
-C5-C12							

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	104		67 - 130
1,2-Dichloroethane-d4 (Surr)	102		75 - 138
Toluene-d8 (Surr)	107		70 - 130

**Lab Sample ID: LCSD 720-131897/6**

**Matrix: Water**

**Analysis Batch: 131897**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	RPD	Limit
	Added	Result	Qualifier			%Rec		
Methyl tert-butyl ether	25.0	30.7		ug/L	123	62 - 130	0	20
Benzene	25.0	26.0		ug/L	104	79 - 130	0	20
Ethylbenzene	25.0	26.7		ug/L	107	80 - 120	0	20
Naphthalene	25.0	24.7		ug/L	99	70 - 130	5	20
Toluene	25.0	26.4		ug/L	106	78 - 120	1	20
m-Xylene & p-Xylene	50.0	57.0		ug/L	114	70 - 142	1	20
o-Xylene	25.0	27.7		ug/L	111	70 - 130	2	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	109		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		75 - 138
Toluene-d8 (Surr)	105		70 - 130

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-48033-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-131897/8**

**Matrix: Water**

**Analysis Batch: 131897**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12	500	501		ug/L		100	62 - 120	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	102		67 - 130
1,2-Dichloroethane-d4 (Surr)	105		75 - 138
Toluene-d8 (Surr)	106		70 - 130

**Lab Sample ID: MB 720-131989/4**

**Matrix: Water**

**Analysis Batch: 131989**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/08/13 16:34	1
Benzene	ND		0.50		ug/L			03/08/13 16:34	1
Ethylbenzene	ND		0.50		ug/L			03/08/13 16:34	1
Naphthalene	ND		1.0		ug/L			03/08/13 16:34	1
Toluene	ND		0.50		ug/L			03/08/13 16:34	1
Xylenes, Total	ND		1.0		ug/L			03/08/13 16:34	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/08/13 16:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		67 - 130		03/08/13 16:34	1
1,2-Dichloroethane-d4 (Surr)	104		75 - 138		03/08/13 16:34	1
Toluene-d8 (Surr)	98		70 - 130		03/08/13 16:34	1

**Lab Sample ID: LCS 720-131989/5**

**Matrix: Water**

**Analysis Batch: 131989**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Methyl tert-butyl ether	25.0	28.3		ug/L		113	62 - 130
Benzene	25.0	24.5		ug/L		98	79 - 130
Ethylbenzene	25.0	24.8		ug/L		99	80 - 120
Naphthalene	25.0	26.9		ug/L		108	70 - 130
Toluene	25.0	24.8		ug/L		99	78 - 120
m-Xylene & p-Xylene	50.0	51.7		ug/L		103	70 - 142
o-Xylene	25.0	26.4		ug/L		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	104		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		75 - 138
Toluene-d8 (Surr)	100		70 - 130

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-48033-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-131989/7**

**Matrix: Water**

**Analysis Batch: 131989**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Gasoline Range Organics (GRO) -C5-C12	500	476		ug/L		95	62 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	104		67 - 130
1,2-Dichloroethane-d4 (Surr)	104		75 - 138
Toluene-d8 (Surr)	100		70 - 130

**Lab Sample ID: LCSD 720-131989/6**

**Matrix: Water**

**Analysis Batch: 131989**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD
Methyl tert-butyl ether	25.0	27.8		ug/L		111	62 - 130	2
Benzene	25.0	24.5		ug/L		98	79 - 130	0
Ethylbenzene	25.0	24.4		ug/L		98	80 - 120	2
Naphthalene	25.0	26.7		ug/L		107	70 - 130	1
Toluene	25.0	24.4		ug/L		98	78 - 120	2
m-Xylene & p-Xylene	50.0	50.7		ug/L		101	70 - 142	2
o-Xylene	25.0	26.0		ug/L		104	70 - 130	1

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	102		67 - 130
1,2-Dichloroethane-d4 (Surr)	102		75 - 138
Toluene-d8 (Surr)	100		70 - 130

**Lab Sample ID: LCSD 720-131989/8**

**Matrix: Water**

**Analysis Batch: 131989**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD
Gasoline Range Organics (GRO) -C5-C12	500	481		ug/L		96	62 - 120	1

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	104		67 - 130
1,2-Dichloroethane-d4 (Surr)	108		75 - 138
Toluene-d8 (Surr)	100		70 - 130

## Method: RSK-175 - Dissolved Gases (GC)

**Lab Sample ID: MB 340-4216/8**

**Matrix: Water**

**Analysis Batch: 4216**

**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			02/28/13 17:27	

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# QC Sample Results

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

TestAmerica Job ID: 720-48033-1

## Method: RSK-175 - Dissolved Gases (GC) (Continued)

**Lab Sample ID: LCS 340-4216/4**

**Matrix: Water**

**Analysis Batch: 4216**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Methane (TCD)	9.42	9.71		mg/L		103	80 - 120

**Lab Sample ID: LCS 340-4216/6**

**Matrix: Water**

**Analysis Batch: 4216**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Methane (FID)	0.0471	0.0445		mg/L		94	80 - 120

**Lab Sample ID: LCSD 340-4216/5**

**Matrix: Water**

**Analysis Batch: 4216**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD
Methane (TCD)	9.42	9.38		mg/L		100	80 - 120	3	20

**Lab Sample ID: LCSD 340-4216/7**

**Matrix: Water**

**Analysis Batch: 4216**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD
Methane (FID)	0.0471	0.0450		mg/L		95	80 - 120	1	20

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

**Lab Sample ID: MB 720-131608/1-A**

**Matrix: Water**

**Analysis Batch: 131674**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

**Prep Batch: 131608**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		03/04/13 09:10	03/05/13 12:00	1

**Surrogate**      **MB MB**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	93		23 - 156	03/04/13 09:10	03/05/13 12:00	1

**Lab Sample ID: LCS 720-131608/2-A**

**Matrix: Water**

**Analysis Batch: 131674**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

**Prep Batch: 131608**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Diesel Range Organics [C10-C28]	2500	1540		ug/L		61	40 - 150

**Surrogate**      **LCS LCS**

Surrogate	%Recovery	Qualifier	Limits
p-Terphenyl	90		23 - 156

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# QC Sample Results

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

TestAmerica Job ID: 720-48033-1

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

Lab Sample ID: LCSD 720-131608/3-A				Client Sample ID: Lab Control Sample Dup						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 131674				Prep Batch: 131608						
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD	Limit
Diesel Range Organics [C10-C28]	2500	1570		ug/L	63	40 - 150	2	35		
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits							
p-Terphenyl	97		23 - 156							

## Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-131466/1-A				Client Sample ID: Method Blank						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 131604				Prep Batch: 131466						
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Magnesium	ND		0.20		mg/L		02/28/13 21:03	03/01/13 23:56		1

Lab Sample ID: LCS 720-131466/2-A				Client Sample ID: Lab Control Sample						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 131604				Prep Batch: 131466						
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits			
Magnesium	10.0	10.1		mg/L	101	80 - 120				

Lab Sample ID: LCSD 720-131466/3-A				Client Sample ID: Lab Control Sample Dup						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 131604				Prep Batch: 131466						
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD	Limit
Magnesium	10.0	10.3		mg/L	103	80 - 120	2	20		

Lab Sample ID: MB 720-131472/1-A				Client Sample ID: Method Blank						
Matrix: Water				Prep Type: Total Recoverable						
Analysis Batch: 131539				Prep Batch: 131472						
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Iron	ND		0.20		mg/L		02/28/13 21:55	03/01/13 13:10		1

Lab Sample ID: LCS 720-131472/2-A				Client Sample ID: Lab Control Sample						
Matrix: Water				Prep Type: Total Recoverable						
Analysis Batch: 131539				Prep Batch: 131472						
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits			
Iron	10.0	9.08		mg/L	91	80 - 120				

Lab Sample ID: LCSD 720-131472/3-A				Client Sample ID: Lab Control Sample Dup						
Matrix: Water				Prep Type: Total Recoverable						
Analysis Batch: 131539				Prep Batch: 131472						
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD	Limit
Iron	10.0	9.13		mg/L	91	80 - 120	1	20		

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# QC Sample Results

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

TestAmerica Job ID: 720-48033-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID:** 720-48033-1 MS

**Matrix:** Water

**Analysis Batch:** 131539

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Iron	4.1		10.0	12.5		mg/L		83	75 - 125

**Lab Sample ID:** 720-48033-1 MSD

**Matrix:** Water

**Analysis Batch:** 131602

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Iron	4.1		10.0	12.4		mg/L		83	75 - 125	0	20

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID:** MB 720-131364/4

**Matrix:** Water

**Analysis Batch:** 131364

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Sulfate	ND		1.0		mg/L			02/27/13 16:08	1

**Lab Sample ID:** LCS 720-131364/5

**Matrix:** Water

**Analysis Batch:** 131364

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Sulfate	10.0	9.87		mg/L		99	90 - 110

**Lab Sample ID:** 720-48033-A-2 MS

**Matrix:** Water

**Analysis Batch:** 131364

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Sulfate	ND		100	98.1		mg/L		98	80 - 120

**Lab Sample ID:** 720-48033-A-2 MSD

**Matrix:** Water

**Analysis Batch:** 131364

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Sulfate	ND		100	102		mg/L		102	80 - 120	3	20

**Lab Sample ID:** MB 720-131365/4

**Matrix:** Water

**Analysis Batch:** 131365

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nitrate as N	ND		0.23		mg/L			02/27/13 16:08	1

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# QC Sample Results

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

TestAmerica Job ID: 720-48033-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCS 720-131365/5**

**Matrix: Water**

**Analysis Batch: 131365**

Analyte		Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Added	Result	Qualifier				
Nitrate as N		2.26	2.26		mg/L		100	90 - 110

**Lab Sample ID: 720-48033-A-2 MS**

**Matrix: Water**

**Analysis Batch: 131365**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Nitrate as N	ND		22.6	23.0		mg/L		102	80 - 120

**Lab Sample ID: 720-48033-A-2 MSD**

**Matrix: Water**

**Analysis Batch: 131365**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Nitrate as N	ND		22.6	22.9		mg/L		101	80 - 120	1	20

## Method: 376.1 - Sulfide

**Lab Sample ID: MB 500-179064/1**

**Matrix: Water**

**Analysis Batch: 179064**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Sulfide	ND		1.0		mg/L			03/04/13 21:15	1

**Lab Sample ID: LCS 500-179064/2**

**Matrix: Water**

**Analysis Batch: 179064**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Sulfide	3.46	3.82		mg/L		111	80 - 120

**Lab Sample ID: 720-48033-1 MS**

**Matrix: Water**

**Analysis Batch: 179064**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Sulfide	ND		8.64	7.05		mg/L		82	75 - 125

**Lab Sample ID: 720-48033-1 MSD**

**Matrix: Water**

**Analysis Batch: 179064**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Sulfide	ND		8.64	6.93		mg/L		80	75 - 125	2	20

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# QC Sample Results

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

TestAmerica Job ID: 720-48033-1

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID:** MB 500-178951/1

**Matrix:** Water

**Analysis Batch:** 178951

**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			03/02/13 16:05	1

**Lab Sample ID:** LCS 500-178951/2

**Matrix:** Water

**Analysis Batch:** 178951

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	250	228		mg/L		91	80 - 120

**Lab Sample ID:** MB 500-178959/1

**Matrix:** Water

**Analysis Batch:** 178959

**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			03/03/13 22:45	1

**Lab Sample ID:** LCS 500-178959/2

**Matrix:** Water

**Analysis Batch:** 178959

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	250	218		mg/L		87	80 - 120

# QC Association Summary

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

TestAmerica Job ID: 720-48033-1

## GC/MS VOA

### Analysis Batch: 131679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1	MW-2	Total/NA	Water	8260B/CA_LUFT MS	5
720-48033-2	MW-3	Total/NA	Water	8260B/CA_LUFT MS	6
720-48033-3	MW-4	Total/NA	Water	8260B/CA_LUFT MS	7
720-48033-3 MS	MW-4	Total/NA	Water	8260B/CA_LUFT MS	8
720-48033-3 MSD	MW-4	Total/NA	Water	8260B/CA_LUFT MS	9
720-48033-4	MW-8	Total/NA	Water	8260B/CA_LUFT MS	10
720-48033-5	MW-9	Total/NA	Water	8260B/CA_LUFT MS	11
720-48033-6	MW-10	Total/NA	Water	8260B/CA_LUFT MS	12
720-48033-7	MW-11	Total/NA	Water	8260B/CA_LUFT MS	13
720-48033-8	MW-12	Total/NA	Water	8260B/CA_LUFT MS	14
LCS 720-131679/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	15
LCS 720-131679/9	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-131679/10	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-131679/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-131679/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

### Analysis Batch: 131732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-9	MW-13	Total/NA	Water	8260B/CA_LUFT MS	
720-48033-10	MW-14	Total/NA	Water	8260B/CA_LUFT MS	
720-48033-12	IW-2	Total/NA	Water	8260B/CA_LUFT MS	
720-48033-13	IW-3	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-131732/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-131732/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-131732/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-131732/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-131732/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

### Analysis Batch: 131850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-8	MW-12	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: 720-48033-1

## GC/MS VOA (Continued)

### Analysis Batch: 131850 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-13	IW-3	Total/NA	Water	8260B/CA_LUFT MS	5
LCS 720-131850/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	6
LCS 720-131850/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	7
LCSD 720-131850/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	8
LCSD 720-131850/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	9
MB 720-131850/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	10

### Analysis Batch: 131897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-14	IW-4	Total/NA	Water	8260B/CA_LUFT MS	11
720-48033-15	IW-5	Total/NA	Water	8260B/CA_LUFT MS	12
720-48033-16	IW-6	Total/NA	Water	8260B/CA_LUFT MS	13
LCS 720-131897/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	14
LCS 720-131897/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	15
LCSD 720-131897/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-131897/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-131897/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

### Analysis Batch: 131989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-11	IW-1	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-131989/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-131989/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-131989/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-131989/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-131989/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

## GC VOA

### Analysis Batch: 4216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1	MW-2	Total/NA	Water	RSK-175	
720-48033-2	MW-3	Total/NA	Water	RSK-175	
720-48033-3	MW-4	Total/NA	Water	RSK-175	
720-48033-4	MW-8	Total/NA	Water	RSK-175	

TestAmerica Pleasanton

# QC Association Summary

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

TestAmerica Job ID: 720-48033-1

## GC VOA (Continued)

### Analysis Batch: 4216 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-5	MW-9	Total/NA	Water	RSK-175	1
720-48033-6	MW-10	Total/NA	Water	RSK-175	2
720-48033-7	MW-11	Total/NA	Water	RSK-175	3
720-48033-8	MW-12	Total/NA	Water	RSK-175	4
720-48033-9	MW-13	Total/NA	Water	RSK-175	5
720-48033-10	MW-14	Total/NA	Water	RSK-175	6
720-48033-11	IW-1	Total/NA	Water	RSK-175	7
720-48033-12	IW-2	Total/NA	Water	RSK-175	8
720-48033-13	IW-3	Total/NA	Water	RSK-175	9
720-48033-14	IW-4	Total/NA	Water	RSK-175	10
720-48033-15	IW-5	Total/NA	Water	RSK-175	11
720-48033-16	IW-6	Total/NA	Water	RSK-175	12
LCS 340-4216/4	Lab Control Sample	Total/NA	Water	RSK-175	13
LCS 340-4216/6	Lab Control Sample	Total/NA	Water	RSK-175	14
LCSD 340-4216/5	Lab Control Sample Dup	Total/NA	Water	RSK-175	15
LCSD 340-4216/7	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 340-4216/8	Method Blank	Total/NA	Water	RSK-175	

## GC Semi VOA

### Prep Batch: 131608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1	MW-2	Total/NA	Water	3510C	1
720-48033-2	MW-3	Total/NA	Water	3510C	2
720-48033-3	MW-4	Total/NA	Water	3510C	3
720-48033-4	MW-8	Total/NA	Water	3510C	4
720-48033-5	MW-9	Total/NA	Water	3510C	5
720-48033-6	MW-10	Total/NA	Water	3510C	6
720-48033-7	MW-11	Total/NA	Water	3510C	7
720-48033-8	MW-12	Total/NA	Water	3510C	8
720-48033-9	MW-13	Total/NA	Water	3510C	9
720-48033-10	MW-14	Total/NA	Water	3510C	10
720-48033-11	IW-1	Total/NA	Water	3510C	11
720-48033-12	IW-2	Total/NA	Water	3510C	12
720-48033-13	IW-3	Total/NA	Water	3510C	13
720-48033-14	IW-4	Total/NA	Water	3510C	14
720-48033-15	IW-5	Total/NA	Water	3510C	15
720-48033-16	IW-6	Total/NA	Water	3510C	
LCS 720-131608/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-131608/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-131608/1-A	Method Blank	Total/NA	Water	3510C	

### Analysis Batch: 131673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-4	MW-8	Total/NA	Water	8015B	131608
720-48033-5	MW-9	Total/NA	Water	8015B	131608
720-48033-6	MW-10	Total/NA	Water	8015B	131608
720-48033-7	MW-11	Total/NA	Water	8015B	131608
720-48033-8	MW-12	Total/NA	Water	8015B	131608
720-48033-9	MW-13	Total/NA	Water	8015B	131608

TestAmerica Pleasanton

# QC Association Summary

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

TestAmerica Job ID: 720-48033-1

## GC Semi VOA (Continued)

### Analysis Batch: 131673 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-11	IW-1	Total/NA	Water	8015B	131608
720-48033-12	IW-2	Total/NA	Water	8015B	131608
720-48033-13	IW-3	Total/NA	Water	8015B	131608

### Analysis Batch: 131674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1	MW-2	Total/NA	Water	8015B	131608
720-48033-2	MW-3	Total/NA	Water	8015B	131608
720-48033-3	MW-4	Total/NA	Water	8015B	131608
LCS 720-131608/2-A	Lab Control Sample	Total/NA	Water	8015B	131608
LCSD 720-131608/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	131608
MB 720-131608/1-A	Method Blank	Total/NA	Water	8015B	131608

### Analysis Batch: 131757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-14	IW-4	Total/NA	Water	8015B	131608
720-48033-15	IW-5	Total/NA	Water	8015B	131608
720-48033-16	IW-6	Total/NA	Water	8015B	131608

### Analysis Batch: 131758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-10	MW-14	Total/NA	Water	8015B	131608

## Metals

### Prep Batch: 131466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1	MW-2	Total/NA	Water	3010A	
720-48033-2	MW-3	Total/NA	Water	3010A	
720-48033-3	MW-4	Total/NA	Water	3010A	
720-48033-4	MW-8	Total/NA	Water	3010A	
720-48033-5	MW-9	Total/NA	Water	3010A	
720-48033-6	MW-10	Total/NA	Water	3010A	
720-48033-7	MW-11	Total/NA	Water	3010A	
720-48033-8	MW-12	Total/NA	Water	3010A	
720-48033-9	MW-13	Total/NA	Water	3010A	
720-48033-10	MW-14	Total/NA	Water	3010A	
720-48033-11	IW-1	Total/NA	Water	3010A	
720-48033-12	IW-2	Total/NA	Water	3010A	
720-48033-13	IW-3	Total/NA	Water	3010A	
720-48033-14	IW-4	Total/NA	Water	3010A	
720-48033-15	IW-5	Total/NA	Water	3010A	
720-48033-16	IW-6	Total/NA	Water	3010A	
LCS 720-131466/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 720-131466/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 720-131466/1-A	Method Blank	Total/NA	Water	3010A	

### Prep Batch: 131472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1	MW-2	Dissolved	Water	3005A	

TestAmerica Pleasanton

# QC Association Summary

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

TestAmerica Job ID: 720-48033-1

## Metals (Continued)

### Prep Batch: 131472 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1 MS	MW-2	Dissolved	Water	3005A	5
720-48033-1 MSD	MW-2	Dissolved	Water	3005A	6
720-48033-2	MW-3	Dissolved	Water	3005A	7
720-48033-3	MW-4	Dissolved	Water	3005A	8
720-48033-4	MW-8	Dissolved	Water	3005A	9
720-48033-5	MW-9	Dissolved	Water	3005A	10
720-48033-6	MW-10	Dissolved	Water	3005A	11
720-48033-7	MW-11	Dissolved	Water	3005A	12
720-48033-8	MW-12	Dissolved	Water	3005A	13
720-48033-9	MW-13	Dissolved	Water	3005A	14
720-48033-10	MW-14	Dissolved	Water	3005A	15
720-48033-11	IW-1	Dissolved	Water	3005A	
720-48033-12	IW-2	Dissolved	Water	3005A	
720-48033-13	IW-3	Dissolved	Water	3005A	
720-48033-14	IW-4	Dissolved	Water	3005A	
720-48033-15	IW-5	Dissolved	Water	3005A	
720-48033-16	IW-6	Dissolved	Water	3005A	
LCS 720-131472/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 720-131472/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 720-131472/1-A	Method Blank	Total Recoverable	Water	3005A	

### Analysis Batch: 131539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1	MW-2	Dissolved	Water	6010B	131472
720-48033-1 MS	MW-2	Dissolved	Water	6010B	131472
720-48033-2	MW-3	Dissolved	Water	6010B	131472
720-48033-3	MW-4	Dissolved	Water	6010B	131472
720-48033-4	MW-8	Dissolved	Water	6010B	131472
720-48033-5	MW-9	Dissolved	Water	6010B	131472
720-48033-6	MW-10	Dissolved	Water	6010B	131472
720-48033-7	MW-11	Dissolved	Water	6010B	131472
720-48033-8	MW-12	Dissolved	Water	6010B	131472
720-48033-9	MW-13	Dissolved	Water	6010B	131472
720-48033-10	MW-14	Dissolved	Water	6010B	131472
720-48033-11	IW-1	Dissolved	Water	6010B	131472
720-48033-12	IW-2	Dissolved	Water	6010B	131472
720-48033-13	IW-3	Dissolved	Water	6010B	131472
720-48033-14	IW-4	Dissolved	Water	6010B	131472
720-48033-15	IW-5	Dissolved	Water	6010B	131472
720-48033-16	IW-6	Dissolved	Water	6010B	131472
LCS 720-131472/2-A	Lab Control Sample	Total Recoverable	Water	6010B	131472
LCSD 720-131472/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	131472
MB 720-131472/1-A	Method Blank	Total Recoverable	Water	6010B	131472

### Analysis Batch: 131602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1 MSD	MW-2	Dissolved	Water	6010B	131472

### Analysis Batch: 131604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1	MW-2	Total/NA	Water	6010B	131466

TestAmerica Pleasanton

# QC Association Summary

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

TestAmerica Job ID: 720-48033-1

## Metals (Continued)

### Analysis Batch: 131604 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-2	MW-3	Total/NA	Water	6010B	131466
720-48033-3	MW-4	Total/NA	Water	6010B	131466
720-48033-4	MW-8	Total/NA	Water	6010B	131466
720-48033-5	MW-9	Total/NA	Water	6010B	131466
720-48033-6	MW-10	Total/NA	Water	6010B	131466
720-48033-7	MW-11	Total/NA	Water	6010B	131466
720-48033-8	MW-12	Total/NA	Water	6010B	131466
720-48033-9	MW-13	Total/NA	Water	6010B	131466
720-48033-10	MW-14	Total/NA	Water	6010B	131466
720-48033-11	IW-1	Total/NA	Water	6010B	131466
720-48033-12	IW-2	Total/NA	Water	6010B	131466
720-48033-13	IW-3	Total/NA	Water	6010B	131466
720-48033-14	IW-4	Total/NA	Water	6010B	131466
720-48033-15	IW-5	Total/NA	Water	6010B	131466
720-48033-16	IW-6	Total/NA	Water	6010B	131466
LCS 720-131466/2-A	Lab Control Sample	Total/NA	Water	6010B	131466
LCSD 720-131466/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	131466
MB 720-131466/1-A	Method Blank	Total/NA	Water	6010B	131466

## General Chemistry

### Analysis Batch: 131364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1	MW-2	Total/NA	Water	300.0	
720-48033-2	MW-3	Total/NA	Water	300.0	
720-48033-3	MW-4	Total/NA	Water	300.0	
720-48033-4	MW-8	Total/NA	Water	300.0	
720-48033-5	MW-9	Total/NA	Water	300.0	
720-48033-6	MW-10	Total/NA	Water	300.0	
720-48033-7	MW-11	Total/NA	Water	300.0	
720-48033-8	MW-12	Total/NA	Water	300.0	
720-48033-9	MW-13	Total/NA	Water	300.0	
720-48033-10	MW-14	Total/NA	Water	300.0	
720-48033-11	IW-1	Total/NA	Water	300.0	
720-48033-12	IW-2	Total/NA	Water	300.0	
720-48033-13	IW-3	Total/NA	Water	300.0	
720-48033-14	IW-4	Total/NA	Water	300.0	
720-48033-15	IW-5	Total/NA	Water	300.0	
720-48033-16	IW-6	Total/NA	Water	300.0	
720-48033-A-2 MS	720-48033-A-2 MS	Total/NA	Water	300.0	
720-48033-A-2 MSD	720-48033-A-2 MSD	Total/NA	Water	300.0	
LCS 720-131364/5	Lab Control Sample	Total/NA	Water	300.0	
MB 720-131364/4	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 131365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1	MW-2	Total/NA	Water	300.0	
720-48033-2	MW-3	Total/NA	Water	300.0	
720-48033-3	MW-4	Total/NA	Water	300.0	
720-48033-4	MW-8	Total/NA	Water	300.0	

TestAmerica Pleasanton

# QC Association Summary

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

TestAmerica Job ID: 720-48033-1

## General Chemistry (Continued)

### Analysis Batch: 131365 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-5	MW-9	Total/NA	Water	300.0	5
720-48033-6	MW-10	Total/NA	Water	300.0	6
720-48033-7	MW-11	Total/NA	Water	300.0	7
720-48033-8	MW-12	Total/NA	Water	300.0	8
720-48033-9	MW-13	Total/NA	Water	300.0	9
720-48033-10	MW-14	Total/NA	Water	300.0	10
720-48033-11	IW-1	Total/NA	Water	300.0	11
720-48033-12	IW-2	Total/NA	Water	300.0	12
720-48033-13	IW-3	Total/NA	Water	300.0	13
720-48033-14	IW-4	Total/NA	Water	300.0	14
720-48033-15	IW-5	Total/NA	Water	300.0	15
720-48033-16	IW-6	Total/NA	Water	300.0	
720-48033-A-2 MS	720-48033-A-2 MS	Total/NA	Water	300.0	
720-48033-A-2 MSD	720-48033-A-2 MSD	Total/NA	Water	300.0	
LCS 720-131365/5	Lab Control Sample	Total/NA	Water	300.0	
MB 720-131365/4	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 178951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1	MW-2	Total/NA	Water	SM 2540C	14
720-48033-2	MW-3	Total/NA	Water	SM 2540C	15
720-48033-3	MW-4	Total/NA	Water	SM 2540C	
720-48033-4	MW-8	Total/NA	Water	SM 2540C	
720-48033-5	MW-9	Total/NA	Water	SM 2540C	
720-48033-6	MW-10	Total/NA	Water	SM 2540C	
720-48033-7	MW-11	Total/NA	Water	SM 2540C	
720-48033-8	MW-12	Total/NA	Water	SM 2540C	
720-48033-9	MW-13	Total/NA	Water	SM 2540C	
LCS 500-178951/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 500-178951/1	Method Blank	Total/NA	Water	SM 2540C	

### Analysis Batch: 178959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-10	MW-14	Total/NA	Water	SM 2540C	
720-48033-11	IW-1	Total/NA	Water	SM 2540C	
720-48033-12	IW-2	Total/NA	Water	SM 2540C	
720-48033-13	IW-3	Total/NA	Water	SM 2540C	
720-48033-14	IW-4	Total/NA	Water	SM 2540C	
720-48033-15	IW-5	Total/NA	Water	SM 2540C	
720-48033-16	IW-6	Total/NA	Water	SM 2540C	
LCS 500-178959/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 500-178959/1	Method Blank	Total/NA	Water	SM 2540C	

### Analysis Batch: 179064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-1	MW-2	Total/NA	Water	376.1	
720-48033-1 MS	MW-2	Total/NA	Water	376.1	
720-48033-1 MSD	MW-2	Total/NA	Water	376.1	
720-48033-2	MW-3	Total/NA	Water	376.1	
720-48033-3	MW-4	Total/NA	Water	376.1	
720-48033-4	MW-8	Total/NA	Water	376.1	

TestAmerica Pleasanton

# QC Association Summary

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

TestAmerica Job ID: 720-48033-1

## General Chemistry (Continued)

### Analysis Batch: 179064 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48033-5	MW-9	Total/NA	Water	376.1	5
720-48033-6	MW-10	Total/NA	Water	376.1	6
720-48033-7	MW-11	Total/NA	Water	376.1	7
720-48033-8	MW-12	Total/NA	Water	376.1	8
720-48033-9	MW-13	Total/NA	Water	376.1	9
720-48033-10	MW-14	Total/NA	Water	376.1	10
720-48033-11	IW-1	Total/NA	Water	376.1	11
720-48033-12	IW-2	Total/NA	Water	376.1	12
720-48033-13	IW-3	Total/NA	Water	376.1	13
720-48033-14	IW-4	Total/NA	Water	376.1	14
720-48033-15	IW-5	Total/NA	Water	376.1	15
720-48033-16	IW-6	Total/NA	Water	376.1	
LCS 500-179064/2	Lab Control Sample	Total/NA	Water	376.1	
MB 500-179064/1	Method Blank	Total/NA	Water	376.1	

## Lab Chronicle

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

TestAmerica Job ID: 720-48033-1

### Client Sample ID: MW-2

Date Collected: 02/26/13 15:00

Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-1

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	131679	03/05/13 14:41	PD	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 18:09	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		20	131674	03/05/13 12:29	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 14:02	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 00:40	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178951	03/02/13 16:44	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064		CLB	TAL CHI
					(Start)	03/04/13 21:20		
					(End)	03/04/13 21:22		
Total/NA	Analysis	300.0		1	131364	02/27/13 17:57	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/27/13 17:57	EYT	TAL SF

### Client Sample ID: MW-3

Date Collected: 02/26/13 14:30

Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-2

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	131679	03/05/13 15:08	PD	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 18:23	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		2	131674	03/05/13 12:58	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 14:07	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 00:45	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178951	03/02/13 16:47	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064		CLB	TAL CHI
					(Start)	03/04/13 21:27		
					(End)	03/04/13 21:30		
Total/NA	Analysis	300.0		1	131364	02/27/13 18:31	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/27/13 18:31	EYT	TAL SF

### Client Sample ID: MW-4

Date Collected: 02/26/13 14:45

Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-3

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	131679	03/05/13 14:15	PD	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 18:37	TD	TAL LA

TestAmerica Pleasanton

## Lab Chronicle

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

TestAmerica Job ID: 720-48033-1

### Client Sample ID: MW-4

Date Collected: 02/26/13 14:45  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		2	131674	03/05/13 13:31	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 14:12	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 00:50	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178951	03/02/13 16:49	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064		CLB	TAL CHI
					(Start)	03/04/13 21:30		
					(End)	03/04/13 21:32		
Total/NA	Analysis	300.0		1	131364	02/27/13 19:40	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/27/13 19:40	EYT	TAL SF

### Client Sample ID: MW-8

Date Collected: 02/26/13 15:15  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-4

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	131679	03/05/13 15:34	PD	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 18:50	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		1	131673	03/05/13 13:31	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 14:16	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 00:55	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178951	03/02/13 16:52	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064		CLB	TAL CHI
					(Start)	03/04/13 21:32		
					(End)	03/04/13 21:35		
Total/NA	Analysis	300.0		1	131364	02/27/13 20:49	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/27/13 20:49	EYT	TAL SF

### Client Sample ID: MW-9

Date Collected: 02/26/13 15:00  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-5

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	131679	03/05/13 15:59	PD	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 19:03	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		1	131673	03/05/13 14:00	DH	TAL SF

TestAmerica Pleasanton

## Lab Chronicle

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

TestAmerica Job ID: 720-48033-1

### Client Sample ID: MW-9

Date Collected: 02/26/13 15:00  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 14:21	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 01:00	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178951	03/02/13 16:54	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064		CLB	TAL CHI
					(Start)	03/04/13 21:35		
					(End)	03/04/13 21:37		
Total/NA	Analysis	300.0		1	131364	02/27/13 21:23	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/27/13 21:23	EYT	TAL SF

### Client Sample ID: MW-10

Date Collected: 02/26/13 13:30  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-6

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	131679	03/05/13 16:25	PD	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 19:16	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		1	131673	03/05/13 14:30	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 14:25	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 01:04	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178951	03/02/13 16:57	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064		CLB	TAL CHI
					(Start)	03/04/13 21:37		
					(End)	03/04/13 21:40		
Total/NA	Analysis	300.0		10	131364	02/27/13 22:15	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/27/13 21:57	EYT	TAL SF

### Client Sample ID: MW-11

Date Collected: 02/26/13 13:45  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-7

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	131679	03/05/13 16:51	PD	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 19:37	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		1	131673	03/05/13 14:59	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 14:30	EFH	TAL SF

TestAmerica Pleasanton

## Lab Chronicle

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

TestAmerica Job ID: 720-48033-1

### Client Sample ID: MW-11

Date Collected: 02/26/13 13:45  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 01:09	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178951	03/02/13 17:00	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064		CLB	TAL CHI
					(Start)	03/04/13 21:40		
					(End)	03/04/13 21:42		
Total/NA	Analysis	300.0		1	131364	02/27/13 22:32	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/27/13 22:32	EYT	TAL SF

### Client Sample ID: MW-12

Date Collected: 02/26/13 14:20  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-8

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	131679	03/05/13 17:18	PD	TAL SF
Total/NA	Analysis	8260B/CA_LUFTMS		10	131850	03/07/13 13:16	AC	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 20:56	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		20	131673	03/05/13 16:19	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 14:35	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 01:14	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178951	03/02/13 17:02	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064		CLB	TAL CHI
					(Start)	03/04/13 21:42		
					(End)	03/04/13 21:45		
Total/NA	Analysis	300.0		1	131364	02/27/13 23:08	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/27/13 23:08	EYT	TAL SF

### Client Sample ID: MW-13

Date Collected: 02/26/13 14:40  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-9

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	131732	03/06/13 04:16	LL	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 21:11	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		2	131673	03/05/13 16:48	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 14:39	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF

TestAmerica Pleasanton

## Lab Chronicle

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

TestAmerica Job ID: 720-48033-1

### Client Sample ID: MW-13

Date Collected: 02/26/13 14:40  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	131604	03/02/13 01:19	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178951	03/02/13 17:05	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064	(Start) 03/04/13 21:45	CLB	TAL CHI
						(End) 03/04/13 21:47		
Total/NA	Analysis	300.0		1	131364	02/28/13 00:16	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/28/13 00:16	EYT	TAL SF

### Client Sample ID: MW-14

Date Collected: 02/26/13 13:30  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-10

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	131732	03/06/13 04:44	LL	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 21:24	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		1	131758	03/06/13 11:15	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 14:43	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 01:32	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178959	03/03/13 23:22	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064	(Start) 03/04/13 21:47	CLB	TAL CHI
						(End) 03/04/13 21:50		
Total/NA	Analysis	300.0		10	131364	02/28/13 01:08	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/28/13 00:51	EYT	TAL SF

### Client Sample ID: IW-1

Date Collected: 02/26/13 13:50  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		10	131989	03/08/13 18:44	LL	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 21:36	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		20	131673	03/05/13 17:46	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 14:57	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 01:37	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178959	03/03/13 23:25	CLB	TAL CHI

TestAmerica Pleasanton

## Lab Chronicle

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

TestAmerica Job ID: 720-48033-1

### Client Sample ID: IW-1

Date Collected: 02/26/13 13:50  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	376.1		1	179064	(Start) 03/04/13 21:50	CLB	TAL CHI
						(End) 03/04/13 21:52		
Total/NA	Analysis	300.0		1	131364	02/28/13 01:25	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/28/13 01:25	EYT	TAL SF

### Client Sample ID: IW-2

Date Collected: 02/26/13 15:00  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		10	131732	03/06/13 05:40	LL	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 21:50	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		2	131673	03/05/13 18:15	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 15:01	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 01:41	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178959	03/03/13 23:27	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064	(Start) 03/04/13 21:52	CLB	TAL CHI
						(End) 03/04/13 21:55		
Total/NA	Analysis	300.0		1	131364	02/28/13 01:59	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/28/13 01:59	EYT	TAL SF

### Client Sample ID: IW-3

Date Collected: 02/26/13 14:05  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-13

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	131732	03/06/13 06:08	LL	TAL SF
Total/NA	Analysis	8260B/CA_LUFTMS		20	131850	03/07/13 17:53	AC	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 22:04	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		1	131673	03/05/13 18:44	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 15:06	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 01:46	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178959	03/03/13 23:30	CLB	TAL CHI

TestAmerica Pleasanton

## Lab Chronicle

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

TestAmerica Job ID: 720-48033-1

### Client Sample ID: IW-3

Date Collected: 02/26/13 14:05  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	376.1		1	179064	(Start) 03/04/13 21:55	CLB	TAL CHI
						(End) 03/04/13 21:57		
Total/NA	Analysis	300.0		1	131364	02/28/13 02:34	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/28/13 02:34	EYT	TAL SF

### Client Sample ID: IW-4

Date Collected: 02/26/13 14:15  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		10	131897	03/08/13 05:06	AC	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 22:17	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		10	131757	03/07/13 01:09	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 15:10	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 01:51	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178959	03/03/13 23:32	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064	(Start) 03/04/13 21:57	CLB	TAL CHI
						(End) 03/04/13 22:00		
Total/NA	Analysis	300.0		1	131364	02/28/13 03:42	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/28/13 03:42	EYT	TAL SF

### Client Sample ID: IW-5

Date Collected: 02/26/13 14:00  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-15

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	131897	03/08/13 05:34	AC	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 22:33	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		10	131757	03/07/13 01:38	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 15:15	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 01:56	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178959	03/03/13 23:35	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064	(Start) 03/04/13 22:00	CLB	TAL CHI
						(End) 03/04/13 22:02		

TestAmerica Pleasanton

## Lab Chronicle

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

TestAmerica Job ID: 720-48033-1

### Client Sample ID: IW-5

Date Collected: 02/26/13 14:00  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	131364	02/28/13 04:17	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/28/13 04:17	EYT	TAL SF

### Client Sample ID: IW-6

Date Collected: 02/26/13 13:45  
Date Received: 02/27/13 12:40

### Lab Sample ID: 720-48033-16

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	131897	03/08/13 06:02	AC	TAL SF
Total/NA	Analysis	RSK-175		1	4216	02/28/13 22:46	TD	TAL LA
Total/NA	Prep	3510C			131608	03/04/13 09:10	MP	TAL SF
Total/NA	Analysis	8015B		2	131757	03/07/13 02:07	DH	TAL SF
Dissolved	Prep	3005A			131472	02/28/13 21:55	ASB	TAL SF
Dissolved	Analysis	6010B		1	131539	03/01/13 15:19	EFH	TAL SF
Total/NA	Prep	3010A			131466	02/28/13 21:03	ASB	TAL SF
Total/NA	Analysis	6010B		1	131604	03/02/13 02:00	SK	TAL SF
Total/NA	Analysis	SM 2540C		1	178959	03/03/13 23:37	CLB	TAL CHI
Total/NA	Analysis	376.1		1	179064		CLB	TAL CHI
					(Start)	03/04/13 22:02		
					(End)	03/04/13 22:05		
Total/NA	Analysis	300.0		1	131364	02/28/13 04:51	EYT	TAL SF
Total/NA	Analysis	300.0		1	131365	02/28/13 04:51	EYT	TAL SF

#### Laboratory References:

EMLab San = EMLab P&K - San Bruno, 1150 Bayhill Drive #100, San Bruno, CA 94066, TEL (866)888-6653

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL LA = TestAmerica Costa Mesa, 3585 Cadillac Ave, Suite A, Costa Mesa, CA 92626, TEL (714)258-8610

TAL SF = 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: 720-48033-1

### 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	01-31-14

### Laboratory: EMLab P&K - San Bruno

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA - LAP	EMLAP		102856	07-01-14
AIHA - LAP	IHLAP		102856	07-01-14

### 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
Alabama	State Program	4	40461	04-30-13
California	NELAP	9	01132CA	04-30-13
Georgia	State Program	4	N/A	04-30-13
Georgia	State Program	4	939	04-30-13
Hawaii	State Program	9	N/A	04-30-13
Illinois	NELAP	5	100201	04-30-13
Indiana	State Program	5	C-II-02	04-30-13
Iowa	State Program	7	82	05-01-14
Kansas	NELAP	7	E-10161	10-31-13
Kentucky	State Program	4	90023	12-31-13
Kentucky (UST)	State Program	4	66	04-11-13
Louisiana	NELAP	6	30720	06-30-13
Massachusetts	State Program	1	M-IL035	06-30-13
Mississippi	State Program	4	N/A	04-30-13
North Carolina DENR	State Program	4	291	12-31-13
North Dakota	State Program	8	R-194	04-30-13
Oklahoma	State Program	6	8908	08-31-13
South Carolina	State Program	4	77001	04-30-13
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Virginia	NELAP	3	460142	06-14-13
Wisconsin	State Program	5	999580010	08-31-13
Wyoming	State Program	8	8TMS-Q	04-30-13

### Laboratory: TestAmerica Costa Mesa

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0727	02-09-14
Florida	NELAP	4	E87652	06-30-13
L-A-B	DoD ELAP		L2273	11-09-13
Louisiana	NELAP	6	01948	06-30-13
New York	NELAP	2	11851	04-01-13
Oregon	NELAP	10	CA200013	07-19-13
Utah	NELAP	8	CA000032012-1	06-30-13
Washington	State Program	10	C579	11-29-13

TestAmerica Pleasanton

## Method Summary

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

TestAmerica Job ID: 720-48033-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL SF
RSK-175	Dissolved Gases (GC)	RSK	TAL LA
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF
6010B	Metals (ICP)	SW846	TAL SF
300.0	Anions, Ion Chromatography	MCAWW	TAL SF
376.1	Sulfide	MCAWW	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
HPC	General Sub Contract Method	NONE	EMLab San

### Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

NONE = NONE

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:

EMLab San = EMLab P&K - San Bruno, 1150 Bayhill Drive #100, San Bruno, CA 94066, TEL (866)888-6653

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL LA = TestAmerica Costa Mesa, 3585 Cadillac Ave, Suite A, Costa Mesa, CA 92626, TEL (714)258-8610

TAL SF = 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: 720-48033-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-48033-1	MW-2	Water	02/26/13 15:00	02/27/13 12:40
720-48033-2	MW-3	Water	02/26/13 14:30	02/27/13 12:40
720-48033-3	MW-4	Water	02/26/13 14:45	02/27/13 12:40
720-48033-4	MW-8	Water	02/26/13 15:15	02/27/13 12:40
720-48033-5	MW-9	Water	02/26/13 15:00	02/27/13 12:40
720-48033-6	MW-10	Water	02/26/13 13:30	02/27/13 12:40
720-48033-7	MW-11	Water	02/26/13 13:45	02/27/13 12:40
720-48033-8	MW-12	Water	02/26/13 14:20	02/27/13 12:40
720-48033-9	MW-13	Water	02/26/13 14:40	02/27/13 12:40
720-48033-10	MW-14	Water	02/26/13 13:30	02/27/13 12:40
720-48033-11	IW-1	Water	02/26/13 13:50	02/27/13 12:40
720-48033-12	IW-2	Water	02/26/13 15:00	02/27/13 12:40
720-48033-13	IW-3	Water	02/26/13 14:05	02/27/13 12:40
720-48033-14	IW-4	Water	02/26/13 14:15	02/27/13 12:40
720-48033-15	IW-5	Water	02/26/13 14:00	02/27/13 12:40
720-48033-16	IW-6	Water	02/26/13 13:45	02/27/13 12:40

TestAmerica Pleasanton



Report for:

**Ms. Dimple Sharma**  
**TestAmerica Pleasanton**  
1220 Quarry Lane  
Pleasanton, CA 94566

Regarding: Project: Blaine Tech Services; BTS# 130226-PC1  
EML ID: 1031743

Approved by:

Lab Manager  
Dr. Kamashwaran Ramanathan

Dates of Analysis:  
Heterotrophic plate count: 03-05-2013

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

3  
Client: TestAmerica Pleasanton4  
C/O: Ms. Dimple Sharma5  
Re: Blaine Tech Services; BTS# 130226-PC16  
Date of Receipt: 02-27-20137  
Date of Report: 03-05-2013**HETEROTROPHIC PLATE COUNT REPORT**

Location:	MW-2	MW-3	MW-4
Comments (see below)	A	A	A
Lab ID-Version‡:	4625595-1	4625596-1	4625597-1
Sample Type	Water sample	Water sample	Water sample
Method	Pour Plate: SM 9215B	Pour Plate: SM 9215B	Pour Plate: SM 9215B
Dilution	Plate Count Agar 1:10	Plate Count Agar 1:100	Plate Count Agar 1:10
Setup Time	02/27/2013 at 12:02 PM	02/27/2013 at 12:02 PM	02/27/2013 at 12:02 PM
Incubation Info	48 hrs at 35 +- 0.5C	48 hrs at 35 +- 0.5C	48 hrs at 35 +- 0.5C
Reporting Unit	1 ml	1 ml	1 ml
CFU/Reporting Unit	1,600	17,000	700
<b>Read Time</b>	03/01/2013 at 12:15 PM	03/01/2013 at 12:15 PM	03/01/2013 at 12:15 PM

**Comments:** A) The sample was analyzed past 8 hour holding time.

Location:	MW-8	MW-9	MW-10
Comments (see below)	A	A	B
Lab ID-Version‡:	4625598-1	4625599-1	4625600-1
Sample Type	Water sample	Water sample	Water sample
Method	Pour Plate: SM 9215B	Pour Plate: SM 9215B	Pour Plate: SM 9215B
Dilution	Plate Count Agar 1:10	Plate Count Agar 1:10	Plate Count Agar 1:10
Setup Time	02/27/2013 at 12:02 PM	02/27/2013 at 12:02 PM	02/27/2013 at 12:02 PM
Incubation Info	48 hrs at 35 +- 0.5C	48 hrs at 35 +- 0.5C	48 hrs at 35 +- 0.5C
Reporting Unit	1 ml	1 ml	1 ml
CFU/Reporting Unit	630	1,300	1,100
<b>Read Time</b>	03/01/2013 at 12:15 PM	03/01/2013 at 12:15 PM	03/01/2013 at 12:15 PM

**Comments:** A) The sample was analyzed past 8 hour holding time. B) The sample was analyzed past 8 hour holding time. Sample selected as a QC replicate. Analyzed as a QC duplicate.

Location:	MW-11	MW-12	MW-13
Comments (see below)	A	A	A
Lab ID-Version‡:	4625601-1	4625602-1	4625603-1
Sample Type	Water sample	Water sample	Water sample
Method	Pour Plate: SM 9215B	Pour Plate: SM 9215B	Pour Plate: SM 9215B
Dilution	Plate Count Agar 1:100	Plate Count Agar 1:10	Plate Count Agar 1:100
Setup Time	02/27/2013 at 12:02 PM	02/27/2013 at 12:02 PM	02/27/2013 at 12:02 PM
Incubation Info	48 hrs at 35 +- 0.5C	48 hrs at 35 +- 0.5C	48 hrs at 35 +- 0.5C
Reporting Unit	1 ml	1 ml	1 ml
CFU/Reporting Unit	2,600	420	11,000
<b>Read Time</b>	03/01/2013 at 12:15 PM	03/01/2013 at 12:15 PM	03/01/2013 at 12:15 PM

**Comments:** A) The sample was analyzed past 8 hour holding time.

\* Estimated result

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

3  
Client: TestAmerica Pleasanton4  
C/O: Ms. Dimple Sharma5  
Re: Blaine Tech Services; BTS# 130226-PC16  
Date of Receipt: 02-27-20137  
Date of Report: 03-05-2013**HETEROTROPHIC PLATE COUNT REPORT**

Location:	MW-14	IW-1	IW-2
Comments (see below)	A	A	A
Lab ID-Version‡:	4625604-1	4625605-1	4625606-1
Sample Type	Water sample	Water sample	Water sample
Method	Pour Plate: SM 9215B	Pour Plate: SM 9215B	Pour Plate: SM 9215B
Dilution	Plate Count Agar 1:100	Plate Count Agar 1:100	Plate Count Agar 1:100
Setup Time	02/27/2013 at 12:02 PM	02/27/2013 at 12:02 PM	02/27/2013 at 12:02 PM
Incubation Info	48 hrs at 35 +- 0.5C	48 hrs at 35 +- 0.5C	48 hrs at 35 +- 0.5C
Reporting Unit	1 ml	1 ml	1 ml
CFU/Reporting Unit	4,800	15,000	27,000
<b>Read Time</b>	03/01/2013 at 12:15 PM	03/01/2013 at 12:15 PM	03/01/2013 at 12:15 PM

**Comments:** A) The sample was analyzed past 8 hour holding time.

Location:	IW-3	IW-4	IW-5
Comments (see below)	A	A	A
Lab ID-Version‡:	4625607-1	4625608-1	4625609-1
Sample Type	Water sample	Water sample	Water sample
Method	Pour Plate: SM 9215B	Pour Plate: SM 9215B	Pour Plate: SM 9215B
Dilution	Plate Count Agar 1:100	Plate Count Agar 1:100	Plate Count Agar 1:100
Setup Time	02/27/2013 at 12:02 PM	02/27/2013 at 12:02 PM	02/27/2013 at 12:02 PM
Incubation Info	48 hrs at 35 +- 0.5C	48 hrs at 35 +- 0.5C	48 hrs at 35 +- 0.5C
Reporting Unit	1 ml	1 ml	1 ml
CFU/Reporting Unit	4,200	45,000	1,300
<b>Read Time</b>	03/01/2013 at 12:15 PM	03/01/2013 at 12:15 PM	03/01/2013 at 12:15 PM

**Comments:** A) The sample was analyzed past 8 hour holding time.

Location:	IW-6
Comments (see below)	A
Lab ID-Version‡:	4625610-1
Sample Type	Water sample
Method	Pour Plate: SM 9215B
Dilution	Plate Count Agar 1:10
Setup Time	02/27/2013 at 12:02 PM
Incubation Info	48 hrs at 35 +- 0.5C
Reporting Unit	1 ml
CFU/Reporting Unit	630
<b>Read Time</b>	03/01/2013 at 12:15 PM

**Comments:** A) The sample was analyzed past 8 hour holding time.

\* Estimated result

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

**BLAINE**

TECH SERVICES, INC.

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

CHAIN OF CUSTODY	
BTS # 130276-PC1	
CLIENT ARCADIS U.S., Inc.	
SITE UPS	
8400 Pardee Drive	
Oakland, CA	

SAMPLE I.D.	DATE	TIME	S= SOIL W=H <sub>2</sub> O	MATRIX	CONTAINERS	CONDUCT ANALYSIS TO DETECT						LAB	TA - SF	DHS #
						DRO	Methane	Nitrate as N & Sulfate	Sulfide	Total Diss. Iron (Field Filtered)	TDS			
MW-2	2-20-13	1500	W	Asst		X	X	X	X	X	X			1
MW-3		1430	W			X	X	X	X	X	X			2
MW-4		1445	W			X	X	X	X	X	X			3
MW-8		1515	W			X	X	X	X	X	X			4
MW-9		1500	W	12		X	X	X	X	X	X			5
MW-10		1330	W			X	X	X	X	X	X			6
MW-11		1345	W			X	X	X	X	X	X			7
MW-12		1420	W			X	X	X	XX	X	X			8
MW-13		1440	W			X	X	X	X	X	X	* Filled 1/2 LAGB for DRO		9
MW-14		1530	W			X	X	X	XX	XX	X			10

SAMPLING DATE	TIME	SAMPLING PERFORMED BY	P. Cornish, B. Works, B. Pace	RESULTS NEEDED NO LATER THAN	Standard TAT
COMPLETED					

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>P. Cornish</i>	2/20/13	1815	<i>B. Works (sc)</i>	2/20/13	1815

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>B. Works</i>	2/21/13	1050	<i>Sarah (TMF)</i>	2/21/13	1050

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>Sarah (TMF)</i>	2/21/13	1240	<i>Sarah (TMF)</i>	2/21/13	1240

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	2.6° 2.4° 4.2° 3.3° 2.9°

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

- EPA  
 LIA  
 OTHER

RWQCB REGION 14430

#### 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

ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
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**BLAINE**

TECH SERVICES, INC.

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

CHAIN OF CUSTODY	BTS #	130276-PCI
CLIENT	ARCADIS U.S., Inc.	
SITE	UPS	
	8400 Pardee Drive	
	Oakland, CA	

C = COMPOSITE ALL CONTAINERS

SAMPLING COMPLETED	DATE <u>2/26/13</u>	TIME	SAMPLING PERFORMED BY <u>P. Corry, B. Panell, B. Weeks</u>	RESULTS NEEDED NO LATER THAN	Standard TAT	
RELEASED BY <u>W.H.</u>	DATE <u>2/26/13</u>	TIME <u>1815</u>	RECEIVED BY <u>Duffy (sc)</u>	DATE <u>2/26/13</u>	TIME <u>1815</u>	
RELEASED BY <u>Sample Custodian</u>	DATE <u>2/27/13</u>	TIME <u>1050</u>	RECEIVED BY <u>Lamey</u>	DATE <u>02/27/13</u>	TIME <u>1050</u>	
RELEASED BY <u>BTS</u>	DATE <u>02/27/13</u>	TIME <u>1240</u>	RECEIVED BY <u>Joan Miller</u>	DATE <u>2-27-13</u>	TIME <u>1240</u>	
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	2-68 2:40° 4.28 3.32 2.91		

144302

DHS

SECTION

—

3/13/2013

720-48033

**BLAINE**  
TECH SERVICES

1660 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
FAX (408) 573-7771  
PHONE (408) 573-0555

CHAIN OF CUSTODY			BTS #	130226-PC1	
CLIENT	ARCADIS U.S., Inc.				
SITE	UPS				
	8400 Pardoe Drive				
	Oakland, CA				
SAMPLE I.D.	DATE	TIME	MATRIX	CONTAINERS	
			SOIL	TOTAL	250 mL

CONDUCT ANALYSIS TO DETECT			LAB	TA - SF	DHS #	
		001031743	ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND			
			<input type="checkbox"/> EPA	<input type="checkbox"/> RWQCB REGION _____		
			<input type="checkbox"/> LIA			
			<input type="checkbox"/> OTHER			
			SPECIAL INSTRUCTIONS			
			Invoice and Report to : Arcadis U.S., Inc. Attn: Hugh Devory <a href="mailto:hugh.devory@arcadis-us.com">hugh.devory@arcadis-us.com</a> 770-428-9009			
			Low Detection levels requested			
HPC Short Hold			ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
	X					
	X					
	X					
	X					
	X					
	X					
	X					
	X					
	X					
		RESULTS NEEDED NO LATER THAN			Standard TAT	
TE 1/26/13	TIME 1735	RECEIVED BY <i>Municipality</i>	DATE 2/26/13	TIME 1735		
TE	TIME	RECEIVED BY	DATE	TIME		
TE	TIME	RECEIVED BY	DATE	TIME		
TE SENT	TIME SENT	COOLER #				

**BLAINE**  
TECH SERVICES.

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

**12C-48033**  
CONDUCT ANALYSIS TO DETECT LAB

CHAIN OF CUSTODY		BTS # 130226-Pc
CLIENT	ARCADIS U.S., Inc.	
SITE	UPS	
	8400 Pardee Drive	
	Colombia, GA	

SAMPLING COMPLETED	DATE 2/26/13	TIME 1545	SAMPLING PERFORMED BY P.Cov
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RELEASED BY

RELEASED BY

RELEASER BY

**SHIPPED VIA**

[Redacted]

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-48033-1

**Login Number: 48033**

**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.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	False	
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: 720-48033-1

**Login Number: 48033**

**List Source: TestAmerica Chicago**

**List Number: 1**

**List Creation: 02/28/13 10:52 AM**

**Creator: Kelsey, Shawn M**

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True		1
The cooler's custody seal, if present, is intact.	True		2
Sample custody seals, if present, are intact.	True		3
The cooler or samples do not appear to have been compromised or tampered with.	True		4
Samples were received on ice.	True		5
Cooler Temperature is acceptable.	True		6
Cooler Temperature is recorded.	True		7
COC is present.	True		8
COC is filled out in ink and legible.	True		9
COC is filled out with all pertinent information.	True		10
Is the Field Sampler's name present on COC?	True		11
There are no discrepancies between the containers received and the COC.	True		12
Samples are received within Holding Time.	True		13
Sample containers have legible labels.	True		14
Containers are not broken or leaking.	True		15
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").	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	True		

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-48033-1

**Login Number:** 48033

**List Source:** TestAmerica Costa Mesa

**List Number:** 1

**List Creation:** 03/01/13 11:52 AM

**Creator:** Morales, Sergio

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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
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: 720-51107-1

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:

8/5/2013 4:33:42 PM

Dimple Sharma, Project Manager I

dimple.sharma@testamericainc.com

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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: 720-51107-1

### Qualifiers

#### GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
X	Surrogate is outside control limits
H	Sample was prepped or analyzed beyond the specified holding time

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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: 720-51107-1

### Job ID: 720-51107-1

Laboratory: TestAmerica Pleasanton

#### Narrative

##### Job Narrative 720-51107-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 7/22/2013 6:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.2° C and 3.7° C.

#### GC/MS VOA

No analytical or quality issues were noted.

#### GC/MS Semi VOA

Method 8270C SIM: Surrogate recovery for the following sample was outside control limits: MW-4 (720-51107-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270C SIM: The laboratory control sample (LCS) for batch #141117 recovered outside acceptance limits for Acenaphthene, fluorene, phenanthrene. There was insufficient sample to perform a re-extraction or re-analysis; therefore, the data have been reported.

Method 8270C SIM: Reanalysis of the following sample was performed outside of the analytical holding time: MW-10 (720-51107-3), MW-8 (720-51107-2).

No other analytical or quality issues were noted.

#### GC VOA

No analytical or quality issues were noted.

#### GC Semi VOA

No analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

# Detection Summary

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

TestAmerica Job ID: 720-51107-1

## Client Sample ID: MW-4

## Lab Sample ID: 720-51107-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO)	86		50		ug/L	1		8260B/CA_LUFT	Total/NA
-C5-C12					MS				
Naphthalene	0.11		0.11		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.63 *		0.11		ug/L	1		8270C SIM	Total/NA
Acenaphthylene	0.30		0.11		ug/L	1		8270C SIM	Total/NA
Fluorene	1.9 *		0.11		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.24 *		0.11		ug/L	1		8270C SIM	Total/NA
Methane	8000		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	1100		50		ug/L	1		8015B	Silica Gel Cleanup
Magnesium	45		0.20		mg/L	1		6010B	Total/NA
Iron	3.6		0.20		mg/L	1		6010B	Dissolved
Manganese	5.7		0.020		mg/L	1		6010B	Dissolved
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	1100		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-8

## Lab Sample ID: 720-51107-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	2.7		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Naphthalene	1.4		0.11		ug/L	1		MS	
Fluorene	0.30 H		0.11		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.11 H		0.11		ug/L	1		8270C SIM	Total/NA
Methane	5100		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	170		53		ug/L	1		8015B	Silica Gel Cleanup
Magnesium	170		0.20		mg/L	1		6010B	Total/NA
Iron	2.9		0.20		mg/L	1		6010B	Dissolved
Manganese	1.8		0.020		mg/L	1		6010B	Dissolved
Sulfide	1.6		1.0		mg/L	1		SM 4500 S2 F	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	5300		50		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-10

## Lab Sample ID: 720-51107-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	7700		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	62		53		ug/L	1		8015B	Silica Gel Cleanup
Magnesium	210		0.20		mg/L	1		6010B	Total/NA
Iron	7.7		0.20		mg/L	1		6010B	Dissolved
Manganese	6.6		0.020		mg/L	1		6010B	Dissolved
Sulfate	1.9		1.0		mg/L	1		300.0	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	5200		50		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: 720-51107-1

## Client Sample ID: MW-4

Date Collected: 07/22/13 13:40  
Date Received: 07/22/13 18:00

## Lab Sample ID: 720-51107-1

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/26/13 01:17	1
Benzene	ND		0.50		ug/L			07/26/13 01:17	1
Ethylbenzene	ND		0.50		ug/L			07/26/13 01:17	1
Naphthalene	ND		1.0		ug/L			07/26/13 01:17	1
Toluene	ND		0.50		ug/L			07/26/13 01:17	1
Xylenes, Total	ND		1.0		ug/L			07/26/13 01:17	1
<b>Gasoline Range Organics (GRO)</b>	<b>86</b>		50		ug/L			07/26/13 01:17	1
<b>-C5-C12</b>									
1,2-DCA	ND		0.50		ug/L			07/26/13 01:17	1
EDB	ND		0.50		ug/L			07/26/13 01:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	108		67 - 130		07/26/13 01:17	1
1,2-Dichloroethane-d4 (Surr)	98		75 - 138		07/26/13 01:17	1
Toluene-d8 (Surr)	101		70 - 130		07/26/13 01:17	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>0.11</b>		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
<b>Acenaphthene</b>	<b>0.63 *</b>		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
<b>Acenaphthylene</b>	<b>0.30</b>		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
<b>Fluorene</b>	<b>1.9 *</b>		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
<b>Phenanthrene</b>	<b>0.24 *</b>		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
Anthracene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
Benzo[a]anthracene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
Chrysene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
Benzo[a]pyrene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
Benzo[b]fluoranthene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
Benzo[k]fluoranthene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
Benzo[g,h,i]perylene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
Indeno[1,2,3-cd]pyrene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
Fluoranthene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
Pyrene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	1
Dibenz(a,h)anthracene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 14:59	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	42		29 - 120				07/29/13 17:09	07/30/13 14:59	1
Terphenyl-d14	35	X	45 - 120				07/29/13 17:09	07/30/13 14:59	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane</b>	<b>8000</b>		5.0		ug/L			07/25/13 08:39	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>1100</b>		50		ug/L		07/24/13 09:57	07/25/13 17:02	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	0		0 - 5				07/24/13 09:57	07/25/13 17:02	1
p-Terphenyl	82		31 - 150				07/24/13 09:57	07/25/13 17:02	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-51107-1

**Client Sample ID: MW-4**  
**Date Collected: 07/22/13 13:40**  
**Date Received: 07/22/13 18:00**

**Lab Sample ID: 720-51107-1**  
**Matrix: Water**

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	45		0.20		mg/L		07/24/13 18:55	07/26/13 00:40	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3.6		0.20		mg/L		07/23/13 11:43	07/24/13 13:15	1
Manganese	5.7		0.020		mg/L		07/23/13 11:43	07/24/13 13:15	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L		07/22/13 21:48		1
Sulfate	ND		1.0		mg/L		07/22/13 21:48		1
Sulfide	ND		1.0		mg/L		07/25/13 22:10		1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10		mg/L		07/24/13 11:00		1

# Client Sample Results

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

TestAmerica Job ID: 720-51107-1

## Client Sample ID: MW-8

Date Collected: 07/22/13 14:25  
Date Received: 07/22/13 18:00

## Lab Sample ID: 720-51107-2

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/26/13 02:34	1
Benzene	ND		0.50		ug/L			07/26/13 02:34	1
Ethylbenzene	ND		0.50		ug/L			07/26/13 02:34	1
<b>Naphthalene</b>	<b>2.7</b>		1.0		ug/L			07/26/13 02:34	1
Toluene	ND		0.50		ug/L			07/26/13 02:34	1
Xylenes, Total	ND		1.0		ug/L			07/26/13 02:34	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			07/26/13 02:34	1
1,2-DCA	ND		0.50		ug/L			07/26/13 02:34	1
EDB	ND		0.50		ug/L			07/26/13 02:34	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	109			67 - 130				07/26/13 02:34	1
1,2-Dichloroethane-d4 (Surr)	99			75 - 138				07/26/13 02:34	1
Toluene-d8 (Surr)	104			70 - 130				07/26/13 02:34	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>1.4</b>		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	1
Acenaphthene	ND	H	0.11		ug/L		08/04/13 09:40	08/04/13 23:06	1
Acenaphthylene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	1
<b>Fluorene</b>	<b>0.30</b>	H	0.11		ug/L		08/04/13 09:40	08/04/13 23:06	1
<b>Phenanthrene</b>	<b>0.11</b>	H	0.11		ug/L		08/04/13 09:40	08/04/13 23:06	1
Anthracene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	1
Benzo[a]anthracene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	1
Chrysene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	1
Benzo[a]pyrene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	1
Benzo[b]fluoranthene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	1
Benzo[k]fluoranthene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	1
Benzo[g,h,i]perylene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	1
Indeno[1,2,3-cd]pyrene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	1
Fluoranthene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	1
Pyrene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	1
Dibenz(a,h)anthracene	ND		0.11		ug/L		07/29/13 17:09	07/30/13 15:22	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	60			29 - 120			07/29/13 17:09	07/30/13 15:22	1
2-Fluorobiphenyl	76			29 - 120			08/04/13 09:40	08/04/13 23:06	1
Terphenyl-d14	63			45 - 120			07/29/13 17:09	07/30/13 15:22	1
Terphenyl-d14	67			45 - 120			08/04/13 09:40	08/04/13 23:06	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane</b>	<b>5100</b>		5.0		ug/L			07/25/13 08:48	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>170</b>		53		ug/L		07/24/13 09:57	07/25/13 16:37	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	0.0005			0 - 5			07/24/13 09:57	07/25/13 16:37	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-51107-1

**Client Sample ID: MW-8**  
**Date Collected: 07/22/13 14:25**  
**Date Received: 07/22/13 18:00**

**Lab Sample ID: 720-51107-2**  
**Matrix: Water**

## Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	97		31 - 150	07/24/13 09:57	07/25/13 16:37	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	170		0.20		mg/L		07/24/13 18:55	07/26/13 00:45	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2.9		0.20		mg/L		07/23/13 11:43	07/24/13 13:28	1
Manganese	1.8		0.020		mg/L		07/23/13 11:43	07/24/13 13:28	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L		07/22/13 22:57		1
Sulfate	ND		1.0		mg/L		07/22/13 22:57		1
<b>Sulfide</b>	<b>1.6</b>		1.0		mg/L		07/25/13 22:12		1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5300		50		mg/L		07/24/13 11:00		1

# Client Sample Results

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

TestAmerica Job ID: 720-51107-1

## Client Sample ID: MW-10

Date Collected: 07/22/13 11:35  
Date Received: 07/22/13 18:00

## Lab Sample ID: 720-51107-3

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/26/13 03:00	1
Benzene	ND		0.50		ug/L			07/26/13 03:00	1
Ethylbenzene	ND		0.50		ug/L			07/26/13 03:00	1
Naphthalene	ND		1.0		ug/L			07/26/13 03:00	1
Toluene	ND		0.50		ug/L			07/26/13 03:00	1
Xylenes, Total	ND		1.0		ug/L			07/26/13 03:00	1
Gasoline Range Organics (GRO)	ND		50		ug/L			07/26/13 03:00	1
-C5-C12									
1,2-DCA	ND		0.50		ug/L			07/26/13 03:00	1
EDB	ND		0.50		ug/L			07/26/13 03:00	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	107			67 - 130				07/26/13 03:00	1
1,2-Dichloroethane-d4 (Surr)	93			75 - 138				07/26/13 03:00	1
Toluene-d8 (Surr)	102			70 - 130				07/26/13 03:00	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		07/29/13 17:09	07/30/13 15:45	1
Acenaphthene	ND	H	0.10		ug/L		08/04/13 09:40	08/04/13 23:27	1
Acenaphthylene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 15:45	1
Fluorene	ND	H	0.10		ug/L		08/04/13 09:40	08/04/13 23:27	1
Phenanthrene	ND	H	0.10		ug/L		08/04/13 09:40	08/04/13 23:27	1
Anthracene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 15:45	1
Benzo[a]anthracene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 15:45	1
Chrysene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 15:45	1
Benzo[a]pyrene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 15:45	1
Benzo[b]fluoranthene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 15:45	1
Benzo[k]fluoranthene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 15:45	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 15:45	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 15:45	1
Fluoranthene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 15:45	1
Pyrene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 15:45	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 15:45	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	63			29 - 120			07/29/13 17:09	07/30/13 15:45	1
2-Fluorobiphenyl	68			29 - 120			08/04/13 09:40	08/04/13 23:27	1
Terphenyl-d14	64			45 - 120			07/29/13 17:09	07/30/13 15:45	1
Terphenyl-d14	68			45 - 120			08/04/13 09:40	08/04/13 23:27	1

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	7700		5.0		ug/L			07/25/13 08:53	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]	62		53		ug/L		07/24/13 09:57	07/25/13 16:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.05		0 - 5				07/24/13 09:57	07/25/13 16:37	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-51107-1

**Client Sample ID: MW-10**  
**Date Collected: 07/22/13 11:35**  
**Date Received: 07/22/13 18:00**

**Lab Sample ID: 720-51107-3**  
**Matrix: Water**

## Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	91		31 - 150	07/24/13 09:57	07/25/13 16:37	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	210		0.20		mg/L		07/24/13 18:55	07/26/13 00:59	1

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	7.7		0.20		mg/L		07/23/13 11:43	07/24/13 13:33	1
Manganese	6.6		0.020		mg/L		07/23/13 11:43	07/24/13 13:33	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L		07/22/13 23:31		1
Sulfate	1.9		1.0		mg/L		07/22/13 23:31		1
Sulfide	ND		1.0		mg/L		07/25/13 22:15		1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5200		50		mg/L		07/24/13 11:00		1

# QC Sample Results

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

TestAmerica Job ID: 720-51107-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

**Lab Sample ID:** MB 720-140901/4

**Matrix:** Water

**Analysis Batch:** 140901

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			07/25/13 17:30	1
Benzene	ND		0.50		ug/L			07/25/13 17:30	1
Ethylbenzene	ND		0.50		ug/L			07/25/13 17:30	1
Naphthalene	ND		1.0		ug/L			07/25/13 17:30	1
Toluene	ND		0.50		ug/L			07/25/13 17:30	1
Xylenes, Total	ND		1.0		ug/L			07/25/13 17:30	1
Gasoline Range Organics (GRO)	ND		50		ug/L			07/25/13 17:30	1
-C5-C12									
1,2-DCA	ND		0.50		ug/L			07/25/13 17:30	1
EDB	ND		0.50		ug/L			07/25/13 17:30	1
<b>MB</b>		<b>MB</b>							
Surrogate	LCS	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107				67 - 130			07/25/13 17:30	1
1,2-Dichloroethane-d4 (Surr)	96				75 - 138			07/25/13 17:30	1
Toluene-d8 (Surr)	100				70 - 130			07/25/13 17:30	1

**Lab Sample ID:** LCS 720-140901/5

**Matrix:** Water

**Analysis Batch:** 140901

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier					
Methyl tert-butyl ether	25.0	26.6		ug/L		106	62 - 130	
Benzene	25.0	24.2		ug/L		97	79 - 130	
Ethylbenzene	25.0	25.9		ug/L		104	80 - 120	
Naphthalene	25.0	25.8		ug/L		103	70 - 130	
Toluene	25.0	25.2		ug/L		101	78 - 120	
m-Xylene & p-Xylene	50.0	56.5		ug/L		113	70 - 142	
o-Xylene	25.0	28.1		ug/L		112	70 - 130	
1,2-DCA	25.0	24.7		ug/L		99	61 - 132	
EDB	25.0	28.2		ug/L		113	70 - 130	
<b>LCS</b>		<b>LCS</b>						
Surrogate	LCS	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed
4-Bromofluorobenzene	112				67 - 130			
1,2-Dichloroethane-d4 (Surr)	90				75 - 138			
Toluene-d8 (Surr)	105				70 - 130			

**Lab Sample ID:** LCS 720-140901/7

**Matrix:** Water

**Analysis Batch:** 140901

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier					
Gasoline Range Organics (GRO)	500	525		ug/L		105	62 - 120	
-C5-C12								
Surrogate	LCS	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed
4-Bromofluorobenzene	115				67 - 130			
1,2-Dichloroethane-d4 (Surr)	95				75 - 138			

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51107-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-140901/7**

**Matrix: Water**

**Analysis Batch: 140901**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	104		70 - 130

**Lab Sample ID: LCSD 720-140901/6**

**Matrix: Water**

**Analysis Batch: 140901**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier						
Methyl tert-butyl ether	25.0	27.2		ug/L	109	62 - 130	2	20	
Benzene	25.0	24.2		ug/L	97	79 - 130	0	20	
Ethylbenzene	25.0	26.0		ug/L	104	80 - 120	0	20	
Naphthalene	25.0	27.1		ug/L	108	70 - 130	5	20	
Toluene	25.0	25.4		ug/L	102	78 - 120	1	20	
m-Xylene & p-Xylene	50.0	56.3		ug/L	113	70 - 142	1	20	
o-Xylene	25.0	28.0		ug/L	112	70 - 130	0	20	
1,2-DCA	25.0	25.1		ug/L	101	61 - 132	2	20	
EDB	25.0	28.5		ug/L	114	70 - 130	1	20	

**LCSD LCSD**

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	110		67 - 130
1,2-Dichloroethane-d4 (Surr)	90		75 - 138
Toluene-d8 (Surr)	104		70 - 130

**Lab Sample ID: LCSD 720-140901/8**

**Matrix: Water**

**Analysis Batch: 140901**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier						
Gasoline Range Organics (GRO) -C5-C12	500	528		ug/L	106	62 - 120	1	20	

**LCSD LCSD**

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	113		67 - 130
1,2-Dichloroethane-d4 (Surr)	95		75 - 138
Toluene-d8 (Surr)	105		70 - 130

**Lab Sample ID: 720-51107-1 MS**

**Matrix: Water**

**Analysis Batch: 140901**

**Client Sample ID: MW-4**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Methyl tert-butyl ether	ND		25.0	26.3		ug/L	105	60 - 138	
Benzene	ND		25.0	24.2		ug/L	97	60 - 140	
Ethylbenzene	ND		25.0	26.2		ug/L	105	60 - 140	
Naphthalene	ND		25.0	30.0		ug/L	117	56 - 140	
Toluene	ND		25.0	25.6		ug/L	102	60 - 140	
m-Xylene & p-Xylene	ND		50.0	56.6		ug/L	113	60 - 140	
o-Xylene	ND		25.0	28.1		ug/L	112	60 - 140	
1,2-DCA	ND		25.0	24.6		ug/L	99	60 - 140	

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# QC Sample Results

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

TestAmerica Job ID: 720-51107-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: 720-51107-1 MS

Matrix: Water

Analysis Batch: 140901

Client Sample ID: MW-4  
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
EDB	ND		25.0	27.2		ug/L		109	60 - 140
<b>Surrogate</b>									
4-Bromofluorobenzene	112			67 - 130					
1,2-Dichloroethane-d4 (Surr)	92			75 - 138					
Toluene-d8 (Surr)	103			70 - 130					

Lab Sample ID: 720-51107-1 MSD

Matrix: Water

Analysis Batch: 140901

Client Sample ID: MW-4  
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	%Rec.	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Methyl tert-butyl ether	ND		25.0	27.3		ug/L		109	60 - 138	4	20	12
Benzene	ND		25.0	24.6		ug/L		98	60 - 140	2	20	
Ethylbenzene	ND		25.0	26.3		ug/L		105	60 - 140	1	20	13
Naphthalene	ND		25.0	33.0		ug/L		129	56 - 140	9	20	
Toluene	ND		25.0	25.4		ug/L		102	60 - 140	1	20	
m-Xylene & p-Xylene	ND		50.0	57.1		ug/L		114	60 - 140	1	20	
o-Xylene	ND		25.0	28.5		ug/L		114	60 - 140	1	20	
1,2-DCA	ND		25.0	25.1		ug/L		100	60 - 140	2	20	
EDB	ND		25.0	28.1		ug/L		113	60 - 140	3	20	
<b>Surrogate</b>												
4-Bromofluorobenzene	110			67 - 130								
1,2-Dichloroethane-d4 (Surr)	90			75 - 138								
Toluene-d8 (Surr)	101			70 - 130								

## Method: 8270C SIM - PAHs by GCMS (SIM)

Lab Sample ID: MB 720-141117/1-A

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 141117

Matrix: Water

Analysis Batch: 141117

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Naphthalene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Acenaphthene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Acenaphthylene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Fluorene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Phenanthrene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Anthracene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Benzo[a]anthracene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Chrysene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Benzo[a]pyrene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Benzo[b]fluoranthene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Benzo[k]fluoranthene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51107-1

## Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

**Lab Sample ID: MB 720-141117/1-A**

**Matrix: Water**

**Analysis Batch: 141117**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 141117**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Surrogate	%Recovery							Prepared	Analyzed	Dil Fac
Fluoranthene	ND				0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Pyrene	ND				0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
Dibenz(a,h)anthracene	ND				0.10		ug/L		07/29/13 17:09	07/30/13 14:36	1
<b>Surrogate</b>	<b>MB</b>	<b>MB</b>									
2-Fluorobiphenyl	61				29 - 120				07/29/13 17:09	07/30/13 14:36	1
Terphenyl-d14	74				45 - 120				07/29/13 17:09	07/30/13 14:36	1

**Lab Sample ID: LCS 720-141117/2-A**

**Matrix: Water**

**Analysis Batch: 141117**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 141117**

Analyte	Spike Added	LC	LC	Result	Qualifier	Unit	D	%Rec	%Rec.	
		Spike	LC						Limits	
Naphthalene	10.0		3.84		*	ug/L		38	29 - 120	
Acenaphthene	10.0		3.98	*		ug/L		40	42 - 120	
Acenaphthylene	10.0		4.14		*	ug/L		41	39 - 120	
Fluorene	10.0		4.24	*		ug/L		42	45 - 120	
Phenanthrene	10.0		4.17	*		ug/L		42	46 - 120	
Anthracene	10.0		5.54			ug/L		55	53 - 120	
Benzo[a]anthracene	10.0		6.78			ug/L		68	48 - 120	
Chrysene	10.0		5.93			ug/L		59	47 - 120	
Benzo[a]pyrene	10.0		6.34			ug/L		63	43 - 120	
Benzo[b]fluoranthene	10.0		6.51			ug/L		65	42 - 120	
Benzo[k]fluoranthene	10.0		6.39			ug/L		64	42 - 120	
Benzo[g,h,i]perylene	10.0		6.00			ug/L		60	24 - 120	
Indeno[1,2,3-cd]pyrene	10.0		6.11			ug/L		61	25 - 120	
Fluoranthene	10.0		5.93			ug/L		59	57 - 120	
Pyrene	10.0		5.43			ug/L		54	47 - 120	
Dibenz(a,h)anthracene	10.0		6.17			ug/L		62	21 - 120	
<b>Surrogate</b>	<b>LCS</b>	<b>LCS</b>								
2-Fluorobiphenyl	42		29 - 120							
Terphenyl-d14	69		45 - 120							

**Lab Sample ID: LCSD 720-141117/3-A**

**Matrix: Water**

**Analysis Batch: 141117**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 141117**

Analyte	Spike Added	LC	LC	Result	Qualifier	Unit	D	%Rec	%Rec.	
		LC	LC						Limits	RPD
Naphthalene	10.0		4.58		*	ug/L		46	29 - 120	17
Acenaphthene	10.0		4.95			ug/L		50	42 - 120	22
Acenaphthylene	10.0		5.11			ug/L		51	39 - 120	21
Fluorene	10.0		5.26			ug/L		53	45 - 120	21
Phenanthrene	10.0		5.15			ug/L		51	46 - 120	21
Anthracene	10.0		6.62			ug/L		66	53 - 120	18
Benzo[a]anthracene	10.0		6.86			ug/L		69	48 - 120	1
Chrysene	10.0		6.01			ug/L		60	47 - 120	1
Benzo[a]pyrene	10.0		6.80			ug/L		68	43 - 120	7

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51107-1

## Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

**Lab Sample ID: LCSD 720-141117/3-A**

**Matrix: Water**

**Analysis Batch: 141117**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 141117**

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPL		
Benzo[b]fluoranthene	10.0	6.80		ug/L	68	42 - 120		4	35	
Benzo[k]fluoranthene	10.0	6.96		ug/L	70	42 - 120		9	35	
Benzo[g,h,i]perylene	10.0	6.73		ug/L	67	24 - 120		12	35	
Indeno[1,2,3-cd]pyrene	10.0	6.92		ug/L	69	25 - 120		12	35	
Fluoranthene	10.0	6.71		ug/L	67	57 - 120		12	35	
Pyrene	10.0	5.95		ug/L	60	47 - 120		9	35	
Dibenz(a,h)anthracene	10.0	7.07		ug/L	71	21 - 120		14	35	
<b>Surrogate</b>		<b>LCSD</b>	<b>LCSD</b>							
		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
2-Fluorobiphenyl	53			29 - 120						
Terphenyl-d14	72			45 - 120						

**Lab Sample ID: MB 720-141517/1-A**

**Matrix: Water**

**Analysis Batch: 141529**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 141517**

Analyte	Result	MB		RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
		Qualifier	RPL					Prepared	Analyzed		
Naphthalene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Acenaphthene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Acenaphthylene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Fluorene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Phenanthrene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Anthracene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Benzo[a]anthracene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Chrysene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Benzo[a]pyrene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Benzo[b]fluoranthene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Benzo[k]fluoranthene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Benzo[g,h,i]perylene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Indeno[1,2,3-cd]pyrene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Fluoranthene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Pyrene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
Dibenz(a,h)anthracene	ND		0.10			ug/L		08/04/13 09:40	08/04/13 15:33		1
<b>Surrogate</b>		<b>MB</b>	<b>MB</b>								
		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>							
2-Fluorobiphenyl	72			29 - 120				08/04/13 09:40		08/04/13 15:33	
Terphenyl-d14	90			45 - 120				08/04/13 09:40		08/04/13 15:33	

**Lab Sample ID: LCS 720-141517/2-A**

**Matrix: Water**

**Analysis Batch: 141529**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 141517**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	RPL
Naphthalene	10.0	6.99		ug/L	70	29 - 120		
Acenaphthene	10.0	7.41		ug/L	74	42 - 120		
Acenaphthylene	10.0	7.39		ug/L	74	39 - 120		
Fluorene	10.0	7.37		ug/L	74	45 - 120		
Phenanthrene	10.0	7.47		ug/L	75	46 - 120		

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51107-1

## Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

**Lab Sample ID: LCS 720-141517/2-A**

**Matrix: Water**

**Analysis Batch: 141529**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 141517**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Anthracene	10.0	8.36		ug/L		84	53 - 120
Benzo[a]anthracene	10.0	7.24		ug/L		72	48 - 120
Chrysene	10.0	7.12		ug/L		71	47 - 120
Benzo[a]pyrene	10.0	6.57		ug/L		66	43 - 120
Benzo[b]fluoranthene	10.0	6.95		ug/L		70	42 - 120
Benzo[k]fluoranthene	10.0	6.27		ug/L		63	42 - 120
Benzo[g,h,i]perylene	10.0	5.52		ug/L		55	24 - 120
Indeno[1,2,3-cd]pyrene	10.0	5.61		ug/L		56	25 - 120
Fluoranthene	10.0	7.75		ug/L		77	57 - 120
Pyrene	10.0	7.38		ug/L		74	47 - 120
Dibenz(a,h)anthracene	10.0	5.74		ug/L		57	21 - 120

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	79		29 - 120
Terphenyl-d14	83		45 - 120

**Lab Sample ID: LCSD 720-141517/3-A**

**Matrix: Water**

**Analysis Batch: 141529**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 141517**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
Naphthalene	10.0	6.31		ug/L		63	29 - 120	10	35
Acenaphthene	10.0	6.76		ug/L		68	42 - 120	9	35
Acenaphthylene	10.0	6.75		ug/L		68	39 - 120	9	35
Fluorene	10.0	6.80		ug/L		68	45 - 120	8	35
Phenanthrene	10.0	7.05		ug/L		71	46 - 120	6	35
Anthracene	10.0	8.01		ug/L		80	53 - 120	4	35
Benzo[a]anthracene	10.0	7.52		ug/L		75	48 - 120	4	35
Chrysene	10.0	7.44		ug/L		74	47 - 120	4	35
Benzo[a]pyrene	10.0	7.24		ug/L		72	43 - 120	10	35
Benzo[b]fluoranthene	10.0	7.73		ug/L		77	42 - 120	11	35
Benzo[k]fluoranthene	10.0	6.93		ug/L		69	42 - 120	10	35
Benzo[g,h,i]perylene	10.0	6.33		ug/L		63	24 - 120	14	35
Indeno[1,2,3-cd]pyrene	10.0	6.33		ug/L		63	25 - 120	12	35
Fluoranthene	10.0	7.65		ug/L		77	57 - 120	1	35
Pyrene	10.0	7.36		ug/L		74	47 - 120	0	35
Dibenz(a,h)anthracene	10.0	6.57		ug/L		66	21 - 120	13	35

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	71		29 - 120
Terphenyl-d14	88		45 - 120

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51107-1

## Method: RSK-175 - Dissolved Gases (GC)

**Lab Sample ID:** MB 280-184295/6

**Matrix:** Water

**Analysis Batch:** 184295

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methane	ND		5.0		ug/L			07/25/13 08:10	1

**Lab Sample ID:** LCS 280-184295/4

**Matrix:** Water

**Analysis Batch:** 184295

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits	RPD
	Added	Result	Qualifier					
Methane	146	149		ug/L		102	75 - 125	

**Lab Sample ID:** LCSD 280-184295/5

**Matrix:** Water

**Analysis Batch:** 184295

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD
	Added	Result	Qualifier					
Methane	146	162		ug/L		111	75 - 125	9

**Lab Sample ID:** 720-51107-1 DU

**Matrix:** Water

**Analysis Batch:** 184295

Analyte	Sample	Sample	DU	DU	Unit	D	RPD
	Result	Qualifier					
Methane	8000		7970		ug/L		0.1

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

**Lab Sample ID:** MB 720-140775/1-A

**Matrix:** Water

**Analysis Batch:** 140850

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		50		ug/L		07/24/13 09:57	07/25/13 18:15	1

**Surrogate** MB MB

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier	Limits			
Capric Acid (Surrogate)	0.001		0 - 5	07/24/13 09:57	07/25/13 18:15	1
p-Terphenyl	97		31 - 150	07/24/13 09:57	07/25/13 18:15	1

**Lab Sample ID:** LCS 720-140775/2-A

**Matrix:** Water

**Analysis Batch:** 140850

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits	RPD
	Added	Result	Qualifier					
Diesel Range Organics [C10-C28]	2500	1090		ug/L		44	32 - 119	

**Surrogate** LCS LCS

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	Limits
p-Terphenyl	108		31 - 150

**Client Sample ID:** Method Blank

**Prep Type:** Silica Gel Cleanup

**Prep Batch:** 140775

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# QC Sample Results

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

TestAmerica Job ID: 720-51107-1

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

**Lab Sample ID:** LCSD 720-140775/3-A

**Matrix:** Water

**Analysis Batch:** 140850

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Silica Gel Cleanup

**Prep Batch:** 140775

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec.	RPD	Limit
		Result	Qualifier			42		
Diesel Range Organics [C10-C28]	2500	1050		ug/L				
<i>Surrogate</i>		LCSD	LCSD					
<i>p-Terphenyl</i>	98	%Recovery	Qualifier	Limits				
				31 - 150				

## Method: 6010B - Metals (ICP)

**Lab Sample ID:** MB 720-140829/1-A

**Matrix:** Water

**Analysis Batch:** 140953

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 140829

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Magnesium	ND		0.20		mg/L		07/24/13 18:55	07/25/13 23:43	1

**Lab Sample ID:** LCS 720-140829/2-A

**Matrix:** Water

**Analysis Batch:** 140953

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 140829

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier			113			
Magnesium	10.0	11.3		mg/L					

**Lab Sample ID:** LCSD 720-140829/3-A

**Matrix:** Water

**Analysis Batch:** 140953

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 140829

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier			115			
Magnesium	10.0	11.5		mg/L					

**Lab Sample ID:** MB 720-140702/1-A

**Matrix:** Water

**Analysis Batch:** 140796

**Client Sample ID:** Method Blank

**Prep Type:** Total Recoverable

**Prep Batch:** 140702

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	ND		0.20		mg/L		07/23/13 11:37	07/24/13 11:41	1
Manganese	ND		0.020		mg/L		07/23/13 11:37	07/24/13 11:41	1

**Lab Sample ID:** LCS 720-140702/2-A

**Matrix:** Water

**Analysis Batch:** 140796

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total Recoverable

**Prep Batch:** 140702

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier			100			
Iron	10.0	9.97		mg/L					
Manganese	1.00	0.930		mg/L		93	80 - 120		

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# QC Sample Results

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

TestAmerica Job ID: 720-51107-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCSD 720-140702/3-A**

**Matrix: Water**

**Analysis Batch: 140796**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total Recoverable**

**Prep Batch: 140702**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	RPD
	Added	Result	Qualifier			%Rec.	RPD Limit
Iron	10.0	9.83		mg/L		98	80 - 120
Manganese	1.00	0.915		mg/L		92	80 - 120

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 720-140597/5**

**Matrix: Water**

**Analysis Batch: 140597**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Sulfate	ND		1.0		mg/L			07/22/13 11:11	1

**Lab Sample ID: LCS 720-140597/6**

**Matrix: Water**

**Analysis Batch: 140597**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.
	Added	Result	Qualifier			%Rec.
Sulfate	10.0	9.66		mg/L		97

**Lab Sample ID: 720-51107-3 MS**

**Matrix: Water**

**Analysis Batch: 140597**

**Client Sample ID: MW-10**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.
	Result	Qualifier	Added	Result	Qualifier			%Rec.
Sulfate	ND		100	99.1		mg/L		99

**Lab Sample ID: 720-51107-3 MSD**

**Matrix: Water**

**Analysis Batch: 140597**

**Client Sample ID: MW-10**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.
	Result	Qualifier	Added	Result	Qualifier			%Rec.
Sulfate	ND		100	99.8		mg/L		100

**Lab Sample ID: MB 720-140598/5**

**Matrix: Water**

**Analysis Batch: 140598**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nitrate as N	ND		0.23		mg/L			07/22/13 11:11	1

**Lab Sample ID: LCS 720-140598/6**

**Matrix: Water**

**Analysis Batch: 140598**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.
	Added	Result	Qualifier			%Rec.
Nitrate as N	2.26	2.19		mg/L		97

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# QC Sample Results

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

TestAmerica Job ID: 720-51107-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID:** 720-51107-3 MS

**Matrix:** Water

**Analysis Batch:** 140598

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Nitrate as N	ND		22.6	22.1		mg/L		98	80 - 120

**Lab Sample ID:** 720-51107-3 MSD

**Matrix:** Water

**Analysis Batch:** 140598

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Nitrate as N	ND		22.6	22.2		mg/L		98	80 - 120	1	20

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID:** MB 720-140782/2

**Matrix:** Water

**Analysis Batch:** 140782

Analyte	MB	MB	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	ND		10		mg/L			07/24/13 11:00	1

**Lab Sample ID:** LCS 720-140782/1

**Matrix:** Water

**Analysis Batch:** 140782

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Total Dissolved Solids	1000	964		mg/L		96	85 - 115

## Method: SM 4500 S2 F - Sulfide, Total

**Lab Sample ID:** MB 500-194912/1

**Matrix:** Water

**Analysis Batch:** 194912

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Sulfide	ND		1.0		mg/L			07/25/13 21:20	1

**Lab Sample ID:** LCS 500-194912/2

**Matrix:** Water

**Analysis Batch:** 194912

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Sulfide	3.70	3.87		mg/L		105	80 - 120

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# QC Association Summary

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

TestAmerica Job ID: 720-51107-1

## GC/MS VOA

### Analysis Batch: 140901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Total/NA	Water	8260B/CA_LUFT MS	5
720-51107-1 MS	MW-4	Total/NA	Water	8260B/CA_LUFT MS	6
720-51107-1 MSD	MW-4	Total/NA	Water	8260B/CA_LUFT MS	7
720-51107-2	MW-8	Total/NA	Water	8260B/CA_LUFT MS	8
720-51107-3	MW-10	Total/NA	Water	8260B/CA_LUFT MS	9
LCS 720-140901/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	10
LCS 720-140901/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	11
LCSD 720-140901/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	12
LCSD 720-140901/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	13
MB 720-140901/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	14

## GC/MS Semi VOA

### Prep Batch: 141117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Total/NA	Water	3510C	
720-51107-2	MW-8	Total/NA	Water	3510C	
720-51107-3	MW-10	Total/NA	Water	3510C	
LCS 720-141117/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-141117/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-141117/1-A	Method Blank	Total/NA	Water	3510C	

### Analysis Batch: 141117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Total/NA	Water	8270C SIM	141117
720-51107-2	MW-8	Total/NA	Water	8270C SIM	141117
720-51107-3	MW-10	Total/NA	Water	8270C SIM	141117
LCS 720-141117/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	141117
LCSD 720-141117/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	141117
MB 720-141117/1-A	Method Blank	Total/NA	Water	8270C SIM	141117

### Prep Batch: 141517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-2	MW-8	Total/NA	Water	3510C	
720-51107-3	MW-10	Total/NA	Water	3510C	
LCS 720-141517/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-141517/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-141517/1-A	Method Blank	Total/NA	Water	3510C	

### Analysis Batch: 141529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-2	MW-8	Total/NA	Water	8270C SIM	141517
720-51107-3	MW-10	Total/NA	Water	8270C SIM	141517

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# QC Association Summary

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

TestAmerica Job ID: 720-51107-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 141529 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-141517/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	141517
LCSD 720-141517/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	141517
MB 720-141517/1-A	Method Blank	Total/NA	Water	8270C SIM	141517

## GC VOA

### Analysis Batch: 184295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Total/NA	Water	RSK-175	
720-51107-1 DU	MW-4	Total/NA	Water	RSK-175	
720-51107-2	MW-8	Total/NA	Water	RSK-175	
720-51107-3	MW-10	Total/NA	Water	RSK-175	
LCS 280-184295/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-184295/5	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 280-184295/6	Method Blank	Total/NA	Water	RSK-175	

## GC Semi VOA

### Prep Batch: 140775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Silica Gel Cleanup	Water	3510C SGC	
720-51107-2	MW-8	Silica Gel Cleanup	Water	3510C SGC	
720-51107-3	MW-10	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-140775/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-140775/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 720-140775/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 140850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Silica Gel Cleanup	Water	8015B	140775
720-51107-2	MW-8	Silica Gel Cleanup	Water	8015B	140775
LCS 720-140775/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	140775
LCSD 720-140775/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	140775
MB 720-140775/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	140775

### Analysis Batch: 140851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-3	MW-10	Silica Gel Cleanup	Water	8015B	140775

## Metals

### Prep Batch: 140702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Dissolved	Water	3005A	
720-51107-2	MW-8	Dissolved	Water	3005A	
720-51107-3	MW-10	Dissolved	Water	3005A	
LCS 720-140702/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 720-140702/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 720-140702/1-A	Method Blank	Total Recoverable	Water	3005A	

TestAmerica Pleasanton

# QC Association Summary

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

TestAmerica Job ID: 720-51107-1

## Metals (Continued)

### Analysis Batch: 140796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Dissolved	Water	6010B	140702
720-51107-2	MW-8	Dissolved	Water	6010B	140702
720-51107-3	MW-10	Dissolved	Water	6010B	140702
LCS 720-140702/2-A	Lab Control Sample	Total Recoverable	Water	6010B	140702
LCSD 720-140702/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	140702
MB 720-140702/1-A	Method Blank	Total Recoverable	Water	6010B	140702

### Prep Batch: 140829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Total/NA	Water	3010A	9
720-51107-2	MW-8	Total/NA	Water	3010A	10
720-51107-3	MW-10	Total/NA	Water	3010A	11
LCS 720-140829/2-A	Lab Control Sample	Total/NA	Water	3010A	12
LCSD 720-140829/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	13
MB 720-140829/1-A	Method Blank	Total/NA	Water	3010A	14

### Analysis Batch: 140953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Total/NA	Water	6010B	140829
720-51107-2	MW-8	Total/NA	Water	6010B	140829
720-51107-3	MW-10	Total/NA	Water	6010B	140829
LCS 720-140829/2-A	Lab Control Sample	Total/NA	Water	6010B	140829
LCSD 720-140829/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	140829
MB 720-140829/1-A	Method Blank	Total/NA	Water	6010B	140829

## General Chemistry

### Analysis Batch: 140597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Total/NA	Water	300.0	
720-51107-2	MW-8	Total/NA	Water	300.0	
720-51107-3	MW-10	Total/NA	Water	300.0	
720-51107-3 MS	MW-10	Total/NA	Water	300.0	
720-51107-3 MSD	MW-10	Total/NA	Water	300.0	
LCS 720-140597/6	Lab Control Sample	Total/NA	Water	300.0	
MB 720-140597/5	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 140598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Total/NA	Water	300.0	
720-51107-2	MW-8	Total/NA	Water	300.0	
720-51107-3	MW-10	Total/NA	Water	300.0	
720-51107-3 MS	MW-10	Total/NA	Water	300.0	
720-51107-3 MSD	MW-10	Total/NA	Water	300.0	
LCS 720-140598/6	Lab Control Sample	Total/NA	Water	300.0	
MB 720-140598/5	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 140782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Total/NA	Water	SM 2540C	

TestAmerica Pleasanton

# QC Association Summary

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

TestAmerica Job ID: 720-51107-1

## General Chemistry (Continued)

### Analysis Batch: 140782 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-2	MW-8	Total/NA	Water	SM 2540C	5
720-51107-3	MW-10	Total/NA	Water	SM 2540C	
LCS 720-140782/1	Lab Control Sample	Total/NA	Water	SM 2540C	6
MB 720-140782/2	Method Blank	Total/NA	Water	SM 2540C	

### Analysis Batch: 194912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51107-1	MW-4	Total/NA	Water	SM 4500 S2 F	8
720-51107-2	MW-8	Total/NA	Water	SM 4500 S2 F	
720-51107-3	MW-10	Total/NA	Water	SM 4500 S2 F	9
LCS 500-194912/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
MB 500-194912/1	Method Blank	Total/NA	Water	SM 4500 S2 F	10

## Lab Chronicle

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

TestAmerica Job ID: 720-51107-1

**Client Sample ID: MW-4**

**Lab Sample ID: 720-51107-1**

Date Collected: 07/22/13 13:40

Matrix: Water

Date Received: 07/22/13 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	140901	07/26/13 01:17	LPL	TAL PLS
Total/NA	Prep	3510C			141117	07/29/13 17:09	NVP	TAL PLS
Total/NA	Analysis	8270C SIM		1	141170	07/30/13 14:59	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	184295	07/25/13 08:39	BMG	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			140775	07/24/13 09:57	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	140850	07/25/13 17:02	DCH	TAL PLS
Dissolved	Prep	3005A			140702	07/23/13 11:43	ECT	TAL PLS
Dissolved	Analysis	6010B		1	140796	07/24/13 13:15	CAM	TAL PLS
Total/NA	Prep	3010A			140829	07/24/13 18:55	ASB	TAL PLS
Total/NA	Analysis	6010B		1	140953	07/26/13 00:40	SLK	TAL PLS
Total/NA	Analysis	SM 4500 S2 F		1	194912		CLB	TAL CHI
					(Start)	07/25/13 22:10		
					(End)	07/25/13 22:12		
Total/NA	Analysis	300.0		1	140597	07/22/13 21:48	MJK	TAL PLS
Total/NA	Analysis	300.0		1	140598	07/22/13 21:48	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	140782	07/24/13 11:00	NVP	TAL PLS

**Client Sample ID: MW-8**

**Lab Sample ID: 720-51107-2**

Date Collected: 07/22/13 14:25

Matrix: Water

Date Received: 07/22/13 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	140901	07/26/13 02:34	LPL	TAL PLS
Total/NA	Prep	3510C			141117	07/29/13 17:09	NVP	TAL PLS
Total/NA	Analysis	8270C SIM		1	141170	07/30/13 15:22	MQL	TAL PLS
Total/NA	Prep	3510C			141517	08/04/13 09:40	JRM	TAL PLS
Total/NA	Analysis	8270C SIM		1	141529	08/04/13 23:06	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	184295	07/25/13 08:48	BMG	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			140775	07/24/13 09:57	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	140850	07/25/13 16:37	DCH	TAL PLS
Dissolved	Prep	3005A			140702	07/23/13 11:43	ECT	TAL PLS
Dissolved	Analysis	6010B		1	140796	07/24/13 13:28	CAM	TAL PLS
Total/NA	Prep	3010A			140829	07/24/13 18:55	ASB	TAL PLS
Total/NA	Analysis	6010B		1	140953	07/26/13 00:45	SLK	TAL PLS
Total/NA	Analysis	SM 4500 S2 F		1	194912		CLB	TAL CHI
					(Start)	07/25/13 22:12		
					(End)	07/25/13 22:15		
Total/NA	Analysis	300.0		1	140597	07/22/13 22:57	MJK	TAL PLS
Total/NA	Analysis	300.0		1	140598	07/22/13 22:57	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	140782	07/24/13 11:00	NVP	TAL PLS

TestAmerica Pleasanton

# Lab Chronicle

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

TestAmerica Job ID: 720-51107-1

**Client Sample ID: MW-10**

**Date Collected: 07/22/13 11:35**

**Date Received: 07/22/13 18:00**

**Lab Sample ID: 720-51107-3**

**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	140901	07/26/13 03:00	LPL	TAL PLS
Total/NA	Prep	3510C			141117	07/29/13 17:09	NVP	TAL PLS
Total/NA	Analysis	8270C SIM		1	141170	07/30/13 15:45	MQL	TAL PLS
Total/NA	Prep	3510C			141517	08/04/13 09:40	JRM	TAL PLS
Total/NA	Analysis	8270C SIM		1	141529	08/04/13 23:27	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	184295	07/25/13 08:53	BMG	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			140775	07/24/13 09:57	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	140851	07/25/13 16:37	DCH	TAL PLS
Dissolved	Prep	3005A			140702	07/23/13 11:43	ECT	TAL PLS
Dissolved	Analysis	6010B		1	140796	07/24/13 13:33	CAM	TAL PLS
Total/NA	Prep	3010A			140829	07/24/13 18:55	ASB	TAL PLS
Total/NA	Analysis	6010B		1	140953	07/26/13 00:59	SLK	TAL PLS
Total/NA	Analysis	SM 4500 S2 F		1	194912		CLB	TAL CHI
					(Start)	07/25/13 22:15		
					(End)	07/25/13 22:17		
Total/NA	Analysis	300.0		1	140597	07/22/13 23:31	MJK	TAL PLS
Total/NA	Analysis	300.0		1	140598	07/22/13 23:31	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	140782	07/24/13 11:00	NVP	TAL PLS

**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

TestAmerica Pleasanton

## Certification Summary

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

TestAmerica Job ID: 720-51107-1

### 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	01-31-14

### 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
Alabama	State Program	4	40461	04-30-14
California	NELAP	9	01132CA	04-30-14
Georgia	State Program	4	N/A	04-30-14
Georgia	State Program	4	939	04-30-14
Hawaii	State Program	9	N/A	04-30-14
Illinois	NELAP	5	100201	04-30-14
Indiana	State Program	5	C-IL-02	04-30-14
Iowa	State Program	7	82	05-01-14
Kansas	NELAP	7	E-10161	10-31-13
Kentucky	State Program	4	90023	12-31-13
Kentucky (UST)	State Program	4	66	04-30-14
Louisiana	NELAP	6	30720	06-30-14
Massachusetts	State Program	1	M-IL035	06-30-14
Mississippi	State Program	4	N/A	04-30-14
North Carolina DENR	State Program	4	291	12-31-13
North Dakota	State Program	8	R-194	04-30-14
Oklahoma	State Program	6	8908	08-31-13
South Carolina	State Program	4	77001	08-30-13 *
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Wisconsin	State Program	5	999580010	08-31-13
Wyoming	State Program	8	8TMS-Q	04-30-14

### 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	10-31-13
A2LA	ISO/IEC 17025		2907.01	10-31-13
Alabama	State Program	4	40730	09-30-13 *
Alaska (UST)	State Program	10	UST-30	04-05-14
Arizona	State Program	9	AZ0713	12-19-13
Arkansas DEQ	State Program	6	88-0687	09-01-13
California	ELAP	9	2513	08-31-14 *
Colorado	State Program	8	N/A	09-30-13
Connecticut	State Program	1	PH-0686	09-30-14
Florida	NELAP	4	E87667	06-30-14
Idaho	State Program	10	CO00026	09-30-13
Illinois	NELAP	5	200017	04-30-14
Iowa	State Program	7	370	12-01-14
Kansas	NELAP	7	E-10166	04-30-14
Louisiana	NELAP	6	02096	09-01-13 *
Maine	State Program	1	CO0002	03-03-15
Maryland	State Program	3	268	03-31-14
Minnesota	NELAP	5	8-999-405	12-31-13

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pleasanton

## Certification Summary

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

TestAmerica Job ID: 720-51107-1

### 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
Nevada	State Program	9	CO0026	09-01-13
New Hampshire	NELAP	1	205310	04-28-14
New Jersey	NELAP	2	CO004	06-30-14
New Mexico	State Program	6	CO00026	06-30-14 *
New York	NELAP	2	11964	04-01-14
North Carolina DENR	State Program	4	358	12-31-13
North Dakota	State Program	8	R-034	06-30-14 *
Oklahoma	State Program	6	8614	08-31-13
Oregon	NELAP	10	CO200001	01-16-14
Pennsylvania	NELAP	3	68-00664	09-01-13 *
South Carolina	State Program	4	72002	09-01-13 *
Texas	NELAP	6	T104704183-08-TX	09-30-13
USDA	Federal		P330-13-00202	07-02-16
Utah	NELAP	8	CO000262012-4	09-01-13
Virginia	NELAP	3	460232	06-14-14
Washington	State Program	10	C583	09-01-13 *
West Virginia DEP	State Program	3	354	11-30-13
Wisconsin	State Program	5	999615430	08-31-13
Wyoming (UST)	A2LA	8		10-31-13

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pleasanton

## Method Summary

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

TestAmerica Job ID: 720-51107-1

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
6010B	Metals (ICP)	SW846	TAL PLS
300.0	Anions, Ion Chromatography	MCAWW	TAL PLS
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PLS
SM 4500 S2 F	Sulfide, Total	SM	TAL CHI

### Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: 720-51107-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-51107-1	MW-4	Water	07/22/13 13:40	07/22/13 18:00
720-51107-2	MW-8	Water	07/22/13 14:25	07/22/13 18:00
720-51107-3	MW-10	Water	07/22/13 11:35	07/22/13 18:00

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TestAmerica Pleasanton

**BLAINE**

TECH SERVICES, INC.

**1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
FAX (408) 573-7777  
PHONE (408) 573-0555**



720-51107 Chain of Custody

SAMPLING COMPLETED	DATE 7/24/13	TIME 1425	SAMPLING PERFORMED BY	Daniel Allen	RESULTS NEEDED NO LATER THAN	Standard TAT	
RELEASED BY	DATE 7/22/13		TIME 1630	RECEIVED BY	DATE 7/22/13		TIME 1630
RELEASED BY	DATE 7/22/13		TIME 1700	RECEIVED BY	DATE 07/22/13		TIME 1700
RELEASED BY	DATE 07/22/13		TIME 1800	RECEIVED BY	DATE 7/22/13		TIME 1800
SHIPPED VIA	DATE SENT		TIME SENT	COOLER #			

1.2°, 3.7°

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-51107-1

**Login Number: 51107**

**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.	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: 720-51107-1

**Login Number: 51107**

**List Source: TestAmerica Chicago**

**List Number: 1**

**List Creation: 07/24/13 10:12 AM**

**Creator: Kelsey, Shawn M**

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.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-51107-1

**Login Number: 51107**

**List Source: TestAmerica Denver**

**List Number: 1**

**List Creation: 07/24/13 03:59 PM**

**Creator: Broander, Laura L**

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?	False	FIELD LEFT BLANK
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
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: 720-51143-1

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:

8/5/2013 3:15:15 PM

Dimple Sharma, Project Manager I

dimple.sharma@testamericainc.com

### LINKS

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results through

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The  
Expert

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: 720-51143-1

### Qualifiers

#### GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

#### GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
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.

#### Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than 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.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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: 720-51143-1

### Job ID: 720-51143-1

Laboratory: TestAmerica Pleasanton

#### Narrative

##### Job Narrative 720-51143-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 7/23/2013 6:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.3° C and 3.6° C.

#### GC/MS VOA

No analytical or quality issues were noted.

#### GC/MS Semi VOA

Method 8270C SIM: Surrogate recovery for the following sample was outside control limits: IW-5 (720-51143-9), IW-6 (720-51143-2), MW-3 (720-51143-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270C SIM: Surrogate recovery for the following sample was outside control limits: IW-5 (720-51143-9). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

#### GC VOA

No analytical or quality issues were noted.

#### GC Semi VOA

Method 8015B: The Diesel Range Organics (DRO) concentration reported for the following sample is due to the presence of discrete peaks: IW-3 (720-51143-3).

Method 8015B: Capric acid surrogate recovery for the following sample was outside control limits: IW-2 (720-51143-4), MW-3 (720-51143-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015B: Due to the level of dilution required for the following sample, surrogate recoveries are not reported: IW-5 (720-51143-9).

No other analytical or quality issues were noted.

#### Metals

Method 3005A: The following sample submitted for metals analysis was received with insufficient preservation (pH >2): 51143-3, 4, and 6. Added 1mL HNO<sub>3</sub> on 07/24/13. ref #: 140837

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for prep batch 140839 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 6010B: The serial dilution performed for the following sample associated with analytical batch 140839 was outside control limits: (720-51143-2 SD)

No other analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

# Detection Summary

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

TestAmerica Job ID: 720-51143-1

## Client Sample ID: MW-14

## Lab Sample ID: 720-51143-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	0.13		0.11		ug/L	1		8270C SIM	Total/NA
Methane	6000		5.0		ug/L	1		RSK-175	Total/NA

## Client Sample ID: IW-6

## Lab Sample ID: 720-51143-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	9.9		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	110		50		ug/L	1		MS	
Naphthalene	2.5		0.11		ug/L	1		8260B/CA_LUFT	Total/NA
Acenaphthene	0.40		0.11		ug/L	1		MS	
Acenaphthylene	0.35		0.11		ug/L	1		8270C SIM	Total/NA
Fluorene	1.8		0.11		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.83		0.11		ug/L	1		8270C SIM	Total/NA
Methane	8200		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	970		52		ug/L	1		8015B	Silica Gel Cleanup
Magnesium	410		1.0		mg/L	5		6010B	Total/NA
Iron	45		0.20		mg/L	1		6010B	Dissolved
Manganese	4.4		0.020		mg/L	1		6010B	Dissolved
Sulfide	6.2		1.0		mg/L	1		SM 4500 S2 F	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	10000		50		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: IW-3

## Lab Sample ID: 720-51143-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	150		5.0		ug/L	5		8260B/CA_LUFT	Total/NA
Naphthalene	51		0.53		ug/L	5		MS	
Acenaphthene	2.2		0.11		ug/L	1		8270C SIM	Total/NA
Fluorene	1.2		0.11		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.70		0.11		ug/L	1		8270C SIM	Total/NA
Methane	4400		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	95		52		ug/L	1		8015B	Silica Gel Cleanup
Magnesium	170		1.0		mg/L	5		6010B	Total/NA
Iron	15		0.20		mg/L	1		6010B	Dissolved
Manganese	3.1		0.020		mg/L	1		6010B	Dissolved
Sulfide	5.4		1.0		mg/L	1		SM 4500 S2 F	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	2800		20		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: IW-2

## Lab Sample ID: 720-51143-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	430		10		ug/L	10		8260B/CA_LUFT	Total/NA
Naphthalene	150		1.1		ug/L	10		MS	
Acenaphthene	87		1.1		ug/L	10		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: 720-51143-1

## Client Sample ID: IW-2 (Continued)

Lab Sample ID: 720-51143-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	1.1		0.11	ug/L		1		8270C SIM	Total/NA
Fluorene	64		1.1	ug/L		10		8270C SIM	Total/NA
Phenanthrene	58		1.1	ug/L		10		8270C SIM	Total/NA
Anthracene	4.6		0.11	ug/L		1		8270C SIM	Total/NA
Benzo[a]anthracene	0.24		0.11	ug/L		1		8270C SIM	Total/NA
Chrysene	0.21		0.11	ug/L		1		8270C SIM	Total/NA
Benzo[b]fluoranthene	0.11		0.11	ug/L		1		8270C SIM	Total/NA
Fluoranthene	5.0		0.11	ug/L		1		8270C SIM	Total/NA
Pyrene	2.0		0.11	ug/L		1		8270C SIM	Total/NA
Methane	3900		5.0	ug/L		1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	3400		54	ug/L		1		8015B	Silica Gel Cleanup
Magnesium	180		1.0	mg/L		5		6010B	Total/NA
Iron	13		0.20	mg/L		1		6010B	Dissolved
Manganese	3.0		0.020	mg/L		1		6010B	Dissolved
Sulfide	3.5		1.0	mg/L		1		SM 4500 S2 F	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	3700		20	mg/L		1		SM 2540C	Total/NA

## Client Sample ID: MW-3

Lab Sample ID: 720-51143-5

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	0.54		0.11	ug/L		1		8270C SIM	Total/NA
Acenaphthene	1.5		0.11	ug/L		1		8270C SIM	Total/NA
Acenaphthylene	1.2		0.11	ug/L		1		8270C SIM	Total/NA
Fluorene	5.5		0.11	ug/L		1		8270C SIM	Total/NA
Phenanthrene	4.9		0.11	ug/L		1		8270C SIM	Total/NA
Fluoranthene	0.16		0.11	ug/L		1		8270C SIM	Total/NA
Pyrene	0.15		0.11	ug/L		1		8270C SIM	Total/NA
Methane	8200		5.0	ug/L		1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	7000		110	ug/L		2		8015B	Silica Gel Cleanup
Magnesium	47		0.20	mg/L		1		6010B	Total/NA
Iron	4.7		0.20	mg/L		1		6010B	Dissolved
Manganese	4.4		0.020	mg/L		1		6010B	Dissolved
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	720		10	mg/L		1		SM 2540C	Total/NA

## Client Sample ID: MW-9

Lab Sample ID: 720-51143-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.31		0.11	ug/L		1		8270C SIM	Total/NA
Chrysene	0.23		0.11	ug/L		1		8270C SIM	Total/NA
Benzo[a]pyrene	0.17		0.11	ug/L		1		8270C SIM	Total/NA
Benzo[b]fluoranthene	0.28		0.11	ug/L		1		8270C SIM	Total/NA
Benzo[k]fluoranthene	0.27		0.11	ug/L		1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	0.11		0.11	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: 720-51143-1

## Client Sample ID: MW-9 (Continued)

Lab Sample ID: 720-51143-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	0.20		0.11		ug/L	1		8270C SIM	Total/NA
Fluoranthene	0.15		0.11		ug/L	1		8270C SIM	Total/NA
Pyrene	0.13		0.11		ug/L	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	0.15		0.11		ug/L	1		8270C SIM	Total/NA
Methane	5400		5.0		ug/L	1		RSK-175	Total/NA
Magnesium	390		1.0		mg/L	5		6010B	Total/NA
Iron	11		0.20		mg/L	1		6010B	Dissolved
Manganese	2.8		0.020		mg/L	1		6010B	Dissolved
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	16000		100		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-11

Lab Sample ID: 720-51143-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	7000		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	78		53		ug/L	1		8015B	Silica Gel Cleanup
Magnesium	180		1.0		mg/L	5		6010B	Total/NA
Iron	5.9		0.20		mg/L	1		6010B	Dissolved
Manganese	1.2		0.020		mg/L	1		6010B	Dissolved
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	5700		50		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-13

Lab Sample ID: 720-51143-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.18		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.24		0.10		ug/L	1		8270C SIM	Total/NA
Methane	13000		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	88		53		ug/L	1		8015B	Silica Gel Cleanup
Magnesium	81		0.20		mg/L	1		6010B	Total/NA
Iron	3.2		0.20		mg/L	1		6010B	Dissolved
Manganese	2.1		0.020		mg/L	1		6010B	Dissolved
Sulfate	2.1		1.0		mg/L	1		300.0	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	1400		10		mg/L	1		SM 2540C	Total/NA

## Client Sample ID: IW-5

Lab Sample ID: 720-51143-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	5.0		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	3500		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	2.7		0.53		ug/L	5		8270C SIM	Total/NA
Acenaphthene	6.3		0.53		ug/L	5		8270C SIM	Total/NA
Acenaphthylene	5.8		0.53		ug/L	5		8270C SIM	Total/NA
Fluorene	15		0.53		ug/L	5		8270C SIM	Total/NA
Phenanthrene	16		0.53		ug/L	5		8270C SIM	Total/NA
Fluoranthene	1.4		0.53		ug/L	5		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: 720-51143-1

### Client Sample ID: IW-5 (Continued)

### Lab Sample ID: 720-51143-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	1.3		0.53		ug/L	5		8270C SIM	Total/NA
Methane	13000		5.0		ug/L	1		RSK-175	Total/NA
Diesel Range Organics [C10-C28]	35000		520		ug/L	10		8015B	Silica Gel Cleanup
Magnesium	62		0.20		mg/L	1		6010B	Total/NA
Iron	7.4		0.20		mg/L	1		6010B	Dissolved
Manganese	6.3		0.020		mg/L	1		6010B	Dissolved
Sulfide	5.8		1.0		mg/L	1		SM 4500 S2 F	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	830		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: 720-51143-1

**Client Sample ID: MW-14**

**Lab Sample ID: 720-51143-1**

**Matrix: Water**

Date Collected: 07/23/13 14:30

Date Received: 07/23/13 18:55

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/26/13 03:26	1
Benzene	ND		0.50		ug/L			07/26/13 03:26	1
Ethylbenzene	ND		0.50		ug/L			07/26/13 03:26	1
Naphthalene	ND		1.0		ug/L			07/26/13 03:26	1
Toluene	ND		0.50		ug/L			07/26/13 03:26	1
Xylenes, Total	ND		1.0		ug/L			07/26/13 03:26	1
Gasoline Range Organics (GRO)	ND		50		ug/L			07/26/13 03:26	1
-C5-C12									
1,2-DCA	ND		0.50		ug/L			07/26/13 03:26	1
EDB	ND		0.50		ug/L			07/26/13 03:26	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		107		67 - 130				07/26/13 03:26	1
1,2-Dichloroethane-d4 (Surr)		101		75 - 138				07/26/13 03:26	1
Toluene-d8 (Surr)		104		70 - 130				07/26/13 03:26	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			07/30/13 15:18	07/31/13 18:29
Acenaphthene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Acenaphthylene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Fluorene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Phenanthrene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Anthracene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Benzo[a]anthracene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Chrysene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
<b>Benzo[a]pyrene</b>	<b>0.13</b>		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Benzo[b]fluoranthene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Benzo[k]fluoranthene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Benzo[g,h,i]perylene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Indeno[1,2,3-cd]pyrene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Fluoranthene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Pyrene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
Dibenz(a,h)anthracene	ND		0.11		ug/L			07/30/13 15:18	07/31/13 18:29
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl		56		29 - 120				07/30/13 15:18	07/31/13 18:29
Terphenyl-d14		57		45 - 120				07/30/13 15:18	07/31/13 18:29

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane</b>	<b>6000</b>		5.0		ug/L			07/29/13 14:10	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		56		ug/L			07/24/13 09:57	07/25/13 17:26
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	0.004		0 - 5					07/24/13 09:57	07/25/13 17:26
p-Terphenyl	78		31 - 150					07/24/13 09:57	07/25/13 17:26

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

## Client Sample ID: IW-6

Date Collected: 07/23/13 14:00  
Date Received: 07/23/13 18:55

## Lab Sample ID: 720-51143-2

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/26/13 03:52	1
Benzene	ND		0.50		ug/L			07/26/13 03:52	1
Ethylbenzene	ND		0.50		ug/L			07/26/13 03:52	1
<b>Naphthalene</b>	<b>9.9</b>		1.0		ug/L			07/26/13 03:52	1
Toluene	ND		0.50		ug/L			07/26/13 03:52	1
Xylenes, Total	ND		1.0		ug/L			07/26/13 03:52	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>110</b>		50		ug/L			07/26/13 03:52	1
1,2-DCA	ND		0.50		ug/L			07/26/13 03:52	1
EDB	ND		0.50		ug/L			07/26/13 03:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	110		67 - 130		07/26/13 03:52	1
1,2-Dichloroethane-d4 (Surr)	97		75 - 138		07/26/13 03:52	1
Toluene-d8 (Surr)	101		70 - 130		07/26/13 03:52	1

### Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>2.5</b>		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
<b>Acenaphthene</b>	<b>0.40</b>		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
<b>Acenaphthylene</b>	<b>0.35</b>		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
<b>Fluorene</b>	<b>1.8</b>		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
<b>Phenanthrene</b>	<b>0.83</b>		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
Anthracene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
Benzo[a]anthracene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
Chrysene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
Benzo[a]pyrene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
Benzo[b]fluoranthene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
Benzo[k]fluoranthene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
Benzo[g,h,i]perylene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
Indeno[1,2,3-cd]pyrene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
Fluoranthene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
Pyrene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
Dibenz(a,h)anthracene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 18:52	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
2-Fluorobiphenyl	45		29 - 120		07/30/13 15:18	07/31/13 18:52	1		
Terphenyl-d14	32	X	45 - 120		07/30/13 15:18	07/31/13 18:52	1		

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane</b>	<b>8200</b>		5.0		ug/L			07/29/13 14:15	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>970</b>		52		ug/L		07/24/13 09:57	07/25/13 17:51	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
Capric Acid (Surr)	2		0 - 5	07/24/13 09:57	07/25/13 17:51	1			
p-Terphenyl	90		31 - 150	07/24/13 09:57	07/25/13 17:51	1			

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: IW-6**  
**Date Collected: 07/23/13 14:00**  
**Date Received: 07/23/13 18:55**

**Lab Sample ID: 720-51143-2**  
**Matrix: Water**

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	410		1.0		mg/L		07/25/13 19:10	07/26/13 20:56	5

**Method: 6010B - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	45		0.20		mg/L		07/24/13 21:04	07/25/13 13:12	1
Manganese	4.4		0.020		mg/L		07/24/13 21:04	07/25/13 13:12	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L		07/24/13 12:49		1
Sulfate	ND		1.0		mg/L		07/24/13 12:49		1
Sulfide	6.2		1.0		mg/L		07/25/13 22:17		1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10000		50		mg/L		07/25/13 08:12		1

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: IW-3**

**Lab Sample ID: 720-51143-3**

Date Collected: 07/23/13 13:00

Matrix: Water

Date Received: 07/23/13 18:55

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.5		ug/L			08/01/13 00:04	5
Benzene	ND		2.5		ug/L			08/01/13 00:04	5
Ethylbenzene	ND		2.5		ug/L			08/01/13 00:04	5
<b>Naphthalene</b>	<b>150</b>		5.0		ug/L			08/01/13 00:04	5
Toluene	ND		2.5		ug/L			08/01/13 00:04	5
Xylenes, Total	ND		5.0		ug/L			08/01/13 00:04	5
Gasoline Range Organics (GRO)	ND		250		ug/L			08/01/13 00:04	5
-C5-C12									
1,2-DCA	ND		2.5		ug/L			08/01/13 00:04	5
EDB	ND		2.5		ug/L			08/01/13 00:04	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	101			67 - 130				08/01/13 00:04	5
1,2-Dichloroethane-d4 (Surr)	101			75 - 138				08/01/13 00:04	5
Toluene-d8 (Surr)	101			70 - 130				08/01/13 00:04	5

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>51</b>		0.53		ug/L		07/30/13 15:18	08/02/13 12:34	5
<b>Acenaphthene</b>	<b>2.2</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
Acenaphthylene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
<b>Fluorene</b>	<b>1.2</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
<b>Phenanthrene</b>	<b>0.70</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
Anthracene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
Benzo[a]anthracene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
Chrysene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
Benzo[a]pyrene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
Benzo[b]fluoranthene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
Benzo[k]fluoranthene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
Benzo[g,h,i]perylene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
Indeno[1,2,3-cd]pyrene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
Fluoranthene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
Pyrene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	1
Dibenz(a,h)anthracene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:01	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	50			29 - 120			07/30/13 15:18	07/31/13 14:01	1
2-Fluorobiphenyl	53			29 - 120			07/30/13 15:18	08/02/13 12:34	5
Terphenyl-d14	55			45 - 120			07/30/13 15:18	07/31/13 14:01	1
Terphenyl-d14	61			45 - 120			07/30/13 15:18	08/02/13 12:34	5

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane</b>	<b>4400</b>		5.0		ug/L			07/29/13 14:19	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>95</b>		52		ug/L		07/24/13 09:57	07/25/13 18:15	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	0.07			0 - 5			07/24/13 09:57	07/25/13 18:15	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: IW-3**  
**Date Collected: 07/23/13 13:00**  
**Date Received: 07/23/13 18:55**

**Lab Sample ID: 720-51143-3**  
**Matrix: Water**

## Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	87		31 - 150	07/24/13 09:57	07/25/13 18:15	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	170		1.0		mg/L		07/25/13 19:10	07/26/13 21:01	5

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	15		0.20		mg/L		07/25/13 21:17	07/26/13 13:38	1
Manganese	3.1		0.020		mg/L		07/25/13 21:17	07/26/13 13:38	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L		07/24/13 13:24		1
Sulfate	ND		1.0		mg/L		07/24/13 13:24		1
Sulfide	5.4		1.0		mg/L		07/30/13 23:34		1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2800		20		mg/L		07/25/13 08:12		1

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: IW-2**

**Lab Sample ID: 720-51143-4**

**Matrix: Water**

Date Collected: 07/23/13 13:20

Date Received: 07/23/13 18:55

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/L			07/29/13 16:07	10
Benzene	ND		5.0		ug/L			07/29/13 16:07	10
Ethylbenzene	ND		5.0		ug/L			07/29/13 16:07	10
<b>Naphthalene</b>	<b>430</b>		10		ug/L			07/29/13 16:07	10
Toluene	ND		5.0		ug/L			07/29/13 16:07	10
Xylenes, Total	ND		10		ug/L			07/29/13 16:07	10
Gasoline Range Organics (GRO)	ND		500		ug/L			07/29/13 16:07	10
-C5-C12									
1,2-DCA	ND		5.0		ug/L			07/29/13 16:07	10
EDB	ND		5.0		ug/L			07/29/13 16:07	10
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	93			67 - 130				07/29/13 16:07	10
1,2-Dichloroethane-d4 (Surr)	91			75 - 138				07/29/13 16:07	10
Toluene-d8 (Surr)	96			70 - 130				07/29/13 16:07	10

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>150</b>		1.1		ug/L		07/30/13 15:18	08/02/13 12:57	10
<b>Acenaphthene</b>	<b>87</b>		1.1		ug/L		07/30/13 15:18	08/02/13 12:57	10
<b>Acenaphthylene</b>	<b>1.1</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:24	1
<b>Fluorene</b>	<b>64</b>		1.1		ug/L		07/30/13 15:18	08/02/13 12:57	10
<b>Phenanthrene</b>	<b>58</b>		1.1		ug/L		07/30/13 15:18	08/02/13 12:57	10
<b>Anthracene</b>	<b>4.6</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:24	1
<b>Benzo[a]anthracene</b>	<b>0.24</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:24	1
<b>Chrysene</b>	<b>0.21</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:24	1
Benzo[a]pyrene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:24	1
<b>Benzo[b]fluoranthene</b>	<b>0.11</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:24	1
Benzo[k]fluoranthene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:24	1
Benzo[g,h,i]perylene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:24	1
Indeno[1,2,3-cd]pyrene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:24	1
<b>Fluoranthene</b>	<b>5.0</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:24	1
<b>Pyrene</b>	<b>2.0</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:24	1
Dibenz(a,h)anthracene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:24	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	61			29 - 120			07/30/13 15:18	07/31/13 14:24	1
2-Fluorobiphenyl	53			29 - 120			07/30/13 15:18	08/02/13 12:57	10
Terphenyl-d14	52			45 - 120			07/30/13 15:18	07/31/13 14:24	1
Terphenyl-d14	53			45 - 120			07/30/13 15:18	08/02/13 12:57	10

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane</b>	<b>3900</b>		5.0		ug/L			07/29/13 14:24	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>3400</b>		54		ug/L		07/24/13 09:57	07/25/13 16:52	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	6	X		0 - 5			07/24/13 09:57	07/25/13 16:52	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: IW-2**  
**Date Collected: 07/23/13 13:20**  
**Date Received: 07/23/13 18:55**

**Lab Sample ID: 720-51143-4**  
**Matrix: Water**

## Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	66		31 - 150	07/24/13 09:57	07/25/13 16:52	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	180		1.0		mg/L		07/25/13 19:10	07/26/13 21:05	5

## Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	13		0.20		mg/L		07/25/13 21:17	07/26/13 13:51	1
Manganese	3.0		0.020		mg/L		07/25/13 21:17	07/26/13 13:51	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L		07/24/13 14:32		1
Sulfate	ND		1.0		mg/L		07/24/13 14:32		1
<b>Sulfide</b>	<b>3.5</b>		1.0		mg/L		07/30/13 23:38		1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	3700		20		mg/L		07/25/13 08:12		1

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: MW-3**

**Lab Sample ID: 720-51143-5**

**Matrix: Water**

Date Collected: 07/23/13 11:20

Date Received: 07/23/13 18:55

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/31/13 00:04	1
Benzene	ND		0.50		ug/L			07/31/13 00:04	1
Ethylbenzene	ND		0.50		ug/L			07/31/13 00:04	1
<b>Naphthalene</b>	<b>1.3</b>		1.0		ug/L			07/31/13 00:04	1
Toluene	ND		0.50		ug/L			07/31/13 00:04	1
Xylenes, Total	ND		1.0		ug/L			07/31/13 00:04	1
<b>Gasoline Range Organics (GRO)</b>	<b>290</b>		50		ug/L			07/31/13 00:04	1
<b>-C5-C12</b>									
1,2-DCA	ND		0.50		ug/L			07/31/13 00:04	1
EDB	ND		0.50		ug/L			07/31/13 00:04	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	95		67 - 130					07/31/13 00:04	1
1,2-Dichloroethane-d4 (Surr)	97		75 - 138					07/31/13 00:04	1
Toluene-d8 (Surr)	97		70 - 130					07/31/13 00:04	1

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>0.54</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
<b>Acenaphthene</b>	<b>1.5</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
<b>Acenaphthylene</b>	<b>1.2</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
<b>Fluorene</b>	<b>5.5</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
<b>Phenanthrene</b>	<b>4.9</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
Anthracene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
Benzo[a]anthracene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
Chrysene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
Benzo[a]pyrene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
Benzo[b]fluoranthene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
Benzo[k]fluoranthene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
Benzo[g,h,i]perylene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
Indeno[1,2,3-cd]pyrene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
<b>Fluoranthene</b>	<b>0.16</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
<b>Pyrene</b>	<b>0.15</b>		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	1
Dibenz(a,h)anthracene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 14:47	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	44		29 - 120				07/30/13 15:18	07/31/13 14:47	1
Terphenyl-d14	23	X	45 - 120				07/30/13 15:18	07/31/13 14:47	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane</b>	<b>8200</b>		5.0		ug/L			07/29/13 14:28	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>7000</b>		110		ug/L		07/24/13 09:57	07/25/13 17:21	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	19	X	0 - 5				07/24/13 09:57	07/25/13 17:21	2
p-Terphenyl	62		31 - 150				07/24/13 09:57	07/25/13 17:21	2

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: MW-3**

**Lab Sample ID: 720-51143-5**

Date Collected: 07/23/13 11:20

Matrix: Water

Date Received: 07/23/13 18:55

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	47		0.20		mg/L		07/24/13 18:55	07/26/13 01:17	1

**Method: 6010B - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4.7		0.20		mg/L		07/24/13 21:04	07/25/13 13:22	1
Manganese	4.4		0.020		mg/L		07/24/13 21:04	07/25/13 13:22	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L		07/24/13 15:07		1
Sulfate	ND		1.0		mg/L		07/24/13 15:07		1
Sulfide	ND		1.0		mg/L		07/30/13 23:41		1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	720		10		mg/L		07/25/13 08:12		1

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: MW-9**

**Lab Sample ID: 720-51143-6**

**Matrix: Water**

Date Collected: 07/23/13 10:20

Date Received: 07/23/13 18:55

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/30/13 16:25	1
Benzene	ND		0.50		ug/L			07/30/13 16:25	1
Ethylbenzene	ND		0.50		ug/L			07/30/13 16:25	1
Naphthalene	ND		1.0		ug/L			07/30/13 16:25	1
Toluene	ND		0.50		ug/L			07/30/13 16:25	1
Xylenes, Total	ND		1.0		ug/L			07/30/13 16:25	1
Gasoline Range Organics (GRO)	ND		50		ug/L			07/30/13 16:25	1
-C5-C12									
1,2-DCA	ND		0.50		ug/L			07/30/13 16:25	1
EDB	ND		0.50		ug/L			07/30/13 16:25	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	104			67 - 130				07/30/13 16:25	1
1,2-Dichloroethane-d4 (Surr)	109			75 - 138				07/30/13 16:25	1
Toluene-d8 (Surr)	99			70 - 130				07/30/13 16:25	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		07/30/13 15:18	07/31/13 15:11	1
Acenaphthene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Acenaphthylene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Fluorene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Phenanthrene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Anthracene	ND		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Benzo[a]anthracene	0.31		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Chrysene	0.23		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Benzo[a]pyrene	0.17		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Benzo[b]fluoranthene	0.28		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Benzo[k]fluoranthene	0.27		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Benzo[g,h,i]perylene	0.11		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Indeno[1,2,3-cd]pyrene	0.20		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Fluoranthene	0.15		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Pyrene	0.13		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	1
Dibenz(a,h)anthracene	0.15		0.11		ug/L		07/30/13 15:18	07/31/13 15:11	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	54			29 - 120				07/30/13 15:18	07/31/13 15:11
Terphenyl-d14	50			45 - 120				07/30/13 15:18	07/31/13 15:11

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	5400		5.0		ug/L			07/29/13 14:32	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		07/24/13 09:57	07/25/13 16:22	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	0.02			0 - 5			07/24/13 09:57	07/25/13 16:22	1
p-Terphenyl	81			31 - 150			07/24/13 09:57	07/25/13 16:22	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: MW-9**

**Lab Sample ID: 720-51143-6**

Date Collected: 07/23/13 10:20

Matrix: Water

Date Received: 07/23/13 18:55

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	390		1.0		mg/L		07/25/13 19:10	07/26/13 21:10	5

**Method: 6010B - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	11		0.20		mg/L		07/25/13 21:17	07/26/13 13:56	1
Manganese	2.8		0.020		mg/L		07/25/13 21:17	07/26/13 13:56	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L		07/24/13 15:41		1
Sulfate	ND		1.0		mg/L		07/24/13 15:41		1
Sulfide	ND		1.0		mg/L		07/30/13 23:45		1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	16000		100		mg/L		07/25/13 08:12		1

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: MW-11**

**Lab Sample ID: 720-51143-7**

**Matrix: Water**

Date Collected: 07/23/13 09:40  
Date Received: 07/23/13 18:55

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/30/13 16:51	1
Benzene	ND		0.50		ug/L			07/30/13 16:51	1
Ethylbenzene	ND		0.50		ug/L			07/30/13 16:51	1
Naphthalene	ND		1.0		ug/L			07/30/13 16:51	1
Toluene	ND		0.50		ug/L			07/30/13 16:51	1
Xylenes, Total	ND		1.0		ug/L			07/30/13 16:51	1
Gasoline Range Organics (GRO)	ND		50		ug/L			07/30/13 16:51	1
-C5-C12									
1,2-DCA	ND		0.50		ug/L			07/30/13 16:51	1
EDB	ND		0.50		ug/L			07/30/13 16:51	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				07/30/13 16:51	1
1,2-Dichloroethane-d4 (Surr)	107			75 - 138				07/30/13 16:51	1
Toluene-d8 (Surr)	100			70 - 130				07/30/13 16:51	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		07/30/13 15:18	07/31/13 15:34	1	
Acenaphthene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Acenaphthylene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Fluorene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Phenanthrene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Anthracene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Benzo[a]anthracene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Chrysene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Benzo[a]pyrene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Benzo[b]fluoranthene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Benzo[k]fluoranthene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Benzo[g,h,i]perylene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Fluoranthene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Pyrene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	1	
Dibenz(a,h)anthracene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:34	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				07/30/13 15:18	07/31/13 15:34	1
Terphenyl-d14	48			45 - 120				07/30/13 15:18	07/31/13 15:34	1

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	7000		5.0		ug/L			07/29/13 14:47	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]	78		53		ug/L		07/24/13 09:57	07/25/13 16:52	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	0.09			0 - 5			07/24/13 09:57	07/25/13 16:52	1
p-Terphenyl	84			31 - 150			07/24/13 09:57	07/25/13 16:52	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: MW-11**  
**Date Collected: 07/23/13 09:40**  
**Date Received: 07/23/13 18:55**

**Lab Sample ID: 720-51143-7**  
**Matrix: Water**

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	180		1.0		mg/L		07/25/13 19:10	07/26/13 21:14	5

**Method: 6010B - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	5.9		0.20		mg/L		07/24/13 21:04	07/25/13 13:26	1
Manganese	1.2		0.020		mg/L		07/24/13 21:04	07/25/13 13:26	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L		07/24/13 16:15		1
Sulfate	ND		1.0		mg/L		07/24/13 16:15		1
Sulfide	ND		1.0		mg/L		07/30/13 23:48		1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5700		50		mg/L		07/25/13 08:12		1

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: MW-13**

**Lab Sample ID: 720-51143-8**

**Matrix: Water**

Date Collected: 07/23/13 09:15

Date Received: 07/23/13 18:55

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/30/13 17:16	1
Benzene	ND		0.50		ug/L			07/30/13 17:16	1
Ethylbenzene	ND		0.50		ug/L			07/30/13 17:16	1
Naphthalene	ND		1.0		ug/L			07/30/13 17:16	1
Toluene	ND		0.50		ug/L			07/30/13 17:16	1
Xylenes, Total	ND		1.0		ug/L			07/30/13 17:16	1
Gasoline Range Organics (GRO)	ND		50		ug/L			07/30/13 17:16	1
-C5-C12									
1,2-DCA	ND		0.50		ug/L			07/30/13 17:16	1
EDB	ND		0.50		ug/L			07/30/13 17:16	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				07/30/13 17:16	1
1,2-Dichloroethane-d4 (Surr)	103			75 - 138				07/30/13 17:16	1
Toluene-d8 (Surr)	101			70 - 130				07/30/13 17:16	1

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>0.18</b>		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Acenaphthene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Acenaphthylene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
<b>Fluorene</b>	<b>0.24</b>		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Phenanthren	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Anthracene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Benzo[a]anthracene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Chrysene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Benzo[a]pyrene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Benzo[b]fluoranthene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Benzo[k]fluoranthene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Fluoranthene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Pyrene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 15:57	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	44			29 - 120				07/30/13 15:18	07/31/13 15:57
Terphenyl-d14	51			45 - 120				07/30/13 15:18	07/31/13 15:57

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane</b>	<b>13000</b>		5.0		ug/L			07/29/13 14:56	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>88</b>		53		ug/L		07/24/13 09:57	07/26/13 10:40	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	0			0 - 5			07/24/13 09:57	07/26/13 10:40	1
p-Terphenyl	84			31 - 150			07/24/13 09:57	07/26/13 10:40	1

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: MW-13**  
**Date Collected: 07/23/13 09:15**  
**Date Received: 07/23/13 18:55**

**Lab Sample ID: 720-51143-8**  
**Matrix: Water**

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	81		0.20		mg/L		07/24/13 18:55	07/26/13 01:22	1

**Method: 6010B - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3.2		0.20		mg/L		07/24/13 21:04	07/25/13 13:31	1
Manganese	2.1		0.020		mg/L		07/24/13 21:04	07/25/13 13:31	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L		07/24/13 16:50		1
Sulfate	2.1		1.0		mg/L		07/24/13 16:50		1
Sulfide	ND		1.0		mg/L		07/30/13 23:52		1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1400		10		mg/L		07/25/13 08:12		1

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: IW-5**

**Lab Sample ID: 720-51143-9**

Date Collected: 07/23/13 07:50

Matrix: Water

Date Received: 07/23/13 18:55

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/30/13 17:42	1
Benzene	ND		0.50		ug/L			07/30/13 17:42	1
Ethylbenzene	ND		0.50		ug/L			07/30/13 17:42	1
<b>Naphthalene</b>	<b>5.0</b>		1.0		ug/L			07/30/13 17:42	1
Toluene	ND		0.50		ug/L			07/30/13 17:42	1
Xylenes, Total	ND		1.0		ug/L			07/30/13 17:42	1
<b>Gasoline Range Organics (GRO)</b>	<b>3500</b>		50		ug/L			07/30/13 17:42	1
<b>-C5-C12</b>									
1,2-DCA	ND		0.50		ug/L			07/30/13 17:42	1
EDB	ND		0.50		ug/L			07/30/13 17:42	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	112		67 - 130					07/30/13 17:42	1
1,2-Dichloroethane-d4 (Surr)	102		75 - 138					07/30/13 17:42	1
Toluene-d8 (Surr)	103		70 - 130					07/30/13 17:42	1

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Naphthalene</b>	<b>2.7</b>		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
<b>Acenaphthene</b>	<b>6.3</b>		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
<b>Acenaphthylene</b>	<b>5.8</b>		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
<b>Fluorene</b>	<b>15</b>		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
<b>Phenanthrene</b>	<b>16</b>		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
Anthracene	ND		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
Benzo[a]anthracene	ND		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
Chrysene	ND		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
Benzo[a]pyrene	ND		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
Benzo[b]fluoranthene	ND		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
Benzo[k]fluoranthene	ND		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
Benzo[g,h,i]perylene	ND		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
Indeno[1,2,3-cd]pyrene	ND		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
<b>Fluoranthene</b>	<b>1.4</b>		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
<b>Pyrene</b>	<b>1.3</b>		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
Dibenz(a,h)anthracene	ND		0.53		ug/L		07/30/13 15:18	08/02/13 13:21	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	49		29 - 120				07/30/13 15:18	08/02/13 13:21	5
Terphenyl-d14	26	X	45 - 120				07/30/13 15:18	08/02/13 13:21	5

## Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methane</b>	<b>13000</b>		5.0		ug/L			07/29/13 15:01	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>35000</b>		520		ug/L		07/24/13 09:57	07/26/13 11:09	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	0		0 - 5				07/24/13 09:57	07/26/13 11:09	10
p-Terphenyl	0	XD	31 - 150				07/24/13 09:57	07/26/13 11:09	10

TestAmerica Pleasanton

# Client Sample Results

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: IW-5**  
**Date Collected: 07/23/13 07:50**  
**Date Received: 07/23/13 18:55**

**Lab Sample ID: 720-51143-9**  
**Matrix: Water**

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	62		0.20		mg/L		07/24/13 18:55	07/26/13 01:27	1

**Method: 6010B - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	7.4		0.20		mg/L		07/24/13 21:04	07/25/13 13:44	1
Manganese	6.3		0.020		mg/L		07/24/13 21:04	07/25/13 13:44	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L		07/24/13 17:58		1
Sulfate	ND		1.0		mg/L		07/24/13 17:58		1
Sulfide	5.8		1.0		mg/L			07/30/13 23:55	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	830		10		mg/L		07/25/13 08:12		1

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

**Lab Sample ID:** MB 720-140901/4

**Matrix:** Water

**Analysis Batch:** 140901

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			07/25/13 17:30	1
Benzene	ND		0.50		ug/L			07/25/13 17:30	1
Ethylbenzene	ND		0.50		ug/L			07/25/13 17:30	1
Naphthalene	ND		1.0		ug/L			07/25/13 17:30	1
Toluene	ND		0.50		ug/L			07/25/13 17:30	1
Xylenes, Total	ND		1.0		ug/L			07/25/13 17:30	1
Gasoline Range Organics (GRO)	ND		50		ug/L			07/25/13 17:30	1
-C5-C12									
1,2-DCA	ND		0.50		ug/L			07/25/13 17:30	1
EDB	ND		0.50		ug/L			07/25/13 17:30	1
<b>MB</b>		<b>MB</b>							
Surrogate	LCS	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107				67 - 130			07/25/13 17:30	1
1,2-Dichloroethane-d4 (Surr)	96				75 - 138			07/25/13 17:30	1
Toluene-d8 (Surr)	100				70 - 130			07/25/13 17:30	1

**Lab Sample ID:** LCS 720-140901/5

**Matrix:** Water

**Analysis Batch:** 140901

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	%Rec.	
	Added	Result	Qualifier						
Methyl tert-butyl ether	25.0	26.6		ug/L		106	62 - 130		
Benzene	25.0	24.2		ug/L		97	79 - 130		
Ethylbenzene	25.0	25.9		ug/L		104	80 - 120		
Naphthalene	25.0	25.8		ug/L		103	70 - 130		
Toluene	25.0	25.2		ug/L		101	78 - 120		
m-Xylene & p-Xylene	50.0	56.5		ug/L		113	70 - 142		
o-Xylene	25.0	28.1		ug/L		112	70 - 130		
1,2-DCA	25.0	24.7		ug/L		99	61 - 132		
EDB	25.0	28.2		ug/L		113	70 - 130		
<b>LCS</b>		<b>LCS</b>							
Surrogate	LCS	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	112				67 - 130			07/25/13 17:30	1
1,2-Dichloroethane-d4 (Surr)	90				75 - 138			07/25/13 17:30	1
Toluene-d8 (Surr)	105				70 - 130			07/25/13 17:30	1

**Lab Sample ID:** LCS 720-140901/7

**Matrix:** Water

**Analysis Batch:** 140901

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	%Rec.	
	Added	Result	Qualifier						
Gasoline Range Organics (GRO)	500	525		ug/L		105	62 - 120		
-C5-C12									
Surrogate	LCS	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	115				67 - 130			07/25/13 17:30	1
1,2-Dichloroethane-d4 (Surr)	95				75 - 138			07/25/13 17:30	1

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-140901/7**

**Matrix: Water**

**Analysis Batch: 140901**

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	104		70 - 130

**Lab Sample ID: LCSD 720-140901/6**

**Matrix: Water**

**Analysis Batch: 140901**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
Methyl tert-butyl ether	25.0	27.2		ug/L	109	62 - 130	2	20	
Benzene	25.0	24.2		ug/L	97	79 - 130	0	20	
Ethylbenzene	25.0	26.0		ug/L	104	80 - 120	0	20	
Naphthalene	25.0	27.1		ug/L	108	70 - 130	5	20	
Toluene	25.0	25.4		ug/L	102	78 - 120	1	20	
m-Xylene & p-Xylene	50.0	56.3		ug/L	113	70 - 142	1	20	
o-Xylene	25.0	28.0		ug/L	112	70 - 130	0	20	
1,2-DCA	25.0	25.1		ug/L	101	61 - 132	2	20	
EDB	25.0	28.5		ug/L	114	70 - 130	1	20	

**Surrogate**      **LCSD**      **LCSD**

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	110		67 - 130
1,2-Dichloroethane-d4 (Surr)	90		75 - 138
Toluene-d8 (Surr)	104		70 - 130

**Lab Sample ID: LCSD 720-140901/8**

**Matrix: Water**

**Analysis Batch: 140901**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
Gasoline Range Organics (GRO) -C5-C12	500	528		ug/L	106	62 - 120	1	20	

**Surrogate**      **LCSD**      **LCSD**

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	113		67 - 130
1,2-Dichloroethane-d4 (Surr)	95		75 - 138
Toluene-d8 (Surr)	105		70 - 130

**Lab Sample ID: MB 720-141074/4**

**Matrix: Water**

**Analysis Batch: 141074**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			07/29/13 11:55	1
Benzene	ND		0.50		ug/L			07/29/13 11:55	1
Ethylbenzene	ND		0.50		ug/L			07/29/13 11:55	1
Naphthalene	ND		1.0		ug/L			07/29/13 11:55	1
Toluene	ND		0.50		ug/L			07/29/13 11:55	1
Xylenes, Total	ND		1.0		ug/L			07/29/13 11:55	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			07/29/13 11:55	1

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-141074/4**

**Matrix: Water**

**Analysis Batch: 141074**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-DCA	ND		0.50		ug/L			07/29/13 11:55	1
EDB	ND		0.50		ug/L			07/29/13 11:55	1
<b>Surrogate</b>									
4-Bromofluorobenzene	92		67 - 130					07/29/13 11:55	1
1,2-Dichloroethane-d4 (Surr)	88		75 - 138					07/29/13 11:55	1
Toluene-d8 (Surr)	100		70 - 130					07/29/13 11:55	1

**Lab Sample ID: LCS 720-141074/5**

**Matrix: Water**

**Analysis Batch: 141074**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
	Added								
Methyl tert-butyl ether	25.0		30.3		ug/L		121	62 - 130	
Benzene	25.0		27.8		ug/L		111	79 - 130	
Ethylbenzene	25.0		28.6		ug/L		114	80 - 120	
Naphthalene	25.0		26.5		ug/L		106	70 - 130	
Toluene	25.0		29.0		ug/L		116	78 - 120	
m-Xylene & p-Xylene	50.0		58.9		ug/L		118	70 - 142	
o-Xylene	25.0		29.4		ug/L		118	70 - 130	
1,2-DCA	25.0		28.5		ug/L		114	61 - 132	
EDB	25.0		29.7		ug/L		119	70 - 130	
<b>Surrogate</b>									
4-Bromofluorobenzene	94		67 - 130						
1,2-Dichloroethane-d4 (Surr)	91		75 - 138						
Toluene-d8 (Surr)	98		70 - 130						

**Lab Sample ID: LCS 720-141074/7**

**Matrix: Water**

**Analysis Batch: 141074**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
	Added							
Gasoline Range Organics (GRO)	500		537		ug/L		107	62 - 120
<b>-C5-C12</b>								
<b>Surrogate</b>								
4-Bromofluorobenzene	95		67 - 130					
1,2-Dichloroethane-d4 (Surr)	92		75 - 138					
Toluene-d8 (Surr)	104		70 - 130					

**Lab Sample ID: LCSD 720-141074/6**

**Matrix: Water**

**Analysis Batch: 141074**

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

Analyte	Spike		LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added									
Methyl tert-butyl ether	25.0		25.1		ug/L		101	62 - 130	19	20
Benzene	25.0		24.2		ug/L		97	79 - 130	14	20

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# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-141074/6**

**Matrix: Water**

**Analysis Batch: 141074**

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

Analyte		Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
		Added	Result	Qualifier							
Ethylbenzene		25.0	25.1		ug/L		100	80 - 120	13		20
Naphthalene		25.0	23.1		ug/L		92	70 - 130	14		20
Toluene		25.0	25.7		ug/L		103	78 - 120	12		20
m-Xylene & p-Xylene		50.0	51.4		ug/L		103	70 - 142	13		20
o-Xylene		25.0	24.7		ug/L		99	70 - 130	17		20
1,2-DCA		25.0	25.2		ug/L		101	61 - 132	12		20
EDB		25.0	29.9		ug/L		119	70 - 130	1		20
<b>Surrogate</b>		<b>LCSD</b>	<b>LCSD</b>								
		<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>						
4-Bromofluorobenzene		94			67 - 130						
1,2-Dichloroethane-d4 (Surr)		90			75 - 138						
Toluene-d8 (Surr)		104			70 - 130						

**Lab Sample ID: LCSD 720-141074/8**

**Matrix: Water**

**Analysis Batch: 141074**

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

Analyte		Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
		Added	Result	Qualifier							
Gasoline Range Organics (GRO)		500	552		ug/L		110	62 - 120	3		20
-C5-C12											
<b>Surrogate</b>		<b>LCSD</b>	<b>LCSD</b>		<b>Limits</b>						
		<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>						
4-Bromofluorobenzene		94			67 - 130						
1,2-Dichloroethane-d4 (Surr)		93			75 - 138						
Toluene-d8 (Surr)		103			70 - 130						

**Lab Sample ID: 720-51143-4 MS**

**Matrix: Water**

**Analysis Batch: 141074**

**Client Sample ID: IW-2**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Methyl tert-butyl ether	ND		250	276		ug/L		110	60 - 138		
Benzene	ND		250	263		ug/L		105	60 - 140		
Ethylbenzene	ND		250	271		ug/L		108	60 - 140		
Naphthalene	430		250	637		ug/L		82	56 - 140		
Toluene	ND		250	278		ug/L		110	60 - 140		
m-Xylene & p-Xylene	ND		500	559		ug/L		111	60 - 140		
o-Xylene	ND		250	275		ug/L		109	60 - 140		
1,2-DCA	ND		250	265		ug/L		106	60 - 140		
EDB	ND		250	293		ug/L		117	60 - 140		
<b>Surrogate</b>		<b>MS</b>	<b>MS</b>		<b>Limits</b>						
		<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>						
4-Bromofluorobenzene		93			67 - 130						
1,2-Dichloroethane-d4 (Surr)		90			75 - 138						
Toluene-d8 (Surr)		101			70 - 130						

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-51143-4 MSD**

**Matrix: Water**

**Analysis Batch: 141074**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD Limit	
	Result	Qualifier	Added	Result	Qualifier							
Methyl tert-butyl ether	ND		250	282		ug/L		113	60 - 138	2	20	
Benzene	ND		250	261		ug/L		104	60 - 140	1	20	
Ethylbenzene	ND		250	270		ug/L		107	60 - 140	1	20	
Naphthalene	430		250	644		ug/L		85	56 - 140	1	20	
Toluene	ND		250	276		ug/L		109	60 - 140	1	20	
m-Xylene & p-Xylene	ND		500	558		ug/L		111	60 - 140	0	20	
o-Xylene	ND		250	274		ug/L		109	60 - 140	0	20	
1,2-DCA	ND		250	266		ug/L		106	60 - 140	0	20	
EDB	ND		250	289		ug/L		116	60 - 140	1	20	
<b>Surrogate</b>												
4-Bromofluorobenzene	94	%Recovery	Qualifier	<b>Limits</b>							<b>Client Sample ID: IW-2</b> <b>Prep Type: Total/NA</b>	
1,2-Dichloroethane-d4 (Surr)	90			67 - 130								
Toluene-d8 (Surr)	99			75 - 138								
<b>Surrogate</b>												
4-Bromofluorobenzene	99	%Recovery	Qualifier	<b>Limits</b>								
1,2-Dichloroethane-d4 (Surr)	99			70 - 130								

**Lab Sample ID: MB 720-141144/5**

**Matrix: Water**

**Analysis Batch: 141144**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
	Result	Qualifier								
Methyl tert-butyl ether	ND		0.50		ug/L			07/30/13 09:29	1	
Benzene	ND		0.50		ug/L			07/30/13 09:29	1	
Ethylbenzene	ND		0.50		ug/L			07/30/13 09:29	1	
Naphthalene	ND		1.0		ug/L			07/30/13 09:29	1	
Toluene	ND		0.50		ug/L			07/30/13 09:29	1	
Xylenes, Total	ND		1.0		ug/L			07/30/13 09:29	1	
Gasoline Range Organics (GRO)	ND		50		ug/L			07/30/13 09:29	1	
-C5-C12										
1,2-DCA	ND		0.50		ug/L			07/30/13 09:29	1	
EDB	ND		0.50		ug/L			07/30/13 09:29	1	
<b>Surrogate</b>										
4-Bromofluorobenzene	101	%Recovery	Qualifier	<b>Limits</b>					<b>Client Sample ID: Method Blank</b> <b>Prep Type: Total/NA</b>	
1,2-Dichloroethane-d4 (Surr)	99			67 - 130						
Toluene-d8 (Surr)	99			75 - 138						
<b>Surrogate</b>										
4-Bromofluorobenzene	99	%Recovery	Qualifier	<b>Limits</b>					<b>Prepared</b>	
1,2-Dichloroethane-d4 (Surr)	99			70 - 130						
Toluene-d8 (Surr)	99			67 - 130						

**Lab Sample ID: LCS 720-141144/6**

**Matrix: Water**

**Analysis Batch: 141144**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Methyl tert-butyl ether	25.0	26.3		ug/L		105	62 - 130
Benzene	25.0	24.0		ug/L		96	79 - 130
Ethylbenzene	25.0	26.2		ug/L		105	80 - 120
Naphthalene	25.0	24.5		ug/L		98	70 - 130
Toluene	25.0	25.6		ug/L		102	78 - 120
m-Xylene & p-Xylene	50.0	57.5		ug/L		115	70 - 142
o-Xylene	25.0	28.3		ug/L		113	70 - 130

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-141144/6**

**Matrix: Water**

**Analysis Batch: 141144**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte		Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Added	Result	Qualifier				
1,2-DCA		25.0	25.9		ug/L		103	61 - 132
EDB		25.0	27.8		ug/L		111	70 - 130

**Surrogate**

**LCS**    **LCS**

**%Recovery**    **Qualifier**    **Limits**

4-Bromofluorobenzene	113	67 - 130
1,2-Dichloroethane-d4 (Surr)	93	75 - 138
Toluene-d8 (Surr)	103	70 - 130

**Lab Sample ID: LCS 720-141144/8**

**Matrix: Water**

**Analysis Batch: 141144**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte		Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Added	Result	Qualifier				
Gasoline Range Organics (GRO)		500	560		ug/L		112	62 - 120
-C5-C12								

**Surrogate**

**LCS**    **LCS**

**%Recovery**    **Qualifier**    **Limits**

4-Bromofluorobenzene	112	67 - 130
1,2-Dichloroethane-d4 (Surr)	100	75 - 138
Toluene-d8 (Surr)	104	70 - 130

**Lab Sample ID: LCSD 720-141144/7**

**Matrix: Water**

**Analysis Batch: 141144**

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

Analyte		Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.
		Added	Result	Qualifier				
Methyl tert-butyl ether		25.0	27.6		ug/L		111	62 - 130
Benzene		25.0	24.4		ug/L		98	79 - 130
Ethylbenzene		25.0	26.5		ug/L		106	80 - 120
Naphthalene		25.0	25.9		ug/L		104	70 - 130
Toluene		25.0	25.6		ug/L		103	78 - 120
m-Xylene & p-Xylene		50.0	57.8		ug/L		116	70 - 142
o-Xylene		25.0	28.6		ug/L		115	70 - 130
1,2-DCA		25.0	26.6		ug/L		106	61 - 132
EDB		25.0	28.9		ug/L		116	70 - 130

**Surrogate**

**LCSD**    **LCSD**

**%Recovery**    **Qualifier**    **Limits**

4-Bromofluorobenzene	114	67 - 130
1,2-Dichloroethane-d4 (Surr)	94	75 - 138
Toluene-d8 (Surr)	102	70 - 130

**Lab Sample ID: LCSD 720-141144/9**

**Matrix: Water**

**Analysis Batch: 141144**

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

Analyte		Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.
		Added	Result	Qualifier				
Gasoline Range Organics (GRO)		500	551		ug/L		110	62 - 120
-C5-C12								

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-141144/9**

**Matrix: Water**

**Analysis Batch: 141144**

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	113		67 - 130
1,2-Dichloroethane-d4 (Surr)	99		75 - 138
Toluene-d8 (Surr)	103		70 - 130

**Lab Sample ID: 720-51143-6 MS**

**Matrix: Water**

**Analysis Batch: 141144**

**Client Sample ID: MW-9**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
									Limits
Methyl tert-butyl ether	ND		25.0	29.4		ug/L		117	60 - 138
Benzene	ND		25.0	24.4		ug/L		97	60 - 140
Ethylbenzene	ND		25.0	24.7		ug/L		99	60 - 140
Naphthalene	ND		25.0	27.6		ug/L		108	56 - 140
Toluene	ND		25.0	24.6		ug/L		98	60 - 140
m-Xylene & p-Xylene	ND		50.0	53.4		ug/L		107	60 - 140
o-Xylene	ND		25.0	27.8		ug/L		111	60 - 140
1,2-DCA	ND		25.0	27.7		ug/L		111	60 - 140
EDB	ND		25.0	30.3		ug/L		121	60 - 140

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene	111		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		75 - 138
Toluene-d8 (Surr)	102		70 - 130

**Lab Sample ID: 720-51143-6 MSD**

**Matrix: Water**

**Analysis Batch: 141144**

**Client Sample ID: MW-9**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
									Limits	RPD	Limit
Methyl tert-butyl ether	ND		25.0	28.3		ug/L		113	60 - 138	4	20
Benzene	ND		25.0	23.9		ug/L		94	60 - 140	2	20
Ethylbenzene	ND		25.0	24.8		ug/L		99	60 - 140	1	20
Naphthalene	ND		25.0	26.8		ug/L		106	56 - 140	3	20
Toluene	ND		25.0	24.3		ug/L		96	60 - 140	1	20
m-Xylene & p-Xylene	ND		50.0	53.5		ug/L		107	60 - 140	0	20
o-Xylene	ND		25.0	27.7		ug/L		111	60 - 140	0	20
1,2-DCA	ND		25.0	26.9		ug/L		108	60 - 140	3	20
EDB	ND		25.0	29.3		ug/L		117	60 - 140	3	20

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene	112		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		75 - 138
Toluene-d8 (Surr)	102		70 - 130

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID:** MB 720-141180/5

**Matrix:** Water

**Analysis Batch:** 141180

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			07/30/13 17:03	1
Benzene	ND		0.50		ug/L			07/30/13 17:03	1
Ethylbenzene	ND		0.50		ug/L			07/30/13 17:03	1
Naphthalene	ND		1.0		ug/L			07/30/13 17:03	1
Toluene	ND		0.50		ug/L			07/30/13 17:03	1
Xylenes, Total	ND		1.0		ug/L			07/30/13 17:03	1
Gasoline Range Organics (GRO)	ND		50		ug/L			07/30/13 17:03	1
-C5-C12									
1,2-DCA	ND		0.50		ug/L			07/30/13 17:03	1
EDB	ND		0.50		ug/L			07/30/13 17:03	1
<b>MB</b>		<b>MB</b>							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		67 - 130					07/30/13 17:03	1
1,2-Dichloroethane-d4 (Surr)	99		75 - 138					07/30/13 17:03	1
Toluene-d8 (Surr)	97		70 - 130					07/30/13 17:03	1

**Lab Sample ID:** LCS 720-141180/6

**Matrix:** Water

**Analysis Batch:** 141180

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Methyl tert-butyl ether	25.0	25.1		ug/L		100	62 - 130
Benzene	25.0	23.5		ug/L		94	79 - 130
Ethylbenzene	25.0	21.9		ug/L		87	80 - 120
Naphthalene	25.0	23.1		ug/L		92	70 - 130
Toluene	25.0	23.6		ug/L		94	78 - 120
m-Xylene & p-Xylene	50.0	42.7		ug/L		85	70 - 142
o-Xylene	25.0	23.2		ug/L		93	70 - 130
1,2-DCA	25.0	25.9		ug/L		103	61 - 132
EDB	25.0	26.5		ug/L		106	70 - 130
<b>LCS</b>		<b>LCS</b>					
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene	97		67 - 130				
1,2-Dichloroethane-d4 (Surr)	99		75 - 138				
Toluene-d8 (Surr)	97		70 - 130				

**Lab Sample ID:** LCS 720-141180/8

**Matrix:** Water

**Analysis Batch:** 141180

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Gasoline Range Organics (GRO)	500	507		ug/L		101	62 - 120
-C5-C12							
<b>LCS</b>		<b>LCS</b>					
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene	101		67 - 130				
1,2-Dichloroethane-d4 (Surr)	101		75 - 138				

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-141180/8**

**Matrix: Water**

**Analysis Batch: 141180**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	97		70 - 130

**Lab Sample ID: LCSD 720-141180/7**

**Matrix: Water**

**Analysis Batch: 141180**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Methyl tert-butyl ether	25.0	24.5		ug/L		98	62 - 130	2	20
Benzene	25.0	23.3		ug/L		93	79 - 130	1	20
Ethylbenzene	25.0	22.0		ug/L		88	80 - 120	1	20
Naphthalene	25.0	23.0		ug/L		92	70 - 130	1	20
Toluene	25.0	23.4		ug/L		94	78 - 120	1	20
m-Xylene & p-Xylene	50.0	43.2		ug/L		86	70 - 142	1	20
o-Xylene	25.0	23.5		ug/L		94	70 - 130	1	20
1,2-DCA	25.0	24.9		ug/L		99	61 - 132	4	20
EDB	25.0	26.0		ug/L		104	70 - 130	2	20

Surrogate	LCSD	LCSD	
	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	97		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		75 - 138
Toluene-d8 (Surr)	99		70 - 130

**Lab Sample ID: LCSD 720-141180/9**

**Matrix: Water**

**Analysis Batch: 141180**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Gasoline Range Organics (GRO) -C5-C12	500	503		ug/L		101	62 - 120	1	20

Surrogate	LCSD	LCSD	
	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		75 - 138
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: MB 720-141297/4**

**Matrix: Water**

**Analysis Batch: 141297**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			07/31/13 20:37	1
Benzene	ND		0.50		ug/L			07/31/13 20:37	1
Ethylbenzene	ND		0.50		ug/L			07/31/13 20:37	1
Naphthalene	ND		1.0		ug/L			07/31/13 20:37	1
Toluene	ND		0.50		ug/L			07/31/13 20:37	1
Xylenes, Total	ND		1.0		ug/L			07/31/13 20:37	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			07/31/13 20:37	1

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# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-141297/4**

**Matrix: Water**

**Analysis Batch: 141297**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-DCA	ND		0.50		ug/L			07/31/13 20:37	1
EDB	ND		0.50		ug/L			07/31/13 20:37	1
<b>Surrogate</b>									
4-Bromofluorobenzene	98		67 - 130					07/31/13 20:37	1
1,2-Dichloroethane-d4 (Surr)	98		75 - 138					07/31/13 20:37	1
Toluene-d8 (Surr)	100		70 - 130					07/31/13 20:37	1

**Lab Sample ID: LCS 720-141297/5**

**Matrix: Water**

**Analysis Batch: 141297**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
	Added								
Methyl tert-butyl ether	25.0		25.0		ug/L		100	62 - 130	
Benzene	25.0		23.2		ug/L		93	79 - 130	
Ethylbenzene	25.0		25.8		ug/L		103	80 - 120	
Naphthalene	25.0		24.1		ug/L		96	70 - 130	
Toluene	25.0		25.0		ug/L		100	78 - 120	
m-Xylene & p-Xylene	50.0		56.4		ug/L		113	70 - 142	
o-Xylene	25.0		27.9		ug/L		112	70 - 130	
1,2-DCA	25.0		25.0		ug/L		100	61 - 132	
EDB	25.0		26.5		ug/L		106	70 - 130	
<b>Surrogate</b>									
4-Bromofluorobenzene	114		67 - 130						
1,2-Dichloroethane-d4 (Surr)	92		75 - 138						
Toluene-d8 (Surr)	103		70 - 130						

**Lab Sample ID: LCS 720-141297/7**

**Matrix: Water**

**Analysis Batch: 141297**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
	Added							
Gasoline Range Organics (GRO)	500		530		ug/L		106	62 - 120
<b>-C5-C12</b>								
<b>Surrogate</b>								
4-Bromofluorobenzene	111		67 - 130					
1,2-Dichloroethane-d4 (Surr)	100		75 - 138					
Toluene-d8 (Surr)	105		70 - 130					

**Lab Sample ID: LCSD 720-141297/6**

**Matrix: Water**

**Analysis Batch: 141297**

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

Analyte	Spike		LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added									
Methyl tert-butyl ether	25.0		26.2		ug/L		105	62 - 130	4	20
Benzene	25.0		23.3		ug/L		93	79 - 130	1	20

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# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-141297/6**

**Matrix: Water**

**Analysis Batch: 141297**

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

Analyte	Spike Added	LCSD		Unit	D	%Rec.		RPD	RPD Limit
		Result	Qualifier			%Rec.	Limits		
Ethylbenzene	25.0	25.2		ug/L	101	80 - 120	2	20	
Naphthalene	25.0	24.6		ug/L	98	70 - 130	2	20	
Toluene	25.0	24.5		ug/L	98	78 - 120	2	20	
m-Xylene & p-Xylene	50.0	55.0		ug/L	110	70 - 142	3	20	
o-Xylene	25.0	27.4		ug/L	110	70 - 130	2	20	
1,2-DCA	25.0	25.1		ug/L	100	61 - 132	0	20	
EDB	25.0	27.6		ug/L	110	70 - 130	4	20	
<b>Surrogate</b>		<b>LCSD</b>	<b>LCSD</b>						
		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene	110			67 - 130					
1,2-Dichloroethane-d4 (Surr)	94			75 - 138					
Toluene-d8 (Surr)	104			70 - 130					

**Lab Sample ID: LCSD 720-141297/8**

**Matrix: Water**

**Analysis Batch: 141297**

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

Analyte	Spike Added	LCSD		Unit	D	%Rec.		RPD	RPD Limit
		Result	Qualifier			%Rec.	Limits		
Gasoline Range Organics (GRO)	500	516		ug/L	103	62 - 120	3	20	
-C5-C12									
<b>Surrogate</b>		<b>LCSD</b>	<b>LCSD</b>						
		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene	110			67 - 130					
1,2-Dichloroethane-d4 (Surr)	97			75 - 138					
Toluene-d8 (Surr)	104			70 - 130					

## Method: 8270C SIM - PAHs by GCMS (SIM)

**Lab Sample ID: MB 720-141186/1-A**

**Matrix: Water**

**Analysis Batch: 141261**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 141186**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
							Prepared	Analyzed		
Naphthalene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Acenaphthene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Acenaphthylene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Fluorene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Phenanthrene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Anthracene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Benzo[a]anthracene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Chrysene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Benzo[a]pyrene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Benzo[b]fluoranthene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Benzo[k]fluoranthene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Benzo[g,h,i]perylene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Fluoranthene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
Pyrene	ND		0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

**Lab Sample ID: MB 720-141186/1-A**

**Matrix: Water**

**Analysis Batch: 141261**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 141186**

Analyte	MB		Result	Qualifier	RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
	MB	MB							Prepared	Analyzed		
Dibenz(a,h)anthracene	ND				0.10		ug/L		07/30/13 15:18	07/31/13 13:15		1
<b>Surrogate</b>	<b>MB</b>	<b>MB</b>										
2-Fluorobiphenyl	37	%Recovery	Qualifier	Limits					07/30/13 15:18	07/31/13 13:15		1
Terphenyl-d14	65			29 - 120					07/30/13 15:18	07/31/13 13:15		1
				45 - 120								

**Lab Sample ID: LCS 720-141186/2-A**

**Matrix: Water**

**Analysis Batch: 141261**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 141186**

Analyte	Spike		Result	Qualifier	Unit	D	%Rec	%Rec.	
	Added	LCS						Limits	
Naphthalene	10.0		4.06		ug/L		41	29 - 120	
Acenaphthene	10.0		4.48		ug/L		45	42 - 120	
Acenaphthylene	10.0		4.58		ug/L		46	39 - 120	
Fluorene	10.0		4.90		ug/L		49	45 - 120	
Phenanthrene	10.0		4.88		ug/L		49	46 - 120	
Anthracene	10.0		6.23		ug/L		62	53 - 120	
Benzo[a]anthracene	10.0		6.03		ug/L		60	48 - 120	
Chrysene	10.0		5.32		ug/L		53	47 - 120	
Benzo[a]pyrene	10.0		5.68		ug/L		57	43 - 120	
Benzo[b]fluoranthene	10.0		6.05		ug/L		60	42 - 120	
Benzo[k]fluoranthene	10.0		5.95		ug/L		60	42 - 120	
Benzo[g,h,i]perylene	10.0		4.90		ug/L		49	24 - 120	
Indeno[1,2,3-cd]pyrene	10.0		5.19		ug/L		52	25 - 120	
Fluoranthene	10.0		6.14		ug/L		61	57 - 120	
Pyrene	10.0		5.23		ug/L		52	47 - 120	
Dibenz(a,h)anthracene	10.0		5.08		ug/L		51	21 - 120	
<b>Surrogate</b>	<b>LCS</b>	<b>LCS</b>							
	%Recovery	Qualifier	Limits						
2-Fluorobiphenyl	46		29 - 120						
Terphenyl-d14	60		45 - 120						

**Lab Sample ID: LCSD 720-141186/3-A**

**Matrix: Water**

**Analysis Batch: 141261**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 141186**

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec	%Rec.		RPD	Limit
	Added	Result	Qualifier	Limits	RPD	Limit					
Naphthalene	10.0	3.78		ug/L			38	29 - 120		7	35
Acenaphthene	10.0	4.38		ug/L			44	42 - 120		2	35
Acenaphthylene	10.0	4.47		ug/L			45	39 - 120		2	35
Fluorene	10.0	4.70		ug/L			47	45 - 120		4	35
Phenanthrene	10.0	4.66		ug/L			47	46 - 120		5	35
Anthracene	10.0	6.06		ug/L			61	53 - 120		3	35
Benzo[a]anthracene	10.0	6.04		ug/L			60	48 - 120		0	35
Chrysene	10.0	5.32		ug/L			53	47 - 120		0	35
Benzo[a]pyrene	10.0	5.77		ug/L			58	43 - 120		2	35
Benzo[b]fluoranthene	10.0	5.73		ug/L			57	42 - 120		5	35
Benzo[k]fluoranthene	10.0	6.35		ug/L			63	42 - 120		6	35

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

**Lab Sample ID: LCSD 720-141186/3-A**

**Matrix: Water**

**Analysis Batch: 141261**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 141186**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier						
Benzo[g,h,i]perylene	10.0	5.05		ug/L		50	24 - 120	3	35
Indeno[1,2,3-cd]pyrene	10.0	5.42		ug/L		54	25 - 120	4	35
Fluoranthene	10.0	6.08		ug/L		61	57 - 120	1	35
Pyrene	10.0	5.20		ug/L		52	47 - 120	1	35
Dibenz(a,h)anthracene	10.0	5.27		ug/L		53	21 - 120	4	35
<b>Surrogate</b>		<b>LCSD</b>	<b>LCSD</b>						
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>						
2-Fluorobiphenyl	43								
Terphenyl-d14	61								

## Method: RSK-175 - Dissolved Gases (GC)

**Lab Sample ID: MB 280-184819/3**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 184819**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methane	ND		5.0		ug/L			07/29/13 13:47	1

**Lab Sample ID: LCS 280-184819/4**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 184819**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier						
Methane	146	150		ug/L		103	75 - 125		

**Lab Sample ID: LCSD 280-184819/5**

**Client Sample ID: Lab Control Sample Dup**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 184819**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier						
Methane	146	159		ug/L		109	75 - 125	6	20

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

**Lab Sample ID: MB 720-140775/1-A**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Silica Gel Cleanup**

**Analysis Batch: 140850**

**Prep Batch: 140775**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		50		ug/L		07/24/13 09:57	07/25/13 18:15	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Capric Acid (Sur)	0.001		0 - 5	07/24/13 09:57	07/25/13 18:15	1
p-Terphenyl	97		31 - 150	07/24/13 09:57	07/25/13 18:15	1

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

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

**Lab Sample ID: LCS 720-140775/2-A**

**Matrix: Water**

**Analysis Batch: 140850**

**Client Sample ID: Lab Control Sample**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 140775**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Diesel Range Organics [C10-C28]	2500	1090		ug/L		44	32 - 119
<i>LCS LCS</i>							
Surrogate	%Recovery	Qualifier	Limits				
p-Terphenyl	108		31 - 150				

**Lab Sample ID: LCSD 720-140775/3-A**

**Matrix: Water**

**Analysis Batch: 140850**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 140775**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
Diesel Range Organics [C10-C28]	2500	1050		ug/L		42	32 - 119	4	4	35
<i>LCSD LCSD</i>										
Surrogate	%Recovery	Qualifier	Limits							
p-Terphenyl	98		31 - 150							

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 720-140829/1-A**

**Matrix: Water**

**Analysis Batch: 140953**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 140829**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		0.20		mg/L		07/24/13 18:55	07/25/13 23:43	1

**Lab Sample ID: LCS 720-140829/2-A**

**Matrix: Water**

**Analysis Batch: 140953**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 140829**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Magnesium	10.0	11.3		mg/L		113	80 - 120

**Lab Sample ID: LCSD 720-140829/3-A**

**Matrix: Water**

**Analysis Batch: 140953**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 140829**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
Magnesium	10.0	11.5		mg/L		115	80 - 120	2	2	20

**Lab Sample ID: MB 720-140922/1-A**

**Matrix: Water**

**Analysis Batch: 141008**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 140922**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		0.20		mg/L		07/25/13 19:10	07/26/13 20:01	1

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# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 720-140922/2-A**

**Matrix: Water**

**Analysis Batch: 141008**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Magnesium	10.0	11.2		mg/L		112	80 - 120

**Lab Sample ID: LCSD 720-140922/3-A**

**Matrix: Water**

**Analysis Batch: 141008**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Magnesium	10.0	11.0		mg/L		110	80 - 120	1	20

**Lab Sample ID: MB 720-140839/1-A**

**Matrix: Water**

**Analysis Batch: 140904**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	ND		0.20		mg/L		07/24/13 21:04	07/25/13 12:51	1
Manganese	ND		0.020		mg/L		07/24/13 21:04	07/25/13 12:51	1

**Lab Sample ID: LCS 720-140839/2-A**

**Matrix: Water**

**Analysis Batch: 140931**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Iron	10.0	9.22		mg/L		92	80 - 120
Manganese	1.00	0.879		mg/L		88	80 - 120

**Lab Sample ID: LCSD 720-140839/3-A**

**Matrix: Water**

**Analysis Batch: 140931**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Iron	10.0	9.32		mg/L		93	80 - 120	1	20
Manganese	1.00	0.871		mg/L		87	80 - 120	1	20

**Lab Sample ID: MB 720-140932/1-A**

**Matrix: Water**

**Analysis Batch: 140974**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	ND		0.20		mg/L		07/25/13 21:17	07/26/13 12:03	1
Manganese	ND		0.020		mg/L		07/25/13 21:17	07/26/13 12:03	1

**Lab Sample ID: LCS 720-140932/2-A**

**Matrix: Water**

**Analysis Batch: 140974**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Iron	10.0	9.36		mg/L		94	80 - 120
Manganese	1.00	0.902		mg/L		90	80 - 120

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCSD 720-140932/3-A**

**Matrix: Water**

**Analysis Batch: 140974**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total Recoverable**

**Prep Batch: 140932**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD
Iron	10.0	9.37		mg/L		94	80 - 120	0 20
Manganese	1.00	0.898		mg/L		90	80 - 120	0 20

**Lab Sample ID: 720-51143-2 MS**

**Matrix: Water**

**Analysis Batch: 140904**

**Client Sample ID: IW-6**

**Prep Type: Dissolved**

**Prep Batch: 140839**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Iron	45		10.0	54.0	4	mg/L		94	75 - 125
Manganese	4.4		1.00	5.03	4	mg/L		67	75 - 125

**Lab Sample ID: 720-51143-2 MSD**

**Matrix: Water**

**Analysis Batch: 140904**

**Client Sample ID: IW-6**

**Prep Type: Dissolved**

**Prep Batch: 140839**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Iron	45		10.0	52.5	4	mg/L		79	75 - 125	3	20
Manganese	4.4		1.00	5.21	4	mg/L		85	75 - 125	4	20

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 720-140762/4**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 140762**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND			1.0	mg/L			07/24/13 10:49	1

**Lab Sample ID: LCS 720-140762/5**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 140762**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Sulfate	10.0	9.77		mg/L		98	90 - 110

**Lab Sample ID: MB 720-140763/4**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 140763**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND			0.23	mg/L			07/24/13 10:49	1

**Lab Sample ID: LCS 720-140763/5**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 140763**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Nitrate as N	2.26	2.18		mg/L		97	90 - 110

TestAmerica Pleasanton

# QC Sample Results

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

TestAmerica Job ID: 720-51143-1

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID:** MB 720-140854/2

**Matrix:** Water

**Analysis Batch:** 140854

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			07/25/13 08:12	1

**Lab Sample ID:** LCS 720-140854/1

**Matrix:** Water

**Analysis Batch:** 140854

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	1000	954		mg/L		95	85 - 115

**Lab Sample ID:** 720-51143-2 DU

**Matrix:** Water

**Analysis Batch:** 140854

**Client Sample ID:** IW-6  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	10000		10200		mg/L		3	10

## Method: SM 4500 S2 F - Sulfide, Total

**Lab Sample ID:** MB 500-194912/1

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

**Analysis Batch:** 194912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		1.0		mg/L			07/25/13 21:20	1

**Lab Sample ID:** LCS 500-194912/2

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

**Analysis Batch:** 194912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfide	3.70	3.87		mg/L		105	80 - 120

**Lab Sample ID:** MB 500-195613/1

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

**Analysis Batch:** 195613

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		1.0		mg/L			07/30/13 23:00	1

**Lab Sample ID:** LCS 500-195613/2

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

**Analysis Batch:** 195613

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfide	3.70	3.53		mg/L		95	80 - 120

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# QC Association Summary

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

TestAmerica Job ID: 720-51143-1

## GC/MS VOA

### Analysis Batch: 140901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-1	MW-14	Total/NA	Water	8260B/CA_LUFT MS	5
720-51143-2	IW-6	Total/NA	Water	8260B/CA_LUFT MS	6
LCS 720-140901/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	7
LCS 720-140901/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	8
LCSD 720-140901/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	9
LCSD 720-140901/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	10
MB 720-140901/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	11

### Analysis Batch: 141074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-4	IW-2	Total/NA	Water	8260B/CA_LUFT MS	12
720-51143-4 MS	IW-2	Total/NA	Water	8260B/CA_LUFT MS	13
720-51143-4 MSD	IW-2	Total/NA	Water	8260B/CA_LUFT MS	14
LCS 720-141074/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-141074/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-141074/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-141074/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-141074/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

### Analysis Batch: 141144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-6	MW-9	Total/NA	Water	8260B/CA_LUFT MS	
720-51143-6 MS	MW-9	Total/NA	Water	8260B/CA_LUFT MS	
720-51143-6 MSD	MW-9	Total/NA	Water	8260B/CA_LUFT MS	
720-51143-7	MW-11	Total/NA	Water	8260B/CA_LUFT MS	
720-51143-8	MW-13	Total/NA	Water	8260B/CA_LUFT MS	
720-51143-9	IW-5	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-141144/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-141144/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-141144/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-141144/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	

# QC Association Summary

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

TestAmerica Job ID: 720-51143-1

## GC/MS VOA (Continued)

### Analysis Batch: 141144 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-141144/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

### Analysis Batch: 141180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-5	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-141180/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-141180/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-141180/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-141180/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-141180/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

### Analysis Batch: 141297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-3	IW-3	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-141297/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-141297/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-141297/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-141297/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-141297/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

## GC/MS Semi VOA

### Prep Batch: 141186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-1	MW-14	Total/NA	Water	3510C	
720-51143-2	IW-6	Total/NA	Water	3510C	
720-51143-3	IW-3	Total/NA	Water	3510C	
720-51143-4	IW-2	Total/NA	Water	3510C	
720-51143-5	MW-3	Total/NA	Water	3510C	
720-51143-6	MW-9	Total/NA	Water	3510C	
720-51143-7	MW-11	Total/NA	Water	3510C	
720-51143-8	MW-13	Total/NA	Water	3510C	
720-51143-9	IW-5	Total/NA	Water	3510C	
LCS 720-141186/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-141186/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-141186/1-A	Method Blank	Total/NA	Water	3510C	

### Analysis Batch: 141261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-1	MW-14	Total/NA	Water	8270C SIM	141186
720-51143-2	IW-6	Total/NA	Water	8270C SIM	141186

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# QC Association Summary

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

TestAmerica Job ID: 720-51143-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 141261 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-3	IW-3	Total/NA	Water	8270C SIM	141186
720-51143-4	IW-2	Total/NA	Water	8270C SIM	141186
720-51143-5	MW-3	Total/NA	Water	8270C SIM	141186
720-51143-6	MW-9	Total/NA	Water	8270C SIM	141186
720-51143-7	MW-11	Total/NA	Water	8270C SIM	141186
720-51143-8	MW-13	Total/NA	Water	8270C SIM	141186
LCS 720-141186/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	141186
LCSD 720-141186/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	141186
MB 720-141186/1-A	Method Blank	Total/NA	Water	8270C SIM	141186

### Analysis Batch: 141437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-3	IW-3	Total/NA	Water	8270C SIM	141186
720-51143-4	IW-2	Total/NA	Water	8270C SIM	141186
720-51143-9	IW-5	Total/NA	Water	8270C SIM	141186

## GC VOA

### Analysis Batch: 184819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-1	MW-14	Total/NA	Water	RSK-175	
720-51143-2	IW-6	Total/NA	Water	RSK-175	
720-51143-3	IW-3	Total/NA	Water	RSK-175	
720-51143-4	IW-2	Total/NA	Water	RSK-175	
720-51143-5	MW-3	Total/NA	Water	RSK-175	
720-51143-6	MW-9	Total/NA	Water	RSK-175	
720-51143-7	MW-11	Total/NA	Water	RSK-175	
720-51143-8	MW-13	Total/NA	Water	RSK-175	
720-51143-9	IW-5	Total/NA	Water	RSK-175	
LCS 280-184819/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-184819/5	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 280-184819/3	Method Blank	Total/NA	Water	RSK-175	

## GC Semi VOA

### Prep Batch: 140775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-1	MW-14	Silica Gel Cleanup	Water	3510C SGC	
720-51143-2	IW-6	Silica Gel Cleanup	Water	3510C SGC	
720-51143-3	IW-3	Silica Gel Cleanup	Water	3510C SGC	
720-51143-4	IW-2	Silica Gel Cleanup	Water	3510C SGC	
720-51143-5	MW-3	Silica Gel Cleanup	Water	3510C SGC	
720-51143-6	MW-9	Silica Gel Cleanup	Water	3510C SGC	
720-51143-7	MW-11	Silica Gel Cleanup	Water	3510C SGC	
720-51143-8	MW-13	Silica Gel Cleanup	Water	3510C SGC	
720-51143-9	IW-5	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-140775/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-140775/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 720-140775/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

# QC Association Summary

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

TestAmerica Job ID: 720-51143-1

## GC Semi VOA (Continued)

### Analysis Batch: 140850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-140775/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	140775
LCSD 720-140775/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	140775
MB 720-140775/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	140775

### Analysis Batch: 140851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-1	MW-14	Silica Gel Cleanup	Water	8015B	140775
720-51143-2	IW-6	Silica Gel Cleanup	Water	8015B	140775
720-51143-3	IW-3	Silica Gel Cleanup	Water	8015B	140775

### Analysis Batch: 140852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-4	IW-2	Silica Gel Cleanup	Water	8015B	140775
720-51143-5	MW-3	Silica Gel Cleanup	Water	8015B	140775

### Analysis Batch: 140853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-6	MW-9	Silica Gel Cleanup	Water	8015B	140775
720-51143-7	MW-11	Silica Gel Cleanup	Water	8015B	140775

### Analysis Batch: 140943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-8	MW-13	Silica Gel Cleanup	Water	8015B	140775
720-51143-9	IW-5	Silica Gel Cleanup	Water	8015B	140775

## Metals

### Prep Batch: 140829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-5	MW-3	Total/NA	Water	3010A	
720-51143-8	MW-13	Total/NA	Water	3010A	
720-51143-9	IW-5	Total/NA	Water	3010A	
LCS 720-140829/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 720-140829/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 720-140829/1-A	Method Blank	Total/NA	Water	3010A	

### Prep Batch: 140839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-2	IW-6	Dissolved	Water	3005A	
720-51143-2 MS	IW-6	Dissolved	Water	3005A	
720-51143-2 MSD	IW-6	Dissolved	Water	3005A	
720-51143-5	MW-3	Dissolved	Water	3005A	
720-51143-7	MW-11	Dissolved	Water	3005A	
720-51143-8	MW-13	Dissolved	Water	3005A	
720-51143-9	IW-5	Dissolved	Water	3005A	
LCS 720-140839/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 720-140839/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 720-140839/1-A	Method Blank	Total Recoverable	Water	3005A	

# QC Association Summary

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

TestAmerica Job ID: 720-51143-1

## Metals (Continued)

### Analysis Batch: 140904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-2	IW-6	Dissolved	Water	6010B	140839
720-51143-2 MS	IW-6	Dissolved	Water	6010B	140839
720-51143-2 MSD	IW-6	Dissolved	Water	6010B	140839
720-51143-5	MW-3	Dissolved	Water	6010B	140839
720-51143-7	MW-11	Dissolved	Water	6010B	140839
720-51143-8	MW-13	Dissolved	Water	6010B	140839
720-51143-9	IW-5	Dissolved	Water	6010B	140839
MB 720-1408391-A	Method Blank	Total Recoverable	Water	6010B	140839

### Prep Batch: 140922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-2	IW-6	Total/NA	Water	3010A	10
720-51143-3	IW-3	Total/NA	Water	3010A	11
720-51143-4	IW-2	Total/NA	Water	3010A	12
720-51143-6	MW-9	Total/NA	Water	3010A	13
720-51143-7	MW-11	Total/NA	Water	3010A	14
LCS 720-140922/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 720-140922/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 720-140922/1-A	Method Blank	Total/NA	Water	3010A	

### Analysis Batch: 140931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-140839/2-A	Lab Control Sample	Total Recoverable	Water	6010B	140839
LCSD 720-140839/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	140839

### Prep Batch: 140932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-3	IW-3	Dissolved	Water	3005A	
720-51143-4	IW-2	Dissolved	Water	3005A	
720-51143-6	MW-9	Dissolved	Water	3005A	
LCS 720-140932/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 720-140932/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 720-140932/1-A	Method Blank	Total Recoverable	Water	3005A	

### Analysis Batch: 140953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-5	MW-3	Total/NA	Water	6010B	140829
720-51143-8	MW-13	Total/NA	Water	6010B	140829
720-51143-9	IW-5	Total/NA	Water	6010B	140829
LCS 720-140829/2-A	Lab Control Sample	Total/NA	Water	6010B	140829
LCSD 720-140829/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	140829
MB 720-140829/1-A	Method Blank	Total/NA	Water	6010B	140829

### Analysis Batch: 140974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-3	IW-3	Dissolved	Water	6010B	140932
720-51143-4	IW-2	Dissolved	Water	6010B	140932
720-51143-6	MW-9	Dissolved	Water	6010B	140932
LCS 720-140932/2-A	Lab Control Sample	Total Recoverable	Water	6010B	140932
LCSD 720-140932/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	140932
MB 720-140932/1-A	Method Blank	Total Recoverable	Water	6010B	140932

TestAmerica Pleasanton

# QC Association Summary

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

TestAmerica Job ID: 720-51143-1

## Metals (Continued)

### Analysis Batch: 141008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-2	IW-6	Total/NA	Water	6010B	140922
720-51143-3	IW-3	Total/NA	Water	6010B	140922
720-51143-4	IW-2	Total/NA	Water	6010B	140922
720-51143-6	MW-9	Total/NA	Water	6010B	140922
720-51143-7	MW-11	Total/NA	Water	6010B	140922
LCS 720-140922/2-A	Lab Control Sample	Total/NA	Water	6010B	140922
LCSD 720-140922/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	140922
MB 720-140922/1-A	Method Blank	Total/NA	Water	6010B	140922

## General Chemistry

### Analysis Batch: 140762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-2	IW-6	Total/NA	Water	300.0	11
720-51143-3	IW-3	Total/NA	Water	300.0	12
720-51143-4	IW-2	Total/NA	Water	300.0	13
720-51143-5	MW-3	Total/NA	Water	300.0	14
720-51143-6	MW-9	Total/NA	Water	300.0	
720-51143-7	MW-11	Total/NA	Water	300.0	
720-51143-8	MW-13	Total/NA	Water	300.0	
720-51143-9	IW-5	Total/NA	Water	300.0	
LCS 720-140762/5	Lab Control Sample	Total/NA	Water	300.0	
MB 720-140762/4	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 140763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-2	IW-6	Total/NA	Water	300.0	
720-51143-3	IW-3	Total/NA	Water	300.0	
720-51143-4	IW-2	Total/NA	Water	300.0	
720-51143-5	MW-3	Total/NA	Water	300.0	
720-51143-6	MW-9	Total/NA	Water	300.0	
720-51143-7	MW-11	Total/NA	Water	300.0	
720-51143-8	MW-13	Total/NA	Water	300.0	
720-51143-9	IW-5	Total/NA	Water	300.0	
LCS 720-140763/5	Lab Control Sample	Total/NA	Water	300.0	
MB 720-140763/4	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 140854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-2	IW-6	Total/NA	Water	SM 2540C	
720-51143-2 DU	IW-6	Total/NA	Water	SM 2540C	
720-51143-3	IW-3	Total/NA	Water	SM 2540C	
720-51143-4	IW-2	Total/NA	Water	SM 2540C	
720-51143-5	MW-3	Total/NA	Water	SM 2540C	
720-51143-6	MW-9	Total/NA	Water	SM 2540C	
720-51143-7	MW-11	Total/NA	Water	SM 2540C	
720-51143-8	MW-13	Total/NA	Water	SM 2540C	
720-51143-9	IW-5	Total/NA	Water	SM 2540C	
LCS 720-140854/1	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 720-140854/2	Method Blank	Total/NA	Water	SM 2540C	

TestAmerica Pleasanton

# QC Association Summary

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

TestAmerica Job ID: 720-51143-1

## General Chemistry (Continued)

### Analysis Batch: 194912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-2	IW-6	Total/NA	Water	SM 4500 S2 F	
LCS 500-194912/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
MB 500-194912/1	Method Blank	Total/NA	Water	SM 4500 S2 F	

### Analysis Batch: 195613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51143-3	IW-3	Total/NA	Water	SM 4500 S2 F	
720-51143-4	IW-2	Total/NA	Water	SM 4500 S2 F	
720-51143-5	MW-3	Total/NA	Water	SM 4500 S2 F	
720-51143-6	MW-9	Total/NA	Water	SM 4500 S2 F	
720-51143-7	MW-11	Total/NA	Water	SM 4500 S2 F	
720-51143-8	MW-13	Total/NA	Water	SM 4500 S2 F	
720-51143-9	IW-5	Total/NA	Water	SM 4500 S2 F	
LCS 500-195613/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
MB 500-195613/1	Method Blank	Total/NA	Water	SM 4500 S2 F	

## Lab Chronicle

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

TestAmerica Job ID: 720-51143-1

### Client Sample ID: MW-14

Date Collected: 07/23/13 14:30

Date Received: 07/23/13 18:55

### Lab Sample ID: 720-51143-1

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	140901	07/26/13 03:26	LPL	TAL PLS
Total/NA	Prep	3510C			141186	07/30/13 15:18	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	141261	07/31/13 18:29	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	184819	07/29/13 14:10	TEM	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			140775	07/24/13 09:57	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	140851	07/25/13 17:26	DCH	TAL PLS

### Client Sample ID: IW-6

Date Collected: 07/23/13 14:00

Date Received: 07/23/13 18:55

### Lab Sample ID: 720-51143-2

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	140901	07/26/13 03:52	LPL	TAL PLS
Total/NA	Prep	3510C			141186	07/30/13 15:18	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	141261	07/31/13 18:52	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	184819	07/29/13 14:15	TEM	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			140775	07/24/13 09:57	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	140851	07/25/13 17:51	DCH	TAL PLS
Dissolved	Prep	3005A			140839	07/24/13 21:04	ASB	TAL PLS
Dissolved	Analysis	6010B		1	140904	07/25/13 13:12	CAM	TAL PLS
Total/NA	Prep	3010A			140922	07/25/13 19:10	ASB	TAL PLS
Total/NA	Analysis	6010B		5	141008	07/26/13 20:56	SLK	TAL PLS
Total/NA	Analysis	SM 4500 S2 F		1	194912		CLB	TAL CHI
					(Start)	07/25/13 22:17		
					(End)	07/25/13 22:20		
Total/NA	Analysis	300.0		1	140762	07/24/13 12:49	MJK	TAL PLS
Total/NA	Analysis	300.0		1	140763	07/24/13 12:49	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	140854	07/25/13 08:12	NVP	TAL PLS

### Client Sample ID: IW-3

Date Collected: 07/23/13 13:00

Date Received: 07/23/13 18:55

### Lab Sample ID: 720-51143-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		5	141297	08/01/13 00:04	LPL	TAL PLS
Total/NA	Prep	3510C			141186	07/30/13 15:18	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	141261	07/31/13 14:01	MQL	TAL PLS
Total/NA	Analysis	8270C SIM		5	141437	08/02/13 12:34	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	184819	07/29/13 14:19	TEM	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			140775	07/24/13 09:57	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	140851	07/25/13 18:15	DCH	TAL PLS
Dissolved	Prep	3005A			140932	07/25/13 21:17	ASB	TAL PLS

TestAmerica Pleasanton

## Lab Chronicle

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

TestAmerica Job ID: 720-51143-1

### Client Sample ID: IW-3

Date Collected: 07/23/13 13:00  
Date Received: 07/23/13 18:55

### Lab Sample ID: 720-51143-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010B		1	140974	07/26/13 13:38	CAM	TAL PLS
Total/NA	Prep	3010A			140922	07/25/13 19:10	ASB	TAL PLS
Total/NA	Analysis	6010B		5	141008	07/26/13 21:01	SLK	TAL PLS
Total/NA	Analysis	SM 4500 S2 F		1	195613		CLB	TAL CHI
					(Start)	07/30/13 23:34		
					(End)	07/30/13 23:38		
Total/NA	Analysis	300.0		1	140762	07/24/13 13:24	MJK	TAL PLS
Total/NA	Analysis	300.0		1	140763	07/24/13 13:24	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	140854	07/25/13 08:12	NVP	TAL PLS

### Client Sample ID: IW-2

Date Collected: 07/23/13 13:20  
Date Received: 07/23/13 18:55

### Lab Sample ID: 720-51143-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		10	141074	07/29/13 16:07	LPL	TAL PLS
Total/NA	Analysis	8270C SIM		1	141261	07/31/13 14:24	MQL	TAL PLS
Total/NA	Prep	3510C			141186	07/30/13 15:18	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		10	141437	08/02/13 12:57	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	184819	07/29/13 14:24	TEM	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			140775	07/24/13 09:57	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	140856	07/25/13 16:52	DCH	TAL PLS
Dissolved	Prep	3005A			140932	07/25/13 21:17	ASB	TAL PLS
Dissolved	Analysis	6010B		1	140974	07/26/13 13:51	CAM	TAL PLS
Total/NA	Prep	3010A			140922	07/25/13 19:10	ASB	TAL PLS
Total/NA	Analysis	6010B		5	141008	07/26/13 21:05	SLK	TAL PLS
Total/NA	Analysis	SM 4500 S2 F		1	195613		CLB	TAL CHI
					(Start)	07/30/13 23:38		
					(End)	07/30/13 23:41		
Total/NA	Analysis	300.0		1	140762	07/24/13 14:32	MJK	TAL PLS
Total/NA	Analysis	300.0		1	140763	07/24/13 14:32	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	140854	07/25/13 08:12	NVP	TAL PLS

### Client Sample ID: MW-3

Date Collected: 07/23/13 11:20  
Date Received: 07/23/13 18:55

### Lab Sample ID: 720-51143-5

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	141180	07/31/13 00:04	ASC	TAL PLS
Total/NA	Prep	3510C			141186	07/30/13 15:18	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	141261	07/31/13 14:47	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	184819	07/29/13 14:28	TEM	TAL DEN

TestAmerica Pleasanton

## Lab Chronicle

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

TestAmerica Job ID: 720-51143-1

### Client Sample ID: MW-3

Date Collected: 07/23/13 11:20  
Date Received: 07/23/13 18:55

### Lab Sample ID: 720-51143-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			140775	07/24/13 09:57	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		2	140856	07/25/13 17:21	DCH	TAL PLS
Dissolved	Prep	3005A			140839	07/24/13 21:04	ASB	TAL PLS
Dissolved	Analysis	6010B		1	140904	07/25/13 13:22	CAM	TAL PLS
Total/NA	Prep	3010A			140829	07/24/13 18:55	ASB	TAL PLS
Total/NA	Analysis	6010B		1	140953	07/26/13 01:17	SLK	TAL PLS
Total/NA	Analysis	SM 4500 S2 F		1	195613		CLB	TAL CHI
					(Start)	07/30/13 23:41		
					(End)	07/30/13 23:45		
Total/NA	Analysis	300.0		1	140762	07/24/13 15:07	MJK	TAL PLS
Total/NA	Analysis	300.0		1	140763	07/24/13 15:07	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	140854	07/25/13 08:12	NVP	TAL PLS

### Client Sample ID: MW-9

Date Collected: 07/23/13 10:20  
Date Received: 07/23/13 18:55

### Lab Sample ID: 720-51143-6

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	141144	07/30/13 16:25	ASC	TAL PLS
Total/NA	Prep	3510C			141186	07/30/13 15:18	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	141261	07/31/13 15:11	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	184819	07/29/13 14:32	TEM	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			140775	07/24/13 09:57	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	140857	07/25/13 16:22	DCH	TAL PLS
Dissolved	Prep	3005A			140932	07/25/13 21:17	ASB	TAL PLS
Dissolved	Analysis	6010B		1	140974	07/26/13 13:56	CAM	TAL PLS
Total/NA	Prep	3010A			140922	07/25/13 19:10	ASB	TAL PLS
Total/NA	Analysis	6010B		5	141008	07/26/13 21:10	SLK	TAL PLS
Total/NA	Analysis	SM 4500 S2 F		1	195613		CLB	TAL CHI
					(Start)	07/30/13 23:45		
					(End)	07/30/13 23:48		
Total/NA	Analysis	300.0		1	140762	07/24/13 15:41	MJK	TAL PLS
Total/NA	Analysis	300.0		1	140763	07/24/13 15:41	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	140854	07/25/13 08:12	NVP	TAL PLS

### Client Sample ID: MW-11

Date Collected: 07/23/13 09:40  
Date Received: 07/23/13 18:55

### Lab Sample ID: 720-51143-7

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	141144	07/30/13 16:51	ASC	TAL PLS
Total/NA	Prep	3510C			141186	07/30/13 15:18	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	141261	07/31/13 15:34	MQL	TAL PLS

TestAmerica Pleasanton

## Lab Chronicle

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

TestAmerica Job ID: 720-51143-1

### Client Sample ID: MW-11

Date Collected: 07/23/13 09:40  
Date Received: 07/23/13 18:55

### Lab Sample ID: 720-51143-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	184819	07/29/13 14:47	TEM	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			140775	07/24/13 09:57	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	140857	07/25/13 16:52	DCH	TAL PLS
Dissolved	Prep	3005A			140839	07/24/13 21:04	ASB	TAL PLS
Dissolved	Analysis	6010B		1	140904	07/25/13 13:26	CAM	TAL PLS
Total/NA	Prep	3010A			140922	07/25/13 19:10	ASB	TAL PLS
Total/NA	Analysis	6010B		5	141008	07/26/13 21:14	SLK	TAL PLS
Total/NA	Analysis	SM 4500 S2 F		1	195613		CLB	TAL CHI
					(Start)	07/30/13 23:48		
					(End)	07/30/13 23:52		
Total/NA	Analysis	300.0		1	140762	07/24/13 16:15	MJK	TAL PLS
Total/NA	Analysis	300.0		1	140763	07/24/13 16:15	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	140854	07/25/13 08:12	NVP	TAL PLS

### Client Sample ID: MW-13

Date Collected: 07/23/13 09:15  
Date Received: 07/23/13 18:55

### Lab Sample ID: 720-51143-8

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	141144	07/30/13 17:16	ASC	TAL PLS
Total/NA	Prep	3510C			141186	07/30/13 15:18	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	141261	07/31/13 15:57	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	184819	07/29/13 14:56	TEM	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			140775	07/24/13 09:57	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	140943	07/26/13 10:40	DCH	TAL PLS
Dissolved	Prep	3005A			140839	07/24/13 21:04	ASB	TAL PLS
Dissolved	Analysis	6010B		1	140904	07/25/13 13:31	CAM	TAL PLS
Total/NA	Prep	3010A			140829	07/24/13 18:55	ASB	TAL PLS
Total/NA	Analysis	6010B		1	140953	07/26/13 01:22	SLK	TAL PLS
Total/NA	Analysis	SM 4500 S2 F		1	195613		CLB	TAL CHI
					(Start)	07/30/13 23:52		
					(End)	07/30/13 23:55		
Total/NA	Analysis	300.0		1	140762	07/24/13 16:50	MJK	TAL PLS
Total/NA	Analysis	300.0		1	140763	07/24/13 16:50	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	140854	07/25/13 08:12	NVP	TAL PLS

### Client Sample ID: IW-5

Date Collected: 07/23/13 07:50  
Date Received: 07/23/13 18:55

### Lab Sample ID: 720-51143-9

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	141144	07/30/13 17:42	ASC	TAL PLS

TestAmerica Pleasanton

## Lab Chronicle

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

TestAmerica Job ID: 720-51143-1

**Client Sample ID: IW-5**

**Lab Sample ID: 720-51143-9**

**Date Collected: 07/23/13 07:50**

**Matrix: Water**

**Date Received: 07/23/13 18:55**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			141186	07/30/13 15:18	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		5	141437	08/02/13 13:21	MQL	TAL PLS
Total/NA	Analysis	RSK-175		1	184819	07/29/13 15:01	TEM	TAL DEN
Silica Gel Cleanup	Prep	3510C SGC			140775	07/24/13 09:57	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		10	140943	07/26/13 11:09	DCH	TAL PLS
Dissolved	Prep	3005A			140839	07/24/13 21:04	ASB	TAL PLS
Dissolved	Analysis	6010B		1	140904	07/25/13 13:44	CAM	TAL PLS
Total/NA	Prep	3010A			140829	07/24/13 18:55	ASB	TAL PLS
Total/NA	Analysis	6010B		1	140953	07/26/13 01:27	SLK	TAL PLS
Total/NA	Analysis	SM 4500 S2 F		1	195613		CLB	TAL CHI
					(Start)	07/30/13 23:55		
					(End)	07/30/13 23:59		
Total/NA	Analysis	300.0		1	140762	07/24/13 17:58	MJK	TAL PLS
Total/NA	Analysis	300.0		1	140763	07/24/13 17:58	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	140854	07/25/13 08:12	NVP	TAL PLS

**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

TestAmerica Pleasanton

## Certification Summary

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

TestAmerica Job ID: 720-51143-1

### 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	01-31-14

### 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
Alabama	State Program	4	40461	04-30-14
California	NELAP	9	01132CA	04-30-14
Georgia	State Program	4	N/A	04-30-14
Georgia	State Program	4	939	04-30-14
Hawaii	State Program	9	N/A	04-30-14
Illinois	NELAP	5	100201	04-30-14
Indiana	State Program	5	C-IL-02	04-30-14
Iowa	State Program	7	82	05-01-14
Kansas	NELAP	7	E-10161	10-31-13
Kentucky	State Program	4	90023	12-31-13
Kentucky (UST)	State Program	4	66	04-30-14
Louisiana	NELAP	6	30720	06-30-14
Massachusetts	State Program	1	M-IL035	06-30-14
Mississippi	State Program	4	N/A	04-30-14
North Carolina DENR	State Program	4	291	12-31-13
North Dakota	State Program	8	R-194	04-30-14
Oklahoma	State Program	6	8908	08-31-13
South Carolina	State Program	4	77001	08-30-13 *
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Wisconsin	State Program	5	999580010	08-31-13
Wyoming	State Program	8	8TMS-Q	04-30-14

### 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	10-31-13
A2LA	ISO/IEC 17025		2907.01	10-31-13
Alabama	State Program	4	40730	09-30-13 *
Alaska (UST)	State Program	10	UST-30	04-05-14
Arizona	State Program	9	AZ0713	12-19-13
Arkansas DEQ	State Program	6	88-0687	09-01-13
California	ELAP	9	2513	08-31-14 *
Colorado	State Program	8	N/A	09-30-13
Connecticut	State Program	1	PH-0686	09-30-14
Florida	NELAP	4	E87667	06-30-14
Idaho	State Program	10	CO00026	09-30-13
Illinois	NELAP	5	200017	04-30-14
Iowa	State Program	7	370	12-01-14
Kansas	NELAP	7	E-10166	04-30-14
Louisiana	NELAP	6	02096	09-01-13 *
Maine	State Program	1	CO0002	03-03-15
Maryland	State Program	3	268	03-31-14
Minnesota	NELAP	5	8-999-405	12-31-13

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pleasanton

## Certification Summary

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

TestAmerica Job ID: 720-51143-1

### 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
Nevada	State Program	9	CO0026	09-01-13
New Hampshire	NELAP	1	205310	04-28-14
New Jersey	NELAP	2	CO004	06-30-14
New Mexico	State Program	6	CO00026	06-30-14 *
New York	NELAP	2	11964	04-01-14
North Carolina DENR	State Program	4	358	12-31-13
North Dakota	State Program	8	R-034	06-30-14 *
Oklahoma	State Program	6	8614	08-31-13
Oregon	NELAP	10	CO200001	01-16-14
Pennsylvania	NELAP	3	68-00664	09-01-13 *
South Carolina	State Program	4	72002	09-01-13 *
Texas	NELAP	6	T104704183-08-TX	09-30-13
USDA	Federal		P330-13-00202	07-02-16
Utah	NELAP	8	CO000262012-4	09-01-13
Virginia	NELAP	3	460232	06-14-14
Washington	State Program	10	C583	09-01-13 *
West Virginia DEP	State Program	3	354	11-30-13
Wisconsin	State Program	5	999615430	08-31-13
Wyoming (UST)	A2LA	8		10-31-13

\* Expired certification is currently pending renewal and is considered valid.

## Method Summary

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

TestAmerica Job ID: 720-51143-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL PLS
8270C SIM RSK-175	PAHs by GCMS (SIM) Dissolved Gases (GC)	SW846 RSK	TAL PLS TAL DEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
300.0	Anions, Ion Chromatography	MCAWW	TAL PLS
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PLS
SM 4500 S2 F	Sulfide, Total	SM	TAL CHI

### Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: 720-51143-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-51143-1	MW-14	Water	07/23/13 14:30	07/23/13 18:55
720-51143-2	IW-6	Water	07/23/13 14:00	07/23/13 18:55
720-51143-3	IW-3	Water	07/23/13 13:00	07/23/13 18:55
720-51143-4	IW-2	Water	07/23/13 13:20	07/23/13 18:55
720-51143-5	MW-3	Water	07/23/13 11:20	07/23/13 18:55
720-51143-6	MW-9	Water	07/23/13 10:20	07/23/13 18:55
720-51143-7	MW-11	Water	07/23/13 09:40	07/23/13 18:55
720-51143-8	MW-13	Water	07/23/13 09:15	07/23/13 18:55
720-51143-9	IW-5	Water	07/23/13 07:50	07/23/13 18:55

TestAmerica Pleasanton

# BLAINE

TECH SERVICES, INC.

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

CHAIN OF CUSTODY		BTS #	130722-0w1	
CLIENT	ARCADIS U.S., Inc.			
SITE	UPS			
8400 Pardee Drive				
Oakland, CA				
SAMPLE I.D.	DATE	TIME	MATRIX	CONTAINERS
MW-14	7/23/13	1430	W SOIL S=H <sub>2</sub> O	9 mix
IW-6		1400		13
IW-3		1300		
IW-2		1320		
MW-3		1120		
MW-9		1020		
MW-11		0940		
MW-13		0915		
IW-5	↓	0750	↓	↓

CONDUCT ANALYSIS TO DETECT					LAB	TA - SF	147427	DHS #	
					ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND				
					<input type="checkbox"/> EPA	<input type="checkbox"/> RWQCB REGION _____			
					<input type="checkbox"/> LIA				
					<input type="checkbox"/> OTHER				
					<b>720-51143</b>				
					SPECIAL INSTRUCTIONS				
					Invoice and Report to : Arcadis U.S., Inc.				
					Attn: Hugh Devery <a href="mailto:hugh.devery@arcadis-us.com">hugh.devery@arcadis-us.com</a>				
					770-428-9009				
					<b>Low Detection levels requested</b>				
					ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #	
X	X	X		X				1	
X	X	X	X	X	X			2	
X	X	X	X	X	X			3	
X	X	X	X	X	X			4	
X	X	X	X	X	X			5	
X	X	X	X	X	X			6	
X	X	X	X	X	X			7	
X	X	X	X	X	X			8	
X	X	X	X	X	X			9	
					RESULTS NEEDED NO LATER THAN				
					Standard TAT				
DATE	TIME	RECEIVED BY			DATE				TIME
7/23/13	1705	<i>M. P. Allen</i>			7/23/13				1705
DATE	TIME	RECEIVED BY			DATE				TIME
7/23/13	1705	<i>Steve Tap</i>			07/23/13				1705
DATE	TIME	RECEIVED BY			DATE				TIME
7/23/13	1855	<i>Justin Singh Tap</i>			7/23/13				1855
DATE SENT	TIME SENT	COOLER #							

$2,3^{\circ}, 3,6^{\circ}$

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-51143-1

**Login Number: 51143**

**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.	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: 720-51143-1

**Login Number: 51143**

**List Source: TestAmerica Chicago**

**List Number: 1**

**List Creation: 07/25/13 01:41 PM**

**Creator: Lunt, Jeff T**

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True		1
The cooler's custody seal, if present, is intact.	True		2
Sample custody seals, if present, are intact.	True		3
The cooler or samples do not appear to have been compromised or tampered with.	True		4
Samples were received on ice.	True		5
Cooler Temperature is acceptable.	True		6
Cooler Temperature is recorded.	True		7
COC is present.	True		8
COC is filled out in ink and legible.	True		9
COC is filled out with all pertinent information.	True		10
Is the Field Sampler's name present on COC?	True		11
There are no discrepancies between the containers received and the COC.	True		12
Samples are received within Holding Time.	True		13
Sample containers have legible labels.	True		14
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").	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	True		

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-51143-1

**Login Number: 51143**

**List Source: TestAmerica Denver**

**List Number: 1**

**List Creation: 07/25/13 06:09 PM**

**Creator: Knauf, James R**

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?	False	FIELD LEFT BLANK
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
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: 720-51620-1

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:

8/19/2013 2:49:58 PM

Dimple Sharma, Project Manager I

dimple.sharma@testamericainc.com

### LINKS

Review your project  
results through

TotalAccess

Have a Question?

Ask  
The  
Expert

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: 720-51620-1

### Qualifiers

#### GC Semi VOA

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

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

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## Case Narrative

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

TestAmerica Job ID: 720-51620-1

### Job ID: 720-51620-1

Laboratory: TestAmerica Pleasanton

#### Narrative

##### Job Narrative 720-51620-1

#### Comments

No additional comments.

#### Receipt

The sample was received on 8/13/2013 5:40 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9° C.

#### GC Semi VOA

Method 8015B: Due to the level of dilution required for the following sample, surrogate recoveries are not reported: IW-5 (720-51620-1).

No other analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

## Detection Summary

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

TestAmerica Job ID: 720-51620-1

**Client Sample ID: IW-5**

**Lab Sample ID: 720-51620-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	39000		500		ug/L	10		8015B	Silica Gel Cleanup

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: 720-51620-1

**Client Sample ID: IW-5**

**Lab Sample ID: 720-51620-1**

Date Collected: 08/12/13 12:00

Matrix: Water

Date Received: 08/13/13 17:40

## 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]	39000		500		ug/L		08/15/13 13:56	08/16/13 19:52	10
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 5				08/15/13 13:56	08/16/13 19:52	10
p-Terphenyl	0	XD	31 - 150				08/15/13 13:56	08/16/13 19:52	10

# QC Sample Results

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

TestAmerica Job ID: 720-51620-1

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

**Lab Sample ID:** MB 720-142276/1-A

**Matrix:** Water

**Analysis Batch:** 142339

**Client Sample ID:** Method Blank

**Prep Type:** Silica Gel Cleanup

**Prep Batch:** 142276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		08/15/13 13:56	08/16/13 21:20	1
<hr/>									
<b>Surrogate</b>									
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Sur)	0.01		0 - 5				08/15/13 13:56	08/16/13 21:20	1
p-Terphenyl	82		31 - 150				08/15/13 13:56	08/16/13 21:20	1

**Lab Sample ID:** LCS 720-142276/2-A

**Matrix:** Water

**Analysis Batch:** 142339

**Client Sample ID:** Lab Control Sample

**Prep Type:** Silica Gel Cleanup

**Prep Batch:** 142276

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limts
Diesel Range Organics [C10-C28]	2500	1710		ug/L		69	32 - 119
<hr/>							
<b>Surrogate</b>							
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
p-Terphenyl	97		31 - 150				

**Lab Sample ID:** LCSD 720-142276/3-A

**Matrix:** Water

**Analysis Batch:** 142339

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Silica Gel Cleanup

**Prep Batch:** 142276

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	Limit
Diesel Range Organics [C10-C28]	2500	1530		ug/L		61	32 - 119	11
<hr/>								
<b>Surrogate</b>								
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits					
p-Terphenyl	93		31 - 150					

# QC Association Summary

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

TestAmerica Job ID: 720-51620-1

## GC Semi VOA

### Prep Batch: 142276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51620-1	IW-5	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-142276/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-142276/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 720-142276/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 142339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-51620-1	IW-5	Silica Gel Cleanup	Water	8015B	142276
LCS 720-142276/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	142276
LCSD 720-142276/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	142276
MB 720-142276/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	142276

## Lab Chronicle

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

TestAmerica Job ID: 720-51620-1

**Client Sample ID: IW-5**

**Lab Sample ID: 720-51620-1**

**Date Collected: 08/12/13 12:00**

**Matrix: Water**

**Date Received: 08/13/13 17:40**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			142276	08/15/13 13:56	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		10	142339	08/16/13 19:52	DCH	TAL PLS

**Laboratory References:**

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

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## Certification Summary

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

TestAmerica Job ID: 720-51620-1

### 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	01-31-14

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TestAmerica Pleasanton

## Method Summary

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

TestAmerica Job ID: 720-51620-1

Method	Method Description	Protocol	Laboratory
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS

**Protocol References:**

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

**Laboratory References:**

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

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## Sample Summary

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

TestAmerica Job ID: 720-51620-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-51620-1	IW-5	Water	08/12/13 12:00	08/13/13 17:40

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147904

BLAINE

TECH SERVICES, INC.

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



720-51620 Chain of Custody

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	J. Ortiz		RESULTS NEEDED NO LATER THAN	Standard TAT
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME	
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME	
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME	
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #				

0.9<sup>0</sup>

Sharma, Dimple

720-51620

**From:** LeBeau, Jennifer [Jennifer.LeBeau@arcadis-us.com]  
**Sent:** Wednesday, August 14, 2013 11:08 AM  
**To:** Sharma, Dimple; Susin, Erin; Devery, Hugh  
**Subject:** RE: Sample Login Confirmation for 720-51620, UPS-Oakland

Please rush this sample for 24 hour tat

Thanks  
Jennifer

**From:** Sharma, Dimple [mailto:[dimple.sharma@testamericainc.com](mailto:dimple.sharma@testamericainc.com)]  
**Sent:** Wednesday, August 14, 2013 2:06 PM  
**To:** Susin, Erin; Devery, Hugh; LeBeau, Jennifer  
**Subject:** Sample Login Confirmation for 720-51620, UPS-Oakland

RUSH

DIMPLE SHARMA

TestAmerica Pleasanton  
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 925.484.1919  
[www.testamericainc.com](http://www.testamericainc.com)



720-51620 Chain of Custody

Reference: [137064]  
Attachments: 3

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## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 720-51620-1

**Login Number: 51620**

**List Source: TestAmerica Pleasanton**

**List Number: 1**

**Creator: Gonzales, Justinn**

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.	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	

**ARCADIS**

## **Appendix D**

UPS – Oakland Hub  
Waste Manifest



# **Icon Environmental Services, Inc.**

**REMIT TO:**

P.O. Box 2407 UNION CITY, CA 94587-2407  
(800) 499-3676 FAX (510) 476-1786  
CAL 000 362 980

WE ACCEPT VISA & MASTERCARD



## Bill of Lading

Invoice # 01179

Date 2-25-13

## **BILLING INFORMATION**

JOB SITE

NAME <i>Arcadis US Inc</i>			NAME <i>United Parcel Services Inc</i>			PO # <i>B0038398-0018</i>	CASH CHECK
ADDRESS <i>630 Plaza Dr Ste #600</i>			ADDRESS <i>8400 Pardee Dr</i>			CUSTOMER EPA ID #	
CITY <i>Highlands Ranch</i>	STATE <i>CO</i>	ZIP <i>80129</i>	CITY <i>Oakland</i>	STATE <i>CA</i>	ZIP <i>94621</i>		
PHONE NO. <i>(770) 428-9009</i>	PHONE NO. <i>( )</i>						
PROPER SHIPPING DESCRIPTION	WASTE CODE	MANIFEST NUMBER		QUANTITY	UNITS	PRICE	AMOUNT
Waste Flammable, Liquid N.O.S., 3 UN1993, PG III							
Non-RCRA Hazardous, Waste, Liquid	X	<i>NH-11188</i>		<i>1100</i>	<i>Qa</i>		
Non-RCRA Hazardous, Waste, Solid							
Waste Corrosive Liquid, N.O.S., 8							
RCRA Hazardous Waste							
Non Hazardous Waste Liquid							
Non Hazardous Waste Solid							
Transportation Charges	X	<i>11</i>		<i>11.0</i>	<i>Hrs</i>		
Additional Labor							
Pressure Washer							
Drum Setup Used / New	Metal / Poly	Size 55 / 30 / 15 / 5					
Empty Drum Disposal	Metal / Poly	Size 55 / 30 / 15 / 5					
Over Pack Drum	Metal / Poly	Size 95 / 85					
Drained Used Oil Filters							
Other:							
DISPOSAL/RECYCLING FACILITY:		TOTAL					
<input checked="" type="checkbox"/> Icon Environmental Services 1220 Whipple Road, Union City, CA CAL 000 369 026; 94587 (800) 499-3676	<input type="checkbox"/> Ecology Control Industries 255 Parr Blvd., Richmond CA CAD009466392; 94801 (310) 354-9999	<input type="checkbox"/> US Ecology HWY 95, 11 Miles S. of Beatty, Beatty, NV NVD 048 946 016 89003 (775) 553-2203					
<input type="checkbox"/> DK Dixon 7300 Chevron Way, Dixon, CA CAT 080 512 602; 95620 (707) 693-6008	<input type="checkbox"/> AERC 30677 Huntwood Ave., Hayward, CA (510) 429-1129; 94544	<input type="checkbox"/> Commercial Filter Recycling 33210 Western Ave; Union City, CA (510) 487-9227; 94587					
<input type="checkbox"/> East Bay MUD 2200 Wake Ave., Oakland, CA (510) 313-8400; 94623	<input type="checkbox"/> Crosby & Overton 1630 W. 17th St.; Long Beach, CA CAD 028 409 019; 90183 (562) 432-5445	<input type="checkbox"/>					
NET 10 DAYS							

I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of the waste. All relevant information regarding known or suspected hazards associated with the waste has been disclosed. I certify that we have an established program to reduce the volume of waste to the degree to be economically practicable.

DRIVER  
SIGNATURE

GENERATOR  
SIGNATURE

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	2. Page 1 of 1	3. Document Number 11188
4. Generator's Name and Mailing Address  United Parcel Services Inc 8400 Pardee Drive Oakland CA 94521 74621 72		same		
Generator's Phone				
5. Transporter Company Name Icon Environmental Services <del>CLEARWATER ENVIRONMENTAL</del> 72		6. US EPA ID Number CAL 000362980  CAR000007013 72	7. Transporter Phone (510) 476-1740	
8. Designated Facility Name and Site Address  Icon Environmental Services Inc 1220 Whipple Rd Union City, CA 94587		9. US EPA ID Number CAL 000 369 026	10. Facility's Phone 510-476-1740	
<b>G E N E R A T O R</b>	11. Waste Shipping Name and Description  a. Non-Hazardous waste Liquid 1100		12. Containers No. 001	13. Total Quantity 1100
	b.		Type TT	Unit Wt/Vol G
<b>T R A N S P O R T E R</b>	15. Special Handling Instructions and Additional Information  Wear PPE Emergency Contact (510) 476-1740 Attn: Charles Seaton		Handling Codes for Wastes Listed Above 11a. 11b. H2O H2O	
			Month 2	Day 25
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to state or federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name  Kathryn Finch		Signature  Kathrin 2/25/13		
17. Transporter Acknowledgement of Receipt of Materials				
Printed/Typed Name  Mike Brown Sr		Signature  M. Brown Sr 2/25/13		
18. Discrepancy Indication Space				
19. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 18.				
Printed/Typed Name		Signature		
		Month	Day	Year



# Icon Environmental Services, Inc.

## REMIT TO:

P.O. Box 2407 UNION CITY, CA 94587-2407  
(800) 499-3676 FAX (510) 476-1786  
CAL 000 362 980

WE ACCEPT VISA &amp; MASTERCARD



Bill of Lading

Invoice # 01448

Date 4.4.13

## BILLING INFORMATION

NAME		JOB SITE			PO#	CASH	CHECK
Arcadis Us INC		United Parcel Services					
630 Plaza Dr #600		8400 Pardee DR				CUSTOMER EPA ID #	
Highlands Ranch Co.		Oakland CA					
PHONE NO. ( )		PHONE NO. ( )					
PROPER SHIPPING DESCRIPTION	WASTE CODE	MANIFEST NUMBER	QUANTITY	UNITS	PRICE	AMOUNT	
Waste Flammable, Liquid N.O.S., 3 UN1993, PG III							
Non-RCRA Hazardous, Waste, Liquid							
Non-RCRA Hazardous, Waste, Solid							
Waste Corrosive Liquid, N.O.S., 8							
RCRA Hazardous Waste							
Non Hazardous Waste Liquid		12143	750	6			
Non Hazardous Waste Solid							
Transportation Charges							
Additional Labor		LABOR	9.0	HRS			
Pressure Washer							
Drum Setup Used / New	Metal / Poly	Size 55 / 30 / 15 / 5					
Empty Drum Disposal	Metal / Poly	Size 55 / 30 / 15 / 5					
Over Pack Drum	Metal / Poly	Size 95 / 85					
Drained Used Oil Filters							
Other:							
DISPOSAL/RECYCLING FACILITY:						TOTAL	
Icon Environmental Services 1220 Whipple Road, Union City, CA CAL 000 369 026; 94587 (800) 499-3676	Ecology Control Industries 255 Parr Blvd., Richmond CA CAD009466392; 94801 (310) 354-9999	US Ecology HWY 95, 11 Miles S. of Beatty, Beatty, NV NVD 048 946 016 89003 (775) 553-2203					NET 10 DAYS
DK Dixon 7300 Chevron Way, Dixon, CA CAT 080 512 602; 95620 (707) 693-6008	AERC 30577 Huntwood Ave., Hayward, CA (510) 429-1129; 94544	Commercial Filter Recycling 33210 Western Ave; Union City, CA (510) 487-9227; 94587					
East Bay MUD 2200 Wake Ave., Oakland, CA (510) 313-8400; 94623	Crosby & Overton 1630 W. 17th St.; Long Beach, CA CAD 028 409 019; 90183 (562) 432-5445	<input checked="" type="checkbox"/> <i>Icon</i> <i>CAC 000 396 626</i>					

I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of the waste. All relevant information regarding known or suspected hazards associated with the waste has been disclosed. I certify that we have an established program to reduce the volume of waste to the degree to be economically practicable.

DRIVER  
SIGNATURE *John*GENERATOR  
SIGNATURE *Signature*

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	2. Page 1 of 1	3. Document Number <b>12143</b>	
G E N E R A T O R	4. Generator's Name and Mailing Address  United Parcel Services Inc 8400 Pardee Drive Oakland, CA 94621				
	Generator's Phone				
	5. Transporter Company Name  CLEARWATER ENVIRONMENTAL	6. US EPA ID Number  CAL 000 362 980 CAR000007013	7. Transporter Phone  (510) 476-1740		
	8. Designated Facility Name and Site Address  Icon Environmental Services Inc 1220 Whipple Road Union City, CA 94587	9. US EPA ID Number  CAL 000 369 026	10. Facility's Phone  510-476-1740		
	11. Waste Shipping Name and Description  a. Non-Hazardous waste LIQUID		12. Containers No. 001	Type 77	Total Quantity 750
	b.				14. Unit Wt/Vol G
	15. Special Handling Instructions and Additional Information  Wear PPE Emergency Contact (510) 476-1740 Attn: Charles Seaton		Handling Codes for Wastes Listed Above 11a.                    11b.		
	Arcadis				
	16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to state or federal regulations for reporting proper disposal of Hazardous Waste.				
	Printed/Typed Name <i>Sophia Williams</i>		Signature Month Day Year		
17. Transporter Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Eugenio Villarreal</i>		Signature Month Day Year <i>09/04/13</i>			
18. Discrepancy Indication Space					
19. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 18.					
Printed/Typed Name		Signature Month Day Year			

G E N E R A T O R	<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	2. Page 1 of 1	3. Document Number 12232		
	4. Generator's Name and Mailing Address		United Parcel Services Inc 8400 Pardee Drive Oakland, CA 94621				
	Generator's Phone						
	5. Transporter Company Name		6. US EPA ID Number	7. Transporter Phone			
	Icon Environmental Services <del>CLEARWATER ENVIRONMENTAL</del>		CAL 000 362 980 CAR000007013	(510) 476-1740			
	8. Designated Facility Name and Site Address		9. US EPA ID Number	10. Facility's Phone			
	Icon Environmental Services Inc 1220 Whipple Road Union City, CA 94587		CAL 000 369 026	510-476-1740			
	11. Waste Shipping Name and Description				12. Containers No.	13. Total Quantity	
	a. Non-Hazardous waste <i>water</i>				001 TT	1200 G	
	b.						
	15. Special Handling Instructions and Additional Information  Wear PPE Emergency Contact (510) 476-1740 Attn: Charles Seaton				Handling Codes for Wastes Listed Above  11a.                    11b. <i>P000</i> <i>PC</i>		
	Arcadis						
	T R A N S P O R T E R	16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to state or federal regulations for reporting proper disposal of Hazardous Waste.					
		Printed/Typed Name <i>Srot Wennen</i>		Signature <i>Se</i> Month Day Year <i>5 15 13</i>			
		17. Transporter Acknowledgement of Receipt of Materials					
	F A C I L I T Y	Printed/Typed Name <i>Tony Barreda</i>		Signature <i>Tony Barreda</i> Month Day Year <i>5 15 13</i>			
		18. Discrepancy Indication Space					
	19. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 18.						
	Printed/Typed Name		Signature				
Month Day Year							



# Icon Environmental Services, Inc.

## REMIT TO:

P.O. Box 2407 UNION CITY, CA 94587-2407  
(800) 499-3676 FAX (510) 476-1786  
CAL 000 362 980

WE ACCEPT VISA &amp; MASTERCARD



Bill of Lading

Invoice # U1570

Date 5-15-13

## BILLING INFORMATION

## JOB SITE

NAME <i>Arcadis US Inc.</i>	NAME <i>U.P.S.</i>	PO <i>80038398-0017</i>	CASH	CHECK		
ADDRESS <i>630 Plaza Dr # 600</i>	ADDRESS <i>8400 Pardee Dr.</i>	CUSTOMER EPA ID #				
CITY <i>Highlands Ranch CO</i>	STATE <i>80129</i>	CITY <i>Oakland CA</i>	STATE <i>94621</i>	ZIP		
PHONE NO. <i>( )</i>	PHONE NO. <i>( )</i>					
PROPER SHIPPING DESCRIPTION	WASTE CODE	MANIFEST NUMBER	QUANTITY	UNITS	PRICE	AMOUNT
Waste Flammable, Liquid N.O.S., 3 UN1993, PG III						
Non-RCRA Hazardous, Waste, Liquid						
Non-RCRA Hazardous, Waste, Solid						
Waste Corrosive Liquid, N.O.S., 8						
RCRA Hazardous Waste						
Non Hazardous Waste Liquid	X	<i>12232</i>	<i>1200</i>	G		
Non Hazardous Waste Solid						
Transportation Charges	X		10	HRS		
Additional Labor						
Pressure Washer						
Drum Setup Used / New	Metal / Poly	Size 55 / 30 / 15 / 5				
Empty Drum Disposal	Metal / Poly	Size 55 / 30 / 15 / 5				
Over Pack Drum	Metal / Poly	Size 95 / 85				
Drained Used Oil Filters						
Other:						
DISPOSAL/RECYCLING FACILITY:		TOTAL				
<input checked="" type="checkbox"/> Icon Environmental Services 1220 Whipple Road, Union City, CA CAL 000 369 026; 94587 (800) 499-3676	<input type="checkbox"/> Ecology Control Industries 255 Parr Blvd., Richmond CA CAD009466392; 94801 (310) 354-9999	<input type="checkbox"/> US Ecology HWY 95, 11 Miles S. of Beatty, Beatty, NV NVD 048 946 016 89003 (775) 553-2203	NET 10 DAYS			
<input type="checkbox"/> DK Dixon 7300 Chevron Way, Dixon, CA CAT 080 512 602; 95620 (707) 693-6008	<input type="checkbox"/> AERC 30677 Huntwood Ave., Hayward, CA (510) 429-1129; 94544	<input type="checkbox"/> Commercial Filter Recycling 33210 Western Ave; Union City, CA (510) 487-9227; 94587				
<input type="checkbox"/> East Bay MUD 2200 Wake Ave., Oakland, CA (510) 313-8400; 94623	<input type="checkbox"/> Crosby & Overton 1630 W. 17th St.; Long Beach, CA CAD 028 409 019; 90183 (562) 432-5445	<input type="checkbox"/>				

I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of the waste. All relevant information regarding known or suspected hazards associated with the waste has been disclosed. I certify that we have an established program to reduce the volume of waste to the degree to be economically practicable.

DRIVER  
SIGNATURE *Tony Barreto*

GENERATOR  
SIGNATURE *S. J. S.*

**ARCADIS**

## **Appendix E**

UPS – Oakland Hub  
HVE Field Notes

# Site Visit Report

ARCADIS G&M Project Number:		Dates of Site Visit:
B003839 8.0018		2/25/13
ARCADIS G&M Project Name:		Location of Project:
UPS Oakland		8400 Pardee Dr.
ARCADIS G&M Personnel Present:	Other Persons Present:	
K. Firish	ICON Environmental	
Purpose of Site Visit:	HVE Event	
Date & Time:	Activities:	
0640	Arrive Emeryville office to pick up equipment & field truck	
0730	Berkeley shed-load more equipment onto truck	
0830	Arrive at UPS Oakland H&S Tailgate, security check-in	
0915	Begin setting up work station at MW-12 for extraction	
<u>DTW:</u>	DT (Product)	
IW-1	6.50	5.65
IW-2	7.04	
IW-3	5.90	
MW-12	6.55	5.50
MW-13	4.61	
1105	Phone calls to Arpen - working on setup	
1115	Start running system, PID readings at MW-12 1115 = 0.2, 1200 = 0.2, 1400 = 1.1	
1415	IW-1 DTW = 8.91 PTP = 8.00 275 gal of water extracted at MW-12	
1430	Start extraction at IW-1	
1500	PID reading = 0.2 at IW-1, hose length appx 25ft.	
1600	Speak with Arpen - stop PID reading and collect DTW at other wells	

Weather: sunny 50°

Signature & Date: Kay 2/25/13

Equipment billing submitted: \_\_\_\_\_

Date to accounting: \_\_\_\_\_

## Site Visit Report

Date & Time:	Activities:
1615	MW-14 could not open
1630	MW-12 NO product. DTW = 8.62
1645	MW-8 DTW = 3.39
1655	Begin clean up. Stop running system. check IW-1
1700	DTW = 8.90 no solid beep but product on the probe. Begin extraction again with hose.
1720	check IW-1 again. Well is dry but residual product on probe.
1730	4.95 DTW in tank. 1100 gallons total probe not working correctly (no solid beep for product)
1745	Empty Free Product drum and label as empty on-site
1800	off-site. call Jennifer.
1830	Berkeley shed drop off
1915	Emeryville drop off and return truck.

4/4/13 UPS Oakland

0645 ARCADIS Onsite - 2TQAWA cost

- locate 55 gal drums

- locate wells

- missing large socket to access

wells - Home depot to purchase

0730 Set up exclusion zone

- retrieve do I employ 55 gal drum

0750 Incorrect equipment not have water

level meters, not interface probe

- sourced interface probe from emory with  
ARCADIS offsite to pick up interface  
probe

0925 ARCADIS onsite - 9TQ - S1-WM

Gauge wells 88.3 - W1Q - S1-WM

IW-1 - DTP = 5.64 ft DTW = 6.48 ft

TD = 9.29 ft - product is thick and black

MW-12 - DTP = 5.70 ft DTW = 5.95 ft

TD = 9.25 ft

MW-13 - DTW = 4.88 ft no product

IW-2 - DTW = 5.16 ft no product

0955 Sub-contractor Icon Environmental

onsite to minimum -

- Tailgate H & SW 100 ft

1020 Bail-down test at IW-1 work OEP1

1145 Bail-down test at MW-12 OEP1

1230 ARCADIS sub offsite to get larch

1300 ARCADIS and Sub-C onsite post lunch

- Communicate with PM & engineers to adjust tests and confirm review
- Middle tailgate H/S meeting with Sub.
- Increase size of exclusion zone
- reposition vehicles
- utilize hazard lights
- Stop work used to mitigate high volume heavy truck traffic

~1400 Gauge mills

IW-12 - DTP - 5.69 DTCW - 5.95

IW-13 - DTCW - 4.88

AT IW-2 DTCW - 5.16

IW-14 DTP - 5.74 DTCW - 6.00

+ 2P-2 Start Vac truck operations - IW-1

- build manifolds for all four mills

- IW-3 not monitored due

to heavy truck traffic

- monitoring at IW-3 would close through traffic

1430 troubleshooting manifold leaks

1500 Vac-truck ~ 150 gallons

15+ record data for vac event

4/4/13 UPS Oakland

1600 Vac-truck at ~ 350 gallons

- Per Arjen Shah - complete draw-down test at IW-1 after Vac-event at IW-1

1630 Vac-truck at ~ 500 gal

1730 MW-13 - DTW - 6.30 ft from top of manifold

IW-2 - DTW - 11.65 ft from top of manifold

- measured before initiation Vacuum in MW-12

1735 Begin extraction from MW-12

1900 Begin MW-12 draw-down test

1930 Icon Environmental offsite

1945 Breakdown / clean / cleanup

2015 ARCADIS offsite

Icon removed all Plowwater from  
3 ARCADIS drums onsite before  
site exit.

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## IW-1 Bail-down test

- Well bailed into std. 5 gal bucket

- Total Product bailed = 6.08 ft
- total Volume bailed = 0.52 ft

Time	DTP [ft]	DTW [ft]
------	----------	----------

before bail → 0940	5.64	6.48
after bail	1023	5.85
	1025	5.85
	1027	5.82
	1030	5.81
	1035	5.80
	1038	5.80
↓	1042	5.80
	1044	5.80
	1050	5.79
	1055	5.79
	1100	5.78
	1106	5.78
	1116	5.77

After bail-down test in MW-12

~1400	5.74	6.16
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MW-12 bail-down test

- bailed into std. 5 gal bucket
- total product bailed - 0.08 ft
- total volume bailed - 0.23 ft

DTP - 5.70 ft DTW - 5.95 ft - before bail

time	DTP [ft]	DTW [ft]
1150	5.81	5.86
1152	5.78	5.84
1158	5.78	5.86
1202	5.75	5.86
1205	5.74	5.86
1208	5.75	5.86
1211	5.75	5.85
1217	5.74	5.85
~1400	5.69	5.95

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IW-1 - Second Draw-down test

- Post HUE

- measured at top of well casing

time	DTP	DTW
1652	8.40	8.42
1657	8.19	8.20
1702	8.13	8.14
1705	8.11	8.12
1709	8.10	8.12
1712	8.08	8.12
1715	8.07	8.12
1719	8.05	8.13
1723	8.04	8.13
1730	8.02	8.15

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B003898.0018

1/4/13       $T_{in} = 2$        $\Delta T_{IP/DTW}$  measured @ top of  
manifold not to top well  
casing

Field personell    Scatter bombing

date 4/4/13

UPS

B003898.0018

measured to top of  
manifold

Field personell Scott Wrenning date 4/4

date 4/4/13

5/15/13

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VTE event

## 0635 ARCAIDS Onsite

Sign in with security  
 Call Angelene and Michael and Jennifer  
 Sign Work rules  
 review H&SP

0700

Open Set up exclusion zone around  
 IW-1, IW-2, MW-12, MW-13  
 - Open wells - not gauging all 17 wells, no time  
 - IW-3 located 20 feet outside of  
 exclusion zone.  
 Heavy truck traffic driving over  
 IW-3

Call Jennifer - She wants to  
 send out another person

Call Arpen - He recommended that  
 the well does not need to be monitored

- Angelene returns phone call
- She does not want ARCAIDS onsite  
 after 4:30 pm and is concerned  
 about our activities blocking traffic
- I recommend that IW-3 not be  
 monitored to keep client happy  
 and safety

0730

- ICON, Subcontractor, Onsite
- Sign in with guard shack
- Tailgate H&S meeting
- Gauge wells - measured at Top of Casing

Well ID

DTA (ft)

DTW (ft)

IW-1

6.56

6.79

MW-12

6.09

6.51

MW-13

—

5.26

IW-2

—

5.21

0810

Begin Manifold Install and hose  
 connection to truck

0830

record initial conditions

Speak to Hollis - confirms that we are  
 not monitoring IW-3

0850

Begin lowering Stinger to depth in IW-1

0930

Close Bladder Valve and begin  
 recording data in FDS

- 1000 trouble shoot Iw-2 , no vacuum  
~  $\frac{1}{8}$  tank of vac truck , 3000 gal tank
- 1115 ~  $\frac{3}{16}$  Vac truck water tank level  
3000 gal tank  
~ extracted ~~per~~ ground water was initially  
dark brown/black then became  
lighter in color. at approx 1100  
ground water became more brown/black  
again
- 1200 - Stop extracting from Iw-1 switch  
to extraction from MW-1  
Monitoring @ Iw-1, Iw-2 and MW-3  
~  $\frac{3}{16}$  Vac truck water level (3000 gal tank)
- 1230 - Begin recording FDS data  
1300 - extracted ground water dark brown  
becoming less turbid and water  
is extracted  
Iw-1 appears to be dry . Vacuum  
increases when the 1" PVC is closed from  
top of manifold otherwise no vacuum.
- 1500 ~  $\frac{1}{4}$  Vac truck tank 3000 gal  
- Ground water less turbid ~ opaque
- 1430 - OFF SITE total volume generated  
~ 1200 gallons according to waste manifest

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BR

GP09BPNA.C125.C0000

DTP/DTW measured from top of manifold

Field personell Scott Wernsing

date 5/15/13

UPS Oakland

~~BP 262~~ GP09BPNA.C125.C0000

DTw/DTP measured from Top of Manifold

Field personell Scott Wenning

date 5/15/13