



**Kelly C. Esters**  
Property Specialist  
Marketing Business Unit

**Chevron Environmental  
Management Company**  
6101 Bollinger Canyon Road  
San Ramon, CA 94583  
Tel (925) 790-6480  
kesters@chevron.com

July 27, 2012

Mr. Mark E. Detterman, PG, CEG  
Senior Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
Environmental Health Department  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Re: Facility No. 9-9708  
5910 MacArthur Boulevard, California

**RECEIVED**

**8:22 am, Jul 31, 2012**

Alameda County  
Environmental Health

Dear Mr. Detterman:

Attached for your review is the *Site Assessment and Preferential Pathway Survey Report* for the above-referenced site. This report was prepared by ARCADIS, upon whose assistance and advice I have relied. I declare under penalty of perjury that the information and/or recommendations contained in the attached report are true and correct to the best of my knowledge. Should you have any further questions, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in blue ink that reads "Kelly C. Esters".

Kelly C. Esters  
Property Specialist

KCE:st  
Encl.



ARCADIS U.S., Inc.  
320 Commerce  
Suite 200  
Irvine  
California 92602  
Tel 714 730 9052  
Fax 714 730 9345  
[www.arcadis-us.com](http://www.arcadis-us.com)

Mr. Mark E. Detterman, PG, CEG  
Senior Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
Environmental Health Department  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

ENVIRONMENT

Subject:

**Site Assessment and Preferential Pathway Survey Report**

Former Chevron Service Station 9-9708  
5910 MacArthur Boulevard  
Oakland, California

Date:  
July 27, 2012

Dear Mr. Detterman:

Contact:  
Toni DeMayo

On behalf of Chevron Environmental Management Company (Chevron), ARCADIS has prepared this report to present the results of the recent site assessment activities associated with the former Chevron Service Station 9-9708 located at 5910 MacArthur Boulevard in Oakland, California (site). Site investigation activities were performed in accordance to ARCADIS' *Work Plan for Site Assessment Activities and Preferential Pathway Survey (Work Plan)*, dated December 16, 2011 and ARCADIS' *Addendum to Work Plan for Site Assessment and Preferential Pathway Survey (Addendum to Work Plan)*, dated May 4, 2012. The original Work Plan was conditionally approved by Alameda County Environmental Health (ACEH) as indicated in a letter dated April 5, 2012. The Addendum to Work Plan was conditionally approved by ACEH via electronic mail (e-mail) on May 10, 2012.

Phone:  
714.508.2657

Email:  
Toni.DeMayo@  
arcadis-us.com

Our ref:  
B0060901.9708

The purpose of the assessment was to characterize and evaluate possible soil and groundwater impacts associated with the former used oil underground storage tank (UST).

### Site Description and Features

The site is currently an active Valero branded service station located at 5910 MacArthur Boulevard in Oakland, California (Figure 1). The site is located on the southeast corner of MacArthur Boulevard and Seminary Avenue. The site is bounded by a mixed commercial and residential building which shares an open parking lot.

Current site features include a convenience store, three gasoline USTs and two dispenser islands with associated canopies (Figure 2).

Imagine the result

## Soil Boring Installation

Between June 12 and June 15, 2012, Cascade Drilling, LP (Cascade) of Richmond, California, under the supervision of ARCADIS, advanced nine soil borings (B-1, B-2, B-3, B-4, B-5, B-6, B-7, B-8, and B-9) and collected grab groundwater samples from each boring to evaluate the potential onsite extent of petroleum hydrocarbon impacts to soil and groundwater.

## Soil Borings

Nine soil borings were advanced at the approximate locations shown on Figure 2. Prior to drilling, all borings were hand cleared with a hand auger to a minimum depth of 8 feet 1 inch bgs. Boring B-1 was hand augered to approximately 7 feet bgs where refusal was met. An air knife was used to clear the boring to 8 feet 1 inch. Boring B-6 was hand cleared with a hand auger until meeting refusal at 5 feet bgs. An air knife was used to see if the boring could be hand cleared to the minimum depth of 8 feet 1 inch. However, refusal was met at 5.5 feet bgs after two attempts in moving the location. Boring B-9 was hand augered to approximately 4.5 feet bgs where refusal was met. An air knife was used to attempt to clear B-9 to the minimum depth. However, refusal was met at 4.5 feet bgs after three attempts of moving the location. Boring B-5 was not advanced during drilling activities due to the proximity of subsurface utilities and structures.

Following utility clearance, six borings (B-1, B-2, B-3, B-4, B-7 and B-8) were advanced using a direct push rig. Total depth of each boring ranged from 20 to 30 feet bgs and was determined in the field when a confining unit was observed.

The soil types encountered were predominately silt underlain by clayey gravel, silty sand and sandy silt. Cross section location map and cross sections are presented in Figures 3 through 6. Boring logs are included in Attachment 1.

## Soil Sampling

Soil samples were collected using 4 foot long acetate sleeves. The samples were logged for soil characteristics and screened for the presence of volatile organic compounds (VOCs) using a photo-ionization detector (PID). Two soil samples, one shallow and one deep, were collected each boring location and submitted for chemical analysis. The shallow soil sample was collected from 0 to 8 feet bgs and the deep soil sample was collected right above the groundwater table.

#### Soil Analytical Data

Following collection, all soil samples were packed on ice, cooled to approximately 4 degrees centigrade and delivered, under chain-of-custody protocols, to TestAmerica, Incorporated (TestAmerica) of Pleasanton, California, a California Department of Health Services-certified analytical laboratory. The samples were shipped from their Pleasanton facility to their Irvine facility for analysis. Soil samples were analyzed for the presence of the following constituents:

- Total petroleum hydrocarbons as diesel range organics [TPH-DRO (C<sub>10</sub>-C<sub>28</sub>)], by United States Environmental Protection Agency (USEPA) Method 8015B Modified with and without silica gel clean up
- TPH-Motor Oil (TPH-MO) by USEPA Method 8015B Modified with and without silica gel clean-up
- Benzene, toluene, ethylbenzene, total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by USEPA Method 8260B
- Halogenated VOCs by USEPA 8260B
- Cadmium, chromium, lead, nickel and zinc by USEPA Method 6010B
- Polychlorinated biphenyls (PCBs) by USEPA 8082

#### Soil Analytical Results

A total of 13 soil samples were collected for chemical analysis. TPH-DRO and TPH-MO was detected in 2 of the 13 soil samples analyzed without silica gel clean-up. The maximum detected concentration of TPH-DRO was collected at B-2 at 12 feet bgs with a concentration of 610 mg/kg. The maximum detected concentration of TPH-MO was at B-1 at 12 feet bgs with a concentration of 330 mg/kg. TPH-DRO and TPH-MO was detected in 3 of the 13 soil samples analyzed with silica gel clean-up. The maximum detected concentrations of 500 mg/kg and 280 mg/kg, respectively, were collected from 12 feet bgs in boring B-1. Except for samples collected from borings B-7 and B-8, BTEX was not detected above their respective laboratory reporting limits in the soil samples submitted for laboratory analysis. Ethylbenzene was detected at 14 feet bgs from B-7 and B-8 with concentrations of 0.350 mg/kg and 0.0021 mg/kg, respectively. MTBE was detected at a concentration of 0.013

mg/kg in B-8 at 6 feet bgs. PCBs were not detected above their respective laboratory reporting limits in all soil samples submitted for laboratory analysis. Lead, zinc, nickel and chromium were detected in all soil samples submitted for laboratory analysis with maximum concentrations of 18 mg/kg in B-6 at 4 feet bgs, 330 mg/kg in B-4 at 12 feet bgs, 380 mg/kg in B-2 at 2 feet bgs and 130 mg/kg in B-2 at 2 feet bgs, respectively. Cadmium was detected in B-4 at 8 feet bgs and 12 feet bgs with concentrations of 0.49 mg/kg and 1.5 mg/kg, respectively. With the exception of B-7, halogenated VOCs were not detected in any of the soil samples.

TPH-DRO and nickel were the only two analytes detected in soil at a concentration meeting or exceeding their respective Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for commercial/industrial soil less than or equal to 3 meters, for shallow soil samples, and soil greater than 3 meters, for deep soil samples, where groundwater is a current or potential drinking water source. TPH-DRO was detected at 590 mg/kg and 610 mg/kg in samples analyzed without silica gel clean-up from B-1 at 12 feet bgs and B-2 at 12 feet bgs, respectively. TPH-DRO was detected at 500 mg/kg and 260 mg/kg in samples analyzed with silica gel clean-up from B-1 at 12 feet bgs and B-2 at 12 feet bgs, respectively. Nickel was detected at 6 of the 7 shallow soil samples collected with concentrations ranging from 150 mg/kg (B-3) to 380 mg/kg (B-2). These results exceed the ESL of 150 mg/kg for soils less than or equal to 3 meters bgs.

Soil analytical data are summarized in Table 1 and 2. Figure 7 presents a soil concentration distribution map. The laboratory analytical report with chain-of-custody records are presented in Attachment 2.

Note that TPH-DRO and TPH-MO results presented on the figure were analyzed with silica gel clean-up. Since bulk TPH analyses do not measure specific compounds, but rather the total mass of organic compounds within a given elution range of the gas chromatograph. Non-petroleum compounds, including partially weathered polar biodegradation products and some natural organic matter, may co-elute with hydrocarbon constituents and be reported as bulk TPH-DRO. Studies (Zemo 2003, Zemo and Foote 2006, Lang et al. 2009) suggest that the polar partially weathered non-petroleum hydrocarbon compounds can contribute to TPH-DRO concentrations well above the expected aqueous solubility of diesel (which is approximately 5 mg/L). Silica gel cleanup applied following sample extraction has been shown to yield a more representative analysis of actual petroleum hydrocarbon in a groundwater sample.

### Grab Groundwater Sampling

Once the borings reached their respected total depth, a  $\frac{3}{4}$  inch outer diameter (OD) poly-vinyl chloride (PVC) with 10 feet of 0.010 inch slotted screen were lowered in each boring location (B-1 through B-4, B-7 and B-8) to collect a grab groundwater sample. Grab groundwater samples were collected using a peristaltic pump and disposable tubing and directly into the appropriate laboratory-supplied sample containers.

Boring B-8 was installed on June 14, 2012. When PVC was lowered into the boring to collect a grab groundwater sample, the boring was dry. The PVC was left in the boring overnight and was secured with a cold asphalt patch. On June 15, 2012, the boring had insufficient water to collect the full suite of sample containers. Only VOCs and metals were collected from this boring.

### Grab Groundwater Analytical Data

Following collection, the groundwater samples (B-1, B-2, B-3, B-4, B-7, and B-8) were packed on ice, cooled to approximately 4 degrees centigrade, and delivered, under chain-of-custody protocols, to Test America. The groundwater samples were analyzed for the presence of the following constituents:

- TPH-DRO (C<sub>10</sub>-C<sub>28</sub>), by USEPA Method 8015B Modified with and without silica gel clean up
- TPH-MO by USEPA Method 8015B Modified with and without silica gel clean up
- BTEX and MTBE by USEPA Method 8260B
- Halogenated VOCs by USEPA 8260B
- Cadmium, chromium, lead, nickel and zinc by USEPA Method 6010B
- Polychlorinated biphenyls (PCBs) by USEPA 8082

## Groundwater Analytical Results

TPH-DRO was detected in 3 of the grab groundwater samples analyzed without silica gel clean-up with the maximum concentration of 1,500 µg/L at B-2. TPH-MO was detected in 2 of the grab groundwater samples analyzed without silica gel clean-up with the maximum concentration of 900 µg/L at B-2. TPH-DRO and TPH-MO concentrations analyzed with silica gel clean-up were not detected above the respective laboratory reporting limits. With the exception of B-7 and B-8, BTEX and MTBE were not detected above the respective laboratory reporting limits in any grab groundwater samples. Both grab groundwater samples from B-7 and B-8 had detected concentrations of benzene, ethylbenzene and MTBE. The maximum detected concentration of benzene was 0.90 ug/L in B-7. The maximum detected concentration of ethylbenzene was 14 ug/L in B-8. The maximum detected concentration of MTBE was 12 ug/L in B-8. PCBs were not detected above the respective laboratory reporting limits. Lead and zinc were detected in 5 of 6 grab groundwater samples. Nickel and chromium were detected in all 6 of the grab groundwater samples. The maximum concentration of lead, zinc, nickel and chromium were from B-4 with concentrations of 750 µg/L, 5,100 µg/L, 5,800 µg/L, and 3,500 µg/L, respectively. Cadmium was not detected above the respective laboratory reporting limits in any of the 6 groundwater samples submitted for laboratory analysis.

TPH-DRO and TPH-MO, analyzed without silica gel cleanup, was detected in groundwater at a concentration meeting or exceeding their respective RWQCB ESLs for commercial/industrial area where groundwater is a current or potential drinking water source. TPH-DRO was detected at 960 ug/L and 1,500 ug/L analyzed without silica gel clean-up from B-1 and B-2, respectively. MTBE was detected above the ESL at B-8 with a concentration of 12 ug/L. 5 of the 6 groundwater samples analyzed for lead, zinc and chromium exceeded their respective ESL with concentrations ranging from 10 ug/L (B-7) to 750 ug/L (B-4) for lead, 68 ug/L (B-7) to 5,100 ug/L (B-4) for zinc and 65 ug/L (B-7) to 3,500 ug/L (B-4) for chromium. All 6 groundwater samples exceeded the ESL for nickel with concentrations ranging from 83 ug/L (B-7) to 5,800 ug/L (B-8). However, TPH-DRO and TPH-MO concentrations were not detected in the 6 groundwater samples collected that were analyzed with silica gel cleanup.

Boring B-8 had insufficient groundwater in the boring for the full suite of sample containers needed for requested chemical analysis. Only VOCs and metals were analyzed from this location.

Groundwater analytical data are summarized in Table 3 and 4. Figure 8 presents grab groundwater concentration distribution map. Note that TPH-DRO and TPH-MO results presented on the figure were analyzed with silica gel clean-up. Refer to earlier text regarding TPH analyzed with silica gel clean-up. The laboratory analytical report with chain-of-custody records are presented in Attachment 2.

Following completion of the grab groundwater sampling, the PVC was removed from each boring and the boreholes were tremie grouted to ground surface. A concrete patch, dyed to match surface conditions, was used for the surface completion.

#### **Investigated Derived Waste**

Soil cuttings generated during the assessment activities were temporarily stored onsite in labeled 55 gallon drums pending characterization and disposal. Investigative derived waste manifests will be submitted under a separate cover and will be uploaded onto GeoTracker once it is received.

#### **Preferential Pathway Survey**

##### Utility Survey

A subsurface utility survey was completed on March 5, 2012 at the site to assess the potential preferential pathways (e.g., water, electric and gas utility trenches) on and near the site. Utilities were identified by a combination of underground service alert (USA) and a private utility surveyor (Cruz Brothers Locators [Cruz]). Figure 9 presents a subsurface utility map. Since the depths of most of the utilities were unknown, the conduits of the utilities were not included in the cross sections. Depth to groundwater has historically ranged between 9.39 (2006/MW-1) to 15.35 (2004 and 2007/MW-2) feet bgs from monitoring wells associated with the site.

A summary of the conduit survey results are presented below.

##### **Water Lines**

The actual depth of the water line could not be determined. The water line runs along the southern side of Seminary Avenue and northern side of MacArthur Boulevard. The water line connects at the intersection of Seminary Avenue and MacArthur Boulevard.



Since the utility is located off site and does not intersect the site it is unlikely to intersect groundwater and act as a conduit for hydrocarbon migration. Historical groundwater levels indicate that groundwater is deeper than 9 feet bgs.

#### **Communication Utilities**

The depth of the communication utilities could not be determined. However, the communication utilities are located on the south-southeast portion of the site which is cross-gradient to historical groundwater flow. In addition, communication lines are relatively shallow.

This utility is not likely to intersect groundwater and act as a conduit for hydrocarbon migration since groundwater is deeper than the conduit.

#### **Sanitary Sewer System**

The actual depth of the sanitary sewer could not be determined. The sewer line runs along the northern and southern side of Seminary Avenue, and the northern side of MacArthur Boulevard right outside the site property line.

This utility does not appear to have intersected groundwater and act as a conduit for hydrocarbon migration.

#### **Electrical Utilities**

The depth of the electrical utilities, according to Cruz, range from 5 inches to 17 inches bgs. Multiple electrical conduits run from the station building to the dispenser islands and planters. A high voltage electrical line runs along the southeast boundary of the site. The depth of this utility is unknown.

This utility does not appear to have intersected groundwater since monitoring and sampling began at the site since the depth of the utility is shallow.

#### **Storm Drain and Piping**

The actual depth of the storm drain is unknown. The storm drain appears to run through the northwest portion of the site and along the northern side of MacArthur Boulevard. The storm drain lines connect at the intersection of Seminary Avenue and MacArthur Boulevard.

### Miscellaneous Subsurface Utilities

Cruz located additional unknown utilities in the northwest portion of the site. These utilities are likely to be shallow. Thus unlikely to intersect groundwater and act as a conduit for hydrocarbon migration.

Groundwater has historically flowed northwest at the site. Utilities located in this direction are the onsite electrical lines running to the dispenser islands and planters. Offsite subsurface utilities in this direction include water, sanitary sewer and storm drain. However, concentrations of petroleum hydrocarbons have generally been nondetect or low at monitoring well MW-2, located in the northwest direction of the site. In addition, these utilities are generally shallower than 9 feet bgs. Historic groundwater has not been recorded higher than 9.39 feet bgs. Thus subsurface utilities on and off site do not appear to have intersected groundwater and act as a conduit for hydrocarbon migration.

### Well Survey

To verify other potential receptors of groundwater, logs for wells within a one quarter mile radius of the site were obtained from the California Department of Water Resources (DWR) and Alameda County Public Works Agency (ACPWA). Table 5 summarizes the result of the well receptor survey from files obtained from ACPWA. The table includes any active, inactive, standby, decommissioned, abandoned and dewatering, drainage and cathodic wells within a one quarter mile radius of the site. 5 monitoring wells, 1 test well, 1 cathodic well, 1 abandoned well and 1 unknown well were identified in this one quarter mile radius well search. Figure 8 presents the well survey map. The latitude and longitude coordinates were provided by ACPWA and plotted on the map. However, there was only one well log available from this table, Well ID 10, which was a cathodic well installed to 120 feet bgs by Pacific Gas & Electric in May 1974. Well construction details were not specified on the well completion report. Table 5 also presents wells located and associated to 5901 and 6001 MacArthur Boulevard. According to GeoTracker, these two addresses are associated with case closures indicating that these monitoring wells are now abandoned.

The files obtained from the California DWR indicated that there was potentially 9 wells (6 monitoring wells and 3 unknown wells) located on Mills College that is near our site. However, the exact location of these wells is unknown and are not presented in Table 5 or Figure 10.

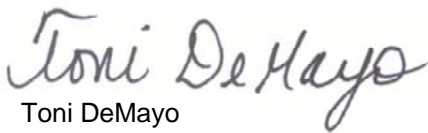
**Conclusions**

The distribution of petroleum hydrocarbons in soil and groundwater indicate that there are residual TPH-DRO and TPH-MO in the vicinity of the former used oil UST. However, the distribution shows that the residual concentration of petroleum hydrocarbons are not migrating from the vicinity of the former used oil UST. PCBs were not detected in soil or groundwater at all locations. Subsurface utilities are likely to be shallower than historic and current groundwater measurements. Thus, are unlikely to intersect groundwater and act as a conduit for hydrocarbon migration. The well survey results show that the location of the known wells are either upgradient or cross-gradient from the site. Since groundwater flow is generally northwest, these wells most likely do not provide a preferential pathway for the migration of petroleum hydrocarbons. ARCADIS recommends the site be considered for low-risk closure.

If you have any questions or comments regarding the content of this letter, please contact Toni DeMayo by telephone at 714.508.2657 or by e-mail at Toni.DeMayo@arcadis-us.com or Melissa Blanchette by telephone at 503.220.8201 extension 1113 or by e-mail at Melissa.Blanchette@arcadis-us.com.

Sincerely,

ARCADIS



Toni DeMayo  
Project Manager



Melissa Blanchette, P.G.  
Certified Project Manager II



Enclosures:

- Table 1                      Soil Analytical Data
- Table 2                      Soil Analytical Data – Additional VOCs
- Table 3                      Grab Groundwater Analytical Data
- Table 4                      Grab Groundwater Analytical Data – Additional VOCs
- Table 5                      Well Survey (Within 0.25 mi from the Site)
  
- Figure 1                     Site Location Map
- Figure 2                     Site Plan with Soil Boring Locations
- Figure 3                     Cross Section Location Map
- Figure 4                     Cross Section A-A'
- Figure 5                     Cross Section B-B'
- Figure 6                     Cross Section C-C'
- Figure 7                     Soil Concentration Distribution Map
- Figure 8                     Grab Groundwater Concentration Distribution Map
- Figure 9                     Subsurface Utility Map
- Figure 10                    Well Survey Map
  
- Attachment 1                Boring Logs
- Attachment 2                Soil and Groundwater Laboratory Analytical Reports with Chain-of-Custody Record

Copies:

Ms. Kelly Esters, Chevron Environmental Management Company  
Mr. Nisson Saidon, Property Owner

**References**

Lang, D., Bastow, T., van Aarssen, B., Davis, B., and Johnston, C. . 2009. Groundwater Monitoring and Remediation. Polar Compounds from the Dissolution of Weathered Diesel. Volume 29, pp 85-93.

Zemo, D.A. 2006. Groundwater Monitoring and Remediation. Sampling in the Smear Zone: Evaluation of Nondissolved Bias and Associated BTEX, MTBE and TPH Concentrations in Groundwater Samples. Volume 26, pp 125-133.

Zemo, D.A. and G.R. Foote. 2003. Groundwater Monitoring and Remediation. The Technical Case for Eliminating the Use of the TPH Analysis in Assessing and Regulating Dissolved Petroleum Hydrocarbons in Ground Water. Volume 23, pp 95-104.



**Tables**

**Table 1**  
**Soil Analytical Results**  
**Former Chevron Service Station No. 9-9708**  
**5910 MacArthur Boulevard, Oakland, CA**

| Sample Name   | Sample Date | Sample Depth (feet bgs) | Diesel Range Organics (EPA 8015B) |                                |                |                               | VOCs (EPA 8260B) |                 |                      |                       |              | PCBs (EPA Method 8082) | Metals (EPA 6010B) |              |                |                  |                 |
|---|-------------|-------------------------|-----------------------------------|--------------------------------|----------------|-------------------------------|------------------|-----------------|----------------------|-----------------------|--------------|------------------------|--------------------|--------------|----------------|------------------|-----------------|
|   |             |                         | TPH-DRO (mg/kg)                   | TPH-DRO with silica gel(mg/kg) | TPH-MO (mg/kg) | TPH-MO with silica gel(mg/kg) | Benzene (mg/kg)  | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Total Xylenes (mg/kg) | MTBE (mg/kg) | PCBs (mg/kg)           | Lead (mg/kg)       | Zinc (mg/kg) | Nickel (mg/kg) | Chromium (mg/kg) | Cadmium (mg/kg) |
| ESLs for Shallow Soils (≤3m bgs)<br>Groundwater is Current or Potential Source of Drinking Water <sup>1</sup> |             |                         | 83                                | 83                             | 2,500          | 2,500                         | 0.044            | 2.9             | 3.3                  | 2.3                   | 0.023        | 0.74                   | 750                | 600          | 150            | --               | 7.4             |
| ESLs for Deep Soils (>3m bgs)<br>Groundwater is Current or Potential Source of Drinking Water <sup>1</sup>    |             |                         | 83                                | 83                             | 5,000          | 5,000                         | 0.044            | 2.9             | 3.3                  | 2.3                   | 0.023        | 6.3                    | 750                | 5,000        | 260            | 5,000            | 39              |
| B-1   | 06/12/12    | 4                       | <5.0                              | <5.0                           | <5.0           | <5.0                          | <0.0020          | <0.0020         | <0.0020              | <0.0020               | <0.0050      | <0.050                 | 15                 | 93           | <b>310</b>     | 170              | <1.0            |
|   | 06/14/12    | 12                      | <b>590</b>                        | <b>500</b>                     | 330            | 280                           | <0.0020          | <0.0020         | <0.0020              | <0.0020               | <0.0050      | <0.050                 | 14                 | 74           | 120            | 90               | <1.0            |
| B-2   | 06/14/12    | 2                       | <5.0                              | <5.0                           | <5.0           | <5.0                          | <0.0020          | <0.0020         | <0.0020              | <0.0020               | <0.0050      | <0.050                 | 16                 | 97           | <b>380</b>     | 130              | <2.5            |
|   | 06/14/12    | 12                      | <b>610</b>                        | <b>260</b>                     | 310            | 250                           | <0.0020          | <0.0020         | <0.0020              | <0.0020               | <0.0050      | <0.050                 | 14                 | 76           | 98             | 65               | <1.0            |
| B-3   | 06/14/12    | 4                       | <5.0                              | <5.0                           | <5.0           | <5.0                          | <0.0020          | <0.0020         | <0.0020              | <0.0020               | <0.0050      | <0.050                 | 13                 | 79           | <b>150</b>     | 83               | <2.5            |
|   | 06/15/12    | 12                      | <5.0                              | <5.0                           | <5.0           | <5.0                          | <0.0020          | <0.0020         | <0.0020              | <0.0020               | <0.0050      | <0.050                 | 7.8                | 37           | 71             | 71               | <0.50           |
| B-4   | 06/13/12    | 8                       | <5.0                              | <5.0                           | <5.0           | <5.0                          | <0.0020          | <0.0020         | <0.0020              | <0.0020               | <0.0050      | <0.050                 | 13                 | 38           | 30             | 34               | 0.49            |
|   | 06/16/12    | 12                      | 80                                | <10                            | 33             | <10                           | <0.0020          | <0.0020         | <0.0020              | <0.0020               | <0.0050      | <0.050                 | 8.7                | 330          | 120            | 77               | 1.5             |
| B-6   | 06/13/12    | 4                       | <5.0                              | 5.9                            | <5.0           | 8.8                           | <0.0020          | <0.0020         | <0.0020              | <0.0020               | <0.0050      | <0.050                 | 18                 | 96           | <b>220</b>     | 99               | <1.0            |
|   | 06/13/12    | 6                       | <5.0                              | <5.0                           | <5.0           | <5.0                          | <0.0020          | <0.0020         | <0.0020              | <0.0020               | <0.0050      | <0.050                 | 14                 | 96           | <b>200</b>     | 81               | <1.0            |
| B-7   | 06/13/12    | 14                      | <15                               | <15                            | <15            | <15                           | <0.0097          | <0.0097         | 0.350                | <0.0097               | <0.024       | <0.050                 | 13                 | 62           | 96             | 55               | <1.0            |
|   | 06/14/12    | 6                       | <5.0                              | <5.0                           | <5.0           | <5.0                          | <0.0020          | <0.0020         | <0.0020              | <0.0020               | 0.013        | <0.050                 | 13                 | 87           | <b>190</b>     | 110              | <0.99           |
| B-8   | 06/14/12    | 14                      | <15                               | <5.0                           | <15            | <5.0                          | <0.0020          | <0.0020         | 0.0021               | <0.0020               | <0.0050      | <0.050                 | 12                 | 63           | 93             | 57               | <0.99           |

**Explanation**

EPA Environmental Protection Agency  
bgs Below ground surface  
TPH-DRO Total Petroleum Hydrocarbons as Diesel Range Organics  
TPH-MO Total Petroleum Hydrocarbons as Motor Oil  
MTBE Methyl Tertiary Butyl Ether  
PCB Polychlorinated Biphenyls (All Aroclors were not detected)  
ESL Environmental Screening Level (*Screening for Environmental Concerns at Sites with Contaminates Soil and Groundwater*), California RWQCB-San Francisco Bay Region, Interim Final - November 2007 (Revised May 2008)  
mg/kg Milligrams per kilogram  
<0.0005 Not detected at concentration threshold as shown  
-- Not Applicable  
**BOLD** Concentrations meets or exceeds their respective ESL  
<sup>1</sup> For Commercial/Industrial Land Use Only

**Table 2**  
**Soil Analytical Data - Additional VOCs**  
**Former Chevron Service Station No. 9-9708**  
**5910 MacArthur Boulevard, Oakland, CA**

| Sample Name   | Sample Date | Sample Depth (feet bgs) | VOCs (EPA 8260B)               |                             |                                |                    |                          |                     |                        |                         |                          |                           |                            |
|---|-------------|-------------------------|--------------------------------|-----------------------------|--------------------------------|--------------------|--------------------------|---------------------|------------------------|-------------------------|--------------------------|---------------------------|----------------------------|
|   |             |                         | 1,2,4-Trimethylbenzene (mg/kg) | 1,2-Dichlorobenzene (mg/kg) | 1,3,5-Trimethylbenzene (mg/kg) | Chloroform (mg/kg) | Isopropylbenzene (mg/kg) | Naphthalene (mg/kg) | n-Butylbenzene (mg/kg) | N-Propylbenzene (mg/kg) | sec-Butylbenzene (mg/kg) | tert-Butylbenzene (mg/kg) | p-Isopropyltoluene (mg/kg) |
| ESLs for Shallow Soils (≤3m bgs)<br>Groundwater is Current or Potential Source of Drinking Water <sup>1</sup> |             |                         | --                             | 1.1                         | --                             | 1.5                | --                       | 2.8                 | --                     | --                      | --                       | --                        | --                         |
| ESLs for Deep Soils (>3m bgs)<br>Groundwater is Current or Potential Source of Drinking Water <sup>1</sup>    |             |                         | --                             | 1.1                         | --                             | 2.1                | --                       | 3.4                 | --                     | --                      | --                       | --                        |                            |
| B-1   | 06/12/12    | 4                       | <0.0020                        | <0.0020                     | <0.0020                        | <0.0020            | <0.0020                  | <0.0050             | <0.0050                | <0.0020                 | <0.0050                  | <0.0050                   | <0.0020                    |
|   | 06/14/12    | 12                      | <0.0020                        | <0.0020                     | <0.0020                        | <0.0020            | <0.0020                  | <0.0050             | <0.0050                | <0.0020                 | <0.0050                  | <0.0050                   | <0.0020                    |
| B-2   | 06/14/12    | 2                       | <0.0020                        | <0.0020                     | <0.0020                        | <0.0020            | <0.0020                  | <0.0050             | <0.0050                | <0.0020                 | <0.0050                  | <0.0050                   | <0.0020                    |
|   | 06/14/12    | 12                      | <0.0020                        | 0.0023                      | <0.0020                        | <0.0020            | <0.0020                  | <0.0050             | <0.0050                | <0.0020                 | 0.0065                   | <0.0050                   | <0.0020                    |
| B-3   | 06/14/12    | 4                       | <0.0020                        | <0.0020                     | <0.0020                        | <0.0020            | <0.0020                  | <0.0050             | <0.0050                | <0.0020                 | <0.0050                  | <0.0050                   | <0.0020                    |
|   | 06/15/12    | 12                      | <0.0020                        | <0.0020                     | <0.0020                        | <0.0020            | <0.0020                  | <0.0050             | <0.0050                | <0.0020                 | <0.0050                  | <0.0050                   | <0.0020                    |
| B-4   | 06/13/12    | 8                       | <0.0020                        | <0.0020                     | <0.0020                        | <0.0020            | <0.0020                  | <0.0050             | <0.0050                | <0.0020                 | <0.0050                  | <0.0050                   | <0.0020                    |
|   | 05/16/12    | 12                      | <0.0020                        | <0.0020                     | <0.0020                        | <0.0020            | <0.0020                  | <0.0050             | <0.0050                | <0.0020                 | <0.0050                  | <0.0050                   | <0.0020                    |
| B-6   | 06/13/12    | 4                       | <0.0020                        | <0.0020                     | <0.0020                        | <0.0020            | <0.0020                  | <0.0050             | <0.0050                | <0.0020                 | <0.0050                  | <0.0050                   | <0.0020                    |
| B-7   | 06/13/12    | 6                       | <0.0020                        | <0.0020                     | <0.0020                        | <0.0020            | <0.0020                  | <0.0050             | <0.0050                | <0.0020                 | <0.0050                  | <0.0050                   | <0.0020                    |
|   | 06/13/12    | 14                      | 0.075                          | <0.0097                     | 0.056                          | <0.0097            | 0.094                    | 0.200               | 0.210                  | 0.340                   | 0.056                    | 0.200                     | 0.038                      |
| B-8   | 06/14/12    | 6                       | <0.0020                        | <0.0020                     | <0.0020                        | <0.0020            | <0.0020                  | <0.0050             | <0.0050                | <0.0020                 | <0.0050                  | <0.0050                   | <0.0020                    |
|   | 06/14/12    | 14                      | <0.0020                        | <0.0020                     | <0.0020                        | <0.0020            | <0.0020                  | <0.0050             | <0.0050                | 0.0035                  | <0.0050                  | <0.0050                   | <0.0020                    |

**Explanation**

bgs Below ground surface  
mg/kg Milligrams per kilogram  
EPA Environmental Protection Agency  
ESL Environmental Screening Level (*Screening for Environmental Concerns at Sites with Contaminates Soil and Groundwater*), California RWQCB-San Francisco Bay Region, Interim Final - November 2007 (Revised May 2008)  
<0.0005 Not detected at concentration threshold as shown  
-- Not Applicable  
**BOLD** Concentrations meets or exceeds their respective ESL  
<sup>1</sup> For Commercial/Industrial Land Use Only



**Table 3**  
**Grab Groundwater Analytical Data**  
**Former Chevron Service Station No. 9-9708**  
**5910 MacArthur Boulevard, Oakland, CA**

| Sample Name  | Sample Date | Diesel Range Organics (EPA 8015B) |                                |               |                              | VOCs (EPA 8260B) |                |                     |                      |             | PCBs (EPA 8082) | Metals (EPA 6010B) |              |               |                 |                |
|--|-------------|-----------------------------------|--------------------------------|---------------|------------------------------|------------------|----------------|---------------------|----------------------|-------------|-----------------|--------------------|--------------|---------------|-----------------|----------------|
|  |             | TPH-DRO (µg/L)                    | TPH-DRO with silica gel (µg/L) | TPH-mo (µg/L) | TPH-mo with silica gel(µg/L) | Benzene (µg/L)   | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | PCBs (µg/L)     | Lead (µg/L)        | Zinc (µg/L)  | Nickel (µg/L) | Chromium (µg/L) | Cadmium (µg/L) |
| ESLs for Deep Soils (>3m bgs)<br>Groundwater is Current or Potential Source of Drinking Water <sup>1</sup> |             | 100                               | 100                            | 100           | 100                          | 1                | 40             | 30                  | 20                   | 5           | 0.014           | 2.5                | 81           | 8.2           | 50              | 0.025          |
| California MCLs  |             | --                                | --                             | --            | --                           | 1                | 150            | 300                 | 1,750                | 13          | 0.5             | 15                 | --           | 100           | --              | 5              |
| B-1  | 06/14/12    | <b>960</b>                        | <480                           | <b>710</b>    | <480                         | <0.50            | <0.50          | <0.50               | <0.50                | <0.50       | <0.97           | <b>22</b>          | <b>460</b>   | <b>890</b>    | <b>390</b>      | <10            |
| B-2  | 06/15/12    | <b>1,500</b>                      | <490                           | <b>900</b>    | <490                         | <0.50            | <0.50          | <0.50               | <0.50                | <0.50       | <1.4            | <5.0               | <20          | <b>46</b>     | 13              | <50            |
| B-3  | 06/15/12    | <72                               | <480                           | <72           | <480                         | <0.50            | <0.50          | <0.50               | <0.50                | <0.50       | <0.95           | <b>310</b>         | <b>1,600</b> | <b>3,000</b>  | <b>1,300</b>    | <50            |
| B-4  | 06/15/12    | 77                                | <500                           | <49           | <500                         | <0.50            | <0.50          | <0.50               | <0.50                | <0.50       | <0.99           | <b>750</b>         | <b>5,100</b> | <b>5,800</b>  | <b>3,500</b>    | <50            |
| B-7  | 06/15/12    | <48                               | <480                           | <48           | <480                         | 0.90             | <0.50          | 3.6                 | <0.50                | 2.3         | <0.96           | <b>10</b>          | <b>68</b>    | <b>83</b>     | <b>65</b>       | <50            |
| B-8*   | 06/15/12    | --                                | --                             | --            | --                           | 0.56             | <0.50          | 14                  | <0.50                | <b>12</b>   | --              | <b>180</b>         | <b>1,700</b> | <b>2,100</b>  | <b>1,300</b>    | <50            |

**Explanation**

- bgs Below ground surface
- TPH-DRO Total Petroleum Hydrocarbons as Diesel Range Organics
- TPH-MO Total Petroleum Hydrocarbons as Motor Oil
- MTBE Methyl Tertiary Butyl Ether
- PCB Polychlorinated Biphenyls (All Aroclors were not detected)
- EPA Environmental Protection Agency
- µg/L Micrograms per liter
- ESL Environmental Screening Level (*Screening for Environmental Concerns at Sites with Contaminates Soil and Groundwater*), California RWQCB-San Francisco Bay Region, Interim Final - November 2007 (Revised May 2008)
- MCL Maximum Contaminant Level
- <0.0005 Not detected at concentration threshold as shown
- Not Analyzed/Applicable
- BOLD** Concentrations meets or exceeds their respective ESL
- <sup>1</sup> For Commercial/Industrial Land Use Only
- \* B-8 went dry before all the sample containers were filled.

**Table 4**  
**Grab Groundwater Analytical Data - Additional VOCs**  
**Former Chevron Service Station No. 9-9708**  
**5910 MacArthur Boulevard, Oakland, CA**

| Sample Name   | Sample Date | VOCs (EPA 8260B)              |                            |                               |                   |                         |                    |                       |                        |                         |                          |                           |
|---|-------------|-------------------------------|----------------------------|-------------------------------|-------------------|-------------------------|--------------------|-----------------------|------------------------|-------------------------|--------------------------|---------------------------|
|   |             | 1,2,4-Trimethylbenzene (µg/L) | 1,2-Dichlorobenzene (µg/L) | 1,3,5-Trimethylbenzene (µg/L) | Chloroform (µg/L) | Isopropylbenzene (µg/L) | Naphthalene (µg/L) | n-Butylbenzene (µg/L) | N-Propylbenzene (µg/L) | sec-Butylbenzene (µg/L) | tert-Butylbenzene (µg/L) | p-Isopropyltoluene (µg/L) |
| ESLs for Deep Soils (>3m bgs)<br>Groundwater is Current or Potential<br>Source of Drinking Water <sup>1</sup> |             | --                            | 10                         | --                            | 70                | --                      | 17                 | --                    | --                     | --                      | --                       | --                        |
| California MCLs   |             | --                            | 600                        | --                            | --                | --                      | --                 | --                    | --                     | --                      | --                       | --                        |
| B-1   | 06/14/12    | <0.50                         | <0.50                      | <0.50                         | 1.2               | <0.50                   | <0.50              | <0.50                 | <0.50                  | <0.50                   | <0.50                    | <0.50                     |
| B-2   | 06/15/12    | <0.50                         | <0.50                      | <0.50                         | <0.50             | <0.50                   | <0.50              | <0.50                 | <0.50                  | <0.50                   | <0.50                    | <0.50                     |
| B-3   | 06/15/12    | <0.50                         | <0.50                      | <0.50                         | 8.7               | <0.50                   | <0.50              | <0.50                 | <0.50                  | <0.50                   | <0.50                    | <0.50                     |
| B-4   | 06/15/12    | <0.50                         | <0.50                      | <0.50                         | <0.50             | <0.50                   | <0.50              | <0.50                 | <0.50                  | <0.50                   | 1                        | <0.50                     |
| B-7   | 06/15/12    | <0.50                         | <0.50                      | <0.50                         | <0.50             | <0.50                   | <0.50              | <0.50                 | 0.68                   | <0.50                   | 0.73                     | <0.50                     |
| B-8   | 06/15/12    | <0.50                         | <0.50                      | <0.50                         | <0.50             | 3.3                     | <0.50              | <0.50                 | 6.4                    | 0.82                    | 7.7                      | 0.57                      |

bgs Below ground surface  
EPA Environmental Protection Agency  
µg/L Micrograms per liter  
ESL Environmental Screening Level (*Screening for Environmental Concerns at Sites with Contaminates Soil and Groundwater*), California RWQCB-San Francisco Bay Region, Interim Final - November 2007 (Revised May 2008)  
MCL Maximum Contaminant Level  
<0.0005 Not detected at concentration threshold as shown  
-- Not Analyzed  
**BOLD** Concentrations meets or exceeds their respective ESL  
<sup>1</sup> For Commercial/Industrial Land Use Only

**Table 5**  
**Well Survey (Within 0.25 mi. from the Site)**  
**Former Chevron Service Station No. 9-9708**  
**5910 MacArthur Boulevard, Oakland, CA**

| Map ID                  | Latitude   | Longitude  | Location                 | Owner                  | Use | Date Installed | Total Depth (ft) | Boring Diameter (in) | Well Screen or Perforations (ft bgs) | Blank Casing (ft bgs) | WCR #  |
|-------------------------|------------|------------|--------------------------|------------------------|-----|----------------|------------------|----------------------|--------------------------------------|-----------------------|--------|
| <b>MONITORING WELLS</b> |            |            |                          |                        |     |                |                  |                      |                                      |                       |        |
| 11                      | 122.182095 | -37.775617 | 6001 MacArthur Blvd      | Quik Stop Markets, Inc | MON | May-93         | 28               | 4                    | --                                   | --                    | --     |
| 12                      | 122.182095 | -37.775617 | 6001 MacArthur Blvd      | Quik Stop Markets, Inc | MON | May-93         | 29               | 4                    | --                                   | --                    | --     |
| 13                      | 122.182095 | -37.775617 | 6001 MacArthur Blvd      | Quik Stop Markets, Inc | MON | May-93         | 29               | 4                    | --                                   | --                    | --     |
| 15                      | 122.182906 | -37.776056 | 5901 MacArthur Blvd      | --                     | MON | Oct-95         | 20               | 4                    | --                                   | --                    | --     |
| 16                      | 122.182906 | -37.776056 | 5901 MacArthur Blvd      | --                     | MON | Oct-95         | 20               | 4                    | --                                   | --                    | --     |
| <b>CATHODIC WELLS</b>   |            |            |                          |                        |     |                |                  |                      |                                      |                       |        |
| 10                      | 122.180518 | -37.777407 | MACARTHUR BLVD & 61TH ST | PG&E                   | CAT | May-74         | 120              | --                   | --                                   | --                    | 120160 |
| <b>TEST WELL</b>        |            |            |                          |                        |     |                |                  |                      |                                      |                       |        |
| 14                      | 122.182938 | -37.77603  | 5901 MacArthur Blvd      | Wickland Properties    | TES | Oct-93         | 26               | 4                    | --                                   | --                    | --     |
| <b>ABANDONED WELLS</b>  |            |            |                          |                        |     |                |                  |                      |                                      |                       |        |
| 9                       | 122.180518 | -37.777407 | 5000 MACARTHUR BLVD      | MILLS COLLEGE          | ABN | --             | 0                | 6                    | --                                   | --                    | --     |
| <b>UNKNOWN WELLS</b>    |            |            |                          |                        |     |                |                  |                      |                                      |                       |        |
| 8                       | 122.180494 | -37.781117 | BEHIND MILL POND         | MILLS COLLEGE          | --  | --             | 0                | 0                    | --                                   | --                    | --     |

**Explanation**

ft feet  
in inch  
bgs below ground surface  
WCR Well Completion Report  
-- Not Available

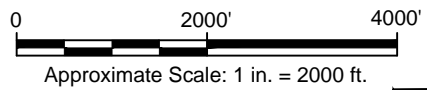
ARCADIS

**Figures**

CITY: PETALUMA, CA DIV/GROUP: ENVCAD DB: J. HARRIS  
 C:\Users\jharris\Desktop\ENVCAD\B0609019708\000002\SA&PPSR\DWG\G06901ND02.dwg LAYOUT: 1 SAVED: 7/15/2012 12:06 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 7/15/2012 12:18 PM BY: HARRIS, JESSICA  
 IMAGES: PROJECTNAME: ...  
 XREFS: Oakland East 2012.jpg



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., OAKLAND EAST, CALIFORNIA, 2012.



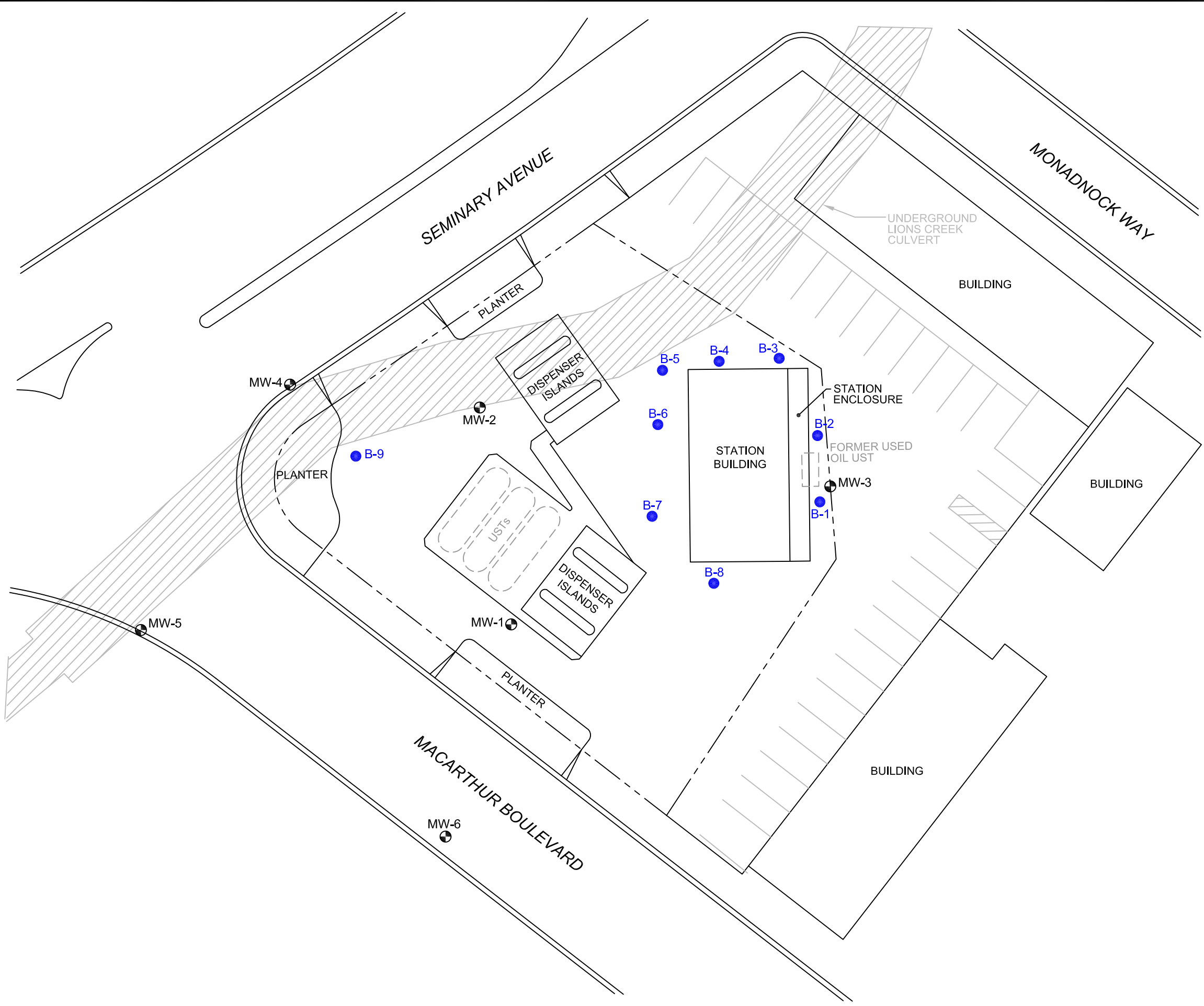
FORMER CHEVRON SERVICE STATION NO. 9-9708  
 5910 MACARTHUR BOULEVARD, OAKLAND, CA  
**SITE ASSESSMENT AND PREFERENTIAL PATHWAY  
 SURVEY REPORT**

**SITE LOCATION MAP**



FIGURE  
**1**

CITY: PETALUMA, CA DIV/GROUP: ENVCAD DB: (P. LUSTERY, J. HARRIS) C:\Users\jharris\Desktop\ENVCAD\B00609019708\000002\SA&PFSR\DWG\60901B01.dwg LAYOUT: 2 SAVED: 7/15/2012 12:36 PM ACADVER: 18.1 S (LMS TECH) PAGES: 21 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 7/15/2012 12:37 PM BY: HARRIS, JESSICA XREFS: IMAGES: PROJECTNAME: --

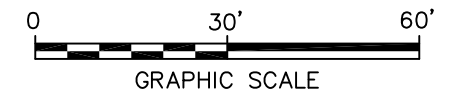


**LEGEND:**

- PROPERTY LINE
- MW-1 MONITORING WELL
- B-1 BORING LOCATION (APPROXIMATE)
- UNDERGROUND STORAGE TANK

**NOTES:**

1. BASE MAP DIGITIZED FROM A PHOTOCOPY OF A DRAWING BY CONESTOGA-ROVER ASSOCIATES (CRA) TITLED "GROUNDWATER ELEVATION AND HYDROCARBON CONCENTRATION MAP", DATED JUNE 13, 2011, AT A SCALE OF 1" = 30'.
2. ALL LOCATIONS ARE APPROXIMATE.

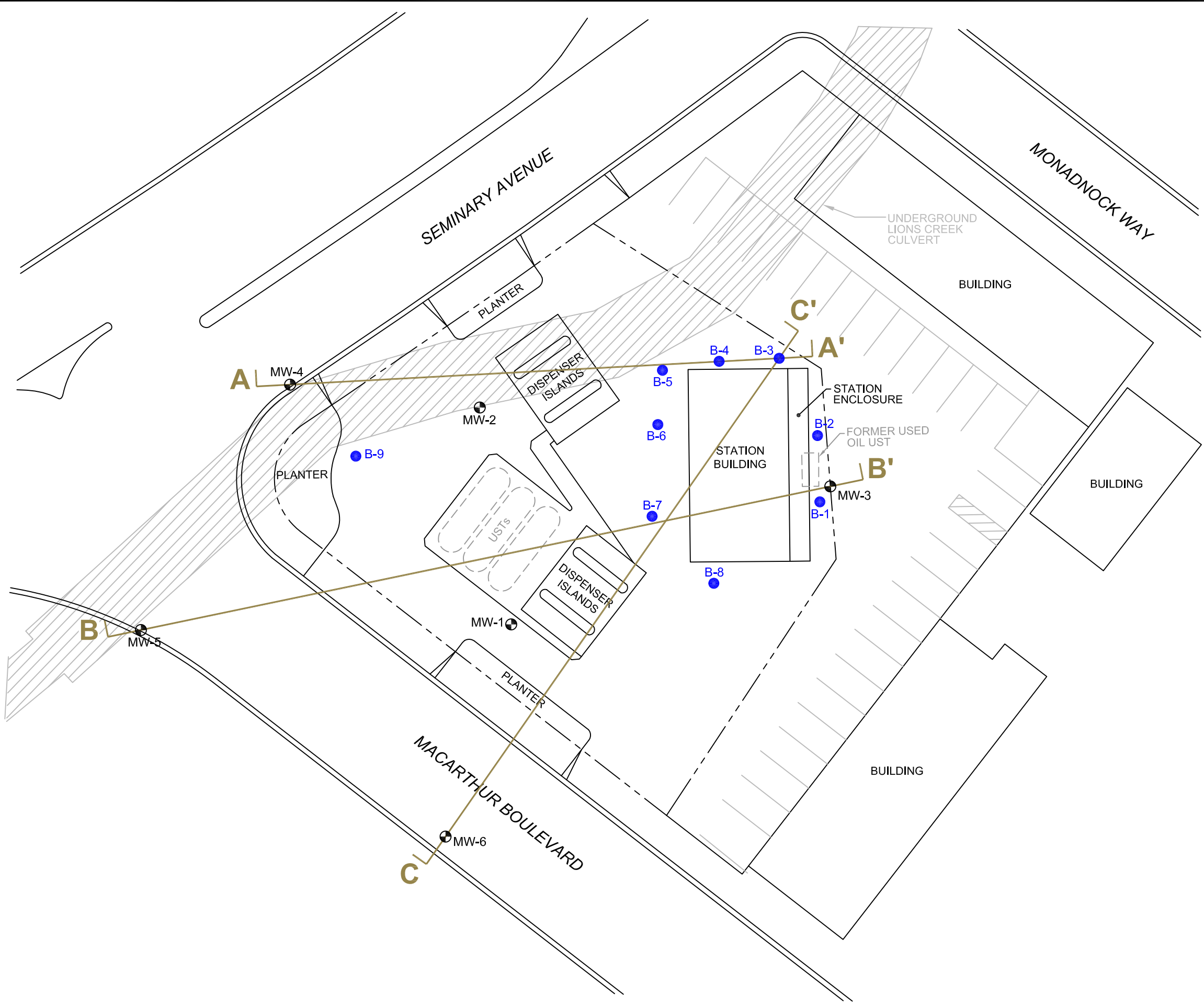


FORMER CHEVRON SERVICE STATION NO. 9-9708  
5910 MACARTHUR BOULEVARD, OAKLAND, CA  
**SITE ASSESSMENT AND PREFERENTIAL PATHWAY  
SURVEY REPORT**

**SITE MAP WITH  
SOIL BORING LOCATIONS**



CITY: PETALUMA, CA DIV/GROUP: ENVCAD DB: (P. LUSTERY, J. HARRIS C:\Users\jharris\Desktop\ENVCAD\B0609019708\000002\SA&PPSR\DWG\60901B02.dwg LAYOUT: 3 SAVED: 7/15/2012 12:52 PM ACADVER: 18.1 S (LMS TECH) PAGES: 3 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 7/15/2012 12:52 PM BY: HARRIS, JESSICA XREFS: IMAGES: PROJECTNAME: -

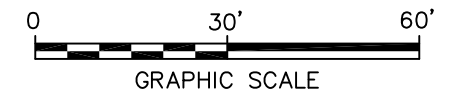


**LEGEND:**

- PROPERTY LINE
- MW-1 MONITORING WELL
- B-1 BORING LOCATION (APPROXIMATE)
- UNDERGROUND STORAGE TANK
- A A' LINE OF GEOLOGIC CROSS SECTION

**NOTES:**

1. BASE MAP DIGITIZED FROM A PHOTOCOPY OF A DRAWING BY CONESTOGA-ROVER ASSOCIATES (CRA) TITLED "GROUNDWATER ELEVATION AND HYDROCARBON CONCENTRATION MAP", DATED JUNE 13, 2011, AT A SCALE OF 1" = 30'.
2. ALL LOCATIONS ARE APPROXIMATE.



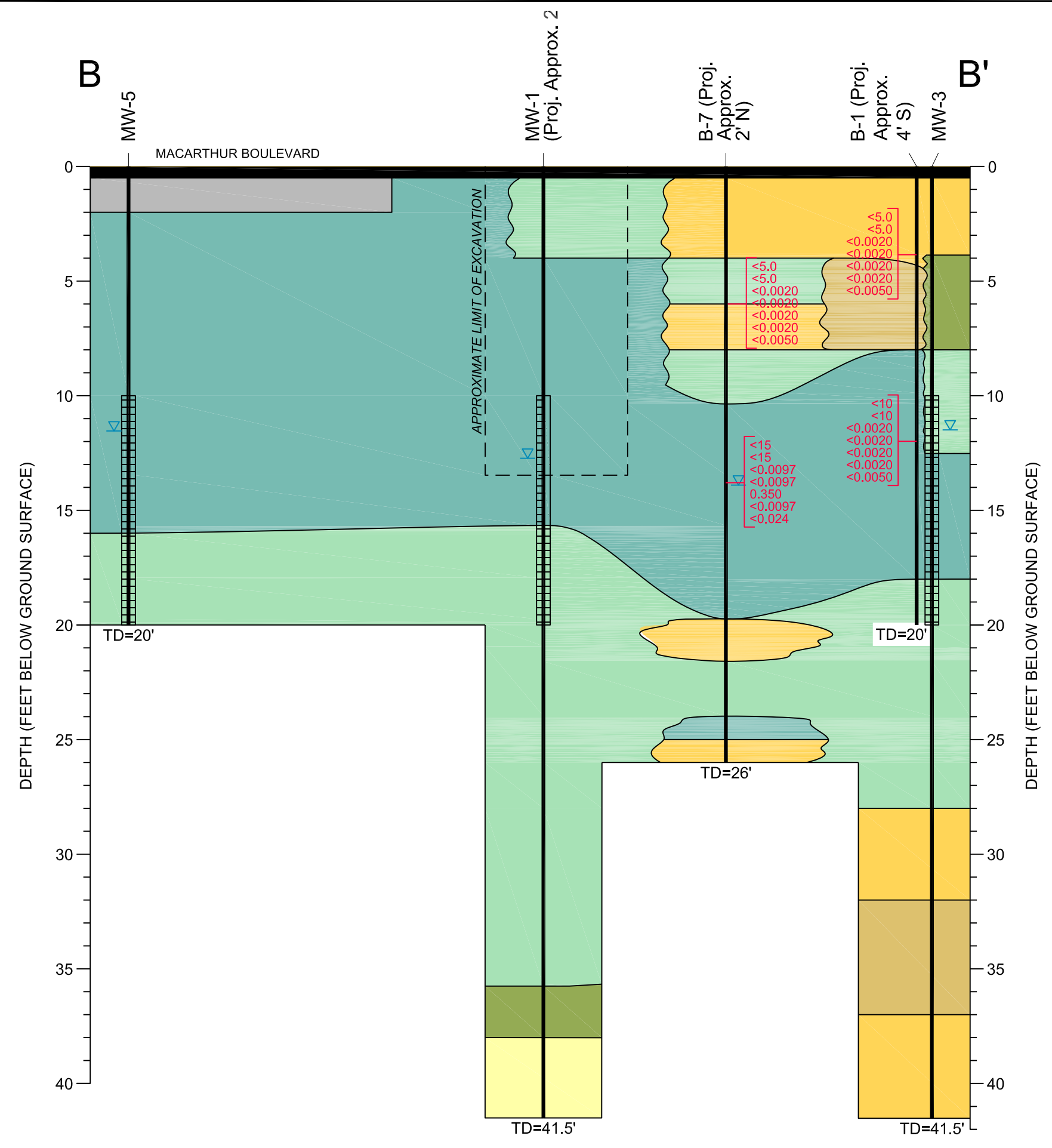
FORMER CHEVRON SERVICE STATION NO. 9-9708  
5910 MACARTHUR BOULEVARD, OAKLAND, CA  
**SITE ASSESSMENT AND PREFERENTIAL PATHWAY SURVEY REPORT**

**CROSS SECTION LOCATION MAP**









**LEGEND**

- WELL / BORING ID
- GROUND SURFACE
- LITHOLOGIC CONTACT
- SCREEN INTERVAL
- TOTAL DEPTH (FEET)
- WATER LEVEL MEASUREMENT (FIRST SIGN OF WATER FROM BORING OR MEASUREMENT FROM MONITORING WELL COLLECTED IN DECEMBER 2011)
- ASPHALT
- CONCRETE
- SANDY CLAY AND CLAY
- CLAYEY GRAVEL
- SANDY SILT AND SILT
- SILTY SAND
- SAND AND CLAYEY SAND
- SAND WITH GRAVEL
- TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS WITH SILICA GEL CLEAN-UP
- TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL WITH SILICA GEL CLEAN-UP
- BENZENE
- TOLUENE
- ETHYLBENZENE
- TOTAL XYLENES
- METHYL TERTIARY BUTYL ETHER

**HORIZONTAL SCALE:** 0, 30', 60'

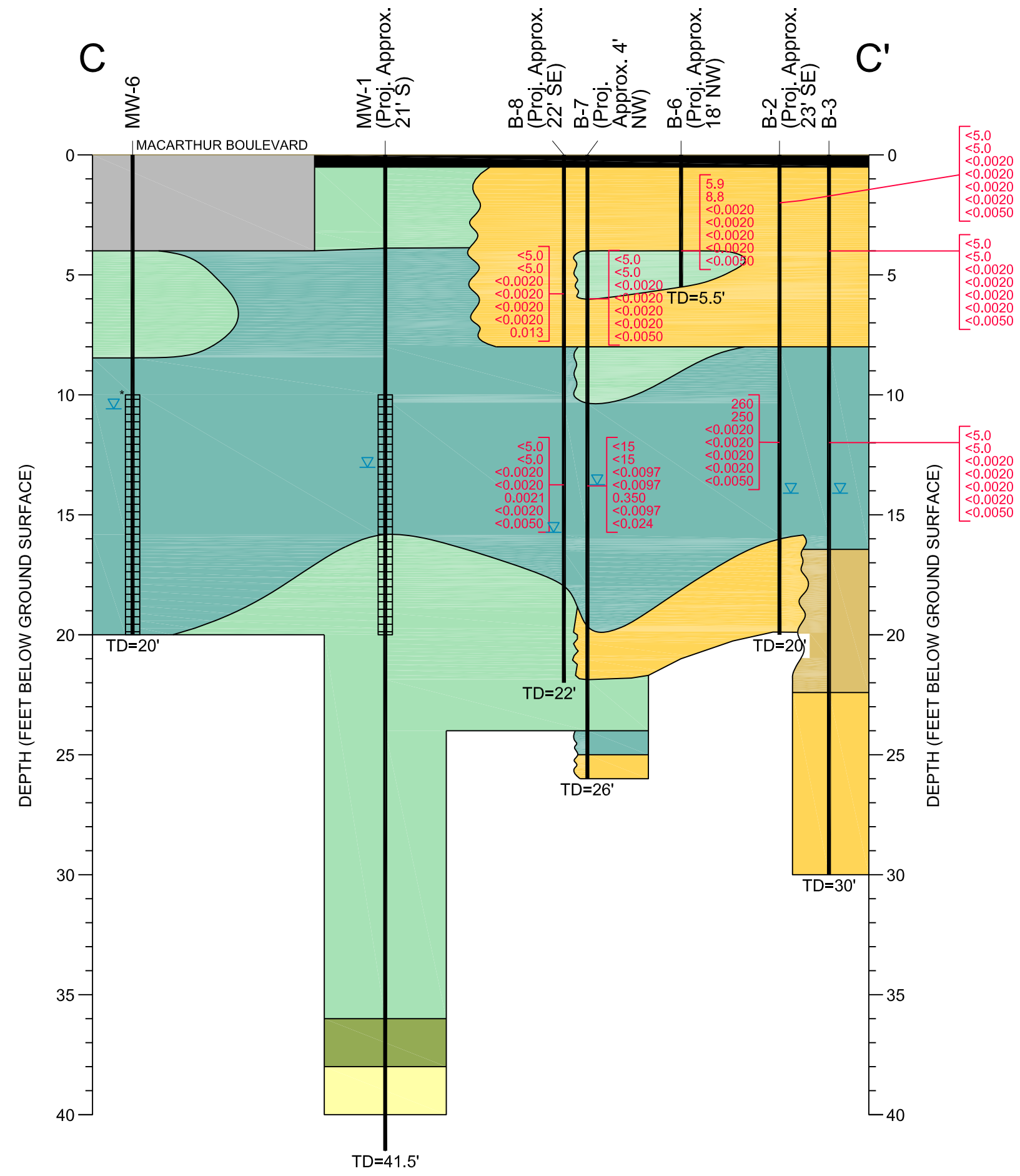
**VERTICAL SCALE:** 0, 5', 10'

FORMER CHEVRON SERVICE STATION NO. 9-9708  
5910 MACARTHUR BOULEVARD, OAKLAND, CA  
**SITE ASSESSMENT AND PREFERENTIAL PATHWAY SURVEY REPORT**

**CROSS SECTION B-B'**

FIGURE 5

CITY: PETALUMA, CA DIV/GROUP: ENVCAD DB: (P. LUSTERY, J. HARRIS)  
 G:\ENVCAD\Irvine\CAIRETURN-TO-Petaluma-CA\B0609019708\00002\SA&PPSR\DWG\60901V03.dwg ACADVER: 18.1S (LMS TECH) LAYOUT: 6  
 SAVED: 7/17/2012 4:52 PM PAGES: 6 PLOTTED: 7/17/2012 4:52 PM BY: ROBITAILLE, BEVERLY  
 XREFS: IMAGES: PROJECTNAME: --  
 XSECS\_Page\_3.dwg



**LEGEND**

- WELL / BORING ID
- GROUND SURFACE
- LITHOLOGIC CONTACT
- SCREEN INTERVAL
- TOTAL DEPTH (FEET)
- WATER LEVEL MEASUREMENT (FIRST SIGN OF WATER FROM BORING OR MEASUREMENT FROM MONITORING WELL COLLECTED IN DECEMBER 2011)

- ASPHALT
- CONCRETE
- SANDY CLAY AND CLAY
- CLAYEY GRAVEL
- SANDY SILT AND SILT
- SILTY SAND
- SAND AND CLAYEY SAND
- SAND WITH GRAVEL

- TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS WITH SILICA GEL CLEAN-UP
- TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL WITH SILICA GEL CLEAN-UP
- BENZENE
- TOLUENE
- ETHYLBENZENE
- TOTAL XYLENES
- METHYL TERTIARY BUTYL ETHER

\* FROM JUNE 2011 SINCE DECEMBER 2011 DATA WAS NOT AVAILABLE

0 30' 60'  
 HORIZONTAL SCALE

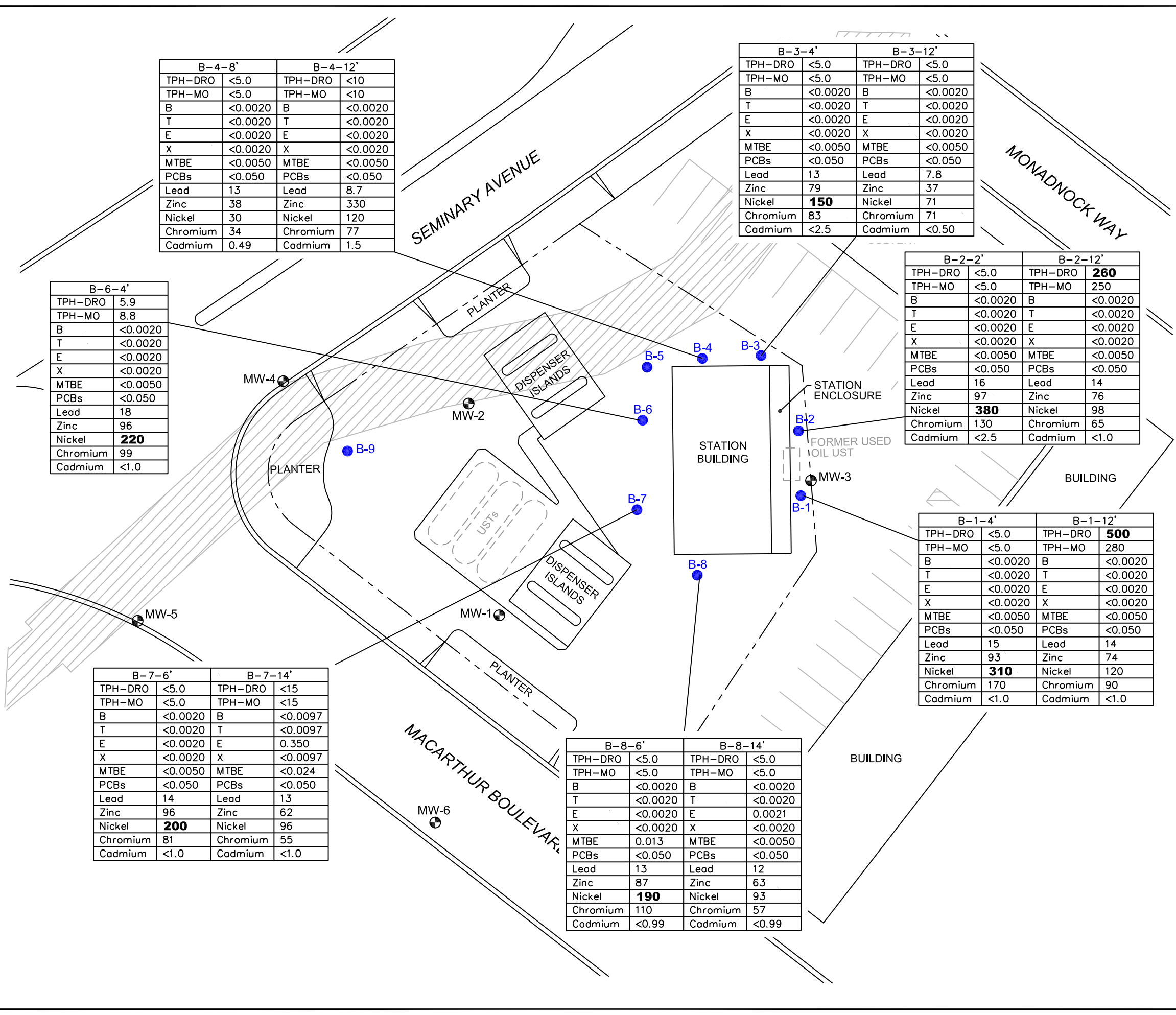
0 5' 10'  
 VERTICAL SCALE

FORMER CHEVRON SERVICE STATION NO. 9-9708  
 5910 MACARTHUR BOULEVARD, OAKLAND, CA  
**SITE ASSESSMENT AND PREFERENTIAL PATHWAY SURVEY REPORT**

**CROSS SECTION C-C'**

FIGURE 6

CITY: PETALUMA, CA DIV/GROUP: ENV/CAD DB: (P. LISTER, J. HARRIS) G:\ENV\CAD\Irvine\CAIR\RETURN-TO-Petaluma-CA\B0609019708100002\S&A\PPSR\DWG\60901B04.dwg LAYOUT: 7. SAVED: 7/17/2012 5:04 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 7/17/2012 5:04 PM BY: ROBITAILLE, BEVERLY XREFS: IMAGES: PROJECTNAME: -



| B-4-8'   |         | B-4-12'  |         |
|----------|---------|----------|---------|
| TPH-DRO  | <5.0    | TPH-DRO  | <10     |
| TPH-MO   | <5.0    | TPH-MO   | <10     |
| B        | <0.0020 | B        | <0.0020 |
| T        | <0.0020 | T        | <0.0020 |
| E        | <0.0020 | E        | <0.0020 |
| X        | <0.0020 | X        | <0.0020 |
| MTBE     | <0.0050 | MTBE     | <0.0050 |
| PCBs     | <0.050  | PCBs     | <0.050  |
| Lead     | 13      | Lead     | 8.7     |
| Zinc     | 38      | Zinc     | 330     |
| Nickel   | 30      | Nickel   | 120     |
| Chromium | 34      | Chromium | 77      |
| Cadmium  | 0.49    | Cadmium  | 1.5     |

| B-3-4'   |            | B-3-12'  |         |
|----------|------------|----------|---------|
| TPH-DRO  | <5.0       | TPH-DRO  | <5.0    |
| TPH-MO   | <5.0       | TPH-MO   | <5.0    |
| B        | <0.0020    | B        | <0.0020 |
| T        | <0.0020    | T        | <0.0020 |
| E        | <0.0020    | E        | <0.0020 |
| X        | <0.0020    | X        | <0.0020 |
| MTBE     | <0.0050    | MTBE     | <0.0050 |
| PCBs     | <0.050     | PCBs     | <0.050  |
| Lead     | 13         | Lead     | 7.8     |
| Zinc     | 79         | Zinc     | 37      |
| Nickel   | <b>150</b> | Nickel   | 71      |
| Chromium | 83         | Chromium | 71      |
| Cadmium  | <2.5       | Cadmium  | <0.50   |

| B-6-4'   |            |
|----------|------------|
| TPH-DRO  | 5.9        |
| TPH-MO   | 8.8        |
| B        | <0.0020    |
| T        | <0.0020    |
| E        | <0.0020    |
| X        | <0.0020    |
| MTBE     | <0.0050    |
| PCBs     | <0.050     |
| Lead     | 18         |
| Zinc     | 96         |
| Nickel   | <b>220</b> |
| Chromium | 99         |
| Cadmium  | <1.0       |

| B-2-2'   |            | B-2-12'  |            |
|----------|------------|----------|------------|
| TPH-DRO  | <5.0       | TPH-DRO  | <b>260</b> |
| TPH-MO   | <5.0       | TPH-MO   | 250        |
| B        | <0.0020    | B        | <0.0020    |
| T        | <0.0020    | T        | <0.0020    |
| E        | <0.0020    | E        | <0.0020    |
| X        | <0.0020    | X        | <0.0020    |
| MTBE     | <0.0050    | MTBE     | <0.0050    |
| PCBs     | <0.050     | PCBs     | <0.050     |
| Lead     | 16         | Lead     | 14         |
| Zinc     | 97         | Zinc     | 76         |
| Nickel   | <b>380</b> | Nickel   | 98         |
| Chromium | 130        | Chromium | 65         |
| Cadmium  | <2.5       | Cadmium  | <1.0       |

| B-1-4'   |            | B-1-12'  |            |
|----------|------------|----------|------------|
| TPH-DRO  | <5.0       | TPH-DRO  | <b>500</b> |
| TPH-MO   | <5.0       | TPH-MO   | 280        |
| B        | <0.0020    | B        | <0.0020    |
| T        | <0.0020    | T        | <0.0020    |
| E        | <0.0020    | E        | <0.0020    |
| X        | <0.0020    | X        | <0.0020    |
| MTBE     | <0.0050    | MTBE     | <0.0050    |
| PCBs     | <0.050     | PCBs     | <0.050     |
| Lead     | 15         | Lead     | 14         |
| Zinc     | 93         | Zinc     | 74         |
| Nickel   | <b>310</b> | Nickel   | 120        |
| Chromium | 170        | Chromium | 90         |
| Cadmium  | <1.0       | Cadmium  | <1.0       |

| B-7-6'   |            | B-7-14'  |         |
|----------|------------|----------|---------|
| TPH-DRO  | <5.0       | TPH-DRO  | <15     |
| TPH-MO   | <5.0       | TPH-MO   | <15     |
| B        | <0.0020    | B        | <0.0097 |
| T        | <0.0020    | T        | <0.0097 |
| E        | <0.0020    | E        | 0.350   |
| X        | <0.0020    | X        | <0.0097 |
| MTBE     | <0.0050    | MTBE     | <0.024  |
| PCBs     | <0.050     | PCBs     | <0.050  |
| Lead     | 14         | Lead     | 13      |
| Zinc     | 96         | Zinc     | 62      |
| Nickel   | <b>200</b> | Nickel   | 96      |
| Chromium | 81         | Chromium | 55      |
| Cadmium  | <1.0       | Cadmium  | <1.0    |

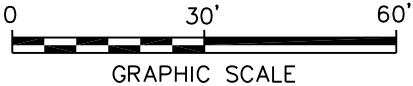
| B-8-6'   |            | B-8-14'  |         |
|----------|------------|----------|---------|
| TPH-DRO  | <5.0       | TPH-DRO  | <5.0    |
| TPH-MO   | <5.0       | TPH-MO   | <5.0    |
| B        | <0.0020    | B        | <0.0020 |
| T        | <0.0020    | T        | <0.0020 |
| E        | <0.0020    | E        | 0.0021  |
| X        | <0.0020    | X        | <0.0020 |
| MTBE     | 0.013      | MTBE     | <0.0050 |
| PCBs     | <0.050     | PCBs     | <0.050  |
| Lead     | 13         | Lead     | 12      |
| Zinc     | 87         | Zinc     | 63      |
| Nickel   | <b>190</b> | Nickel   | 93      |
| Chromium | 110        | Chromium | 57      |
| Cadmium  | <0.99      | Cadmium  | <0.99   |

**LEGEND:**

- PROPERTY LINE
- MW-1 MONITORING WELL
- B-1 BORING LOCATION (APPROXIMATE)
- UNDERGROUND STORAGE TANK
- TPH-DRO = TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS
- TPH-MO = TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL
- B = BENZENE
- T = TOLUENE
- E = ETHYLBENZENE
- X = TOTAL XYLENES
- MTBE = METHYL TERTIARY BUTYL ETHER
- PCBS = POLYCHLORINATED BIPHENYLS (ALL AROCLORS)
- BOLD = EXCEEDING RESPECTIVE ESL

**NOTES:**

1. BASE MAP DIGITIZED FROM A PHOTOCOPY OF A DRAWING BY CONESTOGA-ROVER ASSOCIATES (CRA) TITLED "GROUNDWATER ELEVATION AND HYDROCARBON CONCENTRATION MAP", DATED JUNE 13, 2011, AT A SCALE OF 1" = 30'.
2. ALL LOCATIONS ARE APPROXIMATE.
3. ALL RESULTS ARE REPORTED IN MILLIGRAMS PER KILOGRAM.
4. TPH-DRO AND TPH-MO RESULTS WERE ANALYZED WITH SILICA GEL CLEAN-UP.



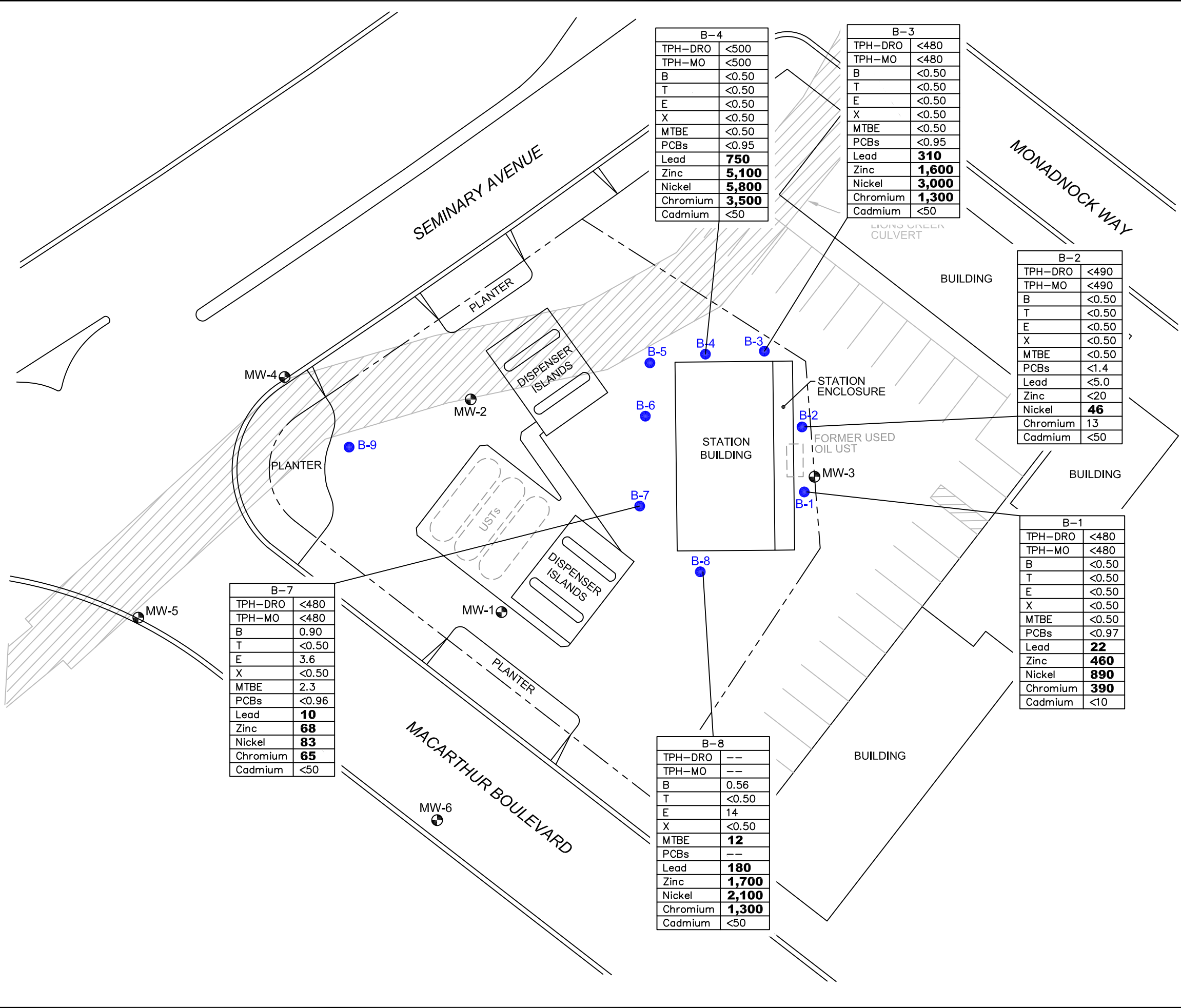
FORMER CHEVRON SERVICE STATION NO. 9-9708  
5910 MACARTHUR BOULEVARD, OAKLAND, CA  
**SITE ASSESSMENT AND PREFERENTIAL PATHWAY SURVEY REPORT**

**SOIL CONCENTRATION DISTRIBUTION MAP**

**ARCADIS**

FIGURE **7**

CITY: PETALUMA, CA DIV/GROUP: ENVCAD DB: (P. LUSTERY, J. HARRIS, R. BASSETT) G:\ENVCAD\SYRACUSE\ACT1\B006090\19708\00020dwg\60901B05.dwg LAYOUT: 8 SAVED: 7/18/2012 9:46 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 7/18/2012 9:46 AM BY: BASSETT, RICHARD XREFS: IMAGES: PROJECTNAME: --



| B-4      |              |
|----------|--------------|
| TPH-DRO  | <500         |
| TPH-MO   | <500         |
| B        | <0.50        |
| T        | <0.50        |
| E        | <0.50        |
| X        | <0.50        |
| MTBE     | <0.50        |
| PCBs     | <0.95        |
| Lead     | <b>750</b>   |
| Zinc     | <b>5,100</b> |
| Nickel   | <b>5,800</b> |
| Chromium | <b>3,500</b> |
| Cadmium  | <50          |

| B-3      |              |
|----------|--------------|
| TPH-DRO  | <480         |
| TPH-MO   | <480         |
| B        | <0.50        |
| T        | <0.50        |
| E        | <0.50        |
| X        | <0.50        |
| MTBE     | <0.50        |
| PCBs     | <0.95        |
| Lead     | <b>310</b>   |
| Zinc     | <b>1,600</b> |
| Nickel   | <b>3,000</b> |
| Chromium | <b>1,300</b> |
| Cadmium  | <50          |

| B-2      |           |
|----------|-----------|
| TPH-DRO  | <490      |
| TPH-MO   | <490      |
| B        | <0.50     |
| T        | <0.50     |
| E        | <0.50     |
| X        | <0.50     |
| MTBE     | <0.50     |
| PCBs     | <1.4      |
| Lead     | <5.0      |
| Zinc     | <20       |
| Nickel   | <b>46</b> |
| Chromium | 13        |
| Cadmium  | <50       |

| B-1      |            |
|----------|------------|
| TPH-DRO  | <480       |
| TPH-MO   | <480       |
| B        | <0.50      |
| T        | <0.50      |
| E        | <0.50      |
| X        | <0.50      |
| MTBE     | <0.50      |
| PCBs     | <0.97      |
| Lead     | <b>22</b>  |
| Zinc     | <b>460</b> |
| Nickel   | <b>890</b> |
| Chromium | <b>390</b> |
| Cadmium  | <10        |

| B-7      |           |
|----------|-----------|
| TPH-DRO  | <480      |
| TPH-MO   | <480      |
| B        | 0.90      |
| T        | <0.50     |
| E        | 3.6       |
| X        | <0.50     |
| MTBE     | 2.3       |
| PCBs     | <0.96     |
| Lead     | <b>10</b> |
| Zinc     | <b>68</b> |
| Nickel   | <b>83</b> |
| Chromium | <b>65</b> |
| Cadmium  | <50       |

| B-8      |              |
|----------|--------------|
| TPH-DRO  | --           |
| TPH-MO   | --           |
| B        | 0.56         |
| T        | <0.50        |
| E        | 14           |
| X        | <0.50        |
| MTBE     | <b>12</b>    |
| PCBs     | --           |
| Lead     | <b>180</b>   |
| Zinc     | <b>1,700</b> |
| Nickel   | <b>2,100</b> |
| Chromium | <b>1,300</b> |
| Cadmium  | <50          |

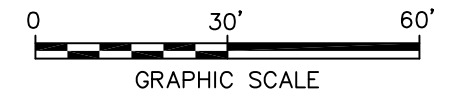


**LEGEND:**

- PROPERTY LINE
- MW-1 MONITORING WELL
- B-1 BORING LOCATION (APPROXIMATE)
- UNDERGROUND STORAGE TANK
- TPH-DRO = TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS
- TPH-MO = TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL
- B = BENZENE
- T = TOLUENE
- E = ETHYLBENZENE
- X = TOTAL XYLENES
- MTBE = METHYL TERTIARY BUTYL ETHER
- PCBs = POLYCHLORINATED BIPHENYLS (ALL AROCLORS)
- BOLD = EXCEEDING RESPECTIVE ESL
- = NOT ANALYZED

**NOTES:**

1. BASE MAP DIGITIZED FROM A PHOTOCOPY OF A DRAWING BY CONESTOGA-ROVER ASSOCIATES (CRA) TITLED "GROUNDWATER ELEVATION AND HYDROCARBON CONCENTRATION MAP", DATED JUNE 13, 2011, AT A SCALE OF 1" = 30'.
2. ALL LOCATIONS ARE APPROXIMATE.
3. ALL RESULTS ARE REPORTED IN MICROGRAMS PER LITER.
4. TPH-DRO AND TPH-MO RESULTS WERE ANALYZED WITH SILICA GEL CLEAN-UP.

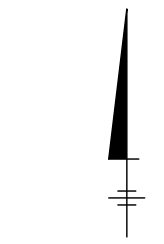
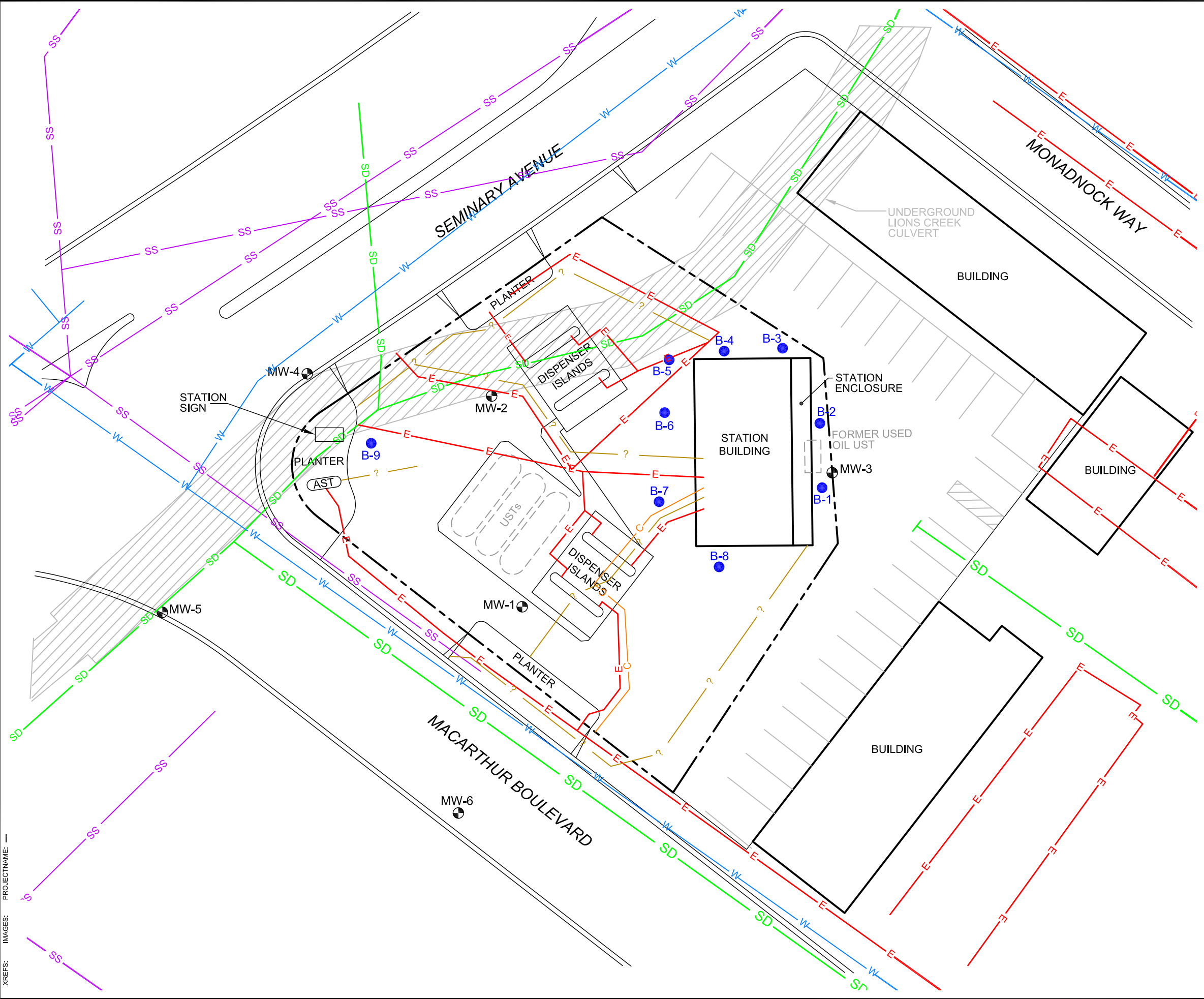


FORMER CHEVRON SERVICE STATION NO. 9-9708  
5910 MACARTHUR BOULEVARD, OAKLAND, CA  
**SITE ASSESSMENT AND PREFERENTIAL PATHWAY SURVEY REPORT**

**GRAB GROUNDWATER CONCENTRATION DISTRIBUTION MAP**

FIGURE  
**8**

CITY: PETALUMA, CA DIV/GROUP: ENVCAD DB: (P. LISTER, J. HARRIS) G:\ENVCAD\Roseville-CA\RETURN-TO-Petaluma-CA\B0609019708000022\SA&PPSR\DWG\60901B03.dwg ACADVER: 18.1S (LMS TECH) PAGES: 9 LAYOUT: 9 SAVED: 7/17/2012 2:53 PM LAYOUT: 9 PAGES: 9 PLOTTED: 7/17/2012 2:54 PM BY: ROBITAILLE, BEVERLY

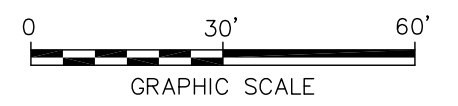


**LEGEND:**

- PROPERTY LINE
- MW-1 ● MONITORING WELL
- B-1 ● BORING LOCATION (APPROXIMATE)
- (UST) UNDERGROUND STORAGE TANK
- (AST) ABOVEGROUND STORAGE TANK
- W WATER LINE
- SS SANITARY SEWER LINE
- SD STORM DRAIN LINE
- E ELECTRICAL LINE
- C COMMUNICATIONS LINE
- ? UNIDENTIFIED LINE

**NOTES:**

1. BASE MAP DIGITIZED FROM A PHOTOCOPY OF A DRAWING BY CONESTOGA-ROVER ASSOCIATES (CRA) TITLED "GROUNDWATER ELEVATION AND HYDROCARBON CONCENTRATION MAP", DATED JUNE 13, 2011, AT A SCALE OF 1" = 30'.
2. ALL LOCATIONS ARE APPROXIMATE.



FORMER CHEVRON SERVICE STATION NO. 9-9708  
 5910 MACARTHUR BOULEVARD, OAKLAND, CA  
**SITE ASSESSMENT AND PREFERENTIAL PATHWAY  
 SURVEY REPORT**

**SUBSURFACE UTILITY MAP**



FIGURE  
**9**



**Site Location**

- LEGEND:**
- SITE LOCATION
  - MONITORING WELL
  - CAT WELL
  - IRRIGATION WELL
  - TEST WELL
  - UNKNOWN
  - ABANDONED WELL
  - QUARTER MILE RADIUS

Notes:  
 Aerial photography obtained from ESRI Inc, Arc GIS Online/Bing Maps

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
 FORMER CHEVRON SERVICE STATION 9-9708  
 5910 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA  
**SITE ASSESSMENT AND  
 PREFERENTIAL PATHWAY SURVEY REPORT**

**WELL SURVEY**



FIGURE  
**10**



AREA LOCATION

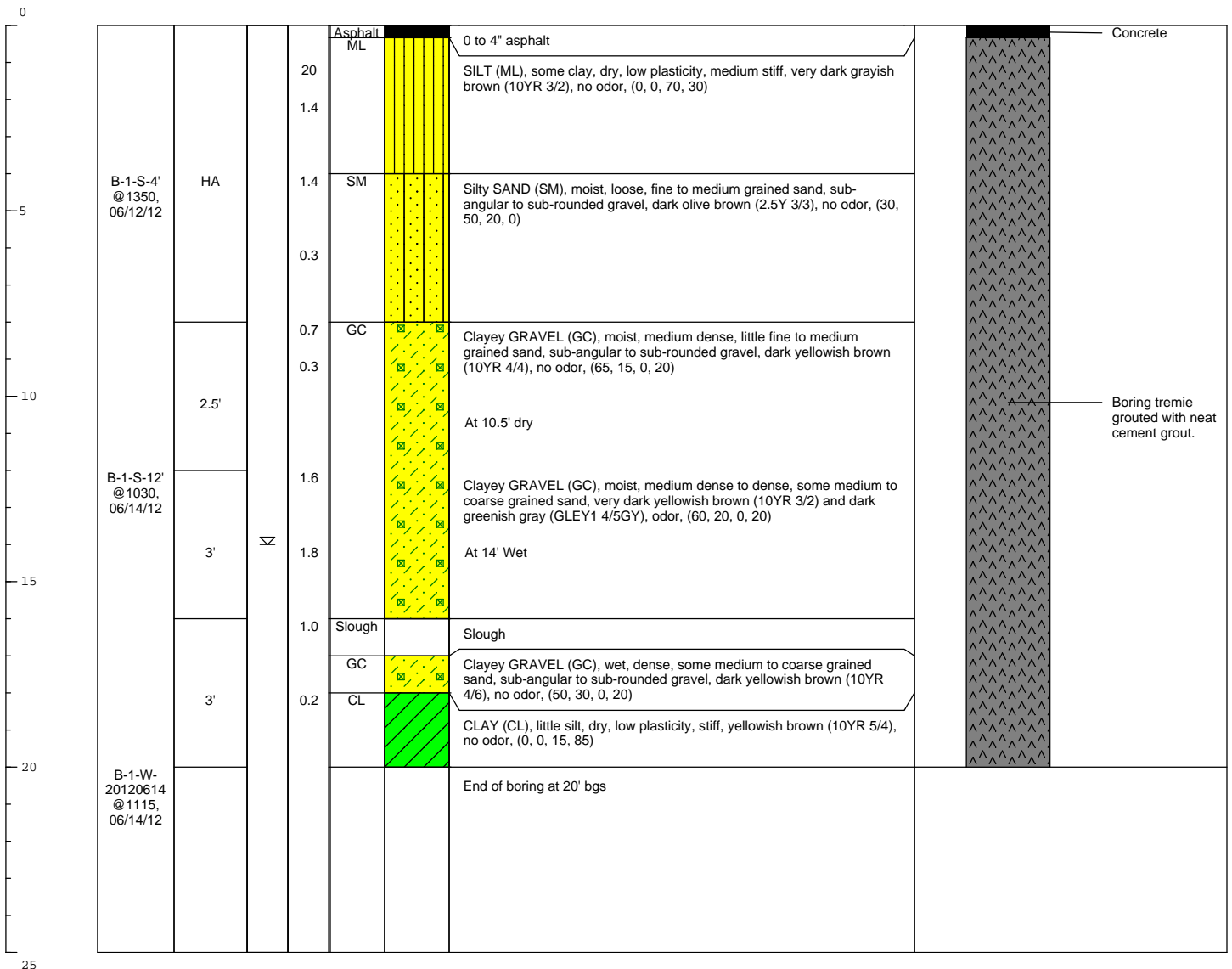


**Attachment 1**

Boring Logs

|   |  |  |
|---|--|--|
| <b>Date Start/Finish:</b> 06/12/2012-06/14/2012 | <b>Latitude:</b> NA                        | <b>Well ID:</b> <b>B-1</b>   |
| <b>Drilling Company:</b> Cascade Drilling, LP   | <b>Longitude:</b> NA                       | <b>Client:</b> Chevron Environmental Management Company              |
| <b>Drilling Method:</b> Geoprobe                | <b>Casing Elevation:</b> NA                | <b>Location:</b> CVX MT 9-9708<br>5910 MacArthur Blvd.<br>Oakland CA |
| <b>Rig Type:</b> Geoprobe                       | <b>Total Depth:</b> 20 ft bgs              | <b>Project Number:</b> B0060901.9708.00002                           |
| <b>Sampling Method:</b> Acetate Sleeve          | <b>Boring Diameter:</b> 2.25 inch          |  |
|   | <b>Logged By:</b> Loretta Kwong            |  |
|   | <b>Reviewed By:</b> Melissa Blanchette, PG |  |

| DEPTH | Lab Sample | Recovery (feet) | Groundwater | PID Headspace (ppm) | USCS Code | Geologic Column | Lithologic Description | Well Construction |
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|

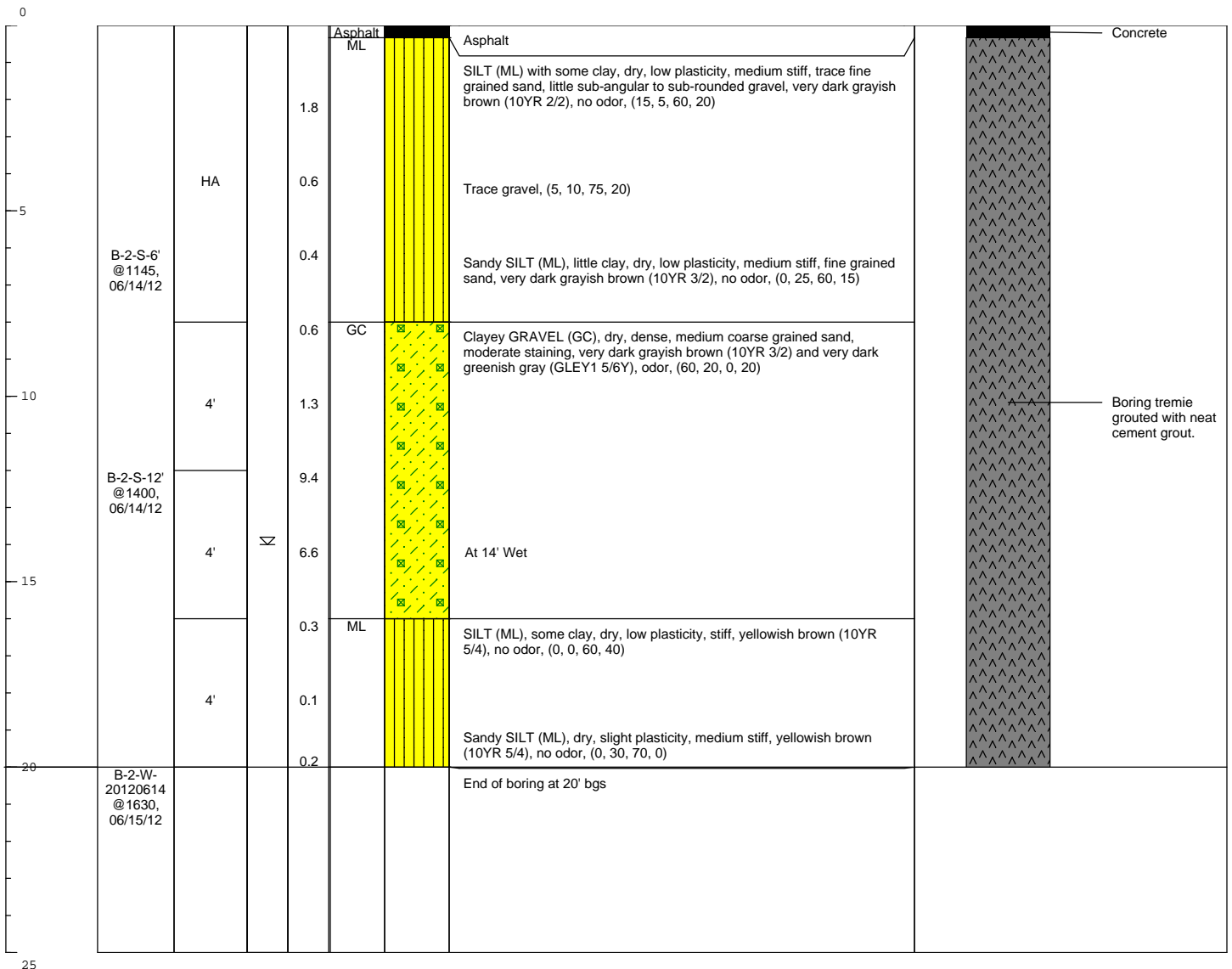



|  |   |
|--|---|
|  | <b>Remarks:</b> AMSL = Above Mean Sea Level; bgs = below ground surface; ft = feet; HA = hand auger; NA = Not Applicable/Available; PID = Photoionization Detector; ppm = parts per million |
|  | Hand auger or airknife to 8' 1" bgs.<br>Direct push to total depth.   |
|  | Collected grab groundwater sample (B-1-W-20120614) at 1115 on 06/14/2012.   |



|   |  |  |
|---|--|--|
| <b>Date Start/Finish:</b> 06/14/2012-06/15/2012 | <b>Latitude:</b> NA                        | <b>Well ID:</b> <b>B-2</b>   |
| <b>Drilling Company:</b> Cascade Drilling, LP   | <b>Longitude:</b> NA                       | <b>Client:</b> Chevron Environmental Management Company              |
| <b>Drilling Method:</b> Geoprobe                | <b>Casing Elevation:</b> NA                | <b>Location:</b> CVX MT 9-9708<br>5910 MacArthur Blvd.<br>Oakland CA |
| <b>Rig Type:</b> Geoprobe                       | <b>Total Depth:</b> 20 ft bgs              | <b>Project Number:</b> B0060901.9708.00002                           |
| <b>Sampling Method:</b> Acetate Sleeve          | <b>Boring Diameter:</b> 2.25 inch          |  |
|   | <b>Logged By:</b> Loretta Kwong            |  |
|   | <b>Reviewed By:</b> Melissa Blanchette, PG |  |

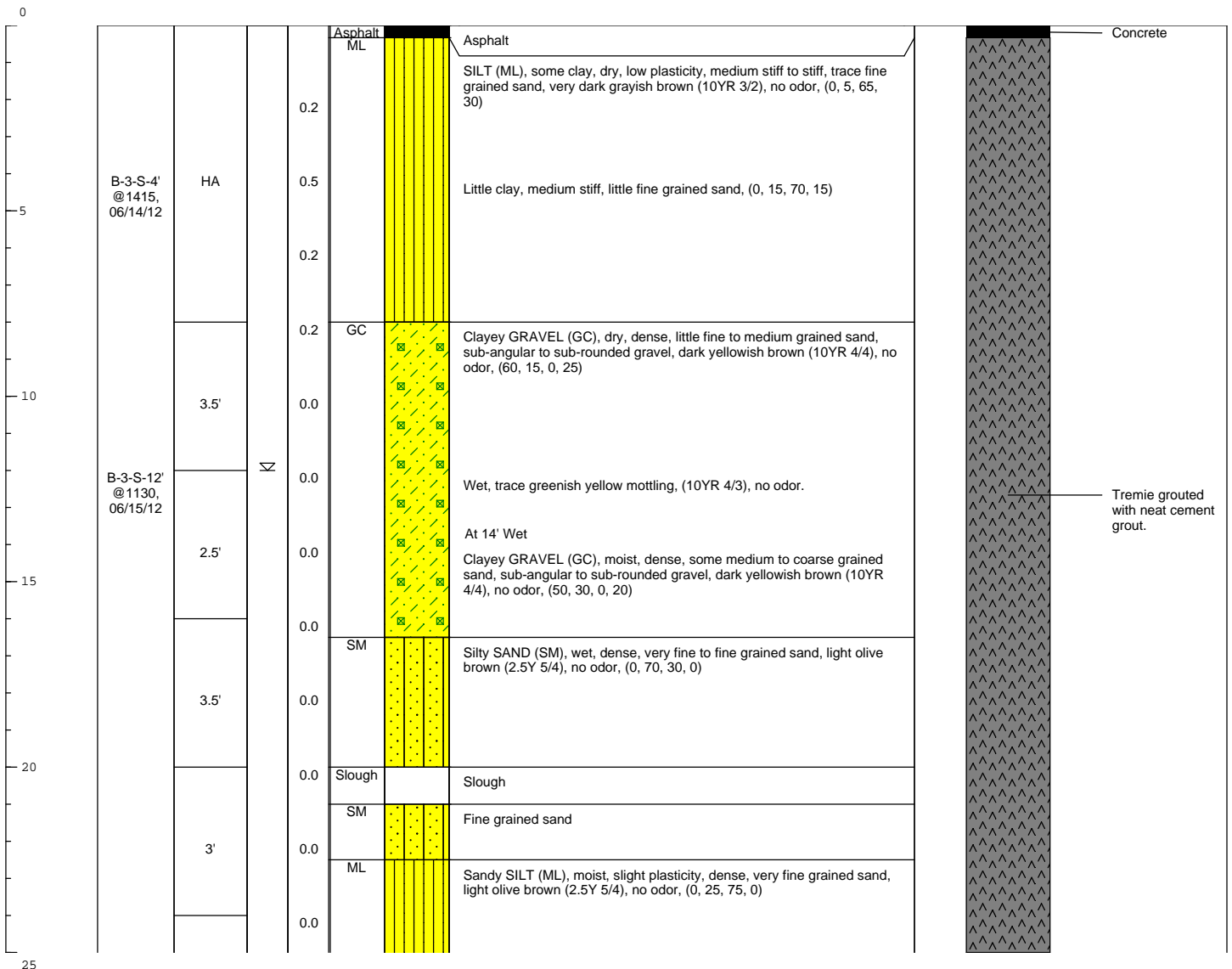
| DEPTH | Lab Sample | Recovery (feet) | Groundwater | PID Headspace (ppm) | USCS Code | Geologic Column | Lithologic Description | Well Construction |
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|



|  |   |
|--|---|
|  | <b>Remarks:</b> AMSL = Above Mean Sea Level; bgs = below ground surface; ft = feet; HA = hand auger; NA = Not Applicable/Available; PID = Photoionization Detector; ppm = parts per million |
|  | Hand auger or airknife to 8' 1" bgs.<br>Direct push to total depth.   |
|  | Collected grab groundwater sample (B-2-W-20120615) at 1630 on 06/15/2012.   |

|   |  |  |
|---|--|--|
| <b>Date Start/Finish:</b> 06/12/2012-06/15/2012 | <b>Latitude:</b> NA                        | <b>Well ID:</b> <b>B-3</b>   |
| <b>Drilling Company:</b> Cascade Drilling, LP   | <b>Longitude:</b> NA                       | <b>Client:</b> Chevron Environmental Management Company              |
| <b>Drilling Method:</b> Geoprobe                | <b>Casing Elevation:</b> NA                | <b>Location:</b> CVX MT 9-9708<br>5910 MacArthur Blvd.<br>Oakland CA |
| <b>Rig Type:</b> Geoprobe                       | <b>Total Depth:</b> 30 ft bgs              | <b>Project Number:</b> B0060901.9708.00002                           |
| <b>Sampling Method:</b> Acetate Sleeve          | <b>Boring Diameter:</b> 2.25 inch          |  |
|   | <b>Logged By:</b> Loretta Kwong            |  |
|   | <b>Reviewed By:</b> Melissa Blanchette, PG |  |


| DEPTH | Lab Sample | Recovery (feet) | Groundwater | PID Headspace (ppm) | USCS Code | Geologic Column | Lithologic Description | Well Construction |
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|




|  |   |
|--|---|
|  | <b>Remarks:</b> AMSL = Above Mean Sea Level; bgs = below ground surface; ft = feet; HA = hand auger; NA = Not Applicable/Available; PID = Photoionization Detector; ppm = parts per million |
|  | Hand auger or airknife to 8' 1" bgs.<br>Direct push to total depth.   |
|  | Collected grab groundwater sample (B-3-W-20120615) at 1525 on 06/15/2012.   |

|   |  |  |
|---|--|--|
| <b>Date Start/Finish:</b> 06/12/2012-06/15/2012 | <b>Latitude:</b> NA                        | <b>Well ID:</b> <b>B-3</b>   |
| <b>Drilling Company:</b> Cascade Drilling, LP   | <b>Longitude:</b> NA                       | <b>Client:</b> Chevron Environmental Management Company              |
| <b>Drilling Method:</b> Geoprobe                | <b>Casing Elevation:</b> NA                | <b>Location:</b> CVX MT 9-9708<br>5910 MacArthur Blvd.<br>Oakland CA |
| <b>Rig Type:</b> Geoprobe                       | <b>Total Depth:</b> 30 ft bgs              | <b>Project Number:</b> B0060901.9708.00002                           |
| <b>Sampling Method:</b> Acetate Sleeve          | <b>Boring Diameter:</b> 2.25 inch          |  |
|   | <b>Logged By:</b> Loretta Kwong            |  |
|   | <b>Reviewed By:</b> Melissa Blanchette, PG |  |

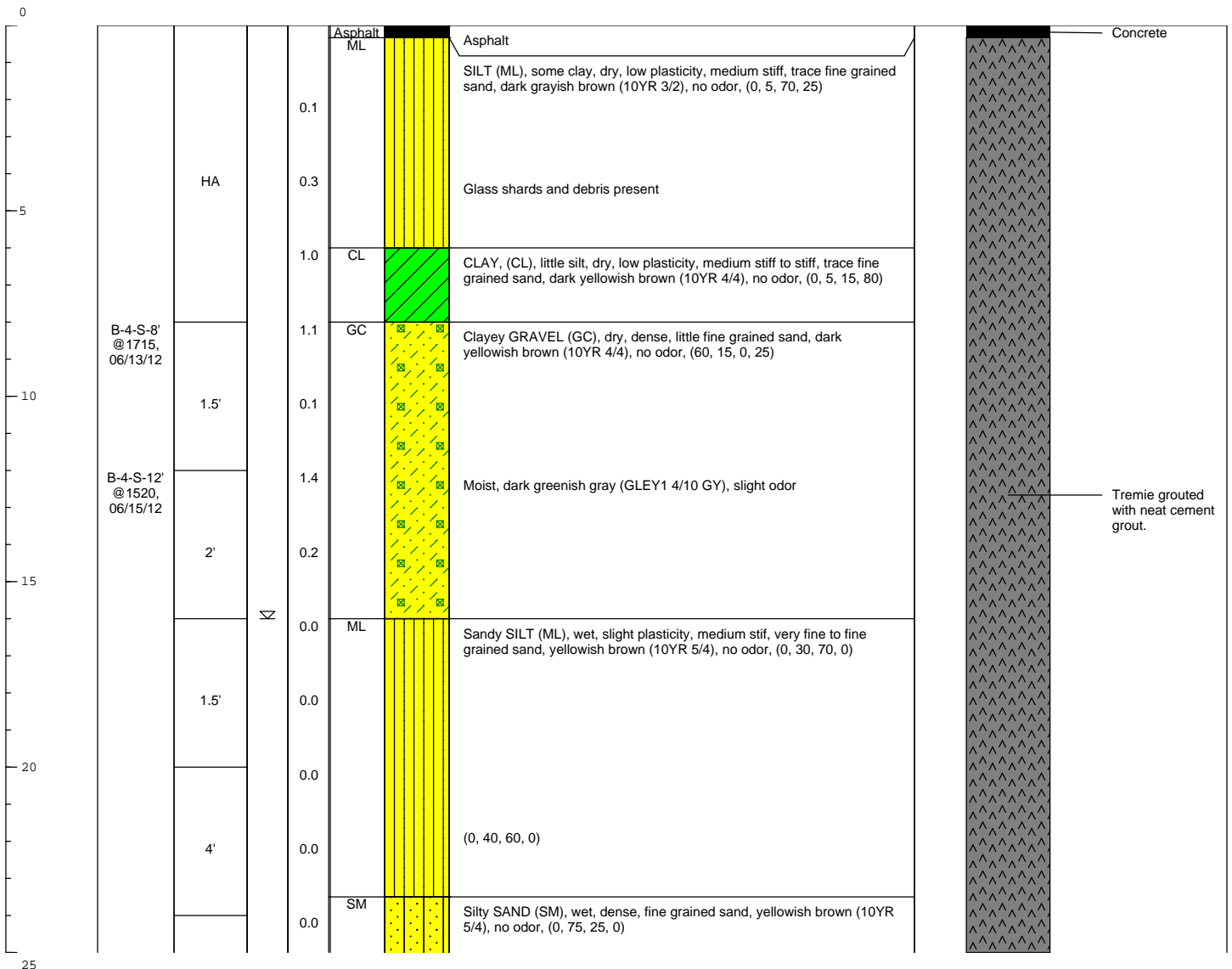
| DEPTH | Lab Sample | Recovery (feet) | Groundwater | PID Headspace (ppm) | USCS Code | Geologic Column | Lithologic Description | Well Construction |
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|

|    |                                |    |  |     |  |  |   |   |
|----|--------------------------------|----|--|-----|--|--|---|---|
| 25 |                                | 2' |  | 0.0 |  |  | Sandy SILT (ML), moist, low plasticity, stiff, fine grained sand, light olive brown (2.5Y 5/4) and olive gray (5Y 5/2), no odor, (0, 30, 70, 0) | <br>Tremie grouted with neat cement grout. |
|    |                                | 2' |  | 0.0 |  |  | Olive gray (5Y 5/2)   |   |
| 30 |                                | 2' |  | 0.0 |  |  | Olive gray (5Y 5/2), (0, 45, 55, 0)   |   |
|    | B-3-W-20120615 @1525, 06/15/12 |    |  |     |  |  | End of boring at 30' bgs  |   |
| 35 |                                |    |  |     |  |  |   |   |
| 40 |                                |    |  |     |  |  |   |   |
| 45 |                                |    |  |     |  |  |   |   |
| 50 |                                |    |  |     |  |  |   |   |

|  |   |
|--|---|
| <br>Infrastructure · Water · Environment · Buildings | <p><b>Remarks:</b> AMSL = Above Mean Sea Level; bgs = below ground surface; ft = feet; HA = hand auger; NA = Not Applicable/Available; PID = Photoionization Detector; ppm = parts per million</p> <p>Hand auger or airknife to 8' 1" bgs.<br/>Direct push to total depth.</p> <p>Collected grab groundwater sample (B-3-W-20120615) at 1525 on 06/15/2012.</p> |
|--|---|

|   |  |  |
|---|--|--|
| <b>Date Start/Finish:</b> 06/13/2012-06/15/2012 | <b>Latitude:</b> NA                        | <b>Well ID:</b> <b>B-4</b>   |
| <b>Drilling Company:</b> Cascade Drilling, LP   | <b>Longitude:</b> NA                       | <b>Client:</b> Chevron Environmental Management Company              |
| <b>Drilling Method:</b> Geoprobe                | <b>Casing Elevation:</b> NA                | <b>Location:</b> CVX MT 9-9708<br>5910 MacArthur Blvd.<br>Oakland CA |
| <b>Rig Type:</b> Geoprobe                       | <b>Total Depth:</b> 30 ft bgs              | <b>Project Number:</b> B0060901.9708.00002                           |
| <b>Sampling Method:</b> Acetate Sleeve          | <b>Boring Diameter:</b> 2.25 inch          |  |
|   | <b>Logged By:</b> Loretta Kwong            |  |
|   | <b>Reviewed By:</b> Melissa Blanchette, PG |  |

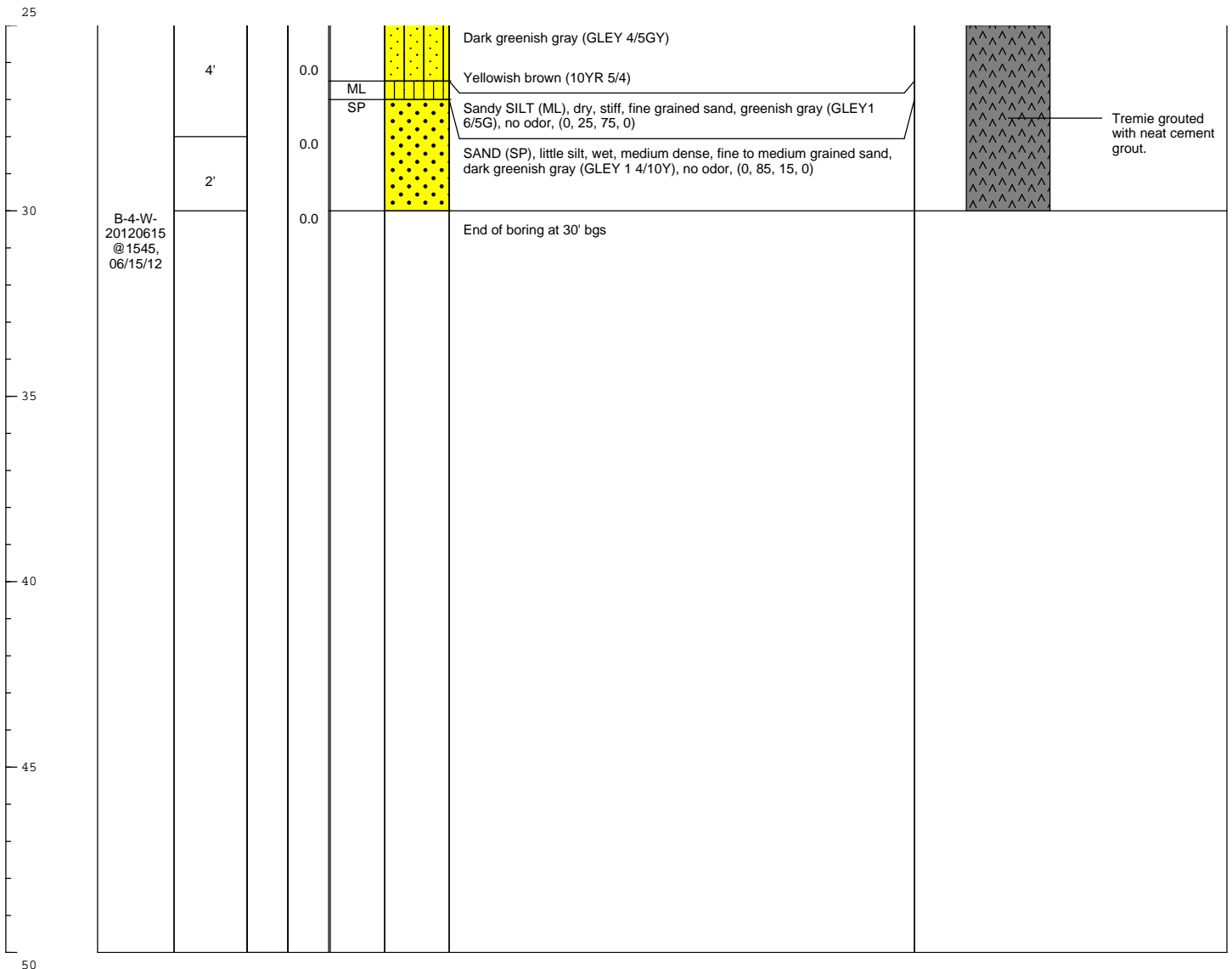
| DEPTH | Lab Sample | Recovery (feet) | Groundwater | PID Headspace (ppm) | USCS Code | Geologic Column | Lithologic Description | Well Construction |
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|



|  |   |
|--|---|
|  | <b>Remarks:</b> AMSL = Above Mean Sea Level; bgs = below ground surface; ft = feet; HA = hand auger; NA = Not Applicable/Available; PID = Photoionization Detector; ppm = parts per million |
|  | Hand auger or airknife to 8' 1" bgs.<br>Direct push to total depth.   |
|  | Collected grab groundwater sample (B-4-W-20120615) at 1545 on 06/15/2012.   |

|   |  |  |
|---|--|--|
| <b>Date Start/Finish:</b> 06/13/2012-06/15/2012 | <b>Latitude:</b> NA                        | <b>Well ID:</b> <b>B-4</b>   |
| <b>Drilling Company:</b> Cascade Drilling, LP   | <b>Longitude:</b> NA                       | <b>Client:</b> Chevron Environmental Management Company              |
| <b>Drilling Method:</b> Geoprobe                | <b>Casing Elevation:</b> NA                | <b>Location:</b> CVX MT 9-9708<br>5910 MacArthur Blvd.<br>Oakland CA |
| <b>Rig Type:</b> Geoprobe                       | <b>Total Depth:</b> 30 ft bgs              | <b>Project Number:</b> B0060901.9708.00002                           |
| <b>Sampling Method:</b> Acetate Sleeve          | <b>Boring Diameter:</b> 2.25 inch          |  |
|   | <b>Logged By:</b> Loretta Kwong            |  |
|   | <b>Reviewed By:</b> Melissa Blanchette, PG |  |

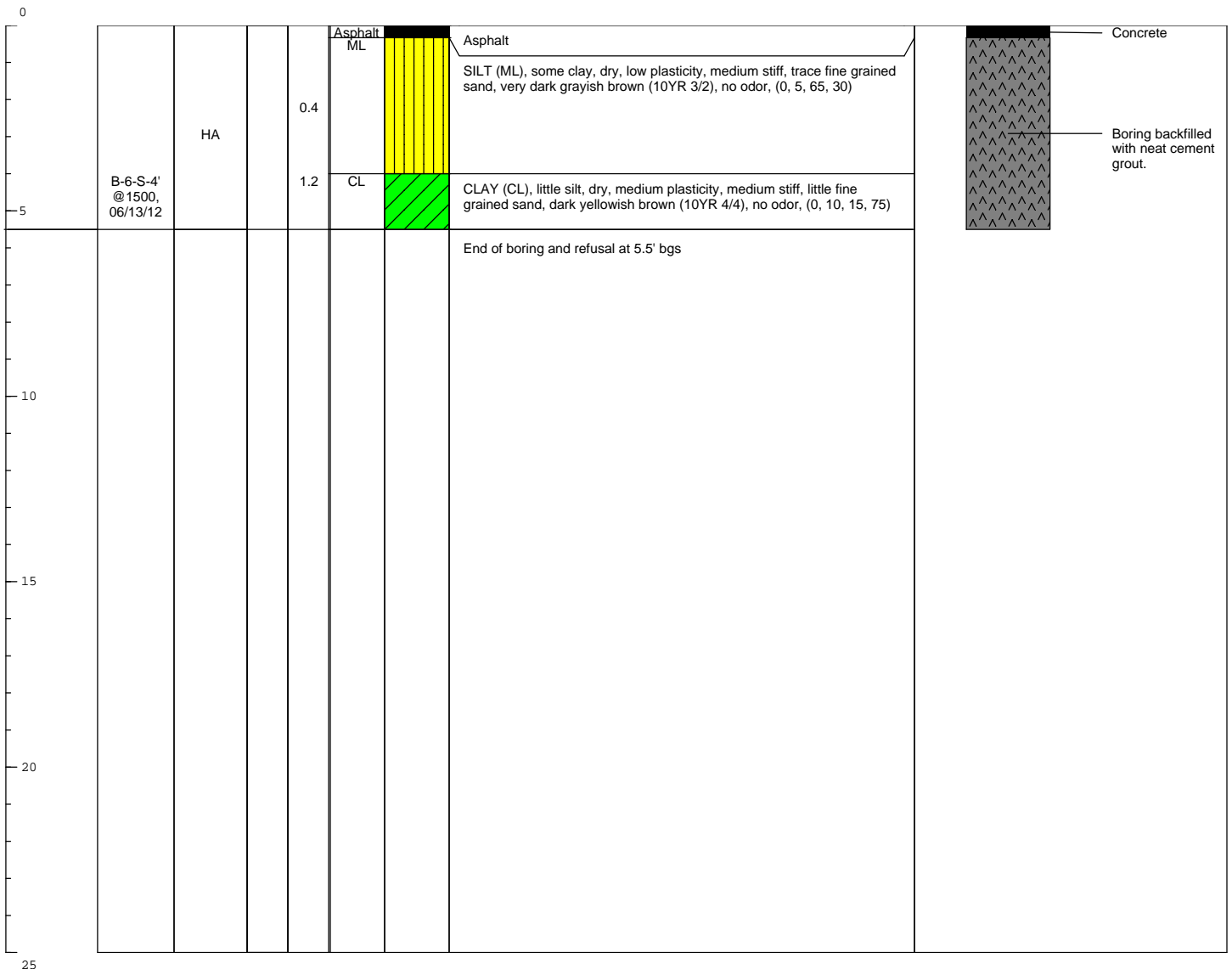
| DEPTH | Lab Sample | Recovery (feet) | Groundwater | PID Headspace (ppm) | USCS Code | Geologic Column | Lithologic Description | Well Construction |
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|



|  |   |
|--|---|
|  | <b>Remarks:</b> AMSL = Above Mean Sea Level; bgs = below ground surface; ft = feet; HA = hand auger; NA = Not Applicable/Available; PID = Photoionization Detector; ppm = parts per million |
|  | Hand auger or airknife to 8' 1" bgs.<br>Direct push to total depth.<br><br>Collected grab groundwater sample (B-4-W-20120615) at 1545 on 06/15/2012.  |

|   |  |  |
|---|--|--|
| <b>Date Start/Finish:</b> 06/13/2012          | <b>Latitude:</b> NA                        | <b>Well ID:</b> <b>B-6</b>   |
| <b>Drilling Company:</b> Cascade Drilling, LP | <b>Longitude:</b> NA                       | <b>Client:</b> Chevron Environmental Management Company              |
| <b>Drilling Method:</b> Geoprobe              | <b>Casing Elevation:</b> NA                | <b>Location:</b> CVX MT 9-9708<br>5910 MacArthur Blvd.<br>Oakland CA |
| <b>Rig Type:</b> Geoprobe                     | <b>Total Depth:</b> 5.5 ft bgs             | <b>Project Number:</b> B0060901.9708.00002                           |
| <b>Sampling Method:</b> Acetate Sleeve        | <b>Boring Diameter:</b> 2.25 inch          |  |
|   | <b>Logged By:</b> Loretta Kwong            |  |
|   | <b>Reviewed By:</b> Melissa Blanchette, PG |  |

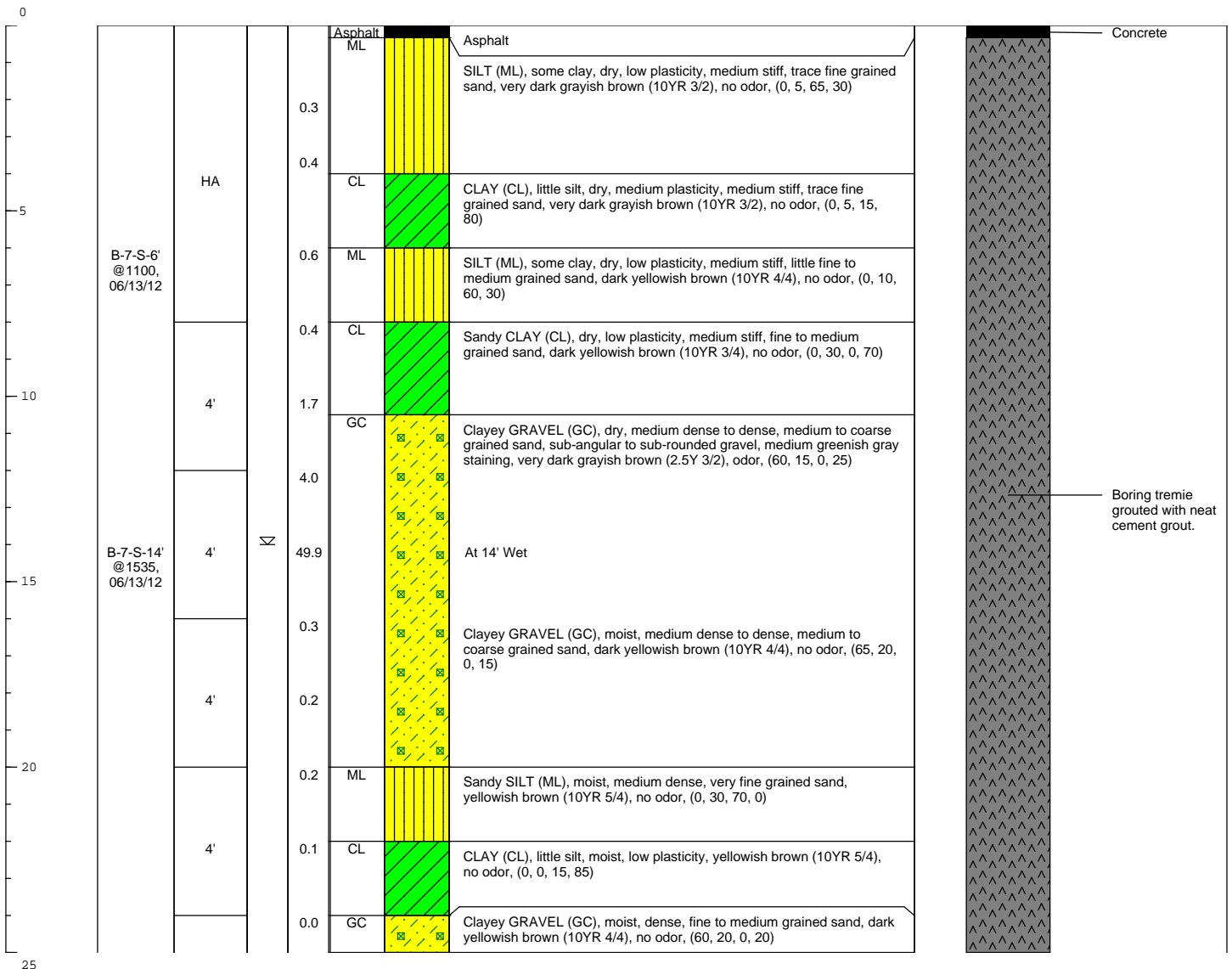
| DEPTH | Lab Sample | Recovery (feet) | Groundwater | PID Headspace (ppm) | USCS Code | Geologic Column | Lithologic Description | Well Construction |
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|



|  |   |
|--|---|
|  | <b>Remarks:</b> AMSL = Above Mean Sea Level; bgs = below ground surface; ft = feet; HA = hand auger; NA = Not Applicable/Available; PID = Photoionization Detector; ppm = parts per million |
|  | Hand auger to 5' bgs.<br>Air knife to 5.5' bgs where refusal was met.   |

|   |  |  |
|---|--|--|
| <b>Date Start/Finish:</b> 06/13/2012-06/15/2012 | <b>Latitude:</b> NA                        | <b>Well ID:</b> <b>B-7</b>   |
| <b>Drilling Company:</b> Cascade Drilling, LP   | <b>Longitude:</b> NA                       | <b>Client:</b> Chevron Environmental Management Company              |
| <b>Drilling Method:</b> Geoprobe                | <b>Casing Elevation:</b> NA                | <b>Location:</b> CVX MT 9-9708<br>5910 MacArthur Blvd.<br>Oakland CA |
| <b>Rig Type:</b> Geoprobe                       | <b>Total Depth:</b> 26 ft bgs              | <b>Project Number:</b> B0060901.9708.00002                           |
| <b>Sampling Method:</b> Acetate Sleeve          | <b>Boring Diameter:</b> 2.25 inch          |  |
|   | <b>Logged By:</b> Loretta Kwong            |  |
|   | <b>Reviewed By:</b> Melissa Blanchette, PG |  |



| DEPTH | Lab Sample | Recovery (feet) | Groundwater | PID Headspace (ppm) | USCS Code | Geologic Column | Lithologic Description | Well Construction |
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|




|  |   |
|--|---|
|  | <b>Remarks:</b> AMSL = Above Mean Sea Level; bgs = below ground surface; ft = feet; HA = hand auger; NA = Not Applicable/Available; PID = Photoionization Detector; ppm = parts per million |
|  | Hand auger or airknife to 8' 1" bgs.<br>Direct push to total depth.   |
|  | Collected grab groundwater sample (B-7-W-20120615) at 1217 on 06/15/2012.   |

|   |  |  |
|---|--|--|
| <b>Date Start/Finish:</b> 06/13/2012-06/15/2012 | <b>Latitude:</b> NA                        | <b>Well ID:</b> <b>B-7</b>   |
| <b>Drilling Company:</b> Cascade Drilling, LP   | <b>Longitude:</b> NA                       | <b>Client:</b> Chevron Environmental Management Company              |
| <b>Drilling Method:</b> Geoprobe                | <b>Casing Elevation:</b> NA                | <b>Location:</b> CVX MT 9-9708<br>5910 MacArthur Blvd.<br>Oakland CA |
| <b>Rig Type:</b> Geoprobe                       | <b>Total Depth:</b> 26 ft bgs              | <b>Project Number:</b> B0060901.9708.00002                           |
| <b>Sampling Method:</b> Acetate Sleeve          | <b>Boring Diameter:</b> 2.25 inch          |  |
|   | <b>Logged By:</b> Loretta Kwong            |  |
|   | <b>Reviewed By:</b> Melissa Blanchette, PG |  |

| DEPTH | Lab Sample | Recovery (feet) | Groundwater | PID Headspace (ppm) | USCS Code | Geologic Column | Lithologic Description | Well Construction |
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|

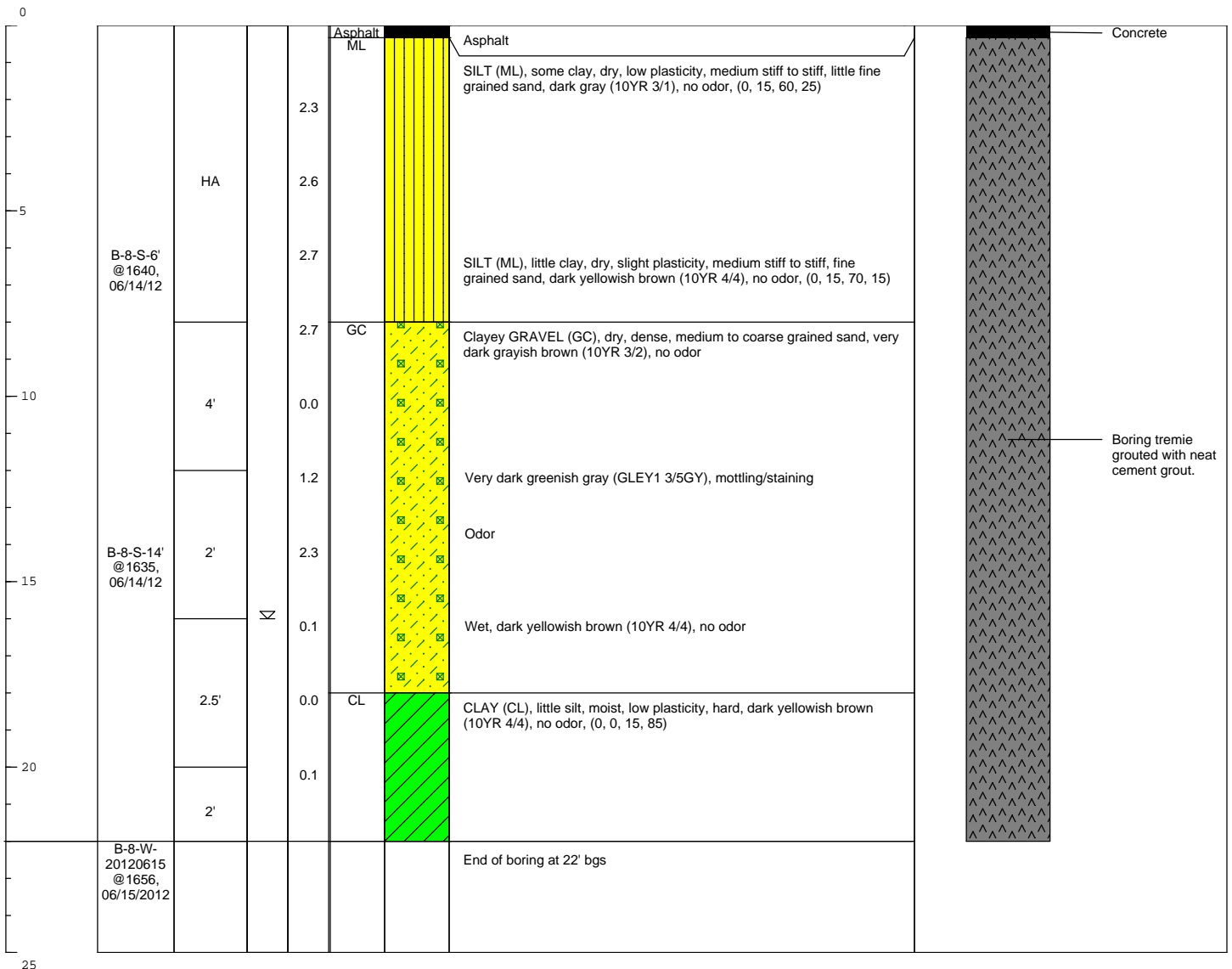
|    |                                  |    |  |  |    |   |   |   |
|----|----------------------------------|----|--|--|----|---|---|---|
| 25 |                                  | 2' |  |  | ML |  | Sandy SILT (ML), moist, medium dense, very fine grained sand, yellowish brown (10YR 5/4), no odor, (0, 30, 70, 0) |  Boring tremie grouted with neat cement grout. |
|    | B-7-W-20120615 @1217, 06/15/2012 |    |  |  |    |   | End of boring at 26' bgs  |   |
| 30 |                                  |    |  |  |    |   |   |   |
| 35 |                                  |    |  |  |    |   |   |   |
| 40 |                                  |    |  |  |    |   |   |   |
| 45 |                                  |    |  |  |    |   |   |   |
| 50 |                                  |    |  |  |    |   |   |   |

|  |   |
|--|---|
|  | <b>Remarks:</b> AMSL = Above Mean Sea Level; bgs = below ground surface; ft = feet; HA = hand auger; NA = Not Applicable/Available; PID = Photoionization Detector; ppm = parts per million |
|  | <p>Hand auger or airknife to 8' 1" bgs.<br/>Direct push to total depth.</p> <p>Collected grab groundwater sample (B-7-W-20120615) at 1217 on 06/15/2012.</p>                                |



|   |  |  |
|---|--|--|
| <b>Date Start/Finish:</b> 06/14/2012-06/15/2012 | <b>Latitude:</b> NA                        | <b>Well ID:</b> <b>B-8</b>   |
| <b>Drilling Company:</b> Cascade Drilling, LP   | <b>Longitude:</b> NA                       | <b>Client:</b> Chevron Environmental Management Company              |
| <b>Drilling Method:</b> Geoprobe                | <b>Casing Elevation:</b> NA                | <b>Location:</b> CVX MT 9-9708<br>5910 MacArthur Blvd.<br>Oakland CA |
| <b>Rig Type:</b> Geoprobe                       | <b>Total Depth:</b> 22 ft bgs              | <b>Project Number:</b> B0060901.9708.00002                           |
| <b>Sampling Method:</b> Acetate Sleeve          | <b>Boring Diameter:</b> 2.25 inch          |  |
|   | <b>Logged By:</b> Loretta Kwong            |  |
|   | <b>Reviewed By:</b> Melissa Blanchette, PG |  |

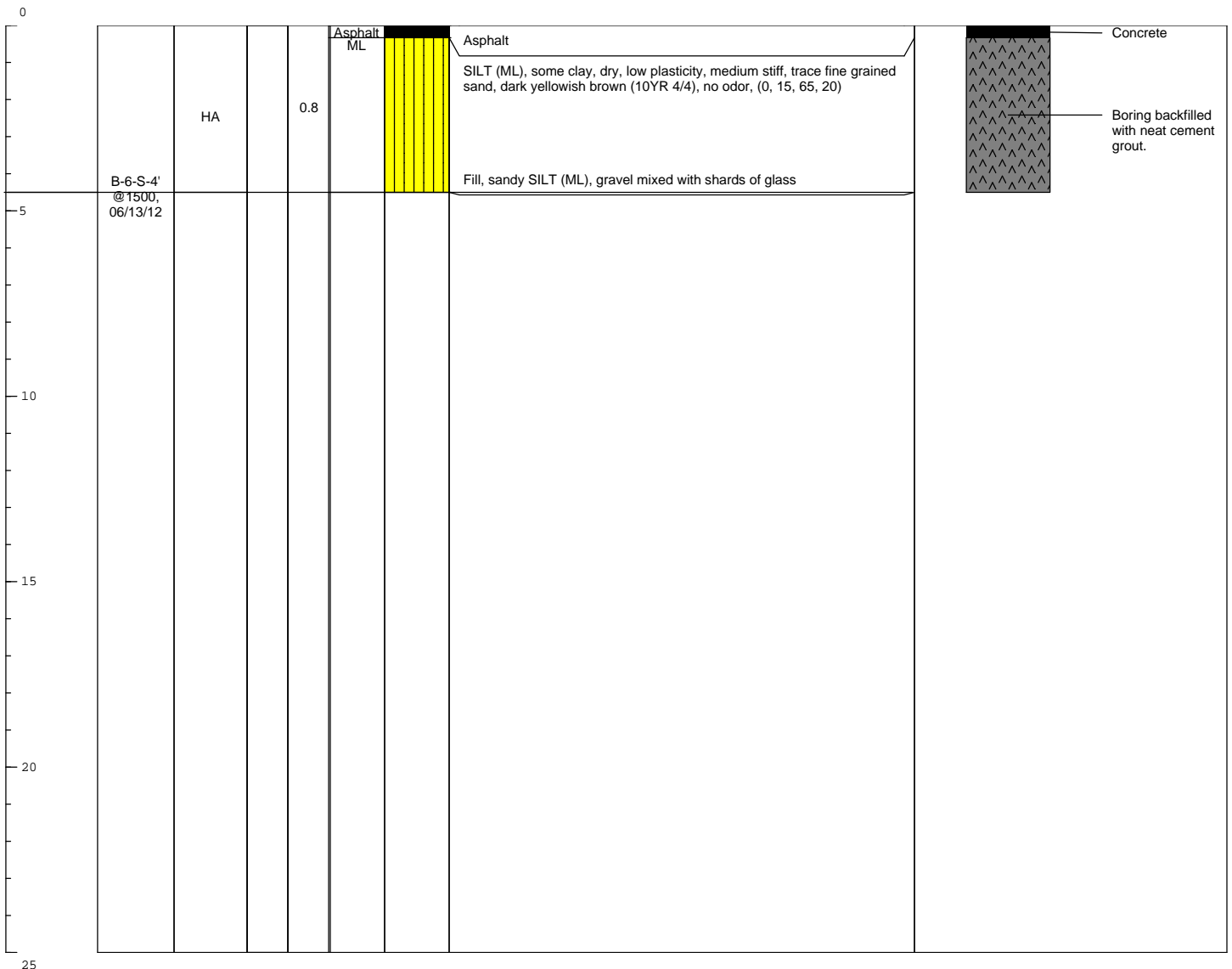
| DEPTH | Lab Sample | Recovery (feet) | Groundwater | PID Headspace (ppm) | USCS Code | Geologic Column | Lithologic Description | Well Construction |
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|



|  |   |
|--|---|
|  | <b>Remarks:</b> AMSL = Above Mean Sea Level; bgs = below ground surface; ft = feet; HA = hand auger; NA = Not Applicable/Available; PID = Photoionization Detector; ppm = parts per million |
|  | Hand auger or airknife to 8' 1" bgs.<br>Direct push to total depth.   |
|  | Collected grab groundwater sample (B-8-W-20120615) at 1656 on 06/15/2012.   |

|  |  |  |
|--|--|--|
| <b>Date Start/Finish:</b> 06/14/2012- 06/15/2012 | <b>Latitude:</b> NA                        | <b>Well ID:</b> <b>B-9</b>   |
| <b>Drilling Company:</b> Cascade Drilling, LP    | <b>Longitude:</b> NA                       | <b>Client:</b> Chevron Environmental Management Company              |
| <b>Drilling Method:</b> Geoprobe                 | <b>Casing Elevation:</b> NA                | <b>Location:</b> CVX MT 9-9708<br>5910 MacArthur Blvd.<br>Oakland CA |
| <b>Rig Type:</b> Geoprobe                        | <b>Total Depth:</b> 4.5 ft bgs             | <b>Project Number:</b> B0060901.9708.00002                           |
| <b>Sampling Method:</b> Acetate Sleeve           | <b>Boring Diameter:</b> 2.25 inch          |  |
|  | <b>Logged By:</b> Loretta Kwong            |  |
|  | <b>Reviewed By:</b> Melissa Blanchette, PG |  |

| DEPTH | Lab Sample | Recovery (feet) | Groundwater | PID Headspace (ppm) | USCS Code | Geologic Column | Lithologic Description | Well Construction |
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|
|-------|------------|-----------------|-------------|---------------------|-----------|-----------------|------------------------|-------------------|



|  |   |
|--|---|
|  | <b>Remarks:</b> AMSL = Above Mean Sea Level; bgs = below ground surface; ft = feet; HA = hand auger; NA = Not Applicable/Available; PID = Photoionization Detector; ppm = parts per million |
|  | Hand auger to 4.5' bgs where refusal was met. Attempted at 3 locations.   |



**Attachment 2**

Soil and Groundwater Laboratory  
Analytical Reports with Chain-of-  
Custody Record

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-14911-1

Client Project/Site: Chevron - 9-9708

Revision: 1

For:

ARCADIS U.S., Inc.

3240 El Camino Real

Suite 200

Irvine, California 92602

Attn: Toni DeMayo



Authorized for release by:

7/13/2012 3:59:47 PM

Sushmitha Reddy

Project Manager I

[sushmitha.reddy@testamericainc.com](mailto:sushmitha.reddy@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*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.*

1

2

3

4

5

6

7

8

9

10

11

12



# Table of Contents

|                                 |    |
|---------------------------------|----|
| Cover Page . . . . .            | 1  |
| Table of Contents . . . . .     | 2  |
| Sample Summary . . . . .        | 3  |
| Case Narrative . . . . .        | 4  |
| Client Sample Results . . . . . | 6  |
| Chronicle . . . . .             | 28 |
| QC Sample Results . . . . .     | 32 |
| QC Association . . . . .        | 42 |
| Definitions . . . . .           | 46 |
| Certification Summary . . . . . | 47 |
| Chain of Custody . . . . .      | 48 |
| Receipt Checklists . . . . .    | 49 |

# Sample Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 440-14911-1   | B-1-S-4'         | Solid  | 06/12/12 13:50 | 06/15/12 10:30 |
| 440-14911-2   | B-7-S-6'         | Solid  | 06/13/12 11:00 | 06/15/12 10:30 |
| 440-14911-3   | B-6-S-4'         | Solid  | 06/13/12 15:00 | 06/15/12 10:30 |
| 440-14911-4   | B-7-S-14'        | Solid  | 06/13/12 15:35 | 06/15/12 10:30 |
| 440-14911-5   | B-4-S-8'         | Solid  | 06/13/12 17:15 | 06/15/12 10:30 |
| 440-14911-6   | B-1-S-12'        | Solid  | 06/14/12 10:30 | 06/15/12 10:30 |
| 440-14911-7   | B-2-S-2'         | Solid  | 06/14/12 11:45 | 06/15/12 10:30 |
| 440-14911-8   | B-2-S-12'        | Solid  | 06/14/12 14:00 | 06/15/12 10:30 |
| 440-14911-9   | B-3-S-4'         | Solid  | 06/14/12 14:15 | 06/15/12 10:30 |
| 440-14911-10  | B-8-S-14'        | Solid  | 06/14/12 16:35 | 06/15/12 10:30 |
| 440-14911-11  | B-8-S-6'         | Solid  | 06/14/12 16:40 | 06/15/12 10:30 |

1

2

3

4

5

6

7

8

9

10

11

12

# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Job ID: 440-14911-1**

**Laboratory: TestAmerica Irvine**

## Narrative

### Job Narrative 440-14911-1

#### Comments

The report is reissued with MTBE data.

#### Receipt

The samples were received on 6/15/2012 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.8° C.

Except:

The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): B-9-2' (440-14911-12), B-9-4' (440-14911-13) These 2 samples were received in Plastic Zip Top bags. Samples did not have sampling date or time on the containers. The samples were logged in with 6/14/12 as a sampling date and 12:01AM as the sampling time. Per client's request, the samples were placed on hold.

#### GC/MS VOA

Method(s) 8260B: The continuing calibration verification (CCV) for Carbon Tetrachloride associated with batch 34151 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 34151 exceeded control limits for the following analytes: Carbon Tetrachloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: B-7-S-14' (440-14911-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. High hydrocarbon.

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 do not provide useful information: B-1-S-12' (440-14911-6), B-2-S-12' (440-14911-8).

No other analytical or quality issues were noted.

#### Metals

Method(s) 6010B: The following sample(s) was diluted due to the nature of the sample matrix: B-1-S-4' (440-14911-1), B-2-S-2' (440-14911-7), B-3-S-4' (440-14911-9), B-6-S-4' (440-14911-3), B-7-S-14' (440-14911-4), B-7-S-6' (440-14911-2), Sewer Sludge (0800)-1333 (440-14954-1). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 33756 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 6010B: The following sample(s) was diluted due to the nature of the sample matrix: B-1-S-12' (440-14911-6), B-2-S-12' (440-14911-8), B-8-S-14' (440-14911-10), B-8-S-6' (440-14911-11). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Organic Prep

Method(s) CA LUFT: The following sample(s) was diluted due to the nature of the sample matrix: B-2-S-12' (440-14911-8), B-7-S-14' (440-14911-4), B-8-S-14' (440-14911-10). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

---

## Job ID: 440-14911-1 (Continued)

---

### Laboratory: TestAmerica Irvine (Continued)

#### VOA Prep

No analytical or quality issues were noted.

1

2

3

4

5

6

7

8

9

10

11

12



# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-1-S-4'**

**Lab Sample ID: 440-14911-1**

**Date Collected: 06/12/12 13:50**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,1-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,1-Dichloroethene          | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,1-Dichloropropene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,2,3-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 9.9 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,2,4-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,2-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,3,5-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,3-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 2,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 2-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 4-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Benzene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Bromobenzene                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Bromoform                   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Bromomethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Carbon tetrachloride        | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Chlorobenzene               | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Chloroethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Chloroform                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Chloromethane               | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Dibromomethane              | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Dichlorodifluoromethane     | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Ethylbenzene                | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Hexachlorobutadiene         | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Isopropylbenzene            | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| m,p-Xylene                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Methylene Chloride          | ND     |           | 20  |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Naphthalene                 | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| n-Butylbenzene              | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| N-Propylbenzene             | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| o-Xylene                    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| sec-Butylbenzene            | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Styrene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| tert-Butylbenzene           | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Tetrachloroethene           | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Toluene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-1-S-4'**

**Lab Sample ID: 440-14911-1**

**Date Collected: 06/12/12 13:50**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|-------|---|----------|----------------|---------|
| Trichloroethene             | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Trichlorofluoromethane      | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Vinyl chloride              | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Bromochloromethane          | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Bromodichloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Dibromochloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| p-Isopropyltoluene          | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 15:46 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |       |   | Prepared | Analyzed       | Dil Fac |
| Toluene-d8 (Surr)           | 106       |           | 80 - 120 |     |       |   |          | 06/21/12 15:46 | 1       |
| 4-Bromofluorobenzene (Surr) | 113       |           | 80 - 120 |     |       |   |          | 06/21/12 15:46 | 1       |
| Dibromofluoromethane (Surr) | 101       |           | 80 - 125 |     |       |   |          | 06/21/12 15:46 | 1       |

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

| Analyte        | Result     | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------|------------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40)  | ND         |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 04:55 | 1       |
| DRO (C13-C28)  | ND         |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 04:55 | 1       |
| <b>C13-C40</b> | <b>5.6</b> |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 04:55 | 1       |
| Surrogate      | %Recovery  | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane   | 90         |           | 40 - 140 |     |       |   | 06/19/12 11:08 | 06/20/12 04:55 | 1       |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND        |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 07:39 | 1       |
| DRO (C13-C28) | ND        |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 07:39 | 1       |
| C13-C40       | ND        |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 07:39 | 1       |
| Surrogate     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane  | 87        |           | 40 - 140 |     |       |   | 06/20/12 11:00 | 06/21/12 07:39 | 1       |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:36 | 1       |
| Aroclor 1221                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:36 | 1       |
| Aroclor 1232                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:36 | 1       |
| Aroclor 1242                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:36 | 1       |
| Aroclor 1248                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:36 | 1       |
| Aroclor 1254                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:36 | 1       |
| Aroclor 1260                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:36 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 85        |           | 45 - 120 |     |       |   | 06/19/12 09:08 | 06/20/12 20:36 | 1       |

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

| Analyte         | Result     | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|------------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>15</b>  |           | 4.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:56 | 10      |
| <b>Zinc</b>     | <b>93</b>  |           | 10  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:56 | 10      |
| <b>Nickel</b>   | <b>310</b> |           | 4.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:56 | 10      |
| <b>Chromium</b> | <b>170</b> |           | 2.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:56 | 10      |
| Cadmium         | ND         |           | 1.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:56 | 10      |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-7-S-6'**

**Lab Sample ID: 440-14911-2**

**Date Collected: 06/13/12 11:00**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,1-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,1-Dichloroethene          | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,1-Dichloropropene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,2,3-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 10  |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,2,4-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,2-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,3,5-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,3-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 2,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 2-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 4-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Benzene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Bromobenzene                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Bromoform                   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Bromomethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Carbon tetrachloride        | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Chlorobenzene               | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Chloroethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Chloroform                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Chloromethane               | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Dibromomethane              | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Dichlorodifluoromethane     | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Ethylbenzene                | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Hexachlorobutadiene         | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Isopropylbenzene            | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| m,p-Xylene                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Methylene Chloride          | ND     |           | 20  |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Naphthalene                 | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| n-Butylbenzene              | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| N-Propylbenzene             | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| o-Xylene                    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| sec-Butylbenzene            | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Styrene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| tert-Butylbenzene           | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Tetrachloroethene           | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Toluene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-7-S-6'**

**Lab Sample ID: 440-14911-2**

Date Collected: 06/13/12 11:00

Matrix: Solid

Date Received: 06/15/12 10:30

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|-------|---|----------|----------------|---------|
| Trichloroethene             | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Trichlorofluoromethane      | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Vinyl chloride              | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Bromochloromethane          | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Bromodichloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Dibromochloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| p-Isopropyltoluene          | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 16:16 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |       |   | Prepared | Analyzed       | Dil Fac |
| Toluene-d8 (Surr)           | 107       |           | 80 - 120 |     |       |   |          | 06/21/12 16:16 | 1       |
| 4-Bromofluorobenzene (Surr) | 115       |           | 80 - 120 |     |       |   |          | 06/21/12 16:16 | 1       |
| Dibromofluoromethane (Surr) | 105       |           | 80 - 125 |     |       |   |          | 06/21/12 16:16 | 1       |

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

| Analyte       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND        |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 05:30 | 1       |
| DRO (C13-C28) | ND        |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 05:30 | 1       |
| C13-C40       | ND        |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 05:30 | 1       |
| Surrogate     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane  | 83        |           | 40 - 140 |     |       |   | 06/19/12 11:08 | 06/20/12 05:30 | 1       |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND        |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 08:19 | 1       |
| DRO (C13-C28) | ND        |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 08:19 | 1       |
| C13-C40       | ND        |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 08:19 | 1       |
| Surrogate     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane  | 77        |           | 40 - 140 |     |       |   | 06/20/12 11:00 | 06/21/12 08:19 | 1       |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:52 | 1       |
| Aroclor 1221                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:52 | 1       |
| Aroclor 1232                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:52 | 1       |
| Aroclor 1242                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:52 | 1       |
| Aroclor 1248                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:52 | 1       |
| Aroclor 1254                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:52 | 1       |
| Aroclor 1260                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 20:52 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 87        |           | 45 - 120 |     |       |   | 06/19/12 09:08 | 06/20/12 20:52 | 1       |

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

| Analyte  | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Lead     | 14     |           | 4.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:58 | 10      |
| Zinc     | 96     |           | 10  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:58 | 10      |
| Nickel   | 200    |           | 4.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:58 | 10      |
| Chromium | 81     |           | 2.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:58 | 10      |
| Cadmium  | ND     |           | 1.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:58 | 10      |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-6-S-4'**

**Lab Sample ID: 440-14911-3**

Date Collected: 06/13/12 15:00

Matrix: Solid

Date Received: 06/15/12 10:30

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,1-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,1-Dichloroethene          | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,1-Dichloropropene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,2,3-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 9.9 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,2,4-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,2-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,3,5-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,3-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 2,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 2-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 4-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Benzene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Bromobenzene                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Bromoform                   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Bromomethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Carbon tetrachloride        | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Chlorobenzene               | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Chloroethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Chloroform                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Chloromethane               | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Dibromomethane              | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Dichlorodifluoromethane     | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Ethylbenzene                | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Hexachlorobutadiene         | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Isopropylbenzene            | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| m,p-Xylene                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Methylene Chloride          | ND     |           | 20  |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Naphthalene                 | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| n-Butylbenzene              | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| N-Propylbenzene             | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| o-Xylene                    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| sec-Butylbenzene            | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Styrene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| tert-Butylbenzene           | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Tetrachloroethene           | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Toluene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-6-S-4'**

**Lab Sample ID: 440-14911-3**

**Date Collected: 06/13/12 15:00**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|-------|---|----------|----------------|---------|
| Trichloroethene             | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Trichlorofluoromethane      | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Vinyl chloride              | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Bromochloromethane          | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Bromodichloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Dibromochloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| p-Isopropyltoluene          | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 16:46 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |       |   | Prepared | Analyzed       | Dil Fac |
| Toluene-d8 (Surr)           | 107       |           | 80 - 120 |     |       |   |          | 06/21/12 16:46 | 1       |
| 4-Bromofluorobenzene (Surr) | 113       |           | 80 - 120 |     |       |   |          | 06/21/12 16:46 | 1       |
| Dibromofluoromethane (Surr) | 106       |           | 80 - 125 |     |       |   |          | 06/21/12 16:46 | 1       |

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

| Analyte        | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40)  | ND        |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 06:12 | 1       |
| DRO (C13-C28)  | ND        |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 06:12 | 1       |
| <b>C13-C40</b> | <b>12</b> |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 06:12 | 1       |
| Surrogate      | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane   | 86        |           | 40 - 140 |     |       |   | 06/19/12 11:08 | 06/20/12 06:12 | 1       |

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

| Analyte        | Result     | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------|------------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40)  | <b>8.8</b> |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 09:01 | 1       |
| DRO (C13-C28)  | <b>5.9</b> |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 09:01 | 1       |
| <b>C13-C40</b> | <b>16</b>  |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 09:01 | 1       |
| Surrogate      | %Recovery  | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane   | 81         |           | 40 - 140 |     |       |   | 06/20/12 11:00 | 06/21/12 09:01 | 1       |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte                       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:07 | 1       |
| Aroclor 1221                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:07 | 1       |
| Aroclor 1232                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:07 | 1       |
| Aroclor 1242                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:07 | 1       |
| Aroclor 1248                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:07 | 1       |
| Aroclor 1254                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:07 | 1       |
| Aroclor 1260                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:07 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 87        |           | 45 - 120 |     |       |   | 06/19/12 09:08 | 06/20/12 21:07 | 1       |

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

| Analyte         | Result     | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|------------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>18</b>  |           | 4.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 14:10 | 10      |
| <b>Zinc</b>     | <b>96</b>  |           | 10  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 14:10 | 10      |
| <b>Nickel</b>   | <b>220</b> |           | 4.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 14:10 | 10      |
| <b>Chromium</b> | <b>99</b>  |           | 2.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 14:10 | 10      |
| Cadmium         | ND         |           | 1.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 14:10 | 10      |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-7-S-14'**

**Lab Sample ID: 440-14911-4**

**Date Collected: 06/13/12 15:35**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                       | Result     | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-------------------------------|------------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane     | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,1,1-Trichloroethane         | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,1,2,2-Tetrachloroethane     | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,1,2-Trichloroethane         | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,1-Dichloroethane            | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,1-Dichloroethene            | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,1-Dichloropropene           | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,2,3-Trichlorobenzene        | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,2,3-Trichloropropane        | ND         |           | 49  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,2,4-Trichlorobenzene        | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| <b>1,2,4-Trimethylbenzene</b> | <b>75</b>  |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,2-Dibromo-3-Chloropropane   | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,2-Dichlorobenzene           | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,2-Dichloroethane            | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,2-Dichloropropane           | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| <b>1,3,5-Trimethylbenzene</b> | <b>56</b>  |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,3-Dichlorobenzene           | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,3-Dichloropropane           | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,4-Dichlorobenzene           | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 2,2-Dichloropropane           | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 2-Chlorotoluene               | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 4-Chlorotoluene               | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Benzene                       | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Bromobenzene                  | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Bromoform                     | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Bromomethane                  | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Carbon tetrachloride          | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Chlorobenzene                 | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Chloroethane                  | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Chloroform                    | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Chloromethane                 | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| cis-1,2-Dichloroethene        | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| cis-1,3-Dichloropropene       | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Dibromomethane                | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Dichlorodifluoromethane       | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| <b>Ethylbenzene</b>           | <b>350</b> |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Hexachlorobutadiene           | ND         |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| <b>Isopropylbenzene</b>       | <b>94</b>  |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| m,p-Xylene                    | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Methylene Chloride            | ND         |           | 97  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| <b>Naphthalene</b>            | <b>200</b> |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| <b>n-Butylbenzene</b>         | <b>210</b> |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| <b>N-Propylbenzene</b>        | <b>340</b> |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| o-Xylene                      | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| <b>sec-Butylbenzene</b>       | <b>56</b>  |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Styrene                       | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| <b>tert-Butylbenzene</b>      | <b>200</b> |           | 24  |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Tetrachloroethene             | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Toluene                       | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| trans-1,2-Dichloroethene      | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| trans-1,3-Dichloropropene     | ND         |           | 9.7 |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-7-S-14'**

**Lab Sample ID: 440-14911-4**

Date Collected: 06/13/12 15:35

Matrix: Solid

Date Received: 06/15/12 10:30

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|-------|---|----------|----------------|---------|
| Trichloroethene             | ND        |           | 9.7      |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Trichlorofluoromethane      | ND        |           | 24       |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Vinyl chloride              | ND        |           | 24       |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |           | 9.7      |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Bromochloromethane          | ND        |           | 24       |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Bromodichloromethane        | ND        |           | 9.7      |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Dibromochloromethane        | ND        |           | 9.7      |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| <b>p-Isopropyltoluene</b>   | <b>38</b> |           | 9.7      |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |           | 24       |     | ug/Kg |   |          | 06/21/12 17:17 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |       |   | Prepared | Analyzed       | Dil Fac |
| Toluene-d8 (Surr)           | 108       |           | 80 - 120 |     |       |   |          | 06/21/12 17:17 | 1       |
| 4-Bromofluorobenzene (Surr) | 123       | X         | 80 - 120 |     |       |   |          | 06/21/12 17:17 | 1       |
| Dibromofluoromethane (Surr) | 105       |           | 80 - 125 |     |       |   |          | 06/21/12 17:17 | 1       |

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

| Analyte       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND        |           | 15       |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 07:35 | 1       |
| DRO (C13-C28) | ND        |           | 15       |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 07:35 | 1       |
| C13-C40       | ND        |           | 15       |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 07:35 | 1       |
| Surrogate     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane  | 85        |           | 40 - 140 |     |       |   | 06/19/12 11:08 | 06/20/12 07:35 | 1       |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND        |           | 15       |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 11:04 | 1       |
| DRO (C13-C28) | ND        |           | 15       |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 11:04 | 1       |
| C13-C40       | ND        |           | 15       |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 11:04 | 1       |
| Surrogate     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane  | 85        |           | 40 - 140 |     |       |   | 06/20/12 11:00 | 06/21/12 11:04 | 1       |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:22 | 1       |
| Aroclor 1221                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:22 | 1       |
| Aroclor 1232                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:22 | 1       |
| Aroclor 1242                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:22 | 1       |
| Aroclor 1248                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:22 | 1       |
| Aroclor 1254                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:22 | 1       |
| Aroclor 1260                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:22 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 88        |           | 45 - 120 |     |       |   | 06/19/12 09:08 | 06/20/12 21:22 | 1       |

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

| Analyte         | Result    | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|-----------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>13</b> |           | 4.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 14:13 | 10      |
| <b>Zinc</b>     | <b>62</b> |           | 10  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 14:13 | 10      |
| <b>Nickel</b>   | <b>96</b> |           | 4.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 14:13 | 10      |
| <b>Chromium</b> | <b>55</b> |           | 2.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 14:13 | 10      |
| Cadmium         | ND        |           | 1.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 14:13 | 10      |



# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-4-S-8'**

**Lab Sample ID: 440-14911-5**

**Date Collected: 06/13/12 17:15**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,1-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,1-Dichloroethene          | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,1-Dichloropropene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,2,3-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 9.9 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,2,4-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,2-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,3,5-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,3-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 2,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 2-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 4-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Benzene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Bromobenzene                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Bromoform                   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Bromomethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Carbon tetrachloride        | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Chlorobenzene               | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Chloroethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Chloroform                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Chloromethane               | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Dibromomethane              | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Dichlorodifluoromethane     | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Ethylbenzene                | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Hexachlorobutadiene         | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Isopropylbenzene            | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| m,p-Xylene                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Methylene Chloride          | ND     |           | 20  |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Naphthalene                 | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| n-Butylbenzene              | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| N-Propylbenzene             | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| o-Xylene                    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| sec-Butylbenzene            | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Styrene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| tert-Butylbenzene           | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Tetrachloroethene           | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Toluene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-4-S-8'**

**Lab Sample ID: 440-14911-5**

Date Collected: 06/13/12 17:15

Matrix: Solid

Date Received: 06/15/12 10:30

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|-------|---|----------|----------------|---------|
| Trichloroethene             | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Trichlorofluoromethane      | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Vinyl chloride              | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Bromochloromethane          | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Bromodichloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Dibromochloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| p-Isopropyltoluene          | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 17:47 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |       |   | Prepared | Analyzed       | Dil Fac |
| Toluene-d8 (Surr)           | 108       |           | 80 - 120 |     |       |   |          | 06/21/12 17:47 | 1       |
| 4-Bromofluorobenzene (Surr) | 112       |           | 80 - 120 |     |       |   |          | 06/21/12 17:47 | 1       |
| Dibromofluoromethane (Surr) | 106       |           | 80 - 125 |     |       |   |          | 06/21/12 17:47 | 1       |

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

| Analyte        | Result     | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------|------------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40)  | ND         |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 08:56 | 1       |
| DRO (C13-C28)  | ND         |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 08:56 | 1       |
| <b>C13-C40</b> | <b>5.7</b> |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 08:56 | 1       |
| Surrogate      | %Recovery  | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane   | 88         |           | 40 - 140 |     |       |   | 06/19/12 11:08 | 06/20/12 08:56 | 1       |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND        |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 11:46 | 1       |
| DRO (C13-C28) | ND        |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 11:46 | 1       |
| C13-C40       | ND        |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 11:46 | 1       |
| Surrogate     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane  | 84        |           | 40 - 140 |     |       |   | 06/20/12 11:00 | 06/21/12 11:46 | 1       |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:37 | 1       |
| Aroclor 1221                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:37 | 1       |
| Aroclor 1232                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:37 | 1       |
| Aroclor 1242                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:37 | 1       |
| Aroclor 1248                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:37 | 1       |
| Aroclor 1254                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:37 | 1       |
| Aroclor 1260                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:37 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 88        |           | 45 - 120 |     |       |   | 06/19/12 09:08 | 06/20/12 21:37 | 1       |

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

| Analyte         | Result      | Qualifier | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|-------------|-----------|------|-----|-------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>13</b>   |           | 2.0  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:38 | 5       |
| <b>Zinc</b>     | <b>38</b>   |           | 4.9  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:38 | 5       |
| <b>Nickel</b>   | <b>30</b>   |           | 2.0  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:38 | 5       |
| <b>Chromium</b> | <b>34</b>   |           | 0.98 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:38 | 5       |
| <b>Cadmium</b>  | <b>0.49</b> |           | 0.49 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:38 | 5       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-1-S-12'**

**Lab Sample ID: 440-14911-6**

**Date Collected: 06/14/12 10:30**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,1-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,1-Dichloroethene          | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,1-Dichloropropene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,2,3-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 9.9 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,2,4-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,2-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,3,5-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,3-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 2,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 2-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 4-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Benzene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Bromobenzene                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Bromoform                   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Bromomethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Carbon tetrachloride        | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Chlorobenzene               | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Chloroethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Chloroform                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Chloromethane               | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Dibromomethane              | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Dichlorodifluoromethane     | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Ethylbenzene                | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Hexachlorobutadiene         | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Isopropylbenzene            | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| m,p-Xylene                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Methylene Chloride          | ND     |           | 20  |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Naphthalene                 | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| n-Butylbenzene              | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| N-Propylbenzene             | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| o-Xylene                    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| sec-Butylbenzene            | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Styrene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| tert-Butylbenzene           | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Tetrachloroethene           | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Toluene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-1-S-12'**

**Lab Sample ID: 440-14911-6**

**Date Collected: 06/14/12 10:30**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|-------|---|----------|----------------|---------|
| Trichloroethene             | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Trichlorofluoromethane      | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Vinyl chloride              | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Bromochloromethane          | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Bromodichloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Dibromochloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| p-Isopropyltoluene          | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 18:18 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |       |   | Prepared | Analyzed       | Dil Fac |
| Toluene-d8 (Surr)           | 103       |           | 80 - 120 |     |       |   |          | 06/21/12 18:18 | 1       |
| 4-Bromofluorobenzene (Surr) | 110       |           | 80 - 120 |     |       |   |          | 06/21/12 18:18 | 1       |
| Dibromofluoromethane (Surr) | 108       |           | 80 - 125 |     |       |   |          | 06/21/12 18:18 | 1       |

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

| Analyte              | Result     | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------------|------------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| <b>ORO (C29-C40)</b> | <b>330</b> |           | 100      |     | mg/Kg |   | 06/19/12 11:08 | 06/21/12 11:18 | 20      |
| <b>DRO (C13-C28)</b> | <b>590</b> |           | 100      |     | mg/Kg |   | 06/19/12 11:08 | 06/21/12 11:18 | 20      |
| <b>C13-C40</b>       | <b>930</b> |           | 100      |     | mg/Kg |   | 06/19/12 11:08 | 06/21/12 11:18 | 20      |
| Surrogate            | %Recovery  | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane         | 95         |           | 40 - 140 |     |       |   | 06/19/12 11:08 | 06/21/12 11:18 | 20      |

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

| Analyte              | Result     | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------------|------------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| <b>ORO (C29-C40)</b> | <b>280</b> |           | 50       |     | mg/Kg |   | 06/20/12 11:00 | 06/22/12 13:32 | 10      |
| <b>DRO (C13-C28)</b> | <b>500</b> |           | 50       |     | mg/Kg |   | 06/20/12 11:00 | 06/22/12 13:32 | 10      |
| <b>C13-C40</b>       | <b>790</b> |           | 50       |     | mg/Kg |   | 06/20/12 11:00 | 06/22/12 13:32 | 10      |
| Surrogate            | %Recovery  | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane         | 75         |           | 40 - 140 |     |       |   | 06/20/12 11:00 | 06/22/12 13:32 | 10      |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte                       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:52 | 1       |
| Aroclor 1221                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:52 | 1       |
| Aroclor 1232                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:52 | 1       |
| Aroclor 1242                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:52 | 1       |
| Aroclor 1248                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:52 | 1       |
| Aroclor 1254                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:52 | 1       |
| Aroclor 1260                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 21:52 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 79        |           | 45 - 120 |     |       |   | 06/19/12 09:08 | 06/20/12 21:52 | 1       |

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

| Analyte         | Result     | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|------------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>14</b>  |           | 4.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:32 | 10      |
| <b>Zinc</b>     | <b>74</b>  |           | 10  |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:32 | 10      |
| <b>Nickel</b>   | <b>120</b> |           | 4.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:32 | 10      |
| <b>Chromium</b> | <b>90</b>  |           | 2.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:32 | 10      |
| Cadmium         | ND         |           | 1.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:32 | 10      |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-2-S-2'**

**Lab Sample ID: 440-14911-7**

**Date Collected: 06/14/12 11:45**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,1-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,1-Dichloroethene          | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,1-Dichloropropene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,2,3-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 9.9 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,2,4-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,2-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,3,5-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,3-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 2,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 2-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 4-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Benzene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Bromobenzene                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Bromoform                   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Bromomethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Carbon tetrachloride        | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Chlorobenzene               | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Chloroethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Chloroform                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Chloromethane               | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Dibromomethane              | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Dichlorodifluoromethane     | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Ethylbenzene                | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Hexachlorobutadiene         | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Isopropylbenzene            | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| m,p-Xylene                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Methylene Chloride          | ND     |           | 20  |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Naphthalene                 | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| n-Butylbenzene              | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| N-Propylbenzene             | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| o-Xylene                    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| sec-Butylbenzene            | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Styrene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| tert-Butylbenzene           | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Tetrachloroethene           | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Toluene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-2-S-2'**

**Lab Sample ID: 440-14911-7**

Date Collected: 06/14/12 11:45

Matrix: Solid

Date Received: 06/15/12 10:30

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|-------|---|----------|----------------|---------|
| Trichloroethene             | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Trichlorofluoromethane      | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Vinyl chloride              | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Bromochloromethane          | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Bromodichloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Dibromochloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| p-Isopropyltoluene          | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 13:13 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |       |   | Prepared | Analyzed       | Dil Fac |
| Toluene-d8 (Surr)           | 105       |           | 80 - 120 |     |       |   |          | 06/21/12 13:13 | 1       |
| 4-Bromofluorobenzene (Surr) | 114       |           | 80 - 120 |     |       |   |          | 06/21/12 13:13 | 1       |
| Dibromofluoromethane (Surr) | 100       |           | 80 - 125 |     |       |   |          | 06/21/12 13:13 | 1       |

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

| Analyte        | Result     | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------|------------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40)  | ND         |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 10:17 | 1       |
| DRO (C13-C28)  | ND         |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 10:17 | 1       |
| <b>C13-C40</b> | <b>7.6</b> |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 10:17 | 1       |
| Surrogate      | %Recovery  | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane   | 89         |           | 40 - 140 |     |       |   | 06/19/12 11:08 | 06/20/12 10:17 | 1       |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte        | Result     | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------|------------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40)  | ND         |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 13:10 | 1       |
| DRO (C13-C28)  | ND         |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 13:10 | 1       |
| <b>C13-C40</b> | <b>6.3</b> |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 13:10 | 1       |
| Surrogate      | %Recovery  | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane   | 79         |           | 40 - 140 |     |       |   | 06/20/12 11:00 | 06/21/12 13:10 | 1       |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:07 | 1       |
| Aroclor 1221                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:07 | 1       |
| Aroclor 1232                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:07 | 1       |
| Aroclor 1242                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:07 | 1       |
| Aroclor 1248                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:07 | 1       |
| Aroclor 1254                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:07 | 1       |
| Aroclor 1260                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:07 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 86        |           | 45 - 120 |     |       |   | 06/19/12 09:08 | 06/20/12 22:07 | 1       |

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

| Analyte         | Result     | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|------------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>16</b>  |           | 10  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:42 | 25      |
| <b>Zinc</b>     | <b>97</b>  |           | 25  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:42 | 25      |
| <b>Nickel</b>   | <b>380</b> |           | 10  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:42 | 25      |
| <b>Chromium</b> | <b>130</b> |           | 5.1 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:42 | 25      |
| Cadmium         | ND         |           | 2.5 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:42 | 25      |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-2-S-12'**

**Lab Sample ID: 440-14911-8**

**Date Collected: 06/14/12 14:00**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result     | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|------------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,1,1-Trichloroethane       | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,1,2-Trichloroethane       | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,1-Dichloroethane          | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,1-Dichloroethene          | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,1-Dichloropropene         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,2,3-Trichlorobenzene      | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,2,3-Trichloropropane      | ND         |           | 10  |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,2,4-Trichlorobenzene      | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,2,4-Trimethylbenzene      | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| <b>1,2-Dichlorobenzene</b>  | <b>2.3</b> |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,2-Dichloroethane          | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,2-Dichloropropane         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,3,5-Trimethylbenzene      | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,3-Dichlorobenzene         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,3-Dichloropropane         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,4-Dichlorobenzene         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 2,2-Dichloropropane         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 2-Chlorotoluene             | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 4-Chlorotoluene             | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Benzene                     | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Bromobenzene                | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Bromoform                   | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Bromomethane                | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Carbon tetrachloride        | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Chlorobenzene               | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Chloroethane                | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Chloroform                  | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Chloromethane               | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| cis-1,2-Dichloroethene      | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| cis-1,3-Dichloropropene     | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Dibromomethane              | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Dichlorodifluoromethane     | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Ethylbenzene                | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Hexachlorobutadiene         | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Isopropylbenzene            | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| m,p-Xylene                  | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Methylene Chloride          | ND         |           | 20  |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Naphthalene                 | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| n-Butylbenzene              | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| N-Propylbenzene             | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| o-Xylene                    | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| <b>sec-Butylbenzene</b>     | <b>6.5</b> |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Styrene                     | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| tert-Butylbenzene           | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Tetrachloroethene           | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Toluene                     | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| trans-1,2-Dichloroethene    | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| trans-1,3-Dichloropropene   | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-2-S-12'**

**Lab Sample ID: 440-14911-8**

**Date Collected: 06/14/12 14:00**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|-------|---|----------|----------------|---------|
| Trichloroethene             | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Trichlorofluoromethane      | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Vinyl chloride              | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Bromochloromethane          | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Bromodichloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Dibromochloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| p-Isopropyltoluene          | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 18:48 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |       |   | Prepared | Analyzed       | Dil Fac |
| Toluene-d8 (Surr)           | 101       |           | 80 - 120 |     |       |   |          | 06/21/12 18:48 | 1       |
| 4-Bromofluorobenzene (Surr) | 109       |           | 80 - 120 |     |       |   |          | 06/21/12 18:48 | 1       |
| Dibromofluoromethane (Surr) | 111       |           | 80 - 125 |     |       |   |          | 06/21/12 18:48 | 1       |

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

| Analyte              | Result     | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------------|------------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| <b>ORO (C29-C40)</b> | <b>310</b> |           | 75       |     | mg/Kg |   | 06/19/12 11:08 | 06/21/12 11:39 | 5       |
| <b>DRO (C13-C28)</b> | <b>610</b> |           | 75       |     | mg/Kg |   | 06/19/12 11:08 | 06/21/12 11:39 | 5       |
| <b>C13-C40</b>       | <b>930</b> |           | 75       |     | mg/Kg |   | 06/19/12 11:08 | 06/21/12 11:39 | 5       |
| Surrogate            | %Recovery  | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane         | 76         |           | 40 - 140 |     |       |   | 06/19/12 11:08 | 06/21/12 11:39 | 5       |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte              | Result     | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------------|------------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| <b>ORO (C29-C40)</b> | <b>250</b> |           | 15       |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 14:31 | 1       |
| <b>DRO (C13-C28)</b> | <b>260</b> |           | 15       |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 14:31 | 1       |
| <b>C13-C40</b>       | <b>520</b> |           | 15       |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 14:31 | 1       |
| Surrogate            | %Recovery  | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane         | 72         |           | 40 - 140 |     |       |   | 06/20/12 11:00 | 06/21/12 14:31 | 1       |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:22 | 1       |
| Aroclor 1221                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:22 | 1       |
| Aroclor 1232                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:22 | 1       |
| Aroclor 1242                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:22 | 1       |
| Aroclor 1248                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:22 | 1       |
| Aroclor 1254                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:22 | 1       |
| Aroclor 1260                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:22 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 83        |           | 45 - 120 |     |       |   | 06/19/12 09:08 | 06/20/12 22:22 | 1       |

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

| Analyte         | Result    | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|-----------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>14</b> |           | 4.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:34 | 10      |
| <b>Zinc</b>     | <b>76</b> |           | 10  |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:34 | 10      |
| <b>Nickel</b>   | <b>98</b> |           | 4.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:34 | 10      |
| <b>Chromium</b> | <b>65</b> |           | 2.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:34 | 10      |
| Cadmium         | ND        |           | 1.0 |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:34 | 10      |



# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-3-S-4'**

**Lab Sample ID: 440-14911-9**

Date Collected: 06/14/12 14:15

Matrix: Solid

Date Received: 06/15/12 10:30

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,1-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,1-Dichloroethene          | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,1-Dichloropropene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,2,3-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 9.9 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,2,4-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,2-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,3,5-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,3-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 2,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 2-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 4-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Benzene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Bromobenzene                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Bromoform                   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Bromomethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Carbon tetrachloride        | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Chlorobenzene               | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Chloroethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Chloroform                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Chloromethane               | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Dibromomethane              | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Dichlorodifluoromethane     | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Ethylbenzene                | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Hexachlorobutadiene         | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Isopropylbenzene            | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| m,p-Xylene                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Methylene Chloride          | ND     |           | 20  |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Naphthalene                 | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| n-Butylbenzene              | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| N-Propylbenzene             | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| o-Xylene                    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| sec-Butylbenzene            | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Styrene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| tert-Butylbenzene           | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Tetrachloroethene           | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Toluene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-3-S-4'**

**Lab Sample ID: 440-14911-9**

Date Collected: 06/14/12 14:15

Matrix: Solid

Date Received: 06/15/12 10:30

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|-------|---|----------|----------------|---------|
| Trichloroethene             | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Trichlorofluoromethane      | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Vinyl chloride              | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Bromochloromethane          | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Bromodichloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Dibromochloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| p-Isopropyltoluene          | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 19:19 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |       |   | Prepared | Analyzed       | Dil Fac |
| Toluene-d8 (Surr)           | 106       |           | 80 - 120 |     |       |   |          | 06/21/12 19:19 | 1       |
| 4-Bromofluorobenzene (Surr) | 115       |           | 80 - 120 |     |       |   |          | 06/21/12 19:19 | 1       |
| Dibromofluoromethane (Surr) | 100       |           | 80 - 125 |     |       |   |          | 06/21/12 19:19 | 1       |

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

| Analyte        | Result     | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------|------------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40)  | ND         |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 11:38 | 1       |
| DRO (C13-C28)  | ND         |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 11:38 | 1       |
| <b>C13-C40</b> | <b>5.8</b> |           | 5.0      |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 11:38 | 1       |
| Surrogate      | %Recovery  | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane   | 87         |           | 40 - 140 |     |       |   | 06/19/12 11:08 | 06/20/12 11:38 | 1       |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte        | Result     | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------------|------------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40)  | ND         |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 07:01 | 1       |
| DRO (C13-C28)  | ND         |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 07:01 | 1       |
| <b>C13-C40</b> | <b>8.5</b> |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 07:01 | 1       |
| Surrogate      | %Recovery  | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane   | 82         |           | 40 - 140 |     |       |   | 06/20/12 11:00 | 06/21/12 07:01 | 1       |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:37 | 1       |
| Aroclor 1221                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:37 | 1       |
| Aroclor 1232                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:37 | 1       |
| Aroclor 1242                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:37 | 1       |
| Aroclor 1248                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:37 | 1       |
| Aroclor 1254                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:37 | 1       |
| Aroclor 1260                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:37 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 82        |           | 45 - 120 |     |       |   | 06/19/12 09:08 | 06/20/12 22:37 | 1       |

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

| Analyte         | Result     | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|------------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>13</b>  |           | 9.8 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:45 | 25      |
| <b>Zinc</b>     | <b>79</b>  |           | 25  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:45 | 25      |
| <b>Nickel</b>   | <b>150</b> |           | 9.8 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:45 | 25      |
| <b>Chromium</b> | <b>83</b>  |           | 4.9 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:45 | 25      |
| Cadmium         | ND         |           | 2.5 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 13:45 | 25      |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-8-S-14'**

**Lab Sample ID: 440-14911-10**

Date Collected: 06/14/12 16:35

Matrix: Solid

Date Received: 06/15/12 10:30

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result     | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|------------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,1,1-Trichloroethane       | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,1,2-Trichloroethane       | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,1-Dichloroethane          | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,1-Dichloroethene          | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,1-Dichloropropene         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,2,3-Trichlorobenzene      | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,2,3-Trichloropropane      | ND         |           | 9.9 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,2,4-Trichlorobenzene      | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,2,4-Trimethylbenzene      | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,2-Dichlorobenzene         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,2-Dichloroethane          | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,2-Dichloropropane         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,3,5-Trimethylbenzene      | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,3-Dichlorobenzene         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,3-Dichloropropane         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,4-Dichlorobenzene         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 2,2-Dichloropropane         | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 2-Chlorotoluene             | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 4-Chlorotoluene             | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Benzene                     | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Bromobenzene                | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Bromoform                   | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Bromomethane                | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Carbon tetrachloride        | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Chlorobenzene               | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Chloroethane                | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Chloroform                  | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Chloromethane               | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| cis-1,2-Dichloroethene      | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| cis-1,3-Dichloropropene     | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Dibromomethane              | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Dichlorodifluoromethane     | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| <b>Ethylbenzene</b>         | <b>2.1</b> |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Hexachlorobutadiene         | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Isopropylbenzene            | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| m,p-Xylene                  | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Methylene Chloride          | ND         |           | 20  |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Naphthalene                 | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| n-Butylbenzene              | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| <b>N-Propylbenzene</b>      | <b>3.5</b> |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| o-Xylene                    | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| sec-Butylbenzene            | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Styrene                     | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| tert-Butylbenzene           | ND         |           | 5.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Tetrachloroethene           | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Toluene                     | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| trans-1,2-Dichloroethene    | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| trans-1,3-Dichloropropene   | ND         |           | 2.0 |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-8-S-14'**

**Lab Sample ID: 440-14911-10**

Date Collected: 06/14/12 16:35

Matrix: Solid

Date Received: 06/15/12 10:30

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|-------|---|----------|----------------|---------|
| Trichloroethene             | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Trichlorofluoromethane      | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Vinyl chloride              | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Bromochloromethane          | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Bromodichloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Dibromochloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| p-Isopropyltoluene          | ND        |           | 2.0      |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |           | 5.0      |     | ug/Kg |   |          | 06/21/12 19:50 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |       |   | Prepared | Analyzed       | Dil Fac |
| Toluene-d8 (Surr)           | 107       |           | 80 - 120 |     |       |   |          | 06/21/12 19:50 | 1       |
| 4-Bromofluorobenzene (Surr) | 117       |           | 80 - 120 |     |       |   |          | 06/21/12 19:50 | 1       |
| Dibromofluoromethane (Surr) | 108       |           | 80 - 125 |     |       |   |          | 06/21/12 19:50 | 1       |

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

| Analyte       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND        |           | 15       |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 12:18 | 1       |
| DRO (C13-C28) | ND        |           | 15       |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 12:18 | 1       |
| C13-C40       | ND        |           | 15       |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 12:18 | 1       |
| Surrogate     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane  | 89        |           | 40 - 140 |     |       |   | 06/19/12 11:08 | 06/20/12 12:18 | 1       |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND        |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 15:10 | 1       |
| DRO (C13-C28) | ND        |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 15:10 | 1       |
| C13-C40       | ND        |           | 5.0      |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 15:10 | 1       |
| Surrogate     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane  | 85        |           | 40 - 140 |     |       |   | 06/20/12 11:00 | 06/21/12 15:10 | 1       |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:52 | 1       |
| Aroclor 1221                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:52 | 1       |
| Aroclor 1232                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:52 | 1       |
| Aroclor 1242                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:52 | 1       |
| Aroclor 1248                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:52 | 1       |
| Aroclor 1254                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:52 | 1       |
| Aroclor 1260                  | ND        |           | 50       |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 22:52 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 89        |           | 45 - 120 |     |       |   | 06/19/12 09:08 | 06/20/12 22:52 | 1       |

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

| Analyte  | Result | Qualifier | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Lead     | 12     |           | 4.0  |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:38 | 10      |
| Zinc     | 63     |           | 9.9  |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:38 | 10      |
| Nickel   | 93     |           | 4.0  |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:38 | 10      |
| Chromium | 57     |           | 2.0  |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:38 | 10      |
| Cadmium  | ND     |           | 0.99 |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:38 | 10      |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-8-S-6'**

**Lab Sample ID: 440-14911-11**

Date Collected: 06/14/12 16:40

Matrix: Solid

Date Received: 06/15/12 10:30

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,1-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,1-Dichloroethene          | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,1-Dichloropropene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,2,3-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 10  |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,2,4-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,2-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,3,5-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,3-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 2,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 2-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 4-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Benzene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Bromobenzene                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Bromoform                   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Bromomethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Carbon tetrachloride        | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Chlorobenzene               | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Chloroethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Chloroform                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Chloromethane               | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Dibromomethane              | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Dichlorodifluoromethane     | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Ethylbenzene                | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Hexachlorobutadiene         | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Isopropylbenzene            | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| m,p-Xylene                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Methylene Chloride          | ND     |           | 20  |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Naphthalene                 | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| n-Butylbenzene              | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| N-Propylbenzene             | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| o-Xylene                    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| sec-Butylbenzene            | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Styrene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| tert-Butylbenzene           | ND     |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Tetrachloroethene           | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Toluene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-8-S-6'**

**Lab Sample ID: 440-14911-11**

Date Collected: 06/14/12 16:40

Matrix: Solid

Date Received: 06/15/12 10:30

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                            | Result    | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------------------------------|-----------|-----------|-----|-----|-------|---|----------|----------------|---------|
| Trichloroethene                    | ND        |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Trichlorofluoromethane             | ND        |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Vinyl chloride                     | ND        |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| 1,2-Dibromoethane (EDB)            | ND        |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Bromochloromethane                 | ND        |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Bromodichloromethane               | ND        |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| Dibromochloromethane               | ND        |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| p-Isopropyltoluene                 | ND        |           | 2.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |
| <b>Methyl-t-Butyl Ether (MTBE)</b> | <b>13</b> |           | 5.0 |     | ug/Kg |   |          | 06/21/12 20:20 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Toluene-d8 (Surr)           | 107       |           | 80 - 120 |          | 06/21/12 20:20 | 1       |
| 4-Bromofluorobenzene (Surr) | 114       |           | 80 - 120 |          | 06/21/12 20:20 | 1       |
| Dibromofluoromethane (Surr) | 106       |           | 80 - 125 |          | 06/21/12 20:20 | 1       |

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

| Analyte       | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND     |           | 5.0 |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 12:58 | 1       |
| DRO (C13-C28) | ND     |           | 5.0 |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 12:58 | 1       |
| C13-C40       | ND     |           | 5.0 |     | mg/Kg |   | 06/19/12 11:08 | 06/20/12 12:58 | 1       |

| Surrogate    | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------|-----------|-----------|----------|----------------|----------------|---------|
| n-Octacosane | 87        |           | 40 - 140 | 06/19/12 11:08 | 06/20/12 12:58 | 1       |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte       | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND     |           | 5.0 |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 15:46 | 1       |
| DRO (C13-C28) | ND     |           | 5.0 |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 15:46 | 1       |
| C13-C40       | ND     |           | 5.0 |     | mg/Kg |   | 06/20/12 11:00 | 06/21/12 15:46 | 1       |

| Surrogate    | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------|-----------|-----------|----------|----------------|----------------|---------|
| n-Octacosane | 90        |           | 40 - 140 | 06/20/12 11:00 | 06/21/12 15:46 | 1       |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte      | Result | Qualifier | RL | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------|--------|-----------|----|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016 | ND     |           | 50 |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 23:07 | 1       |
| Aroclor 1221 | ND     |           | 50 |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 23:07 | 1       |
| Aroclor 1232 | ND     |           | 50 |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 23:07 | 1       |
| Aroclor 1242 | ND     |           | 50 |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 23:07 | 1       |
| Aroclor 1248 | ND     |           | 50 |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 23:07 | 1       |
| Aroclor 1254 | ND     |           | 50 |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 23:07 | 1       |
| Aroclor 1260 | ND     |           | 50 |     | ug/Kg |   | 06/19/12 09:08 | 06/20/12 23:07 | 1       |

| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 74        |           | 45 - 120 | 06/19/12 09:08 | 06/20/12 23:07 | 1       |

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

| Analyte         | Result     | Qualifier | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|------------|-----------|------|-----|-------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>13</b>  |           | 3.9  |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:40 | 10      |
| <b>Zinc</b>     | <b>87</b>  |           | 9.9  |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:40 | 10      |
| <b>Nickel</b>   | <b>190</b> |           | 3.9  |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:40 | 10      |
| <b>Chromium</b> | <b>110</b> |           | 2.0  |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:40 | 10      |
| Cadmium         | ND         |           | 0.99 |     | mg/Kg |   | 06/19/12 09:00 | 06/26/12 14:40 | 10      |

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-1-S-4'**

**Date Collected: 06/12/12 13:50**

**Date Received: 06/15/12 10:30**

**Lab Sample ID: 440-14911-1**

**Matrix: Solid**

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 5.04 g         | 10 mL        | 34311        | 06/21/12 15:46       | KK      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 30.04 g        | 1 mL         | 33785        | 06/19/12 11:08       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 33917        | 06/20/12 04:55       |         | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.02 g        | 2 mL         | 33763        | 06/19/12 09:08       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34064        | 06/20/12 20:36       | JM      | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 30.05 g        | 1 mL         | 34045        | 06/20/12 11:00       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34251        | 06/21/12 07:39       |         | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 1.98 g         | 50 mL        | 33756        | 06/19/12 09:00       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 10         |                |              | 34348        | 06/20/12 13:56       | DT      | TAL IRV |

**Client Sample ID: B-7-S-6'**

**Date Collected: 06/13/12 11:00**

**Date Received: 06/15/12 10:30**

**Lab Sample ID: 440-14911-2**

**Matrix: Solid**

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 5.02 g         | 10 mL        | 34311        | 06/21/12 16:16       | KK      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 30.01 g        | 1 mL         | 33785        | 06/19/12 11:08       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 33917        | 06/20/12 05:30       |         | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.00 g        | 2 mL         | 33763        | 06/19/12 09:08       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34064        | 06/20/12 20:52       | JM      | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 30.02 g        | 1 mL         | 34045        | 06/20/12 11:00       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34251        | 06/21/12 08:19       |         | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 1.99 g         | 50 mL        | 33756        | 06/19/12 09:00       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 10         |                |              | 34348        | 06/20/12 13:58       | DT      | TAL IRV |

**Client Sample ID: B-6-S-4'**

**Date Collected: 06/13/12 15:00**

**Date Received: 06/15/12 10:30**

**Lab Sample ID: 440-14911-3**

**Matrix: Solid**

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 5.05 g         | 10 mL        | 34311        | 06/21/12 16:46       | KK      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 30.01 g        | 1 mL         | 33785        | 06/19/12 11:08       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 33917        | 06/20/12 06:12       |         | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.02 g        | 2 mL         | 33763        | 06/19/12 09:08       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34064        | 06/20/12 21:07       | JM      | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 30.02 g        | 1 mL         | 34045        | 06/20/12 11:00       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34251        | 06/21/12 09:01       |         | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 1.99 g         | 50 mL        | 33756        | 06/19/12 09:00       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 10         |                |              | 34348        | 06/20/12 14:10       | DT      | TAL IRV |

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## Client Sample ID: B-7-S-14'

Lab Sample ID: 440-14911-4

Date Collected: 06/13/12 15:35

Matrix: Solid

Date Received: 06/15/12 10:30

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 1.03 g         | 10 mL        | 34311        | 06/21/12 17:17       | KK      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 10.05 g        | 1 mL         | 33785        | 06/19/12 11:08       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 33917        | 06/20/12 07:35       |         | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.01 g        | 2 mL         | 33763        | 06/19/12 09:08       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34064        | 06/20/12 21:22       | JM      | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 10.02 g        | 1 mL         | 34045        | 06/20/12 11:00       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34251        | 06/21/12 11:04       |         | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 2.00 g         | 50 mL        | 33756        | 06/19/12 09:00       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 10         |                |              | 34348        | 06/20/12 14:13       | DT      | TAL IRV |

## Client Sample ID: B-4-S-8'

Lab Sample ID: 440-14911-5

Date Collected: 06/13/12 17:15

Matrix: Solid

Date Received: 06/15/12 10:30

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 5.04 g         | 10 mL        | 34311        | 06/21/12 17:47       | KK      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 30.03 g        | 1 mL         | 33785        | 06/19/12 11:08       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 33917        | 06/20/12 08:56       |         | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.05 g        | 2 mL         | 33763        | 06/19/12 09:08       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34064        | 06/20/12 21:37       | JM      | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 30.08 g        | 1 mL         | 34045        | 06/20/12 11:00       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34251        | 06/21/12 11:46       |         | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 2.04 g         | 50 mL        | 33756        | 06/19/12 09:00       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 5          |                |              | 34348        | 06/20/12 13:38       | DT      | TAL IRV |

## Client Sample ID: B-1-S-12'

Lab Sample ID: 440-14911-6

Date Collected: 06/14/12 10:30

Matrix: Solid

Date Received: 06/15/12 10:30

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 5.05 g         | 10 mL        | 34311        | 06/21/12 18:18       | KK      | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.01 g        | 2 mL         | 33763        | 06/19/12 09:08       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34064        | 06/20/12 21:52       | JM      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 30.01 g        | 1 mL         | 33785        | 06/19/12 11:08       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 20         |                |              | 34194        | 06/21/12 11:18       |         | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 30.04 g        | 1 mL         | 34045        | 06/20/12 11:00       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 10         |                |              | 34426        | 06/22/12 13:32       |         | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 2.01 g         | 50 mL        | 33756        | 06/19/12 09:00       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 10         |                |              | 35286        | 06/26/12 14:32       | TK      | TAL IRV |



# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## Client Sample ID: B-2-S-2'

Date Collected: 06/14/12 11:45

Date Received: 06/15/12 10:30

## Lab Sample ID: 440-14911-7

Matrix: Solid

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 5.04 g         | 10 mL        | 34311        | 06/21/12 13:13       | KK      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 30.01 g        | 1 mL         | 33785        | 06/19/12 11:08       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 33917        | 06/20/12 10:17       |         | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.00 g        | 2 mL         | 33763        | 06/19/12 09:08       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34064        | 06/20/12 22:07       | JM      | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 30.08 g        | 1 mL         | 34045        | 06/20/12 11:00       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34251        | 06/21/12 13:10       |         | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 1.98 g         | 50 mL        | 33756        | 06/19/12 09:00       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 25         |                |              | 34348        | 06/20/12 13:42       | DT      | TAL IRV |

## Client Sample ID: B-2-S-12'

Date Collected: 06/14/12 14:00

Date Received: 06/15/12 10:30

## Lab Sample ID: 440-14911-8

Matrix: Solid

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 5.02 g         | 10 mL        | 34311        | 06/21/12 18:48       | KK      | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.02 g        | 2 mL         | 33763        | 06/19/12 09:08       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34064        | 06/20/12 22:22       | JM      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 10.00 g        | 1 mL         | 33785        | 06/19/12 11:08       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 5          |                |              | 34194        | 06/21/12 11:39       |         | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 10.08 g        | 1 mL         | 34045        | 06/20/12 11:00       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34251        | 06/21/12 14:31       |         | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 1.99 g         | 50 mL        | 33756        | 06/19/12 09:00       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 10         |                |              | 35286        | 06/26/12 14:34       | TK      | TAL IRV |

## Client Sample ID: B-3-S-4'

Date Collected: 06/14/12 14:15

Date Received: 06/15/12 10:30

## Lab Sample ID: 440-14911-9

Matrix: Solid

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 5.04 g         | 10 mL        | 34311        | 06/21/12 19:19       | KK      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 30.03 g        | 1 mL         | 33785        | 06/19/12 11:08       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 33917        | 06/20/12 11:38       |         | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.01 g        | 2 mL         | 33763        | 06/19/12 09:08       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34064        | 06/20/12 22:37       | JM      | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 30.04 g        | 1 mL         | 34045        | 06/20/12 11:00       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34251        | 06/21/12 07:01       |         | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 2.04 g         | 50 mL        | 33756        | 06/19/12 09:00       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 25         |                |              | 34348        | 06/20/12 13:45       | DT      | TAL IRV |

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

**Client Sample ID: B-8-S-14'**

**Lab Sample ID: 440-14911-10**

**Date Collected: 06/14/12 16:35**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 5.04 g         | 10 mL        | 34311        | 06/21/12 19:50       | KK      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 10.04 g        | 1 mL         | 33785        | 06/19/12 11:08       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 33917        | 06/20/12 12:18       |         | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.04 g        | 2 mL         | 33763        | 06/19/12 09:08       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34064        | 06/20/12 22:52       | JM      | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 30.07 g        | 1 mL         | 34045        | 06/20/12 11:00       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34251        | 06/21/12 15:10       |         | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 2.02 g         | 50 mL        | 33756        | 06/19/12 09:00       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 10         |                |              | 35286        | 06/26/12 14:38       | TK      | TAL IRV |

**Client Sample ID: B-8-S-6'**

**Lab Sample ID: 440-14911-11**

**Date Collected: 06/14/12 16:40**

**Matrix: Solid**

**Date Received: 06/15/12 10:30**

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 5 g            | 10 mL        | 34311        | 06/21/12 20:20       | KK      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 30.01 g        | 1 mL         | 33785        | 06/19/12 11:08       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 33917        | 06/20/12 12:58       |         | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.05 g        | 2 mL         | 33763        | 06/19/12 09:08       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34064        | 06/20/12 23:07       | JM      | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 30.05 g        | 1 mL         | 34045        | 06/20/12 11:00       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34251        | 06/21/12 15:46       |         | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 2.03 g         | 50 mL        | 33756        | 06/19/12 09:00       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 10         |                |              | 35286        | 06/26/12 14:40       | TK      | TAL IRV |

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-34311/3**

**Matrix: Solid**

**Analysis Batch: 34311**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

| Analyte                     | MB Result | MB Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,1,1-Trichloroethane       | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,1,2-Trichloroethane       | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,1-Dichloroethane          | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,1-Dichloroethene          | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,1-Dichloropropene         | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,2,3-Trichlorobenzene      | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,2,3-Trichloropropane      | ND        |              | 10  |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,2,4-Trichlorobenzene      | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,2,4-Trimethylbenzene      | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,2-Dichlorobenzene         | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,2-Dichloroethane          | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,2-Dichloropropane         | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,3,5-Trimethylbenzene      | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,3-Dichlorobenzene         | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,3-Dichloropropane         | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,4-Dichlorobenzene         | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 2,2-Dichloropropane         | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 2-Chlorotoluene             | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 4-Chlorotoluene             | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Benzene                     | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Bromobenzene                | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Bromoform                   | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Bromomethane                | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Carbon tetrachloride        | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Chlorobenzene               | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Chloroethane                | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Chloroform                  | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Chloromethane               | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| cis-1,2-Dichloroethene      | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| cis-1,3-Dichloropropene     | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Dibromomethane              | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Dichlorodifluoromethane     | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Ethylbenzene                | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Hexachlorobutadiene         | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Isopropylbenzene            | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| m,p-Xylene                  | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Methylene Chloride          | ND        |              | 20  |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Naphthalene                 | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| n-Butylbenzene              | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| N-Propylbenzene             | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| o-Xylene                    | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| sec-Butylbenzene            | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Styrene                     | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| tert-Butylbenzene           | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Tetrachloroethene           | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Toluene                     | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-34311/3**

**Matrix: Solid**

**Analysis Batch: 34311**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

| Analyte                     | MB Result | MB Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-----|-----|-------|---|----------|----------------|---------|
| trans-1,2-Dichloroethene    | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| trans-1,3-Dichloropropene   | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Trichloroethene             | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Trichlorofluoromethane      | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Vinyl chloride              | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Bromochloromethane          | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Bromodichloromethane        | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Dibromochloromethane        | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| p-Isopropyltoluene          | ND        |              | 2.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |              | 5.0 |     | ug/Kg |   |          | 06/21/12 12:12 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------|----------------|---------|
| Toluene-d8 (Surr)           | 106          |              | 80 - 120 |          | 06/21/12 12:12 | 1       |
| 4-Bromofluorobenzene (Surr) | 112          |              | 80 - 120 |          | 06/21/12 12:12 | 1       |
| Dibromofluoromethane (Surr) | 101          |              | 80 - 125 |          | 06/21/12 12:12 | 1       |

**Lab Sample ID: LCS 440-34311/4**

**Matrix: Solid**

**Analysis Batch: 34311**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| 1,1,1,2-Tetrachloroethane   | 50.0        | 55.8       |               | ug/Kg |   | 112  | 70 - 130     |
| 1,1,1-Trichloroethane       | 50.0        | 52.1       |               | ug/Kg |   | 104  | 65 - 135     |
| 1,1,2,2-Tetrachloroethane   | 50.0        | 54.7       |               | ug/Kg |   | 109  | 55 - 140     |
| 1,1,2-Trichloroethane       | 50.0        | 50.2       |               | ug/Kg |   | 100  | 65 - 135     |
| 1,1-Dichloroethane          | 50.0        | 50.4       |               | ug/Kg |   | 101  | 70 - 130     |
| 1,1-Dichloroethene          | 50.0        | 53.9       |               | ug/Kg |   | 108  | 70 - 125     |
| 1,1-Dichloropropene         | 50.0        | 48.1       |               | ug/Kg |   | 96   | 70 - 130     |
| 1,2,3-Trichlorobenzene      | 50.0        | 48.3       |               | ug/Kg |   | 97   | 60 - 130     |
| 1,2,3-Trichloropropane      | 50.0        | 50.8       |               | ug/Kg |   | 102  | 60 - 135     |
| 1,2,4-Trichlorobenzene      | 50.0        | 52.8       |               | ug/Kg |   | 106  | 70 - 135     |
| 1,2,4-Trimethylbenzene      | 50.0        | 55.1       |               | ug/Kg |   | 110  | 70 - 125     |
| 1,2-Dibromo-3-Chloropropane | 50.0        | 46.5       |               | ug/Kg |   | 93   | 50 - 135     |
| 1,2-Dichlorobenzene         | 50.0        | 54.4       |               | ug/Kg |   | 109  | 75 - 120     |
| 1,2-Dichloroethane          | 50.0        | 50.3       |               | ug/Kg |   | 101  | 60 - 140     |
| 1,2-Dichloropropane         | 50.0        | 48.7       |               | ug/Kg |   | 97   | 70 - 130     |
| 1,3,5-Trimethylbenzene      | 50.0        | 54.7       |               | ug/Kg |   | 109  | 70 - 125     |
| 1,3-Dichlorobenzene         | 50.0        | 53.5       |               | ug/Kg |   | 107  | 75 - 125     |
| 1,3-Dichloropropane         | 50.0        | 49.7       |               | ug/Kg |   | 99   | 70 - 125     |
| 1,4-Dichlorobenzene         | 50.0        | 53.6       |               | ug/Kg |   | 107  | 75 - 120     |
| 2,2-Dichloropropane         | 50.0        | 53.4       |               | ug/Kg |   | 107  | 60 - 145     |
| 2-Chlorotoluene             | 50.0        | 53.7       |               | ug/Kg |   | 107  | 70 - 125     |
| 4-Chlorotoluene             | 50.0        | 53.0       |               | ug/Kg |   | 106  | 75 - 125     |
| Benzene                     | 50.0        | 49.1       |               | ug/Kg |   | 98   | 65 - 120     |
| Bromobenzene                | 50.0        | 53.9       |               | ug/Kg |   | 108  | 75 - 120     |
| Bromoform                   | 50.0        | 50.0       |               | ug/Kg |   | 100  | 55 - 135     |
| Bromomethane                | 50.0        | 50.3       |               | ug/Kg |   | 101  | 60 - 145     |
| Carbon tetrachloride        | 50.0        | 52.9       |               | ug/Kg |   | 106  | 65 - 140     |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-34311/4**

**Matrix: Solid**

**Analysis Batch: 34311**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Chlorobenzene               | 50.0        | 52.6       |               | ug/Kg |   | 105  | 75 - 120     |
| Chloroethane                | 50.0        | 47.3       |               | ug/Kg |   | 95   | 60 - 140     |
| Chloroform                  | 50.0        | 50.9       |               | ug/Kg |   | 102  | 70 - 130     |
| Chloromethane               | 50.0        | 46.3       |               | ug/Kg |   | 93   | 45 - 145     |
| cis-1,2-Dichloroethene      | 50.0        | 56.1       |               | ug/Kg |   | 112  | 70 - 125     |
| cis-1,3-Dichloropropene     | 50.0        | 48.7       |               | ug/Kg |   | 97   | 75 - 125     |
| Dibromomethane              | 50.0        | 53.6       |               | ug/Kg |   | 107  | 70 - 130     |
| Dichlorodifluoromethane     | 50.0        | 38.4       |               | ug/Kg |   | 77   | 35 - 160     |
| Ethylbenzene                | 50.0        | 53.6       |               | ug/Kg |   | 107  | 70 - 125     |
| Hexachlorobutadiene         | 50.0        | 52.0       |               | ug/Kg |   | 104  | 60 - 135     |
| Isopropylbenzene            | 50.0        | 54.2       |               | ug/Kg |   | 108  | 75 - 130     |
| m,p-Xylene                  | 100         | 101        |               | ug/Kg |   | 101  | 70 - 125     |
| Methylene Chloride          | 50.0        | 47.9       |               | ug/Kg |   | 96   | 55 - 135     |
| Naphthalene                 | 50.0        | 52.5       |               | ug/Kg |   | 105  | 55 - 135     |
| n-Butylbenzene              | 50.0        | 55.3       |               | ug/Kg |   | 111  | 70 - 130     |
| N-Propylbenzene             | 50.0        | 54.6       |               | ug/Kg |   | 109  | 70 - 130     |
| o-Xylene                    | 50.0        | 53.0       |               | ug/Kg |   | 106  | 70 - 125     |
| sec-Butylbenzene            | 50.0        | 52.3       |               | ug/Kg |   | 105  | 70 - 125     |
| Styrene                     | 50.0        | 54.1       |               | ug/Kg |   | 108  | 75 - 130     |
| tert-Butylbenzene           | 50.0        | 56.1       |               | ug/Kg |   | 112  | 70 - 125     |
| Tetrachloroethene           | 50.0        | 52.4       |               | ug/Kg |   | 105  | 70 - 125     |
| Toluene                     | 50.0        | 54.6       |               | ug/Kg |   | 109  | 70 - 125     |
| trans-1,2-Dichloroethene    | 50.0        | 54.7       |               | ug/Kg |   | 109  | 70 - 125     |
| trans-1,3-Dichloropropene   | 50.0        | 60.3       |               | ug/Kg |   | 121  | 70 - 135     |
| Trichloroethene             | 50.0        | 52.6       |               | ug/Kg |   | 105  | 70 - 125     |
| Trichlorofluoromethane      | 50.0        | 50.7       |               | ug/Kg |   | 101  | 60 - 145     |
| Vinyl chloride              | 50.0        | 48.2       |               | ug/Kg |   | 96   | 55 - 135     |
| 1,2-Dibromoethane (EDB)     | 50.0        | 51.7       |               | ug/Kg |   | 103  | 70 - 130     |
| Bromochloromethane          | 50.0        | 54.0       |               | ug/Kg |   | 108  | 70 - 135     |
| Bromodichloromethane        | 50.0        | 53.2       |               | ug/Kg |   | 106  | 70 - 135     |
| Dibromochloromethane        | 50.0        | 55.9       |               | ug/Kg |   | 112  | 65 - 140     |
| p-Isopropyltoluene          | 50.0        | 56.2       |               | ug/Kg |   | 112  | 75 - 125     |
| Methyl-t-Butyl Ether (MTBE) | 50.0        | 54.8       |               | ug/Kg |   | 110  | 60 - 140     |

| Surrogate                   | LCS LCS   |           | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| Toluene-d8 (Surr)           | 108       |           | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 111       |           | 80 - 120 |
| Dibromofluoromethane (Surr) | 103       |           | 80 - 125 |

**Lab Sample ID: 440-14911-7 MS**

**Matrix: Solid**

**Analysis Batch: 34311**

**Client Sample ID: B-2-S-2'**

**Prep Type: Total/NA**

| Analyte                   | Sample Result | Sample Qualifier | Spike Added | MS MS  |           | Unit  | D | %Rec | %Rec. Limits |
|---------------------------|---------------|------------------|-------------|--------|-----------|-------|---|------|--------------|
|                           |               |                  |             | Result | Qualifier |       |   |      |              |
| 1,1,1,2-Tetrachloroethane | ND            |                  | 49.8        | 63.3   |           | ug/Kg |   | 127  | 65 - 145     |
| 1,1,1-Trichloroethane     | ND            |                  | 49.8        | 55.7   |           | ug/Kg |   | 112  | 65 - 145     |
| 1,1,2,2-Tetrachloroethane | ND            |                  | 49.8        | 63.7   |           | ug/Kg |   | 128  | 40 - 160     |
| 1,1,2-Trichloroethane     | ND            |                  | 49.8        | 58.4   |           | ug/Kg |   | 117  | 65 - 140     |
| 1,1-Dichloroethane        | ND            |                  | 49.8        | 54.0   |           | ug/Kg |   | 109  | 65 - 135     |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-14911-7 MS

Matrix: Solid

Analysis Batch: 34311

Client Sample ID: B-2-S-2'

Prep Type: Total/NA

| Analyte                     | Sample | Sample    | Spike | MS     | MS        | Unit  | D | %Rec | %Rec.<br>Limits |
|-----------------------------|--------|-----------|-------|--------|-----------|-------|---|------|-----------------|
|                             | Result | Qualifier | Added | Result | Qualifier |       |   |      |                 |
| 1,1-Dichloroethene          | ND     |           | 49.8  | 59.3   |           | ug/Kg |   | 119  | 65 - 135        |
| 1,1-Dichloropropene         | ND     |           | 49.8  | 52.2   |           | ug/Kg |   | 105  | 65 - 135        |
| 1,2,3-Trichlorobenzene      | ND     |           | 49.8  | 51.4   |           | ug/Kg |   | 103  | 45 - 145        |
| 1,2,3-Trichloropropane      | ND     |           | 49.8  | 59.1   |           | ug/Kg |   | 119  | 50 - 150        |
| 1,2,4-Trichlorobenzene      | ND     |           | 49.8  | 55.9   |           | ug/Kg |   | 112  | 50 - 140        |
| 1,2,4-Trimethylbenzene      | ND     |           | 49.8  | 61.5   |           | ug/Kg |   | 123  | 65 - 140        |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 49.8  | 52.3   |           | ug/Kg |   | 105  | 40 - 150        |
| 1,2-Dichlorobenzene         | ND     |           | 49.8  | 61.0   |           | ug/Kg |   | 122  | 70 - 130        |
| 1,2-Dichloroethane          | ND     |           | 49.8  | 58.4   |           | ug/Kg |   | 117  | 60 - 150        |
| 1,2-Dichloropropane         | ND     |           | 49.8  | 56.2   |           | ug/Kg |   | 113  | 65 - 130        |
| 1,3,5-Trimethylbenzene      | ND     |           | 49.8  | 60.7   |           | ug/Kg |   | 122  | 65 - 135        |
| 1,3-Dichlorobenzene         | ND     |           | 49.8  | 60.6   |           | ug/Kg |   | 122  | 70 - 130        |
| 1,3-Dichloropropane         | ND     |           | 49.8  | 57.9   |           | ug/Kg |   | 116  | 65 - 140        |
| 1,4-Dichlorobenzene         | ND     |           | 49.8  | 59.8   |           | ug/Kg |   | 120  | 70 - 130        |
| 2,2-Dichloropropane         | ND     |           | 49.8  | 57.6   |           | ug/Kg |   | 116  | 65 - 150        |
| 2-Chlorotoluene             | ND     |           | 49.8  | 60.6   |           | ug/Kg |   | 122  | 60 - 135        |
| 4-Chlorotoluene             | ND     |           | 49.8  | 60.4   |           | ug/Kg |   | 121  | 65 - 135        |
| Benzene                     | ND     |           | 49.8  | 54.0   |           | ug/Kg |   | 109  | 65 - 130        |
| Bromobenzene                | ND     |           | 49.8  | 62.9   |           | ug/Kg |   | 126  | 65 - 140        |
| Bromoform                   | ND     |           | 49.8  | 57.5   |           | ug/Kg |   | 115  | 50 - 145        |
| Bromomethane                | ND     |           | 49.8  | 56.5   |           | ug/Kg |   | 113  | 60 - 155        |
| Carbon tetrachloride        | ND     |           | 49.8  | 58.5   |           | ug/Kg |   | 117  | 60 - 145        |
| Chlorobenzene               | ND     |           | 49.8  | 58.6   |           | ug/Kg |   | 118  | 70 - 130        |
| Chloroethane                | ND     |           | 49.8  | 52.2   |           | ug/Kg |   | 105  | 60 - 150        |
| Chloroform                  | ND     |           | 49.8  | 54.8   |           | ug/Kg |   | 110  | 65 - 135        |
| Chloromethane               | ND     |           | 49.8  | 53.4   |           | ug/Kg |   | 107  | 40 - 145        |
| cis-1,2-Dichloroethene      | ND     |           | 49.8  | 60.4   |           | ug/Kg |   | 121  | 65 - 135        |
| cis-1,3-Dichloropropene     | ND     |           | 49.8  | 56.2   |           | ug/Kg |   | 113  | 70 - 135        |
| Dibromomethane              | ND     |           | 49.8  | 61.8   |           | ug/Kg |   | 124  | 65 - 140        |
| Dichlorodifluoromethane     | ND     |           | 49.8  | 49.8   |           | ug/Kg |   | 100  | 30 - 160        |
| Ethylbenzene                | ND     |           | 49.8  | 60.5   |           | ug/Kg |   | 121  | 70 - 135        |
| Hexachlorobutadiene         | ND     |           | 49.8  | 55.1   |           | ug/Kg |   | 111  | 50 - 145        |
| Isopropylbenzene            | ND     |           | 49.8  | 60.9   |           | ug/Kg |   | 122  | 70 - 145        |
| m,p-Xylene                  | ND     |           | 99.6  | 114    |           | ug/Kg |   | 114  | 70 - 130        |
| Methylene Chloride          | ND     |           | 49.8  | 54.0   |           | ug/Kg |   | 108  | 55 - 145        |
| Naphthalene                 | ND     |           | 49.8  | 54.7   |           | ug/Kg |   | 110  | 40 - 150        |
| n-Butylbenzene              | ND     |           | 49.8  | 62.6   |           | ug/Kg |   | 126  | 55 - 145        |
| N-Propylbenzene             | ND     |           | 49.8  | 62.2   |           | ug/Kg |   | 125  | 65 - 140        |
| o-Xylene                    | ND     |           | 49.8  | 58.8   |           | ug/Kg |   | 118  | 65 - 130        |
| sec-Butylbenzene            | ND     |           | 49.8  | 58.5   |           | ug/Kg |   | 118  | 60 - 135        |
| Styrene                     | ND     |           | 49.8  | 58.8   |           | ug/Kg |   | 118  | 70 - 140        |
| tert-Butylbenzene           | ND     |           | 49.8  | 62.3   |           | ug/Kg |   | 125  | 60 - 140        |
| Tetrachloroethene           | ND     |           | 49.8  | 57.7   |           | ug/Kg |   | 116  | 65 - 135        |
| Toluene                     | ND     |           | 49.8  | 60.8   |           | ug/Kg |   | 122  | 70 - 130        |
| trans-1,2-Dichloroethene    | ND     |           | 49.8  | 58.5   |           | ug/Kg |   | 117  | 70 - 135        |
| trans-1,3-Dichloropropene   | ND     |           | 49.8  | 69.2   |           | ug/Kg |   | 139  | 60 - 145        |
| Trichloroethene             | ND     |           | 49.8  | 57.8   |           | ug/Kg |   | 116  | 65 - 140        |
| Trichlorofluoromethane      | ND     |           | 49.8  | 56.9   |           | ug/Kg |   | 114  | 55 - 155        |
| Vinyl chloride              | ND     |           | 49.8  | 55.2   |           | ug/Kg |   | 111  | 55 - 140        |
| 1,2-Dibromoethane (EDB)     | ND     |           | 49.8  | 61.2   |           | ug/Kg |   | 123  | 65 - 140        |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-14911-7 MS**

**Matrix: Solid**

**Analysis Batch: 34311**

**Client Sample ID: B-2-S-2'**

**Prep Type: Total/NA**

| Analyte                     | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|-----------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Bromochloromethane          | ND            |                  | 49.8        | 61.3      |              | ug/Kg |   | 123  | 65 - 145     |
| Bromodichloromethane        | ND            |                  | 49.8        | 59.9      |              | ug/Kg |   | 120  | 65 - 145     |
| Dibromochloromethane        | ND            |                  | 49.8        | 64.5      |              | ug/Kg |   | 130  | 60 - 145     |
| p-Isopropyltoluene          | ND            |                  | 49.8        | 62.6      |              | ug/Kg |   | 126  | 60 - 140     |
| Methyl-t-Butyl Ether (MTBE) | ND            |                  | 49.8        | 61.9      |              | ug/Kg |   | 124  | 55 - 155     |

| Surrogate                   | MS %Recovery | MS Qualifier | MS Limits |
|-----------------------------|--------------|--------------|-----------|
| Toluene-d8 (Surr)           | 107          |              | 80 - 120  |
| 4-Bromofluorobenzene (Surr) | 111          |              | 80 - 120  |
| Dibromofluoromethane (Surr) | 103          |              | 80 - 125  |

**Lab Sample ID: 440-14911-7 MSD**

**Matrix: Solid**

**Analysis Batch: 34311**

**Client Sample ID: B-2-S-2'**

**Prep Type: Total/NA**

| Analyte                     | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| 1,1,1,2-Tetrachloroethane   | ND            |                  | 49.5        | 61.6       |               | ug/Kg |   | 124  | 65 - 145     | 3   | 20        |
| 1,1,1-Trichloroethane       | ND            |                  | 49.5        | 54.0       |               | ug/Kg |   | 109  | 65 - 145     | 3   | 20        |
| 1,1,1,2,2-Tetrachloroethane | ND            |                  | 49.5        | 63.9       |               | ug/Kg |   | 129  | 40 - 160     | 0   | 30        |
| 1,1,1,2-Trichloroethane     | ND            |                  | 49.5        | 56.5       |               | ug/Kg |   | 114  | 65 - 140     | 3   | 30        |
| 1,1-Dichloroethane          | ND            |                  | 49.5        | 52.4       |               | ug/Kg |   | 106  | 65 - 135     | 3   | 25        |
| 1,1-Dichloroethene          | ND            |                  | 49.5        | 58.3       |               | ug/Kg |   | 118  | 65 - 135     | 2   | 25        |
| 1,1-Dichloropropene         | ND            |                  | 49.5        | 51.1       |               | ug/Kg |   | 103  | 65 - 135     | 2   | 20        |
| 1,2,3-Trichlorobenzene      | ND            |                  | 49.5        | 48.2       |               | ug/Kg |   | 97   | 45 - 145     | 6   | 30        |
| 1,2,3-Trichloropropane      | ND            |                  | 49.5        | 61.0       |               | ug/Kg |   | 123  | 50 - 150     | 3   | 30        |
| 1,2,4-Trichlorobenzene      | ND            |                  | 49.5        | 54.1       |               | ug/Kg |   | 109  | 50 - 140     | 3   | 30        |
| 1,2,4-Trimethylbenzene      | ND            |                  | 49.5        | 61.0       |               | ug/Kg |   | 123  | 65 - 140     | 1   | 25        |
| 1,2-Dibromo-3-Chloropropane | ND            |                  | 49.5        | 52.1       |               | ug/Kg |   | 105  | 40 - 150     | 0   | 30        |
| 1,2-Dichlorobenzene         | ND            |                  | 49.5        | 59.6       |               | ug/Kg |   | 120  | 70 - 130     | 2   | 25        |
| 1,2-Dichloroethane          | ND            |                  | 49.5        | 56.7       |               | ug/Kg |   | 115  | 60 - 150     | 3   | 25        |
| 1,2-Dichloropropane         | ND            |                  | 49.5        | 53.1       |               | ug/Kg |   | 107  | 65 - 130     | 6   | 20        |
| 1,3,5-Trimethylbenzene      | ND            |                  | 49.5        | 60.4       |               | ug/Kg |   | 122  | 65 - 135     | 0   | 25        |
| 1,3-Dichlorobenzene         | ND            |                  | 49.5        | 59.5       |               | ug/Kg |   | 120  | 70 - 130     | 2   | 25        |
| 1,3-Dichloropropane         | ND            |                  | 49.5        | 58.0       |               | ug/Kg |   | 117  | 65 - 140     | 0   | 25        |
| 1,4-Dichlorobenzene         | ND            |                  | 49.5        | 58.6       |               | ug/Kg |   | 118  | 70 - 130     | 2   | 25        |
| 2,2-Dichloropropane         | ND            |                  | 49.5        | 56.2       |               | ug/Kg |   | 114  | 65 - 150     | 2   | 25        |
| 2-Chlorotoluene             | ND            |                  | 49.5        | 58.9       |               | ug/Kg |   | 119  | 60 - 135     | 3   | 25        |
| 4-Chlorotoluene             | ND            |                  | 49.5        | 60.2       |               | ug/Kg |   | 122  | 65 - 135     | 0   | 25        |
| Benzene                     | ND            |                  | 49.5        | 52.3       |               | ug/Kg |   | 106  | 65 - 130     | 3   | 20        |
| Bromobenzene                | ND            |                  | 49.5        | 60.7       |               | ug/Kg |   | 123  | 65 - 140     | 3   | 25        |
| Bromoform                   | ND            |                  | 49.5        | 56.5       |               | ug/Kg |   | 114  | 50 - 145     | 2   | 30        |
| Bromomethane                | ND            |                  | 49.5        | 54.1       |               | ug/Kg |   | 109  | 60 - 155     | 4   | 25        |
| Carbon tetrachloride        | ND            |                  | 49.5        | 56.9       |               | ug/Kg |   | 115  | 60 - 145     | 3   | 25        |
| Chlorobenzene               | ND            |                  | 49.5        | 57.2       |               | ug/Kg |   | 115  | 70 - 130     | 2   | 25        |
| Chloroethane                | ND            |                  | 49.5        | 51.3       |               | ug/Kg |   | 104  | 60 - 150     | 2   | 25        |
| Chloroform                  | ND            |                  | 49.5        | 52.8       |               | ug/Kg |   | 107  | 65 - 135     | 4   | 20        |
| Chloromethane               | ND            |                  | 49.5        | 52.1       |               | ug/Kg |   | 105  | 40 - 145     | 3   | 25        |
| cis-1,2-Dichloroethene      | ND            |                  | 49.5        | 58.9       |               | ug/Kg |   | 119  | 65 - 135     | 2   | 25        |
| cis-1,3-Dichloropropene     | ND            |                  | 49.5        | 54.6       |               | ug/Kg |   | 110  | 70 - 135     | 3   | 25        |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-14911-7 MSD

Matrix: Solid

Analysis Batch: 34311

Client Sample ID: B-2-S-2'

Prep Type: Total/NA

| Analyte                     | Sample | Sample    | Spike | MSD    | MSD       | Unit  | D | %Rec | %Rec.    | RPD | RPD   |
|-----------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|
|                             | Result | Qualifier | Added | Result | Qualifier |       |   |      | Limits   |     | Limit |
| Dibromomethane              | ND     |           | 49.5  | 59.7   |           | ug/Kg |   | 121  | 65 - 140 | 3   | 25    |
| Dichlorodifluoromethane     | ND     |           | 49.5  | 49.1   |           | ug/Kg |   | 99   | 30 - 160 | 1   | 35    |
| Ethylbenzene                | ND     |           | 49.5  | 58.5   |           | ug/Kg |   | 118  | 70 - 135 | 3   | 25    |
| Hexachlorobutadiene         | ND     |           | 49.5  | 52.5   |           | ug/Kg |   | 106  | 50 - 145 | 5   | 35    |
| Isopropylbenzene            | ND     |           | 49.5  | 61.1   |           | ug/Kg |   | 123  | 70 - 145 | 0   | 25    |
| m,p-Xylene                  | ND     |           | 99.0  | 111    |           | ug/Kg |   | 112  | 70 - 130 | 2   | 25    |
| Methylene Chloride          | ND     |           | 49.5  | 52.0   |           | ug/Kg |   | 105  | 55 - 145 | 4   | 25    |
| Naphthalene                 | ND     |           | 49.5  | 52.7   |           | ug/Kg |   | 107  | 40 - 150 | 4   | 40    |
| n-Butylbenzene              | ND     |           | 49.5  | 62.1   |           | ug/Kg |   | 125  | 55 - 145 | 1   | 30    |
| N-Propylbenzene             | ND     |           | 49.5  | 61.5   |           | ug/Kg |   | 124  | 65 - 140 | 1   | 25    |
| o-Xylene                    | ND     |           | 49.5  | 57.7   |           | ug/Kg |   | 117  | 65 - 130 | 2   | 25    |
| sec-Butylbenzene            | ND     |           | 49.5  | 57.0   |           | ug/Kg |   | 115  | 60 - 135 | 3   | 25    |
| Styrene                     | ND     |           | 49.5  | 57.6   |           | ug/Kg |   | 116  | 70 - 140 | 2   | 25    |
| tert-Butylbenzene           | ND     |           | 49.5  | 61.8   |           | ug/Kg |   | 125  | 60 - 140 | 1   | 25    |
| Tetrachloroethene           | ND     |           | 49.5  | 56.9   |           | ug/Kg |   | 115  | 65 - 135 | 1   | 25    |
| Toluene                     | ND     |           | 49.5  | 58.3   |           | ug/Kg |   | 118  | 70 - 130 | 4   | 20    |
| trans-1,2-Dichloroethene    | ND     |           | 49.5  | 56.8   |           | ug/Kg |   | 115  | 70 - 135 | 3   | 25    |
| trans-1,3-Dichloropropene   | ND     |           | 49.5  | 66.2   |           | ug/Kg |   | 134  | 60 - 145 | 5   | 25    |
| Trichloroethene             | ND     |           | 49.5  | 57.2   |           | ug/Kg |   | 115  | 65 - 140 | 1   | 25    |
| Trichlorofluoromethane      | ND     |           | 49.5  | 53.8   |           | ug/Kg |   | 109  | 55 - 155 | 6   | 25    |
| Vinyl chloride              | ND     |           | 49.5  | 52.9   |           | ug/Kg |   | 107  | 55 - 140 | 4   | 30    |
| 1,2-Dibromoethane (EDB)     | ND     |           | 49.5  | 59.4   |           | ug/Kg |   | 120  | 65 - 140 | 3   | 25    |
| Bromochloromethane          | ND     |           | 49.5  | 58.1   |           | ug/Kg |   | 117  | 65 - 145 | 5   | 25    |
| Bromodichloromethane        | ND     |           | 49.5  | 57.7   |           | ug/Kg |   | 117  | 65 - 145 | 4   | 20    |
| Dibromochloromethane        | ND     |           | 49.5  | 63.5   |           | ug/Kg |   | 128  | 60 - 145 | 2   | 25    |
| p-Isopropyltoluene          | ND     |           | 49.5  | 61.7   |           | ug/Kg |   | 125  | 60 - 140 | 1   | 25    |
| Methyl-t-Butyl Ether (MTBE) | ND     |           | 49.5  | 60.4   |           | ug/Kg |   | 122  | 55 - 155 | 2   | 35    |

| Surrogate                   | MSD       | MSD       | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| Toluene-d8 (Surr)           | 106       |           | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 109       |           | 80 - 120 |
| Dibromofluoromethane (Surr) | 102       |           | 80 - 125 |

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

Lab Sample ID: MB 440-33785/1-A

Matrix: Solid

Analysis Batch: 33917

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33785

| Analyte       | MB     | MB        | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
|               | Result | Qualifier |     |     |       |   |                |                |         |
| ORO (C29-C40) | ND     |           | 5.0 |     | mg/Kg |   | 06/19/12 11:08 | 06/19/12 22:29 | 1       |
| DRO (C13-C28) | ND     |           | 5.0 |     | mg/Kg |   | 06/19/12 11:08 | 06/19/12 22:29 | 1       |
| C13-C40       | ND     |           | 5.0 |     | mg/Kg |   | 06/19/12 11:08 | 06/19/12 22:29 | 1       |

| Surrogate    | MB        | MB        | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------|-----------|-----------|----------|----------------|----------------|---------|
|              | %Recovery | Qualifier |          |                |                |         |
| n-Octacosane | 81        |           | 40 - 140 | 06/19/12 11:08 | 06/19/12 22:29 | 1       |



# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

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

**Lab Sample ID: LCS 440-33785/2-A**

**Matrix: Solid**

**Analysis Batch: 33917**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 33785**

| Analyte             | Spike Added | LCS Result           | LCS Qualifier        | Unit  | D | %Rec | %Rec. Limits  |
|---------------------|-------------|----------------------|----------------------|-------|---|------|---------------|
| EFH (C10-C28)       | 33.3        | 23.0                 |                      | mg/Kg |   | 69   | 45 - 115      |
| <b>Surrogate</b>    |             | <b>LCS %Recovery</b> | <b>LCS Qualifier</b> |       |   |      | <b>Limits</b> |
| <i>n-Octacosane</i> |             | 78                   |                      |       |   |      | 40 - 140      |

**Lab Sample ID: 440-14702-A-6-A MS**

**Matrix: Solid**

**Analysis Batch: 33917**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

**Prep Batch: 33785**

| Analyte             | Sample Result | Sample Qualifier    | Spike Added | MS Result           | MS Qualifier | Unit  | D | %Rec | %Rec. Limits  |
|---------------------|---------------|---------------------|-------------|---------------------|--------------|-------|---|------|---------------|
| EFH (C10-C28)       | 9.7           |                     | 33.3        | 27.4                |              | mg/Kg |   | 53   | 40 - 120      |
| <b>Surrogate</b>    |               | <b>MS %Recovery</b> |             | <b>MS Qualifier</b> |              |       |   |      | <b>Limits</b> |
| <i>n-Octacosane</i> |               | 89                  |             |                     |              |       |   |      | 40 - 140      |

**Lab Sample ID: 440-14702-A-6-B MSD**

**Matrix: Solid**

**Analysis Batch: 33917**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

**Prep Batch: 33785**

| Analyte             | Sample Result | Sample Qualifier     | Spike Added | MSD Result           | MSD Qualifier | Unit  | D | %Rec | %Rec. Limits  | RPD | RPD Limit |
|---------------------|---------------|----------------------|-------------|----------------------|---------------|-------|---|------|---------------|-----|-----------|
| EFH (C10-C28)       | 9.7           |                      | 33.3        | 23.8                 |               | mg/Kg |   | 42   | 40 - 120      | 14  | 30        |
| <b>Surrogate</b>    |               | <b>MSD %Recovery</b> |             | <b>MSD Qualifier</b> |               |       |   |      | <b>Limits</b> |     |           |
| <i>n-Octacosane</i> |               | 72                   |             |                      |               |       |   |      | 40 - 140      |     |           |

**Lab Sample ID: MB 440-34045/1-A**

**Matrix: Solid**

**Analysis Batch: 34251**

**Client Sample ID: Method Blank**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 34045**

| Analyte             | MB Result | MB Qualifier        | RL  | MDL | Unit  | D | Prepared        | Analyzed        | Dil Fac        |
|---------------------|-----------|---------------------|-----|-----|-------|---|-----------------|-----------------|----------------|
| ORO (C29-C40)       | ND        |                     | 5.0 |     | mg/Kg |   | 06/20/12 11:00  | 06/20/12 23:02  | 1              |
| DRO (C13-C28)       | ND        |                     | 5.0 |     | mg/Kg |   | 06/20/12 11:00  | 06/20/12 23:02  | 1              |
| C13-C40             | ND        |                     | 5.0 |     | mg/Kg |   | 06/20/12 11:00  | 06/20/12 23:02  | 1              |
| <b>Surrogate</b>    |           | <b>MB %Recovery</b> |     |     |       |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| <i>n-Octacosane</i> |           | 81                  |     |     |       |   | 06/20/12 11:00  | 06/20/12 23:02  | 1              |

**Lab Sample ID: LCS 440-34045/2-A**

**Matrix: Solid**

**Analysis Batch: 34251**

**Client Sample ID: Lab Control Sample**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 34045**

| Analyte             | Spike Added | LCS Result           | LCS Qualifier        | Unit  | D | %Rec | %Rec. Limits  |
|---------------------|-------------|----------------------|----------------------|-------|---|------|---------------|
| EFH (C10-C28)       | 33.3        | 21.5                 |                      | mg/Kg |   | 64   | 45 - 115      |
| <b>Surrogate</b>    |             | <b>LCS %Recovery</b> | <b>LCS Qualifier</b> |       |   |      | <b>Limits</b> |
| <i>n-Octacosane</i> |             | 76                   |                      |       |   |      | 40 - 140      |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

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

**Lab Sample ID: 440-14911-9 MS**

**Matrix: Solid**

**Analysis Batch: 34251**

**Client Sample ID: B-3-S-4'**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 34045**

| Analyte             | Sample           | Sample           | Spike         | MS     | MS        | Unit  | D | %Rec | %Rec.    |
|---------------------|------------------|------------------|---------------|--------|-----------|-------|---|------|----------|
|                     | Result           | Qualifier        | Added         | Result | Qualifier |       |   |      |          |
| EFH (C10-C28)       | 5.0              |                  | 33.3          | 24.6   |           | mg/Kg |   | 59   | 40 - 120 |
| <b>Surrogate</b>    | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |        |           |       |   |      |          |
| <i>n-Octacosane</i> | 79               |                  | 40 - 140      |        |           |       |   |      |          |

**Lab Sample ID: 440-14911-9 MSD**

**Matrix: Solid**

**Analysis Batch: 34251**

**Client Sample ID: B-3-S-4'**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 34045**

| Analyte             | Sample           | Sample           | Spike         | MSD    | MSD       | Unit  | D | %Rec | %Rec.    | RPD |
|---------------------|------------------|------------------|---------------|--------|-----------|-------|---|------|----------|-----|
|                     | Result           | Qualifier        | Added         | Result | Qualifier |       |   |      |          |     |
| EFH (C10-C28)       | 5.0              |                  | 33.2          | 24.5   |           | mg/Kg |   | 59   | 40 - 120 | 0   |
| <b>Surrogate</b>    | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |        |           |       |   |      |          |     |
| <i>n-Octacosane</i> | 79               |                  | 40 - 140      |        |           |       |   |      |          |     |

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 440-33763/1-A**

**Matrix: Solid**

**Analysis Batch: 34064**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 33763**

| Analyte                              | MB               | MB               | RL            | MDL | Unit  | D | Prepared        | Analyzed        | Dil Fac        |
|--------------------------------------|------------------|------------------|---------------|-----|-------|---|-----------------|-----------------|----------------|
|                                      | Result           | Qualifier        |               |     |       |   |                 |                 |                |
| Aroclor 1016                         | ND               |                  | 50            |     | ug/Kg |   | 06/19/12 09:08  | 06/20/12 18:36  | 1              |
| Aroclor 1221                         | ND               |                  | 50            |     | ug/Kg |   | 06/19/12 09:08  | 06/20/12 18:36  | 1              |
| Aroclor 1232                         | ND               |                  | 50            |     | ug/Kg |   | 06/19/12 09:08  | 06/20/12 18:36  | 1              |
| Aroclor 1242                         | ND               |                  | 50            |     | ug/Kg |   | 06/19/12 09:08  | 06/20/12 18:36  | 1              |
| Aroclor 1248                         | ND               |                  | 50            |     | ug/Kg |   | 06/19/12 09:08  | 06/20/12 18:36  | 1              |
| Aroclor 1254                         | ND               |                  | 50            |     | ug/Kg |   | 06/19/12 09:08  | 06/20/12 18:36  | 1              |
| Aroclor 1260                         | ND               |                  | 50            |     | ug/Kg |   | 06/19/12 09:08  | 06/20/12 18:36  | 1              |
| <b>Surrogate</b>                     | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |       |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| <i>DCB Decachlorobiphenyl (Surr)</i> | 94               |                  | 45 - 120      |     |       |   | 06/19/12 09:08  | 06/20/12 18:36  | 1              |

**Lab Sample ID: LCS 440-33763/2-A**

**Matrix: Solid**

**Analysis Batch: 34064**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 33763**

| Analyte                              | Spike            | LCS              | LCS           | Unit  | D | %Rec | %Rec.    |
|--------------------------------------|------------------|------------------|---------------|-------|---|------|----------|
|                                      |                  | Result           | Qualifier     |       |   |      |          |
| Aroclor 1016                         | 267              | 262              |               | ug/Kg |   | 98   | 65 - 115 |
| Aroclor 1260                         | 267              | 221              |               | ug/Kg |   | 83   | 65 - 115 |
| <b>Surrogate</b>                     | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |       |   |      |          |
| <i>DCB Decachlorobiphenyl (Surr)</i> | 92               |                  | 45 - 120      |       |   |      |          |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID: 440-14911-1 MS**

**Matrix: Solid**

**Analysis Batch: 34064**

**Client Sample ID: B-1-S-4'**

**Prep Type: Total/NA**

**Prep Batch: 33763**

| Analyte                       | Sample           | Sample           | Spike         | MS     | MS        | Unit  | D | %Rec | %Rec. | Limits   |
|-------------------------------|------------------|------------------|---------------|--------|-----------|-------|---|------|-------|----------|
|                               | Result           | Qualifier        | Added         | Result | Qualifier |       |   |      |       |          |
| Aroclor 1016                  | ND               |                  | 266           | 265    |           | ug/Kg |   | 99   |       | 50 - 120 |
| Aroclor 1260                  | ND               |                  | 266           | 222    |           | ug/Kg |   | 83   |       | 50 - 125 |
|                               |                  | <b>MS</b>        | <b>MS</b>     |        |           |       |   |      |       |          |
| <b>Surrogate</b>              | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |        |           |       |   |      |       |          |
| DCB Decachlorobiphenyl (Surr) | 92               |                  | 45 - 120      |        |           |       |   |      |       |          |

**Lab Sample ID: 440-14911-1 MSD**

**Matrix: Solid**

**Analysis Batch: 34064**

**Client Sample ID: B-1-S-4'**

**Prep Type: Total/NA**

**Prep Batch: 33763**

| Analyte                       | Sample           | Sample           | Spike         | MSD    | MSD       | Unit  | D | %Rec | %Rec. | Limits   | RPD | Limit |
|-------------------------------|------------------|------------------|---------------|--------|-----------|-------|---|------|-------|----------|-----|-------|
|                               | Result           | Qualifier        | Added         | Result | Qualifier |       |   |      |       |          |     |       |
| Aroclor 1016                  | ND               |                  | 266           | 263    |           | ug/Kg |   | 99   |       | 50 - 120 | 4   | 30    |
| Aroclor 1260                  | ND               |                  | 266           | 220    |           | ug/Kg |   | 83   |       | 50 - 125 | 1   | 30    |
|                               |                  | <b>MSD</b>       | <b>MSD</b>    |        |           |       |   |      |       |          |     |       |
| <b>Surrogate</b>              | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |        |           |       |   |      |       |          |     |       |
| DCB Decachlorobiphenyl (Surr) | 92               |                  | 45 - 120      |        |           |       |   |      |       |          |     |       |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 440-33756/1-A ^5**

**Matrix: Solid**

**Analysis Batch: 34348**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 33756**

| Analyte  | MB     | MB        | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
|          | Result | Qualifier |      |     |       |   |                |                |         |
| Lead     | ND     |           | 2.0  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 12:26 | 5       |
| Zinc     | ND     |           | 5.0  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 12:26 | 5       |
| Nickel   | ND     |           | 2.0  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 12:26 | 5       |
| Chromium | ND     |           | 1.0  |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 12:26 | 5       |
| Cadmium  | ND     |           | 0.50 |     | mg/Kg |   | 06/19/12 09:00 | 06/20/12 12:26 | 5       |

**Lab Sample ID: LCS 440-33756/2-A ^5**

**Matrix: Solid**

**Analysis Batch: 34348**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 33756**

| Analyte  | Spike | LCS  | LCS | Unit  | D | %Rec | %Rec. | Limits   |
|----------|-------|------|-----|-------|---|------|-------|----------|
|          |       |      |     |       |   |      |       |          |
| Lead     | 49.8  | 48.1 |     | mg/Kg |   | 97   |       | 80 - 120 |
| Zinc     | 49.8  | 45.5 |     | mg/Kg |   | 91   |       | 80 - 120 |
| Nickel   | 49.8  | 47.9 |     | mg/Kg |   | 96   |       | 80 - 120 |
| Chromium | 49.8  | 49.5 |     | mg/Kg |   | 99   |       | 80 - 120 |
| Cadmium  | 49.8  | 47.0 |     | mg/Kg |   | 94   |       | 80 - 120 |

**Lab Sample ID: 440-14954-A-1-B MS ^50**

**Matrix: Solid**

**Analysis Batch: 34348**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

**Prep Batch: 33756**

| Analyte | Sample | Sample    | Spike | MS     | MS        | Unit  | D | %Rec  | %Rec. | Limits   |
|---------|--------|-----------|-------|--------|-----------|-------|---|-------|-------|----------|
|         | Result | Qualifier | Added | Result | Qualifier |       |   |       |       |          |
| Lead    | 51     |           | 49.5  | 121    | F         | mg/Kg |   | 51    |       | 75 - 125 |
| Zinc    | 1100   |           | 49.5  | 569    | 4         | mg/Kg |   | -1094 |       | 75 - 125 |
| Nickel  | 150    |           | 49.5  | 152    | F         | mg/Kg |   | 49    |       | 75 - 125 |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

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

Lab Sample ID: 440-14954-A-1-B MS ^50

Matrix: Solid

Analysis Batch: 34348

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 33756

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Chromium | 96            |                  | 49.5        | 137       | F            | mg/Kg |   | 58   | 75 - 125     |
| Cadmium  | ND            |                  | 49.5        | 49.6      |              | mg/Kg |   | 93   | 75 - 125     |

Lab Sample ID: 440-14954-A-1-C MSD ^50

Matrix: Solid

Analysis Batch: 34348

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 33756

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec. Limits | RPD | Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-------|
| Lead     | 51            |                  | 50.0        | 139        |               | mg/Kg |   | 89   | 75 - 125     | 14  | 20    |
| Zinc     | 1100          |                  | 50.0        | 703        | 4 F           | mg/Kg |   | -815 | 75 - 125     | 21  | 20    |
| Nickel   | 150           |                  | 50.0        | 203        | F             | mg/Kg |   | 152  | 75 - 125     | 29  | 20    |
| Chromium | 96            |                  | 50.0        | 218        | F             | mg/Kg |   | 218  | 75 - 125     | 45  | 20    |
| Cadmium  | ND            |                  | 50.0        | 48.3       |               | mg/Kg |   | 89   | 75 - 125     | 3   | 20    |

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## GC/MS VOA

### Analysis Batch: 34311

| Lab Sample ID   | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-----------------|--------------------|-----------|--------|--------|------------|
| 440-14911-1     | B-1-S-4'           | Total/NA  | Solid  | 8260B  |            |
| 440-14911-2     | B-7-S-6'           | Total/NA  | Solid  | 8260B  |            |
| 440-14911-3     | B-6-S-4'           | Total/NA  | Solid  | 8260B  |            |
| 440-14911-4     | B-7-S-14'          | Total/NA  | Solid  | 8260B  |            |
| 440-14911-5     | B-4-S-8'           | Total/NA  | Solid  | 8260B  |            |
| 440-14911-6     | B-1-S-12'          | Total/NA  | Solid  | 8260B  |            |
| 440-14911-7     | B-2-S-2'           | Total/NA  | Solid  | 8260B  |            |
| 440-14911-7 MS  | B-2-S-2'           | Total/NA  | Solid  | 8260B  |            |
| 440-14911-7 MSD | B-2-S-2'           | Total/NA  | Solid  | 8260B  |            |
| 440-14911-8     | B-2-S-12'          | Total/NA  | Solid  | 8260B  |            |
| 440-14911-9     | B-3-S-4'           | Total/NA  | Solid  | 8260B  |            |
| 440-14911-10    | B-8-S-14'          | Total/NA  | Solid  | 8260B  |            |
| 440-14911-11    | B-8-S-6'           | Total/NA  | Solid  | 8260B  |            |
| LCS 440-34311/4 | Lab Control Sample | Total/NA  | Solid  | 8260B  |            |
| MB 440-34311/3  | Method Blank       | Total/NA  | Solid  | 8260B  |            |

## GC Semi VOA

### Prep Batch: 33763

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 440-14911-1       | B-1-S-4'           | Total/NA  | Solid  | 3546   |            |
| 440-14911-1 MS    | B-1-S-4'           | Total/NA  | Solid  | 3546   |            |
| 440-14911-1 MSD   | B-1-S-4'           | Total/NA  | Solid  | 3546   |            |
| 440-14911-2       | B-7-S-6'           | Total/NA  | Solid  | 3546   |            |
| 440-14911-3       | B-6-S-4'           | Total/NA  | Solid  | 3546   |            |
| 440-14911-4       | B-7-S-14'          | Total/NA  | Solid  | 3546   |            |
| 440-14911-5       | B-4-S-8'           | Total/NA  | Solid  | 3546   |            |
| 440-14911-6       | B-1-S-12'          | Total/NA  | Solid  | 3546   |            |
| 440-14911-7       | B-2-S-2'           | Total/NA  | Solid  | 3546   |            |
| 440-14911-8       | B-2-S-12'          | Total/NA  | Solid  | 3546   |            |
| 440-14911-9       | B-3-S-4'           | Total/NA  | Solid  | 3546   |            |
| 440-14911-10      | B-8-S-14'          | Total/NA  | Solid  | 3546   |            |
| 440-14911-11      | B-8-S-6'           | Total/NA  | Solid  | 3546   |            |
| LCS 440-33763/2-A | Lab Control Sample | Total/NA  | Solid  | 3546   |            |
| MB 440-33763/1-A  | Method Blank       | Total/NA  | Solid  | 3546   |            |

### Prep Batch: 33785

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method  | Prep Batch |
|---------------------|------------------------|-----------|--------|---------|------------|
| 440-14702-A-6-A MS  | Matrix Spike           | Total/NA  | Solid  | CA LUFT |            |
| 440-14702-A-6-B MSD | Matrix Spike Duplicate | Total/NA  | Solid  | CA LUFT |            |
| 440-14911-1         | B-1-S-4'               | Total/NA  | Solid  | CA LUFT |            |
| 440-14911-2         | B-7-S-6'               | Total/NA  | Solid  | CA LUFT |            |
| 440-14911-3         | B-6-S-4'               | Total/NA  | Solid  | CA LUFT |            |
| 440-14911-4         | B-7-S-14'              | Total/NA  | Solid  | CA LUFT |            |
| 440-14911-5         | B-4-S-8'               | Total/NA  | Solid  | CA LUFT |            |
| 440-14911-6         | B-1-S-12'              | Total/NA  | Solid  | CA LUFT |            |
| 440-14911-7         | B-2-S-2'               | Total/NA  | Solid  | CA LUFT |            |
| 440-14911-8         | B-2-S-12'              | Total/NA  | Solid  | CA LUFT |            |
| 440-14911-9         | B-3-S-4'               | Total/NA  | Solid  | CA LUFT |            |
| 440-14911-10        | B-8-S-14'              | Total/NA  | Solid  | CA LUFT |            |
| 440-14911-11        | B-8-S-6'               | Total/NA  | Solid  | CA LUFT |            |
| LCS 440-33785/2-A   | Lab Control Sample     | Total/NA  | Solid  | CA LUFT |            |

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## GC Semi VOA (Continued)

### Prep Batch: 33785 (Continued)

| Lab Sample ID    | Client Sample ID | Prep Type | Matrix | Method  | Prep Batch |
|------------------|------------------|-----------|--------|---------|------------|
| MB 440-33785/1-A | Method Blank     | Total/NA  | Solid  | CA LUFT |            |

### Analysis Batch: 33917

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 440-14702-A-6-A MS  | Matrix Spike           | Total/NA  | Solid  | 8015B  | 33785      |
| 440-14702-A-6-B MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015B  | 33785      |
| 440-14911-1         | B-1-S-4'               | Total/NA  | Solid  | 8015B  | 33785      |
| 440-14911-2         | B-7-S-6'               | Total/NA  | Solid  | 8015B  | 33785      |
| 440-14911-3         | B-6-S-4'               | Total/NA  | Solid  | 8015B  | 33785      |
| 440-14911-4         | B-7-S-14'              | Total/NA  | Solid  | 8015B  | 33785      |
| 440-14911-5         | B-4-S-8'               | Total/NA  | Solid  | 8015B  | 33785      |
| 440-14911-7         | B-2-S-2'               | Total/NA  | Solid  | 8015B  | 33785      |
| 440-14911-9         | B-3-S-4'               | Total/NA  | Solid  | 8015B  | 33785      |
| 440-14911-10        | B-8-S-14'              | Total/NA  | Solid  | 8015B  | 33785      |
| 440-14911-11        | B-8-S-6'               | Total/NA  | Solid  | 8015B  | 33785      |
| LCS 440-33785/2-A   | Lab Control Sample     | Total/NA  | Solid  | 8015B  | 33785      |
| MB 440-33785/1-A    | Method Blank           | Total/NA  | Solid  | 8015B  | 33785      |

### Prep Batch: 34045

| Lab Sample ID     | Client Sample ID   | Prep Type          | Matrix | Method  | Prep Batch |
|-------------------|--------------------|--------------------|--------|---------|------------|
| 440-14911-1       | B-1-S-4'           | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-14911-2       | B-7-S-6'           | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-14911-3       | B-6-S-4'           | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-14911-4       | B-7-S-14'          | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-14911-5       | B-4-S-8'           | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-14911-6       | B-1-S-12'          | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-14911-7       | B-2-S-2'           | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-14911-8       | B-2-S-12'          | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-14911-9       | B-3-S-4'           | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-14911-9 MS    | B-3-S-4'           | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-14911-9 MSD   | B-3-S-4'           | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-14911-10      | B-8-S-14'          | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-14911-11      | B-8-S-6'           | Silica Gel Cleanup | Solid  | CA LUFT |            |
| LCS 440-34045/2-A | Lab Control Sample | Silica Gel Cleanup | Solid  | CA LUFT |            |
| MB 440-34045/1-A  | Method Blank       | Silica Gel Cleanup | Solid  | CA LUFT |            |

### Analysis Batch: 34064

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 440-14911-1       | B-1-S-4'           | Total/NA  | Solid  | 8082   | 33763      |
| 440-14911-1 MS    | B-1-S-4'           | Total/NA  | Solid  | 8082   | 33763      |
| 440-14911-1 MSD   | B-1-S-4'           | Total/NA  | Solid  | 8082   | 33763      |
| 440-14911-2       | B-7-S-6'           | Total/NA  | Solid  | 8082   | 33763      |
| 440-14911-3       | B-6-S-4'           | Total/NA  | Solid  | 8082   | 33763      |
| 440-14911-4       | B-7-S-14'          | Total/NA  | Solid  | 8082   | 33763      |
| 440-14911-5       | B-4-S-8'           | Total/NA  | Solid  | 8082   | 33763      |
| 440-14911-6       | B-1-S-12'          | Total/NA  | Solid  | 8082   | 33763      |
| 440-14911-7       | B-2-S-2'           | Total/NA  | Solid  | 8082   | 33763      |
| 440-14911-8       | B-2-S-12'          | Total/NA  | Solid  | 8082   | 33763      |
| 440-14911-9       | B-3-S-4'           | Total/NA  | Solid  | 8082   | 33763      |
| 440-14911-10      | B-8-S-14'          | Total/NA  | Solid  | 8082   | 33763      |
| 440-14911-11      | B-8-S-6'           | Total/NA  | Solid  | 8082   | 33763      |
| LCS 440-33763/2-A | Lab Control Sample | Total/NA  | Solid  | 8082   | 33763      |

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## GC Semi VOA (Continued)

### Analysis Batch: 34064 (Continued)

| Lab Sample ID    | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------|-----------|--------|--------|------------|
| MB 440-33763/1-A | Method Blank     | Total/NA  | Solid  | 8082   | 33763      |

### Analysis Batch: 34194

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 440-14911-6   | B-1-S-12'        | Total/NA  | Solid  | 8015B  | 33785      |
| 440-14911-8   | B-2-S-12'        | Total/NA  | Solid  | 8015B  | 33785      |

### Analysis Batch: 34251

| Lab Sample ID     | Client Sample ID   | Prep Type          | Matrix | Method | Prep Batch |
|-------------------|--------------------|--------------------|--------|--------|------------|
| 440-14911-1       | B-1-S-4'           | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| 440-14911-2       | B-7-S-6'           | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| 440-14911-3       | B-6-S-4'           | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| 440-14911-4       | B-7-S-14'          | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| 440-14911-5       | B-4-S-8'           | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| 440-14911-7       | B-2-S-2'           | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| 440-14911-8       | B-2-S-12'          | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| 440-14911-9       | B-3-S-4'           | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| 440-14911-9 MS    | B-3-S-4'           | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| 440-14911-9 MSD   | B-3-S-4'           | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| 440-14911-10      | B-8-S-14'          | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| 440-14911-11      | B-8-S-6'           | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| LCS 440-34045/2-A | Lab Control Sample | Silica Gel Cleanup | Solid  | 8015B  | 34045      |
| MB 440-34045/1-A  | Method Blank       | Silica Gel Cleanup | Solid  | 8015B  | 34045      |

### Analysis Batch: 34426

| Lab Sample ID | Client Sample ID | Prep Type          | Matrix | Method | Prep Batch |
|---------------|------------------|--------------------|--------|--------|------------|
| 440-14911-6   | B-1-S-12'        | Silica Gel Cleanup | Solid  | 8015B  | 34045      |

## Metals

### Prep Batch: 33756

| Lab Sample ID           | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-------------------------|------------------------|-----------|--------|--------|------------|
| 440-14911-1             | B-1-S-4'               | Total/NA  | Solid  | 3050B  |            |
| 440-14911-2             | B-7-S-6'               | Total/NA  | Solid  | 3050B  |            |
| 440-14911-3             | B-6-S-4'               | Total/NA  | Solid  | 3050B  |            |
| 440-14911-4             | B-7-S-14'              | Total/NA  | Solid  | 3050B  |            |
| 440-14911-5             | B-4-S-8'               | Total/NA  | Solid  | 3050B  |            |
| 440-14911-6             | B-1-S-12'              | Total/NA  | Solid  | 3050B  |            |
| 440-14911-7             | B-2-S-2'               | Total/NA  | Solid  | 3050B  |            |
| 440-14911-8             | B-2-S-12'              | Total/NA  | Solid  | 3050B  |            |
| 440-14911-9             | B-3-S-4'               | Total/NA  | Solid  | 3050B  |            |
| 440-14911-10            | B-8-S-14'              | Total/NA  | Solid  | 3050B  |            |
| 440-14911-11            | B-8-S-6'               | Total/NA  | Solid  | 3050B  |            |
| 440-14954-A-1-B MS ^50  | Matrix Spike           | Total/NA  | Solid  | 3050B  |            |
| 440-14954-A-1-C MSD ^50 | Matrix Spike Duplicate | Total/NA  | Solid  | 3050B  |            |
| LCS 440-33756/2-A ^5    | Lab Control Sample     | Total/NA  | Solid  | 3050B  |            |
| MB 440-33756/1-A ^5     | Method Blank           | Total/NA  | Solid  | 3050B  |            |

### Analysis Batch: 34348

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 440-14911-1   | B-1-S-4'         | Total/NA  | Solid  | 6010B  | 33756      |
| 440-14911-2   | B-7-S-6'         | Total/NA  | Solid  | 6010B  | 33756      |

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## Metals (Continued)

### Analysis Batch: 34348 (Continued)

| Lab Sample ID           | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-------------------------|------------------------|-----------|--------|--------|------------|
| 440-14911-3             | B-6-S-4'               | Total/NA  | Solid  | 6010B  | 33756      |
| 440-14911-4             | B-7-S-14'              | Total/NA  | Solid  | 6010B  | 33756      |
| 440-14911-5             | B-4-S-8'               | Total/NA  | Solid  | 6010B  | 33756      |
| 440-14911-7             | B-2-S-2'               | Total/NA  | Solid  | 6010B  | 33756      |
| 440-14911-9             | B-3-S-4'               | Total/NA  | Solid  | 6010B  | 33756      |
| 440-14954-A-1-B MS ^50  | Matrix Spike           | Total/NA  | Solid  | 6010B  | 33756      |
| 440-14954-A-1-C MSD ^50 | Matrix Spike Duplicate | Total/NA  | Solid  | 6010B  | 33756      |
| LCS 440-33756/2-A ^5    | Lab Control Sample     | Total/NA  | Solid  | 6010B  | 33756      |
| MB 440-33756/1-A ^5     | Method Blank           | Total/NA  | Solid  | 6010B  | 33756      |

### Analysis Batch: 35286

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 440-14911-6   | B-1-S-12'        | Total/NA  | Solid  | 6010B  | 33756      |
| 440-14911-8   | B-2-S-12'        | Total/NA  | Solid  | 6010B  | 33756      |
| 440-14911-10  | B-8-S-14'        | Total/NA  | Solid  | 6010B  | 33756      |
| 440-14911-11  | B-8-S-6'         | Total/NA  | Solid  | 6010B  | 33756      |



# Definitions/Glossary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description               |
|-----------|-------------------------------------|
| X         | Surrogate is outside control limits |

### Metals

| Qualifier | Qualifier Description   |
|-----------|---|
| F         | MS or MSD exceeds the control limits  |
| 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. |
| F         | RPD of the MS and MSD exceeds the 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  |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL            | Estimated Detection Limit  |
| EPA            | United States Environmental Protection Agency  |
| 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  |
| RL             | Reporting Limit  |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                       |
| TEF            | Toxicity Equivalent Factor (Dioxin)  |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)  |

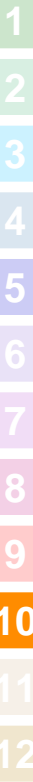
# Certification Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14911-1

| Laboratory         | Authority                | Program                     | EPA Region | Certification ID  |
|--------------------|--------------------------|-----------------------------|------------|-------------------|
| TestAmerica Irvine | Arizona                  | State Program               | 9          | AZ0671            |
| TestAmerica Irvine | California               | LA Cty Sanitation Districts | 9          | 10256             |
| TestAmerica Irvine | California               | NELAC                       | 9          | 1108CA            |
| TestAmerica Irvine | California               | State Program               | 9          | 2706              |
| TestAmerica Irvine | Guam                     | State Program               | 9          | Cert. No. 12.002r |
| TestAmerica Irvine | Hawaii                   | State Program               | 9          | N/A               |
| TestAmerica Irvine | Nevada                   | State Program               | 9          | CA015312007A      |
| TestAmerica Irvine | New Mexico               | State Program               | 6          | N/A               |
| TestAmerica Irvine | Northern Mariana Islands | State Program               | 9          | MP0002            |
| TestAmerica Irvine | Oregon                   | NELAC                       | 10         | 4005              |
| TestAmerica Irvine | USDA                     | Federal                     |            | P330-09-00080     |

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



## CHAIN OF CUSTODY FORM

17461 Derian Ave., #100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297  
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046  
 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303  
 6000 S. Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013 (0911)

440-14911

Page 1 of 1

| Client Name/Address:<br>ARCADIS   320 Commerce, Ste 200<br>Irvine, CA 92602 |               |                | Project/PO Number:<br>B0060901.9708 |               |               |               | Analysis Required               |  |                 |                           |                             |  |   |   |                      |
|---|---------------|----------------|-------------------------------------|---------------|---------------|---------------|---------------------------------|--|-----------------|---------------------------|-----------------------------|--|---|---|----------------------|
| Project Manager: Toni Penayo  |               |                | Phone Number:<br>714.508.2057       |               |               |               | TPH-MO (8015H)                  | TPH-PRO (8015B)<br>w/ sulfur gel cleanup | TPH-PRO (8015B) | BTEX+MTBE (8200F)         | Halogenated VOCs<br>(8260B) | Cadmium, Chromium,<br>Lead, Nickel, Zinc (6010B) | PCBs (8082)   | TPH-MO (8015H)<br>w/ sulfur gel cleanup | Special Instructions |
| Sampler: LK/BW  |               |                | Fax Number:<br>714.730.9345         |               |               |               |                                 |  |                 |                           |                             |  |   |   |                      |
| Sample Description  | Sample Matrix | Container Type | # of Cont.                          | Sampling Date | Sampling Time | Preservatives |                                 |  |                 |                           |                             |  |   |   |                      |
| B-1-S-4'  | S             | sleeve         | 1                                   | 6/12/12       | 1350          | ---           | X                               | X  | X               | X                         | X                           | X  | X   |   |                      |
| <del>B-7-S-6'</del> B-7-S-6'  | S             | sleeve         | 1                                   | 6/13/12       | 1100          | ---           | X                               | X  | X               | X                         | X                           | X  | X   |   |                      |
| B-6-S-4'  | S             | sleeve         | 1                                   | 6/13/12       | 1500          | ---           | X                               | X  | X               | X                         | X                           | X  | X   |   |                      |
| B-7-S-14'   | S             | sleeve         | 1                                   | 6/13/12       | 1535          | ---           | X                               | X  | X               | X                         | X                           | X  | X   |   |                      |
| B-4-S-8'  | S             | sleeve         | 1                                   | 6/13/12       | 1715          | ---           | X                               | X  | X               | X                         | X                           | X  | X   |   |                      |
| B-1-S-12'   | S             | sleeve         | 1                                   | 6/14/12       | 1030          | ---           | X                               | X  | X               | X                         | X                           | X  | X   |   |                      |
| B-2-S-2'  | S             | sleeve         | 1                                   | 6/14/12       | 1145          | ---           | X                               | X  | X               | X                         | X                           | X  | X   |   |                      |
| B-2-S-12'   | S             | sleeve         | 1                                   | 6/14/12       | 1400          | ---           | X                               | X  | X               | X                         | X                           | X  | X   |   |                      |
| B-3-S-4'  | S             | sleeve         | 1                                   | 6/14/12       | 1415          | ---           | X                               | X  | X               | X                         | X                           | X  | X   |   |                      |
| B-8-S-14'   | S             | sleeve         | 1                                   | 6/14/12       | 1635          | ---           | X                               | X  | X               | X                         | X                           | X  | X   |   |                      |
| B-8-S-6'  | S             | sleeve         | 1                                   | 6/14/12       | 1640          | ---           | X                               | X  | X               | X                         | X                           | X  | X   |   |                      |
| Relinquished By: [Signature]  |               |                | Date/Time: 6/14/12 1933             |               |               |               | Received By: [Signature]        |  |                 | Date/Time: 6-14-12 1933   |                             |  | Turnaround Time: (Check)<br>same day _____ 72 hours _____<br>24 hours _____ 5 days _____<br>48 hours _____ normal <input checked="" type="checkbox"/> |   |                      |
| Relinquished By: [Signature]  |               |                | Date/Time: 6/15/12 1544             |               |               |               | Received in Lab By: [Signature] |  |                 | Date/Time: 06/15/12 10:30 |                             |  | Sample Integrity: (Check)<br>intact <input checked="" type="checkbox"/> on ice <input checked="" type="checkbox"/>                                    |   |                      |

Page 48 of 49

7/13/2012

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

5.80/5.62



## Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 440-14911-1

**Login Number: 14911**

**List Number: 1**

**Creator: Freitag, Kevin R**

**List Source: TestAmerica Irvine**

| Question   | Answer | Comment                             |
|--|--------|-------------------------------------|
| Radioactivity either was not measured or, if measured, is at or below background | True   |                                     |
| The cooler's custody seal, if present, is 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   | LK/BW                               |
| There are no discrepancies between the sample IDs on the containers and the COC. | False  | Refer to Job Narrative for details. |
| Samples are received within Holding Time.  | True   |                                     |
| Sample containers have legible labels.   | True   |                                     |
| Containers are not broken or leaking.  | True   |                                     |
| Sample collection date/times are provided.                                       | True   |                                     |
| Appropriate sample containers are used.  | True   |                                     |
| Sample bottles are completely filled.  | True   |                                     |
| Sample Preservation Verified.  | N/A    |                                     |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |                                     |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.     | N/A    |                                     |
| 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 Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-15194-1

Client Project/Site: Chevron - 9-9708

For:

ARCADIS U.S., Inc.

3240 El Camino Real

Suite 200

Irvine, California 92602

Attn: Toni DeMayo



Authorized for release by:

7/5/2012 9:34:02 PM

Sushmitha Reddy

Project Manager I

[sushmitha.reddy@testamericainc.com](mailto:sushmitha.reddy@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*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.*

1

2

3

4

5

6

7

8

9

10

11

12



# Table of Contents

|                                 |    |
|---------------------------------|----|
| Cover Page . . . . .            | 1  |
| Table of Contents . . . . .     | 2  |
| Sample Summary . . . . .        | 3  |
| Case Narrative . . . . .        | 4  |
| Client Sample Results . . . . . | 5  |
| Chronicle . . . . .             | 9  |
| QC Sample Results . . . . .     | 10 |
| QC Association . . . . .        | 20 |
| Definitions . . . . .           | 22 |
| Certification Summary . . . . . | 23 |
| Chain of Custody . . . . .      | 24 |
| Receipt Checklists . . . . .    | 25 |

# Sample Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 440-15194-1   | B-3-S-12'        | Solid  | 06/15/12 11:30 | 06/20/12 09:40 |
| 440-15194-2   | B-4-S-12'        | Solid  | 06/15/12 15:20 | 06/20/12 09:40 |

1

2

3

4

5

6

7

8

9

10

11

12

# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

**Job ID: 440-15194-1**

**Laboratory: TestAmerica Irvine**

## Narrative

### Job Narrative 440-15194-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 6/20/2012 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.4° C.

#### GC/MS VOA

No analytical or quality issues were noted.

#### GC Semi VOA

Method(s) 8082: The following sample(s) required a copper clean-up to reduce matrix interferences caused by sulfur: (440-15317-4 MS), (440-15317-4 MSD), (LCS 440-34843/5-A), (MB 440-34843/1-A), B-4-S-12' (440-15194-2), MS-S04 (440-15317-4).

No other analytical or quality issues were noted.

#### Metals

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 34927 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 6010B: The following sample(s) was diluted due to the nature of the sample matrix: B-4-S-12' (440-15194-2). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Organic Prep

Method(s) CA LUFT: The following sample(s) was diluted due to the nature of the sample matrix: B-4-S-12' (440-15194-2). Elevated reporting limits (RLs) are provided.

Method(s) CA LUFT: The following sample(s) was diluted due to the nature of the sample matrix: B-4-S-12' (440-15194-2). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### VOA Prep

No analytical or quality issues were noted.



# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

**Client Sample ID: B-3-S-12'**

**Lab Sample ID: 440-15194-1**

**Date Collected: 06/15/12 11:30**

**Matrix: Solid**

**Date Received: 06/20/12 09:40**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,1-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,1-Dichloroethene          | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,1-Dichloropropene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,2,3-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 10  |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,2,4-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,2-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,3,5-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,3-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 2,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 2-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 4-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Benzene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Bromobenzene                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Bromoform                   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Bromomethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Carbon tetrachloride        | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Chlorobenzene               | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Chloroethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Chloroform                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Chloromethane               | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Dibromomethane              | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Dichlorodifluoromethane     | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Ethylbenzene                | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Hexachlorobutadiene         | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Isopropylbenzene            | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| m,p-Xylene                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Methylene Chloride          | ND     |           | 20  |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Naphthalene                 | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| n-Butylbenzene              | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| N-Propylbenzene             | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| o-Xylene                    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| sec-Butylbenzene            | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Styrene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| tert-Butylbenzene           | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Tetrachloroethene           | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Toluene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

**Client Sample ID: B-3-S-12'**

**Lab Sample ID: 440-15194-1**

Date Collected: 06/15/12 11:30

Matrix: Solid

Date Received: 06/20/12 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|-------|---|----------|----------------|---------|
| Trichloroethene             | ND        |           | 2.0      |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Trichlorofluoromethane      | ND        |           | 5.0      |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Vinyl chloride              | ND        |           | 5.0      |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |           | 2.0      |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Bromochloromethane          | ND        |           | 5.0      |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Bromodichloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Dibromochloromethane        | ND        |           | 2.0      |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| p-Isopropyltoluene          | ND        |           | 2.0      |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |           | 5.0      |     | ug/Kg |   |          | 06/27/12 17:01 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |       |   | Prepared | Analyzed       | Dil Fac |
| Toluene-d8 (Surr)           | 99        |           | 80 - 120 |     |       |   |          | 06/27/12 17:01 | 1       |
| 4-Bromofluorobenzene (Surr) | 93        |           | 80 - 120 |     |       |   |          | 06/27/12 17:01 | 1       |
| Dibromofluoromethane (Surr) | 96        |           | 80 - 125 |     |       |   |          | 06/27/12 17:01 | 1       |

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

| Analyte       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND        |           | 5.0      |     | mg/Kg |   | 06/21/12 09:38 | 06/22/12 00:09 | 1       |
| DRO (C13-C28) | ND        |           | 5.0      |     | mg/Kg |   | 06/21/12 09:38 | 06/22/12 00:09 | 1       |
| C13-C40       | ND        |           | 5.0      |     | mg/Kg |   | 06/21/12 09:38 | 06/22/12 00:09 | 1       |
| Surrogate     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane  | 81        |           | 40 - 140 |     |       |   | 06/21/12 09:38 | 06/22/12 00:09 | 1       |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND        |           | 5.0      |     | mg/Kg |   | 06/25/12 12:03 | 06/25/12 19:26 | 1       |
| DRO (C13-C28) | ND        |           | 5.0      |     | mg/Kg |   | 06/25/12 12:03 | 06/25/12 19:26 | 1       |
| C13-C40       | ND        |           | 5.0      |     | mg/Kg |   | 06/25/12 12:03 | 06/25/12 19:26 | 1       |
| Surrogate     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane  | 72        |           | 40 - 140 |     |       |   | 06/25/12 12:03 | 06/25/12 19:26 | 1       |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result    | Qualifier | RL       | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016                  | ND        |           | 50       |     | ug/Kg |   | 06/24/12 14:12 | 06/25/12 22:04 | 1       |
| Aroclor 1221                  | ND        |           | 50       |     | ug/Kg |   | 06/24/12 14:12 | 06/25/12 22:04 | 1       |
| Aroclor 1232                  | ND        |           | 50       |     | ug/Kg |   | 06/24/12 14:12 | 06/25/12 22:04 | 1       |
| Aroclor 1242                  | ND        |           | 50       |     | ug/Kg |   | 06/24/12 14:12 | 06/25/12 22:04 | 1       |
| Aroclor 1248                  | ND        |           | 50       |     | ug/Kg |   | 06/24/12 14:12 | 06/25/12 22:04 | 1       |
| Aroclor 1254                  | ND        |           | 50       |     | ug/Kg |   | 06/24/12 14:12 | 06/25/12 22:04 | 1       |
| Aroclor 1260                  | ND        |           | 50       |     | ug/Kg |   | 06/24/12 14:12 | 06/25/12 22:04 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |     |       |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 77        |           | 45 - 120 |     |       |   | 06/24/12 14:12 | 06/25/12 22:04 | 1       |

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

| Analyte  | Result | Qualifier | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Lead     | 7.8    |           | 2.0  |     | mg/Kg |   | 06/25/12 09:46 | 06/27/12 18:48 | 5       |
| Zinc     | 37     |           | 5.0  |     | mg/Kg |   | 06/25/12 09:46 | 06/27/12 18:48 | 5       |
| Nickel   | 71     |           | 2.0  |     | mg/Kg |   | 06/25/12 09:46 | 06/27/12 18:48 | 5       |
| Chromium | 71     |           | 1.0  |     | mg/Kg |   | 06/25/12 09:46 | 06/27/12 18:48 | 5       |
| Cadmium  | ND     |           | 0.50 |     | mg/Kg |   | 06/25/12 09:46 | 06/27/12 18:48 | 5       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

**Client Sample ID: B-4-S-12'**

**Lab Sample ID: 440-15194-2**

**Date Collected: 06/15/12 15:20**

**Matrix: Solid**

**Date Received: 06/20/12 09:40**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,1-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,1-Dichloroethene          | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,1-Dichloropropene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,2,3-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 10  |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,2,4-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,2-Dichloroethane          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,3,5-Trimethylbenzene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,3-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 2,2-Dichloropropane         | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 2-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 4-Chlorotoluene             | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Benzene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Bromobenzene                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Bromoform                   | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Bromomethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Carbon tetrachloride        | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Chlorobenzene               | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Chloroethane                | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Chloroform                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Chloromethane               | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Dibromomethane              | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Dichlorodifluoromethane     | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Ethylbenzene                | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Hexachlorobutadiene         | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Isopropylbenzene            | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| m,p-Xylene                  | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Methylene Chloride          | ND     |           | 20  |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Naphthalene                 | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| n-Butylbenzene              | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| N-Propylbenzene             | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| o-Xylene                    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| sec-Butylbenzene            | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Styrene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| tert-Butylbenzene           | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Tetrachloroethene           | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Toluene                     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |

## Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

**Client Sample ID: B-4-S-12'**

**Lab Sample ID: 440-15194-2**

Date Collected: 06/15/12 15:20

Matrix: Solid

Date Received: 06/20/12 09:40

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte                     | Result | Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-----|-------|---|----------|----------------|---------|
| Trichloroethene             | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Trichlorofluoromethane      | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Vinyl chloride              | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| 1,2-Dibromoethane (EDB)     | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Bromochloromethane          | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Bromodichloromethane        | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Dibromochloromethane        | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| p-Isopropyltoluene          | ND     |           | 2.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND     |           | 5.0 |     | ug/Kg |   |          | 06/27/12 17:30 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| Toluene-d8 (Surr)           | 101       |           | 80 - 120 |          | 06/27/12 17:30 | 1       |
| 4-Bromofluorobenzene (Surr) | 94        |           | 80 - 120 |          | 06/27/12 17:30 | 1       |
| Dibromofluoromethane (Surr) | 99        |           | 80 - 125 |          | 06/27/12 17:30 | 1       |

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

| Analyte       | Result | Qualifier | RL | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|--------|-----------|----|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | 33     |           | 15 |     | mg/Kg |   | 06/21/12 09:38 | 06/22/12 00:34 | 1       |
| DRO (C13-C28) | 80     |           | 15 |     | mg/Kg |   | 06/21/12 09:38 | 06/22/12 00:34 | 1       |
| C13-C40       | 120    |           | 15 |     | mg/Kg |   | 06/21/12 09:38 | 06/22/12 00:34 | 1       |

| Surrogate    | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------|-----------|-----------|----------|----------------|----------------|---------|
| n-Octacosane | 73        |           | 40 - 140 | 06/21/12 09:38 | 06/22/12 00:34 | 1       |

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

| Analyte       | Result | Qualifier | RL | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|--------|-----------|----|-----|-------|---|----------------|----------------|---------|
| ORO (C29-C40) | ND     |           | 10 |     | mg/Kg |   | 06/25/12 12:03 | 06/25/12 19:51 | 1       |
| DRO (C13-C28) | ND     |           | 10 |     | mg/Kg |   | 06/25/12 12:03 | 06/25/12 19:51 | 1       |
| C13-C40       | 14     |           | 10 |     | mg/Kg |   | 06/25/12 12:03 | 06/25/12 19:51 | 1       |

| Surrogate    | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------|-----------|-----------|----------|----------------|----------------|---------|
| n-Octacosane | 75        |           | 40 - 140 | 06/25/12 12:03 | 06/25/12 19:51 | 1       |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte      | Result | Qualifier | RL | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------|--------|-----------|----|-----|-------|---|----------------|----------------|---------|
| Aroclor 1016 | ND     |           | 50 |     | ug/Kg |   | 06/24/12 14:12 | 06/26/12 08:38 | 1       |
| Aroclor 1221 | ND     |           | 50 |     | ug/Kg |   | 06/24/12 14:12 | 06/26/12 08:38 | 1       |
| Aroclor 1232 | ND     |           | 50 |     | ug/Kg |   | 06/24/12 14:12 | 06/26/12 08:38 | 1       |
| Aroclor 1242 | ND     |           | 50 |     | ug/Kg |   | 06/24/12 14:12 | 06/26/12 08:38 | 1       |
| Aroclor 1248 | ND     |           | 50 |     | ug/Kg |   | 06/24/12 14:12 | 06/26/12 08:38 | 1       |
| Aroclor 1254 | ND     |           | 50 |     | ug/Kg |   | 06/24/12 14:12 | 06/26/12 08:38 | 1       |
| Aroclor 1260 | ND     |           | 50 |     | ug/Kg |   | 06/24/12 14:12 | 06/26/12 08:38 | 1       |

| Surrogate                     | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 74        |           | 45 - 120 | 06/24/12 14:12 | 06/26/12 08:38 | 1       |

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

| Analyte  | Result | Qualifier | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Lead     | 8.7    |           | 4.0 |     | mg/Kg |   | 06/25/12 09:46 | 06/29/12 14:42 | 10      |
| Zinc     | 330    |           | 10  |     | mg/Kg |   | 06/25/12 09:46 | 06/29/12 14:42 | 10      |
| Nickel   | 120    |           | 4.0 |     | mg/Kg |   | 06/25/12 09:46 | 06/29/12 14:42 | 10      |
| Chromium | 77     |           | 2.0 |     | mg/Kg |   | 06/25/12 09:46 | 06/29/12 14:42 | 10      |
| Cadmium  | 1.5    |           | 1.0 |     | mg/Kg |   | 06/25/12 09:46 | 06/29/12 14:42 | 10      |

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

**Client Sample ID: B-3-S-12'**

**Date Collected: 06/15/12 11:30**

**Date Received: 06/20/12 09:40**

**Lab Sample ID: 440-15194-1**

**Matrix: Solid**

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 5.01 g         | 10 mL        | 35411        | 06/27/12 17:01       | TN      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 30.07 g        | 1 mL         | 34337        | 06/21/12 09:38       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 34426        | 06/22/12 00:09       |         | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 30.06 g        | 1 mL         | 34958        | 06/25/12 12:03       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34936        | 06/25/12 19:26       | ES      | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.04 g        | 2 mL         | 34843        | 06/24/12 14:12       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34988        | 06/25/12 22:04       | JM      | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 1.99 g         | 50 mL        | 34927        | 06/25/12 09:46       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 5          |                |              | 35722        | 06/27/12 18:48       | VS      | TAL IRV |

**Client Sample ID: B-4-S-12'**

**Date Collected: 06/15/12 15:20**

**Date Received: 06/20/12 09:40**

**Lab Sample ID: 440-15194-2**

**Matrix: Solid**

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 5.01 g         | 10 mL        | 35411        | 06/27/12 17:30       | TN      | TAL IRV |
| Total/NA           | Prep       | CA LUFT      |     |            | 10.00 g        | 1 mL         | 34337        | 06/21/12 09:38       | TM      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 34426        | 06/22/12 00:34       |         | TAL IRV |
| Silica Gel Cleanup | Prep       | CA LUFT      |     |            | 15.06 g        | 1 mL         | 34958        | 06/25/12 12:03       | TM      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34936        | 06/25/12 19:51       | ES      | TAL IRV |
| Total/NA           | Prep       | 3546         |     |            | 15.04 g        | 2 mL         | 34843        | 06/24/12 14:12       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34988        | 06/26/12 08:38       | JM      | TAL IRV |
| Total/NA           | Prep       | 3050B        |     |            | 1.99 g         | 50 mL        | 34927        | 06/25/12 09:46       | DT      | TAL IRV |
| Total/NA           | Analysis   | 6010B        |     | 10         |                |              | 36183        | 06/29/12 14:42       | DP      | TAL IRV |

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

# QC Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-35411/5**

**Matrix: Solid**

**Analysis Batch: 35411**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

| Analyte                     | MB<br>Result | MB<br>Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|-----------------|-----|-----|-------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,1,1-Trichloroethane       | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,1,2-Trichloroethane       | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,1-Dichloroethane          | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,1-Dichloroethene          | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,1-Dichloropropene         | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,2,3-Trichlorobenzene      | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,2,3-Trichloropropane      | ND           |                 | 10  |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,2,4-Trichlorobenzene      | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,2,4-Trimethylbenzene      | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,2-Dichlorobenzene         | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,2-Dichloroethane          | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,2-Dichloropropane         | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,3,5-Trimethylbenzene      | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,3-Dichlorobenzene         | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,3-Dichloropropane         | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,4-Dichlorobenzene         | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 2,2-Dichloropropane         | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 2-Chlorotoluene             | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 4-Chlorotoluene             | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Benzene                     | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Bromobenzene                | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Bromoform                   | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Bromomethane                | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Carbon tetrachloride        | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Chlorobenzene               | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Chloroethane                | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Chloroform                  | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Chloromethane               | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| cis-1,2-Dichloroethene      | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| cis-1,3-Dichloropropene     | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Dibromomethane              | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Dichlorodifluoromethane     | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Ethylbenzene                | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Hexachlorobutadiene         | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Isopropylbenzene            | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| m,p-Xylene                  | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Methylene Chloride          | ND           |                 | 20  |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Naphthalene                 | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| n-Butylbenzene              | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| N-Propylbenzene             | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| o-Xylene                    | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| sec-Butylbenzene            | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Styrene                     | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| tert-Butylbenzene           | ND           |                 | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Tetrachloroethene           | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Toluene                     | ND           |                 | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-35411/5**

**Matrix: Solid**

**Analysis Batch: 35411**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

| Analyte                     | MB Result | MB Qualifier | RL  | MDL | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-----|-----|-------|---|----------|----------------|---------|
| trans-1,2-Dichloroethene    | ND        |              | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| trans-1,3-Dichloropropene   | ND        |              | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Trichloroethene             | ND        |              | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Trichlorofluoromethane      | ND        |              | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Vinyl chloride              | ND        |              | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |              | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Bromochloromethane          | ND        |              | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Bromodichloromethane        | ND        |              | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Dibromochloromethane        | ND        |              | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| p-Isopropyltoluene          | ND        |              | 2.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |              | 5.0 |     | ug/Kg |   |          | 06/27/12 08:35 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------|----------------|---------|
| Toluene-d8 (Surr)           | 101          |              | 80 - 120 |          | 06/27/12 08:35 | 1       |
| 4-Bromofluorobenzene (Surr) | 101          |              | 80 - 120 |          | 06/27/12 08:35 | 1       |
| Dibromofluoromethane (Surr) | 97           |              | 80 - 125 |          | 06/27/12 08:35 | 1       |

**Lab Sample ID: LCS 440-35411/4**

**Matrix: Solid**

**Analysis Batch: 35411**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| 1,1,1,2-Tetrachloroethane   | 50.0        | 52.5       |               | ug/Kg |   | 105  | 70 - 130     |
| 1,1,1-Trichloroethane       | 50.0        | 52.5       |               | ug/Kg |   | 105  | 65 - 135     |
| 1,1,1,2-Tetrachloroethane   | 50.0        | 56.5       |               | ug/Kg |   | 113  | 55 - 140     |
| 1,1,2-Trichloroethane       | 50.0        | 53.5       |               | ug/Kg |   | 107  | 65 - 135     |
| 1,1-Dichloroethane          | 50.0        | 54.4       |               | ug/Kg |   | 109  | 70 - 130     |
| 1,1-Dichloroethene          | 50.0        | 57.4       |               | ug/Kg |   | 115  | 70 - 125     |
| 1,1-Dichloropropene         | 50.0        | 48.4       |               | ug/Kg |   | 97   | 70 - 130     |
| 1,2,3-Trichlorobenzene      | 50.0        | 49.7       |               | ug/Kg |   | 99   | 60 - 130     |
| 1,2,3-Trichloropropane      | 50.0        | 52.8       |               | ug/Kg |   | 106  | 60 - 135     |
| 1,2,4-Trichlorobenzene      | 50.0        | 52.7       |               | ug/Kg |   | 105  | 70 - 135     |
| 1,2,4-Trimethylbenzene      | 50.0        | 57.4       |               | ug/Kg |   | 115  | 70 - 125     |
| 1,2-Dibromo-3-Chloropropane | 50.0        | 62.5       |               | ug/Kg |   | 125  | 50 - 135     |
| 1,2-Dichlorobenzene         | 50.0        | 54.1       |               | ug/Kg |   | 108  | 75 - 120     |
| 1,2-Dichloroethane          | 50.0        | 54.6       |               | ug/Kg |   | 109  | 60 - 140     |
| 1,2-Dichloropropane         | 50.0        | 53.1       |               | ug/Kg |   | 106  | 70 - 130     |
| 1,3,5-Trimethylbenzene      | 50.0        | 56.2       |               | ug/Kg |   | 112  | 70 - 125     |
| 1,3-Dichlorobenzene         | 50.0        | 54.3       |               | ug/Kg |   | 109  | 75 - 125     |
| 1,3-Dichloropropane         | 50.0        | 52.0       |               | ug/Kg |   | 104  | 70 - 125     |
| 1,4-Dichlorobenzene         | 50.0        | 53.7       |               | ug/Kg |   | 107  | 75 - 120     |
| 2,2-Dichloropropane         | 50.0        | 52.8       |               | ug/Kg |   | 106  | 60 - 145     |
| 2-Chlorotoluene             | 50.0        | 53.6       |               | ug/Kg |   | 107  | 70 - 125     |
| 4-Chlorotoluene             | 50.0        | 53.7       |               | ug/Kg |   | 107  | 75 - 125     |
| Benzene                     | 50.0        | 55.7       |               | ug/Kg |   | 111  | 65 - 120     |
| Bromobenzene                | 50.0        | 54.9       |               | ug/Kg |   | 110  | 75 - 120     |
| Bromoform                   | 50.0        | 48.7       |               | ug/Kg |   | 97   | 55 - 135     |
| Bromomethane                | 50.0        | 53.8       |               | ug/Kg |   | 108  | 60 - 145     |
| Carbon tetrachloride        | 50.0        | 52.8       |               | ug/Kg |   | 106  | 65 - 140     |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-35411/4**

**Matrix: Solid**

**Analysis Batch: 35411**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Chlorobenzene               | 50.0        | 51.2       |               | ug/Kg |   | 102  | 75 - 120     |
| Chloroethane                | 50.0        | 52.4       |               | ug/Kg |   | 105  | 60 - 140     |
| Chloroform                  | 50.0        | 54.4       |               | ug/Kg |   | 109  | 70 - 130     |
| Chloromethane               | 50.0        | 52.3       |               | ug/Kg |   | 105  | 45 - 145     |
| cis-1,2-Dichloroethene      | 50.0        | 58.3       |               | ug/Kg |   | 117  | 70 - 125     |
| cis-1,3-Dichloropropene     | 50.0        | 56.6       |               | ug/Kg |   | 113  | 75 - 125     |
| Dibromomethane              | 50.0        | 55.6       |               | ug/Kg |   | 111  | 70 - 130     |
| Dichlorodifluoromethane     | 50.0        | 55.2       |               | ug/Kg |   | 110  | 35 - 160     |
| Ethylbenzene                | 50.0        | 53.2       |               | ug/Kg |   | 106  | 70 - 125     |
| Hexachlorobutadiene         | 50.0        | 47.6       |               | ug/Kg |   | 95   | 60 - 135     |
| Isopropylbenzene            | 50.0        | 52.1       |               | ug/Kg |   | 104  | 75 - 130     |
| m,p-Xylene                  | 100         | 102        |               | ug/Kg |   | 102  | 70 - 125     |
| Methylene Chloride          | 50.0        | 53.6       |               | ug/Kg |   | 107  | 55 - 135     |
| Naphthalene                 | 50.0        | 51.5       |               | ug/Kg |   | 103  | 55 - 135     |
| n-Butylbenzene              | 50.0        | 52.7       |               | ug/Kg |   | 105  | 70 - 130     |
| N-Propylbenzene             | 50.0        | 52.6       |               | ug/Kg |   | 105  | 70 - 130     |
| o-Xylene                    | 50.0        | 51.8       |               | ug/Kg |   | 104  | 70 - 125     |
| sec-Butylbenzene            | 50.0        | 53.4       |               | ug/Kg |   | 107  | 70 - 125     |
| Styrene                     | 50.0        | 54.6       |               | ug/Kg |   | 109  | 75 - 130     |
| tert-Butylbenzene           | 50.0        | 53.5       |               | ug/Kg |   | 107  | 70 - 125     |
| Tetrachloroethene           | 50.0        | 50.9       |               | ug/Kg |   | 102  | 70 - 125     |
| Toluene                     | 50.0        | 56.5       |               | ug/Kg |   | 113  | 70 - 125     |
| trans-1,2-Dichloroethene    | 50.0        | 55.9       |               | ug/Kg |   | 112  | 70 - 125     |
| trans-1,3-Dichloropropene   | 50.0        | 58.3       |               | ug/Kg |   | 117  | 70 - 135     |
| Trichloroethene             | 50.0        | 52.4       |               | ug/Kg |   | 105  | 70 - 125     |
| Trichlorofluoromethane      | 50.0        | 52.8       |               | ug/Kg |   | 106  | 60 - 145     |
| Vinyl chloride              | 50.0        | 52.7       |               | ug/Kg |   | 105  | 55 - 135     |
| 1,2-Dibromoethane (EDB)     | 50.0        | 54.1       |               | ug/Kg |   | 108  | 70 - 130     |
| Bromochloromethane          | 50.0        | 57.8       |               | ug/Kg |   | 116  | 70 - 135     |
| Bromodichloromethane        | 50.0        | 56.7       |               | ug/Kg |   | 113  | 70 - 135     |
| Dibromochloromethane        | 50.0        | 55.3       |               | ug/Kg |   | 111  | 65 - 140     |
| p-Isopropyltoluene          | 50.0        | 52.9       |               | ug/Kg |   | 106  | 75 - 125     |
| Methyl-t-Butyl Ether (MTBE) | 50.0        | 53.4       |               | ug/Kg |   | 107  | 60 - 140     |

| Surrogate                   | LCS LCS   |           | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| Toluene-d8 (Surr)           | 103       |           | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 105       |           | 80 - 120 |
| Dibromofluoromethane (Surr) | 98        |           | 80 - 125 |

**Lab Sample ID: 440-14885-A-1 MS**

**Matrix: Solid**

**Analysis Batch: 35411**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

| Analyte                   | Sample Result | Sample Qualifier | Spike Added | MS MS  |           | Unit  | D | %Rec | %Rec. Limits |
|---------------------------|---------------|------------------|-------------|--------|-----------|-------|---|------|--------------|
|                           |               |                  |             | Result | Qualifier |       |   |      |              |
| 1,1,1,2-Tetrachloroethane | ND            |                  | 47.6        | 52.5   |           | ug/Kg |   | 110  | 65 - 145     |
| 1,1,1-Trichloroethane     | ND            |                  | 47.6        | 51.1   |           | ug/Kg |   | 107  | 65 - 145     |
| 1,1,2,2-Tetrachloroethane | ND            |                  | 47.6        | 56.3   |           | ug/Kg |   | 118  | 40 - 160     |
| 1,1,2-Trichloroethane     | ND            |                  | 47.6        | 53.2   |           | ug/Kg |   | 112  | 65 - 140     |
| 1,1-Dichloroethane        | ND            |                  | 47.6        | 50.5   |           | ug/Kg |   | 106  | 65 - 135     |



# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-14885-A-1 MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 35411

| Analyte                     | Sample | Sample    | Spike | MS     | MS        | Unit  | D | %Rec | %Rec.<br>Limits |
|-----------------------------|--------|-----------|-------|--------|-----------|-------|---|------|-----------------|
|                             | Result | Qualifier | Added | Result | Qualifier |       |   |      |                 |
| 1,1-Dichloroethene          | ND     |           | 47.6  | 54.2   |           | ug/Kg |   | 114  | 65 - 135        |
| 1,1-Dichloropropene         | ND     |           | 47.6  | 50.4   |           | ug/Kg |   | 106  | 65 - 135        |
| 1,2,3-Trichlorobenzene      | ND     |           | 47.6  | 45.9   |           | ug/Kg |   | 96   | 45 - 145        |
| 1,2,3-Trichloropropane      | ND     |           | 47.6  | 54.8   |           | ug/Kg |   | 115  | 50 - 150        |
| 1,2,4-Trichlorobenzene      | ND     |           | 47.6  | 49.3   |           | ug/Kg |   | 103  | 50 - 140        |
| 1,2,4-Trimethylbenzene      | ND     |           | 47.6  | 55.2   |           | ug/Kg |   | 113  | 65 - 140        |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 47.6  | 67.4   |           | ug/Kg |   | 141  | 40 - 150        |
| 1,2-Dichlorobenzene         | ND     |           | 47.6  | 52.2   |           | ug/Kg |   | 110  | 70 - 130        |
| 1,2-Dichloroethane          | ND     |           | 47.6  | 54.3   |           | ug/Kg |   | 114  | 60 - 150        |
| 1,2-Dichloropropane         | ND     |           | 47.6  | 50.8   |           | ug/Kg |   | 107  | 65 - 130        |
| 1,3,5-Trimethylbenzene      | ND     |           | 47.6  | 53.5   |           | ug/Kg |   | 112  | 65 - 135        |
| 1,3-Dichlorobenzene         | ND     |           | 47.6  | 53.0   |           | ug/Kg |   | 111  | 70 - 130        |
| 1,3-Dichloropropane         | ND     |           | 47.6  | 53.7   |           | ug/Kg |   | 113  | 65 - 140        |
| 1,4-Dichlorobenzene         | ND     |           | 47.6  | 52.4   |           | ug/Kg |   | 110  | 70 - 130        |
| 2,2-Dichloropropane         | ND     |           | 47.6  | 54.7   |           | ug/Kg |   | 115  | 65 - 150        |
| 2-Chlorotoluene             | ND     |           | 47.6  | 52.0   |           | ug/Kg |   | 109  | 60 - 135        |
| 4-Chlorotoluene             | ND     |           | 47.6  | 52.5   |           | ug/Kg |   | 110  | 65 - 135        |
| Benzene                     | ND     |           | 47.6  | 52.6   |           | ug/Kg |   | 110  | 65 - 130        |
| Bromobenzene                | ND     |           | 47.6  | 53.3   |           | ug/Kg |   | 112  | 65 - 140        |
| Bromoform                   | ND     |           | 47.6  | 49.5   |           | ug/Kg |   | 104  | 50 - 145        |
| Bromomethane                | ND     |           | 47.6  | 45.0   |           | ug/Kg |   | 95   | 60 - 155        |
| Carbon tetrachloride        | ND     |           | 47.6  | 53.7   |           | ug/Kg |   | 113  | 60 - 145        |
| Chlorobenzene               | ND     |           | 47.6  | 51.7   |           | ug/Kg |   | 108  | 70 - 130        |
| Chloroethane                | ND     |           | 47.6  | 45.6   |           | ug/Kg |   | 96   | 60 - 150        |
| Chloroform                  | ND     |           | 47.6  | 50.1   |           | ug/Kg |   | 105  | 65 - 135        |
| Chloromethane               | ND     |           | 47.6  | 40.0   |           | ug/Kg |   | 84   | 40 - 145        |
| cis-1,2-Dichloroethene      | ND     |           | 47.6  | 53.6   |           | ug/Kg |   | 113  | 65 - 135        |
| cis-1,3-Dichloropropene     | ND     |           | 47.6  | 51.2   |           | ug/Kg |   | 107  | 70 - 135        |
| Dibromomethane              | ND     |           | 47.6  | 54.0   |           | ug/Kg |   | 113  | 65 - 140        |
| Dichlorodifluoromethane     | ND     |           | 47.6  | 34.8   |           | ug/Kg |   | 73   | 30 - 160        |
| Ethylbenzene                | ND     |           | 47.6  | 53.5   |           | ug/Kg |   | 112  | 70 - 135        |
| Hexachlorobutadiene         | ND     |           | 47.6  | 35.2   |           | ug/Kg |   | 74   | 50 - 145        |
| Isopropylbenzene            | ND     |           | 47.6  | 51.6   |           | ug/Kg |   | 108  | 70 - 145        |
| m,p-Xylene                  | ND     |           | 95.2  | 104    |           | ug/Kg |   | 110  | 70 - 130        |
| Methylene Chloride          | ND     |           | 47.6  | 49.9   |           | ug/Kg |   | 105  | 55 - 145        |
| Naphthalene                 | ND     |           | 47.6  | 51.6   |           | ug/Kg |   | 104  | 40 - 150        |
| n-Butylbenzene              | ND     |           | 47.6  | 47.7   |           | ug/Kg |   | 100  | 55 - 145        |
| N-Propylbenzene             | ND     |           | 47.6  | 51.3   |           | ug/Kg |   | 108  | 65 - 140        |
| o-Xylene                    | ND     |           | 47.6  | 52.6   |           | ug/Kg |   | 110  | 65 - 130        |
| sec-Butylbenzene            | ND     |           | 47.6  | 50.5   |           | ug/Kg |   | 106  | 60 - 135        |
| Styrene                     | ND     |           | 47.6  | 54.8   |           | ug/Kg |   | 115  | 70 - 140        |
| tert-Butylbenzene           | ND     |           | 47.6  | 51.3   |           | ug/Kg |   | 108  | 60 - 140        |
| Tetrachloroethene           | ND     |           | 47.6  | 51.6   |           | ug/Kg |   | 108  | 65 - 135        |
| Toluene                     | ND     |           | 47.6  | 54.2   |           | ug/Kg |   | 114  | 70 - 130        |
| trans-1,2-Dichloroethene    | ND     |           | 47.6  | 52.8   |           | ug/Kg |   | 111  | 70 - 135        |
| trans-1,3-Dichloropropene   | ND     |           | 47.6  | 60.2   |           | ug/Kg |   | 126  | 60 - 145        |
| Trichloroethene             | ND     |           | 47.6  | 54.5   |           | ug/Kg |   | 115  | 65 - 140        |
| Trichlorofluoromethane      | ND     |           | 47.6  | 49.6   |           | ug/Kg |   | 104  | 55 - 155        |
| Vinyl chloride              | ND     |           | 47.6  | 43.5   |           | ug/Kg |   | 91   | 55 - 140        |
| 1,2-Dibromoethane (EDB)     | ND     |           | 47.6  | 54.4   |           | ug/Kg |   | 114  | 65 - 140        |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-14885-A-1 MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 35411

| Analyte                     | Sample | Sample    | Spike | MS     | MS        | Unit  | D | %Rec | %Rec.<br>Limits |
|-----------------------------|--------|-----------|-------|--------|-----------|-------|---|------|-----------------|
|                             | Result | Qualifier | Added | Result | Qualifier |       |   |      |                 |
| Bromochloromethane          | ND     |           | 47.6  | 53.9   |           | ug/Kg |   | 113  | 65 - 145        |
| Bromodichloromethane        | ND     |           | 47.6  | 54.0   |           | ug/Kg |   | 113  | 65 - 145        |
| Dibromochloromethane        | ND     |           | 47.6  | 54.5   |           | ug/Kg |   | 114  | 60 - 145        |
| p-Isopropyltoluene          | ND     |           | 47.6  | 49.6   |           | ug/Kg |   | 104  | 60 - 140        |
| Methyl-t-Butyl Ether (MTBE) | ND     |           | 47.6  | 55.3   |           | ug/Kg |   | 116  | 55 - 155        |

| Surrogate                   | MS        | MS        | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| Toluene-d8 (Surr)           | 101       |           | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 102       |           | 80 - 120 |
| Dibromofluoromethane (Surr) | 96        |           | 80 - 125 |

Lab Sample ID: 440-14885-A-1 MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 35411

| Analyte                     | Sample | Sample    | Spike | MSD    | MSD       | Unit  | D | %Rec | %Rec.<br>Limits | RPD | RPD   |
|-----------------------------|--------|-----------|-------|--------|-----------|-------|---|------|-----------------|-----|-------|
|                             | Result | Qualifier | Added | Result | Qualifier |       |   |      |                 | RPD | Limit |
| 1,1,1,2-Tetrachloroethane   | ND     |           | 48.4  | 48.8   |           | ug/Kg |   | 101  | 65 - 145        | 7   | 20    |
| 1,1,1-Trichloroethane       | ND     |           | 48.4  | 47.9   |           | ug/Kg |   | 99   | 65 - 145        | 7   | 20    |
| 1,1,1,2,2-Tetrachloroethane | ND     |           | 48.4  | 52.7   |           | ug/Kg |   | 109  | 40 - 160        | 7   | 30    |
| 1,1,2-Trichloroethane       | ND     |           | 48.4  | 50.8   |           | ug/Kg |   | 105  | 65 - 140        | 5   | 30    |
| 1,1-Dichloroethane          | ND     |           | 48.4  | 47.7   |           | ug/Kg |   | 99   | 65 - 135        | 6   | 25    |
| 1,1-Dichloroethene          | ND     |           | 48.4  | 51.5   |           | ug/Kg |   | 107  | 65 - 135        | 5   | 25    |
| 1,1-Dichloropropene         | ND     |           | 48.4  | 47.9   |           | ug/Kg |   | 99   | 65 - 135        | 5   | 20    |
| 1,2,3-Trichlorobenzene      | ND     |           | 48.4  | 45.2   |           | ug/Kg |   | 94   | 45 - 145        | 1   | 30    |
| 1,2,3-Trichloropropane      | ND     |           | 48.4  | 52.0   |           | ug/Kg |   | 107  | 50 - 150        | 5   | 30    |
| 1,2,4-Trichlorobenzene      | ND     |           | 48.4  | 48.0   |           | ug/Kg |   | 99   | 50 - 140        | 3   | 30    |
| 1,2,4-Trimethylbenzene      | ND     |           | 48.4  | 52.5   |           | ug/Kg |   | 106  | 65 - 140        | 5   | 25    |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 48.4  | 65.9   |           | ug/Kg |   | 136  | 40 - 150        | 2   | 30    |
| 1,2-Dichlorobenzene         | ND     |           | 48.4  | 49.7   |           | ug/Kg |   | 103  | 70 - 130        | 5   | 25    |
| 1,2-Dichloroethane          | ND     |           | 48.4  | 51.7   |           | ug/Kg |   | 107  | 60 - 150        | 5   | 25    |
| 1,2-Dichloropropane         | ND     |           | 48.4  | 50.2   |           | ug/Kg |   | 104  | 65 - 130        | 1   | 20    |
| 1,3,5-Trimethylbenzene      | ND     |           | 48.4  | 51.0   |           | ug/Kg |   | 106  | 65 - 135        | 5   | 25    |
| 1,3-Dichlorobenzene         | ND     |           | 48.4  | 49.8   |           | ug/Kg |   | 103  | 70 - 130        | 6   | 25    |
| 1,3-Dichloropropane         | ND     |           | 48.4  | 48.9   |           | ug/Kg |   | 101  | 65 - 140        | 9   | 25    |
| 1,4-Dichlorobenzene         | ND     |           | 48.4  | 49.3   |           | ug/Kg |   | 102  | 70 - 130        | 6   | 25    |
| 2,2-Dichloropropane         | ND     |           | 48.4  | 49.9   |           | ug/Kg |   | 103  | 65 - 150        | 9   | 25    |
| 2-Chlorotoluene             | ND     |           | 48.4  | 49.3   |           | ug/Kg |   | 102  | 60 - 135        | 5   | 25    |
| 4-Chlorotoluene             | ND     |           | 48.4  | 49.8   |           | ug/Kg |   | 103  | 65 - 135        | 5   | 25    |
| Benzene                     | ND     |           | 48.4  | 51.2   |           | ug/Kg |   | 106  | 65 - 130        | 3   | 20    |
| Bromobenzene                | ND     |           | 48.4  | 50.8   |           | ug/Kg |   | 105  | 65 - 140        | 5   | 25    |
| Bromoform                   | ND     |           | 48.4  | 44.4   |           | ug/Kg |   | 92   | 50 - 145        | 11  | 30    |
| Bromomethane                | ND     |           | 48.4  | 42.6   |           | ug/Kg |   | 88   | 60 - 155        | 6   | 25    |
| Carbon tetrachloride        | ND     |           | 48.4  | 50.9   |           | ug/Kg |   | 105  | 60 - 145        | 5   | 25    |
| Chlorobenzene               | ND     |           | 48.4  | 47.4   |           | ug/Kg |   | 98   | 70 - 130        | 9   | 25    |
| Chloroethane                | ND     |           | 48.4  | 42.6   |           | ug/Kg |   | 88   | 60 - 150        | 7   | 25    |
| Chloroform                  | ND     |           | 48.4  | 47.3   |           | ug/Kg |   | 98   | 65 - 135        | 6   | 20    |
| Chloromethane               | ND     |           | 48.4  | 38.1   |           | ug/Kg |   | 79   | 40 - 145        | 5   | 25    |
| cis-1,2-Dichloroethene      | ND     |           | 48.4  | 50.5   |           | ug/Kg |   | 105  | 65 - 135        | 6   | 25    |
| cis-1,3-Dichloropropene     | ND     |           | 48.4  | 48.1   |           | ug/Kg |   | 99   | 70 - 135        | 6   | 25    |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-14885-A-1 MSD

Matrix: Solid

Analysis Batch: 35411

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

| Analyte                     | Sample | Sample    | Spike | MSD    | MSD       | Unit  | D | %Rec | %Rec.    | RPD | RPD |
|-----------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-----|
|                             | Result | Qualifier | Added | Result | Qualifier |       |   |      | Limits   |     |     |
| Dibromomethane              | ND     |           | 48.4  | 52.0   |           | ug/Kg |   | 108  | 65 - 140 | 4   | 25  |
| Dichlorodifluoromethane     | ND     |           | 48.4  | 32.8   |           | ug/Kg |   | 68   | 30 - 160 | 6   | 35  |
| Ethylbenzene                | ND     |           | 48.4  | 50.2   |           | ug/Kg |   | 104  | 70 - 135 | 6   | 25  |
| Hexachlorobutadiene         | ND     |           | 48.4  | 32.9   |           | ug/Kg |   | 68   | 50 - 145 | 7   | 35  |
| Isopropylbenzene            | ND     |           | 48.4  | 49.5   |           | ug/Kg |   | 102  | 70 - 145 | 4   | 25  |
| m,p-Xylene                  | ND     |           | 96.7  | 96.9   |           | ug/Kg |   | 100  | 70 - 130 | 7   | 25  |
| Methylene Chloride          | ND     |           | 48.4  | 47.4   |           | ug/Kg |   | 98   | 55 - 145 | 5   | 25  |
| Naphthalene                 | ND     |           | 48.4  | 52.1   |           | ug/Kg |   | 104  | 40 - 150 | 1   | 40  |
| n-Butylbenzene              | ND     |           | 48.4  | 43.9   |           | ug/Kg |   | 91   | 55 - 145 | 8   | 30  |
| N-Propylbenzene             | ND     |           | 48.4  | 49.0   |           | ug/Kg |   | 101  | 65 - 140 | 5   | 25  |
| o-Xylene                    | ND     |           | 48.4  | 48.5   |           | ug/Kg |   | 100  | 65 - 130 | 8   | 25  |
| sec-Butylbenzene            | ND     |           | 48.4  | 46.6   |           | ug/Kg |   | 96   | 60 - 135 | 8   | 25  |
| Styrene                     | ND     |           | 48.4  | 49.8   |           | ug/Kg |   | 103  | 70 - 140 | 9   | 25  |
| tert-Butylbenzene           | ND     |           | 48.4  | 48.7   |           | ug/Kg |   | 101  | 60 - 140 | 5   | 25  |
| Tetrachloroethene           | ND     |           | 48.4  | 46.4   |           | ug/Kg |   | 96   | 65 - 135 | 11  | 25  |
| Toluene                     | ND     |           | 48.4  | 51.9   |           | ug/Kg |   | 107  | 70 - 130 | 4   | 20  |
| trans-1,2-Dichloroethene    | ND     |           | 48.4  | 50.3   |           | ug/Kg |   | 104  | 70 - 135 | 5   | 25  |
| trans-1,3-Dichloropropene   | ND     |           | 48.4  | 56.8   |           | ug/Kg |   | 117  | 60 - 145 | 6   | 25  |
| Trichloroethene             | ND     |           | 48.4  | 52.9   |           | ug/Kg |   | 109  | 65 - 140 | 3   | 25  |
| Trichlorofluoromethane      | ND     |           | 48.4  | 47.6   |           | ug/Kg |   | 99   | 55 - 155 | 4   | 25  |
| Vinyl chloride              | ND     |           | 48.4  | 40.4   |           | ug/Kg |   | 84   | 55 - 140 | 7   | 30  |
| 1,2-Dibromoethane (EDB)     | ND     |           | 48.4  | 50.0   |           | ug/Kg |   | 103  | 65 - 140 | 9   | 25  |
| Bromochloromethane          | ND     |           | 48.4  | 51.2   |           | ug/Kg |   | 106  | 65 - 145 | 5   | 25  |
| Bromodichloromethane        | ND     |           | 48.4  | 51.7   |           | ug/Kg |   | 107  | 65 - 145 | 4   | 20  |
| Dibromochloromethane        | ND     |           | 48.4  | 50.8   |           | ug/Kg |   | 105  | 60 - 145 | 7   | 25  |
| p-Isopropyltoluene          | ND     |           | 48.4  | 46.4   |           | ug/Kg |   | 96   | 60 - 140 | 7   | 25  |
| Methyl-t-Butyl Ether (MTBE) | ND     |           | 48.4  | 50.6   |           | ug/Kg |   | 105  | 55 - 155 | 9   | 35  |

| Surrogate                   | MSD       | MSD       | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| Toluene-d8 (Surr)           | 99        |           | 80 - 120 |
| 4-Bromofluorobenzene (Surr) | 101       |           | 80 - 120 |
| Dibromofluoromethane (Surr) | 95        |           | 80 - 125 |

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

Lab Sample ID: MB 440-34337/1-A

Matrix: Solid

Analysis Batch: 34426

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34337

| Analyte       | MB     | MB        | RL  | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
|               | Result | Qualifier |     |     |       |   |                |                |         |
| ORO (C29-C40) | ND     |           | 5.0 |     | mg/Kg |   | 06/21/12 09:38 | 06/21/12 13:42 | 1       |
| DRO (C13-C28) | ND     |           | 5.0 |     | mg/Kg |   | 06/21/12 09:38 | 06/21/12 13:42 | 1       |
| C13-C40       | ND     |           | 5.0 |     | mg/Kg |   | 06/21/12 09:38 | 06/21/12 13:42 | 1       |

| Surrogate    | MB        | MB        | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------|-----------|-----------|----------|----------------|----------------|---------|
|              | %Recovery | Qualifier |          |                |                |         |
| n-Octacosane | 73        |           | 40 - 140 | 06/21/12 09:38 | 06/21/12 13:42 | 1       |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

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

**Lab Sample ID: LCS 440-34337/2-A**

**Matrix: Solid**

**Analysis Batch: 34426**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 34337**

| Analyte             | Spike Added | LCS Result       | LCS Qualifier    | Unit  | D | %Rec | %Rec. Limits  |
|---------------------|-------------|------------------|------------------|-------|---|------|---------------|
| EFH (C10-C28)       | 33.3        | 26.1             |                  | mg/Kg |   | 78   | 45 - 115      |
| <b>Surrogate</b>    |             | <b>%Recovery</b> | <b>Qualifier</b> |       |   |      | <b>Limits</b> |
| <i>n-Octacosane</i> |             | 76               |                  |       |   |      | 40 - 140      |

**Lab Sample ID: 440-15146-E-6-B MS**

**Matrix: Solid**

**Analysis Batch: 34426**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

**Prep Batch: 34337**

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec. Limits  |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|---------------|
| EFH (C10-C28)       | ND            |                  | 33.3        | 27.4      |              | mg/Kg |   | 82   | 40 - 120      |
| <b>Surrogate</b>    |               | <b>%Recovery</b> |             |           |              |       |   |      | <b>Limits</b> |
| <i>n-Octacosane</i> |               | 79               |             |           |              |       |   |      | 40 - 140      |

**Lab Sample ID: 440-15146-E-6-C MSD**

**Matrix: Solid**

**Analysis Batch: 34426**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

**Prep Batch: 34337**

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec. Limits  | RPD | RPD Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|---------------|-----|-----------|
| EFH (C10-C28)       | ND            |                  | 33.3        | 27.2       |               | mg/Kg |   | 82   | 40 - 120      | 1   | 30        |
| <b>Surrogate</b>    |               | <b>%Recovery</b> |             |            |               |       |   |      | <b>Limits</b> |     |           |
| <i>n-Octacosane</i> |               | 80               |             |            |               |       |   |      | 40 - 140      |     |           |

**Lab Sample ID: MB 440-34958/1-A**

**Matrix: Solid**

**Analysis Batch: 34936**

**Client Sample ID: Method Blank**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 34958**

| Analyte             | MB Result | MB Qualifier     | RL  | MDL | Unit  | D | Prepared        | Analyzed        | Dil Fac        |
|---------------------|-----------|------------------|-----|-----|-------|---|-----------------|-----------------|----------------|
| ORO (C29-C40)       | ND        |                  | 5.0 |     | mg/Kg |   | 06/25/12 12:03  | 06/25/12 17:50  | 1              |
| DRO (C13-C28)       | ND        |                  | 5.0 |     | mg/Kg |   | 06/25/12 12:03  | 06/25/12 17:50  | 1              |
| C13-C40             | ND        |                  | 5.0 |     | mg/Kg |   | 06/25/12 12:03  | 06/25/12 17:50  | 1              |
| <b>Surrogate</b>    |           | <b>%Recovery</b> |     |     |       |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| <i>n-Octacosane</i> |           | 78               |     |     |       |   | 06/25/12 12:03  | 06/25/12 17:50  | 1              |

**Lab Sample ID: LCS 440-34958/2-A**

**Matrix: Solid**

**Analysis Batch: 34936**

**Client Sample ID: Lab Control Sample**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 34958**

| Analyte             | Spike Added | LCS Result       | LCS Qualifier    | Unit  | D | %Rec | %Rec. Limits  |
|---------------------|-------------|------------------|------------------|-------|---|------|---------------|
| EFH (C10-C28)       | 33.3        | 23.3             |                  | mg/Kg |   | 70   | 45 - 115      |
| <b>Surrogate</b>    |             | <b>%Recovery</b> | <b>Qualifier</b> |       |   |      | <b>Limits</b> |
| <i>n-Octacosane</i> |             | 75               |                  |       |   |      | 40 - 140      |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

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

**Lab Sample ID: 440-15194-1 MS**

**Matrix: Solid**

**Analysis Batch: 34936**

**Client Sample ID: B-3-S-12'**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 34958**

| Analyte             | Sample Result    | Sample Qualifier    | Spike Added   | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|---------------------|------------------|---------------------|---------------|-----------|--------------|-------|---|------|--------------|
| EFH (C10-C28)       | ND               |                     | 33.3          | 23.5      |              | mg/Kg |   | 71   | 40 - 120     |
| <b>Surrogate</b>    | <b>%Recovery</b> | <b>MS Qualifier</b> | <b>Limits</b> |           |              |       |   |      |              |
| <i>n-Octacosane</i> | 78               |                     | 40 - 140      |           |              |       |   |      |              |

**Lab Sample ID: 440-15194-1 MSD**

**Matrix: Solid**

**Analysis Batch: 34936**

**Client Sample ID: B-3-S-12'**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 34958**

| Analyte             | Sample Result    | Sample Qualifier     | Spike Added   | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------------------|------------------|----------------------|---------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| EFH (C10-C28)       | ND               |                      | 33.3          | 21.6       |               | mg/Kg |   | 65   | 40 - 120     | 8   | 30        |
| <b>Surrogate</b>    | <b>%Recovery</b> | <b>MSD Qualifier</b> | <b>Limits</b> |            |               |       |   |      |              |     |           |
| <i>n-Octacosane</i> | 71               |                      | 40 - 140      |            |               |       |   |      |              |     |           |

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 440-34843/1-A**

**Matrix: Solid**

**Analysis Batch: 34988**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 34843**

| Analyte                              | MB Result        | MB Qualifier        | RL            | MDL | Unit  | D | Prepared        | Analyzed        | Dil Fac        |
|--------------------------------------|------------------|---------------------|---------------|-----|-------|---|-----------------|-----------------|----------------|
| Aroclor 1016                         | ND               |                     | 50            |     | ug/Kg |   | 06/24/12 14:12  | 06/26/12 07:33  | 1              |
| Aroclor 1221                         | ND               |                     | 50            |     | ug/Kg |   | 06/24/12 14:12  | 06/26/12 07:33  | 1              |
| Aroclor 1232                         | ND               |                     | 50            |     | ug/Kg |   | 06/24/12 14:12  | 06/26/12 07:33  | 1              |
| Aroclor 1242                         | ND               |                     | 50            |     | ug/Kg |   | 06/24/12 14:12  | 06/26/12 07:33  | 1              |
| Aroclor 1248                         | ND               |                     | 50            |     | ug/Kg |   | 06/24/12 14:12  | 06/26/12 07:33  | 1              |
| Aroclor 1254                         | ND               |                     | 50            |     | ug/Kg |   | 06/24/12 14:12  | 06/26/12 07:33  | 1              |
| Aroclor 1260                         | ND               |                     | 50            |     | ug/Kg |   | 06/24/12 14:12  | 06/26/12 07:33  | 1              |
| <b>Surrogate</b>                     | <b>%Recovery</b> | <b>MB Qualifier</b> | <b>Limits</b> |     |       |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| <i>DCB Decachlorobiphenyl (Surr)</i> | 93               |                     | 45 - 120      |     |       |   | 06/24/12 14:12  | 06/26/12 07:33  | 1              |

**Lab Sample ID: LCS 440-34843/5-A**

**Matrix: Solid**

**Analysis Batch: 34988**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 34843**

| Analyte                              | Spike Added      | LCS Result           | LCS Qualifier | Unit  | D | %Rec | %Rec. Limits |
|--------------------------------------|------------------|----------------------|---------------|-------|---|------|--------------|
| Aroclor 1016                         | 267              | 298                  |               | ug/Kg |   | 112  | 65 - 115     |
| Aroclor 1260                         | 267              | 262                  |               | ug/Kg |   | 98   | 65 - 115     |
| <b>Surrogate</b>                     | <b>%Recovery</b> | <b>LCS Qualifier</b> | <b>Limits</b> |       |   |      |              |
| <i>DCB Decachlorobiphenyl (Surr)</i> | 96               |                      | 45 - 120      |       |   |      |              |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID: 440-15317-G-4-C MS**  
**Matrix: Solid**  
**Analysis Batch: 34988**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 34843**

| Analyte                       | Sample           | Sample           | Spike         | MS     | MS        | Unit  | D | %Rec | %Rec. | Limits   |  |
|-------------------------------|------------------|------------------|---------------|--------|-----------|-------|---|------|-------|----------|--|
|                               | Result           | Qualifier        | Added         | Result | Qualifier |       |   |      |       |          |  |
| Aroclor 1016                  | ND               |                  | 267           | 240    |           | ug/Kg |   | 90   |       | 50 - 120 |  |
| Aroclor 1260                  | ND               |                  | 267           | 208    |           | ug/Kg |   | 78   |       | 50 - 125 |  |
|                               |                  | <b>MS</b>        | <b>MS</b>     |        |           |       |   |      |       |          |  |
| <b>Surrogate</b>              | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |        |           |       |   |      |       |          |  |
| DCB Decachlorobiphenyl (Surr) | 78               |                  | 45 - 120      |        |           |       |   |      |       |          |  |

**Lab Sample ID: 440-15317-G-4-D MSD**  
**Matrix: Solid**  
**Analysis Batch: 34988**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 34843**

| Analyte                       | Sample           | Sample           | Spike         | MSD    | MSD       | Unit  | D | %Rec | %Rec. | Limits   | RPD | Limit |
|-------------------------------|------------------|------------------|---------------|--------|-----------|-------|---|------|-------|----------|-----|-------|
|                               | Result           | Qualifier        | Added         | Result | Qualifier |       |   |      |       |          |     |       |
| Aroclor 1016                  | ND               |                  | 267           | 235    |           | ug/Kg |   | 88   |       | 50 - 120 | 2   | 30    |
| Aroclor 1260                  | ND               |                  | 267           | 197    |           | ug/Kg |   | 74   |       | 50 - 125 | 5   | 30    |
|                               |                  | <b>MSD</b>       | <b>MSD</b>    |        |           |       |   |      |       |          |     |       |
| <b>Surrogate</b>              | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |        |           |       |   |      |       |          |     |       |
| DCB Decachlorobiphenyl (Surr) | 73               |                  | 45 - 120      |        |           |       |   |      |       |          |     |       |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 440-34927/1-A ^5**  
**Matrix: Solid**  
**Analysis Batch: 35722**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 34927**

| Analyte  | MB     | MB        | RL   | MDL | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
|          | Result | Qualifier |      |     |       |   |                |                |         |
| Lead     | ND     |           | 2.0  |     | mg/Kg |   | 06/25/12 09:46 | 06/27/12 17:52 | 5       |
| Zinc     | ND     |           | 5.0  |     | mg/Kg |   | 06/25/12 09:46 | 06/27/12 17:52 | 5       |
| Nickel   | ND     |           | 2.0  |     | mg/Kg |   | 06/25/12 09:46 | 06/27/12 17:52 | 5       |
| Chromium | ND     |           | 1.0  |     | mg/Kg |   | 06/25/12 09:46 | 06/27/12 17:52 | 5       |
| Cadmium  | ND     |           | 0.50 |     | mg/Kg |   | 06/25/12 09:46 | 06/27/12 17:52 | 5       |

**Lab Sample ID: LCS 440-34927/2-A ^5**  
**Matrix: Solid**  
**Analysis Batch: 35722**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 34927**

| Analyte  | Spike | LCS  | LCS | Unit  | D | %Rec | %Rec. | Limits   |
|----------|-------|------|-----|-------|---|------|-------|----------|
|          |       |      |     |       |   |      |       |          |
| Lead     | 50.0  | 50.6 |     | mg/Kg |   | 101  |       | 80 - 120 |
| Zinc     | 50.0  | 49.2 |     | mg/Kg |   | 98   |       | 80 - 120 |
| Nickel   | 50.0  | 49.9 |     | mg/Kg |   | 100  |       | 80 - 120 |
| Chromium | 50.0  | 50.4 |     | mg/Kg |   | 101  |       | 80 - 120 |
| Cadmium  | 50.0  | 49.9 |     | mg/Kg |   | 100  |       | 80 - 120 |

**Lab Sample ID: 440-15146-E-2-F MS ^5**  
**Matrix: Solid**  
**Analysis Batch: 35722**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 34927**

| Analyte | Sample | Sample    | Spike | MS     | MS        | Unit  | D | %Rec | %Rec. | Limits   |
|---------|--------|-----------|-------|--------|-----------|-------|---|------|-------|----------|
|         | Result | Qualifier | Added | Result | Qualifier |       |   |      |       |          |
| Lead    | 4.5    |           | 49.3  | 53.8   |           | mg/Kg |   | 100  |       | 75 - 125 |
| Zinc    | 15     |           | 49.3  | 63.8   |           | mg/Kg |   | 99   |       | 75 - 125 |
| Nickel  | 6.1    |           | 49.3  | 55.5   |           | mg/Kg |   | 100  |       | 75 - 125 |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

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

Lab Sample ID: 440-15146-E-2-F MS ^5

Matrix: Solid

Analysis Batch: 35722

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34927

| Analyte  | Sample | Sample    | Spike | MS     | MS        | Unit  | D | %Rec | %Rec.    |
|----------|--------|-----------|-------|--------|-----------|-------|---|------|----------|
|          | Result | Qualifier | Added | Result | Qualifier |       |   |      | Limits   |
| Chromium | 12     |           | 49.3  | 64.7   |           | mg/Kg |   | 108  | 75 - 125 |
| Cadmium  | ND     |           | 49.3  | 48.7   |           | mg/Kg |   | 98   | 75 - 125 |

Lab Sample ID: 440-15146-E-2-G MSD ^5

Matrix: Solid

Analysis Batch: 35722

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34927

| Analyte  | Sample | Sample    | Spike | MSD    | MSD       | Unit  | D | %Rec | %Rec.    | RPD |       |
|----------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|
|          | Result | Qualifier | Added | Result | Qualifier |       |   |      | Limits   | RPD | Limit |
| Lead     | 4.5    |           | 49.8  | 52.1   |           | mg/Kg |   | 96   | 75 - 125 | 3   | 20    |
| Zinc     | 15     |           | 49.8  | 63.0   |           | mg/Kg |   | 97   | 75 - 125 | 1   | 20    |
| Nickel   | 6.1    |           | 49.8  | 54.2   |           | mg/Kg |   | 97   | 75 - 125 | 2   | 20    |
| Chromium | 12     |           | 49.8  | 61.1   |           | mg/Kg |   | 99   | 75 - 125 | 6   | 20    |
| Cadmium  | ND     |           | 49.8  | 48.1   |           | mg/Kg |   | 96   | 75 - 125 | 1   | 20    |

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

## GC/MS VOA

### Analysis Batch: 35411

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 440-14885-A-1 MS  | Matrix Spike           | Total/NA  | Solid  | 8260B  |            |
| 440-14885-A-1 MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8260B  |            |
| 440-15194-1       | B-3-S-12'              | Total/NA  | Solid  | 8260B  |            |
| 440-15194-2       | B-4-S-12'              | Total/NA  | Solid  | 8260B  |            |
| LCS 440-35411/4   | Lab Control Sample     | Total/NA  | Solid  | 8260B  |            |
| MB 440-35411/5    | Method Blank           | Total/NA  | Solid  | 8260B  |            |

## GC Semi VOA

### Prep Batch: 34337

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method  | Prep Batch |
|---------------------|------------------------|-----------|--------|---------|------------|
| 440-15146-E-6-B MS  | Matrix Spike           | Total/NA  | Solid  | CA LUFT |            |
| 440-15146-E-6-C MSD | Matrix Spike Duplicate | Total/NA  | Solid  | CA LUFT |            |
| 440-15194-1         | B-3-S-12'              | Total/NA  | Solid  | CA LUFT |            |
| 440-15194-2         | B-4-S-12'              | Total/NA  | Solid  | CA LUFT |            |
| LCS 440-34337/2-A   | Lab Control Sample     | Total/NA  | Solid  | CA LUFT |            |
| MB 440-34337/1-A    | Method Blank           | Total/NA  | Solid  | CA LUFT |            |

### Analysis Batch: 34426

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 440-15146-E-6-B MS  | Matrix Spike           | Total/NA  | Solid  | 8015B  | 34337      |
| 440-15146-E-6-C MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015B  | 34337      |
| 440-15194-1         | B-3-S-12'              | Total/NA  | Solid  | 8015B  | 34337      |
| 440-15194-2         | B-4-S-12'              | Total/NA  | Solid  | 8015B  | 34337      |
| LCS 440-34337/2-A   | Lab Control Sample     | Total/NA  | Solid  | 8015B  | 34337      |
| MB 440-34337/1-A    | Method Blank           | Total/NA  | Solid  | 8015B  | 34337      |

### Prep Batch: 34843

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 440-15194-1         | B-3-S-12'              | Total/NA  | Solid  | 3546   |            |
| 440-15194-2         | B-4-S-12'              | Total/NA  | Solid  | 3546   |            |
| 440-15317-G-4-C MS  | Matrix Spike           | Total/NA  | Solid  | 3546   |            |
| 440-15317-G-4-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 3546   |            |
| LCS 440-34843/5-A   | Lab Control Sample     | Total/NA  | Solid  | 3546   |            |
| MB 440-34843/1-A    | Method Blank           | Total/NA  | Solid  | 3546   |            |

### Analysis Batch: 34936

| Lab Sample ID     | Client Sample ID   | Prep Type          | Matrix | Method | Prep Batch |
|-------------------|--------------------|--------------------|--------|--------|------------|
| 440-15194-1       | B-3-S-12'          | Silica Gel Cleanup | Solid  | 8015B  | 34958      |
| 440-15194-1 MS    | B-3-S-12'          | Silica Gel Cleanup | Solid  | 8015B  | 34958      |
| 440-15194-1 MSD   | B-3-S-12'          | Silica Gel Cleanup | Solid  | 8015B  | 34958      |
| 440-15194-2       | B-4-S-12'          | Silica Gel Cleanup | Solid  | 8015B  | 34958      |
| LCS 440-34958/2-A | Lab Control Sample | Silica Gel Cleanup | Solid  | 8015B  | 34958      |
| MB 440-34958/1-A  | Method Blank       | Silica Gel Cleanup | Solid  | 8015B  | 34958      |

### Prep Batch: 34958

| Lab Sample ID     | Client Sample ID   | Prep Type          | Matrix | Method  | Prep Batch |
|-------------------|--------------------|--------------------|--------|---------|------------|
| 440-15194-1       | B-3-S-12'          | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-15194-1 MS    | B-3-S-12'          | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-15194-1 MSD   | B-3-S-12'          | Silica Gel Cleanup | Solid  | CA LUFT |            |
| 440-15194-2       | B-4-S-12'          | Silica Gel Cleanup | Solid  | CA LUFT |            |
| LCS 440-34958/2-A | Lab Control Sample | Silica Gel Cleanup | Solid  | CA LUFT |            |



# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

## GC Semi VOA (Continued)

### Prep Batch: 34958 (Continued)

| Lab Sample ID    | Client Sample ID | Prep Type          | Matrix | Method  | Prep Batch |
|------------------|------------------|--------------------|--------|---------|------------|
| MB 440-34958/1-A | Method Blank     | Silica Gel Cleanup | Solid  | CA LUFT |            |

### Analysis Batch: 34988

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 440-15194-1         | B-3-S-12'              | Total/NA  | Solid  | 8082   | 34843      |
| 440-15194-2         | B-4-S-12'              | Total/NA  | Solid  | 8082   | 34843      |
| 440-15317-G-4-C MS  | Matrix Spike           | Total/NA  | Solid  | 8082   | 34843      |
| 440-15317-G-4-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8082   | 34843      |
| LCS 440-34843/5-A   | Lab Control Sample     | Total/NA  | Solid  | 8082   | 34843      |
| MB 440-34843/1-A    | Method Blank           | Total/NA  | Solid  | 8082   | 34843      |

## Metals

### Prep Batch: 34927

| Lab Sample ID          | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|------------------------|------------------------|-----------|--------|--------|------------|
| 440-15146-E-2-F MS ^5  | Matrix Spike           | Total/NA  | Solid  | 3050B  |            |
| 440-15146-E-2-G MSD ^5 | Matrix Spike Duplicate | Total/NA  | Solid  | 3050B  |            |
| 440-15194-1            | B-3-S-12'              | Total/NA  | Solid  | 3050B  |            |
| 440-15194-2            | B-4-S-12'              | Total/NA  | Solid  | 3050B  |            |
| LCS 440-34927/2-A ^5   | Lab Control Sample     | Total/NA  | Solid  | 3050B  |            |
| MB 440-34927/1-A ^5    | Method Blank           | Total/NA  | Solid  | 3050B  |            |

### Analysis Batch: 35722

| Lab Sample ID          | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|------------------------|------------------------|-----------|--------|--------|------------|
| 440-15146-E-2-F MS ^5  | Matrix Spike           | Total/NA  | Solid  | 6010B  | 34927      |
| 440-15146-E-2-G MSD ^5 | Matrix Spike Duplicate | Total/NA  | Solid  | 6010B  | 34927      |
| 440-15194-1            | B-3-S-12'              | Total/NA  | Solid  | 6010B  | 34927      |
| LCS 440-34927/2-A ^5   | Lab Control Sample     | Total/NA  | Solid  | 6010B  | 34927      |
| MB 440-34927/1-A ^5    | Method Blank           | Total/NA  | Solid  | 6010B  | 34927      |

### Analysis Batch: 36183

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 440-15194-2   | B-4-S-12'        | Total/NA  | Solid  | 6010B  | 34927      |

# Definitions/Glossary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

## 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  |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL            | Estimated Detection Limit  |
| EPA            | United States Environmental Protection Agency  |
| 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  |
| RL             | Reporting Limit  |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                       |
| TEF            | Toxicity Equivalent Factor (Dioxin)  |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)  |

# Certification Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15194-1

| Laboratory         | Authority                | Program                     | EPA Region | Certification ID  |
|--------------------|--------------------------|-----------------------------|------------|-------------------|
| TestAmerica Irvine | Arizona                  | State Program               | 9          | AZ0671            |
| TestAmerica Irvine | California               | LA Cty Sanitation Districts | 9          | 10256             |
| TestAmerica Irvine | California               | NELAC                       | 9          | 1108CA            |
| TestAmerica Irvine | Guam                     | State Program               | 9          | Cert. No. 12.002r |
| TestAmerica Irvine | Hawaii                   | State Program               | 9          | N/A               |
| TestAmerica Irvine | Nevada                   | State Program               | 9          | CA015312007A      |
| TestAmerica Irvine | New Mexico               | State Program               | 6          | N/A               |
| TestAmerica Irvine | Northern Mariana Islands | State Program               | 9          | MP0002            |
| TestAmerica Irvine | Oregon                   | NELAC                       | 10         | 4005              |
| TestAmerica Irvine | USDA                     | Federal                     |            | P330-09-00080     |

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



## CHAIN OF CUSTODY FORM

17461 Derian Ave., #100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297  
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046  
 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303  
 6000 S. Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

440-15194 138931

Temp. 79.1, 36° Page 1 of 1

| Client Name / Address:<br>ARCADES / 320 Commerce, suite 200<br>Irvine, CA 92602 |               |                | Project / PO Number:<br>B0000901.9708 |               |                     |               | Analysis Required |                         |                       |   |                        |  |                          |             |                |                       |   |
|---|---------------|----------------|---------------------------------------|---------------|---------------------|---------------|-------------------|-------------------------|-----------------------|---|------------------------|--|--------------------------|-------------|----------------|-----------------------|---|
| Project Manager:<br>Toni DeMamp   |               |                | Phone Number:<br>714.508.2057         |               |                     |               | TPH-WO (8015H)    | TPH-P20 (8015B)         | w/ silica gel cleanup | TPH-D20 (8015B)   | P-Tex + 14 PAH (8260P) | Cadmium, Chromium, Lead, Nickel, Zinc (6010) | Halogenated VOCs (8260B) | PCBs (8082) | TPH-WO (8015H) | w/ silica gel cleanup | Special Instructions<br>MS<br>6/20/12<br>2125 |
| Sampler:<br>LK/PAN  |               |                | Fax Number:<br>714.730.9345           |               |                     |               |                   |                         |                       |   |                        |  |                          |             |                |                       |   |
| Sample Description  | Sample Matrix | Container Type | # of Cont.                            | Sampling Date | Sampling Time       | Preservatives | TPH-WO (8015H)    | TPH-P20 (8015B)         | w/ silica gel cleanup | TPH-D20 (8015B)   | P-Tex + 14 PAH (8260P) | Cadmium, Chromium, Lead, Nickel, Zinc (6010) | Halogenated VOCs (8260B) | PCBs (8082) | TPH-WO (8015H) | w/ silica gel cleanup | Special Instructions                          |
| B-3-S-12'   | S             | sleeve         | 1                                     | 6/15/12       | 1130                | —             | X                 | X                       | X                     | X   | X                      | X  | X                        | X           | X              |                       |   |
| B-4-S-12'   | S             | sleeve         | 1                                     | 6/15/12       | 1520                | —             | X                 | X                       | X                     | X   | X                      | X  | X                        | X           | X              |                       |   |
| Relinquished By:  |               |                | Date/Time: 6/15/12 1834               |               | Received By:        |               |                   | Date/Time: 6/15/12 1834 |                       | Turnaround Time: (Check)<br>same day _____ 72 hours _____<br>24 hours _____ 5 days _____<br>48 hours _____ normal <input checked="" type="checkbox"/> |                        |  |                          |             |                |                       |   |
| Relinquished By:  |               |                | Date/Time: 6-19-12 17:06              |               | Received in Lab By: |               |                   | Date/Time: 6/20/12 9:40 |                       | Sample Integrity: (Check)<br>intact <input checked="" type="checkbox"/> on ice <input checked="" type="checkbox"/>                                    |                        |  |                          |             |                |                       |   |

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days. 5.4°C

## Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 440-15194-1

**Login Number: 15194**

**List Number: 1**

**Creator: Perez, Angel**

**List Source: TestAmerica Irvine**

| Question   | Answer | Comment |
|--|--------|---------|
| Radioactivity either was not measured or, if measured, is at or below background | N/A    |         |
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | N/A    |         |
| 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 sample IDs on the containers and the COC. | True   |         |
| Samples are received within Holding Time.  | True   |         |
| Sample containers have legible labels.   | True   |         |
| Containers are not broken or leaking.  | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.  | True   |         |
| Sample bottles are completely filled.  | True   |         |
| Sample Preservation Verified.  | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.     | N/A    |         |
| Multiphasic samples are not present.   | True   |         |
| 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 Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-14914-1

Client Project/Site: Chevron - 9-9708

For:

ARCADIS U.S., Inc.

3240 El Camino Real

Suite 200

Irvine, California 92602

Attn: Toni DeMayo



Authorized for release by:

7/4/2012 2:26:05 PM

Sushmitha Reddy

Project Manager I

[sushmitha.reddy@testamericainc.com](mailto:sushmitha.reddy@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*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.*

1

2

3

4

5

6

7

8

9

10

11

12



# Table of Contents

|                                 |    |
|---------------------------------|----|
| Cover Page . . . . .            | 1  |
| Table of Contents . . . . .     | 2  |
| Sample Summary . . . . .        | 3  |
| Case Narrative . . . . .        | 4  |
| Client Sample Results . . . . . | 5  |
| Chronicle . . . . .             | 7  |
| QC Sample Results . . . . .     | 8  |
| QC Association . . . . .        | 17 |
| Definitions . . . . .           | 19 |
| Certification Summary . . . . . | 20 |
| Chain of Custody . . . . .      | 21 |
| Receipt Checklists . . . . .    | 22 |

# Sample Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

---

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 440-14914-1   | B-1-W-20120614   | Water  | 06/14/12 11:15 | 06/16/12 10:30 |

---

1

2

3

4

5

6

7

8

9

10

11

12



# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

**Job ID: 440-14914-1**

**Laboratory: TestAmerica Irvine**

## Narrative

### Job Narrative 440-14914-1

#### Comments

No additional comments.

#### Receipt

The sample was received on 6/16/2012 10:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.8° C.

#### GC/MS VOA

Method(s) 8260B: The following sample(s) was received with headspace in the sample vial, only one VOA Vial is provided : (440-15425-1 MS), (440-15425-1 MSD), CT-12 (440-15425-1).

No other analytical or quality issues were noted.

#### GC Semi VOA

Method(s) 8015B: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 34062. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method(s) 8082: The continuing calibration verification (CCV) for analytical batch 33546 exceeded control criteria for 1016/1260. Analyte not detected, data not impacted. Affected samples are: (CCV 440-33546/31), B-1-W-20120614 (440-14914-1)

Method(s) 8082: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with 33558. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other analytical or quality issues were noted.

#### Metals

Method(s) 6010B: The following sample(s) was diluted due to the nature of the sample matrix: B-1-W-20120614 (440-14914-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

#### VOA Prep

No analytical or quality issues were noted.

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

**Client Sample ID: B-1-W-20120614**

**Lab Sample ID: 440-14914-1**

**Date Collected: 06/14/12 11:15**

**Matrix: Water**

**Date Received: 06/16/12 10:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result     | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|------------|-----------|------|-----|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,1,1-Trichloroethane       | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,1,1,2,2-Tetrachloroethane | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,1,1,2-Trichloroethane     | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,1-Dichloroethane          | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,1-Dichloroethene          | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,1-Dichloropropene         | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,2,3-Trichlorobenzene      | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,2,3-Trichloropropane      | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,2,4-Trichlorobenzene      | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,2,4-Trimethylbenzene      | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND         |           | 1.0  |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,2-Dibromoethane (EDB)     | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,2-Dichlorobenzene         | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,2-Dichloroethane          | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,2-Dichloropropane         | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,3,5-Trimethylbenzene      | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,3-Dichlorobenzene         | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,3-Dichloropropane         | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 1,4-Dichlorobenzene         | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 2,2-Dichloropropane         | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 2-Chlorotoluene             | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| 4-Chlorotoluene             | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Benzene                     | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Bromobenzene                | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Bromochloromethane          | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Bromodichloromethane        | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Bromoform                   | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Bromomethane                | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Carbon tetrachloride        | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Chlorobenzene               | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Chloroethane                | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| <b>Chloroform</b>           | <b>1.2</b> |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Chloromethane               | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| cis-1,2-Dichloroethene      | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| cis-1,3-Dichloropropene     | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Dibromochloromethane        | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Dibromomethane              | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Dichlorodifluoromethane     | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Ethylbenzene                | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Hexachlorobutadiene         | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Isopropylbenzene            | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| m,p-Xylene                  | ND         |           | 1.0  |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Methylene Chloride          | ND         |           | 1.0  |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Naphthalene                 | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| n-Butylbenzene              | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| N-Propylbenzene             | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| o-Xylene                    | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| p-Isopropyltoluene          | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| Styrene                     | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |
| sec-Butylbenzene            | ND         |           | 0.50 |     | ug/L |   |          | 06/28/12 02:49 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

**Client Sample ID: B-1-W-20120614**

**Lab Sample ID: 440-14914-1**

**Date Collected: 06/14/12 11:15**

**Matrix: Water**

**Date Received: 06/16/12 10:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|-----------------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| tert-Butylbenzene           | ND               |                  | 0.50          |     | ug/L |   |                 | 06/28/12 02:49  | 1              |
| Tetrachloroethene           | ND               |                  | 0.50          |     | ug/L |   |                 | 06/28/12 02:49  | 1              |
| Toluene                     | ND               |                  | 0.50          |     | ug/L |   |                 | 06/28/12 02:49  | 1              |
| trans-1,2-Dichloroethene    | ND               |                  | 0.50          |     | ug/L |   |                 | 06/28/12 02:49  | 1              |
| trans-1,3-Dichloropropene   | ND               |                  | 0.50          |     | ug/L |   |                 | 06/28/12 02:49  | 1              |
| Trichloroethene             | ND               |                  | 0.50          |     | ug/L |   |                 | 06/28/12 02:49  | 1              |
| Trichlorofluoromethane      | ND               |                  | 0.50          |     | ug/L |   |                 | 06/28/12 02:49  | 1              |
| Vinyl chloride              | ND               |                  | 0.50          |     | ug/L |   |                 | 06/28/12 02:49  | 1              |
| Methyl-t-Butyl Ether (MTBE) | ND               |                  | 0.50          |     | ug/L |   |                 | 06/28/12 02:49  | 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 (Surr) | 90               |                  | 80 - 120      |     |      |   |                 | 06/28/12 02:49  | 1              |
| Dibromofluoromethane (Surr) | 87               |                  | 80 - 120      |     |      |   |                 | 06/28/12 02:49  | 1              |
| Toluene-d8 (Surr)           | 94               |                  | 80 - 120      |     |      |   |                 | 06/28/12 02:49  | 1              |

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

| Analyte          | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| <b>C10-C28</b>   | <b>0.96</b>      |                  | 0.051         |     | mg/L |   | 06/20/12 16:48  | 06/22/12 16:47  | 1              |
| <b>C29-C40</b>   | <b>0.71</b>      |                  | 0.051         |     | mg/L |   | 06/20/12 16:48  | 06/22/12 16:47  | 1              |
| <b>Surrogate</b> | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| n-Octacosane     | 75               |                  | 45 - 120      |     |      |   | 06/20/12 16:48  | 06/22/12 16:47  | 1              |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte          | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| C10-C28          | ND               |                  | 0.48          |     | mg/L |   | 06/20/12 12:14  | 06/21/12 09:57  | 1              |
| C29-C40          | ND               |                  | 0.48          |     | mg/L |   | 06/20/12 12:14  | 06/21/12 09:57  | 1              |
| <b>Surrogate</b> | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| n-Octacosane     | 64               |                  | 45 - 120      |     |      |   | 06/20/12 12:14  | 06/21/12 09:57  | 1              |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|-------------------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| Aroclor 1016                  | ND               |                  | 0.97          |     | ug/L |   | 06/18/12 14:49  | 06/18/12 19:38  | 1              |
| Aroclor 1221                  | ND               |                  | 0.97          |     | ug/L |   | 06/18/12 14:49  | 06/18/12 19:38  | 1              |
| Aroclor 1232                  | ND               |                  | 0.97          |     | ug/L |   | 06/18/12 14:49  | 06/18/12 19:38  | 1              |
| Aroclor 1242                  | ND               |                  | 0.97          |     | ug/L |   | 06/18/12 14:49  | 06/18/12 19:38  | 1              |
| Aroclor 1248                  | ND               |                  | 0.97          |     | ug/L |   | 06/18/12 14:49  | 06/18/12 19:38  | 1              |
| Aroclor 1254                  | ND               |                  | 0.97          |     | ug/L |   | 06/18/12 14:49  | 06/18/12 19:38  | 1              |
| Aroclor 1260                  | ND               |                  | 0.97          |     | ug/L |   | 06/18/12 14:49  | 06/18/12 19:38  | 1              |
| <b>Surrogate</b>              | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| DCB Decachlorobiphenyl (Surr) | 73               |                  | 45 - 120      |     |      |   | 06/18/12 14:49  | 06/18/12 19:38  | 1              |

**Method: 6010B - Metals (ICP) - Total Recoverable**

| Analyte         | Result       | Qualifier | RL    | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|--------------|-----------|-------|-----|------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>0.022</b> |           | 0.010 |     | mg/L |   | 06/22/12 12:38 | 06/23/12 16:18 | 2       |
| <b>Zinc</b>     | <b>0.46</b>  |           | 0.040 |     | mg/L |   | 06/22/12 12:38 | 06/23/12 16:18 | 2       |
| <b>Nickel</b>   | <b>0.89</b>  |           | 0.020 |     | mg/L |   | 06/22/12 12:38 | 06/23/12 16:18 | 2       |
| <b>Chromium</b> | <b>0.39</b>  |           | 0.010 |     | mg/L |   | 06/22/12 12:38 | 06/23/12 16:18 | 2       |
| Cadmium         | ND           |           | 0.010 |     | mg/L |   | 06/22/12 12:38 | 06/23/12 16:18 | 2       |

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
 Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

**Client Sample ID: B-1-W-20120614**

**Lab Sample ID: 440-14914-1**

**Date Collected: 06/14/12 11:15**

**Matrix: Water**

**Date Received: 06/16/12 10:30**

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 10 mL          | 10 mL        | 35599        | 06/28/12 02:49       | RM      | TAL IRV |
| Total/NA           | Prep       | 3510C        |     |            | 1030 mL        | 2 mL         | 33558        | 06/18/12 14:49       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 33546        | 06/18/12 19:38       | JM      | TAL IRV |
| Silica Gel Cleanup | Prep       | 3510C SGC    |     |            | 1040 mL        | 1 mL         | 34062        | 06/20/12 12:14       | KW      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34194        | 06/21/12 09:57       |         | TAL IRV |
| Total/NA           | Prep       | 3510C        |     |            | 990 mL         | 1 mL         | 34182        | 06/20/12 16:48       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 34703        | 06/22/12 16:47       |         | TAL IRV |
| Total Recoverable  | Prep       | 3005A        |     |            | 50 mL          | 50 mL        | 34617        | 06/22/12 12:38       | SC      | TAL IRV |
| Total Recoverable  | Analysis   | 6010B        |     | 2          |                |              | 34916        | 06/23/12 16:18       | FR      | TAL IRV |

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022



# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-35599/3**

**Matrix: Water**

**Analysis Batch: 35599**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

| Analyte                     | MB Result | MB Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|------|-----|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,1,1-Trichloroethane       | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,1,2-Trichloroethane       | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,1-Dichloroethane          | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,1-Dichloroethene          | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,1-Dichloropropene         | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,2,3-Trichlorobenzene      | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,2,3-Trichloropropane      | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,2,4-Trichlorobenzene      | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,2,4-Trimethylbenzene      | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND        |              | 1.0  |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,2-Dichlorobenzene         | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,2-Dichloroethane          | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,2-Dichloropropane         | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,3,5-Trimethylbenzene      | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,3-Dichlorobenzene         | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,3-Dichloropropane         | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 1,4-Dichlorobenzene         | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 2,2-Dichloropropane         | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 2-Chlorotoluene             | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| 4-Chlorotoluene             | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Benzene                     | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Bromobenzene                | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Bromochloromethane          | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Bromodichloromethane        | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Bromoform                   | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Bromomethane                | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Carbon tetrachloride        | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Chlorobenzene               | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Chloroethane                | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Chloroform                  | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Chloromethane               | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| cis-1,2-Dichloroethene      | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| cis-1,3-Dichloropropene     | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Dibromochloromethane        | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Dibromomethane              | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Dichlorodifluoromethane     | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Ethylbenzene                | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Hexachlorobutadiene         | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Isopropylbenzene            | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| m,p-Xylene                  | ND        |              | 1.0  |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Methylene Chloride          | ND        |              | 1.0  |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Naphthalene                 | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| n-Butylbenzene              | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| N-Propylbenzene             | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| o-Xylene                    | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| p-Isopropyltoluene          | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-35599/3

Matrix: Water

Analysis Batch: 35599

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|------|-----|------|---|----------|----------------|---------|
| Styrene                     | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| sec-Butylbenzene            | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| tert-Butylbenzene           | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Tetrachloroethene           | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Toluene                     | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| trans-1,2-Dichloroethene    | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| trans-1,3-Dichloropropene   | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Trichloroethene             | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Trichlorofluoromethane      | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Vinyl chloride              | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |              | 0.50 |     | ug/L |   |          | 06/27/12 18:59 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 93           |              | 80 - 120 |          | 06/27/12 18:59 | 1       |
| Dibromofluoromethane (Surr) | 88           |              | 80 - 120 |          | 06/27/12 18:59 | 1       |
| Toluene-d8 (Surr)           | 96           |              | 80 - 120 |          | 06/27/12 18:59 | 1       |

Lab Sample ID: LCS 440-35599/4

Matrix: Water

Analysis Batch: 35599

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|--------------|
| 1,1,1,2-Tetrachloroethane   | 25.0        | 27.7       |               | ug/L |   | 111  | 70 - 130     |
| 1,1,1-Trichloroethane       | 25.0        | 26.6       |               | ug/L |   | 106  | 65 - 135     |
| 1,1,1,2,2-Tetrachloroethane | 25.0        | 26.7       |               | ug/L |   | 107  | 55 - 130     |
| 1,1,2-Trichloroethane       | 25.0        | 25.9       |               | ug/L |   | 104  | 70 - 125     |
| 1,1-Dichloroethane          | 25.0        | 25.9       |               | ug/L |   | 104  | 70 - 125     |
| 1,1-Dichloroethene          | 25.0        | 27.6       |               | ug/L |   | 110  | 70 - 125     |
| 1,1-Dichloropropene         | 25.0        | 26.7       |               | ug/L |   | 107  | 75 - 130     |
| 1,2,3-Trichlorobenzene      | 25.0        | 25.1       |               | ug/L |   | 100  | 65 - 125     |
| 1,2,3-Trichloropropane      | 25.0        | 25.1       |               | ug/L |   | 100  | 60 - 130     |
| 1,2,4-Trichlorobenzene      | 25.0        | 27.2       |               | ug/L |   | 109  | 70 - 135     |
| 1,2,4-Trimethylbenzene      | 25.0        | 29.7       |               | ug/L |   | 119  | 75 - 125     |
| 1,2-Dibromo-3-Chloropropane | 25.0        | 28.8       |               | ug/L |   | 115  | 50 - 135     |
| 1,2-Dibromoethane (EDB)     | 25.0        | 26.7       |               | ug/L |   | 107  | 75 - 125     |
| 1,2-Dichlorobenzene         | 25.0        | 27.1       |               | ug/L |   | 108  | 75 - 120     |
| 1,2-Dichloroethane          | 25.0        | 26.8       |               | ug/L |   | 107  | 60 - 140     |
| 1,2-Dichloropropane         | 25.0        | 26.0       |               | ug/L |   | 104  | 70 - 125     |
| 1,3,5-Trimethylbenzene      | 25.0        | 29.4       |               | ug/L |   | 117  | 75 - 125     |
| 1,3-Dichlorobenzene         | 25.0        | 28.0       |               | ug/L |   | 112  | 75 - 120     |
| 1,3-Dichloropropane         | 25.0        | 26.6       |               | ug/L |   | 106  | 70 - 120     |
| 1,4-Dichlorobenzene         | 25.0        | 27.9       |               | ug/L |   | 112  | 75 - 120     |
| 2,2-Dichloropropane         | 25.0        | 27.6       |               | ug/L |   | 110  | 65 - 140     |
| 2-Chlorotoluene             | 25.0        | 27.6       |               | ug/L |   | 110  | 70 - 125     |
| 4-Chlorotoluene             | 25.0        | 28.2       |               | ug/L |   | 113  | 75 - 125     |
| Benzene                     | 25.0        | 27.4       |               | ug/L |   | 109  | 70 - 120     |
| Bromobenzene                | 25.0        | 27.9       |               | ug/L |   | 112  | 75 - 120     |
| Bromochloromethane          | 25.0        | 27.4       |               | ug/L |   | 110  | 70 - 130     |
| Bromodichloromethane        | 25.0        | 27.0       |               | ug/L |   | 108  | 70 - 135     |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-35599/4**

**Matrix: Water**

**Analysis Batch: 35599**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|--------------|
| Bromoform                   | 25.0        | 23.9       |               | ug/L |   | 95   | 55 - 130     |
| Bromomethane                | 25.0        | 22.9       |               | ug/L |   | 92   | 65 - 140     |
| Carbon tetrachloride        | 25.0        | 28.1       |               | ug/L |   | 112  | 65 - 140     |
| Chlorobenzene               | 25.0        | 27.5       |               | ug/L |   | 110  | 75 - 120     |
| Chloroethane                | 25.0        | 23.3       |               | ug/L |   | 93   | 60 - 140     |
| Chloroform                  | 25.0        | 25.7       |               | ug/L |   | 103  | 70 - 130     |
| Chloromethane               | 25.0        | 20.5       |               | ug/L |   | 82   | 50 - 140     |
| cis-1,2-Dichloroethene      | 25.0        | 28.2       |               | ug/L |   | 113  | 70 - 125     |
| cis-1,3-Dichloropropene     | 25.0        | 25.6       |               | ug/L |   | 102  | 75 - 125     |
| Dibromochloromethane        | 25.0        | 27.3       |               | ug/L |   | 109  | 70 - 140     |
| Dibromomethane              | 25.0        | 26.7       |               | ug/L |   | 107  | 70 - 125     |
| Dichlorodifluoromethane     | 25.0        | 17.8       |               | ug/L |   | 71   | 35 - 155     |
| Ethylbenzene                | 25.0        | 29.2       |               | ug/L |   | 117  | 75 - 125     |
| Hexachlorobutadiene         | 25.0        | 26.1       |               | ug/L |   | 104  | 65 - 135     |
| Isopropylbenzene            | 25.0        | 28.6       |               | ug/L |   | 114  | 75 - 130     |
| m,p-Xylene                  | 50.0        | 57.5       |               | ug/L |   | 115  | 75 - 125     |
| Methylene Chloride          | 25.0        | 25.4       |               | ug/L |   | 102  | 55 - 130     |
| Naphthalene                 | 25.0        | 23.9       |               | ug/L |   | 96   | 55 - 135     |
| n-Butylbenzene              | 25.0        | 28.0       |               | ug/L |   | 112  | 70 - 130     |
| N-Propylbenzene             | 25.0        | 28.5       |               | ug/L |   | 114  | 75 - 130     |
| o-Xylene                    | 25.0        | 28.7       |               | ug/L |   | 115  | 75 - 125     |
| p-Isopropyltoluene          | 25.0        | 28.4       |               | ug/L |   | 114  | 75 - 125     |
| Styrene                     | 25.0        | 29.1       |               | ug/L |   | 117  | 75 - 130     |
| sec-Butylbenzene            | 25.0        | 28.7       |               | ug/L |   | 115  | 70 - 125     |
| tert-Butylbenzene           | 25.0        | 28.8       |               | ug/L |   | 115  | 70 - 125     |
| Tetrachloroethene           | 25.0        | 28.2       |               | ug/L |   | 113  | 70 - 125     |
| Toluene                     | 25.0        | 28.5       |               | ug/L |   | 114  | 70 - 120     |
| trans-1,2-Dichloroethene    | 25.0        | 27.5       |               | ug/L |   | 110  | 70 - 125     |
| trans-1,3-Dichloropropene   | 25.0        | 29.7       |               | ug/L |   | 119  | 70 - 125     |
| Trichloroethene             | 25.0        | 28.2       |               | ug/L |   | 113  | 70 - 125     |
| Trichlorofluoromethane      | 25.0        | 25.9       |               | ug/L |   | 103  | 65 - 145     |
| Vinyl chloride              | 25.0        | 21.7       |               | ug/L |   | 87   | 55 - 135     |
| Methyl-t-Butyl Ether (MTBE) | 25.0        | 26.0       |               | ug/L |   | 104  | 60 - 135     |

| Surrogate                   | LCS LCS   |           | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| 4-Bromofluorobenzene (Surr) | 100       |           | 80 - 120 |
| Dibromofluoromethane (Surr) | 94        |           | 80 - 120 |
| Toluene-d8 (Surr)           | 99        |           | 80 - 120 |

**Lab Sample ID: 440-15425-A-1 MS**

**Matrix: Water**

**Analysis Batch: 35599**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

| Analyte                   | Sample Result | Sample Qualifier | Spike Added | MS MS  |           | Unit | D | %Rec | %Rec. Limits |
|---------------------------|---------------|------------------|-------------|--------|-----------|------|---|------|--------------|
|                           |               |                  |             | Result | Qualifier |      |   |      |              |
| 1,1,1,2-Tetrachloroethane | ND            |                  | 25.0        | 26.2   |           | ug/L |   | 105  | 65 - 140     |
| 1,1,1-Trichloroethane     | ND            |                  | 25.0        | 25.3   |           | ug/L |   | 101  | 65 - 140     |
| 1,1,2,2-Tetrachloroethane | ND            |                  | 25.0        | 26.8   |           | ug/L |   | 107  | 55 - 135     |
| 1,1,2-Trichloroethane     | ND            |                  | 25.0        | 25.2   |           | ug/L |   | 101  | 65 - 130     |
| 1,1-Dichloroethane        | ND            |                  | 25.0        | 24.5   |           | ug/L |   | 98   | 65 - 130     |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-15425-A-1 MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 35599

| Analyte                     | Sample | Sample    | Spike | MS     | MS        | Unit | D | %Rec | %Rec.<br>Limits |
|-----------------------------|--------|-----------|-------|--------|-----------|------|---|------|-----------------|
|                             | Result | Qualifier | Added | Result | Qualifier |      |   |      |                 |
| 1,1-Dichloroethene          | ND     |           | 25.0  | 26.8   |           | ug/L |   | 107  | 60 - 130        |
| 1,1-Dichloropropene         | ND     |           | 25.0  | 26.7   |           | ug/L |   | 107  | 70 - 135        |
| 1,2,3-Trichlorobenzene      | ND     |           | 25.0  | 23.9   |           | ug/L |   | 95   | 60 - 135        |
| 1,2,3-Trichloropropane      | ND     |           | 25.0  | 25.6   |           | ug/L |   | 102  | 55 - 135        |
| 1,2,4-Trichlorobenzene      | ND     |           | 25.0  | 26.4   |           | ug/L |   | 105  | 65 - 135        |
| 1,2,4-Trimethylbenzene      | ND     |           | 25.0  | 29.2   |           | ug/L |   | 117  | 55 - 135        |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 25.0  | 30.0   |           | ug/L |   | 120  | 45 - 145        |
| 1,2-Dibromoethane (EDB)     | ND     |           | 25.0  | 25.6   |           | ug/L |   | 102  | 70 - 130        |
| 1,2-Dichlorobenzene         | ND     |           | 25.0  | 26.9   |           | ug/L |   | 108  | 75 - 125        |
| 1,2-Dichloroethane          | ND     |           | 25.0  | 25.8   |           | ug/L |   | 103  | 60 - 140        |
| 1,2-Dichloropropane         | ND     |           | 25.0  | 25.9   |           | ug/L |   | 103  | 65 - 130        |
| 1,3,5-Trimethylbenzene      | ND     |           | 25.0  | 28.6   |           | ug/L |   | 115  | 70 - 130        |
| 1,3-Dichlorobenzene         | ND     |           | 25.0  | 28.0   |           | ug/L |   | 112  | 75 - 125        |
| 1,3-Dichloropropane         | ND     |           | 25.0  | 25.3   |           | ug/L |   | 101  | 65 - 135        |
| 1,4-Dichlorobenzene         | ND     |           | 25.0  | 27.5   |           | ug/L |   | 110  | 75 - 125        |
| 2,2-Dichloropropane         | ND     |           | 25.0  | 26.1   |           | ug/L |   | 104  | 60 - 145        |
| 2-Chlorotoluene             | ND     |           | 25.0  | 28.3   |           | ug/L |   | 113  | 65 - 135        |
| 4-Chlorotoluene             | ND     |           | 25.0  | 27.9   |           | ug/L |   | 111  | 70 - 135        |
| Benzene                     | ND     |           | 25.0  | 26.9   |           | ug/L |   | 108  | 65 - 125        |
| Bromobenzene                | ND     |           | 25.0  | 27.6   |           | ug/L |   | 111  | 70 - 125        |
| Bromochloromethane          | ND     |           | 25.0  | 24.7   |           | ug/L |   | 99   | 65 - 135        |
| Bromodichloromethane        | 0.54   |           | 25.0  | 26.9   |           | ug/L |   | 105  | 70 - 135        |
| Bromoform                   | ND     |           | 25.0  | 23.4   |           | ug/L |   | 94   | 55 - 135        |
| Bromomethane                | ND     |           | 25.0  | 22.5   |           | ug/L |   | 90   | 55 - 145        |
| Carbon tetrachloride        | ND     |           | 25.0  | 28.6   |           | ug/L |   | 114  | 65 - 140        |
| Chlorobenzene               | ND     |           | 25.0  | 26.2   |           | ug/L |   | 105  | 75 - 125        |
| Chloroethane                | ND     |           | 25.0  | 21.7   |           | ug/L |   | 87   | 55 - 140        |
| Chloroform                  | 0.59   |           | 25.0  | 24.3   |           | ug/L |   | 95   | 65 - 135        |
| Chloromethane               | ND     |           | 25.0  | 19.7   |           | ug/L |   | 79   | 45 - 145        |
| cis-1,2-Dichloroethene      | ND     |           | 25.0  | 25.6   |           | ug/L |   | 102  | 65 - 130        |
| cis-1,3-Dichloropropene     | ND     |           | 25.0  | 24.8   |           | ug/L |   | 99   | 70 - 130        |
| Dibromochloromethane        | 0.56   |           | 25.0  | 26.6   |           | ug/L |   | 104  | 65 - 140        |
| Dibromomethane              | ND     |           | 25.0  | 25.6   |           | ug/L |   | 102  | 65 - 135        |
| Dichlorodifluoromethane     | ND     |           | 25.0  | 17.2   |           | ug/L |   | 69   | 25 - 155        |
| Ethylbenzene                | ND     |           | 25.0  | 28.0   |           | ug/L |   | 112  | 65 - 130        |
| Hexachlorobutadiene         | ND     |           | 25.0  | 25.5   |           | ug/L |   | 102  | 60 - 135        |
| Isopropylbenzene            | ND     |           | 25.0  | 28.9   |           | ug/L |   | 116  | 70 - 135        |
| m,p-Xylene                  | ND     |           | 50.0  | 54.0   |           | ug/L |   | 108  | 65 - 130        |
| Methylene Chloride          | ND     |           | 25.0  | 23.7   |           | ug/L |   | 95   | 50 - 135        |
| Naphthalene                 | ND     |           | 25.0  | 23.6   |           | ug/L |   | 94   | 50 - 140        |
| n-Butylbenzene              | ND     |           | 25.0  | 28.5   |           | ug/L |   | 114  | 65 - 135        |
| N-Propylbenzene             | ND     |           | 25.0  | 28.9   |           | ug/L |   | 116  | 70 - 135        |
| o-Xylene                    | ND     |           | 25.0  | 27.1   |           | ug/L |   | 108  | 65 - 125        |
| p-Isopropyltoluene          | ND     |           | 25.0  | 28.3   |           | ug/L |   | 113  | 65 - 130        |
| Styrene                     | ND     |           | 25.0  | 17.6   |           | ug/L |   | 71   | 50 - 145        |
| sec-Butylbenzene            | ND     |           | 25.0  | 29.5   |           | ug/L |   | 118  | 70 - 125        |
| tert-Butylbenzene           | ND     |           | 25.0  | 29.4   |           | ug/L |   | 118  | 65 - 130        |
| Tetrachloroethene           | ND     |           | 25.0  | 27.2   |           | ug/L |   | 109  | 65 - 130        |
| Toluene                     | ND     |           | 25.0  | 27.8   |           | ug/L |   | 111  | 70 - 125        |
| trans-1,2-Dichloroethene    | ND     |           | 25.0  | 25.9   |           | ug/L |   | 104  | 65 - 130        |



# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-15425-A-1 MS**

**Matrix: Water**

**Analysis Batch: 35599**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

| Analyte                     | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| trans-1,3-Dichloropropene   | ND            |                  | 25.0        | 28.7      |              | ug/L |   | 115  | 65 - 135     |
| Trichloroethene             | ND            |                  | 25.0        | 27.7      |              | ug/L |   | 111  | 65 - 125     |
| Trichlorofluoromethane      | ND            |                  | 25.0        | 24.9      |              | ug/L |   | 100  | 60 - 145     |
| Vinyl chloride              | ND            |                  | 25.0        | 20.9      |              | ug/L |   | 84   | 45 - 140     |
| Methyl-t-Butyl Ether (MTBE) | ND            |                  | 25.0        | 24.5      |              | ug/L |   | 98   | 55 - 145     |

| Surrogate                   | MS %Recovery | MS Qualifier | MS Limits |
|-----------------------------|--------------|--------------|-----------|
| 4-Bromofluorobenzene (Surr) | 94           |              | 80 - 120  |
| Dibromofluoromethane (Surr) | 86           |              | 80 - 120  |
| Toluene-d8 (Surr)           | 93           |              | 80 - 120  |

**Lab Sample ID: 440-15425-A-1 MSD**

**Matrix: Water**

**Analysis Batch: 35599**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

| Analyte                     | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| 1,1,1,2-Tetrachloroethane   | ND            |                  | 25.0        | 26.9       |               | ug/L |   | 108  | 65 - 140     | 3   | 20        |
| 1,1,1-Trichloroethane       | ND            |                  | 25.0        | 25.8       |               | ug/L |   | 103  | 65 - 140     | 2   | 20        |
| 1,1,2,2-Tetrachloroethane   | ND            |                  | 25.0        | 26.4       |               | ug/L |   | 105  | 55 - 135     | 2   | 30        |
| 1,1,2-Trichloroethane       | ND            |                  | 25.0        | 25.1       |               | ug/L |   | 100  | 65 - 130     | 1   | 25        |
| 1,1-Dichloroethane          | ND            |                  | 25.0        | 24.5       |               | ug/L |   | 98   | 65 - 130     | 0   | 20        |
| 1,1-Dichloroethene          | ND            |                  | 25.0        | 26.8       |               | ug/L |   | 107  | 60 - 130     | 0   | 20        |
| 1,1-Dichloropropene         | ND            |                  | 25.0        | 27.1       |               | ug/L |   | 108  | 70 - 135     | 2   | 20        |
| 1,2,3-Trichlorobenzene      | ND            |                  | 25.0        | 23.5       |               | ug/L |   | 94   | 60 - 135     | 2   | 20        |
| 1,2,3-Trichloropropane      | ND            |                  | 25.0        | 25.5       |               | ug/L |   | 102  | 55 - 135     | 0   | 30        |
| 1,2,4-Trichlorobenzene      | ND            |                  | 25.0        | 25.9       |               | ug/L |   | 104  | 65 - 135     | 2   | 20        |
| 1,2,4-Trimethylbenzene      | ND            |                  | 25.0        | 29.2       |               | ug/L |   | 117  | 55 - 135     | 0   | 25        |
| 1,2-Dibromo-3-Chloropropane | ND            |                  | 25.0        | 29.2       |               | ug/L |   | 117  | 45 - 145     | 3   | 30        |
| 1,2-Dibromoethane (EDB)     | ND            |                  | 25.0        | 25.9       |               | ug/L |   | 104  | 70 - 130     | 1   | 25        |
| 1,2-Dichlorobenzene         | ND            |                  | 25.0        | 27.0       |               | ug/L |   | 108  | 75 - 125     | 1   | 20        |
| 1,2-Dichloroethane          | ND            |                  | 25.0        | 25.9       |               | ug/L |   | 104  | 60 - 140     | 0   | 20        |
| 1,2-Dichloropropane         | ND            |                  | 25.0        | 26.1       |               | ug/L |   | 104  | 65 - 130     | 1   | 20        |
| 1,3,5-Trimethylbenzene      | ND            |                  | 25.0        | 28.3       |               | ug/L |   | 113  | 70 - 130     | 1   | 20        |
| 1,3-Dichlorobenzene         | ND            |                  | 25.0        | 28.1       |               | ug/L |   | 112  | 75 - 125     | 0   | 20        |
| 1,3-Dichloropropane         | ND            |                  | 25.0        | 25.6       |               | ug/L |   | 102  | 65 - 135     | 1   | 25        |
| 1,4-Dichlorobenzene         | ND            |                  | 25.0        | 27.3       |               | ug/L |   | 109  | 75 - 125     | 1   | 20        |
| 2,2-Dichloropropane         | ND            |                  | 25.0        | 25.3       |               | ug/L |   | 101  | 60 - 145     | 3   | 25        |
| 2-Chlorotoluene             | ND            |                  | 25.0        | 28.0       |               | ug/L |   | 112  | 65 - 135     | 1   | 20        |
| 4-Chlorotoluene             | ND            |                  | 25.0        | 27.8       |               | ug/L |   | 111  | 70 - 135     | 0   | 20        |
| Benzene                     | ND            |                  | 25.0        | 27.1       |               | ug/L |   | 108  | 65 - 125     | 1   | 20        |
| Bromobenzene                | ND            |                  | 25.0        | 27.5       |               | ug/L |   | 110  | 70 - 125     | 0   | 20        |
| Bromochloromethane          | ND            |                  | 25.0        | 25.2       |               | ug/L |   | 101  | 65 - 135     | 2   | 25        |
| Bromodichloromethane        | 0.54          |                  | 25.0        | 27.4       |               | ug/L |   | 107  | 70 - 135     | 2   | 20        |
| Bromoform                   | ND            |                  | 25.0        | 23.2       |               | ug/L |   | 93   | 55 - 135     | 1   | 25        |
| Bromomethane                | ND            |                  | 25.0        | 22.0       |               | ug/L |   | 88   | 55 - 145     | 2   | 25        |
| Carbon tetrachloride        | ND            |                  | 25.0        | 28.9       |               | ug/L |   | 116  | 65 - 140     | 1   | 25        |
| Chlorobenzene               | ND            |                  | 25.0        | 26.5       |               | ug/L |   | 106  | 75 - 125     | 1   | 20        |
| Chloroethane                | ND            |                  | 25.0        | 21.8       |               | ug/L |   | 87   | 55 - 140     | 1   | 25        |
| Chloroform                  | 0.59          |                  | 25.0        | 24.6       |               | ug/L |   | 96   | 65 - 135     | 1   | 20        |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-15425-A-1 MSD

Matrix: Water

Analysis Batch: 35599

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

| Analyte                     | Sample | Sample    | Spike | MSD    | MSD       | Unit | D | %Rec | %Rec.    | RPD | RPD |
|-----------------------------|--------|-----------|-------|--------|-----------|------|---|------|----------|-----|-----|
|                             | Result | Qualifier | Added | Result | Qualifier |      |   |      | Limits   |     |     |
| Chloromethane               | ND     |           | 25.0  | 19.4   |           | ug/L |   | 78   | 45 - 145 | 1   | 25  |
| cis-1,2-Dichloroethene      | ND     |           | 25.0  | 26.6   |           | ug/L |   | 106  | 65 - 130 | 4   | 20  |
| cis-1,3-Dichloropropene     | ND     |           | 25.0  | 24.7   |           | ug/L |   | 99   | 70 - 130 | 1   | 20  |
| Dibromochloromethane        | 0.56   |           | 25.0  | 27.1   |           | ug/L |   | 106  | 65 - 140 | 2   | 25  |
| Dibromomethane              | ND     |           | 25.0  | 25.4   |           | ug/L |   | 102  | 65 - 135 | 1   | 25  |
| Dichlorodifluoromethane     | ND     |           | 25.0  | 17.2   |           | ug/L |   | 69   | 25 - 155 | 0   | 30  |
| Ethylbenzene                | ND     |           | 25.0  | 28.5   |           | ug/L |   | 114  | 65 - 130 | 2   | 20  |
| Hexachlorobutadiene         | ND     |           | 25.0  | 25.0   |           | ug/L |   | 100  | 60 - 135 | 2   | 20  |
| Isopropylbenzene            | ND     |           | 25.0  | 28.8   |           | ug/L |   | 115  | 70 - 135 | 0   | 20  |
| m,p-Xylene                  | ND     |           | 50.0  | 54.9   |           | ug/L |   | 110  | 65 - 130 | 2   | 25  |
| Methylene Chloride          | ND     |           | 25.0  | 24.4   |           | ug/L |   | 98   | 50 - 135 | 3   | 20  |
| Naphthalene                 | ND     |           | 25.0  | 23.1   |           | ug/L |   | 92   | 50 - 140 | 2   | 30  |
| n-Butylbenzene              | ND     |           | 25.0  | 28.5   |           | ug/L |   | 114  | 65 - 135 | 0   | 20  |
| N-Propylbenzene             | ND     |           | 25.0  | 29.0   |           | ug/L |   | 116  | 70 - 135 | 0   | 20  |
| o-Xylene                    | ND     |           | 25.0  | 27.1   |           | ug/L |   | 108  | 65 - 125 | 0   | 20  |
| p-Isopropyltoluene          | ND     |           | 25.0  | 28.8   |           | ug/L |   | 115  | 65 - 130 | 2   | 20  |
| Styrene                     | ND     |           | 25.0  | 16.2   |           | ug/L |   | 65   | 50 - 145 | 9   | 30  |
| sec-Butylbenzene            | ND     |           | 25.0  | 29.8   |           | ug/L |   | 119  | 70 - 125 | 1   | 20  |
| tert-Butylbenzene           | ND     |           | 25.0  | 29.5   |           | ug/L |   | 118  | 65 - 130 | 0   | 20  |
| Tetrachloroethene           | ND     |           | 25.0  | 28.1   |           | ug/L |   | 113  | 65 - 130 | 3   | 20  |
| Toluene                     | ND     |           | 25.0  | 28.0   |           | ug/L |   | 112  | 70 - 125 | 1   | 20  |
| trans-1,2-Dichloroethene    | ND     |           | 25.0  | 26.5   |           | ug/L |   | 106  | 65 - 130 | 2   | 20  |
| trans-1,3-Dichloropropene   | ND     |           | 25.0  | 28.7   |           | ug/L |   | 115  | 65 - 135 | 0   | 25  |
| Trichloroethene             | ND     |           | 25.0  | 27.9   |           | ug/L |   | 111  | 65 - 125 | 0   | 20  |
| Trichlorofluoromethane      | ND     |           | 25.0  | 25.0   |           | ug/L |   | 100  | 60 - 145 | 0   | 25  |
| Vinyl chloride              | ND     |           | 25.0  | 20.7   |           | ug/L |   | 83   | 45 - 140 | 1   | 30  |
| Methyl-t-Butyl Ether (MTBE) | ND     |           | 25.0  | 24.5   |           | ug/L |   | 98   | 55 - 145 | 0   | 25  |

| Surrogate                   | MSD       | MSD       | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| 4-Bromofluorobenzene (Surr) | 94        |           | 80 - 120 |
| Dibromofluoromethane (Surr) | 88        |           | 80 - 120 |
| Toluene-d8 (Surr)           | 94        |           | 80 - 120 |

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

Lab Sample ID: MB 440-34062/1-A

Matrix: Water

Analysis Batch: 34194

Client Sample ID: Method Blank

Prep Type: Silica Gel Cleanup

Prep Batch: 34062

| Analyte | MB     | MB        | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|------|-----|------|---|----------------|----------------|---------|
|         | Result | Qualifier |      |     |      |   |                |                |         |
| C10-C28 | ND     |           | 0.50 |     | mg/L |   | 06/20/12 12:14 | 06/20/12 21:07 | 1       |
| C29-C40 | ND     |           | 0.50 |     | mg/L |   | 06/20/12 12:14 | 06/20/12 21:07 | 1       |

| Surrogate    | MB        | MB        | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------|-----------|-----------|----------|----------------|----------------|---------|
|              | %Recovery | Qualifier |          |                |                |         |
| n-Octacosane | 82        |           | 45 - 120 | 06/20/12 12:14 | 06/20/12 21:07 | 1       |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

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

**Lab Sample ID:** LCS 440-34062/2-A  
**Matrix:** Water  
**Analysis Batch:** 34194

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Silica Gel Cleanup  
**Prep Batch:** 34062

| Analyte             | Spike Added | LCS Result       | LCS Qualifier    | Unit | D | %Rec | %Rec. Limits  |
|---------------------|-------------|------------------|------------------|------|---|------|---------------|
| C10-C28             | 1.00        | 0.762            |                  | mg/L |   | 76   | 40 - 115      |
| <b>Surrogate</b>    |             | <b>%Recovery</b> | <b>Qualifier</b> |      |   |      | <b>Limits</b> |
| <i>n-Octacosane</i> |             | 82               |                  |      |   |      | 45 - 120      |

**Lab Sample ID:** LCSD 440-34062/3-A  
**Matrix:** Water  
**Analysis Batch:** 34194

**Client Sample ID:** Lab Control Sample Dup  
**Prep Type:** Silica Gel Cleanup  
**Prep Batch:** 34062

| Analyte             | Spike Added | LCSD Result      | LCSD Qualifier   | Unit | D | %Rec | %Rec. Limits  | RPD | Limit |
|---------------------|-------------|------------------|------------------|------|---|------|---------------|-----|-------|
| C10-C28             | 1.00        | 0.744            |                  | mg/L |   | 74   | 40 - 115      | 2   | 25    |
| <b>Surrogate</b>    |             | <b>%Recovery</b> | <b>Qualifier</b> |      |   |      | <b>Limits</b> |     |       |
| <i>n-Octacosane</i> |             | 79               |                  |      |   |      | 45 - 120      |     |       |

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

**Lab Sample ID:** MB 440-34182/1-A  
**Matrix:** Water  
**Analysis Batch:** 34701

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 34182

| Analyte             | MB Result        | MB Qualifier     | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|---------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| C10-C28             | ND               |                  | 0.050         |     | mg/L |   | 06/20/12 16:48  | 06/22/12 15:13  | 1              |
| C29-C40             | ND               |                  | 0.050         |     | mg/L |   | 06/20/12 16:48  | 06/22/12 15:13  | 1              |
| <b>Surrogate</b>    | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| <i>n-Octacosane</i> | 86               |                  | 45 - 120      |     |      |   | 06/20/12 16:48  | 06/22/12 15:13  | 1              |

**Lab Sample ID:** LCS 440-34182/2-A  
**Matrix:** Water  
**Analysis Batch:** 34701

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 34182

| Analyte             | Spike Added | LCS Result       | LCS Qualifier    | Unit | D | %Rec | %Rec. Limits  |
|---------------------|-------------|------------------|------------------|------|---|------|---------------|
| C10-C28             | 1.00        | 0.853            |                  | mg/L |   | 85   | 40 - 115      |
| <b>Surrogate</b>    |             | <b>%Recovery</b> | <b>Qualifier</b> |      |   |      | <b>Limits</b> |
| <i>n-Octacosane</i> |             | 85               |                  |      |   |      | 45 - 120      |

**Lab Sample ID:** LCSD 440-34182/3-A  
**Matrix:** Water  
**Analysis Batch:** 34701

**Client Sample ID:** Lab Control Sample Dup  
**Prep Type:** Total/NA  
**Prep Batch:** 34182

| Analyte             | Spike Added | LCSD Result      | LCSD Qualifier   | Unit | D | %Rec | %Rec. Limits  | RPD | Limit |
|---------------------|-------------|------------------|------------------|------|---|------|---------------|-----|-------|
| C10-C28             | 1.00        | 0.819            |                  | mg/L |   | 82   | 40 - 115      | 4   | 25    |
| <b>Surrogate</b>    |             | <b>%Recovery</b> | <b>Qualifier</b> |      |   |      | <b>Limits</b> |     |       |
| <i>n-Octacosane</i> |             | 81               |                  |      |   |      | 45 - 120      |     |       |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 440-33558/1-A**

**Matrix: Water**

**Analysis Batch: 33546**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 33558**

| Analyte      | MB Result | MB Qualifier | RL  | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|--------------|-----------|--------------|-----|-----|------|---|----------------|----------------|---------|
| Aroclor 1016 | ND        |              | 1.0 |     | ug/L |   | 06/18/12 13:00 | 06/18/12 18:46 | 1       |
| Aroclor 1221 | ND        |              | 1.0 |     | ug/L |   | 06/18/12 13:00 | 06/18/12 18:46 | 1       |
| Aroclor 1232 | ND        |              | 1.0 |     | ug/L |   | 06/18/12 13:00 | 06/18/12 18:46 | 1       |
| Aroclor 1242 | ND        |              | 1.0 |     | ug/L |   | 06/18/12 13:00 | 06/18/12 18:46 | 1       |
| Aroclor 1248 | ND        |              | 1.0 |     | ug/L |   | 06/18/12 13:00 | 06/18/12 18:46 | 1       |
| Aroclor 1254 | ND        |              | 1.0 |     | ug/L |   | 06/18/12 13:00 | 06/18/12 18:46 | 1       |
| Aroclor 1260 | ND        |              | 1.0 |     | ug/L |   | 06/18/12 13:00 | 06/18/12 18:46 | 1       |

| Surrogate                     | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|--------------|--------------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 82           |              | 45 - 120 | 06/18/12 13:00 | 06/18/12 18:46 | 1       |

**Lab Sample ID: LCS 440-33558/2-A**

**Matrix: Water**

**Analysis Batch: 33546**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 33558**

| Analyte      | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------|-------------|------------|---------------|------|---|------|-------------|
| Aroclor 1016 | 4.00        | 3.85       |               | ug/L |   | 96   | 50 - 115    |
| Aroclor 1260 | 4.00        | 4.01       |               | ug/L |   | 100  | 60 - 120    |

| Surrogate                     | LCS %Recovery | LCS Qualifier | Limits   |
|-------------------------------|---------------|---------------|----------|
| DCB Decachlorobiphenyl (Surr) | 89            |               | 45 - 120 |

**Lab Sample ID: LCSD 440-33558/3-A**

**Matrix: Water**

**Analysis Batch: 33546**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 33558**

| Analyte      | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| Aroclor 1016 | 4.00        | 3.92        |                | ug/L |   | 98   | 50 - 115    | 2   | 30        |
| Aroclor 1260 | 4.00        | 4.02        |                | ug/L |   | 101  | 60 - 120    | 0   | 25        |

| Surrogate                     | LCSD %Recovery | LCSD Qualifier | Limits   |
|-------------------------------|----------------|----------------|----------|
| DCB Decachlorobiphenyl (Surr) | 86             |                | 45 - 120 |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 440-34617/1-A**

**Matrix: Water**

**Analysis Batch: 34916**

**Client Sample ID: Method Blank**

**Prep Type: Total Recoverable**

**Prep Batch: 34617**

| Analyte  | MB Result | MB Qualifier | RL     | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|-----------|--------------|--------|-----|------|---|----------------|----------------|---------|
| Lead     | ND        |              | 0.0050 |     | mg/L |   | 06/22/12 12:38 | 06/23/12 15:29 | 1       |
| Zinc     | ND        |              | 0.020  |     | mg/L |   | 06/22/12 12:38 | 06/23/12 15:29 | 1       |
| Nickel   | ND        |              | 0.010  |     | mg/L |   | 06/22/12 12:38 | 06/23/12 15:29 | 1       |
| Chromium | ND        |              | 0.0050 |     | mg/L |   | 06/22/12 12:38 | 06/23/12 15:29 | 1       |
| Cadmium  | ND        |              | 0.0050 |     | mg/L |   | 06/22/12 12:38 | 06/23/12 15:29 | 1       |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

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

**Lab Sample ID: LCS 440-34617/2-A**

**Matrix: Water**

**Analysis Batch: 34916**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 34617**

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|------|---|------|--------------|
| Lead     | 1.00        | 1.01       |               | mg/L |   | 101  | 80 - 120     |
| Zinc     | 1.00        | 0.975      |               | mg/L |   | 98   | 80 - 120     |
| Nickel   | 1.00        | 0.975      |               | mg/L |   | 97   | 80 - 120     |
| Chromium | 1.00        | 1.05       |               | mg/L |   | 105  | 80 - 120     |
| Cadmium  | 1.00        | 0.989      |               | mg/L |   | 99   | 80 - 120     |

**Lab Sample ID: 440-15228-C-1-C MS**

**Matrix: Water**

**Analysis Batch: 34916**

**Client Sample ID: Matrix Spike**

**Prep Type: Total Recoverable**

**Prep Batch: 34617**

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Lead     | ND            |                  | 1.00        | 0.978     |              | mg/L |   | 98   | 75 - 125     |
| Zinc     | 0.032         |                  | 1.00        | 0.998     |              | mg/L |   | 97   | 75 - 125     |
| Nickel   | ND            |                  | 1.00        | 0.932     |              | mg/L |   | 93   | 75 - 125     |
| Chromium | ND            |                  | 1.00        | 1.03      |              | mg/L |   | 103  | 75 - 125     |
| Cadmium  | ND            |                  | 1.00        | 0.955     |              | mg/L |   | 95   | 75 - 125     |

**Lab Sample ID: 440-15228-C-1-D MSD**

**Matrix: Water**

**Analysis Batch: 34916**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total Recoverable**

**Prep Batch: 34617**

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|----------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-------|
| Lead     | ND            |                  | 1.00        | 0.995      |               | mg/L |   | 99   | 75 - 125     | 2   | 20    |
| Zinc     | 0.032         |                  | 1.00        | 1.03       |               | mg/L |   | 100  | 75 - 125     | 3   | 20    |
| Nickel   | ND            |                  | 1.00        | 0.973      |               | mg/L |   | 97   | 75 - 125     | 4   | 20    |
| Chromium | ND            |                  | 1.00        | 1.05       |               | mg/L |   | 105  | 75 - 125     | 2   | 20    |
| Cadmium  | ND            |                  | 1.00        | 0.987      |               | mg/L |   | 99   | 75 - 125     | 3   | 20    |

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

## GC/MS VOA

### Analysis Batch: 35599

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 440-14914-1       | B-1-W-20120614         | Total/NA  | Water  | 8260B  |            |
| 440-15425-A-1 MS  | Matrix Spike           | Total/NA  | Water  | 8260B  |            |
| 440-15425-A-1 MSD | Matrix Spike Duplicate | Total/NA  | Water  | 8260B  |            |
| LCS 440-35599/4   | Lab Control Sample     | Total/NA  | Water  | 8260B  |            |
| MB 440-35599/3    | Method Blank           | Total/NA  | Water  | 8260B  |            |

## GC Semi VOA

### Analysis Batch: 33546

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 440-14914-1        | B-1-W-20120614         | Total/NA  | Water  | 8082   | 33558      |
| LCS 440-33558/2-A  | Lab Control Sample     | Total/NA  | Water  | 8082   | 33558      |
| LCSD 440-33558/3-A | Lab Control Sample Dup | Total/NA  | Water  | 8082   | 33558      |
| MB 440-33558/1-A   | Method Blank           | Total/NA  | Water  | 8082   | 33558      |

### Prep Batch: 33558

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 440-14914-1        | B-1-W-20120614         | Total/NA  | Water  | 3510C  |            |
| LCS 440-33558/2-A  | Lab Control Sample     | Total/NA  | Water  | 3510C  |            |
| LCSD 440-33558/3-A | Lab Control Sample Dup | Total/NA  | Water  | 3510C  |            |
| MB 440-33558/1-A   | Method Blank           | Total/NA  | Water  | 3510C  |            |

### Prep Batch: 34062

| Lab Sample ID      | Client Sample ID       | Prep Type          | Matrix | Method    | Prep Batch |
|--------------------|------------------------|--------------------|--------|-----------|------------|
| 440-14914-1        | B-1-W-20120614         | Silica Gel Cleanup | Water  | 3510C SGC |            |
| LCS 440-34062/2-A  | Lab Control Sample     | Silica Gel Cleanup | Water  | 3510C SGC |            |
| LCSD 440-34062/3-A | Lab Control Sample Dup | Silica Gel Cleanup | Water  | 3510C SGC |            |
| MB 440-34062/1-A   | Method Blank           | Silica Gel Cleanup | Water  | 3510C SGC |            |

### Prep Batch: 34182

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 440-14914-1        | B-1-W-20120614         | Total/NA  | Water  | 3510C  |            |
| LCS 440-34182/2-A  | Lab Control Sample     | Total/NA  | Water  | 3510C  |            |
| LCSD 440-34182/3-A | Lab Control Sample Dup | Total/NA  | Water  | 3510C  |            |
| MB 440-34182/1-A   | Method Blank           | Total/NA  | Water  | 3510C  |            |

### Analysis Batch: 34194

| Lab Sample ID      | Client Sample ID       | Prep Type          | Matrix | Method | Prep Batch |
|--------------------|------------------------|--------------------|--------|--------|------------|
| 440-14914-1        | B-1-W-20120614         | Silica Gel Cleanup | Water  | 8015B  | 34062      |
| LCS 440-34062/2-A  | Lab Control Sample     | Silica Gel Cleanup | Water  | 8015B  | 34062      |
| LCSD 440-34062/3-A | Lab Control Sample Dup | Silica Gel Cleanup | Water  | 8015B  | 34062      |
| MB 440-34062/1-A   | Method Blank           | Silica Gel Cleanup | Water  | 8015B  | 34062      |

### Analysis Batch: 34701

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| LCS 440-34182/2-A  | Lab Control Sample     | Total/NA  | Water  | 8015B  | 34182      |
| LCSD 440-34182/3-A | Lab Control Sample Dup | Total/NA  | Water  | 8015B  | 34182      |
| MB 440-34182/1-A   | Method Blank           | Total/NA  | Water  | 8015B  | 34182      |

### Analysis Batch: 34703

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 440-14914-1   | B-1-W-20120614   | Total/NA  | Water  | 8015B  | 34182      |

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

## Metals

### Prep Batch: 34617

| Lab Sample ID       | Client Sample ID       | Prep Type         | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 440-14914-1         | B-1-W-20120614         | Total Recoverable | Water  | 3005A  |            |
| 440-15228-C-1-C MS  | Matrix Spike           | Total Recoverable | Water  | 3005A  |            |
| 440-15228-C-1-D MSD | Matrix Spike Duplicate | Total Recoverable | Water  | 3005A  |            |
| LCS 440-34617/2-A   | Lab Control Sample     | Total Recoverable | Water  | 3005A  |            |
| MB 440-34617/1-A    | Method Blank           | Total Recoverable | Water  | 3005A  |            |

### Analysis Batch: 34916

| Lab Sample ID       | Client Sample ID       | Prep Type         | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 440-14914-1         | B-1-W-20120614         | Total Recoverable | Water  | 6010B  | 34617      |
| 440-15228-C-1-C MS  | Matrix Spike           | Total Recoverable | Water  | 6010B  | 34617      |
| 440-15228-C-1-D MSD | Matrix Spike Duplicate | Total Recoverable | Water  | 6010B  | 34617      |
| LCS 440-34617/2-A   | Lab Control Sample     | Total Recoverable | Water  | 6010B  | 34617      |
| MB 440-34617/1-A    | Method Blank           | Total Recoverable | Water  | 6010B  | 34617      |

## Definitions/Glossary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

### 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  |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL            | Estimated Detection Limit  |
| EPA            | United States Environmental Protection Agency  |
| 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  |
| RL             | Reporting Limit  |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                       |
| TEF            | Toxicity Equivalent Factor (Dioxin)  |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)  |



# Certification Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-14914-1

| Laboratory         | Authority                | Program                     | EPA Region | Certification ID  |
|--------------------|--------------------------|-----------------------------|------------|-------------------|
| TestAmerica Irvine | Arizona                  | State Program               | 9          | AZ0671            |
| TestAmerica Irvine | California               | LA Cty Sanitation Districts | 9          | 10256             |
| TestAmerica Irvine | California               | NELAC                       | 9          | 1108CA            |
| TestAmerica Irvine | California               | State Program               | 9          | 2706              |
| TestAmerica Irvine | Guam                     | State Program               | 9          | Cert. No. 12.002r |
| TestAmerica Irvine | Hawaii                   | State Program               | 9          | N/A               |
| TestAmerica Irvine | Nevada                   | State Program               | 9          | CA015312007A      |
| TestAmerica Irvine | New Mexico               | State Program               | 6          | N/A               |
| TestAmerica Irvine | Northern Mariana Islands | State Program               | 9          | MP0002            |
| TestAmerica Irvine | Oregon                   | NELAC                       | 10         | 4005              |
| TestAmerica Irvine | USDA                     | Federal                     |            | P330-09-00080     |

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

# TestAmerica

## CHAIN OF CUSTODY FORM

17461 Derian Ave., #100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297  
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046  
 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303  
 6000 S. Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013 (0911)

440-14914

Page 1 of 1

| Client Name / Address:                              |               | Project / PO Number: |                | Analysis Required                   |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|---|---------------|----------------------|----------------|-------------------------------------|---------------|---------------|----------------|---------------------------------------|------------------|-------------------|--------------------------|---|--------------|-------------------------------------|----------------------|--|--|
| APLADIS / 320 Commerce, Ste 200<br>Irvine, CA 92602 |               | B00600101.9708       |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
| Project Manager:                                    |               | Phone Number:        |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
| Toni DeUlayo  |               | 714.508.2657         |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
| Sampler:  |               | Fax Number:          |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
| LK / B.W.P  |               | 714.730.9345         |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
| Sample Description                                  | Sample Matrix | Container Type       | # of Cont.     | Sampling Date                       | Sampling Time | Preservatives | TPH-MD (8015M) | TPH-DR20 (8015B) w/silica gel cleanup | TPH-DR20 (8015B) | PTEX+LTBE (8260B) | Halogenated VOCs (8260B) | Cadmium, Chromium, Lead, Nickel, Zinc (8015B) | PbPb (8082-) | TPH-MD (8015M) w/silica gel cleanup | Special Instructions |  |  |
| B-1-W-20120614                                      | W             | Variety              | 9              | 6/14/12                             | 1115          | HCl/HNO3-     | X              | X                                     | X                | X                 | X                        | X   | X            | X                                   |                      |  |  |
|   |               |                      |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   |               |                      |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   |               |                      |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   |               |                      |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   |               |                      |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   |               |                      |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   |               |                      |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   |               |                      |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   |               |                      |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   |               |                      |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   |               |                      |                |                                     |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
| Relinquished By:                                    | Date/Time:    | Received By:         | Date/Time:     | Turnaround Time: (Check)            |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   | 6/14/12 1932  | John Nullen          | 6-14-12 1932   | same day _____ 72 hours _____       |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
| Relinquished By:                                    | Date/Time:    | Received By:         | Date/Time:     | 24 hours _____ 5 days _____         |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   | 6/5/12 1544   |                      |                | 48 hours _____ normal <u>X</u>      |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
| Relinquished By:                                    | Date/Time:    | Received in Lab By:  | Date/Time:     | Sample Integrity: (Check)           |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |
|   |               |                      | 06/16/12 10:30 | intact <u>X</u> on ice <u>X</u> 130 |               |               |                |                                       |                  |                   |                          |   |              |                                     |                      |  |  |

Page 21 of 22

7/4/2012

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

5.82/5.62



## Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 440-14914-1

**Login Number: 14914**

**List Number: 1**

**Creator: Freitag, Kevin R**

**List Source: TestAmerica Irvine**

| Question   | Answer | Comment |
|--|--------|---------|
| Radioactivity either was not measured or, if measured, is at or below background | True   |         |
| The cooler's custody seal, if present, is 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   | LK      |
| There are no discrepancies between the sample IDs on the containers and the COC. | True   |         |
| Samples are received within Holding Time.  | True   |         |
| Sample containers have legible labels.   | True   |         |
| Containers are not broken or leaking.  | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.  | True   |         |
| Sample bottles are completely filled.  | True   |         |
| Sample Preservation Verified.  | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.     | True   |         |
| Multiphasic samples are not present.   | True   |         |
| Samples do not require splitting or compositing.                                 | True   |         |
| Residual Chlorine Checked.   | N/A    |         |

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-15189-1

Client Project/Site: Chevron - 9-9708

For:

ARCADIS U.S., Inc.

3240 El Camino Real

Suite 200

Irvine, California 92602

Attn: Toni DeMayo



Authorized for release by:

7/5/2012 9:29:33 PM

Sushmitha Reddy

Project Manager I

[sushmitha.reddy@testamericainc.com](mailto:sushmitha.reddy@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*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.*

1

2

3

4

5

6

7

8

9

10

11

12



# Table of Contents

|                                 |    |
|---------------------------------|----|
| Cover Page . . . . .            | 1  |
| Table of Contents . . . . .     | 2  |
| Sample Summary . . . . .        | 3  |
| Case Narrative . . . . .        | 4  |
| Client Sample Results . . . . . | 6  |
| Chronicle . . . . .             | 16 |
| QC Sample Results . . . . .     | 18 |
| QC Association . . . . .        | 27 |
| Definitions . . . . .           | 29 |
| Certification Summary . . . . . | 30 |
| Chain of Custody . . . . .      | 31 |
| Receipt Checklists . . . . .    | 32 |

# Sample Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 440-15189-1   | B-7-W-20120615   | Water  | 06/15/12 12:17 | 06/20/12 09:40 |
| 440-15189-2   | B-3-W-20120615   | Water  | 06/15/12 15:25 | 06/20/12 09:40 |
| 440-15189-3   | B-4-W-20120615   | Water  | 06/15/12 15:45 | 06/20/12 09:40 |
| 440-15189-4   | B-2-W-20120615   | Water  | 06/15/12 16:30 | 06/20/12 09:40 |
| 440-15189-5   | B-8-W-20120615   | Water  | 06/15/12 16:50 | 06/20/12 09:40 |

1

2

3

4

5

6

7

8

9

10

11

12

# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

## Job ID: 440-15189-1

### Laboratory: TestAmerica Irvine

#### Narrative

#### Job Narrative 440-15189-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 6/20/2012 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.4° C.

#### GC/MS VOA

Method(s) 8260B: The continuing calibration verification (CCV) for Carbon tetrachloride associated with batch 35961 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries associated with batch 35961 were outside control limits for Carbon tetrachloride: (440-15189-1 MSD). Samples associated with this batch were ND for Carbon tetrachloride.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 35961 exceeded control limits for the following analytes: carbon tetrachloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

#### GC Semi VOA

Method(s) 8015B: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 34950. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method(s) 8082: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 34404. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other analytical or quality issues were noted.

#### Metals

Method(s) 6010B: Due to the high concentration of Ca,Fe,Mg,Na , the matrix spike / matrix spike duplicate (MS/MSD) for batch 35508 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 6010B: The ICSAB for analytical batch 440-35724 exceeded the acceptance limits for cadmium. The samples were non-detect, so no re-analysis was required.

Method(s) 6010B: The following sample(s) was diluted due to the nature of the sample matrix: B-3-W-20120615 (440-15189-2), B-4-W-20120615 (440-15189-3), B-8-W-20120615 (440-15189-5). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Organic Prep

Method(s) 3510C: Elevated reporting limits are provided for the following sample(s) due to insufficient sample provided for preparation B-3-W-20120615 (440-15189-2)

Method(s) 3510C: Elevated reporting limits are provided for the following sample(s) due to insufficient sample provided for <<CHOOSE ONE>> preparation/analysis: B-2-W-20120615 (440-15189-4)

No other analytical or quality issues were noted.

#### VOA Prep

# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

---

## Job ID: 440-15189-1 (Continued)

---

### Laboratory: TestAmerica Irvine (Continued)

No analytical or quality issues were noted.

1

2

3

4

5

6

7

8

9

10

11

12



# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

**Client Sample ID: B-7-W-20120615**

**Lab Sample ID: 440-15189-1**

**Date Collected: 06/15/12 12:17**

**Matrix: Water**

**Date Received: 06/20/12 09:40**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result      | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-------------|-----------|------|-----|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,1,1-Trichloroethane       | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,1,2-Trichloroethane       | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,1-Dichloroethane          | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,1-Dichloroethene          | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,1-Dichloropropene         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,2,3-Trichlorobenzene      | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,2,3-Trichloropropane      | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,2,4-Trichlorobenzene      | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,2,4-Trimethylbenzene      | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND          |           | 5.0  |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,2-Dibromoethane (EDB)     | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,2-Dichlorobenzene         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,2-Dichloroethane          | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,2-Dichloropropane         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,3,5-Trimethylbenzene      | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,3-Dichlorobenzene         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,3-Dichloropropane         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 1,4-Dichlorobenzene         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 2,2-Dichloropropane         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 2-Chlorotoluene             | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| 4-Chlorotoluene             | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| <b>Benzene</b>              | <b>0.90</b> |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Bromobenzene                | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Bromochloromethane          | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Bromodichloromethane        | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Bromoform                   | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Bromomethane                | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Carbon tetrachloride        | ND *        |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Chlorobenzene               | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Chloroethane                | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Chloroform                  | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Chloromethane               | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| cis-1,2-Dichloroethene      | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| cis-1,3-Dichloropropene     | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Dibromochloromethane        | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Dibromomethane              | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Dichlorodifluoromethane     | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| <b>Ethylbenzene</b>         | <b>3.6</b>  |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Hexachlorobutadiene         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Isopropylbenzene            | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| m,p-Xylene                  | ND          |           | 1.0  |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Methylene Chloride          | ND          |           | 5.0  |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Naphthalene                 | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| n-Butylbenzene              | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| <b>N-Propylbenzene</b>      | <b>0.68</b> |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| o-Xylene                    | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| p-Isopropyltoluene          | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| Styrene                     | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |
| sec-Butylbenzene            | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 11:09 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

**Client Sample ID: B-7-W-20120615**

**Lab Sample ID: 440-15189-1**

Date Collected: 06/15/12 12:17

Matrix: Water

Date Received: 06/20/12 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                            | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|------------------------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| <b>tert-Butylbenzene</b>           | <b>0.73</b>      |                  | 0.50          |     | ug/L |   |                 | 06/29/12 11:09  | 1              |
| Tetrachloroethene                  | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 11:09  | 1              |
| Toluene                            | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 11:09  | 1              |
| trans-1,2-Dichloroethene           | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 11:09  | 1              |
| trans-1,3-Dichloropropene          | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 11:09  | 1              |
| Trichloroethene                    | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 11:09  | 1              |
| Trichlorofluoromethane             | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 11:09  | 1              |
| Vinyl chloride                     | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 11:09  | 1              |
| <b>Methyl-t-Butyl Ether (MTBE)</b> | <b>2.3</b>       |                  | 0.50          |     | ug/L |   |                 | 06/29/12 11:09  | 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 (Surr)        | 98               |                  | 80 - 120      |     |      |   |                 | 06/29/12 11:09  | 1              |
| Dibromofluoromethane (Surr)        | 84               |                  | 80 - 120      |     |      |   |                 | 06/29/12 11:09  | 1              |
| Toluene-d8 (Surr)                  | 100              |                  | 80 - 120      |     |      |   |                 | 06/29/12 11:09  | 1              |

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

| Analyte          | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| C10-C28          | ND               |                  | 0.048         |     | mg/L |   | 06/21/12 11:18  | 06/21/12 20:44  | 1              |
| C29-C40          | ND               |                  | 0.048         |     | mg/L |   | 06/21/12 11:18  | 06/21/12 20:44  | 1              |
| <b>Surrogate</b> | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| n-Octacosane     | 79               |                  | 45 - 120      |     |      |   | 06/21/12 11:18  | 06/21/12 20:44  | 1              |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte          | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| C10-C28          | ND               |                  | 0.48          |     | mg/L |   | 06/25/12 11:33  | 06/25/12 20:31  | 1              |
| C29-C40          | ND               |                  | 0.48          |     | mg/L |   | 06/25/12 11:33  | 06/25/12 20:31  | 1              |
| <b>Surrogate</b> | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| n-Octacosane     | 81               |                  | 45 - 120      |     |      |   | 06/25/12 11:33  | 06/25/12 20:31  | 1              |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|-------------------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| Aroclor 1016                  | ND               |                  | 0.96          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:43  | 1              |
| Aroclor 1221                  | ND               |                  | 0.96          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:43  | 1              |
| Aroclor 1232                  | ND               |                  | 0.96          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:43  | 1              |
| Aroclor 1242                  | ND               |                  | 0.96          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:43  | 1              |
| Aroclor 1248                  | ND               |                  | 0.96          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:43  | 1              |
| Aroclor 1254                  | ND               |                  | 0.96          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:43  | 1              |
| Aroclor 1260                  | ND               |                  | 0.96          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:43  | 1              |
| <b>Surrogate</b>              | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| DCB Decachlorobiphenyl (Surr) | 78               |                  | 45 - 120      |     |      |   | 06/21/12 14:17  | 06/25/12 17:43  | 1              |

**Method: 6010B - Metals (ICP) - Total Recoverable**

| Analyte         | Result       | Qualifier | RL     | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|--------------|-----------|--------|-----|------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>0.010</b> |           | 0.0050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:49 | 1       |
| <b>Zinc</b>     | <b>0.068</b> |           | 0.020  |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:49 | 1       |
| <b>Nickel</b>   | <b>0.083</b> |           | 0.010  |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:49 | 1       |
| <b>Chromium</b> | <b>0.065</b> |           | 0.0050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:49 | 1       |
| Cadmium         | ND           |           | 0.0050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:49 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

**Client Sample ID: B-3-W-20120615**

**Lab Sample ID: 440-15189-2**

Date Collected: 06/15/12 15:25

Matrix: Water

Date Received: 06/20/12 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result     | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|------------|-----------|------|-----|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,1,1-Trichloroethane       | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,1,2-Trichloroethane       | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,1-Dichloroethane          | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,1-Dichloroethene          | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,1-Dichloropropene         | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,2,3-Trichlorobenzene      | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,2,3-Trichloropropane      | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,2,4-Trichlorobenzene      | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,2,4-Trimethylbenzene      | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND         |           | 5.0  |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,2-Dibromoethane (EDB)     | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,2-Dichlorobenzene         | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,2-Dichloroethane          | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,2-Dichloropropane         | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,3,5-Trimethylbenzene      | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,3-Dichlorobenzene         | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,3-Dichloropropane         | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 1,4-Dichlorobenzene         | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 2,2-Dichloropropane         | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 2-Chlorotoluene             | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| 4-Chlorotoluene             | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Benzene                     | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Bromobenzene                | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Bromochloromethane          | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Bromodichloromethane        | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Bromoform                   | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Bromomethane                | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Carbon tetrachloride        | ND *       |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Chlorobenzene               | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Chloroethane                | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| <b>Chloroform</b>           | <b>8.7</b> |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Chloromethane               | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| cis-1,2-Dichloroethene      | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| cis-1,3-Dichloropropene     | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Dibromochloromethane        | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Dibromomethane              | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Dichlorodifluoromethane     | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Ethylbenzene                | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Hexachlorobutadiene         | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Isopropylbenzene            | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| m,p-Xylene                  | ND         |           | 1.0  |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Methylene Chloride          | ND         |           | 5.0  |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Naphthalene                 | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| n-Butylbenzene              | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| N-Propylbenzene             | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| o-Xylene                    | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| p-Isopropyltoluene          | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| Styrene                     | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |
| sec-Butylbenzene            | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 12:30 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

**Client Sample ID: B-3-W-20120615**

**Lab Sample ID: 440-15189-2**

Date Collected: 06/15/12 15:25

Matrix: Water

Date Received: 06/20/12 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|-----------------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| tert-Butylbenzene           | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:30  | 1              |
| Tetrachloroethene           | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:30  | 1              |
| Toluene                     | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:30  | 1              |
| trans-1,2-Dichloroethene    | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:30  | 1              |
| trans-1,3-Dichloropropene   | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:30  | 1              |
| Trichloroethene             | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:30  | 1              |
| Trichlorofluoromethane      | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:30  | 1              |
| Vinyl chloride              | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:30  | 1              |
| Methyl-t-Butyl Ether (MTBE) | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:30  | 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 (Surr) | 94               |                  | 80 - 120      |     |      |   |                 | 06/29/12 12:30  | 1              |
| Dibromofluoromethane (Surr) | 84               |                  | 80 - 120      |     |      |   |                 | 06/29/12 12:30  | 1              |
| Toluene-d8 (Surr)           | 102              |                  | 80 - 120      |     |      |   |                 | 06/29/12 12:30  | 1              |

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

| Analyte          | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| C10-C28          | ND               |                  | 0.072         |     | mg/L |   | 06/21/12 11:18  | 06/21/12 21:07  | 1              |
| C29-C40          | ND               |                  | 0.072         |     | mg/L |   | 06/21/12 11:18  | 06/21/12 21:07  | 1              |
| <b>Surrogate</b> | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| n-Octacosane     | 98               |                  | 45 - 120      |     |      |   | 06/21/12 11:18  | 06/21/12 21:07  | 1              |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte          | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| C10-C28          | ND               |                  | 0.48          |     | mg/L |   | 06/25/12 11:33  | 06/25/12 20:52  | 1              |
| C29-C40          | ND               |                  | 0.48          |     | mg/L |   | 06/25/12 11:33  | 06/25/12 20:52  | 1              |
| <b>Surrogate</b> | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| n-Octacosane     | 85               |                  | 45 - 120      |     |      |   | 06/25/12 11:33  | 06/25/12 20:52  | 1              |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|-------------------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| Aroclor 1016                  | ND               |                  | 0.95          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:56  | 1              |
| Aroclor 1221                  | ND               |                  | 0.95          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:56  | 1              |
| Aroclor 1232                  | ND               |                  | 0.95          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:56  | 1              |
| Aroclor 1242                  | ND               |                  | 0.95          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:56  | 1              |
| Aroclor 1248                  | ND               |                  | 0.95          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:56  | 1              |
| Aroclor 1254                  | ND               |                  | 0.95          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:56  | 1              |
| Aroclor 1260                  | ND               |                  | 0.95          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 17:56  | 1              |
| <b>Surrogate</b>              | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| DCB Decachlorobiphenyl (Surr) | 73               |                  | 45 - 120      |     |      |   | 06/21/12 14:17  | 06/25/12 17:56  | 1              |

**Method: 6010B - Metals (ICP) - Total Recoverable**

| Analyte  | Result | Qualifier | RL    | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|-------|-----|------|---|----------------|----------------|---------|
| Lead     | 0.31   |           | 0.050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:51 | 2       |
| Zinc     | 1.6    |           | 0.20  |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:51 | 2       |
| Nickel   | 3.0    |           | 0.10  |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:51 | 2       |
| Chromium | 1.3    |           | 0.050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:51 | 2       |
| Cadmium  | ND     |           | 0.050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:51 | 2       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

**Client Sample ID: B-4-W-20120615**

**Lab Sample ID: 440-15189-3**

**Date Collected: 06/15/12 15:45**

**Matrix: Water**

**Date Received: 06/20/12 09:40**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,1-Dichloroethane          | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,1-Dichloroethene          | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,1-Dichloropropene         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,2,3-Trichlorobenzene      | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,2,4-Trimethylbenzene      | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 5.0  |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,2-Dibromoethane (EDB)     | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,2-Dichloroethane          | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,2-Dichloropropane         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,3,5-Trimethylbenzene      | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,3-Dichloropropane         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 2,2-Dichloropropane         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 2-Chlorotoluene             | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| 4-Chlorotoluene             | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Benzene                     | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Bromobenzene                | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Bromochloromethane          | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Bromodichloromethane        | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Bromoform                   | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Bromomethane                | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Carbon tetrachloride        | ND *   |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Chlorobenzene               | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Chloroethane                | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Chloroform                  | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Chloromethane               | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Dibromochloromethane        | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Dibromomethane              | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Dichlorodifluoromethane     | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Ethylbenzene                | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Hexachlorobutadiene         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Isopropylbenzene            | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| m,p-Xylene                  | ND     |           | 1.0  |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Methylene Chloride          | ND     |           | 5.0  |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Naphthalene                 | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| n-Butylbenzene              | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| N-Propylbenzene             | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| o-Xylene                    | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| p-Isopropyltoluene          | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| Styrene                     | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |
| sec-Butylbenzene            | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 12:57 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

**Client Sample ID: B-4-W-20120615**

**Lab Sample ID: 440-15189-3**

Date Collected: 06/15/12 15:45

Matrix: Water

Date Received: 06/20/12 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|-----------------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| <b>tert-Butylbenzene</b>    | <b>1.0</b>       |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:57  | 1              |
| Tetrachloroethene           | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:57  | 1              |
| Toluene                     | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:57  | 1              |
| trans-1,2-Dichloroethene    | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:57  | 1              |
| trans-1,3-Dichloropropene   | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:57  | 1              |
| Trichloroethene             | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:57  | 1              |
| Trichlorofluoromethane      | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:57  | 1              |
| Vinyl chloride              | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:57  | 1              |
| Methyl-t-Butyl Ether (MTBE) | ND               |                  | 0.50          |     | ug/L |   |                 | 06/29/12 12:57  | 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 (Surr) | 95               |                  | 80 - 120      |     |      |   |                 | 06/29/12 12:57  | 1              |
| Dibromofluoromethane (Surr) | 83               |                  | 80 - 120      |     |      |   |                 | 06/29/12 12:57  | 1              |
| Toluene-d8 (Surr)           | 101              |                  | 80 - 120      |     |      |   |                 | 06/29/12 12:57  | 1              |

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

| Analyte          | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| <b>C10-C28</b>   | <b>0.077</b>     |                  | 0.049         |     | mg/L |   | 06/21/12 11:18  | 06/21/12 21:30  | 1              |
| C29-C40          | ND               |                  | 0.049         |     | mg/L |   | 06/21/12 11:18  | 06/21/12 21:30  | 1              |
| <b>Surrogate</b> | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| n-Octacosane     | 89               |                  | 45 - 120      |     |      |   | 06/21/12 11:18  | 06/21/12 21:30  | 1              |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte          | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| C10-C28          | ND               |                  | 0.50          |     | mg/L |   | 06/25/12 11:33  | 06/25/12 21:12  | 1              |
| C29-C40          | ND               |                  | 0.50          |     | mg/L |   | 06/25/12 11:33  | 06/25/12 21:12  | 1              |
| <b>Surrogate</b> | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| n-Octacosane     | 89               |                  | 45 - 120      |     |      |   | 06/25/12 11:33  | 06/25/12 21:12  | 1              |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result           | Qualifier        | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|-------------------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| Aroclor 1016                  | ND               |                  | 0.99          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 18:09  | 1              |
| Aroclor 1221                  | ND               |                  | 0.99          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 18:09  | 1              |
| Aroclor 1232                  | ND               |                  | 0.99          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 18:09  | 1              |
| Aroclor 1242                  | ND               |                  | 0.99          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 18:09  | 1              |
| Aroclor 1248                  | ND               |                  | 0.99          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 18:09  | 1              |
| Aroclor 1254                  | ND               |                  | 0.99          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 18:09  | 1              |
| Aroclor 1260                  | ND               |                  | 0.99          |     | ug/L |   | 06/21/12 14:17  | 06/25/12 18:09  | 1              |
| <b>Surrogate</b>              | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| DCB Decachlorobiphenyl (Surr) | 85               |                  | 45 - 120      |     |      |   | 06/21/12 14:17  | 06/25/12 18:09  | 1              |

**Method: 6010B - Metals (ICP) - Total Recoverable**

| Analyte         | Result      | Qualifier | RL    | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|-------------|-----------|-------|-----|------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>0.75</b> |           | 0.050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:53 | 2       |
| <b>Zinc</b>     | <b>5.1</b>  |           | 0.20  |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:53 | 2       |
| <b>Nickel</b>   | <b>5.8</b>  |           | 0.10  |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:53 | 2       |
| <b>Chromium</b> | <b>3.5</b>  |           | 0.050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:53 | 2       |
| Cadmium         | ND          |           | 0.050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:53 | 2       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

**Client Sample ID: B-2-W-20120615**

**Lab Sample ID: 440-15189-4**

**Date Collected: 06/15/12 16:30**

**Matrix: Water**

**Date Received: 06/20/12 09:40**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,1-Dichloroethane          | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,1-Dichloroethene          | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,1-Dichloropropene         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,2,3-Trichlorobenzene      | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,2,4-Trimethylbenzene      | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 5.0  |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,2-Dibromoethane (EDB)     | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,2-Dichloroethane          | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,2-Dichloropropane         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,3,5-Trimethylbenzene      | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,3-Dichloropropane         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 2,2-Dichloropropane         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 2-Chlorotoluene             | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| 4-Chlorotoluene             | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Benzene                     | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Bromobenzene                | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Bromochloromethane          | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Bromodichloromethane        | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Bromoform                   | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Bromomethane                | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Carbon tetrachloride        | ND *   |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Chlorobenzene               | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Chloroethane                | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Chloroform                  | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Chloromethane               | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Dibromochloromethane        | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Dibromomethane              | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Dichlorodifluoromethane     | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Ethylbenzene                | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Hexachlorobutadiene         | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Isopropylbenzene            | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| m,p-Xylene                  | ND     |           | 1.0  |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Methylene Chloride          | ND     |           | 5.0  |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Naphthalene                 | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| n-Butylbenzene              | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| N-Propylbenzene             | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| o-Xylene                    | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| p-Isopropyltoluene          | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Styrene                     | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| sec-Butylbenzene            | ND     |           | 0.50 |     | ug/L |   |          | 06/29/12 13:24 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

**Client Sample ID: B-2-W-20120615**

**Lab Sample ID: 440-15189-4**

Date Collected: 06/15/12 16:30

Matrix: Water

Date Received: 06/20/12 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|------|---|----------|----------------|---------|
| tert-Butylbenzene           | ND        |           | 0.50     |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Tetrachloroethene           | ND        |           | 0.50     |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Toluene                     | ND        |           | 0.50     |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| trans-1,2-Dichloroethene    | ND        |           | 0.50     |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| trans-1,3-Dichloropropene   | ND        |           | 0.50     |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Trichloroethene             | ND        |           | 0.50     |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Trichlorofluoromethane      | ND        |           | 0.50     |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Vinyl chloride              | ND        |           | 0.50     |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |           | 0.50     |     | ug/L |   |          | 06/29/12 13:24 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 94        |           | 80 - 120 |     |      |   |          | 06/29/12 13:24 | 1       |
| Dibromofluoromethane (Surr) | 82        |           | 80 - 120 |     |      |   |          | 06/29/12 13:24 | 1       |
| Toluene-d8 (Surr)           | 101       |           | 80 - 120 |     |      |   |          | 06/29/12 13:24 | 1       |

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

| Analyte      | Result    | Qualifier | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|--------------|-----------|-----------|----------|-----|------|---|----------------|----------------|---------|
| C10-C28      | 1.5       |           | 0.053    |     | mg/L |   | 06/21/12 11:18 | 06/21/12 21:53 | 1       |
| C29-C40      | 0.90      |           | 0.053    |     | mg/L |   | 06/21/12 11:18 | 06/21/12 21:53 | 1       |
| Surrogate    | %Recovery | Qualifier | Limits   |     |      |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane | 94        |           | 45 - 120 |     |      |   | 06/21/12 11:18 | 06/21/12 21:53 | 1       |

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

| Analyte      | Result    | Qualifier | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|--------------|-----------|-----------|----------|-----|------|---|----------------|----------------|---------|
| C10-C28      | ND        |           | 0.49     |     | mg/L |   | 06/25/12 11:33 | 06/25/12 21:33 | 1       |
| C29-C40      | ND        |           | 0.49     |     | mg/L |   | 06/25/12 11:33 | 06/25/12 21:33 | 1       |
| Surrogate    | %Recovery | Qualifier | Limits   |     |      |   | Prepared       | Analyzed       | Dil Fac |
| n-Octacosane | 82        |           | 45 - 120 |     |      |   | 06/25/12 11:33 | 06/25/12 21:33 | 1       |

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| Analyte                       | Result    | Qualifier | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|------|---|----------------|----------------|---------|
| Aroclor 1016                  | ND        |           | 1.4      |     | ug/L |   | 06/21/12 14:17 | 06/25/12 18:23 | 1       |
| Aroclor 1221                  | ND        |           | 1.4      |     | ug/L |   | 06/21/12 14:17 | 06/25/12 18:23 | 1       |
| Aroclor 1232                  | ND        |           | 1.4      |     | ug/L |   | 06/21/12 14:17 | 06/25/12 18:23 | 1       |
| Aroclor 1242                  | ND        |           | 1.4      |     | ug/L |   | 06/21/12 14:17 | 06/25/12 18:23 | 1       |
| Aroclor 1248                  | ND        |           | 1.4      |     | ug/L |   | 06/21/12 14:17 | 06/25/12 18:23 | 1       |
| Aroclor 1254                  | ND        |           | 1.4      |     | ug/L |   | 06/21/12 14:17 | 06/25/12 18:23 | 1       |
| Aroclor 1260                  | ND        |           | 1.4      |     | ug/L |   | 06/21/12 14:17 | 06/25/12 18:23 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |     |      |   | Prepared       | Analyzed       | Dil Fac |
| DCB Decachlorobiphenyl (Surr) | 71        |           | 45 - 120 |     |      |   | 06/21/12 14:17 | 06/25/12 18:23 | 1       |

**Method: 6010B - Metals (ICP) - Total Recoverable**

| Analyte  | Result | Qualifier | RL     | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|--------|-----|------|---|----------------|----------------|---------|
| Lead     | ND     |           | 0.0050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:55 | 1       |
| Zinc     | ND     |           | 0.020  |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:55 | 1       |
| Nickel   | 0.046  |           | 0.010  |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:55 | 1       |
| Chromium | 0.013  |           | 0.0050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:55 | 1       |
| Cadmium  | ND     |           | 0.0050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:55 | 1       |



# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

**Client Sample ID: B-8-W-20120615**

**Lab Sample ID: 440-15189-5**

Date Collected: 06/15/12 16:50

Matrix: Water

Date Received: 06/20/12 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result      | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-------------|-----------|------|-----|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,1,1-Trichloroethane       | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,1,2-Trichloroethane       | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,1-Dichloroethane          | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,1-Dichloroethene          | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,1-Dichloropropene         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,2,3-Trichlorobenzene      | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,2,3-Trichloropropane      | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,2,4-Trichlorobenzene      | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,2,4-Trimethylbenzene      | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND          |           | 5.0  |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,2-Dibromoethane (EDB)     | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,2-Dichlorobenzene         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,2-Dichloroethane          | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,2-Dichloropropane         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,3,5-Trimethylbenzene      | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,3-Dichlorobenzene         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,3-Dichloropropane         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 1,4-Dichlorobenzene         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 2,2-Dichloropropane         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 2-Chlorotoluene             | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| 4-Chlorotoluene             | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| <b>Benzene</b>              | <b>0.56</b> |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Bromobenzene                | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Bromochloromethane          | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Bromodichloromethane        | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Bromoform                   | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Bromomethane                | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Carbon tetrachloride        | ND *        |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Chlorobenzene               | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Chloroethane                | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Chloroform                  | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Chloromethane               | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| cis-1,2-Dichloroethene      | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| cis-1,3-Dichloropropene     | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Dibromochloromethane        | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Dibromomethane              | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Dichlorodifluoromethane     | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| <b>Ethylbenzene</b>         | <b>14</b>   |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Hexachlorobutadiene         | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| <b>Isopropylbenzene</b>     | <b>3.3</b>  |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| m,p-Xylene                  | ND          |           | 1.0  |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Methylene Chloride          | ND          |           | 5.0  |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Naphthalene                 | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| <b>n-Butylbenzene</b>       | <b>1.3</b>  |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| <b>N-Propylbenzene</b>      | <b>6.4</b>  |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| o-Xylene                    | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| <b>p-Isopropyltoluene</b>   | <b>0.57</b> |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Styrene                     | ND          |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| <b>sec-Butylbenzene</b>     | <b>0.82</b> |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

**Client Sample ID: B-8-W-20120615**

**Lab Sample ID: 440-15189-5**

Date Collected: 06/15/12 16:50

Matrix: Water

Date Received: 06/20/12 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                            | Result     | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------------------|------------|-----------|------|-----|------|---|----------|----------------|---------|
| <b>tert-Butylbenzene</b>           | <b>7.7</b> |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Tetrachloroethene                  | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Toluene                            | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| trans-1,2-Dichloroethene           | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| trans-1,3-Dichloropropene          | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Trichloroethene                    | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Trichlorofluoromethane             | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| Vinyl chloride                     | ND         |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |
| <b>Methyl-t-Butyl Ether (MTBE)</b> | <b>12</b>  |           | 0.50 |     | ug/L |   |          | 06/29/12 13:51 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 95        |           | 80 - 120 |          | 06/29/12 13:51 | 1       |
| Dibromofluoromethane (Surr) | 83        |           | 80 - 120 |          | 06/29/12 13:51 | 1       |
| Toluene-d8 (Surr)           | 104       |           | 80 - 120 |          | 06/29/12 13:51 | 1       |

**Method: 6010B - Metals (ICP) - Total Recoverable**

| Analyte         | Result      | Qualifier | RL    | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------|-------------|-----------|-------|-----|------|---|----------------|----------------|---------|
| <b>Lead</b>     | <b>0.18</b> |           | 0.050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:57 | 2       |
| <b>Zinc</b>     | <b>1.7</b>  |           | 0.20  |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:57 | 2       |
| <b>Nickel</b>   | <b>2.1</b>  |           | 0.10  |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:57 | 2       |
| <b>Chromium</b> | <b>1.3</b>  |           | 0.050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:57 | 2       |
| Cadmium         | ND          |           | 0.050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:57 | 2       |

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

**Client Sample ID: B-7-W-20120615**

**Lab Sample ID: 440-15189-1**

Date Collected: 06/15/12 12:17

Matrix: Water

Date Received: 06/20/12 09:40

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 10 mL          | 10 mL        | 35961        | 06/29/12 11:09       | LB      | TAL IRV |
| Total/NA           | Prep       | 3510C        |     |            | 1045 mL        | 1 mL         | 34359        | 06/21/12 11:18       | KW      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 34396        | 06/21/12 20:44       |         | TAL IRV |
| Silica Gel Cleanup | Prep       | 3510C SGC    |     |            | 1045 mL        | 1 mL         | 34950        | 06/25/12 11:33       | KW      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34910        | 06/25/12 20:31       | ES      | TAL IRV |
| Total/NA           | Prep       | 3510C        |     |            | 1040 mL        | 2 mL         | 34404        | 06/21/12 14:17       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34988        | 06/25/12 17:43       | JM      | TAL IRV |
| Total Recoverable  | Prep       | 3005A        |     |            | 50 mL          | 50 mL        | 35508        | 06/27/12 11:59       | EN      | TAL IRV |
| Total Recoverable  | Analysis   | 6010B        |     | 1          |                |              | 35724        | 06/27/12 20:49       | VS      | TAL IRV |

**Client Sample ID: B-3-W-20120615**

**Lab Sample ID: 440-15189-2**

Date Collected: 06/15/12 15:25

Matrix: Water

Date Received: 06/20/12 09:40

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 10 mL          | 10 mL        | 35961        | 06/29/12 12:30       | LB      | TAL IRV |
| Total/NA           | Prep       | 3510C        |     |            | 690 mL         | 1 mL         | 34359        | 06/21/12 11:18       | KW      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 34396        | 06/21/12 21:07       |         | TAL IRV |
| Silica Gel Cleanup | Prep       | 3510C SGC    |     |            | 1040 mL        | 1 mL         | 34950        | 06/25/12 11:33       | KW      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34910        | 06/25/12 20:52       | ES      | TAL IRV |
| Total/NA           | Prep       | 3510C        |     |            | 1050 mL        | 2 mL         | 34404        | 06/21/12 14:17       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34988        | 06/25/12 17:56       | JM      | TAL IRV |
| Total Recoverable  | Prep       | 3005A        |     |            | 10 mL          | 50 mL        | 35508        | 06/27/12 11:59       | EN      | TAL IRV |
| Total Recoverable  | Analysis   | 6010B        |     | 2          |                |              | 35724        | 06/27/12 20:51       | VS      | TAL IRV |

**Client Sample ID: B-4-W-20120615**

**Lab Sample ID: 440-15189-3**

Date Collected: 06/15/12 15:45

Matrix: Water

Date Received: 06/20/12 09:40

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 10 mL          | 10 mL        | 35961        | 06/29/12 12:57       | LB      | TAL IRV |
| Total/NA           | Prep       | 3510C        |     |            | 1020 mL        | 1 mL         | 34359        | 06/21/12 11:18       | KW      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 34396        | 06/21/12 21:30       |         | TAL IRV |
| Silica Gel Cleanup | Prep       | 3510C SGC    |     |            | 1010 mL        | 1 mL         | 34950        | 06/25/12 11:33       | KW      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34910        | 06/25/12 21:12       | ES      | TAL IRV |
| Total/NA           | Prep       | 3510C        |     |            | 1010 mL        | 2 mL         | 34404        | 06/21/12 14:17       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34988        | 06/25/12 18:09       | JM      | TAL IRV |
| Total Recoverable  | Prep       | 3005A        |     |            | 10 mL          | 50 mL        | 35508        | 06/27/12 11:59       | EN      | TAL IRV |
| Total Recoverable  | Analysis   | 6010B        |     | 2          |                |              | 35724        | 06/27/12 20:53       | VS      | TAL IRV |

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

**Client Sample ID: B-2-W-20120615**

**Lab Sample ID: 440-15189-4**

Date Collected: 06/15/12 16:30

Matrix: Water

Date Received: 06/20/12 09:40

| Prep Type          | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|--------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA           | Analysis   | 8260B        |     | 1          | 10 mL          | 10 mL        | 35961        | 06/29/12 13:24       | LB      | TAL IRV |
| Total/NA           | Prep       | 3510C        |     |            | 950 mL         | 1 mL         | 34359        | 06/21/12 11:18       | KW      | TAL IRV |
| Total/NA           | Analysis   | 8015B        |     | 1          |                |              | 34396        | 06/21/12 21:53       |         | TAL IRV |
| Silica Gel Cleanup | Prep       | 3510C SGC    |     |            | 1030 mL        | 1 mL         | 34950        | 06/25/12 11:33       | KW      | TAL IRV |
| Silica Gel Cleanup | Analysis   | 8015B        |     | 1          |                |              | 34910        | 06/25/12 21:33       | ES      | TAL IRV |
| Total/NA           | Prep       | 3510C        |     |            | 730 mL         | 2 mL         | 34404        | 06/21/12 14:17       | AB      | TAL IRV |
| Total/NA           | Analysis   | 8082         |     | 1          |                |              | 34988        | 06/25/12 18:23       | JM      | TAL IRV |
| Total Recoverable  | Prep       | 3005A        |     |            | 50 mL          | 50 mL        | 35508        | 06/27/12 11:59       | EN      | TAL IRV |
| Total Recoverable  | Analysis   | 6010B        |     | 1          |                |              | 35724        | 06/27/12 20:55       | VS      | TAL IRV |

**Client Sample ID: B-8-W-20120615**

**Lab Sample ID: 440-15189-5**

Date Collected: 06/15/12 16:50

Matrix: Water

Date Received: 06/20/12 09:40

| Prep Type         | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B        |     | 1          | 10 mL          | 10 mL        | 35961        | 06/29/12 13:51       | LB      | TAL IRV |
| Total Recoverable | Prep       | 3005A        |     |            | 10 mL          | 50 mL        | 35508        | 06/27/12 11:59       | EN      | TAL IRV |
| Total Recoverable | Analysis   | 6010B        |     | 2          |                |              | 35724        | 06/27/12 20:57       | VS      | TAL IRV |

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-35961/3**

**Matrix: Water**

**Analysis Batch: 35961**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

| Analyte                     | MB Result | MB Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|------|-----|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,1,1-Trichloroethane       | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,1,2-Trichloroethane       | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,1-Dichloroethane          | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,1-Dichloroethene          | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,1-Dichloropropene         | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,2,3-Trichlorobenzene      | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,2,3-Trichloropropane      | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,2,4-Trichlorobenzene      | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,2,4-Trimethylbenzene      | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND        |              | 5.0  |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,2-Dichlorobenzene         | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,2-Dichloroethane          | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,2-Dichloropropane         | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,3,5-Trimethylbenzene      | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,3-Dichlorobenzene         | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,3-Dichloropropane         | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 1,4-Dichlorobenzene         | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 2,2-Dichloropropane         | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 2-Chlorotoluene             | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| 4-Chlorotoluene             | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Benzene                     | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Bromobenzene                | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Bromochloromethane          | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Bromodichloromethane        | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Bromoform                   | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Bromomethane                | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Carbon tetrachloride        | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Chlorobenzene               | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Chloroethane                | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Chloroform                  | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Chloromethane               | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| cis-1,2-Dichloroethene      | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| cis-1,3-Dichloropropene     | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Dibromochloromethane        | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Dibromomethane              | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Dichlorodifluoromethane     | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Ethylbenzene                | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Hexachlorobutadiene         | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Isopropylbenzene            | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| m,p-Xylene                  | ND        |              | 1.0  |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Methylene Chloride          | ND        |              | 5.0  |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Naphthalene                 | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| n-Butylbenzene              | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| N-Propylbenzene             | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| o-Xylene                    | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| p-Isopropyltoluene          | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-35961/3**

**Matrix: Water**

**Analysis Batch: 35961**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

| Analyte                     | MB Result | MB Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|------|-----|------|---|----------|----------------|---------|
| Styrene                     | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| sec-Butylbenzene            | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| tert-Butylbenzene           | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Tetrachloroethene           | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Toluene                     | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| trans-1,2-Dichloroethene    | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| trans-1,3-Dichloropropene   | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Trichloroethene             | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Trichlorofluoromethane      | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Vinyl chloride              | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |
| Methyl-t-Butyl Ether (MTBE) | ND        |              | 0.50 |     | ug/L |   |          | 06/29/12 10:05 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 99           |              | 80 - 120 |          | 06/29/12 10:05 | 1       |
| Dibromofluoromethane (Surr) | 84           |              | 80 - 120 |          | 06/29/12 10:05 | 1       |
| Toluene-d8 (Surr)           | 101          |              | 80 - 120 |          | 06/29/12 10:05 | 1       |

**Lab Sample ID: LCS 440-35961/4**

**Matrix: Water**

**Analysis Batch: 35961**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|--------------|
| 1,1,1,2-Tetrachloroethane   | 25.0        | 30.9       |               | ug/L |   | 124  | 70 - 130     |
| 1,1,1-Trichloroethane       | 25.0        | 27.4       |               | ug/L |   | 110  | 65 - 135     |
| 1,1,1,2-Tetrachloroethane   | 25.0        | 21.8       |               | ug/L |   | 87   | 55 - 130     |
| 1,1,2-Trichloroethane       | 25.0        | 22.4       |               | ug/L |   | 90   | 70 - 125     |
| 1,1-Dichloroethane          | 25.0        | 21.8       |               | ug/L |   | 87   | 70 - 125     |
| 1,1-Dichloroethene          | 25.0        | 22.7       |               | ug/L |   | 91   | 70 - 125     |
| 1,1-Dichloropropene         | 25.0        | 27.1       |               | ug/L |   | 108  | 75 - 130     |
| 1,2,3-Trichlorobenzene      | 25.0        | 25.9       |               | ug/L |   | 104  | 65 - 125     |
| 1,2,3-Trichloropropane      | 25.0        | 22.0       |               | ug/L |   | 88   | 60 - 130     |
| 1,2,4-Trichlorobenzene      | 25.0        | 28.6       |               | ug/L |   | 114  | 70 - 135     |
| 1,2,4-Trimethylbenzene      | 25.0        | 29.1       |               | ug/L |   | 116  | 75 - 125     |
| 1,2-Dibromo-3-Chloropropane | 25.0        | 28.6       |               | ug/L |   | 114  | 50 - 135     |
| 1,2-Dibromoethane (EDB)     | 25.0        | 26.4       |               | ug/L |   | 105  | 75 - 125     |
| 1,2-Dichlorobenzene         | 25.0        | 27.0       |               | ug/L |   | 108  | 75 - 120     |
| 1,2-Dichloroethane          | 25.0        | 30.2       |               | ug/L |   | 121  | 60 - 140     |
| 1,2-Dichloropropane         | 25.0        | 22.6       |               | ug/L |   | 91   | 70 - 125     |
| 1,3,5-Trimethylbenzene      | 25.0        | 28.5       |               | ug/L |   | 114  | 75 - 125     |
| 1,3-Dichlorobenzene         | 25.0        | 26.1       |               | ug/L |   | 105  | 75 - 120     |
| 1,3-Dichloropropane         | 25.0        | 23.1       |               | ug/L |   | 92   | 70 - 120     |
| 1,4-Dichlorobenzene         | 25.0        | 25.1       |               | ug/L |   | 100  | 75 - 120     |
| 2,2-Dichloropropane         | 25.0        | 26.4       |               | ug/L |   | 105  | 65 - 140     |
| 2-Chlorotoluene             | 25.0        | 24.0       |               | ug/L |   | 96   | 70 - 125     |
| 4-Chlorotoluene             | 25.0        | 24.5       |               | ug/L |   | 98   | 75 - 125     |
| Benzene                     | 25.0        | 23.7       |               | ug/L |   | 95   | 70 - 120     |
| Bromobenzene                | 25.0        | 27.1       |               | ug/L |   | 108  | 75 - 120     |
| Bromochloromethane          | 25.0        | 26.2       |               | ug/L |   | 105  | 70 - 130     |
| Bromodichloromethane        | 25.0        | 29.9       |               | ug/L |   | 119  | 70 - 135     |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-35961/4**

**Matrix: Water**

**Analysis Batch: 35961**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|--------------|
| Bromoform                   | 25.0        | 26.2       |               | ug/L |   | 105  | 55 - 130     |
| Bromomethane                | 25.0        | 30.5       |               | ug/L |   | 122  | 65 - 140     |
| Carbon tetrachloride        | 25.0        | 38.3       | *             | ug/L |   | 153  | 65 - 140     |
| Chlorobenzene               | 25.0        | 25.9       |               | ug/L |   | 104  | 75 - 120     |
| Chloroethane                | 25.0        | 18.8       |               | ug/L |   | 75   | 60 - 140     |
| Chloroform                  | 25.0        | 25.2       |               | ug/L |   | 101  | 70 - 130     |
| Chloromethane               | 25.0        | 23.5       |               | ug/L |   | 94   | 50 - 140     |
| cis-1,2-Dichloroethene      | 25.0        | 23.2       |               | ug/L |   | 93   | 70 - 125     |
| cis-1,3-Dichloropropene     | 25.0        | 27.2       |               | ug/L |   | 109  | 75 - 125     |
| Dibromochloromethane        | 25.0        | 32.0       |               | ug/L |   | 128  | 70 - 140     |
| Dibromomethane              | 25.0        | 28.9       |               | ug/L |   | 116  | 70 - 125     |
| Dichlorodifluoromethane     | 25.0        | 27.2       |               | ug/L |   | 109  | 35 - 155     |
| Ethylbenzene                | 25.0        | 25.6       |               | ug/L |   | 102  | 75 - 125     |
| Hexachlorobutadiene         | 25.0        | 28.3       |               | ug/L |   | 113  | 65 - 135     |
| Isopropylbenzene            | 25.0        | 26.5       |               | ug/L |   | 106  | 75 - 130     |
| m,p-Xylene                  | 50.0        | 52.8       |               | ug/L |   | 106  | 75 - 125     |
| Methylene Chloride          | 25.0        | 20.3       |               | ug/L |   | 81   | 55 - 130     |
| Naphthalene                 | 25.0        | 27.6       |               | ug/L |   | 110  | 55 - 135     |
| n-Butylbenzene              | 25.0        | 25.1       |               | ug/L |   | 100  | 70 - 130     |
| N-Propylbenzene             | 25.0        | 24.3       |               | ug/L |   | 97   | 75 - 130     |
| o-Xylene                    | 25.0        | 26.6       |               | ug/L |   | 106  | 75 - 125     |
| p-Isopropyltoluene          | 25.0        | 26.4       |               | ug/L |   | 105  | 75 - 125     |
| Styrene                     | 25.0        | 27.4       |               | ug/L |   | 110  | 75 - 130     |
| sec-Butylbenzene            | 25.0        | 27.0       |               | ug/L |   | 108  | 70 - 125     |
| tert-Butylbenzene           | 25.0        | 26.0       |               | ug/L |   | 104  | 70 - 125     |
| Tetrachloroethene           | 25.0        | 29.3       |               | ug/L |   | 117  | 70 - 125     |
| Toluene                     | 25.0        | 25.3       |               | ug/L |   | 101  | 70 - 120     |
| trans-1,2-Dichloroethene    | 25.0        | 22.3       |               | ug/L |   | 89   | 70 - 125     |
| trans-1,3-Dichloropropene   | 25.0        | 29.4       |               | ug/L |   | 118  | 70 - 125     |
| Trichloroethene             | 25.0        | 29.9       |               | ug/L |   | 119  | 70 - 125     |
| Trichlorofluoromethane      | 25.0        | 31.2       |               | ug/L |   | 125  | 65 - 145     |
| Vinyl chloride              | 25.0        | 27.7       |               | ug/L |   | 111  | 55 - 135     |
| Methyl-t-Butyl Ether (MTBE) | 25.0        | 21.2       |               | ug/L |   | 85   | 60 - 135     |

| Surrogate                   | LCS LCS   |           | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| 4-Bromofluorobenzene (Surr) | 96        |           | 80 - 120 |
| Dibromofluoromethane (Surr) | 88        |           | 80 - 120 |
| Toluene-d8 (Surr)           | 101       |           | 80 - 120 |

**Lab Sample ID: 440-15189-1 MS**

**Matrix: Water**

**Analysis Batch: 35961**

**Client Sample ID: B-7-W-20120615**

**Prep Type: Total/NA**

| Analyte                   | Sample Result | Sample Qualifier | Spike Added | MS MS  |           | Unit | D | %Rec | %Rec. Limits |
|---------------------------|---------------|------------------|-------------|--------|-----------|------|---|------|--------------|
|                           |               |                  |             | Result | Qualifier |      |   |      |              |
| 1,1,1,2-Tetrachloroethane | ND            |                  | 25.0        | 26.6   |           | ug/L |   | 106  | 65 - 140     |
| 1,1,1-Trichloroethane     | ND            |                  | 25.0        | 24.0   |           | ug/L |   | 96   | 65 - 140     |
| 1,1,2,2-Tetrachloroethane | ND            |                  | 25.0        | 21.1   |           | ug/L |   | 84   | 55 - 135     |
| 1,1,2-Trichloroethane     | ND            |                  | 25.0        | 21.3   |           | ug/L |   | 85   | 65 - 130     |
| 1,1-Dichloroethane        | ND            |                  | 25.0        | 18.4   |           | ug/L |   | 74   | 65 - 130     |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-15189-1 MS

Client Sample ID: B-7-W-20120615

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 35961

| Analyte                     | Sample | Sample    | Spike | MS     | MS        | Unit | D | %Rec | %Rec.<br>Limits |
|-----------------------------|--------|-----------|-------|--------|-----------|------|---|------|-----------------|
|                             | Result | Qualifier | Added | Result | Qualifier |      |   |      |                 |
| 1,1-Dichloroethene          | ND     |           | 25.0  | 20.4   |           | ug/L |   | 82   | 60 - 130        |
| 1,1-Dichloropropene         | ND     |           | 25.0  | 24.2   |           | ug/L |   | 97   | 70 - 135        |
| 1,2,3-Trichlorobenzene      | ND     |           | 25.0  | 23.9   |           | ug/L |   | 96   | 60 - 135        |
| 1,2,3-Trichloropropane      | ND     |           | 25.0  | 22.1   |           | ug/L |   | 89   | 55 - 135        |
| 1,2,4-Trichlorobenzene      | ND     |           | 25.0  | 25.5   |           | ug/L |   | 102  | 65 - 135        |
| 1,2,4-Trimethylbenzene      | ND     |           | 25.0  | 26.4   |           | ug/L |   | 105  | 55 - 135        |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 25.0  | 27.3   |           | ug/L |   | 109  | 45 - 145        |
| 1,2-Dibromoethane (EDB)     | ND     |           | 25.0  | 23.8   |           | ug/L |   | 95   | 70 - 130        |
| 1,2-Dichlorobenzene         | ND     |           | 25.0  | 23.8   |           | ug/L |   | 95   | 75 - 125        |
| 1,2-Dichloroethane          | ND     |           | 25.0  | 26.7   |           | ug/L |   | 107  | 60 - 140        |
| 1,2-Dichloropropane         | ND     |           | 25.0  | 20.1   |           | ug/L |   | 80   | 65 - 130        |
| 1,3,5-Trimethylbenzene      | ND     |           | 25.0  | 27.2   |           | ug/L |   | 109  | 70 - 130        |
| 1,3-Dichlorobenzene         | ND     |           | 25.0  | 24.6   |           | ug/L |   | 98   | 75 - 125        |
| 1,3-Dichloropropane         | ND     |           | 25.0  | 20.2   |           | ug/L |   | 81   | 65 - 135        |
| 1,4-Dichlorobenzene         | ND     |           | 25.0  | 23.0   |           | ug/L |   | 92   | 75 - 125        |
| 2,2-Dichloropropane         | ND     |           | 25.0  | 24.4   |           | ug/L |   | 98   | 60 - 145        |
| 2-Chlorotoluene             | ND     |           | 25.0  | 22.5   |           | ug/L |   | 90   | 65 - 135        |
| 4-Chlorotoluene             | ND     |           | 25.0  | 22.6   |           | ug/L |   | 90   | 70 - 135        |
| Benzene                     | 0.90   |           | 25.0  | 21.7   |           | ug/L |   | 83   | 65 - 125        |
| Bromobenzene                | ND     |           | 25.0  | 25.1   |           | ug/L |   | 100  | 70 - 125        |
| Bromochloromethane          | ND     |           | 25.0  | 22.4   |           | ug/L |   | 90   | 65 - 135        |
| Bromodichloromethane        | ND     |           | 25.0  | 26.3   |           | ug/L |   | 105  | 70 - 135        |
| Bromoform                   | ND     |           | 25.0  | 22.9   |           | ug/L |   | 92   | 55 - 135        |
| Bromomethane                | ND     |           | 25.0  | 25.4   |           | ug/L |   | 102  | 55 - 145        |
| Carbon tetrachloride        | ND *   |           | 25.0  | 34.7   |           | ug/L |   | 139  | 65 - 140        |
| Chlorobenzene               | ND     |           | 25.0  | 22.0   |           | ug/L |   | 88   | 75 - 125        |
| Chloroethane                | ND     |           | 25.0  | 16.0   |           | ug/L |   | 64   | 55 - 140        |
| Chloroform                  | ND     |           | 25.0  | 21.5   |           | ug/L |   | 86   | 65 - 135        |
| Chloromethane               | ND     |           | 25.0  | 18.7   |           | ug/L |   | 75   | 45 - 145        |
| cis-1,2-Dichloroethene      | ND     |           | 25.0  | 20.3   |           | ug/L |   | 81   | 65 - 130        |
| cis-1,3-Dichloropropene     | ND     |           | 25.0  | 23.2   |           | ug/L |   | 93   | 70 - 130        |
| Dibromochloromethane        | ND     |           | 25.0  | 26.5   |           | ug/L |   | 106  | 65 - 140        |
| Dibromomethane              | ND     |           | 25.0  | 26.1   |           | ug/L |   | 104  | 65 - 135        |
| Dichlorodifluoromethane     | ND     |           | 25.0  | 19.4   |           | ug/L |   | 78   | 25 - 155        |
| Ethylbenzene                | 3.6    |           | 25.0  | 25.5   |           | ug/L |   | 87   | 65 - 130        |
| Hexachlorobutadiene         | ND     |           | 25.0  | 25.5   |           | ug/L |   | 102  | 60 - 135        |
| Isopropylbenzene            | ND     |           | 25.0  | 25.7   |           | ug/L |   | 101  | 70 - 135        |
| m,p-Xylene                  | ND     |           | 50.0  | 45.9   |           | ug/L |   | 92   | 65 - 130        |
| Methylene Chloride          | ND     |           | 25.0  | 17.7   |           | ug/L |   | 71   | 50 - 135        |
| Naphthalene                 | ND     |           | 25.0  | 26.0   |           | ug/L |   | 104  | 50 - 140        |
| n-Butylbenzene              | ND     |           | 25.0  | 23.0   |           | ug/L |   | 92   | 65 - 135        |
| N-Propylbenzene             | 0.68   |           | 25.0  | 23.7   |           | ug/L |   | 92   | 70 - 135        |
| o-Xylene                    | ND     |           | 25.0  | 22.2   |           | ug/L |   | 89   | 65 - 125        |
| p-Isopropyltoluene          | ND     |           | 25.0  | 24.2   |           | ug/L |   | 97   | 65 - 130        |
| Styrene                     | ND     |           | 25.0  | 23.6   |           | ug/L |   | 94   | 50 - 145        |
| sec-Butylbenzene            | ND     |           | 25.0  | 25.2   |           | ug/L |   | 101  | 70 - 125        |
| tert-Butylbenzene           | 0.73   |           | 25.0  | 25.2   |           | ug/L |   | 98   | 65 - 130        |
| Tetrachloroethene           | ND     |           | 25.0  | 26.4   |           | ug/L |   | 106  | 65 - 130        |
| Toluene                     | ND     |           | 25.0  | 23.4   |           | ug/L |   | 94   | 70 - 125        |
| trans-1,2-Dichloroethene    | ND     |           | 25.0  | 18.7   |           | ug/L |   | 75   | 65 - 130        |



# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-15189-1 MS**

**Client Sample ID: B-7-W-20120615**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 35961**

| Analyte                     | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| trans-1,3-Dichloropropene   | ND            |                  | 25.0        | 25.6      |              | ug/L |   | 102  | 65 - 135     |
| Trichloroethene             | ND            |                  | 25.0        | 27.2      |              | ug/L |   | 109  | 65 - 125     |
| Trichlorofluoromethane      | ND            |                  | 25.0        | 27.4      |              | ug/L |   | 110  | 60 - 145     |
| Vinyl chloride              | ND            |                  | 25.0        | 23.4      |              | ug/L |   | 94   | 45 - 140     |
| Methyl-t-Butyl Ether (MTBE) | 2.3           |                  | 25.0        | 20.4      |              | ug/L |   | 72   | 55 - 145     |

| Surrogate                   | MS %Recovery | MS Qualifier | MS Limits |
|-----------------------------|--------------|--------------|-----------|
| 4-Bromofluorobenzene (Surr) | 91           |              | 80 - 120  |
| Dibromofluoromethane (Surr) | 84           |              | 80 - 120  |
| Toluene-d8 (Surr)           | 102          |              | 80 - 120  |

**Lab Sample ID: 440-15189-1 MSD**

**Client Sample ID: B-7-W-20120615**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 35961**

| Analyte                     | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| 1,1,1,2-Tetrachloroethane   | ND            |                  | 25.0        | 28.4       |               | ug/L |   | 114  | 65 - 140     | 7   | 20        |
| 1,1,1-Trichloroethane       | ND            |                  | 25.0        | 24.9       |               | ug/L |   | 100  | 65 - 140     | 4   | 20        |
| 1,1,1,2,2-Tetrachloroethane | ND            |                  | 25.0        | 22.8       |               | ug/L |   | 91   | 55 - 135     | 8   | 30        |
| 1,1,2-Trichloroethane       | ND            |                  | 25.0        | 22.0       |               | ug/L |   | 88   | 65 - 130     | 3   | 25        |
| 1,1-Dichloroethane          | ND            |                  | 25.0        | 19.5       |               | ug/L |   | 78   | 65 - 130     | 6   | 20        |
| 1,1-Dichloroethene          | ND            |                  | 25.0        | 21.5       |               | ug/L |   | 86   | 60 - 130     | 5   | 20        |
| 1,1-Dichloropropene         | ND            |                  | 25.0        | 24.5       |               | ug/L |   | 98   | 70 - 135     | 1   | 20        |
| 1,2,3-Trichlorobenzene      | ND            |                  | 25.0        | 27.8       |               | ug/L |   | 111  | 60 - 135     | 15  | 20        |
| 1,2,3-Trichloropropane      | ND            |                  | 25.0        | 24.3       |               | ug/L |   | 97   | 55 - 135     | 9   | 30        |
| 1,2,4-Trichlorobenzene      | ND            |                  | 25.0        | 28.8       |               | ug/L |   | 115  | 65 - 135     | 12  | 20        |
| 1,2,4-Trimethylbenzene      | ND            |                  | 25.0        | 27.4       |               | ug/L |   | 110  | 55 - 135     | 4   | 25        |
| 1,2-Dibromo-3-Chloropropane | ND            |                  | 25.0        | 31.9       |               | ug/L |   | 128  | 45 - 145     | 15  | 30        |
| 1,2-Dibromoethane (EDB)     | ND            |                  | 25.0        | 25.1       |               | ug/L |   | 100  | 70 - 130     | 5   | 25        |
| 1,2-Dichlorobenzene         | ND            |                  | 25.0        | 26.5       |               | ug/L |   | 106  | 75 - 125     | 11  | 20        |
| 1,2-Dichloroethane          | ND            |                  | 25.0        | 28.2       |               | ug/L |   | 113  | 60 - 140     | 5   | 20        |
| 1,2-Dichloropropane         | ND            |                  | 25.0        | 21.6       |               | ug/L |   | 87   | 65 - 130     | 7   | 20        |
| 1,3,5-Trimethylbenzene      | ND            |                  | 25.0        | 27.2       |               | ug/L |   | 109  | 70 - 130     | 0   | 20        |
| 1,3-Dichlorobenzene         | ND            |                  | 25.0        | 25.2       |               | ug/L |   | 101  | 75 - 125     | 3   | 20        |
| 1,3-Dichloropropane         | ND            |                  | 25.0        | 21.4       |               | ug/L |   | 86   | 65 - 135     | 6   | 25        |
| 1,4-Dichlorobenzene         | ND            |                  | 25.0        | 24.2       |               | ug/L |   | 97   | 75 - 125     | 5   | 20        |
| 2,2-Dichloropropane         | ND            |                  | 25.0        | 24.8       |               | ug/L |   | 99   | 60 - 145     | 1   | 25        |
| 2-Chlorotoluene             | ND            |                  | 25.0        | 23.0       |               | ug/L |   | 92   | 65 - 135     | 2   | 20        |
| 4-Chlorotoluene             | ND            |                  | 25.0        | 23.2       |               | ug/L |   | 93   | 70 - 135     | 3   | 20        |
| Benzene                     | 0.90          |                  | 25.0        | 22.5       |               | ug/L |   | 86   | 65 - 125     | 3   | 20        |
| Bromobenzene                | ND            |                  | 25.0        | 25.1       |               | ug/L |   | 101  | 70 - 125     | 0   | 20        |
| Bromochloromethane          | ND            |                  | 25.0        | 23.7       |               | ug/L |   | 95   | 65 - 135     | 6   | 25        |
| Bromodichloromethane        | ND            |                  | 25.0        | 27.0       |               | ug/L |   | 108  | 70 - 135     | 3   | 20        |
| Bromoform                   | ND            |                  | 25.0        | 25.0       |               | ug/L |   | 100  | 55 - 135     | 9   | 25        |
| Bromomethane                | ND            |                  | 25.0        | 26.9       |               | ug/L |   | 108  | 55 - 145     | 6   | 25        |
| Carbon tetrachloride        | ND            | *                | 25.0        | 35.5       | F             | ug/L |   | 142  | 65 - 140     | 2   | 25        |
| Chlorobenzene               | ND            |                  | 25.0        | 23.6       |               | ug/L |   | 94   | 75 - 125     | 7   | 20        |
| Chloroethane                | ND            |                  | 25.0        | 16.9       |               | ug/L |   | 67   | 55 - 140     | 5   | 25        |
| Chloroform                  | ND            |                  | 25.0        | 22.1       |               | ug/L |   | 89   | 65 - 135     | 3   | 20        |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-15189-1 MSD**

**Matrix: Water**

**Analysis Batch: 35961**

**Client Sample ID: B-7-W-20120615**

**Prep Type: Total/NA**

| Analyte                     | Sample | Sample    | Spike | MSD    | MSD       | Unit | D | %Rec | %Rec.    | RPD | RPD |
|-----------------------------|--------|-----------|-------|--------|-----------|------|---|------|----------|-----|-----|
|                             | Result | Qualifier | Added | Result | Qualifier |      |   |      | Limits   |     |     |
| Chloromethane               | ND     |           | 25.0  | 19.1   |           | ug/L |   | 77   | 45 - 145 | 2   | 25  |
| cis-1,2-Dichloroethene      | ND     |           | 25.0  | 21.0   |           | ug/L |   | 84   | 65 - 130 | 3   | 20  |
| cis-1,3-Dichloropropene     | ND     |           | 25.0  | 24.9   |           | ug/L |   | 100  | 70 - 130 | 7   | 20  |
| Dibromochloromethane        | ND     |           | 25.0  | 29.2   |           | ug/L |   | 117  | 65 - 140 | 10  | 25  |
| Dibromomethane              | ND     |           | 25.0  | 28.2   |           | ug/L |   | 113  | 65 - 135 | 8   | 25  |
| Dichlorodifluoromethane     | ND     |           | 25.0  | 20.0   |           | ug/L |   | 80   | 25 - 155 | 3   | 30  |
| Ethylbenzene                | 3.6    |           | 25.0  | 25.8   |           | ug/L |   | 89   | 65 - 130 | 1   | 20  |
| Hexachlorobutadiene         | ND     |           | 25.0  | 28.3   |           | ug/L |   | 113  | 60 - 135 | 10  | 20  |
| Isopropylbenzene            | ND     |           | 25.0  | 26.5   |           | ug/L |   | 104  | 70 - 135 | 3   | 20  |
| m,p-Xylene                  | ND     |           | 50.0  | 48.0   |           | ug/L |   | 96   | 65 - 130 | 5   | 25  |
| Methylene Chloride          | ND     |           | 25.0  | 18.2   |           | ug/L |   | 73   | 50 - 135 | 3   | 20  |
| Naphthalene                 | ND     |           | 25.0  | 31.1   |           | ug/L |   | 124  | 50 - 140 | 18  | 30  |
| n-Butylbenzene              | ND     |           | 25.0  | 24.9   |           | ug/L |   | 99   | 65 - 135 | 8   | 20  |
| N-Propylbenzene             | 0.68   |           | 25.0  | 24.0   |           | ug/L |   | 93   | 70 - 135 | 1   | 20  |
| o-Xylene                    | ND     |           | 25.0  | 24.0   |           | ug/L |   | 96   | 65 - 125 | 8   | 20  |
| p-Isopropyltoluene          | ND     |           | 25.0  | 24.8   |           | ug/L |   | 99   | 65 - 130 | 2   | 20  |
| Styrene                     | ND     |           | 25.0  | 24.1   |           | ug/L |   | 96   | 50 - 145 | 2   | 30  |
| sec-Butylbenzene            | ND     |           | 25.0  | 25.8   |           | ug/L |   | 103  | 70 - 125 | 2   | 20  |
| tert-Butylbenzene           | 0.73   |           | 25.0  | 25.4   |           | ug/L |   | 99   | 65 - 130 | 1   | 20  |
| Tetrachloroethene           | ND     |           | 25.0  | 27.0   |           | ug/L |   | 108  | 65 - 130 | 2   | 20  |
| Toluene                     | ND     |           | 25.0  | 23.5   |           | ug/L |   | 94   | 70 - 125 | 1   | 20  |
| trans-1,2-Dichloroethene    | ND     |           | 25.0  | 20.8   |           | ug/L |   | 83   | 65 - 130 | 10  | 20  |
| trans-1,3-Dichloropropene   | ND     |           | 25.0  | 28.1   |           | ug/L |   | 113  | 65 - 135 | 10  | 25  |
| Trichloroethene             | ND     |           | 25.0  | 28.2   |           | ug/L |   | 113  | 65 - 125 | 3   | 20  |
| Trichlorofluoromethane      | ND     |           | 25.0  | 27.4   |           | ug/L |   | 109  | 60 - 145 | 0   | 25  |
| Vinyl chloride              | ND     |           | 25.0  | 23.8   |           | ug/L |   | 95   | 45 - 140 | 2   | 30  |
| Methyl-t-Butyl Ether (MTBE) | 2.3    |           | 25.0  | 21.4   |           | ug/L |   | 76   | 55 - 145 | 5   | 25  |

| Surrogate                   | MSD       | MSD       | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| 4-Bromofluorobenzene (Surr) | 92        |           | 80 - 120 |
| Dibromofluoromethane (Surr) | 84        |           | 80 - 120 |
| Toluene-d8 (Surr)           | 102       |           | 80 - 120 |

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

**Lab Sample ID: MB 440-34950/1-A**

**Matrix: Water**

**Analysis Batch: 34910**

**Client Sample ID: Method Blank**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 34950**

| Analyte | MB     | MB        | RL   | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|------|-----|------|---|----------------|----------------|---------|
|         | Result | Qualifier |      |     |      |   |                |                |         |
| C10-C28 | ND     |           | 0.50 |     | mg/L |   | 06/25/12 11:33 | 06/25/12 19:31 | 1       |
| C29-C40 | ND     |           | 0.50 |     | mg/L |   | 06/25/12 11:33 | 06/25/12 19:31 | 1       |

| Surrogate    | MB        | MB        | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------|-----------|-----------|----------|----------------|----------------|---------|
|              | %Recovery | Qualifier |          |                |                |         |
| n-Octacosane | 91        |           | 45 - 120 | 06/25/12 11:33 | 06/25/12 19:31 | 1       |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

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

**Lab Sample ID: LCS 440-34950/2-A**  
**Matrix: Water**  
**Analysis Batch: 34910**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 34950**

| Analyte             | Spike Added | LCS Result       | LCS Qualifier    | Unit | D | %Rec | %Rec. Limits  |
|---------------------|-------------|------------------|------------------|------|---|------|---------------|
| C10-C28             | 1.00        | 0.704            |                  | mg/L |   | 70   | 40 - 115      |
| <b>Surrogate</b>    |             | <b>%Recovery</b> | <b>Qualifier</b> |      |   |      | <b>Limits</b> |
| <i>n-Octacosane</i> |             | 79               |                  |      |   |      | 45 - 120      |

**Lab Sample ID: LCSD 440-34950/3-A**  
**Matrix: Water**  
**Analysis Batch: 34910**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 34950**

| Analyte             | Spike Added | LCSD Result      | LCSD Qualifier   | Unit | D | %Rec | %Rec. Limits  | RPD | RPD Limit |
|---------------------|-------------|------------------|------------------|------|---|------|---------------|-----|-----------|
| C10-C28             | 1.00        | 0.811            |                  | mg/L |   | 81   | 40 - 115      | 14  | 25        |
| <b>Surrogate</b>    |             | <b>%Recovery</b> | <b>Qualifier</b> |      |   |      | <b>Limits</b> |     |           |
| <i>n-Octacosane</i> |             | 89               |                  |      |   |      | 45 - 120      |     |           |

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

**Lab Sample ID: MB 440-34359/1-A**  
**Matrix: Water**  
**Analysis Batch: 34395**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 34359**

| Analyte             | MB Result        | MB Qualifier     | RL            | MDL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|---------------------|------------------|------------------|---------------|-----|------|---|-----------------|-----------------|----------------|
| C10-C28             | ND               |                  | 0.050         |     | mg/L |   | 06/21/12 11:18  | 06/21/12 18:48  | 1              |
| C29-C40             | ND               |                  | 0.050         |     | mg/L |   | 06/21/12 11:18  | 06/21/12 18:48  | 1              |
| <b>Surrogate</b>    | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |     |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| <i>n-Octacosane</i> | 73               |                  | 45 - 120      |     |      |   | 06/21/12 11:18  | 06/21/12 18:48  | 1              |

**Lab Sample ID: LCS 440-34359/2-A**  
**Matrix: Water**  
**Analysis Batch: 34395**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 34359**

| Analyte             | Spike Added | LCS Result       | LCS Qualifier    | Unit | D | %Rec | %Rec. Limits  |
|---------------------|-------------|------------------|------------------|------|---|------|---------------|
| C10-C28             | 1.00        | 0.862            |                  | mg/L |   | 86   | 40 - 115      |
| <b>Surrogate</b>    |             | <b>%Recovery</b> | <b>Qualifier</b> |      |   |      | <b>Limits</b> |
| <i>n-Octacosane</i> |             | 95               |                  |      |   |      | 45 - 120      |

**Lab Sample ID: 440-14866-I-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 34395**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 34359**

| Analyte             | Sample Result | Sample Qualifier | Spike Added      | MS Result     | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------|---------------|------------------|------------------|---------------|--------------|------|---|------|--------------|
| C10-C28             | ND            |                  | 0.952            | 0.864         |              | mg/L |   | 91   | 40 - 120     |
| <b>Surrogate</b>    |               | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |              |      |   |      |              |
| <i>n-Octacosane</i> |               | 95               |                  | 45 - 120      |              |      |   |      |              |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

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

Lab Sample ID: 440-14866-I-1-B MSD

Matrix: Water

Analysis Batch: 34395

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34359

| Analyte      | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| C10-C28      | ND            |                  | 0.957       | 0.818      |               | mg/L |   | 86   | 40 - 120     | 5   | 30        |
| Surrogate    | MSD MSD       |                  | Limits      |            |               |      |   |      |              |     |           |
| n-Octacosane | %Recovery     | Qualifier        | Limits      |            |               |      |   |      |              |     |           |
|              | 91            |                  | 45 - 120    |            |               |      |   |      |              |     |           |

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 440-34404/1-A

Matrix: Water

Analysis Batch: 34988

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34404

| Analyte                       | MB Result | MB Qualifier | RL       | MDL | Unit | D              | Prepared       | Analyzed       | Dil Fac |
|-------------------------------|-----------|--------------|----------|-----|------|----------------|----------------|----------------|---------|
| Aroclor 1016                  | ND        |              | 1.0      |     | ug/L |                | 06/21/12 14:17 | 06/25/12 16:51 | 1       |
| Aroclor 1221                  | ND        |              | 1.0      |     | ug/L |                | 06/21/12 14:17 | 06/25/12 16:51 | 1       |
| Aroclor 1232                  | ND        |              | 1.0      |     | ug/L |                | 06/21/12 14:17 | 06/25/12 16:51 | 1       |
| Aroclor 1242                  | ND        |              | 1.0      |     | ug/L |                | 06/21/12 14:17 | 06/25/12 16:51 | 1       |
| Aroclor 1248                  | ND        |              | 1.0      |     | ug/L |                | 06/21/12 14:17 | 06/25/12 16:51 | 1       |
| Aroclor 1254                  | ND        |              | 1.0      |     | ug/L |                | 06/21/12 14:17 | 06/25/12 16:51 | 1       |
| Aroclor 1260                  | ND        |              | 1.0      |     | ug/L |                | 06/21/12 14:17 | 06/25/12 16:51 | 1       |
| Surrogate                     | MB MB     |              | Limits   |     |      | Prepared       | Analyzed       | Dil Fac        |         |
| DCB Decachlorobiphenyl (Surr) | %Recovery | Qualifier    | Limits   |     |      | 06/21/12 14:17 | 06/25/12 16:51 | 1              |         |
|                               | 82        |              | 45 - 120 |     |      |                |                |                |         |

Lab Sample ID: LCS 440-34404/2-A

Matrix: Water

Analysis Batch: 34988

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34404

| Analyte                       | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-------------------------------|-------------|------------|---------------|------|---|------|--------------|
| Aroclor 1016                  | 4.00        | 3.55       |               | ug/L |   | 89   | 50 - 115     |
| Aroclor 1260                  | 4.00        | 3.60       |               | ug/L |   | 90   | 60 - 120     |
| Surrogate                     | LCS LCS     |            | Limits        |      |   |      |              |
| DCB Decachlorobiphenyl (Surr) | %Recovery   | Qualifier  | Limits        |      |   |      |              |
|                               | 83          |            | 45 - 120      |      |   |      |              |

Lab Sample ID: LCSD 440-34404/3-A

Matrix: Water

Analysis Batch: 34988

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34404

| Analyte                       | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-------------------------------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| Aroclor 1016                  | 4.00        | 3.53        |                | ug/L |   | 88   | 50 - 115     | 1   | 30        |
| Aroclor 1260                  | 4.00        | 3.59        |                | ug/L |   | 90   | 60 - 120     | 0   | 25        |
| Surrogate                     | LCSD LCSD   |             | Limits         |      |   |      |              |     |           |
| DCB Decachlorobiphenyl (Surr) | %Recovery   | Qualifier   | Limits         |      |   |      |              |     |           |
|                               | 83          |             | 45 - 120       |      |   |      |              |     |           |

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 440-35508/1-A**  
**Matrix: Water**  
**Analysis Batch: 35724**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 35508**

| Analyte  | MB Result | MB Qualifier | RL     | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|-----------|--------------|--------|-----|------|---|----------------|----------------|---------|
| Lead     | ND        |              | 0.0050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:22 | 1       |
| Zinc     | ND        |              | 0.020  |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:22 | 1       |
| Nickel   | ND        |              | 0.010  |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:22 | 1       |
| Chromium | ND        |              | 0.0050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:22 | 1       |
| Cadmium  | ND        |              | 0.0050 |     | mg/L |   | 06/27/12 11:59 | 06/27/12 20:22 | 1       |

**Lab Sample ID: LCS 440-35508/2-A**  
**Matrix: Water**  
**Analysis Batch: 35724**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 35508**

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|------|---|------|--------------|
| Lead     | 1.00        | 0.996      |               | mg/L |   | 100  | 80 - 120     |
| Zinc     | 1.00        | 0.969      |               | mg/L |   | 97   | 80 - 120     |
| Nickel   | 1.00        | 0.978      |               | mg/L |   | 98   | 80 - 120     |
| Chromium | 1.00        | 0.995      |               | mg/L |   | 99   | 80 - 120     |
| Cadmium  | 1.00        | 1.03       |               | mg/L |   | 103  | 80 - 120     |

**Lab Sample ID: 440-15573-F-1-C MS**  
**Matrix: Water**  
**Analysis Batch: 35724**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total Recoverable**  
**Prep Batch: 35508**

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Lead     | ND            |                  | 1.00        | 0.986     |              | mg/L |   | 98   | 75 - 125     |
| Zinc     | 0.10          |                  | 1.00        | 1.04      |              | mg/L |   | 93   | 75 - 125     |
| Nickel   | 0.021         |                  | 1.00        | 0.955     |              | mg/L |   | 93   | 75 - 125     |
| Chromium | 0.039         |                  | 1.00        | 1.01      |              | mg/L |   | 97   | 75 - 125     |
| Cadmium  | ND            |                  | 1.00        | 1.03      |              | mg/L |   | 103  | 75 - 125     |

**Lab Sample ID: 440-15573-F-1-D MSD**  
**Matrix: Water**  
**Analysis Batch: 35724**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 35508**

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Lead     | ND            |                  | 1.00        | 0.963      |               | mg/L |   | 96   | 75 - 125     | 2   | 20        |
| Zinc     | 0.10          |                  | 1.00        | 1.04       |               | mg/L |   | 93   | 75 - 125     | 0   | 20        |
| Nickel   | 0.021         |                  | 1.00        | 0.957      |               | mg/L |   | 94   | 75 - 125     | 0   | 20        |
| Chromium | 0.039         |                  | 1.00        | 1.02       |               | mg/L |   | 98   | 75 - 125     | 1   | 20        |
| Cadmium  | ND            |                  | 1.00        | 1.01       |               | mg/L |   | 101  | 75 - 125     | 2   | 20        |

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

## GC/MS VOA

### Analysis Batch: 35961

| Lab Sample ID   | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-----------------|--------------------|-----------|--------|--------|------------|
| 440-15189-1     | B-7-W-20120615     | Total/NA  | Water  | 8260B  |            |
| 440-15189-1 MS  | B-7-W-20120615     | Total/NA  | Water  | 8260B  |            |
| 440-15189-1 MSD | B-7-W-20120615     | Total/NA  | Water  | 8260B  |            |
| 440-15189-2     | B-3-W-20120615     | Total/NA  | Water  | 8260B  |            |
| 440-15189-3     | B-4-W-20120615     | Total/NA  | Water  | 8260B  |            |
| 440-15189-4     | B-2-W-20120615     | Total/NA  | Water  | 8260B  |            |
| 440-15189-5     | B-8-W-20120615     | Total/NA  | Water  | 8260B  |            |
| LCS 440-35961/4 | Lab Control Sample | Total/NA  | Water  | 8260B  |            |
| MB 440-35961/3  | Method Blank       | Total/NA  | Water  | 8260B  |            |

## GC Semi VOA

### Prep Batch: 34359

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 440-14866-I-1-A MS  | Matrix Spike           | Total/NA  | Water  | 3510C  |            |
| 440-14866-I-1-B MSD | Matrix Spike Duplicate | Total/NA  | Water  | 3510C  |            |
| 440-15189-1         | B-7-W-20120615         | Total/NA  | Water  | 3510C  |            |
| 440-15189-2         | B-3-W-20120615         | Total/NA  | Water  | 3510C  |            |
| 440-15189-3         | B-4-W-20120615         | Total/NA  | Water  | 3510C  |            |
| 440-15189-4         | B-2-W-20120615         | Total/NA  | Water  | 3510C  |            |
| LCS 440-34359/2-A   | Lab Control Sample     | Total/NA  | Water  | 3510C  |            |
| MB 440-34359/1-A    | Method Blank           | Total/NA  | Water  | 3510C  |            |

### Analysis Batch: 34395

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 440-14866-I-1-A MS  | Matrix Spike           | Total/NA  | Water  | 8015B  | 34359      |
| 440-14866-I-1-B MSD | Matrix Spike Duplicate | Total/NA  | Water  | 8015B  | 34359      |
| LCS 440-34359/2-A   | Lab Control Sample     | Total/NA  | Water  | 8015B  | 34359      |
| MB 440-34359/1-A    | Method Blank           | Total/NA  | Water  | 8015B  | 34359      |

### Analysis Batch: 34396

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 440-15189-1   | B-7-W-20120615   | Total/NA  | Water  | 8015B  | 34359      |
| 440-15189-2   | B-3-W-20120615   | Total/NA  | Water  | 8015B  | 34359      |
| 440-15189-3   | B-4-W-20120615   | Total/NA  | Water  | 8015B  | 34359      |
| 440-15189-4   | B-2-W-20120615   | Total/NA  | Water  | 8015B  | 34359      |

### Prep Batch: 34404

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 440-15189-1        | B-7-W-20120615         | Total/NA  | Water  | 3510C  |            |
| 440-15189-2        | B-3-W-20120615         | Total/NA  | Water  | 3510C  |            |
| 440-15189-3        | B-4-W-20120615         | Total/NA  | Water  | 3510C  |            |
| 440-15189-4        | B-2-W-20120615         | Total/NA  | Water  | 3510C  |            |
| LCS 440-34404/2-A  | Lab Control Sample     | Total/NA  | Water  | 3510C  |            |
| LCSD 440-34404/3-A | Lab Control Sample Dup | Total/NA  | Water  | 3510C  |            |
| MB 440-34404/1-A   | Method Blank           | Total/NA  | Water  | 3510C  |            |

### Analysis Batch: 34910

| Lab Sample ID | Client Sample ID | Prep Type          | Matrix | Method | Prep Batch |
|---------------|------------------|--------------------|--------|--------|------------|
| 440-15189-1   | B-7-W-20120615   | Silica Gel Cleanup | Water  | 8015B  | 34950      |
| 440-15189-2   | B-3-W-20120615   | Silica Gel Cleanup | Water  | 8015B  | 34950      |
| 440-15189-3   | B-4-W-20120615   | Silica Gel Cleanup | Water  | 8015B  | 34950      |

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

## GC Semi VOA (Continued)

### Analysis Batch: 34910 (Continued)

| Lab Sample ID      | Client Sample ID       | Prep Type          | Matrix | Method | Prep Batch |
|--------------------|------------------------|--------------------|--------|--------|------------|
| 440-15189-4        | B-2-W-20120615         | Silica Gel Cleanup | Water  | 8015B  | 34950      |
| LCS 440-34950/2-A  | Lab Control Sample     | Silica Gel Cleanup | Water  | 8015B  | 34950      |
| LCSD 440-34950/3-A | Lab Control Sample Dup | Silica Gel Cleanup | Water  | 8015B  | 34950      |
| MB 440-34950/1-A   | Method Blank           | Silica Gel Cleanup | Water  | 8015B  | 34950      |

### Prep Batch: 34950

| Lab Sample ID      | Client Sample ID       | Prep Type          | Matrix | Method    | Prep Batch |
|--------------------|------------------------|--------------------|--------|-----------|------------|
| 440-15189-1        | B-7-W-20120615         | Silica Gel Cleanup | Water  | 3510C SGC |            |
| 440-15189-2        | B-3-W-20120615         | Silica Gel Cleanup | Water  | 3510C SGC |            |
| 440-15189-3        | B-4-W-20120615         | Silica Gel Cleanup | Water  | 3510C SGC |            |
| 440-15189-4        | B-2-W-20120615         | Silica Gel Cleanup | Water  | 3510C SGC |            |
| LCS 440-34950/2-A  | Lab Control Sample     | Silica Gel Cleanup | Water  | 3510C SGC |            |
| LCSD 440-34950/3-A | Lab Control Sample Dup | Silica Gel Cleanup | Water  | 3510C SGC |            |
| MB 440-34950/1-A   | Method Blank           | Silica Gel Cleanup | Water  | 3510C SGC |            |

### Analysis Batch: 34988

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 440-15189-1        | B-7-W-20120615         | Total/NA  | Water  | 8082   | 34404      |
| 440-15189-2        | B-3-W-20120615         | Total/NA  | Water  | 8082   | 34404      |
| 440-15189-3        | B-4-W-20120615         | Total/NA  | Water  | 8082   | 34404      |
| 440-15189-4        | B-2-W-20120615         | Total/NA  | Water  | 8082   | 34404      |
| LCS 440-34404/2-A  | Lab Control Sample     | Total/NA  | Water  | 8082   | 34404      |
| LCSD 440-34404/3-A | Lab Control Sample Dup | Total/NA  | Water  | 8082   | 34404      |
| MB 440-34404/1-A   | Method Blank           | Total/NA  | Water  | 8082   | 34404      |

## Metals

### Prep Batch: 35508

| Lab Sample ID       | Client Sample ID       | Prep Type         | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 440-15189-1         | B-7-W-20120615         | Total Recoverable | Water  | 3005A  |            |
| 440-15189-2         | B-3-W-20120615         | Total Recoverable | Water  | 3005A  |            |
| 440-15189-3         | B-4-W-20120615         | Total Recoverable | Water  | 3005A  |            |
| 440-15189-4         | B-2-W-20120615         | Total Recoverable | Water  | 3005A  |            |
| 440-15189-5         | B-8-W-20120615         | Total Recoverable | Water  | 3005A  |            |
| 440-15573-F-1-C MS  | Matrix Spike           | Total Recoverable | Water  | 3005A  |            |
| 440-15573-F-1-D MSD | Matrix Spike Duplicate | Total Recoverable | Water  | 3005A  |            |
| LCS 440-35508/2-A   | Lab Control Sample     | Total Recoverable | Water  | 3005A  |            |
| MB 440-35508/1-A    | Method Blank           | Total Recoverable | Water  | 3005A  |            |

### Analysis Batch: 35724

| Lab Sample ID       | Client Sample ID       | Prep Type         | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 440-15189-1         | B-7-W-20120615         | Total Recoverable | Water  | 6010B  | 35508      |
| 440-15189-2         | B-3-W-20120615         | Total Recoverable | Water  | 6010B  | 35508      |
| 440-15189-3         | B-4-W-20120615         | Total Recoverable | Water  | 6010B  | 35508      |
| 440-15189-4         | B-2-W-20120615         | Total Recoverable | Water  | 6010B  | 35508      |
| 440-15189-5         | B-8-W-20120615         | Total Recoverable | Water  | 6010B  | 35508      |
| 440-15573-F-1-C MS  | Matrix Spike           | Total Recoverable | Water  | 6010B  | 35508      |
| 440-15573-F-1-D MSD | Matrix Spike Duplicate | Total Recoverable | Water  | 6010B  | 35508      |
| LCS 440-35508/2-A   | Lab Control Sample     | Total Recoverable | Water  | 6010B  | 35508      |
| MB 440-35508/1-A    | Method Blank           | Total Recoverable | Water  | 6010B  | 35508      |

# Definitions/Glossary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description                  |
|-----------|--|
| *         | LCS or LCSD exceeds the control limits |
| F         | MS or MSD exceeds the 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  |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL            | Estimated Detection Limit  |
| EPA            | United States Environmental Protection Agency  |
| 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  |
| RL             | Reporting Limit  |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                       |
| TEF            | Toxicity Equivalent Factor (Dioxin)  |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)  |



# Certification Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Chevron - 9-9708

TestAmerica Job ID: 440-15189-1

| Laboratory         | Authority                | Program                     | EPA Region | Certification ID  |
|--------------------|--------------------------|-----------------------------|------------|-------------------|
| TestAmerica Irvine | Arizona                  | State Program               | 9          | AZ0671            |
| TestAmerica Irvine | California               | LA Cty Sanitation Districts | 9          | 10256             |
| TestAmerica Irvine | California               | NELAC                       | 9          | 1108CA            |
| TestAmerica Irvine | Guam                     | State Program               | 9          | Cert. No. 12.002r |
| TestAmerica Irvine | Hawaii                   | State Program               | 9          | N/A               |
| TestAmerica Irvine | Nevada                   | State Program               | 9          | CA015312007A      |
| TestAmerica Irvine | New Mexico               | State Program               | 6          | N/A               |
| TestAmerica Irvine | Northern Mariana Islands | State Program               | 9          | MP0002            |
| TestAmerica Irvine | Oregon                   | NELAC                       | 10         | 4005              |
| TestAmerica Irvine | USDA                     | Federal                     |            | P330-09-00080     |

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

1

2

3

4

5

6

7

8

9

10

11

12

## CHAIN OF CUSTODY FORM

17461 Derian Ave., #100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297  
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4687 FAX (909) 370-1046  
 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303  
 6000 S. Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

440-15189 138931

Temp 7.9, 1.9, 3.6°C

Page 1 of 1

| Client Name/Address:<br>ARCADIS / 320 Commerce, Suite 200<br>Irvine, CA 92602 |               |                | Project/PO Number:<br>B0066901.9708                          |               |               |               | Analysis Required |   |                 |                      |   |                             |             | Special Instructions                   |  |
|---|---------------|----------------|--|---------------|---------------|---------------|-------------------|---|-----------------|----------------------|---|-----------------------------|-------------|--|--|
| Project Manager:<br>Toni DeMayo<br>Sampler:<br>LK/BW                          |               |                | Phone Number:<br>714.908.2657<br>Fax Number:<br>714.730.9345 |               |               |               | TPH-MD (8015M)    | TPH-DRD (8015B)<br>w/ silicagel cleanup | TPH-DRD (8015B) | PTEX+TUBE<br>(8260B) | Cadmium, Chromium<br>Lead, Nickel, Zinc (6010B) | Halogenated VOCs<br>(8260B) | PCBs (8082) |  | TPH-MD (8015M)<br>w/ silicagel cleanup |
| Sample Description  | Sample Matrix | Container Type | # of Cont.   | Sampling Date | Sampling Time | Preservatives | TPH-MD (8015M)    | TPH-DRD (8015B)<br>w/ silicagel cleanup | TPH-DRD (8015B) | PTEX+TUBE<br>(8260B) | Cadmium, Chromium<br>Lead, Nickel, Zinc (6010B) | Halogenated VOCs<br>(8260B) | PCBs (8082) | TPH-MD (8015M)<br>w/ silicagel cleanup | Special Instructions                   |
| B-1-W-20120615  | W             | variety        | 9  | 6/15/12       | 1217          | HELMND, -     | X                 | X                                       | X               | X                    | X   | X                           | X           | X                                      |  |
| B-3-W-20120615  | W             | variety        | 9  | 6/15/12       | 1525          | "             | X                 | X                                       | X               | X                    | X   | X                           | X           | X                                      |  |
| B-4-W-20120615  | W             | variety        | 9  | 6/15/12       | 1545          | "             | X                 | X                                       | X               | X                    | X   | X                           | X           | X                                      |  |
| B-2-W-20120615  | W             | "              | 8  | 6/15/12       | 1630          | "             | X                 | X                                       | X               | X                    | X   | X                           | X           | X                                      |  |
| B-8-W-20120615  | W             | "              | 4  | 6/15/12       | 1650          | "             |                   |   |                 | X                    | X   | X                           |             |  |  |

|                  |                          |                     |                         |   |
|------------------|--------------------------|---------------------|-------------------------|---|
| Relinquished By: | Date/Time: 6/15/12 1834  | Received By:        | Date/Time: 6/15/12 1834 | Turnaround Time: (Check)<br>same day _____ 72 hours _____<br>24 hours _____ 5 days _____<br>48 hours _____ normal <input checked="" type="checkbox"/> |
| Relinquished By: | Date/Time: 6-19-12 17:00 | Received By:        | Date/Time:              |   |
| Relinquished By: | Date/Time:               | Received in Lab By: | Date/Time: 6/20/12 9:40 |   |

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days. 5.4°C



## Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 440-15189-1

**Login Number: 15189**

**List Number: 1**

**Creator: Perez, Angel**

**List Source: TestAmerica Irvine**

| Question   | Answer | Comment |
|--|--------|---------|
| Radioactivity either was not measured or, if measured, is at or below background | N/A    |         |
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | N/A    |         |
| 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 sample IDs on the containers and the COC. | True   |         |
| Samples are received within Holding Time.  | True   |         |
| Sample containers have legible labels.   | True   |         |
| Containers are not broken or leaking.  | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.  | True   |         |
| Sample bottles are completely filled.  | True   |         |
| Sample Preservation Verified.  | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.     | True   |         |
| Multiphasic samples are not present.   | True   |         |
| Samples do not require splitting or compositing.                                 | N/A    |         |
| Residual Chlorine Checked.   | N/A    |         |

