



**PHASE II ENVIRONMENTAL  
SITE ASSESSMENT REPORT  
SMUD CORPORATION YARD  
1708 59<sup>TH</sup> STREET  
SACRAMENTO, CALIFORNIA**

February 25, 2016

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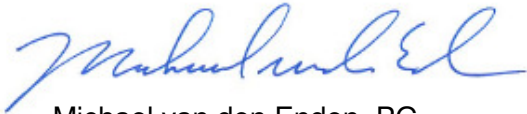
A Report Prepared for:

Sacramento Municipal Utility District  
Mr. Patrick Durham  
Director, Environmental Management  
6201 S Street, Mail Stop B203  
Sacramento, CA 95817

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SACRAMENTO, CALIFORNIA**

Kleinfelder Job No. 138810.001A

Prepared by:



Michael van den Enden, PG  
Project Geologist



Julie Hernandez, GIT  
Staff Geologist

Reviewed By:



Lizanne Simmons, PG  
Principal Geologist



Sue Gardner, PG  
Project Manager



**KLEINFELDER, INC.**  
3077 Fite Circle  
Sacramento, CA 95827  
(916) 366-1701

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## 1 EXECUTIVE SUMMARY

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This Phase II Environmental Site Assessment Report describes activities performed between April and December 2015 at the Sacramento Municipal Utility District (SMUD) Corporation Yard, located at 1708 59<sup>th</sup> Street in Sacramento, California (Site).

The purpose of the environmental assessment was to evaluate areas of the Site where past and/or current activities (truck garage, transformer repair or maintenance, vehicle storage, etc.) may have chemically-impacted soil gas, soil, or groundwater, in preparation for possible Site redevelopment. The scope of work was based on Kleinfelder's *Draft Phase II Environmental Site Assessment Workplan (Work Plan)*, dated May 4, 2015.

Investigation activities were conducted in general accordance with United States Environmental Protection Agency (USEPA) and Department of Toxic Substances Control (DTSC) guidelines and recognized industry standards.

Investigation activities included passive soil gas, active soil gas, soil and groundwater sampling and analysis. Results were compared to the 2013 San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Environmental Screening Levels (ESLs) and California State Water Resources Control Board (SWRCB) Primary Maximum Contaminant Levels (MCLs) for drinking water.

### *Soil Gas Samples*

Tetrachloroethene (PCE) was detected above the residential ESL of 210  $\mu\text{g}/\text{m}^3$  (micrograms per cubic meter) in samples collected from locations KA-2-S-SV (220  $\mu\text{g}/\text{m}^3$ ) and KA-19-S-SV (240  $\mu\text{g}/\text{m}^3$ ). Additionally, concentrations of PCE were above the commercial ESL of 2,100  $\mu\text{g}/\text{m}^3$  in original and duplicate samples collected from location KA-17-H-SV at concentrations of 15,000  $\mu\text{g}/\text{m}^3$  and 14,000  $\mu\text{g}/\text{m}^3$ , respectively.

Ethylbenzene was detected above the residential ESLr of 490  $\mu\text{g}/\text{m}^3$  at location KA-2-S-SV at a concentration of 860  $\mu\text{g}/\text{m}^3$ .

The active soil gas sampling results for PCE generally correlated with those concentrations reported from the passive soil gas (PSG) samples, and appear to be present in the north central area of the Site.

### *Soil Samples*

Arsenic was detected above the residential direct contact ESL of 0.39 mg/kg in each of the 106 samples. While these concentrations exceeded the ESL, they are consistent with reports of naturally occurring concentrations of metals in California (Bradford et al., 1996). In addition, according to the DTSC, if soil arsenic concentrations are less than or equal to 12 mg/kg, arsenic can be eliminated as a chemical of potential concern (Chernoff et al., undated). In 97 of the 106 samples, arsenic was below 12 mg/kg. In the remaining nine samples, arsenic was detected above typical background levels (12 mg/kg) at concentrations ranging from 14 mg/kg to 110 mg/kg.

With the exception of arsenic, soils sampled at the Site did not appear to be impacted above ESLs for residential or commercial sites where water is a current or potential source of drinking water.

Arsenic concentrations exceeding background were from shallow soils collected in the northern central portion of the Site. These concentrations ranged from 14 mg/kg (in location KA-19 at 6 feet bgs) to 110 mg/kg (in location KA-50 at 3 feet bgs).

### *Groundwater Samples*

TPH-diesel was detected above the ESL of 100 µg/L in two samples, at concentrations of 230 µg/L in sample KA-7-D and 330 µg/L in sample KA-42-D. TPH-motor oil was detected above the ESL of 100 µg/L in sample KA-42-D at a concentration of 470 J µg/L.

Low concentrations of metals including cobalt, copper, nickel, silver, and vanadium were reported at or above their respective residential and commercial ESLs. The detected concentrations did not exceed respective MCLs where established.

### *Recommendations*

Based on the PCE concentrations in soil gas, Kleinfelder recommends that additional soil vapor sampling be conducted in the vicinity of the Garage Building and the Tool Issue Building, to evaluate the lateral and vertical extent of PCE in this area. We also recommend soil vapor sampling south-southwest of location KA-18-S near the southwest corner of the Tool Issue Building and below subgrade within the buildings foot print to assess for indoor air vapor concerns.

## 2 BACKGROUND

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### 2.1 SITE DESCRIPTION

The former SMUD Corporation Yard (SCY) is an approximately 20-acre property located at 1708 59<sup>th</sup> Street in Sacramento, California (Figure 1). Prior to SMUD's purchase in 1947, the property was owned and operated as a corporation yard by the Pacific Gas and Electric Company (PG&E). Both PG&E and SMUD have stored hazardous and non-hazardous waste and materials at the Site.

### 2.2 REGIONAL AND LOCAL GEOLOGY

The Site is located in Sacramento in Township 8 north, Range 5 east, in Section 9 (Mount Diablo Meridian) and the approximate elevation of the Site is an average of 30 feet above average mean sea level (msl). The Site is located in the Great Valley Geomorphic Province which is characterized by northwest-trending structural trough filled with up to 10 vertical miles of marine and non-marine sediments which were deposited by the Sacramento River which leads to the Delta and San Francisco Bay. The Geomorphic Province is underlain by interbedded Holocene aged non-marine alluvial deposits. Near surface deposits consist of a heterogeneous assemblage of fluvial deposits composed of gravels, sands, silts, and clays and flood plain deposits composed of sands and silts.

Data from the investigation and public records at neighboring sites indicate that groundwater is typically encountered at depths between 30 to 45 feet below ground surface (bgs). Groundwater flow direction is south to south-southwest.

### 2.3 HYDROGEOLOGY

Municipal drinking water wells draw from depths of approximately 100 to 400 feet bgs. Although many municipal wells are located between two and three miles from the Site, no active drinking water wells were confirmed to exist within two miles of the Site (AECOM DRAFT RCRA Facility Investigation Workplan, dated July 2013). Several private domestic wells were installed within two miles of the Site during the 1950s. Well logs for these installations are generally incomplete. Available information indicates that the wells were completed to depths of

approximately 75 to 200 feet. The area where these wells are located is now served by the City of Sacramento, which derives its water from groundwater sources more than two miles away from the Site and from surface water from the American River and the Sacramento River (AECOM, 2013). Groundwater generally flows in a south-southwest direction, although it may be affected by the American River. The shallow aquifer has a velocity of approximately 50 to 60 feet per year. The lower aquifer has a velocity of approximately 10 to 15 feet per year (AECOM, 2013).

### **3 PRE-FIELD ACTIVITIES**

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#### **3.1 HEALTH AND SAFETY PLAN**

Prior to conducting the investigation, Kleinfelder developed a site-specific health and safety plan (HASP) for on-Site activities. The HASP identified key project personnel, potential health and safety concerns, and appropriate PPE levels. The HASP was reviewed and signed by Kleinfelder personnel, observers and subcontractor personnel each day prior to beginning activities.

#### **3.2 UNDERGROUND UTILITY CLEARANCE**

Sample locations were marked with white paint and Underground Service Alert (USA) was notified by both Kleinfelder and Taber Drilling of the proposed sampling locations at least 72 hours before the start of sampling. The USA Ticket (No. 151124) was kept active throughout the investigation. Kleinfelder reviewed as-built drawings of the Site provided by SMUD. Kleinfelder also contracted with Cruz Brothers Locators to mark utilities in the vicinity of the boring locations. Prior to the start of soil sampling activities, Kleinfelder also conducted a field meeting with SMUD's internal utility clearance personnel to review sampling locations.

#### **3.3 PHOTO SURVEY**

On April 1 and 2, 2015, Kleinfelder performed a visual inspection and photo survey prior to beginning the sub-surface exploration and sampling work. The purpose of the inspection was to obtain information for refinement of the specific tasks of the investigation. Such information included sample location access, surface materials, overhead power lines, and building entry limitations. The Site inspection and photo survey was conducted in conjunction with the private utility locating and USA of the Site. The Photo Survey is included in Appendix A.

#### **3.4 PERMITTING AND SUBCONTRACTOR COORDINATION**

Prior to advancing the borings for the Phase II Environmental Site Assessment (ESA) sampling activities, Kleinfelder obtained an environmental assessment drilling permit from the



Sacramento County Environmental Management Department (SCEMD). A copy of the approved permit is included in Appendix B.

## 4 FIELD ACTIVITIES

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Field activities were conducted from April through December 2015. Field activities included the following sampling:

- Thirty-seven (37) PSG locations
- Twenty-three (23) hand auger borings
- Seventeen (17) shallow soil borings
- Nine (9) deeper soil and groundwater borings
- Six (6) active soil gas (ASG) locations

Rationale for sampling locations (Figures 2 and 3) is presented in Table 1.

*Please note that one sampling location was originally intended to be a shallow boring but was later converted into a hand auger boring; however, the name of the boring was not changed. See Section 4.3, below, for further explanation.*

### 4.1 PASSIVE SOIL GAS SURVEY

Kleinfelder used PSG modules which collect soil gas in absorbent material to obtain preliminary data for potential soil gas contamination. PSG sample locations were selected in areas most likely to have been impacted based on the Site's past practices and with the understanding that the radius of detection can vary considerably depending on shallow sub-surface soils lithology and permeability. PSG analysis provides qualitative results. The results are typically then used to select locations for the collection of ASG in canisters. ASG analysis provides quantitative data.

To perform the initial screening, 37 PSG samplers were installed at locations identified on Figure 2. On April 8 and 9, 2015, the modules were installed in a narrow 3/4-inch pilot hole drilled with a roto-hammer to depths of between two to three feet bgs in native soil. Removal and backfilling of the pilot holes was completed on April 13 and 14, 2015.

## 4.2 ACTIVE SOIL GAS SAMPLING

Following receipt and review of PSG survey results and preliminary indications of contamination, six locations were selected for ASG sampling. Locations are presented in Figure 2. Soil gas probe installation, purging, and sampling was conducted in general accordance with state DTSC guidelines and is described below.

### 4.2.1 Probe Installation

On June 11 and 12, 2015, temporary soil gas tips and tubes were installed as sampling probes. Probes consisted of a new stainless steel screened tip attached to new ¼-inch diameter Teflon tubing. Probes were installed into borings advanced to 5-feet bgs using a hand auger. Prior to installing each probe, approximately 6 inches of #3 sand was added to the 5-foot deep borehole. The probe was then lowered inside the borehole to approximately 4.5 feet bgs, and then another 6 inches of sand was placed in the annulus between the probe and the borehole sidewalls. The remaining annulus was filled with bentonite to just below ground surface. The bentonite was hydrated with deionized water at 1 foot increments. The above ground end of the tubing was capped and a cone was placed over the top for protection while the bentonite was allowed to hydrate.

### 4.2.2 Pre-sampling Purging and Leak Checking

On June 18 and 19, 2015 Kleinfelder mobilized to the Site to collect samples from the soil gas probes. Sampling for volatile organic compounds (VOCs) was conducted using certified “clean” sampling equipment provided by Eurofins / Air Toxics, a subcontractor of BC Labs. The equipment included 6 liter (L) stainless steel SUMMA™ canisters, flow meters and sample manifolds, and sorbent tubes. The equipment was inspected by Kleinfelder prior to sampling.

Prior to sampling with the SUMMA™ canisters, equipment was leak checked by assembling the sample train, applying a vacuum, and monitoring the vacuum for 30 minutes (shut-in test). During the shut-in test, if vacuum is maintained the equipment is considered suitable for sampling. Each of the sampling trains passed this test.

Following the shut-in test, the void space inside of the tubing and pore/void space of the sand pack around the probe was purged of a minimum of three volumes (approximately 2 liters) of air to remove ambient air that may have been introduced during probe construction.

Purging was performed using a vacuum pump set at a flow of 100 to 200 milliliters per minute (ml/min). The surface seal leak check is conducted during purging by placing a semi-clear plastic shroud over the seal and filling the shroud with helium. Once the atmosphere achieved a minimum of 10% helium, a soil gas sample was drawn from the tubing into a Tedlar bag and a reading of the helium concentration in the Tedlar bag was recorded in field sheets included in Appendix C. The DTSC advisory on soil gas sampling suggests that a maximum reading of 5% (of the percentage helium in the shroud) is acceptable during the test. Helium readings were collected using a MGD2002 helium detector. The MGD2002 is capable of reading helium concentrations of 1 part per million (ppm) and upward. Helium was not detected above the minimum reading of 1 ppm in the Tedlar bag samples.

#### 4.2.3 Sample Collection

Following purging, a sample of soil gas was collected in a certified clean 6L stainless steel SUMMA™ canister. The canister and flow controller were attached to the sample tubing and the shroud encasing the canister was infused with helium. After the concentration of helium reached a minimum of 10%, the valve on the canister was opened, and the sample was collected. Following sampling, each canister was labeled and returned to its original packaging. Initial and final canister vacuum readings were recorded on each label. During each day of sampling, an ambient air sample was also collected in a 6L SUMMA™ canister (two total). In addition, one Quality Control duplicate sample was collected at location KA-17-H.

On July 1, 2015, additional soil gas was sampled from each probe using glass sorbent tubes. Prior to sampling, approximately one purge volume of soil gas was purged from each sample location. Samples were collected by connecting sample tubing to glass sorbent tubes with new silicon tubing. Approximately 1 liter of soil gas was pulled through the sorbent tube using a 60 ml syringe. Following sample collection, the sorbent tubes were capped, labeled and placed in a cooler with ice pending transport to the analytical lab.

The soil gas samples were transported using chain-of-custody protocols to BC Labs for analysis.

The temporary soil gas probes have been left in place for potential resampling until this report is received and reviewed by SMUD.

### 4.3 SHALLOW SOIL BORINGS AND SAMPLING

To assess for potential chemical impacts in near surface and shallow soil, Kleinfelder advanced 23 hand auger borings to approximately 5 feet bgs and drilled 16 hollow stem auger borings to approximately 20 feet bgs. Hand auger and shallow boring locations were cored prior to drilling by National Concrete on May 18 through 20, 2015 (Figure 3).

*Please note that initially 22 hand auger sample locations were assigned identification numbers followed by the letter "H". Similarly, shallow soil borings were given an identification letter of "S" and deeper borings a letter "D". During the investigation, all borings were hand augered to an initial depth of 5-feet for utility clearance. Boring KA-8-S was intended to be a shallow soil boring (see section 4.3.2 below); however, due to the close proximity of underground utilities the boring was changed to a hand auger boring (as discussed in section 4.7 below). In this report, this location remains identified with an "S" but the boring was advanced as a hand auger boring and results are compared to "H" borings for consistency.*

#### 4.3.1 Five Foot Borings ("H" Borings plus KA-8-S)

On May 18 through 20, 2015, 23 borings were advanced to a maximum depth of 5 feet bgs using hand auger methods to assess for potential chemical impacts in the near surface soil. The borings were advanced at locations throughout the Site (Figure 3). Samples were collected using a slide hammer with barrel lined by stainless steel tubes at depths of 1-foot and 5-feet bgs unless refusal was met in which case a sample was collected at the bottom of boring. During auguring, a photoionization detector (PID) was used to provide a qualitative screening of the soil samples for VOCs. The PID measures ionizing compounds in the air in parts per million by volume (ppmv), and typically aids in the selection of samples to be submitted for laboratory analysis. PID readings were recorded on field data sheets included in Appendix C. The soils retrieved from each boring were logged by a Kleinfelder field geologist for descriptions of lithology and lithologic changes. Boring logs are included as Appendix D.

Samples were labeled with a unique identifier and placed in a cooler with ice pending transfer under chain-of-custody control to BC Laboratories, Inc. (BC Lab) of Bakersfield, California. After completion, the borings were backfilled to ground surface with neat cement grout.

#### 4.3.2 Twenty Foot Borings (“S” Borings minus KA-8-S)

On June 1 through 3, 2015, Kleinfelder retained the services of Taber Drilling, a California licensed C-57 contractor, to drill sixteen 20-foot soil borings using a hollow stem auger (HSA) drill rig equipped with 6-inch augers (Figure 3). Samples were collected at 5-foot intervals using stainless steel sleeves. During drilling, a PID was used to provide a qualitative screening of the soil samples. The PID measures ionizing compounds in the air in ppmv, and typically aids in the selection of samples to be submitted for laboratory analysis. PID readings were recorded on field data sheets (Appendix C). To reduce the potential for cross-contamination between the borings, equipment was cleaned with non-phosphate soap and rinsed with distilled water prior to advancing each location.

The soils retrieved from each boring were logged by a Kleinfelder field geologist for descriptions of lithology and lithologic changes. Boring logs are included as Appendix D. Samples were labeled with a unique identifier and placed into a cooler with ice pending transfer under chain-of-custody control to BC Labs. After completion, the borings were backfilled to ground surface with neat cement grout.

#### 4.4 DEEPER SOIL BORINGS (“D” BORINGS)

On May 21 through 29, 2015, nine deeper borings were advanced to groundwater to assess the potential presence and migration of chemicals to soils deeper than 20 feet and into the groundwater. Deeper soil boring locations were cored prior to drilling by National Concrete on May 18 through 20, 2015. Soil samples were collected at 5-foot intervals using stainless steel sleeves to a depth of approximately five feet into first encountered groundwater. During drilling, a PID was used to provide a qualitative screening of the soil samples. The PID measures ionizing compounds in the air in ppmv, and typically aids in the selection of samples to be submitted for laboratory analysis. PID readings were recorded on field data sheets (Appendix C). To reduce the potential for cross-contamination between the borings, equipment was cleaned with non-phosphate soap and rinsed with distilled water prior to advancing each location.

The soils retrieved from each boring were logged by a Kleinfelder field geologist for descriptions of lithology and lithologic changes. Boring logs are included as Appendix D. Samples were labeled with a unique identifier and placed into a cooler with ice pending transfer under chain-of-custody control to BC Labs.

Upon completing the deeper borings to total depth, temporary well points were installed in each boring prior to collecting groundwater samples. Each temporary well point consisted of new, 2-inch-diameter PVC casing with 2 feet of 0.020-inch slotted screen at the bottom of the casing. The filter pack consisted of #3 Monterey and was placed 1-foot past the screen. Two to three feet of bentonite was placed above the filter pack. Construction details for the wells are shown in Table 2. The temporary wells were covered at the surface to protect groundwater from potential down-hole contamination.

Following installation, the coordinates for the PVC well casings were surveyed by SMUD so that depth-to-groundwater measurements in the wells can be converted to groundwater elevations. Survey data is presented in Table 3.

#### 4.5 WATER SAMPLING

On June 1 and 2, 2015, the nine temporary wells were sampled. Prior to sampling the temporary wells, the depth to groundwater were measured with a conductivity-based water level indicator. The water level indicator was cleaned prior to use in each well to reduce the potential for cross-contamination. Measurements were made to the surveyed mark on the north rim of the PVC casings. The depth-to-groundwater measurements were recorded on field data sheets located in Appendix C.

The volume of water in each well was calculated, and each well was purged of at least three well casing volumes of water prior to the collection of each sample. The well purge water was contained pending receipt of analytical results. Groundwater samples were collected from each temporary well using clean, single use plastic bailers to transfer water into bottles prepared by the analytical laboratory. The groundwater sample containers were labeled and placed in a cooler with ice, pending transfer under chain-of-custody control to BC Labs.

Following completion of sampling, the temporary casings were removed and the borings were backfilled to ground surface with neat cement grout through a tremie pipe, in accordance with SCEMD permit requirements. A SCEMD representative was onsite to observe grout placement.

Additional groundwater sampling was deemed necessary for further characterization of metals in groundwater. This sampling was performed on December 9, 10 and 11, 2015. Samples

were collected at the same initial locations of the temporary wells. Cone penetration test (CPT) equipment was hydraulically driven to selected depths using a Hydropunch™ sampler. At each sample location, the sampler was advanced to the desired depth, after which the rods were pulled back approximately 2 feet to allow groundwater to flow into the borehole. A small diameter stainless steel bailer was then used to recover groundwater samples. Groundwater samples were then filtered with 0.45 micron filter and transferred into laboratory-prepared bottles, sealed, labeled, and placed in a cooler with ice pending transfer to the analytical laboratory.

Following completion of sampling, the borings were backfilled to ground surface with neat cement grout through a tremie pipe, in accordance with SCEMD permit requirements. A SCEMD representative was on Site to observe grout placement.

#### 4.6 DECONTAMINATION PROCEDURES

Decontamination procedures for sampling equipment were conducted to assure that analytical data is representative of Site conditions. Disposable equipment intended for one-time use (i.e. disposable bailers used for groundwater sampling) were not decontaminated, but were packaged for appropriate disposal. Decontamination in the form of steam cleaning occurred prior to and after each use of a piece of equipment associated with auger drilling. Sampling devices used for hand auguring, including trowels and augers were decontaminated with deionized water and non-phosphate soap.

#### 4.7 FIELD VARIENCES

In Kleinfelder's work plan dated May 4, 2015, Kleinfelder proposed collecting duplicate samples, equipment blanks, and trip blanks in the field for laboratory analysis. Field duplicates were not collected. Kleinfelder instructed BC Labs to prepare lab duplicates from 11 soil samples (KA-8-S-2, KA-14-S-6, KA-14-S-16, KA-18-S-6, KA-18-S-11, KA-19-S-6, KA-19-S-16, KA-23-S-6, KA-23-S-11, KA-24-S-6, and KA-24-S-11) that were submitted for analysis. Results for the duplicate analysis are shown on Tables 4 and 5. Duplicate samples were named using the original sample ID and a suffix of the letter "D" (i.e. KA-8-S-2D is a duplicate for sample KA-8-S-2). Equipment blanks and trip blanks were not collected.

In the May 2015 work plan Kleinfelder proposed installing 38 PSG sample locations, hand auguring 23 locations, and drilling 18 shallow borings to 20 feet bgs for soil sampling. Thirty-



seven PSG locations were installed and sampled (PSG-16 was omitted). One shallow boring (KA-39-S) was removed by SMUD due to close proximity to underground utilities and one shallow boring was converted to a hand auger boring (KA-8-S) for similar reasons. One hand auger boring was removed (KA-12-H) by SMUD due to the close proximity of underground utilities, reducing the total to 22 borings; however, as mentioned above, boring KA-8-S was changed to a hand auger boring bringing the total of hand auger borings to 23.

## 5 LABORATORY ANALYSIS

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Soil gas, soil and groundwater samples were analyzed for hydrocarbons, metals, pesticides and PCBs as described below.

### 5.1 PASSIVE SOIL GAS

Thirty-seven shallow passive soil gas samples plus two trip blanks were submitted under chain-of-custody control to Amplified Geochemical Imaging, LLC. (AGI) of Elkton, Maryland, operating under the guidelines of its ELAP accreditation. The samples were analyzed for total petroleum hydrocarbons (TPH), select VOCs, semi-volatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs). Samples were analyzed using thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) instrumentation following USEPA Method 8260 (SPG-WI-0292). TPH values include the entire chromatogram and provide estimates for aliphatic hydrocarbon ranges of C4 to C20.

### 5.2 ACTIVE SOIL GAS

Nine soil gas samples, including two ambient air samples and one duplicate sample, were submitted under chain-of-custody control to BC Laboratories, Inc. (BC), of Bakersfield, California, a California certified laboratory (ELAP #1186). The samples were analyzed by a subcontractor to BC Laboratories (Eurofins Air Toxics) and tested by the following methods, except for analysis for TPH Diesel (TPH-d) which was analyzed by BC:

- Full Scan VOCs by gas chromatography (GC) and mass selective detection (MS), (gas samples) by USEPA Test Method TO-15 SIM.
- Total Petroleum Hydrocarbons as gasoline (TPH-g), Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) and Oxygenates (gas samples) by USEPA Test Method TO-3.
- TPH-d by USEPA Test Method TO-17.
- Helium (tracer compound) by ASTM Test Method D-1946.

### 5.3 SOIL AND GROUNDWATER

BC Labs was directed to analyze 108 soil samples from hand auger, shallow borings, and deeper borings and nine groundwater samples for one or more of the following constituents using the indicated USEPA Test Methods:

- TPH-g , VOCs including BTEX by USEPA Test Method 8260
- TPH-d to Motor Oil (TPH-d-mo), Oil and Grease by USEPA Test Method 8015
- SVOCs including Naphthalene and PAHs by USEPA Test Method 8270
- Polychlorinated Biphenyls (PCBs) by USEPA Test Method 8082
- California Administrative Manual (CAM) 17 Metals by USEPA Test Method 6000/7000 Series
- Copper Napthenate by USEPA Test Method 200.8
- Organochlorine Pesticides (OCPs) by USEPA Test Method 8081

Samples were submitted on a standard turnaround time. Copies of analytical laboratory reports and chain-of-custody forms are included in Appendix E.

## 6 RESULTS

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Analytical results for the samples analyzed are summarized in Tables 3 through 7. Results for samples with reported concentrations above the laboratory reporting limits are summarized below. Results reported above the 2013 San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) ESLs, California State Water Resources Control Board (SWRCB) Primary Maximum Contaminant Levels (MCLs) for drinking water, or typical background values (for arsenic) are reported in the tables in bold and discussed below. It is important to note that the Site is located within the jurisdiction of the Central Valley Regional Water Quality Control Board (CVRWQCB). Because CVRWQCB has not established ESLs, SFBRWQCB ESLs are typically used as screening tools for constituents of concern.

Results that are greater than the practical quantitation limit (PQL) but less than the method detection limit (MDL) are identified by a “J”. The J flag results are laboratory-estimated values based on instrumentation capabilities.

Cross-section locations are depicted on Figure 4 and cross-sections A-A’ and B-B’ are depicted in Figure 5 and Figure 6, respectively.

Concentration contour maps were prepared for PCE reported in shallow soil vapor (Figure 7) and arsenic in soil (Figures 8). Concentration contours are an interpretive, graphical representation of the distribution of specific constituents in soil and soil gas. This graphical interpretation is based on a limited dataset, limited in both number and physical distribution. These limitations affect how this graphical depiction may be used. These graphics may not be used to predict constituent concentrations at a specific location or area. An appropriate use of these graphics is to compare it with others generated at different times to assess, over a specific period of time, whether or not a constituent’s distribution is increasing/decreasing in size, and/or increasing/decreasing in concentration.

### 6.1 SUMMARY OF SOIL VAPOR ANALYTICAL RESULTS

#### Passive Soil Gas

Results of the PSG sampling were used to select the locations of the six active soil gas sampling locations. Sample results (tables and concentration maps) presented in Appendix F

were compared to the results of the ASG samples. Results of the PSG samples that indicated the presence of PCE, generally correlated with those concentrations reported from the ASG samples.

### Active Soil Gas

Six soil vapor, two ambient air, and one duplicate sample (nine total samples) were collected on June 18 and 19 and July 1, 2015. Each sample was submitted for analysis.

Sample results were compared to SFBRWQCB ESLs from Table E-2 for soil gas screening levels for the evaluation of potential vapor intrusion for residential and commercial land use. Sample results are presented in Table 5.

Results for samples with reported concentrations above the ESLs are summarized below.

- PCE was reported above the residential ESL in samples collected from locations KA-2-S (220  $\mu\text{g}/\text{m}^3$ ) and KA-19-S (240  $\mu\text{g}/\text{m}^3$ ). The sample collected at KA-17-H, along with the duplicate sample, were reported above the commercial ESL at concentrations of 15,000  $\mu\text{g}/\text{m}^3$  and 14,000  $\mu\text{g}/\text{m}^3$ , respectively. See Figure 7 for an aerial depiction of PCE concentrations in soil gas.
- Ethylbenzene was reported in sample KA-2-S at a concentration of 860  $\mu\text{g}/\text{m}^3$ , exceeding the residential ESL of 490  $\mu\text{g}/\text{m}^3$ .
- Helium (tracer gas) was detected in sample KA-2-S-SV at a concentration of 0.34  $\mu\text{g}/\text{m}^3$ . The helium detected is below the maximum reading of 5% of the applied helium (12.5%) noted in the DTSC advisory on soil gas sampling.

## 6.2 SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS

Kleinfelder analyzed 106 soil samples from hand auger, shallow borings, and deeper borings. Sample locations, identification numbers, depths and dates collected are presented in Tables 3 and 4.

Sample results were compared to ESLs for shallow soil (less than or equal to 3 meters) where groundwater is a current or potential drinking water source for residential and commercial land use, from Tables A-1 and A-2, respectively. Deeper soil samples were compared to ESLs for

deep soil (greater than 3 meters), where groundwater is a current or potential drinking water source for residential and commercial land use, from Tables C-1 and C-2, respectively.

Results for samples with reported concentrations above the ESLs are summarized below.

- A VOC in the form of methylene chloride was detected above the residential and commercial ESLs in four samples with concentrations ranging from 0.082 mg/kg in sample KA-40-S-6-D and 0.15 mg/kg in sample KA-38-S-11-D. It should be noted that methylene chloride is a common laboratory contaminant.
- Arsenic was detected above the residential ESL in the 106 soil samples analyzed and above the commercial ESL in 98 soil samples. Arsenic concentrations ranged from 0.65J in sample KA-42-D-26 to 110 mg/kg in KA-50-H-3. Arsenic concentrations at approximately 12 mg/kg or less are considered typical for background soils in California (Bradford et al., 1996). Nine of the 106 samples contained arsenic above the ESLs and typical background concentrations. See Figure 8 for an aerial depiction of arsenic concentrations above background levels in soil.

### 6.3 SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS

Kleinfelder collected nine groundwater samples from temporary wells. Well constructions details, depths to groundwater, survey and groundwater elevations for each temporary well are detailed on the attached Table 2. The groundwater was calculated to flow in a south to south-southwesterly direction, at a gradient of approximately 0.001 foot per foot (ft/ft). A groundwater contour map for the Site is included on Figure 9.

Sample results were compared to Primary MCLs, ESLs from Tables F-1a for final groundwater screening levels where groundwater is a potential drinking water source and from Table F-1b for final groundwater screening levels where groundwater is not a potential drinking water source. Sample results are summarized in Tables 6 and 7.

Results for samples with reported concentrations above the ESLs are summarized below.

- TPH-d was reported in two samples at concentrations of 230 µg/L in sample KA-7-D and 330 µg/L in sample KA-42-D. Both TPH-d samples were reported above the MCL and ESL of 100 µg/L.

- TPH-motor oil was reported in sample KA-42-D at a concentration of 470 J  $\mu\text{g/L}$ , which is above the MCL and ESL of 100  $\mu\text{g/L}$ .
- Low concentrations of metals including cobalt, copper, nickel, silver, and vanadium were reported at or above their respective residential and commercial ESLs. The detected concentrations did not exceed respective MCLs where established.

#### 6.4 SITE CONCEPTUAL MODEL

Site conceptual models (SCM) identify potential exposure pathways which describe the course a chemical could take from a source to a receptor. To be complete, an exposure pathway must exhibit the following characteristics:

- Source;
- Release Mechanisms (primary, secondary, etc.);
- Transport Mechanisms (primary, secondary, etc.);
- Exposure Media;
- Exposure Routes; and
- Receptor Groups.

Therefore, the SCM presents the means by which a receptor may come into contact with chemicals of potential concern. Where exposure pathways are determined to be incomplete and exposure does not occur, then there is no risk or hazard. Thus, certain exposure pathways may be eliminated from consideration in the exposure assessment.

Based on the results of this Phase II environmental site assessment a preliminary SCM has been created (Figure 10). The exposure pathways expected to be complete under current and likely future land uses are limited to direct contact with soil (ingestion and dermal contact) and inhalation of dust released to the breathing zone by wind erosion or mechanical disturbance (e.g., excavation). Dust inhalation is possible for all receptor categories, dermal contact is possible for on-Site intrusive workers and ecological receptors, and ingestion is possible for ecological receptors.

The primary data gaps identified included potential inhalation of soil gas/vapor or volatilization of VOCs in groundwater for all receptor categories.

## 7 CONCLUSIONS

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Phase II ESA were activities performed between April and December 2015 at the SMUD Corporation Yard (Site). Investigation activities included passive soil gas, active soil gas, soil and groundwater sampling, and analysis.

The purpose of the environmental assessment was to evaluate areas of the Site where past and/or current activities (truck garage, transformer repair or maintenance, vehicle storage, etc.) may have chemically-impacted soil gas, soil, or groundwater, in preparation for possible Site redevelopment. Conclusions from the Phase II ESA are discussed in the following sections.

### 7.1 LITHOLOGY

Near-surface deposits consist of a heterogeneous assemblage of fluvial deposits composed of gravels, sands, silts, and clays, and flood plain deposits composed of sands and silts.

### 7.2 GROUNDWATER GRADIENT DIRECTION

The groundwater flow direction at the Site was found to be in a south to southwesterly direction, at a gradient of 0.001 ft/ft. These findings are reported based on groundwater elevation contours displayed on Figure 9 (Groundwater Gradient Map).

### 7.3 PASSIVE SOIL GAS

Results of the PSG samples that indicated the presence of chemicals of concern, predominantly PCE, generally correlated with those concentrations reported from the ASG samples (see Section 7.4).

### 7.4 ACTIVE SOIL GAS

Soil vapor concentrations were compared to the SFBRWQCB ESLs, Table E-2 – Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion, Residential and Commercial/Industrial Land Use. PCE was detected above both the residential ESL of 210  $\mu\text{g}/\text{m}^3$  in samples collected from locations KA-2-S (220  $\mu\text{g}/\text{m}^3$ ) and KA-19-S (240  $\mu\text{g}/\text{m}^3$ ).



Additionally, concentrations of PCE exceeded both the residential ESL of 210  $\mu\text{g}/\text{m}^3$  and commercial ESL of 2,100  $\mu\text{g}/\text{m}^3$  in original and duplicate samples collected at KA-17-H (15,000  $\mu\text{g}/\text{m}^3$  and 14,000  $\mu\text{g}/\text{m}^3$ , respectively). PCE concentrations in soil gas exceeding residential and commercial ESLs are illustrated on Figure 7. The figure illustrates that concentrations are predominantly in the area between the Tool Issue Building and the Garage Building.

Ethylbenzene was reported above the residential ESLr (SFBRWQCB ESL Table E-2) of 490  $\mu\text{g}/\text{m}^3$  at location KA-2-S at a concentration of 860  $\mu\text{g}/\text{m}^3$  in the Garage Building.

The active soil gas sampling results for PCE generally correlated with those concentrations reported from the PSG samples, and appear to be present in the north central area of the Site.

## 7.5 SOIL

### 7.5.1 Non-Metals

Petroleum hydrocarbons as gasoline, diesel, motor oil, oil and grease were not detected above their respective residential and commercial ESLs. With the exception of the VOC methylene chloride, a common laboratory contaminant, VOCs, PCBs, SVOCs, and OCPs were not detected above their respective residential and commercial ESLs.

### 7.5.2 Metals

Sample results exceeded the residential direct contact ESL of 0.39 mg/kg for arsenic in each of the 106 samples. While these concentrations exceeded the ESL, they are consistent with reports of naturally occurring concentrations of metals in California (Bradford et al., 1996). In addition, according to the DTSC, if soil arsenic concentrations are less than or equal to 12 mg/kg, arsenic can be eliminated as a chemical of potential concern (Chernoff et al., undated). In 97 of the 106 samples, arsenic was below 12 mg/kg. The remaining nine samples were collected at depths ranging from 1.5 feet bgs to 6 feet bgs. Arsenic was detected in these nine samples above typical background levels (12 mg/kg) at concentrations ranging from 14 mg/kg to 110 mg/kg. Generally, arsenic concentrations in the deep borings ("D" locations) decrease with depth, as shown on Figure 8. These results may indicate that shallow soils in these locations may have been affected by an arsenic-containing pesticides.

With the exception of arsenic, soils sampled at the Site do not appear to be impacted by metals above ESLs for residential or commercial sites where water is a current or potential source of drinking water.

## 7.6 GROUNDWATER

TPH-diesel was detected above the Primary MCL of 100 µg/L and Groundwater Screening ESLs of 100 µg/L in two samples. Detected concentrations were 230 µg/L in sample KA-7-D and 330 µg/L in sample KA-42-D. TPH-motor oil was detected above Primary MCL of 100 µg/L and Groundwater Screening ESLs of 100 µg/L in sample KA-42-D at a concentration of 470 J µg/L. The analytical report from BC Lab noted that the sample chromatograms for these samples were not typical of diesel or motor oil; therefore, these concentrations may be related to naturally occurring organic compounds in the subsurface. In the future, groundwater samples can be analyzed using the silica-gel cleanup method to assist with organic material removal.

Low concentrations of metals including cobalt, copper, nickel, silver, and vanadium were reported at or above their respective residential and commercial ESLs. These ESLs are based on the protection of aquatic habitat in the San Francisco Bay Area and are not applicable to this Site. The detected concentrations did not exceed respective MCLs where established.

## 7.7 SITE CONCEPTUAL MODEL

A preliminary SCM was prepared based on the results of the Phase II ESA. The SCM indicates that potential inhalation of soil gas/vapor has not been adequately assessed throughout the site. Dermal contact through trenching, excavation, and handling has not been adequately assessed for construction workers and potential onsite future residents. The data gaps discussed in the preliminary SCM are addressed in the recommendation section below.

## 8 RECOMMENDATIONS

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Based on the PCE concentrations in soil gas, Kleinfelder recommends that additional soil vapor sampling be conducted at two depths (5-feet and 15-feet) in the vicinity of the Garage Building and the Tool Issue Building, to evaluate the lateral and vertical extent of PCE in this area. We also recommend soil vapor sampling south-southwest of location KA-18-S near the southwest corner of the Tool Issue Building and below subgrade within the buildings foot print to assess for indoor air vapor concerns.

Kleinfelder also recommends that additional soil samples be collected during probe installations for soil gas sampling (mentioned above) to further assess soil for arsenic and arsenic containing pesticides.

## 9 LIMITATIONS

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This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions, and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee, or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

This report may be used only by the Client and the registered design professional in responsible charge and only for the purposes stated for this specific engagement within a reasonable time from its issuance, but in no event later than two (2) years from the date of the report. The work performed was based on project information provided by Client. If Client does not retain Kleinfelder to review any plans and specifications, including any revisions or modifications to the plans and specifications, Kleinfelder assumes no responsibility for the suitability of our recommendations. In addition, if there are any changes in the field to the plans and specifications, Client must obtain written approval from Kleinfelder's engineer that such changes do not affect our recommendations. Failure to do so will vitiate Kleinfelder's recommendations.

## 10 REFERENCES

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Bradford, GR, Chang AC, Page AL, Bakhtar D, Frampton JA, Wright H. 1996. Background Concentrations of Trace Metals and Major Elements in California Soils, Kearney Foundation of Soil Science, Division of Agriculture and Natural Resources, University of California, March 1996.

Chernoff, G. et al., Undated. Determination of a Southern California Regional Background Arsenic Concentration in Soil, Department of Toxic substances Control.

AECOM, 2012, DRAFT RCRA Facility Investigation Workplan, dated July 16, 2012

San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), 2013. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final - December 2013.

Kleinfelder, 2015. Draft Phase II Environmental Site Assessment Workplan (Work Plan), 1708 59<sup>th</sup> Street, Sacramento, California. May 4, 2015. (00138810/SAC15R19175).

## TABLES

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**Table 1  
Summary of Boring Locations Rationale  
1708 59th Street  
Sacramento, California**

Name	Location	Concern(s)	RFA Reference Number (if applicable)	Borings/Location Identifications				
				Passive Soil Gas	Near Surface 0-5' bgs	Shallow Soil 0-20' bgs	Deep Soil + Groundwater 0-50' bgs	
<b>Garage Building</b>								
Former Underground Storage Tanks (5)	West of the Garage Building	Five 500-gallon tanks (solvents, waste oil, trans. fluid, hydraulic oil, motor oil) removed in 1986	---	PSG-07, PSG-08		KA-1-S		
Parts Washer	West of the Garage Building	Leaks of oil and grease. Potential soil or groundwater impact due to release. Extensive staining on the concrete.	5.2	PSG-01 thru PSG-08		KA-1-S		
Lube Room	Adjacent to Battery Room in the Garage Building	Potential releases of oil and grease from the underground piping between the Lube Room and the Vehicle Oil/Washer Separator	5.3			KA-2-S		
Parts Washer Room	Garage Building East End	Potential releases of cleaning solvent that contains bacteria for the removal and decomposition of oil/grease. Potential soil and atmosphere impact due to release.	5.4				KA-5-D	
Northwest corner of Garage Building	Northwest outside corner of the Garage Building	Potential release of oil during storage and transporting that may impact soil	5.5			KA-3-S		
Battery Room	Garage Building	Potential release of lead and sulfuric acid that may impact soil from storing batteries. Concrete areas are discolored and white residue.	5.6			KA-2-S		
Diesel Filter Pulse Cleaner	Southwest side of the Garage Building	Possibility of released during collection/disposal of ash. Potential soil or atmosphere impact due to release.	5.7			KA-1-S		
Former Waste Oil Underground Storage Tank	Northwest corner of the Garage Building	Potential leakage from the single wall UST that may impact soil or groundwater. Have been destroyed and sampled previously.	5.8			KA-3-S		
Former Waste Oil Underground Storage Tank	Outdoor and centrally along the north side of the Garage Building	Potential leakage from the single wall UST that may impact soil or groundwater. Have been destroyed and sampled previously.	5.9			KA-4-S		
Hydraulic Lifts	Inside Garage Building	Potential leakage from hydraulic lift usage.	---				KA-5-D, KA-7-D	
Dry Cleaners	North of (and off site) SCY	Potential chlorinated solvent plume.	---				KA-6-D	
<b>Shops Building</b>								
Transformer Repair Area	Transformer Shop	Potential release of PCBs	5.10	PSG-09 thru PSG-14		KA-8-S		
Vehicle Oil/Water Separator	South side of the Transformer Repair Shop	Ancillary piping leaks of oils, greases, mud and sands. Potential soil or groundwater impact due to release.	---				KA-9-D	
<b>Hazardous Materials Building</b>								
HazMat Used Battery Storage Area	East side of the HazMat Building	Potential leakage from storing new/used batteries that may impact soil	5.11	PSG-15 thru PSG-18		KA-13-S		
Hazardous Materials	East side of the HazMat Building	Potential release of PCB, oil, battery leakage, metals, etc. that may impact soil or groundwater.	5.12			KA-13-S		
Oil Storage Tanks	West side of the HazMat Building	Potential release of transformer oil. On a concrete secondary containment.	5.13			KA-10-H, KA-11-H	KA-13-S	KA-15-D
Possible Tank or Dispenser	Based on Sanborn Maps (Date 1960, 1964, 1968, and 1970) South of HazMat Building	Total Petroleum Hydrocarbons, VOCs and Metals associated with possible leakage.	---				KA-14-S	
Possible Shallow Spillage	Areas Around Haz Mat Building	Total Petroleum Hydrocarbons, VOCs and Metals associated with possible leakage.	---			KA-10-H, KA-11-H, KA-12-H		
<b>Tool Issue Building</b>								
Former Fuel Underground Storage Tank	Outside the Tool Issue Building near the southeast corner	Potential release of gasoline from piping and 3 USTs (gasoline, solvents, kerosene) that may impact soil. Soil sampling has been conducted previously (results = concentrations below reporting limits).	5.15	PSG-19, PSG-21 thru PSG-24		KA-18-S		
Former Truck Repair Shop	Based on Sanborn Maps (Date 1952, 1957, 1960, 1964, 1968, and 1970) North Side of Tool Shop Building	Hydrocarbons, Metals, Solvents, VOCs associated with past use.	---			KA-16-H, KA-17-H		
Salvage and Transformer Repair	Northwest side of the Tool Issue Building	PCBs	---				KA-19-S	
<b>Former Transformer and HazMat Repair/Storage Areas</b>								
Drained Transformer Staging Area and Universal Waste Storage	Outdoor pad. Along Western side of SCY.	Potential release of PCBs, hydrocarbons, metals, solvents, and other VOCs from surrounding area. This is a low point where surface water drains into.	5.14	PSG-20, PSG-25 thru PSG-33		KA-20-H	KA-24-S	KA-27-D
Transformer Storage Area	West of the Salvage Yard near the southwest corner of the SCY	Cleaners, solvents, metals, PCBs	---			KA-21-H, KA-22-H	KA-23-S	KA-26-D
Former PCB Storage Area	Southwest corner of the SCY	Potential release of PCB during storage and transport. Soil sampling was conducted prior to area closure.	5.16			KA-21-H, KA-22-H	KA-23-S	KA-26-D
Satellite Accumulation Areas	Garage, Carpenter Shop, and Tool Issue Buildings. All drums are located at or near areas of waste generation for accumulation of non-RCRA wastes	Potential leakage from the single walled storage containers	5.19			Multiple Locations		
Former Transformer Repair Shop	Based on Sanborn Map (Date 1952, 1957, 1960, 1964, 1968, and 1970) North Side of Warehouse	PCBs	---				KA-25-S	
<b>South Corporation Yard Area</b>								
Treated Wood Waste Area and Storage Containers	Concrete pad with two steel walled and floored waste bin	Potential release of copper naphthenate to soils below asphalt. Potential pesticides and wood treatments chemicals.	5.17	PSG-34 thru PSG-38		KA-40-S		
Vehicle Oil/Water Separator	Vehicle wash pad west of treated wood waste area	In-ground tank leakage of oil, grease, mud, and sand. Potential soil or groundwater impact due to release.	5.18			KA-28-H, KA-34-H	KA-38-S	KA-41-D
Vehicle Storage Area	West of the Pre-Fab Building	Potential fuel and metal impacts.	---			KA-29-H, KA-31-H	KA-36-S	
Vehicle and Transformer Storage Area	SMUD Storage Yard	Potential fuel and metal impacts.	---			KA-30-H, KA-31-H, KA-32-H, KA-33-H	KA-35-S, KA-37-S	KA-42-D
<b>General Area</b>								
General Yard	North and South of the Warehouse Building	Total Petroleum Hydrocarbons, VOCs and Metals associated with general yard past and present activities.	---		KA-43-H thru KA-50-H			

**Explanations:**  
 ---:Not Applicable  
 SCY:Sacramento Corporation Yard  
 UST: Underground Storage Tank  
 RCRA: Resource Conservation and Recovery Act  
 RFA:Resource Conservation and Recovery Act Facility Assessment (July 16, 2012)  
 bgs:Below Ground Surface  
 TPH:Total Petroleum Hydrocarbons  
 VOCs:Volatile Organic Compounds  
 PCBs:Polychlorinated Biphenyls  
 H:Hand Auger to 5-feet bgs  
 S:Shallow soil to 20-feet bgs  
 D:Deeper Soil and Groundwater to 50-feet bgs

**Table 2  
Well Construction Details  
1708 59th Street  
Sacramento, CA**

<b>Well Location</b>	<b>TOP (BGS)</b>	<b>BOP (BGS)</b>	<b>Total Depth (BGS)</b>	<b>Casing Diameter (inches)</b>	<b>Filter Pack</b>	<b>Screen Size</b>
KA-5-D	40	45	45	2	#3 sand	0.020
KA-6-D	47.5	49.5	49.5	2	#3 sand	0.020
KA-7-D	39	45	45	2	#3 sand	0.020
KA-9-D	47.5	49.5	49.5	2	#3 sand	0.020
KA-15-D	47.5	49.5	49.5	2	#3 sand	0.020
KA-26-D	47	49	49	2	#3 sand	0.020
KA-27-D	47.5	49.5	49.5	2	#3 sand	0.020
KA-41-D	30	40	45	2	#3 sand	0.020
KA-42-D	33	40	40	2	#3 sand	0.020

TOP - Top of Perforation (screen), relative to ground surface, feet  
 BOP - Bottom of Perforation (screen), relative to ground surface, feet  
 BGS - Below Ground Surface, feet



**Table 3  
Well Survey Data  
1708 59th Street  
Sacramento, CA**

<b>Well Location</b>	<b>Y</b>	<b>X</b>	<b>Z</b>
<b>Ground Surface Coordinates</b>			
KA-5-D	1,965,045.11	6,722,519.83	39.9617
KA-6-D	1,965,082.75	6,722,613.47	39.6399
KA-7-D	1,965,111.78	6,722,412.68	39.9125
KA-9-D	1,965,130.92	6,722,120.97	37.4859
KA-15-D	1,965,042.00	6,721,941.11	34.7065
KA-26-D	1,964,876.57	6,721,812.10	33.8228
KA-27-D	1,965,305.08	6,721,955.13	36.8508
KA-41-D	1,964,461.02	6,722,341.61	32.145
KA-42-D	1,964,667.55	6,721,693.43	31.364
<b>Top of PVC Coordinates</b>			
KA-5-D PVC	1,965,044.44	6,722,519.57	40.4667
KA-6-D PVC	1,965,082.00	6,722,613.07	43.0354
KA-7-D PVC	1,965,111.04	6,722,412.49	41.3191
KA-9-D PVC	1,965,130.28	6,722,120.66	37.1161
KA-15-D PVC	1,965,040.99	6,721,940.65	34.3935
KA-26-D PVC	1,964,875.66	6,721,811.84	36.2229
KA-27-D PVC	1,965,304.41	6,721,954.95	39.7984
KA-41-D PVC	1,964,460.24	6,722,341.44	32.9287
KA-42-D PVC	1,964,666.44	6,721,693.25	32.5442

State Plane Coordinates (California Zone 2) in U.S. Survey feet, provided by SMUD

**Table 4**  
**Summary of Detected Analytical Results - Soil**  
**1708 59th Street**  
**Sacramento, California**

Boring ID	Sample ID	Sample Depth (Ft, BGS)	Date Sampled	Total Petroleum Hydrocarbons				VOCs	PCBs	SVOCs	OCPs
				Gasoline	Diesel	Motor Oil	Oil and Grease				
				mg/kg	mg/kg	mg/kg	mg/kg				
<b>Environmental Screening Levels</b>											
<b>ESL (Table A-1) (mg/kg)</b>				100	100	100	NE	NE	0.22	NE	NE
<b>ESL (Table A-2) (mg/kg)</b>				500	110	500	NE	NE	0.74	NE	NE
<b>ESL (Table C-1) (mg/kg)</b>				500	110	500	NE	NE	0.22	NE	NE
<b>ESL (Table C-2) (mg/kg)</b>				770	110	100	NE	NE	0.74	NE	NE
KA-1-S	KA-1-S-21	21	6/1/2015	ND	ND	ND	ND	ND	ND	ND	---
KA-2-S	KA-2-S-6	6	5/29/2015	ND	ND	ND	ND	ND	---	ND	---
	KA-2-S-16	16		ND	ND	ND	ND	ND	---	ND	---
KA-3-S	KA-3-S-6	6	6/1/2015	ND	ND	ND	ND	ND	---	---	---
	KA-3-S-11	11		ND	ND	ND	ND	ND	---	---	---
KA-4-S	KA-4-S-6	6	6/1/2015	ND	ND	ND	ND	ND	---	---	---
	KA-4-S-16	16		ND	ND	ND	ND	ND	---	---	---
KA-5-D	KA-5-D-6	6	5/28/2015	ND	ND	ND	ND	ND	---	ND	---
	KA-5-D-36	36		ND	ND	ND	ND	ND	---	ND	---
	KA-5-D-46	46		ND	ND	ND	ND	ND	---	ND	---
KA-6-D	KA-6-D-6	6	5/21/2015	ND	ND	ND	ND	ND	---	---	---
	KA-6-D-36	36		0.082 J	ND	ND	ND	ND	---	---	---
	KA-6-D-46	46		ND	ND	ND	ND	ND	---	---	---
KA-7-D	KA-7-D-6	6	5/29/2015	ND	ND	ND	ND	ND	---	ND	---
	KA-7-D-36	36		ND	ND	ND	ND	ND	---	ND	---
	KA-7-D-46	46		ND	ND	ND	ND	ND	---	ND	---
KA-8-S	KA-8-S-2	2	6/3/2015	ND	ND	ND	ND	ND	ND	---	---
	KA-8-S-2 D	2	6/3/2015	ND	ND	ND	ND	MC	0.11	ND	---
KA-9-D	KA-9-D-6	6	5/22/2015	ND	ND	ND	ND	ND	ND	---	---
	KA-9-D-36	36		0.092 J	ND	ND	ND	ND	ND	---	---
	KA-9-D-51	51		ND	ND	ND	ND	ND	ND	---	---
KA-10-H	KA-10-H-1.5	1.5	5/19/2015	ND	4.1 J*	22	56	ND	0.0037 J	---	---
	KA-10-H-4.5	4.5		---	---	---	ND	---	ND	---	---
KA-11-H	KA-11-H-1.5	1.5	5/19/2015	ND	15	23	ND	ND	0.0068 J	---	---
	KA-11-H-5	5		---	---	---	---	---	ND	---	---
KA-13-S	KA-13-S-6	6	6/1/2015	ND	ND	ND	ND	ND	ND	---	---
	KA-13-S-11	11		ND	ND	ND	ND	ND	ND	---	---
KA-14-S	KA-14-S-6	6	6/2/2015	ND	ND	ND	ND	ND	ND	---	---
	KA-14-S-6 D	6		ND	ND	ND	ND	ND	ND	---	---
	KA-14-S-16	16		ND	ND	ND	ND	ND	ND	---	---
	KA-14-S-16 D	16		0.035 J***	ND	ND	ND	ND	ND	---	---
KA-15-D	KA-15-D-6	6	5/26/2015	0.061 J	7.1 J*	ND	ND	ND	ND	---	---
	KA-15-D-36	36		0.083 J	4.0 J*	ND	ND	ND	ND	---	---
	KA-15-D-46	46		0.065 J	ND	ND	ND	ND	ND	---	---
KA-16-H	KA-16-H-1.5	1.5	5/18/2015	ND	ND	ND	ND	ND	---	---	
KA-17-H	KA-17-H-1.5	1.5	5/18/2015	ND	ND	ND	ND	ND	---	---	---
	KA-17-H-5	5	5/18/2015	---	---	---	---	---	ND	---	---
KA-18-S	KA-18-S-6	6	6/2/2015	ND	13*	47	ND	ND	---	---	---
	KA-18-S-6 D	6		ND	ND	17 J	ND	ND	---	---	---
	KA-18-S-11	11		ND	ND	ND	ND	ND	---	---	---
	KA-18-S-11 D	11		0.033 J***	ND	ND	ND	ND	ND	---	---
KA-19-S	KA-19-S-6	6	6/2/2015	ND	ND	ND	ND	ND	---	---	---
	KA-19-S-6 D	6		0.036 J***	ND	ND	ND	ND	---	---	---
	KA-19-S-16	16		ND	ND	ND	ND	ND	---	---	---
	KA-19-S-16 D	16		0.039 J***	ND	ND	ND	ND	---	---	---
KA-20-H	KA-20-H-1.5	1.5	5/19/2015	---	ND	ND	ND	ND	ND	---	
KA-21-H	KA-21-H-1.5	1.5	5/19/2015	---	ND	ND	ND	ND	ND	---	
KA-22-H	KA-22-H-2	2	5/19/2015	---	ND	ND	ND	ND	ND	---	

**Table 4**  
**Summary of Detected Analytical Results - Soil**  
**1708 59th Street**  
**Sacramento, California**

Boring ID	Sample ID	Sample Depth (Ft, BGS)	Date Sampled	Total Petroleum Hydrocarbons				VOCs	PCBs	SVOCs	OCPs
				Gasoline	Diesel	Motor Oil	Oil and Grease				
				mg/kg	mg/kg	mg/kg	mg/kg				
<b>Environmental Screening Levels</b>											
<b>ESL (Table A-1) (mg/kg)</b>				100	100	100	NE	NE	0.22	NE	NE
<b>ESL (Table A-2) (mg/kg)</b>				500	110	500	NE	NE	0.74	NE	NE
<b>ESL (Table C-1) (mg/kg)</b>				500	110	500	NE	NE	0.22	NE	NE
<b>ESL (Table C-2) (mg/kg)</b>				770	110	100	NE	NE	0.74	NE	NE
KA-23-S	KA-23-S-6	6	6/2/2015	---	ND	ND	ND	ND	ND	---	---
	KA-23-S-6 D	6		---	ND	ND	ND	ND	ND	---	---
	KA-23-S-11	11		---	ND	ND	ND	ND	ND	---	---
	KA-23-S-11 D	11		---	ND	ND	ND	ND	ND	---	---
KA-24-S	KA-24-S-6	6	6/2/2015	---	ND	ND	ND	ND	ND	---	---
	KA-24-S-6 D	6		---	ND	ND	ND	ND	ND	---	---
	KA-24-S-11	11		---	ND	ND	ND	ND	ND	---	---
	KA-24-S-11 D	11		---	ND	ND	ND	ND	0.017	---	---
KA-25-S	KA-25-S-6	6	6/1/2015	---	ND	ND	ND	ND	ND	---	---
	KA-25-S-16	16		---	ND	ND	ND	ND	ND	---	---
KA-26-D	KA-26-D-6	6	5/26/2015	---	ND	ND	ND	ND	ND	---	---
	KA-26-D-36	36		---	ND	ND	ND	ND	ND	---	---
	KA-26-D-51	51		---	ND	ND	ND	ND	ND	---	---
KA-27-D	KA-27-D-6	6	5/22/2015	---	ND	ND	ND	ND	ND	---	---
	KA-27-D-36	36		---	ND	ND	ND	ND	ND	---	---
	KA-27-D-46	46		---	ND	ND	ND	ND	ND	---	---
KA-28-H	KA-28-H-1	1	5/20/2015	ND	ND	ND	ND	ND	---	---	
KA-29-H	KA-29-H-1	1	5/20/2015	ND	6.1 J	23	ND	ND	0.051	ND	---
	KA-29-H-5	5	5/20/2015	---	---	---	---	---	ND	---	---
KA-30-H	KA-30-H-1	1	5/20/2015	ND	ND	ND	ND	ND	---	---	
KA-31-H	KA-31-H-1	1	5/20/2015	ND	ND	ND	ND	ND	---	---	
KA-32-H	KA-32-H-1	1	5/20/2015	ND	ND	14 J	34 J	ND	---	---	
KA-33-H	KA-33-H-1	1	5/19/2015	ND	4.9 J*	59	ND	ND	---	---	
KA-34-H	KA-34-H-2	2	5/20/2015	ND	ND	ND	ND	ND	---	---	
KA-35-S	KA-35-S-6	6	6/2/2015	ND	ND	ND	ND	ND	ND	---	---
	KA-35-S-6 D	6		0.035 J***	ND	ND	ND	ND	ND	---	---
	KA-35-S-16	16		ND	ND	ND	ND	ND	ND	---	---
	KA-35-S-16 D	16		ND	ND	ND	ND	ND	ND	---	---
KA-36-S	KA-36-S-6	6	6/3/2015	ND	ND	ND	ND	ND	ND	---	---
	KA-36-S-6 D	6		0.044 J	ND	ND	ND	ND	ND	---	---
	KA-36-S-16	16		ND	ND	ND	ND	ND	ND	---	---
	KA-36-S-16 D	16		0.049 J	ND	ND	ND	MC	0.088	ND	---
KA-37-S	KA-37-S-6	6	6/3/2015	ND	ND	ND	ND	ND	ND	---	---
	KA-37-S-6 D	6		0.054 J	ND	ND	ND	ND	ND	---	---
	KA-37-S-11	11		ND	ND	ND	ND	ND	ND	---	---
	KA-37-S-11 D	11		0.047 J	ND	ND	ND	ND	ND	---	---
KA-38-S	KA-38-S-6	6	6/3/2015	ND	ND	ND	ND	ND	ND	---	---
	KA-38-S-6 D	6		0.045 J	ND	ND	ND	MC	0.027	ND	---
	KA-38-S-11	11		ND	ND	ND	ND	ND	ND	---	---
	KA-38-S-11 D	11		0.045 J	ND	ND	ND	MC	0.15	ND	---
KA-40-S	KA-40-S-6	6	6/3/2015	---	---	---	---	ND	ND	ND	ND
	KA-40-S-6 D	6		---	---	---	---	MC	0.082	ND	ND
	KA-40-S-16	16		---	---	---	---	ND	ND	ND	ND
	KA-40-S-16 D	16		---	---	---	---	MC	0.011	ND	ND

**Table 4**  
**Summary of Detected Analytical Results - Soil**  
**1708 59th Street**  
**Sacramento, California**

Boring ID	Sample ID	Sample Depth (Ft, BGS)	Date Sampled	Total Petroleum Hydrocarbons				VOCs	PCBs	SVOCs	OCPs	
				Gasoline	Diesel	Motor Oil	Oil and Grease					
				mg/kg	mg/kg	mg/kg	mg/kg					
<b>Environmental Screening Levels</b>												
<b>ESL (Table A-1) (mg/kg)</b>				100	100	100	NE	NE	0.22	NE	NE	
<b>ESL (Table A-2) (mg/kg)</b>				500	110	500	NE	NE	0.74	NE	NE	
<b>ESL (Table C-1) (mg/kg)</b>				500	110	500	NE	NE	0.22	NE	NE	
<b>ESL (Table C-2) (mg/kg)</b>				770	110	100	NE	NE	0.74	NE	NE	
KA-41-D	KA-41-D-6	6	5/27/2015	ND	ND	ND	ND	ND	ND	ND	---	
	KA-41-D-26	26		ND	ND	ND	ND	ND	ND	ND	ND	---
	KA-41-D-36	36		0.061 J	ND	ND	ND	ND	ND	ND	ND	---
KA-42-D	KA-42-D-6	6	5/27/2015	ND	ND	ND	ND	ND	ND	---	---	
	KA-42-D-26	26		ND	ND	ND	ND	ND	ND	ND	---	---
	KA-42-D-36	36		ND	ND	ND	ND	ND	ND	ND	---	---
KA-43-H	KA-43-H-1	1	5/18/2015	ND	ND	ND	ND	ND	---	---	---	
KA-44-H	KA-44-H-1.5	1.5	5/18/2015	ND	ND	ND	ND	ND	---	---	---	
KA-45-H	KA-45-H-1.5	1.5	5/18/2015	ND	ND	ND	ND	ND	---	---	---	
KA-46-H	KA-46-H-1.5	1.5	5/18/2015	ND	ND	20	30 J	ND	---	---	---	
KA-47-H	KA-47-H-1.5	1.5	5/18/2015	ND	ND	ND	ND	ND	---	---	---	
KA-48-H	KA-48-H-2	2	5/19/2015	ND	15*	75	140	ND	---	---	---	
KA-49-H	KA-49-H-1.5	1.5	5/19/2015	ND	ND	40**	57	ND	---	---	---	
KA-50-H	KA-50-H-3	3	5/19/2015	ND	ND	ND	ND	ND	---	---	---	

**Explanations:**

mg/kg: Miligrams per kilogram

ND: Not Detected Above Laboratory Detection Limit. Please see analytical report for individual detection limits

NE: Not Established

J: The estimated value between the practical quantitation limit (PQL) and the method detection limit (MDL)

---: Not analyzed for the listed constituent

VOCs: Volatile Organic Compounds

PCBs: Poly Chlorinated Biphenyls

SVOCs: Semi-Volatile Organic Compounds

OCPs: Organochlorine Pesticides

MC: Methylene Chloride

Ft. BGS: Feet below ground surface

ESL: San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels, December 2013

ESL (Table A-1): Shallow soil residential land use, Soil collected from less than or equal to 3m bgs, Groundwater is a current or potential source of drinking water

ESL (Table A-2): Shallow soil commercial land use, Soil collected from less than or equal to 3m bgs, Groundwater is a current or potential source of drinking water

ESL (Table C-1): Deep soil residential land use, Soil collected from greater than 3m bgs, Groundwater is a current or potential source of drinking water

ESL (Table C-2): Deep soil commercial land use, Soil collected from greater than 3m bgs, Groundwater is a current or potential source of drinking water

\* A52: Chromatogram not typical of diesel

\*\* A01: Detection and quantitation limits are reduced due to sample dilution

\*\*\* S05: The sample holding time was exceeded

**Table 5  
Summary of Detected Analytical Results- Metals in Soil  
1708 59th Street  
Sacramento, California**

Boring ID	Sample ID	Sample Depth	Date Sampled	Sample Type	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
<b>ESL (Table A-1) (mg/kg)</b>					<b>Environmental Screening Levels</b>																
					20	0.39	750	4	12	1,000	23	230	80	6.7	40	150	10	20	0.78	200	600
<b>ESL (Table A-2) (mg/kg):</b>					40	1.6	1,500	8	12	2,500	80	230	320	10	40	150	10	40	10	200	600
<b>ESL (Table C-1) (mg/kg)</b>					31	0.39	2,500	160	78	2,500	23	2,500	80	6.7	390	1,500	390	390	0.78	390	2,500
<b>ESL (Table C-2) (mg/kg)</b>					410	1.6	5,000	2,000	1,000	5,000	300	5,000	320	88	5,000	5,000	5,000	5,000	10	5,000	5,000
<b>KA-1-S</b>	KA-1-S-21	21	6/1/2015	SOIL	ND	2.2	37	0.18J	ND	20	4.7	13	2.3J	ND	ND	23	ND	ND	1.2J	26	24
<b>KA-2-S</b>	KA-2-S-6	6	5/29/2015	SOIL	ND	7.4	110	0.37J	ND	39	10	30	7.4	ND	0.74J	47	ND	ND	ND	48	41
	KA-2-S-16	16		SOIL	ND	3.0	78	0.24J	ND	36	7.0	14	4.1	ND	ND	35	ND	ND	ND	42	38
<b>KA-3-S</b>	KA-3-S-6	6	6/1/2015	SOIL	ND	7.0	96	0.49J	ND	39	11	22	7.0	ND	ND	34	ND	ND	2.1J	50	36
	KA-3-S-11	11		SOIL	ND	3.8	68	0.35J	ND	28	6.3	16	4.1	ND	ND	29	1.0	ND	1.9J	47	33
	KA-4-S-6	6		SOIL	ND	5.8	100	0.41J	ND	34	8.7	23	6.1	ND	ND	36	ND	ND	1.7J	47	39
<b>KA-4-S</b>	KA-4-S-16	16		SOIL	ND	1.9	63	0.23J	ND	21	5.5	13	3.1	ND	ND	26	ND	ND	1.6J	31	36
<b>KA-5-D</b>	KA-5-D-6	6	5/28/2015	SOIL	ND	7.5	120	0.52	ND	43	12	26	9.5	ND	0.095J	38	ND	ND	ND	59	43
	KA-5-D-36	36		SOIL	ND	1.5	130	0.45J	ND	33	7.0	20	6.0	ND	ND	36	ND	ND	ND	35	33
	KA-5-D-46	46		SOIL	ND	2.5	120	0.26J	0.060J	24	8.1	15	5.6	ND	ND	48	ND	ND	ND	41	34
<b>KA-6-D</b>	KA-6-D-6	6	5/21/2015	SOIL	ND	7.2	92	0.52	ND	46	11	24	8.3	ND	0.52J	45	ND	ND	ND	61	40
	KA-6-D-36	36		SOIL	ND	1.5	72	0.34J	ND	31	7.6	12	4.8	ND	ND	28	ND	ND	ND	38	30
	KA-6-D-46	46		SOIL	ND	1.7	69	0.22J	ND	25	8.0	11	4.2	ND	ND	52	ND	ND	ND	30	27
<b>KA-7-D</b>	KA-7-D-6	6	5/29/2015	SOIL	ND	5.8	140	0.34J	ND	41	11	27	7.6	ND	0.21J	49	ND	ND	ND	48	42
	KA-7-D-36	36		SOIL	ND	2.2	100	0.33J	ND	21	8.1	21	7.1	ND	ND	25	ND	ND	ND	36	43
	KA-7-D-46	46		SOIL	ND	1.4	55	0.19J	ND	29	6.4	7.4	3.2	ND	ND	50	ND	ND	ND	35	21
<b>KA-8-S</b>	KA-8-S-2	2	6/3/2015	SOIL	ND	4.1	77	0.26J	ND	23	8.2	13	8.7	ND	ND	15	ND	0.074J	ND	40	27
	KA-8-S-2 D	2		SOIL	ND	4.3	87	0.30J	ND	24	7.8	15	9.1	ND	ND	18	ND	ND	ND	41	31
<b>KA-9-D</b>	KA-9-D-6	6	5/22/2015	SOIL	ND	6.3	160	0.4J	0.081J	44	13	30	8.4	ND	ND	60	ND	ND	ND	52	54
	KA-9-D-36	36		SOIL	ND	1.0	35	0.32J	ND	35	5.7	8.2	4.3	ND	ND	26	ND	ND	ND	24	19
	KA-9-D-51	51		SOIL	ND	1.7	70	0.17J	ND	58	10	8.9	3.1	ND	ND	100	ND	ND	ND	24	24
<b>KA-10-H</b>	KA-10-H-1.5	1.5	5/19/2015	SOIL	ND	29	95	0.32	ND	27	8.7	14	9.2	ND	0.057	21	ND	ND	ND	46	33
	KA-10-H-4.5	4.5		SOIL	---	2.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>KA-11-H</b>	KA-11-H-1.5	1.5	6/1/2015	SOIL	ND	5.9	88	0.3J	ND	31	9.6	19	7.3	ND	ND	31	ND	ND	ND	46	46
	KA-13-S-6	6		SOIL	ND	4.8	75	0.35J	ND	23	7.2	14	3.7	ND	0.084J	21	ND	ND	1.3J	47	31
<b>KA-13-S</b>	KA-13-S-11	11		SOIL	ND	7.2	120	0.51	ND	51	14	33	7.9	ND	ND	59	ND	ND	1.9J	59	62
<b>KA-14-S</b>	KA-14-S-6	6	6/2/2015	SOIL	ND	3.2	78	0.36J	ND	22	5.6	14	4.3	ND	ND	19	ND	ND	1.4J	39	30
	KA-14-S-16	16		SOIL	ND	2.5	55	0.21J	ND	13	3.5	9.2	2.8	ND	ND	11	ND	ND	2.0J	29	27
	KA-14-S-6 D	6		SOIL	ND	5.2	96	0.40J	ND	32	9.0	17	3.7	ND	0.20J	27	ND	ND	0.89J	51	34
<b>KA-15-D</b>	KA-15-D-6	6	5/26/2015	SOIL	ND	3.5	63	0.21J	ND	20	5.8	11	2.6	ND	ND	17	0.98J	ND	1.8J	38	31
	KA-15-D-36	36		SOIL	ND	4.2	96	0.45J	ND	26	8.2	16	5.6	ND	ND	26	ND	ND	ND	48	32
	KA-15-D-46	46		SOIL	ND	2.5	110	0.37J	ND	27	11	10	4.6	ND	ND	26	ND	ND	ND	38	24
<b>KA-16-H</b>	KA-16-H-1.5	1.5	5/27/2015	SOIL	ND	2.6	110	0.23J	ND	23	6.6	12	4.4	ND	ND	42	ND	ND	ND	35	27
<b>KA-17-H</b>	KA-17-H-1.5	1.5	5/18/2015	SOIL	ND	3.9	60	0.30J	ND	25	8.7	13	5.2	0.047J	0.10J	19	ND	ND	ND	47	26
	KA-17-H-5	5	SOIL	ND	100	110	0.30J	ND	28	7.4	16	6.5	ND	ND	24	ND	ND	ND	43	39	
<b>KA-18-S</b>	KA-18-S-6	6	6/2/2015	SOIL	---	2.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	KA-18-S-11	11		SOIL	ND	23	140	0.43J	ND	39	12	46	7.7	ND	ND	37	ND	ND	ND	54	50
	KA-18-S-6 D	6		SOIL	ND	7.2	150	0.46J	ND	41	16	29	6.7	ND	ND	47	ND	ND	ND	56	55
	KA-18-S-11 D	11		SOIL	ND	22	140	0.46J	ND	41	13	32	7.2	ND	ND	38	1.2	ND	ND	56	46
<b>KA-19-S</b>	KA-19-S-6	6		SOIL	ND	6.5	150	0.49J	ND	46	14	28	6.4	ND	ND	49	ND	ND	0.66J	56	54
	KA-19-S-16	16		SOIL	ND	10	100	0.48J	ND	32	10	18	4.0	ND	ND	31	ND	ND	ND	53	39
	KA-19-S-6 D	6		SOIL	ND	5.7	96	0.34J	ND	63	16	34	3.2	ND	ND	68	ND	ND	ND	61	48
	KA-19-S-16 D	16		SOIL	ND	14	120	0.53	ND	36	11	19	4.6	ND	ND	37	ND	ND	ND	57	42
<b>KA-20-H</b>	KA-20-H-1.5	1.5	5/19/2015	SOIL	ND	5.0	98	0.37J	0.057J	59	16	33	3.6	ND	ND	70	ND	ND	0.82J	59	48
<b>KA-21-H</b>	KA-21-H-1.5	1.5		SOIL	ND	4.9	94	0.33J	ND	35	9.1	21	6.4	ND	ND	42	ND	ND	ND	50	39
<b>KA-22-H</b>	KA-22-H-2	2		SOIL	ND	3.6	82	0.28J	ND	31	8.4	19	5.4	ND	ND	37	ND	ND	ND	47	35
<b>KA-23-S</b>	KA-23-S-6	6	6/2/2015	SOIL	ND	5.3	100	0.35J	ND	41	10	22	7.6	ND	ND	39	ND	ND	ND	49	44
	KA-23-S-11	11		SOIL	ND	1.7	120	0.54	ND	30	8.2	19	6.0	ND	ND	26	ND	ND	1.9J	49	37
	KA-23-S-6 D	6		SOIL	ND	7.1	96	0.42J	ND	41	12	19	4.6	ND	ND	38	ND	ND	ND	54	38
	KA-23-S-11 D	11		SOIL	ND	5.4	120	0.45J	ND	36	11	21	4.2	ND	ND	34	1.2	ND	0.95J	54	41
<b>KA-24-S</b>	KA-24-S-6	6		SOIL	ND	8.6	110	0.55	ND	50	12	24	5.8	ND	ND	47	ND	ND	1.3J	66	44
	KA-24-S-11	11		SOIL	ND	2.5	67	0.35J	ND	20	5.2	13	3.7	ND	ND	16	ND	ND	1.7J	37	27
	KA-24-S-11 D	11		SOIL	ND	2.3	64	0.31J	ND	15	4.3	11	3.1	ND	ND	15	ND	ND	1.2J	34	26
	KA-24-S-6 D	6		SOIL	ND	4.7	77	0.33J	ND	24	7.2	14	3.5	ND	ND	22	1.3	ND	0.86J	44	32
	KA-24-S-11 D	11		SOIL	ND	4.8	65	0.33J	ND	20	6.6	14	2.8	ND	ND	23	ND	ND	ND	44	32
<b>KA-25-S</b>	KA-25-S-6	6	6/1/2015	SOIL	ND	5.2	80	0.52	ND	32	11	20	6	ND	ND	31	ND	ND	1.7J	53	39
	KA-25-S-16	16		SOIL	ND	1.7	60	0.20J	ND	11	3.2	10	2.0J	ND	ND	8.8	ND	ND	1.8J	31	27
<b>KA-26-D</b>	KA-26-D-6	6	5/26/2015	SOIL	ND	3.7	86	0.38J	ND	27	7.8	15	5.3	ND	ND	25	ND	ND	ND	47	33
	KA-26-D-36	36		SOIL	ND	0.79J	19	0.31J	ND	22											

**Table 6**  
**Summary of Detected Analytical Results - Soil Vapor**  
**1708 59th Street**  
**Sacramento, California**

Analytical Method	Constituent of Concern	Unit	Sample Date: June 18, 2015				Sample Date: June 19, 2015					ESLr ug/m <sup>3</sup>	ESLc ug/m <sup>3</sup>
			AA-1	KA-2-S-SV	KA-8-S-SV	KA-11-H-SV	AA-2	KA-17-H-SV	KA-17-H-SVD	KA-19-S-SV	KA-31-H-SV		
			Ambient Air	Soil Gas	Soil Gas	Soil Gas	Ambient Air	Soil Gas	Soil Gas	Soil Gas	Soil Gas		
EPA TO-15	Freon 11	µg/m <sup>3</sup>	ND	ND	ND	ND	ND	ND	ND	5.2	ND	NE	NE
	Freon 12	µg/m <sup>3</sup>	ND	ND	37	5.4	ND	ND	ND	ND	ND	NE	NE
	Chloroform	µg/m <sup>3</sup>	ND	48	30	ND	ND	ND	ND	8.8	5.8	230	2,300
	Benzene	µg/m <sup>3</sup>	ND	28	18	ND	ND	ND	ND	ND	ND	42	420
	1,1,1-Trichloroethane	µg/m <sup>3</sup>	ND	ND	ND	ND	ND	ND	ND	41	ND	2,600,000	22,000,000
	Trichloroethene (TCE)	µg/m <sup>3</sup>	ND	ND	16	ND	ND	210	200	ND	ND	300	3,000
	Toluene	µg/m <sup>3</sup>	ND	1,200	400	16	ND	ND	ND	23	5.2	160,000	1,300,000
	Tetrachloroethene (PCE)	µg/m <sup>3</sup>	ND	220	47	33	ND	15,000	14,000	240	6.9	210	2,100
	Ethyl Benzene	µg/m <sup>3</sup>	ND	860	130	ND	ND	ND	ND	9.3	ND	490	4,900
	m,p-Xylene	µg/m <sup>3</sup>	ND	2,900	1,700	5.1	ND	ND	ND	26	ND	52,000	440,000
	o-Xylene	µg/m <sup>3</sup>	ND	1,600	570	6.8	ND	ND	ND	7.8	ND	52,000	440,000
	1,3,5-Trimethylbenzene	µg/m <sup>3</sup>	ND	920	620	ND	ND	ND	ND	ND	ND	NE	NE
	1,2,4-Trimethylbenzene	µg/m <sup>3</sup>	ND	1,900	1,700	ND	ND	ND	ND	ND	ND	NE	NE
	Hexane	µg/m <sup>3</sup>	ND	ND	ND	ND	ND	ND	ND	3.5	ND	NE	NE
	Heptane	µg/m <sup>3</sup>	ND	18	ND	ND	ND	ND	ND	ND	ND	NE	NE
	Cyclohexane	µg/m <sup>3</sup>	ND	ND	7.2	ND	ND	ND	ND	3.0	ND	NE	NE
	Cumene	µg/m <sup>3</sup>	ND	71	22	ND	ND	ND	ND	ND	ND	NE	NE
	Propylbenzene	µg/m <sup>3</sup>	ND	340	110	ND	ND	ND	ND	ND	ND	NE	NE
	Acetone	µg/m <sup>3</sup>	ND	350	ND	ND	ND	ND	ND	29	ND	16,000,000	140,000,000
	Carbon Disulfide	µg/m <sup>3</sup>	ND	ND	ND	ND	ND	ND	ND	55	ND	NE	NE
4-Ethyltoluene	µg/m <sup>3</sup>	ND	1,800	1,300	ND	ND	ND	ND	9.2	ND	NE	NE	
2,2,4-Trimethylpentane	µg/m <sup>3</sup>	ND	76	49	ND	ND	ND	ND	ND	ND	NE	NE	
TPH-Gasoline	µg/m <sup>3</sup>	ND	27,000	15,000	390	ND	ND	ND	490	ND	300,000	2,500,000	
EPA 8015B	TPH-Diesel	µg/L	NA	ND	ND	ND	NA	ND	ND	ND	ND	68,000	570,000
ASTM D-1946	Oxygen	%	21	21	20	17	21	16	16	17	3.1	NA	NA
	Nitrogen	%	79	79	79	78	79	78	78	80	81	NA	NA
	Methane	%	0.00019	0.00019	0.00020	ND	0.00021	0.00018	0.00021	ND	ND	NA	NA
	Carbon Dioxide	%	0.040	ND	1.1	4.6	0.041	5.6	5.7	2.8	16	NA	NA
	Helium	%	ND	0.34	ND	ND	ND	ND	ND	ND	ND	NA	NA

Explanations:

ug/m<sup>3</sup>: Micrograms per cubic meter

#: Percent by volume

NA: Does not apply

ND: Not detected above laboratory reporting limits

NE: Not established

ESL: San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels, December 2013

ESLr: Table E-2, Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion, Residential Land Use

ESLc: Table E-2, Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion, Commercial/Industrial Land Use

**Table 7  
Summary of Detected Analytical Results - Groundwater  
1708 59th Street  
Sacramento, California**

Boring ID	Date Sampled	Total Petroleum Hydrocarbons				VOCs	PCBs	SVOCs*	
		Gasoline	Diesel (FFP)	Motor Oil	Oil and Grease				
		ug/L	ug/L	ug/L	ug/L				
<b>Environmental Screening Levels</b>									
ESL Table F-1a		100	100	100	NA	Chloroform	80	0.014	NA
						PCE	5		
						BDCM	80		
ESL Table F-1b		100	100	100	NA	Chloroform	80	0.50	NA
						PCE	5.0		
						BDCM	80		
KA-5-D	6/1/2015	ND	ND	ND	ND	Chloroform	1.1	---	ND
						PCE	0.35J		
KA-6-D	6/1/2015	9.4J	ND	ND	ND	Chloroform	4.7	---	---
						PCE	0.85		
KA-7-D	6/1/2015	11J	230	ND	ND	Chloroform	0.51	---	ND
						PCE	0.77		
KA-9-D	6/2/2015	9.6J	ND	ND	ND	Chloroform	3.9	ND	---
						PCE	2.1		
KA-15-D	6/2/2015	7.8J	ND	ND	ND	Chloroform	2.1	ND	---
						PCE	0.50		
KA-26-D	6/2/2015	---	ND	ND	ND	BDCM	0.19J	ND	---
						Chloroform	8.0		
KA-27-D	6/1/2015	---	ND	ND	ND	Chloroform	1.2	ND	---
						PCE	1.8		
KA-41-D	6/2/2015	10J	ND	ND	ND	BDCM	0.30J	ND	ND
						Chloroform	4.1		
KA-42-D	6/2/2015	ND	330*	470 J**	ND	Chloroform	0.63	ND	---
						PCE	0.18J		

**Explanations**

ug/L: Micrograms per liter

NA: Does Not Apply

ND: Not Detected Above Laboratory Detection Limit. Please see analytical report for individual detection limits

J: The estimated value between the practical quantitation limit (PQL) and the Method Detection Limit (MDL)

---: Not analyzed for the listed constituent

VOCs: Volatile Organic Compounds

PCBs: Poly Chlorinated Biphenyls

SVOCs: Semi-Volatile Organic Compounds (Base Neutral and Acid Extractables Organic Analysis)

PCE: Tetrachloroethene

Chloroform: A chemical compound

BDCM: Bromodichloromethane

ESL: San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels, December 2013

ESL Table F-1a: California Final Groundwater Screening Level (Groundwater is a current or potential drinking water resource)

ESL Table F-1b: California Final Groundwater Screening Level (Groundwater is NOT a current or potential drinking water resource)

\* A52: Chromatogram not typical of diesel

\*\* A57: Chromatogram not typical of motor oil

**Table 8  
Summary of Detected Analytical Results- Metals in Groundwater  
1708 59th Street  
Sacramento, California**

Boring ID	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
		<b>Environmental Screening Levels</b>																
ESL Table F-1a		<b>6.0</b>	<b>10</b>	<b>1,000</b>	<b>0.53</b>	<b>0.25</b>	<b>50</b>	<b>3.0</b>	<b>3.1</b>	<b>2.5</b>	<b>0.025</b>	<b>78</b>	<b>8.2</b>	<b>5.0</b>	<b>0.19</b>	<b>2.0</b>	<b>19</b>	<b>81</b>
ESL Table F-1b		<b>30</b>	<b>36</b>	<b>1,000</b>	<b>0.53</b>	<b>0.25</b>	<b>180</b>	<b>3.0</b>	<b>3.1</b>	<b>2.5</b>	<b>0.025</b>	<b>240</b>	<b>8.2</b>	<b>5.0</b>	<b>0.19</b>	<b>4.0</b>	<b>19</b>	<b>81</b>
KA-5-D	6/1/2015	ND	37J	1,100	3.6J	ND	320	130	210	50	0.14J	5.2J	640	15J	ND	ND	420	470
KA-6-D		ND	ND	88	ND	ND	24	88	9.9J	12	ND	ND	6.3J	59	ND	ND	24	21J
KA-7-D		ND	68	2,300	6.9J	1.9J	460	240	400	110	ND	ND	1,300	24J	ND	ND	730	890
KA-9-D	6/2/2015	ND	8.0J	550	1.6J	ND	120	49J	74	16J	ND	3.4J	300	ND	ND	ND	170	190
KA-15-D		ND	28J	640	2.2J	ND	150	47J	100	25J	ND	3.7J	260	21J	ND	ND	210	230
KA-26-D		ND	29J	890	3.5J	ND	180	74	150	23J	ND	ND	290	15J	ND	ND	340	310
KA-27-D	6/1/2015	ND	ND	130	ND	ND	21	8.4J	18	ND	ND	8.2J	47	ND	ND	ND	36	30J
KA-41-D	6/2/2015	ND	52	2,100	6.5J	1.2J	280	100	200	71	ND	8.6J	450	ND	ND	ND	420	540
KA-42-D		ND	130	3,900	13	ND	770	290	580	150	ND	ND	1,100	ND	ND	ND	1,200	1,300

**Explanations:**

ug/L: Micrograms per liter

ND: Not Detected Above Laboratory Detection Limit. Please see analytical report for individual detection limits.

J: The estimated value between the practical quantitation limit (PQL) and the Method Detection Limit (MDL)

---: not analyzed for the listed constituent

J: The estimated value between the practical quantitation limit (PQL) and the method detection limit (MDL)

ESL: San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels, December 2013

ESL Table F-1a: California Final Groundwater Screening Level (Groundwater is a current or potential drinking water resource)

ESL Table F-1b: California Final Groundwater Screening Level (Groundwater is NOT a current or potential drinking water resource)

**Bold:** Results presented are at or above the ESL referenced in Table F-1a

**Red:** Results presented are at or above the ESL referenced in Table F-1b



**Table 9**  
**Depth to Groundwater and Groundwater Elevations**  
**1708 59th Street**  
**Sacramento, California**

Well Location	KA-5-D	KA-6-D	KA-7-D	KA-9-D	KA-15-D	KA-26-D	KA-27-D	KA-41-D	KA-42-D
Well Casing Elevation (TOC)	40.47	43.04	41.32	37.12	34.39	36.22	39.80	32.93	32.54
<b>Date Measured: June 2, 2015</b>									
Depth to Groundwater	40.54	43.04	41.34	37.17	34.54	36.61	39.72	33.75	33.24
* Groundwater Elevation	-0.07	0.00	-0.02	-0.05	-0.15	-0.39	0.08	-0.82	-0.70

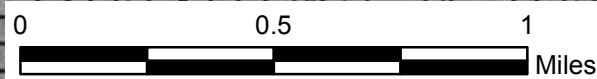
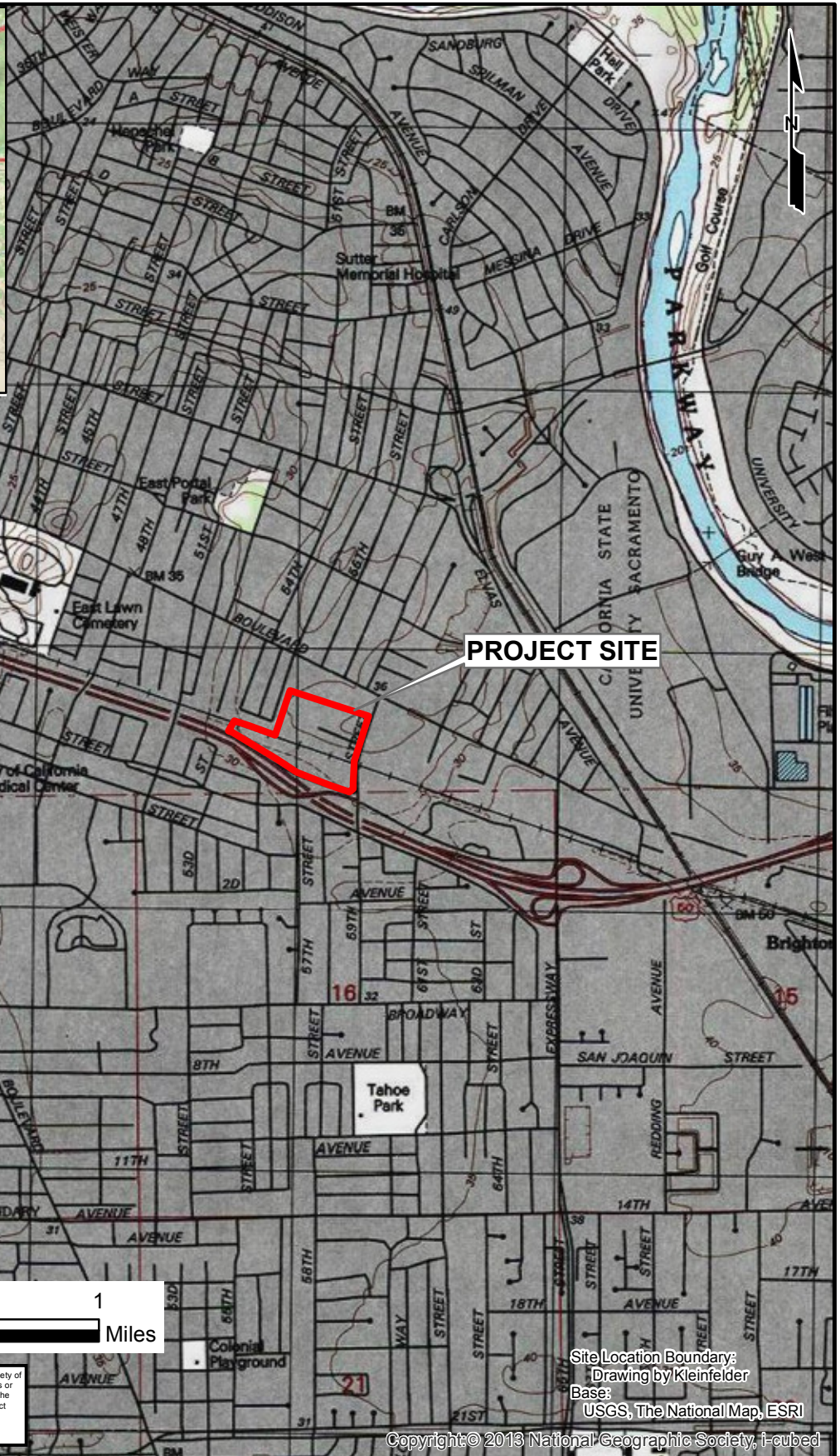
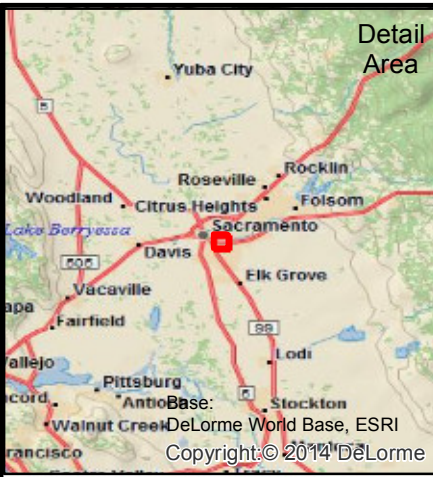
Well Casing Elevations: Based on well survey data provided by SMUD

TOC: Top of Casing Measured at North Rim

\*Groundwater Elevations (mean sea level): TOC minus depth to groundwater

## FIGURES

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Site Location Boundary:  
 Drawing by Kleinfelder  
 Base:  
 USGS, The National Map, ESRI

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PROJECT NO. 138810-14-004
DRAWN: 08/03/2015
DRAWN BY: D. Ross
CHECKED BY: C. Riddle
FILE NAME: 138810-15-004_SLM.mxd

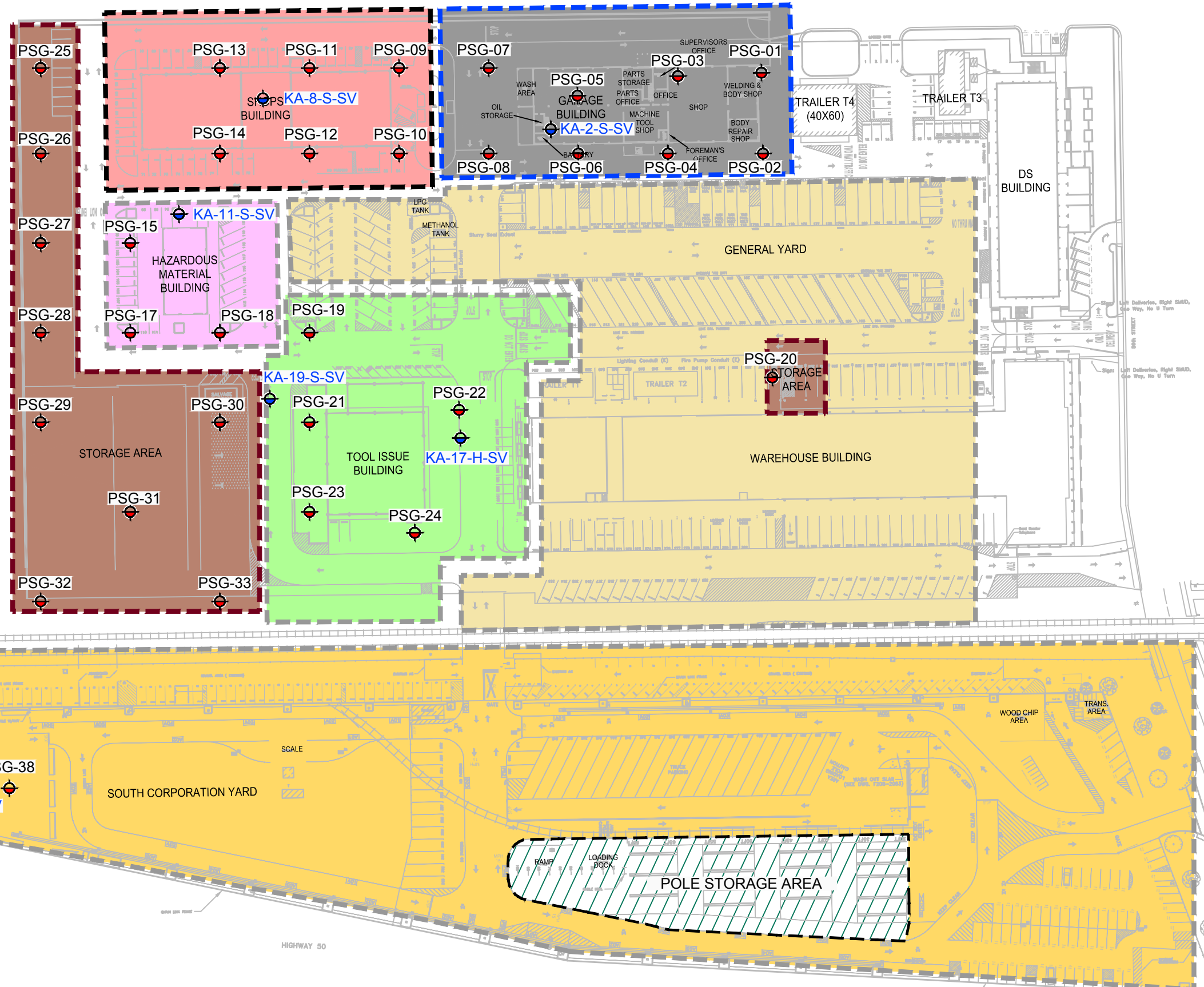
<b>SITE LOCATION MAP</b>
SMUD Corporation Yard 1708 59th Street Sacramento, California

FIGURE
<b>1</b>



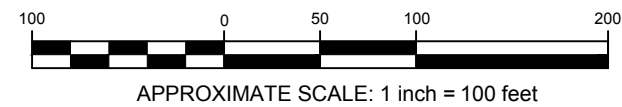
**LEGEND**

-  Active Soil Gas Sampling Location
-  Passive Soil Gas Sampling Location
-  General Area
-  Garage Building Area
-  Shops Building Area
-  Hazardous Material Building Area
-  Tool Issue Building Area
-  Former Transformer and Hazardous Material Repair/Storage Areas
-  South Corporation Yard Area
-  Pole Storage Area (not included in study)



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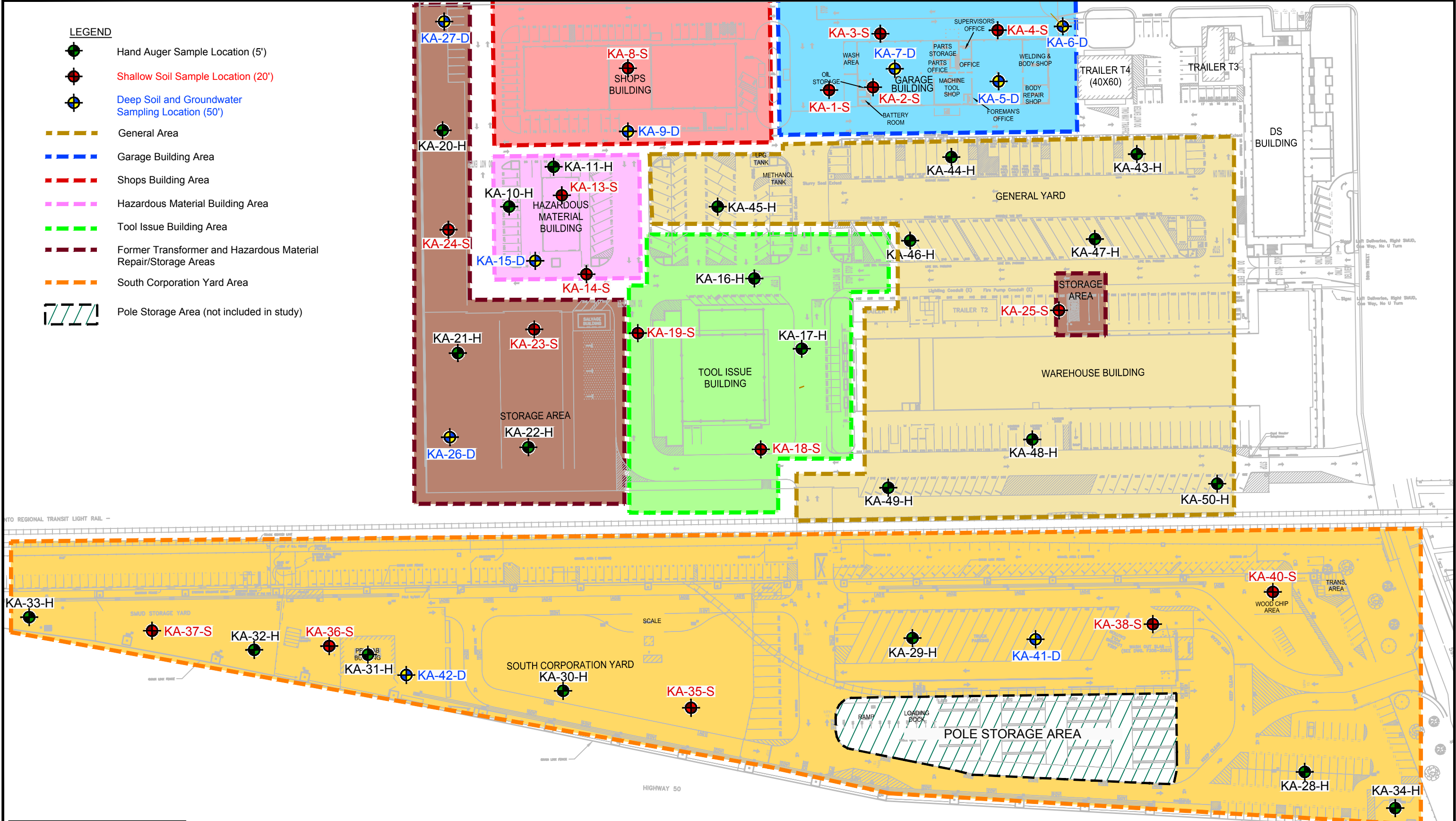
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PROJECT NO.	138810-15-004
DRAWN:	02/23/2016
DRAWN BY:	D. Ross
CHECKED BY:	C. Riddle
FILE NAME:	SMUD SITE-2.dwg

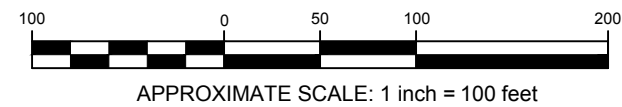
**ACTIVE SOIL GAS AND  
PASSIVE SOIL GAS SAMPLE LOCATIONS**

SMUD Corporation Yard  
1708 59th Street  
Sacramento, California 95819



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PROJECT NO.	138810-15-004
DRAWN:	02/15/2016
DRAWN BY:	D. Ross
CHECKED BY:	C. Riddle
FILE NAME:	SMUD SITE-3.dwg













**SOIL AND GROUNDWATER  
SAMPLE LOCATIONS**

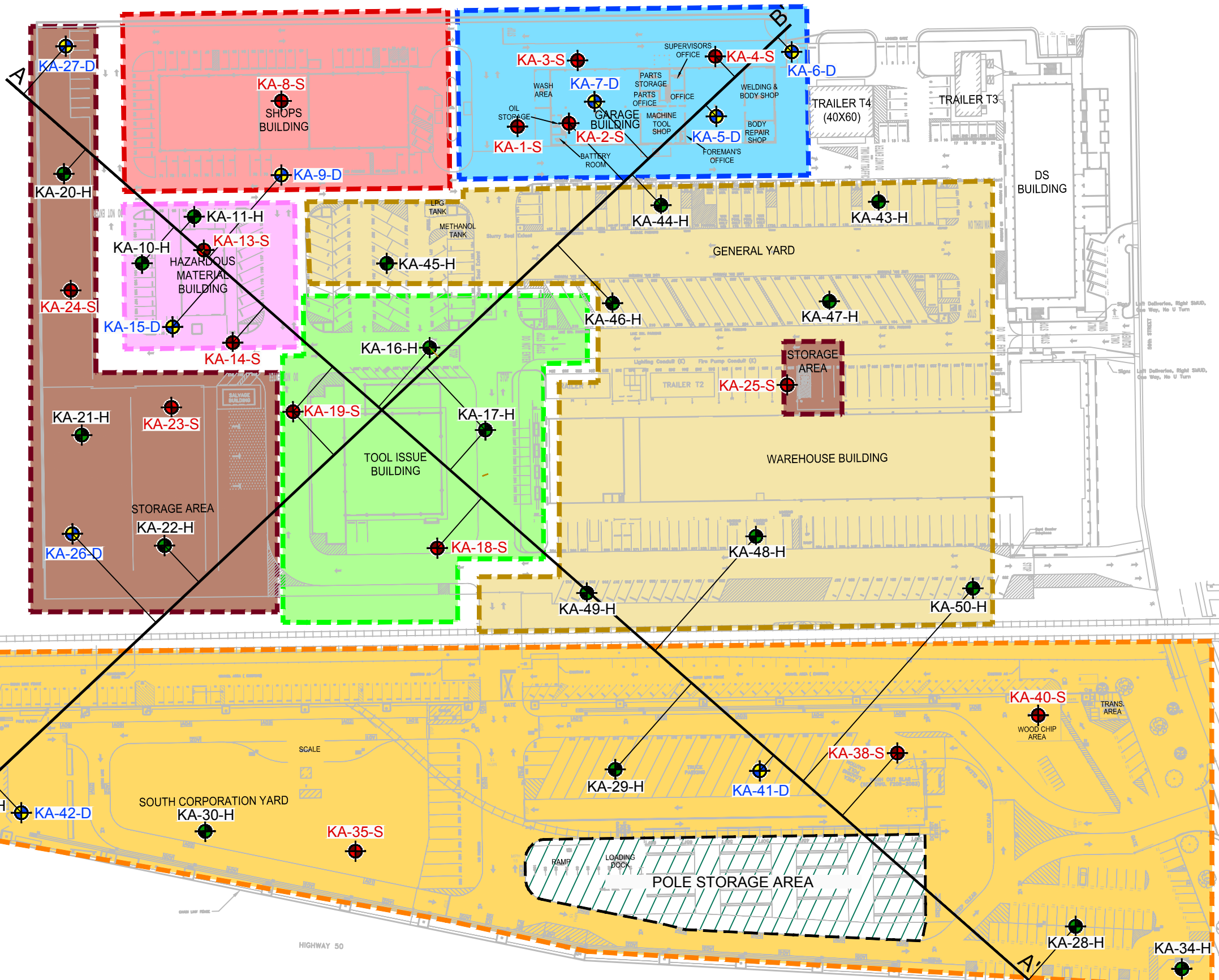
SMUD Corporation Yard  
1708 59th Street  
Sacramento, California 95819

FIGURE  
**3**



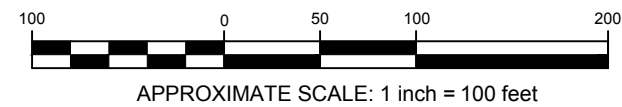
**LEGEND**

-  Hand Auger Sample Location (5')
-  Shallow Soil Sample Location (20')
-  Deep Soil and Groundwater Sampling Location (50')
-  General Area
-  Garage Building Area
-  Shops Building Area
-  Hazardous Material Building Area
-  Tool Issue Building Area
-  Former Transformer and Hazardous Material Repair/Storage Areas
-  South Corporation Yard Area
-  Pole Storage Area (not included in study)
-  Cross Section Location (see Figures 6 and 7)



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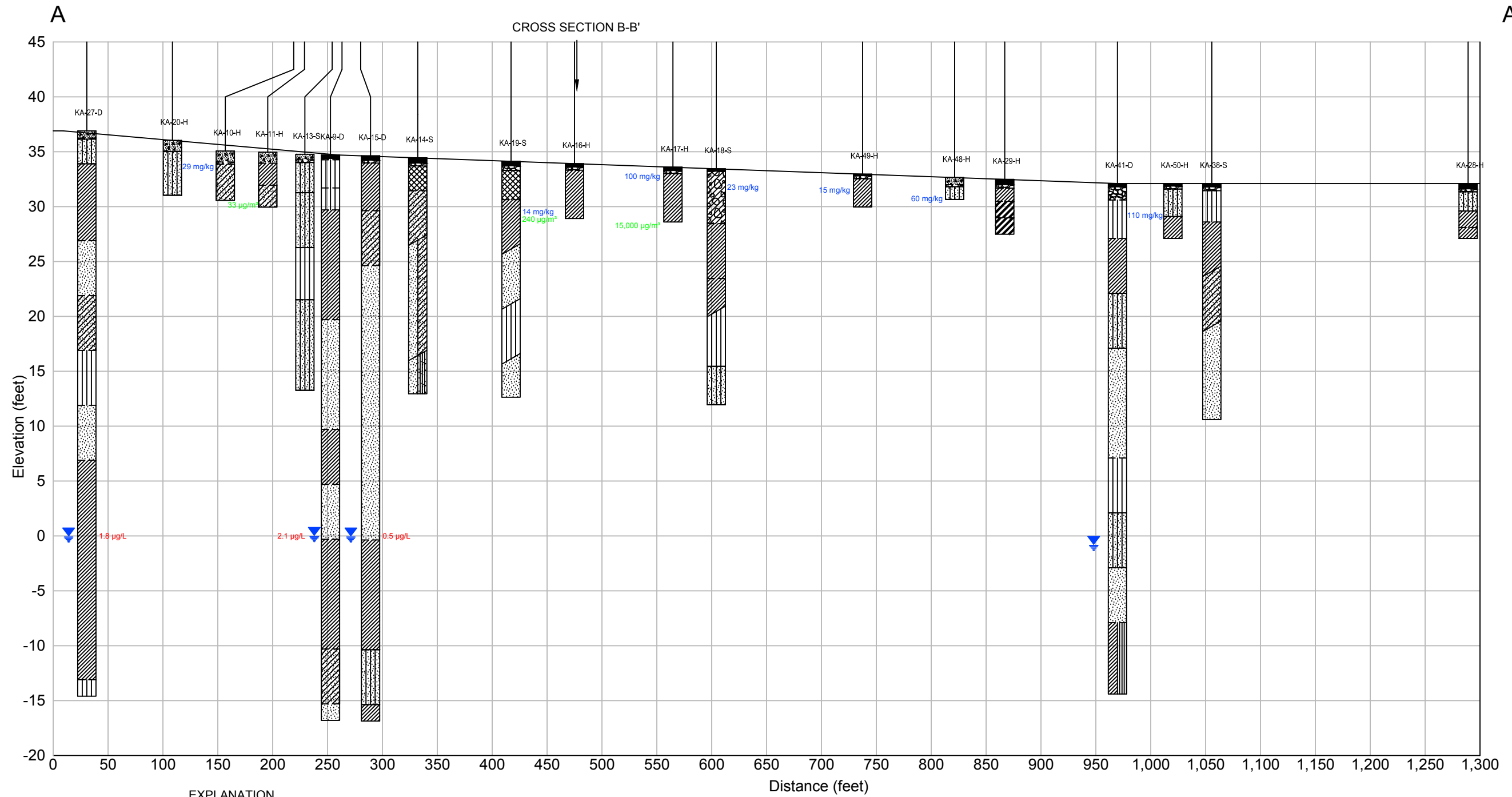



PROJECT NO.	138810-15-004
DRAWN:	02/17/2016
DRAWN BY:	D. Ross
CHECKED BY:	C. Riddle
FILE NAME:	SMUD SITE-4.dwg

**CROSS SECTION LAYOUT**

SMUD Corporation Yard  
1708 59th Street  
Sacramento, California 95819

FIGURE  
**4**



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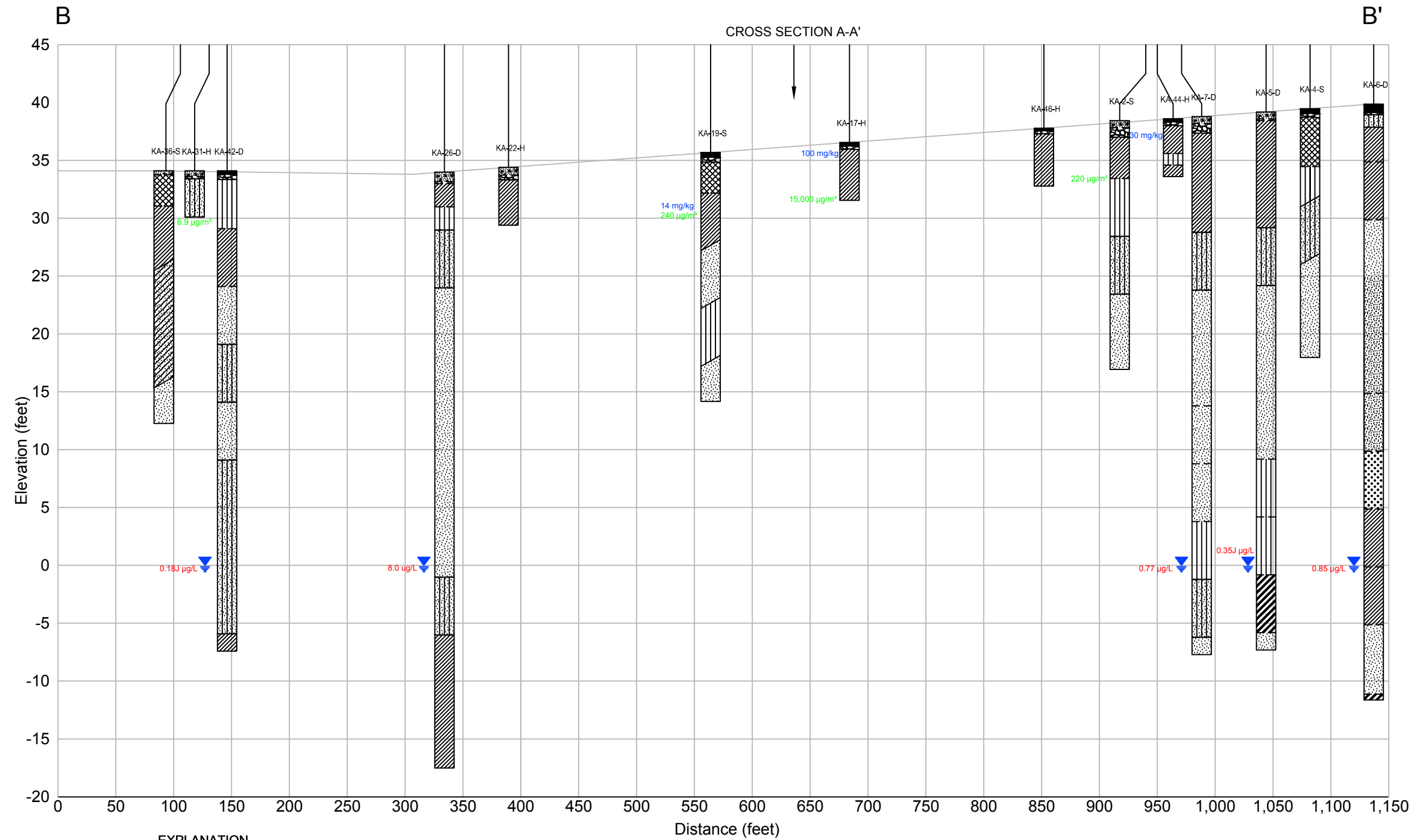
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PROJECT NO.	138810-15-004
DRAWN:	02/15/2016
DRAWN BY:	D. Ross
CHECKED BY:	C. Riddle
FILE NAME:	SMUD SITE-A-A.dwg

<b>CROSS-SECTION A - A'</b>	
SMUD Corporation Yard 1708 59th Street Sacramento, California	

FIGURE  
**5**



**EXPLANATION**

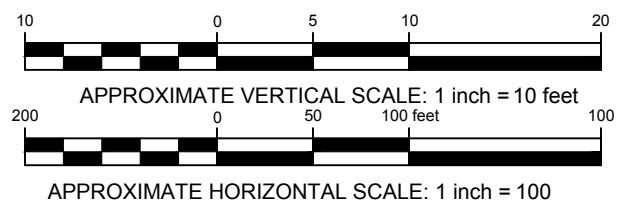
KA-20-H

Groundwater at time of sampling

14 mg/kg ← Arsenic Concentration in Soil Exceeding 12 mg/kg

240 ug/m3 ← PCE Concentrations Detected in Soil vapor

2.1 µg/L ← PCE Concentrations Detected in Groundwater



**NOTES:**

1. Non-surveyed boring elevations estimated.
2. Please refer to Figure D-1 for explanation of symbology.
3. Arsenic concentrations in soil above 12mg/kg are shown. Arsenic below 12mg/kg are consistent with naturally occurring concentrations of metals in California (Bradford et al., 1996).
4. mg/kg : Milligrams per Kilogram, represents a soil concentration.
5. µg/m³ : Micrograms per Meter cubed, represents a soil gas concentration.
6. µg/L : Micrograms per Liter, represents a groundwater concentration.

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PROJECT NO.	138810-15-004
DRAWN:	02/15/2016
DRAWN BY:	D. Ross
CHECKED BY:	C. Riddle
FILE NAME:	SMUD SITE-B-B.dwg

**CROSS-SECTION B - B'**

SMUD Corporation Yard  
1708 59th Street  
Sacramento, California

FIGURE

**6**



LEGEND

- Active Soil Gas Sampling Location
- Passive Soil Gas Sampling Location

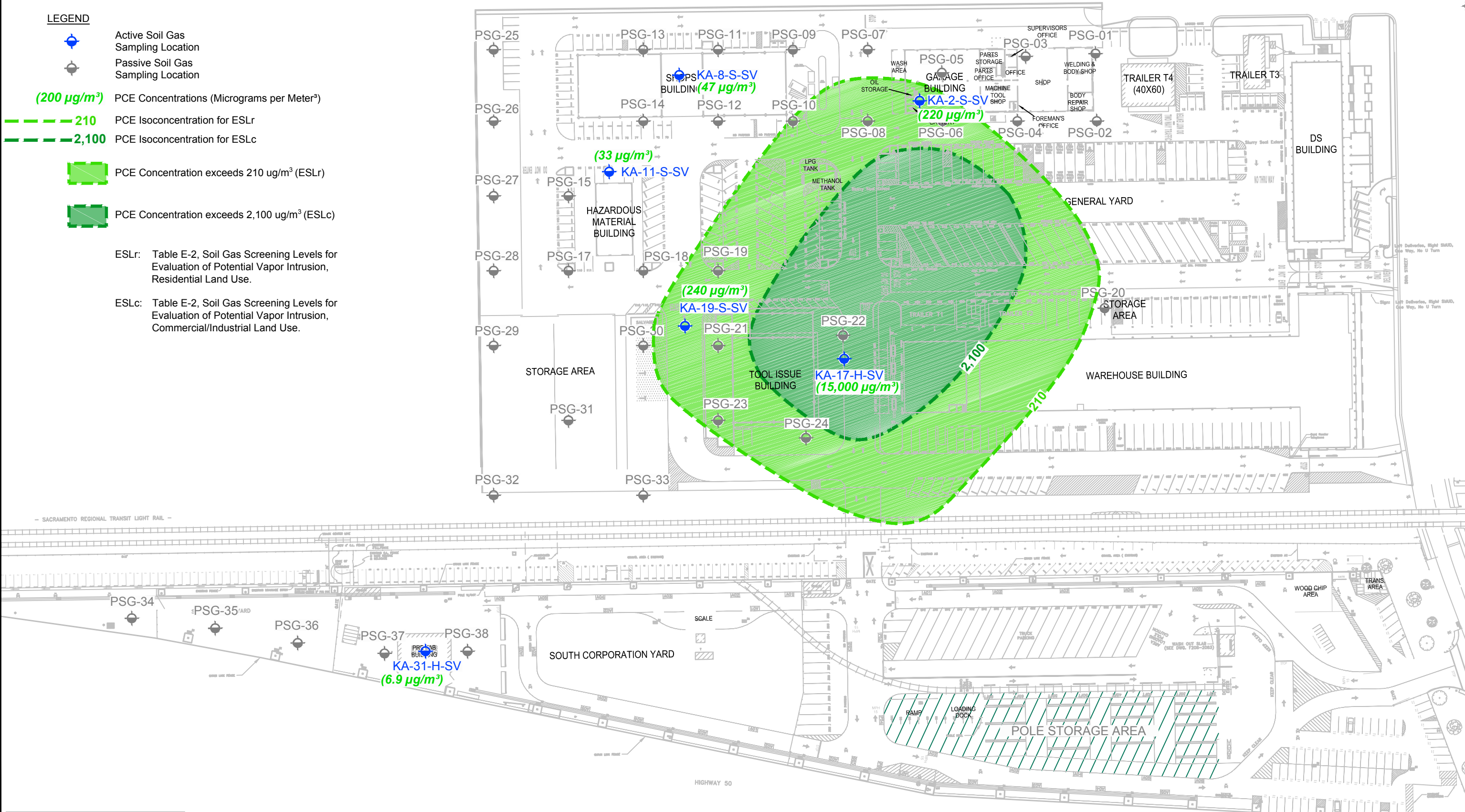
(200 µg/m³) PCE Concentrations (Micrograms per Meter³)

- 210 PCE Isoconcentration for ESLr
- 2,100 PCE Isoconcentration for ESLc

- PCE Concentration exceeds 210 ug/m³ (ESLr)
- PCE Concentration exceeds 2,100 ug/m³ (ESLc)

ESLr: Table E-2, Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion, Residential Land Use.

ESLc: Table E-2, Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion, Commercial/Industrial Land Use.



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APPROXIMATE SCALE: 1 inch = 100 feet

PROJECT NO.	138810-15-004
DRAWN:	02/23/2016
DRAWN BY:	D. Ross
CHECKED BY:	MVD
FILE NAME:	SMUD SITE-7.dwg

**ACTIVE SOIL GAS AND  
PASSIVE SOIL GAS SAMPLE LOCATIONS**

SMUD Corporation Yard  
1708 59th Street  
Sacramento, California 95819



FIGURE  
**7**

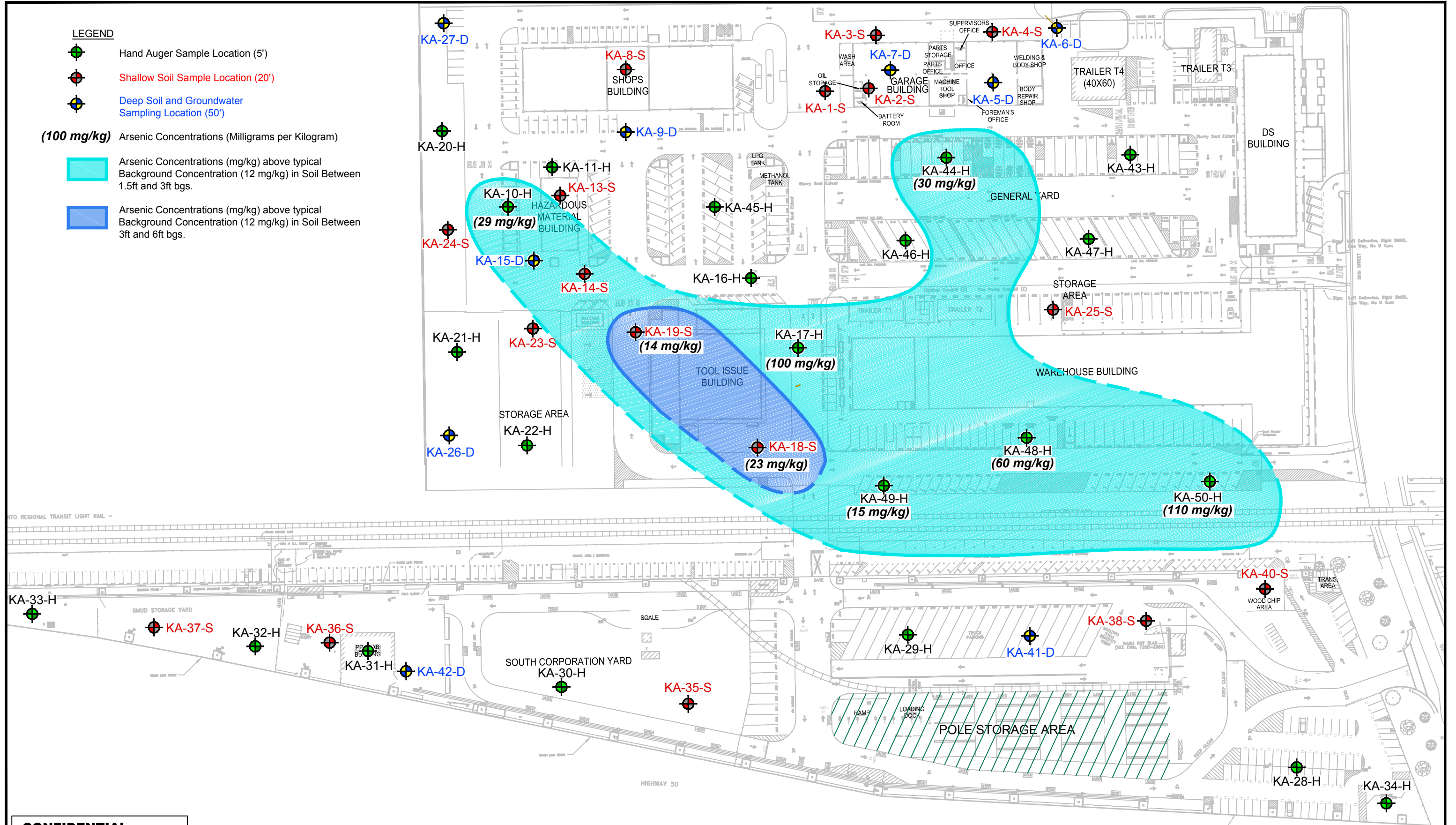


**LEGEND**

-  Hand Auger Sample Location (5')
-  Shallow Soil Sample Location (20')
-  Deep Soil and Groundwater Sampling Location (50')

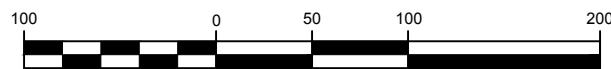
**(100 mg/kg)** Arsenic Concentrations (Milligrams per Kilogram)

-  Arsenic Concentrations (mg/kg) above typical Background Concentration (12 mg/kg) in Soil Between 1.5ft and 3ft bgs.
-  Arsenic Concentrations (mg/kg) above typical Background Concentration (12 mg/kg) in Soil Between 3ft and 6ft bgs.



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APPROXIMATE SCALE: 1 inch = 100 feet



PROJECT NO.	138810-15-004
DRAWN:	02/17/2016
DRAWN BY:	D. Ross
CHECKED BY:	C. Riddle
FILE NAME:	138810_F8-F11.dwg

**ARSENIC CONCENTRATIONS ABOVE  
BACKGROUND LEVELS IN SOIL**

SMUD Corporation Yard  
1708 59th Street  
Sacramento, California 95819

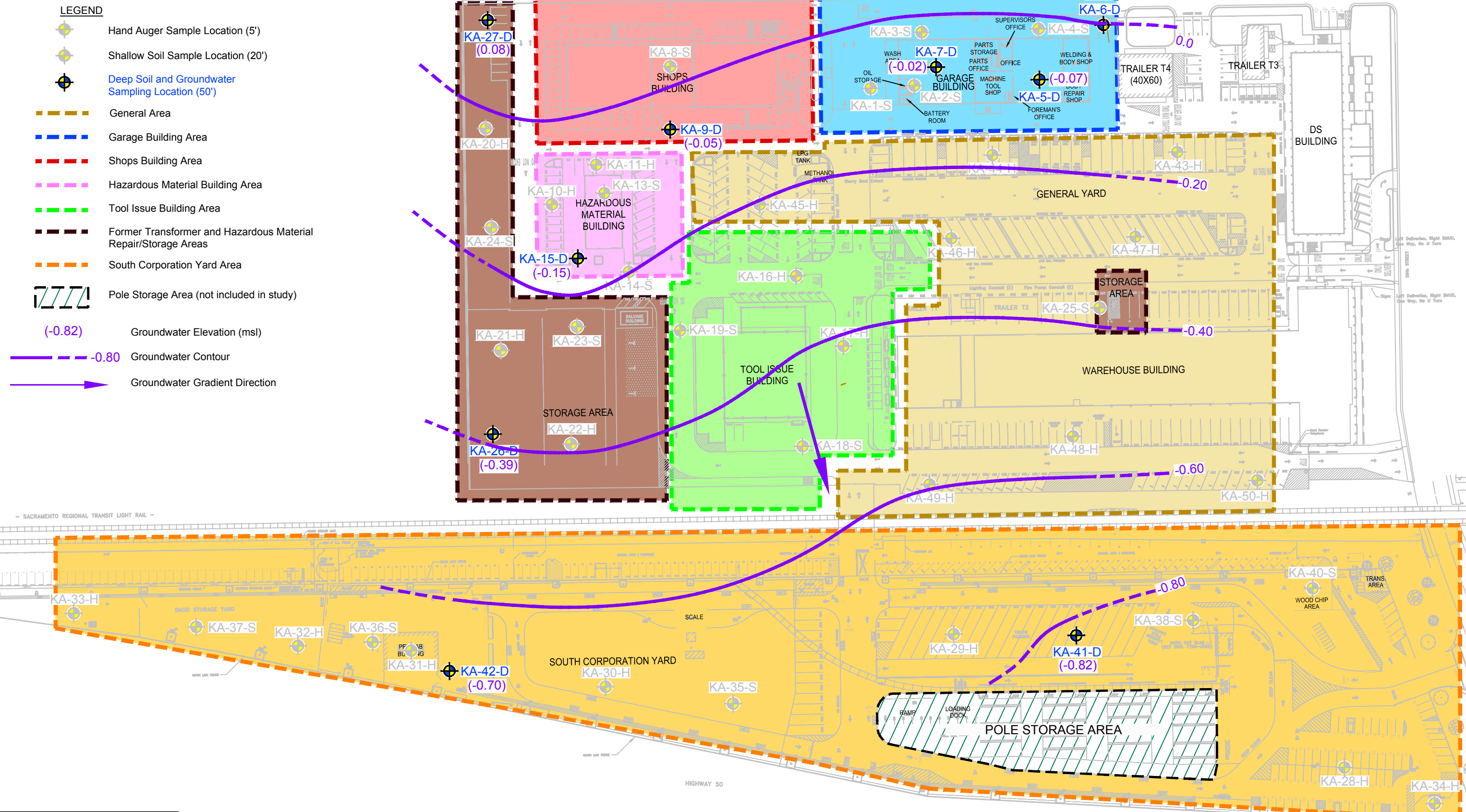
FIGURE

**8**



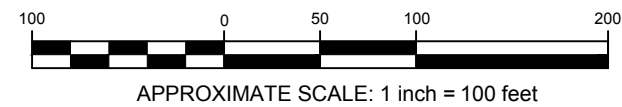
PLOTTED: 17 Feb 2016, 2:25pm, dross

CAD FILE: L:\2016\Projects\138810\Cad\15-0041 LAYOUT: 100 ft



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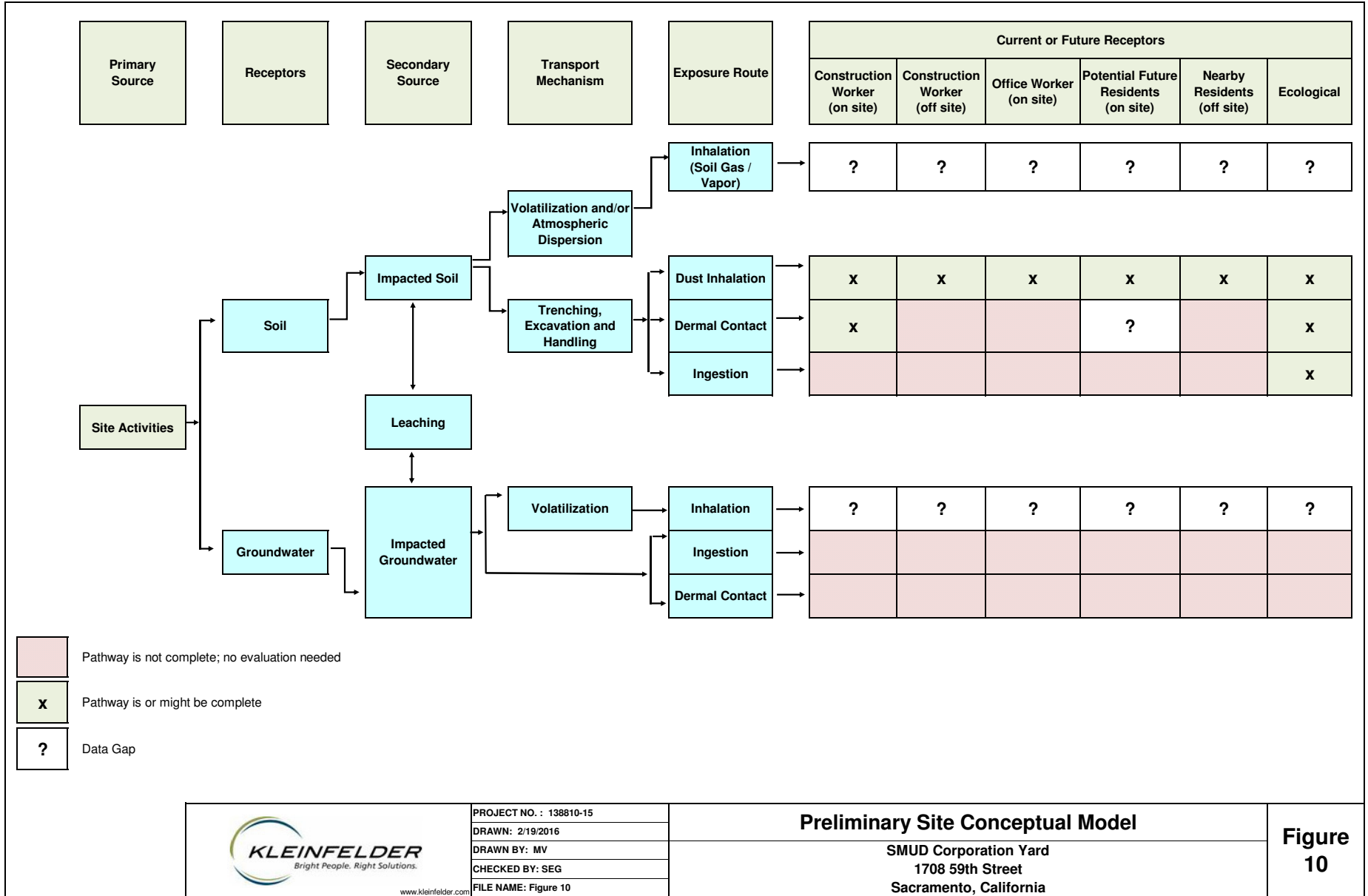


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PROJECT NO.	138810-15-004
DRAWN:	02/17/2016
DRAWN BY:	D. Ross
CHECKED BY:	C. Riddle
FILE NAME:	SMUD_GW-9.dwg

<b>GROUNDWATER GRADIENT MAP</b>
SMUD Corporation Yard 1708 59th Street Sacramento, California 95819

FIGURE  
**9**



**APPENDIX A**  
**PHOTO SURVEY**

---





Image 1: PSG-1 is located northeast corner of the Garage Building



Image 2: KA-6-D is located northeast corner of the Garage Building

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	DRAWN: 15 Apr 2015		
	DRAWN BY: SL	SMUD Corporation Yard 1708 59th Street Sacramento, California 95819	
	CHECKED BY: <checked by>		
	FILE NAME: U:\Environmental\SMUD\001		





Image 3: PSG-2 is located southeast corner of the Garage Building



Image 4: PSG-3 is located inside north of the Garage Building

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	CHECKED BY: <checked by>		
FILE NAME: <file name>			



Image 5: KA-4-D is located northeast of the Garage Building

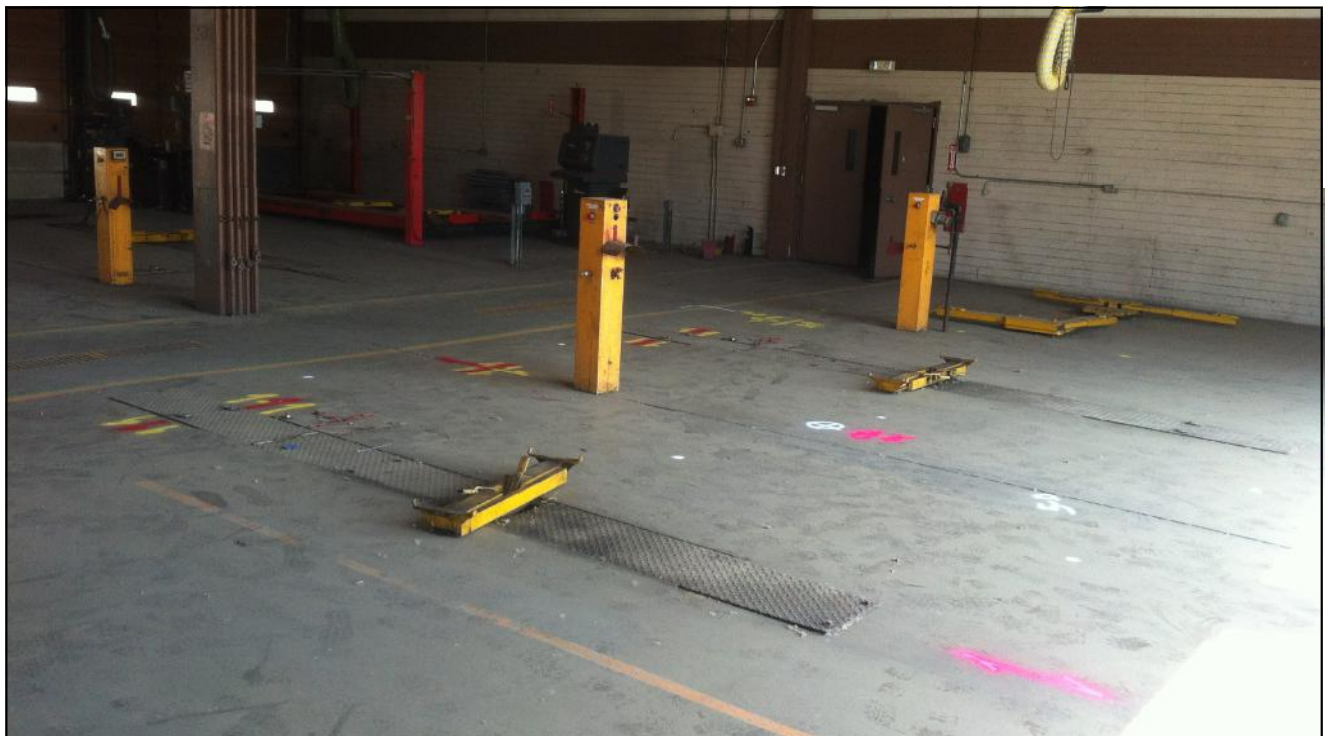


Image 6: KA-5-D is located inside of the Garage Building

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Image 7: PSG-4 is located south of the Garage Building



Image 8: PSG-5, KA-7-D, and KA-2-S are located inside of the Garage Building

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	CHECKED BY: <checked by>		
FILE NAME: <file name>			





Image 9: PSG-6 is located south of the Garage Building



Image 10: KA-3-S is located northwest of the Garage Building

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FILE NAME: <file name>			



Image 11: PSG-7 is located northwest corner of the Shops Building



Image 12: PSG-8 and KA-1-S are located in former UST area west of the Garage Building

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FILE NAME: <file name>			





Image 13: PSG-9 is located northwest corner of the Shops Building



Image 14: PSG-11 is located north of the Shops Building

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	FILE NAME: <file name>		



Image 15: KA-8-S is located inside of the Shops Building



Image 16: PSG-14 is located south of the Shop Building

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	CHECKED BY: <checked by>		
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Image 17: KA-9-D is located south of the Shops Building



Image 18: PSG-25 through PSG-28, KA-27-D, KA-20-H, and KA-24-S are located along the Storage Area

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	PROJECT NO. 138810	<b>PHASE II ENVIRONMENTAL SITE ASSESSMENT</b>	FIGURE <b>A-9</b>
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	CHECKED BY: <checked by>		
FILE NAME: <file name>			





Image 19: PSG-16 and KA-12-H are located in east of the Hazardous Material Building



Image 20: PSG-18 and KA-14-S are located southeast of the Hazardous Material Building

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Image 21: KA-11-H is located north of the Hazardous Material Building



Image 22: KA-13-S is located inside the Hazardous Material Building

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PROJECT NO.	138810
DRAWN:	15 Apr 2015
DRAWN BY:	SL
CHECKED BY:	<checked by>
FILE NAME:	<file name>

**PHASE II ENVIRONMENTAL SITE ASSESSMENT**

SMUD Corporation Yard  
1708 59th Street  
Sacramento, California 95819

FIGURE

**A-11**





Image 23: PSG-17 & 15, KA-10-H & 15-D are located southwest of the Hazardous Material Building



Image 24: KA-43-H is located northeast of the General Yard area

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Image 25: KA-44-H is located north of the General Yard area



Image 26: KA-50-H is located southeast of the Warehouse Building

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Image 27: KA-48-H is located south of the Warehouse Building



Image 28: KA-49-H is located southwest of the Warehouse Building

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FILE NAME: <file name>			





Image 29: PSG-22 and KA-17-H are located northeast of the Tool Issue Building



Image 30: PSG-24 and KA-18-S are located southeast of the Tool Issue Building

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Image 31: PSG-21 and PSG-23 are located west of the Tool Issue Building



Image 32: PSG-21 and PSG-23 locations

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Image 33: PSG-32 is located southwest of the Storage Area



Image 34: KA-26-D is located southwest of the Storage Area

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Image 35: KA-34-H is located southeast of the South Corporation Yard



Image 36: KA-28-H is located southeast of the South Corporation Yard

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	PROJECT NO. 138810	<b>PHASE II ENVIRONMENTAL SITE ASSESSMENT</b>	FIGURE  <b>A-18</b>
	DRAWN: 15 Apr 2015		
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	CHECKED BY: <checked by>		
FILE NAME: <file name>			





Image 37: KA-40-S is located in the Wood Chip Area at the South Corporation Yard



Image 38: KA-39-H is located in the South Corporation Yard

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Image 39: KA-38-S is located in the South Corporation Yard



Image 40: KA-41-D is located in the South Corporation Yard

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	CHECKED BY: <checked by>		
FILE NAME: <file name>			





Image 41: KA-29-H is located in the South Corporation Yard

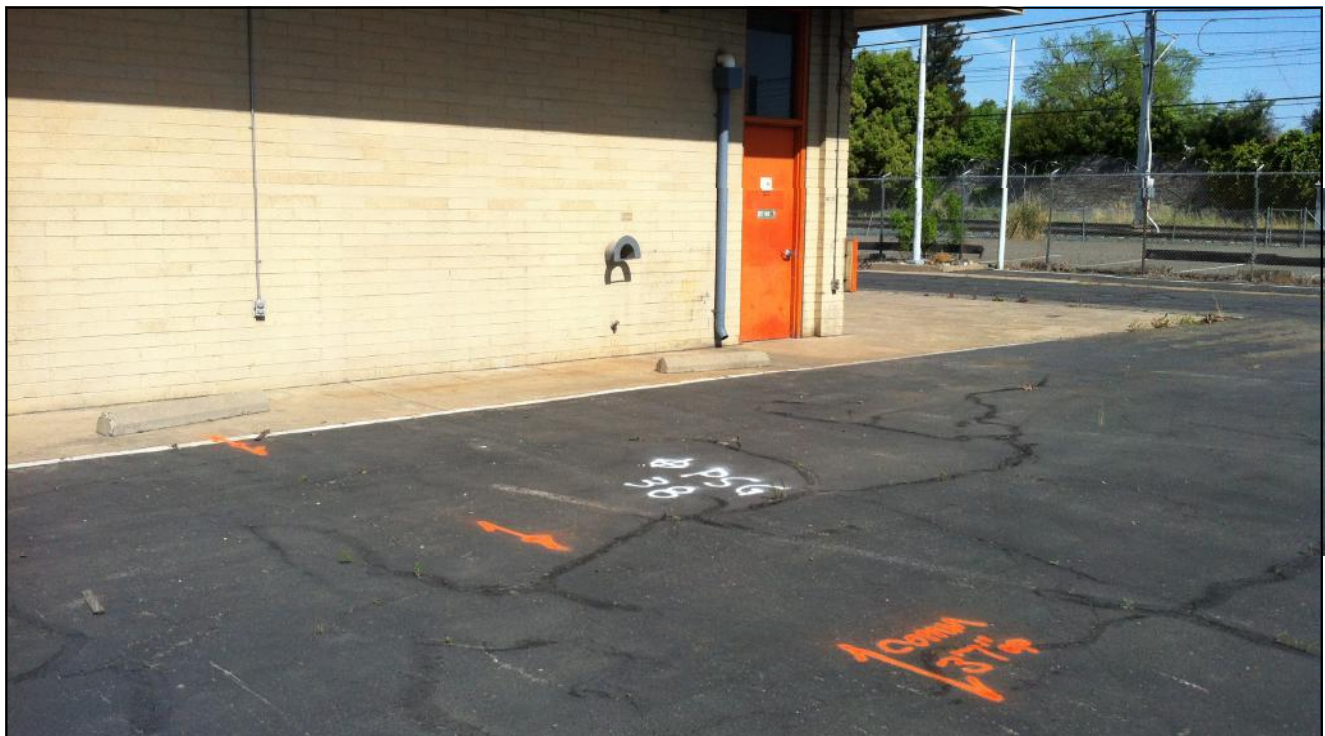


Image 42: PSG-38 is located west of the Pre-Fab Building at the South Corporation Yard

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	PROJECT NO. 138810	<b>PHASE II ENVIRONMENTAL SITE ASSESSMENT</b>	FIGURE  <b>A-21</b>
	DRAWN: 15 Apr 2015		
	DRAWN BY: SL	SMUD Corporation Yard 1708 59th Street Sacramento, California 95819	
	CHECKED BY: <checked by>		
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Image 43: KA-42-D is located west of the Pre-Fab Building at the South Corporation Yard



Image 44: KA-31-H is located inside the Pre Fab Building at the South Corporation Yard

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	PROJECT NO. 138810	<b>PHASE II ENVIRONMENTAL SITE ASSESSMENT</b>	FIGURE <b>A-22</b>
	DRAWN: 15 Apr 2015		
	DRAWN BY: SL	SMUD Corporation Yard 1708 59th Street Sacramento, California 95819	
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Image 45: KA-31-H location



Image 46: KA-36-S is located west of the Pre Fab Building at the South Corporation Yard

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	PROJECT NO. 138810	<b>PHASE II ENVIRONMENTAL SITE ASSESSMENT</b>	FIGURE  <b>A-23</b>
	DRAWN: 15 Apr 2015		
	DRAWN BY: SL	SMUD Corporation Yard 1708 59th Street Sacramento, California 95819	
	CHECKED BY: <checked by>		
FILE NAME: <file name>			





Image 47: PSG-37 is located west of the Pre Fab Building at the South Corporation Yard



Image 48: PSG-36 and KA-32-H are located southwest of the South Corporation yard

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	PROJECT NO. 138810	<b>PHASE II ENVIRONMENTAL SITE ASSESSMENT</b>	FIGURE <b>A-24</b>
	DRAWN: 15 Apr 2015		
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	CHECKED BY: <checked by>		
FILE NAME: <file name>			





Image 49: KA-37-S is located southwest of the South Corporation Yard



Image 50: PSG-35 is located southwest of the South Corporation yard

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	DRAWN: 15 Apr 2015		
	DRAWN BY: SL	SMUD Corporation Yard 1708 59th Street Sacramento, California 95819	
	CHECKED BY: <checked by>		
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Image 51: PSG-34 and KA-33-H is located southwest of the South Corporation Yard

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	PROJECT NO. 138810	<b>PHASE II ENVIRONMENTAL SITE ASSESSMENT</b>	FIGURE  <b>A-26</b>
	DRAWN: 15 Apr 2015		
	DRAWN BY: SL	SMUD Corporation Yard 1708 59th Street Sacramento, California 95819	
	CHECKED BY: <checked by>		
FILE NAME: <file name>			

**APPENDIX B**  
**SACRAMENTO COUNTY ENVIRONMENTAL MANAGEMENT DEPARTMENT – PERMITS**

---





### WELL APPLICATION AND PERMIT FORM

ENVIRONMENTAL MANAGEMENT DEPARTMENT – ENVIRONMENTAL COMPLIANCE DIVISION  
10590 ARMSTRONG AVENUE • SUITE A • MATHER, CA 95655  
TELEPHONE (916) 875-8400 FAX: (916) 875-8513

**WELL INSPECTION LINE: (916) 875-8524**

IS THIS PERMIT FOR A HAZARDOUS SUBSTANCE INVESTIGATION?  YES  NO

<b>FOR OFFICE USE ONLY</b>		<b>EXPEDITED PROCESSING?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO	
<input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> APPROVED W/CONDITIONS (ATTACHED)		PERMIT NUMBER(S): <u>56032 A-I</u>	
BY: <u>Lisa Chandy</u>	DATE: <u>5-13-15</u>	DATE RECEIVED: <u>5/12/15</u>	TOTAL FEE: <u>\$ 426.00</u>
INITIAL GROUT BY: _____	DATE: _____	RECEIPT NO: <u>12378924</u>	DEPTH TO WATER: _____
FINAL INSPECTION BY: _____	DATE: _____	WELL DEPTH: _____	GROUT DEPTH: _____
DESTRUCTION BY: _____	DATE: _____	GPS: N: <u>38</u>	W: <u>-121</u>
COMMENTS: _____			

<b>SITE ADDRESS:</b>	
Job Address: <u>1708 59th Street, Sacramento, CA 95819</u>	Nearest Major Cross Street: <u>Folsom Boulevard to the north</u>
Property Owner: <u>Sacramento Municipal Utility District</u>	Parcel Number(s): <u>008-0010-009</u>
Well Contractor: <u>Taber Drilling</u>	CA License No.: <u>C-57 969927 Exp 2-29-16</u>
Contractor's Address: <u>536 Galveston Street, West Sacramento, CA 95691</u>	
Well/Boring Identification Number(s): <u>KA-5D, KA-6D, KA-7D, KA-9D, KA-15D, KA-26D, KA-27D, KA-41D, and KA-42D</u>	

16.01 Sac  
OK  
(9)

**TYPE OF WORK:** (California C-57 License required unless noted otherwise)

- Well construction
- Vault box repair (General A or B)
- Well destruction (SUPPLEMENT REQUIRED)
- Pump replacement (or C-61)
- Well repair
- X Exploratory boring (C-57 if water present)
- Well inactivation (Owner only)
- Pump repair (or C-61)
- Other: \_\_\_\_\_

**INTENDED USE:**

- Domestic/private
- Irrigation/agricultural
- Water/vapor monitoring/extraction
- Public water system: \_\_\_\_\_
- Dewatering
- Cathodic protection
- Heat exchange
- Geotechnical boring
- X Environmental boring
- Other: \_\_\_\_\_

(NAME OF WATER PURVEYOR WITH CONTACT NAME AND TELEPHONE NUMBER)

**DRILLING METHOD:**

- Mud rotary
- Air Rotary
- Cable tool
- X Auger
- Driven
- Other: \_\_\_\_\_

**SETBACKS:** (Wells only)

- Is the well located within 50 feet of a:  sewer line,  stream,  ditch,  drainage course,  pond, or  lake?  No
- Is the well located within 100 feet of a:  septic tank,  leach line,  deep trench, or  animal enclosure?  No

**SPECIFICATIONS:**

BOREHOLE: Diameter: 8-inch Depth: 50-ft CASING: Diameter: \_\_\_\_\_ Depth: \_\_\_\_\_  
 CONDUCTOR: Diameter: \_\_\_\_\_ Depth: \_\_\_\_\_ IF STEEL: Gauge: \_\_\_\_\_ or Thickness: \_\_\_\_\_  
 ANNULAR SEAL: Depth: 0-50 Material: Neat Cement IF PLASTIC: Type: \_\_\_\_\_ (Must meet ASTM F-480)  
 TRANSITION SEAL: Material: \_\_\_\_\_ MULTIPLE COMPLETION?  Yes (DIAGRAM REQUIRED)  
 COMMENTS: \_\_\_\_\_

**PUMP INSTALLATION/REPAIR:**

Contractor: \_\_\_\_\_  
 License Number: \_\_\_\_\_ Type of Pump: \_\_\_\_\_ Horsepower: \_\_\_\_\_

I will comply with all Codes, Rules and Regulations of the State and County pertaining to or regulating wells and pumps, call (916) 875-8524 for a grout inspection at least 24 hours prior to the requested appointment time, submit a "Well Completion Report" (if required) within 60 days of the completion of my work so a final inspection can be made, and obtain WPD approval before placing a well in service.

SIGNATURE: Brian Young  Property Owner  
 PRINTED NAME: Brian Young X Well Contractor  
 COMPANY: Taber Drilling  Agent (REQUIRES AUTHORIZATION FORM)  
 MAILING ADDRESS: 536 Galveston St. W. Sac., CA 95691  
 PHONE NUMBER: 916.321.8234 FIELD PHONE: \_\_\_\_\_

A SITE PLAN MUST BE SUBMITTED WITH EACH APPLICATION.  
PERMIT EXPIRES ONE (1) YEAR AFTER DATE APPROVED (UNLESS EXTENDED)

mvandenenden@keinfelder.com



**ATTACHMENT**  
**WELL APPLICATION & PERMIT FORM**

Pursuant to the Sacramento County Code, Chapter 6.28, Section 6.28.030.E.1, Permit Number 56032 is conditioned as follows:

- Acceptable sealing materials include neat cement, sand-cement slurry, concrete, and bentonite, as specified in Sacramento County Code, Chapter 6.28, Section 6.28.040.A.2. **Sealing materials shall terminate at a depth of 5 feet below ground surface. Clean fill shall be used between 5 feet bgs and ground surface.**
- This exploratory boring is located in an area with several potential sources of soil and groundwater contamination. Soil and groundwater contaminants may be encountered in waste streams generated by these borings. All applicable Health & Safety measures shall be employed by the applicants. All applicable local, State and Federal requirements for the proper disposal of waste streams shall be employed by the applicants.
- Pursuant to Sacramento County Code, Chapter 6.28, Section 6.28.000.F, if contamination is discovered during the completion of this project, you must report the discovery to the EMD within 60 days of discovery.
- All other provisions of Chapter 6.28 of the Sacramento County Code remain in full force and effect.

By:

  
Lisa Christy  
Well Program

Date: May 13, 2015

W:\DATAWELLSWELL PERMIT ATTACHMENTS\EXPLORATORY BORINGS\1708 59TH ST\_56032\_TABER.DOCX

**SITE ADDRESS: 1708 59<sup>TH</sup> STREET**

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
56032-A	KA-5D					
Comments:						

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
56032-B	KA-6D					
Comments:						

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
56032-C	KA-7D					
Comments:						



**SITE ADDRESS: 1708 59<sup>TH</sup> STREET**

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
56032-D	KA-9D					
Comments:						

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
56032-E	KA-15D					
Comments:						

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
56032-F	KA-26D					
Comments:						

**SITE ADDRESS: 1708 59<sup>TH</sup> STREET**

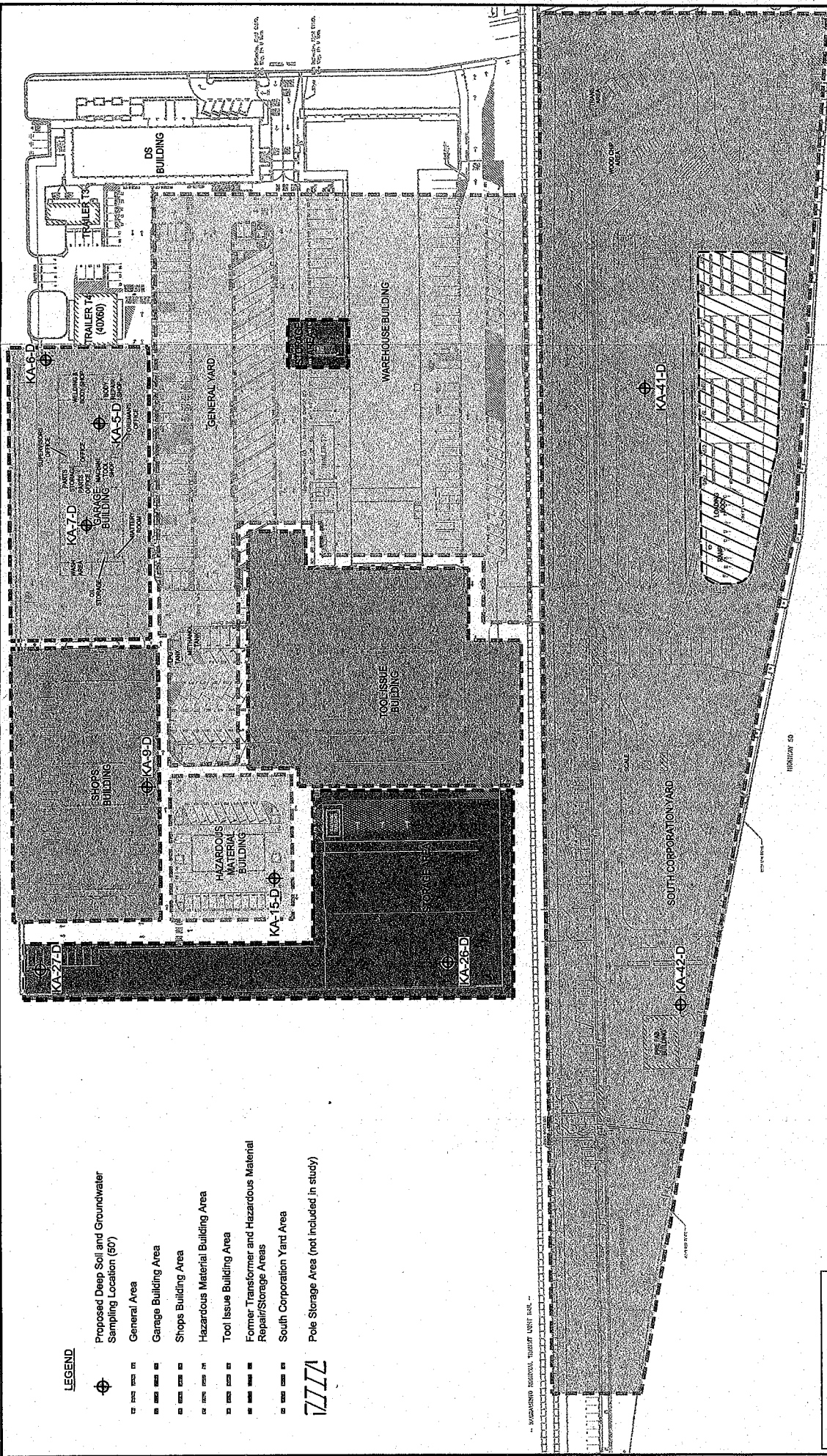
Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
56032-G	KA-27D					
Comments:						

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
56032-H	KA-41D					
Comments:						

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
56032-I	KA-42D					
Comments:						

**LEGEND**

- ⊕ Proposed Deep Soil and Groundwater Sampling Location (50')
- ▭ General Area
- ▭ Garage Building Area
- ▭ Shops Building Area
- ▭ Hazardous Material Building Area
- ▭ Tool Issue Building Area
- ▭ Former Transformer and Hazardous Material Repair/Storage Areas
- ▭ South Corporation Yard Area
- ▭ Pole Storage Area (not included in study)



**CONFIDENTIAL  
PROJECT - ATTORNEY  
CLIENT PRIVILEGE**

The information contained on this graphic representation has been compiled from a variety of sources, including but not limited to, aerial photography, maps, and other data. It is not intended to be used as a basis for any legal or other action. The user of this information is advised that the information is not intended to be used as a basis for any legal or other action. The user of this information is advised that the information is not intended to be used as a basis for any legal or other action.



PROJECT NO. 138810-14-07  
 DRAWN: 08/08/2015  
 DRAWN BY: D. Ross  
 CHECKED BY: MMD  
 FILE NAME: SMUD SITE-3a.dwg

**SITE MAP AND PROPOSED SOIL AND  
GROUNDWATER SAMPLE LOCATIONS**

SMJD Corporation Yard  
 1708 59th Street  
 Sacramento, California 95819



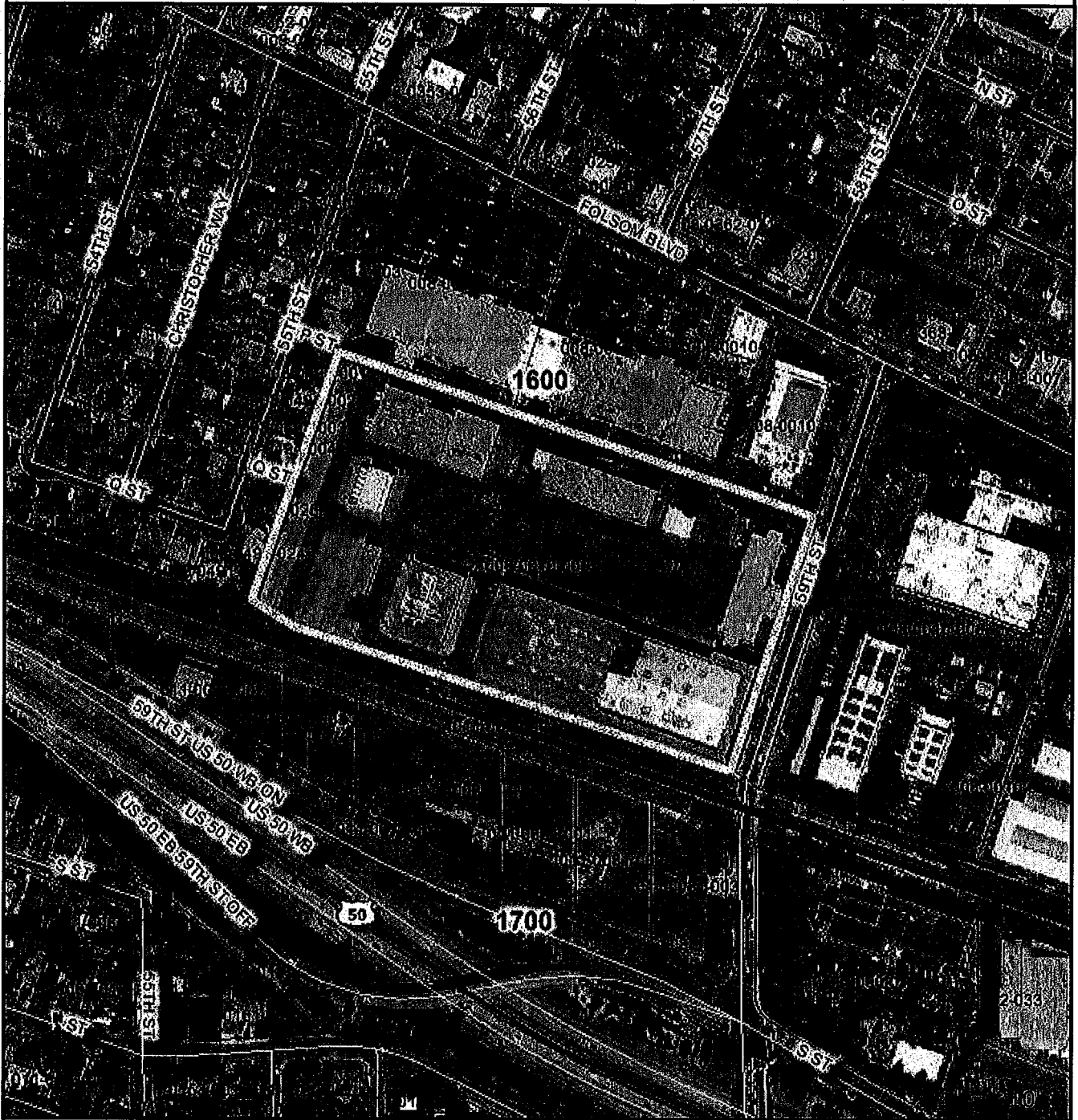
FIGURE

**3**



# 1708 59TH ST

# SACRAMENTO COUNTY



Rivers	Ortho - Street Names	Freeways	Other/Unknown Inactivation
County Boundary Lines	Major Streets	EMD Abandoned Wells Hand-dug	Deleted Parcels
Parcel Boundaries		Open casing	2010 Census Tracts
		Open piping	
		Inoperable	

**Information For Parcel:  
008-0010-009-0000****PROPERTY INFORMATION**

APN 00800100090000  
Situs Address 1708 59TH ST  
Postal City/St/Zip SACRAMENTO, CA 95819  
Additional Addresses for this Parcel  
Thomas Bros 297 J 7  
Kappa Maps 61 A 4  
Landuse Code WCAC0A  
Jurisdiction SACRAMENTO  
Sup. District District 1 - Phil Serna

**OWNERSHIP INFORMATION**

Owner S M U D  
Mailing Address PO BOX 15830  
SACRAMENTO, CA 95852  
Transfer Date unknown  
Deed No Property Transfer Document available.  
Owner History View Owner History

**PARCEL DETAIL LINKS**

General Info View General Parcel Data  
Districts View District Data  
Recorded Map No maps are available.  
Assessor Maps View Assessor Map  
Parcel History No Parcel History records available.  
Assessment Info View Assessor Data  
Building Permits View Permits  
Parcel Notes No Parcel Notes recorded.  
Business Licenses No Business License Data available.  
SHRA Info View SHRA Data  
CUBS Info No CUBS data available.  
Refuse Pickup View Refuse Service Data  
Water Meters No Water Meter Data available.  
Easements View Easements Data  
Planning Parcel View Planning Parcel Page  
Page

**Addresses for APN: 008-0010-009-0000**

**ADDRESSES**

1708 59TH ST

SAC\_MAD

1730 59TH ST

SAC\_MAD



## Contractor's License Detail for License # 969927

**DISCLAIMER: A license status check provides information taken from the CSLB license database. Before relying on this information, you should be aware of the following limitations.**

CSLB complaint disclosure is restricted by law (B&P 7124.6) If this entity is subject to public complaint disclosure, a link for complaint disclosure will appear below. Click on the link or button to obtain complaint and/or legal action information.

Per B&P 7071.17, only construction related civil judgments reported to the CSLB are disclosed.

Arbitrations are not listed unless the contractor fails to comply with the terms of the arbitration.

Due to workload, there may be relevant information that has not yet been entered onto the Board's license database.

### Business Information

TABER DRILLING  
536 GALVESTON STREET  
WEST SACRAMENTO, CA 95691  
Business Phone Number:(916) 371-8234

Entity Corporation

Issue Date 02/08/2012

Expire Date 02/29/2016

### License Status

**This license is current and active.**

All information below should be reviewed.

### Classifications

C57 - WELL DRILLING (WATER)

### Bonding Information

#### Contractor's Bond

This license filed a Contractor's Bond with AMERICAN CONTRACTORS INDEMNITY COMPANY.

**Bond Number:** 100184408

**Bond Amount:** \$12,500

**Effective Date:** 01/09/2012

#### Bond of Qualifying Individual

This license filed Bond of Qualifying Individual number 100256275 for DARCY TIMOTHY ALLEN in the amount of \$12,500 with AMERICAN CONTRACTORS INDEMNITY COMPANY.

**Effective Date:** 09/04/2014

### Workers' Compensation

This license has workers compensation insurance with the STATE COMPENSATION INSURANCE FUND

**Policy Number:**1972433

**Effective Date:** 07/13/2011

**Expire Date:** 07/13/2015

### Other

Personnel listed on this license (current or disassociated) are listed on other licenses.

[Home](#) | [Online Services](#) | [License Detail](#) | [Personnel List](#)

## Contractor's License Detail (Personnel List)

**Contractor License #** 969927  
**Contractor Name** TABER DRILLING

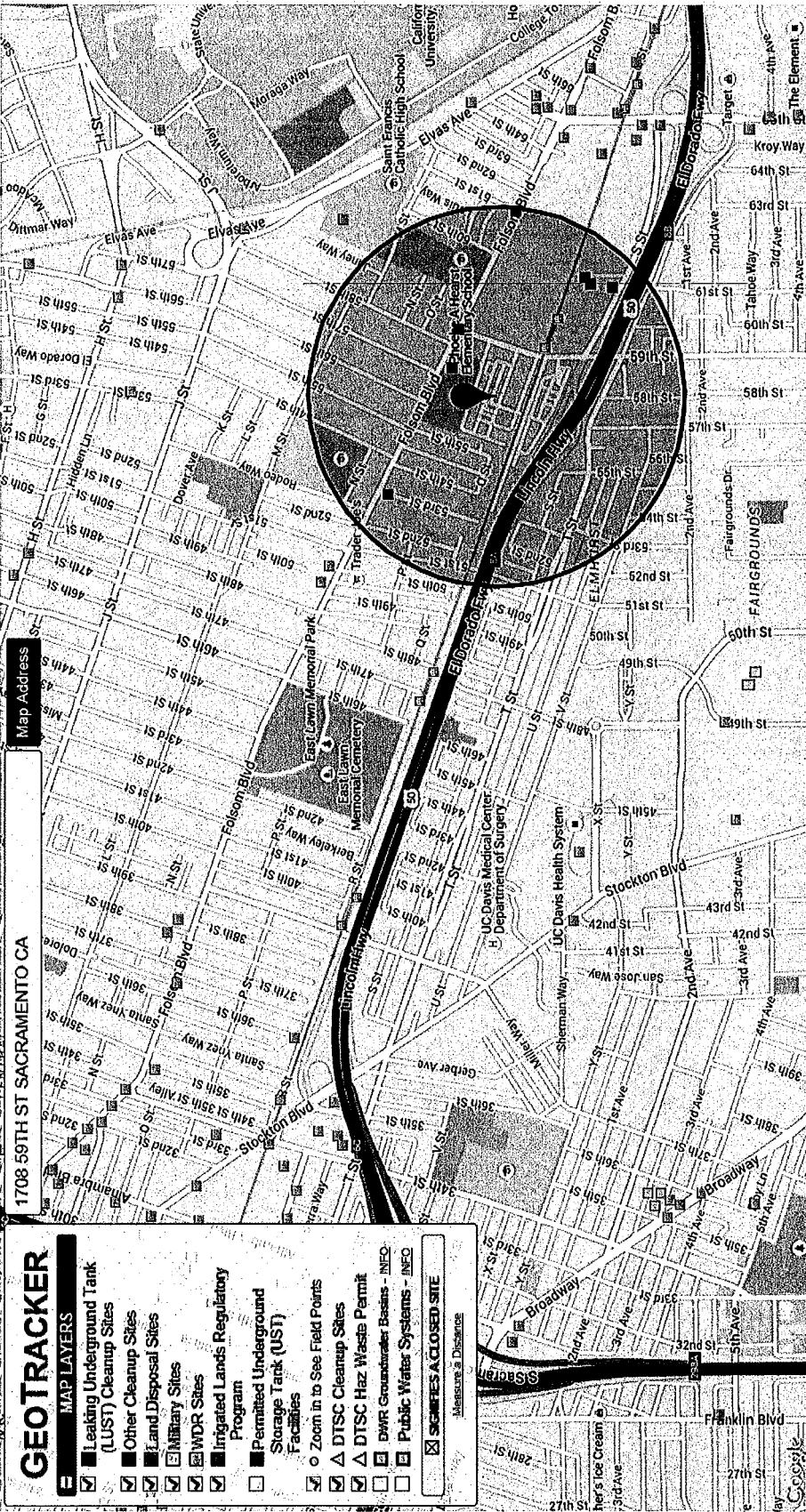
Click on the person's name to see a more detailed page of information on that person

### Personnel Currently Associated with License

**Name** [KIMBERLY DARLENE TABER](#)  
**Title** CEO / PRESIDENT  
**Association Date** 02/08/2012  
**Name** [SHARON LEE TABER](#)  
**Title** OFFICER  
**Association Date** 02/08/2012  
**Name** [TIMOTHY ALLEN DARCY](#)  
**Title** RMO  
**Association Date** 04/09/2013  
**Classification** C57  
**Name** [BRIAN JAMES YOUNG](#)  
**Title** OFFICER  
**Association Date** 03/27/2014

### Personnel No Longer Associated with License

**Name** [ANDREW LUCAS TABER](#)  
**Title** RMO  
**Association Date** 02/08/2012  
**Disassociation Date** 10/03/2014  
**Classification** C57



# GEOTRACKER

- MAP LAYERS**
- Leaking Underground Tank (LUST) Cleanup Sites
  - Other Cleanup Sites
  - Land Disposal Sites
  - Military Sites
  - WDR Sites
  - Irrigated Lands Regulatory Program
  - Permitted Underground Storage Tank (UST) Facilities
  - Zoom in to See Field Points
  - DTSC Cleanup Sites
  - DTSC Haz Waste Permit
  - DWR Groundwater Basins - INFO
  - Public Water Systems - INFO
  - SIGMIFES A CLOSED SITE
- Measure & Distance

1708 59TH ST SACRAMENTO CA

Map Address

SITE NAME	GLOBAL ID	STATUS	ADDRESS
BURGER KING	10606701076	OPEN - SITE ASSESSMENT	5900 FOLSOM BLVD
CALTRANS TRANSPORTATION LABORATORY	10606705881	OPEN - SITE ASSESSMENT	5900 FOLSOM BLVD
ECONO LUBE & TUNE #71	10606701082	OPEN - VERIFICATION MONITORING	6101 FOLSOM BLVD
FORMER KRAMER CARTON CO. FACILITY	11000000064	OPEN - SITE ASSESSMENT	1601 61ST STREET
MISSION LAUNDRY	10606700020	COMPLETED - CASE CLOSED	1824 61ST ST
SHELL	10606700183	COMPLETED - CASE CLOSED	5700 FOLSOM BLVD
SINO	11000000480	OPEN - SITE ASSESSMENT	1626 61ST STREET

7 SITES FOUND IN SEARCH RADIUS





May 7, 2015

County of Sacramento  
Environmental Management Department  
10590 Armstrong Avenue, Suite A  
Mather, California 95655

Subject: **Well Permit Application (Exploratory Borings)**  
Sacramento Municipal Utility District  
1708 59<sup>th</sup> Street  
Sacramento, California  
Kleinfelder Project No. 138810-14-07

To Whom It May Concern:

Kleinfelder has been authorized by the Sacramento Municipal Utility District to submit the following well application and permit form for exploratory borings. The nine proposed borings will be installed by a C57 licensed well driller (Taber Drilling C57-969927).

Enclosed please find:

- One Well Application and Permit Form;
- Check #5192 for \$426.00 payable to Sacramento Env. Management Dept. to cover the application fee; and
- One Site Map and Proposed Soil and Groundwater Sample locations Figure.

Work will be scheduled upon receipt of the permit. If you have any questions or concerns, please email me at [mvandenenden@kleinfelder.com](mailto:mvandenenden@kleinfelder.com) or by phone at (916) 366-1701.

Sincerely,

**KLEINFELDER, INC.**

A handwritten signature in black ink, appearing to read "Michael van den Enden", written over a horizontal line.

Michael van den Enden  
Staff Geologist

cc: File

**WELL PERMIT TIME LOG SHEET**

**FIRST PERMIT: WP0056032**

**SITE ADDRESS: 1708 59<sup>th</sup> Street**

**PAID TIME: 2 hrs**

**Taber Drilling  
- 9 Borings**

Date	Specialist	Activity	Hours	Time Remaining	Envision Updated
5/13/15	LBC	Permit processing/approval/scheduling	0.5	1.5	x





# WELL APPLICATION AND PERMIT FORM

AR17250

ENVIRONMENTAL MANAGEMENT DEPARTMENT - ENVIRONMENTAL COMPLIANCE DIVISION  
10590 ARMSTRONG AVENUE - SUITE A - MATHER, CA 95655  
TELEPHONE (916) 875-8400 FAX: (916) 875-8513

## WELL INSPECTION LINE: (916) 875-8524

IS THIS PERMIT FOR A HAZARDOUS SUBSTANCE INVESTIGATION?  YES  NO

<b>FOR OFFICE USE ONLY</b>		EXPEDITED PROCESSING? <input type="checkbox"/> YES <input type="checkbox"/> NO	
<input type="checkbox"/> APPROVED	<input checked="" type="checkbox"/> APPROVED W/CONDITIONS (ATTACHED)	PERMIT NUMBER(S):	57020 A-G
BY: <u>DVA</u>	DATE: <u>12.8.15</u>	DATE RECEIVED: <u>11/24/2015</u>	TOTAL FEE: <u>\$426.00</u>
INITIAL GROUT BY: _____	DATE: _____	RECEIPT NO: <u>NO1394261</u>	DEPTH TO WATER: _____
FINAL INSPECTION BY: _____	DATE: _____	WELL DEPTH: _____	GROUT DEPTH: _____
DESTRUCTION BY: _____	DATE: _____	GPS: N: <u>38</u>	W: <u>-121</u>
COMMENTS: <u>Backfill top 5' w/ non-grout, clean fill.</u>			

SITE ADDRESS: SMUD Corporation Yard 1708 59 <sup>th</sup> Street Sacramento, California 95819	
Job Address: same as above	Nearest Major Cross St: 59 <sup>th</sup> and S St. Sacramento Ca.
Property Owner: SMUD	Parcel Number(s): <u>008-0010-009</u>
Well Contractor: <u>Gregg Drilling</u>	CA License No.: <u>485165 Exp 1/31/16</u>
Contractor's Address: <u>950 Howe Rd, Martinez, CA 94553</u>	<u>(925) 313 5800</u>
Well/Boring Identification Number(s): KA-5D,-7D,-9D,-15D,-26D,-41D and -42D	

16.01 SAC

### TYPE OF WORK: (California C-57 License required unless noted otherwise)

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Well construction              | <input type="checkbox"/> Vault box repair (General A or B) | <input type="checkbox"/> Well destruction (SUPPLEMENT REQUIRED)        |
| <input type="checkbox"/> Pump replacement (or C-61)     | <input type="checkbox"/> Well repair                       | <input type="checkbox"/> Exploratory boring (C-57 if water present)    |
| <input type="checkbox"/> Well inactivation (Owner only) | <input type="checkbox"/> Pump repair (or C-61)             | <input checked="" type="checkbox"/> Other: <u>groundwater sampling</u> |

### INTENDED USE:

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Domestic/private                  | <input type="checkbox"/> Dewatering                             | <input type="checkbox"/> Geotechnical boring                        |
| <input type="checkbox"/> Irrigation/agricultural           | <input type="checkbox"/> Cathodic protection                    | <input type="checkbox"/> Environmental boring                       |
| <input type="checkbox"/> Water/vapor monitoring/extraction | <input type="checkbox"/> Heat exchange                          | <input checked="" type="checkbox"/> Other: <u>CPT hydrofracture</u> |
| <input type="checkbox"/> Public water system:              | (NAME OF WATER PURVEYOR WITH CONTACT NAME AND TELEPHONE NUMBER) |   |

### DRILLING METHOD:

- Mud rotary  Air Rotary  Cable tool  Auger  Driven  Other: CPT

### SETBACKS: (Wells only)

- Is the well located within 50 feet of a: sewer line, stream, ditch, drainage course, pond, or lake?  No
- Is the well located within 100 feet of a: septic tank, leach line, deep trench, or animal enclosure?  No

### SPECIFICATIONS:

BOREHOLE: Diameter: 1.25" Depth: 40 Feet CASING: Diameter: n/a Depth: n/a

CONDUCTOR: Diameter: \_\_\_\_\_ Depth: \_\_\_\_\_ CASING: Diameter: \_\_\_\_\_ Depth: \_\_\_\_\_

ANNULAR SEAL: Depth: \_\_\_\_\_ Material: \_\_\_\_\_ IF STEEL: Gauge: \_\_\_\_\_ or Thickness: \_\_\_\_\_

TRANSITION SEAL: Material: Neat Cement IF PLASTIC: Type: \_\_\_\_\_ (Must meet ASTM F-480)

COMMENTS: Following completion of sampling, borings will be backfilled to ground surface with cement/bentonite grout.

### PUMP INSTALLATION/REPAIR:

Contractor: \_\_\_\_\_ Type of Pump: \_\_\_\_\_ Horsepower: \_\_\_\_\_

License Number: \_\_\_\_\_

I will comply with all Codes, Rules and Regulations of the State and County pertaining to or regulating wells and pumps, call (916) 875-8524 for a grout inspection at least 24 hours prior to the requested appointment time, submit a "Well Completion Report" (if required) within 60 days of the completion of my work so a final inspection can be made, and obtain WPD approval before placing a well in service.

SIGNATURE: [Signature] Property Owner

PRINTED NAME: Mike Van Den Enden Well Contractor

COMPANY: Kleinfelder  Agent (REQUIRES AUTHORIZATION FORM) OK ZBC

MAILING ADDRESS: 2882 Prospect Park Drive, Suite 200, Rancho Cordova, CA

PHONE NUMBER: (916) 366-1701 FIELD PHONE: NA



**SITE ADDRESS: 1708 59<sup>TH</sup> ST**

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
57020-A	KA-5D					
Comments:						

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
57020-B	KA-7D					
Comments:						

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
57020-C	KA-9D					
Comments:						

**SITE ADDRESS: 1708 59<sup>TH</sup> ST**

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
57020-D	KA-15D					
Comments:						

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
57020-E	KA-26D					
Comments:						

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
57020-F	KA-41D					
Comments:						

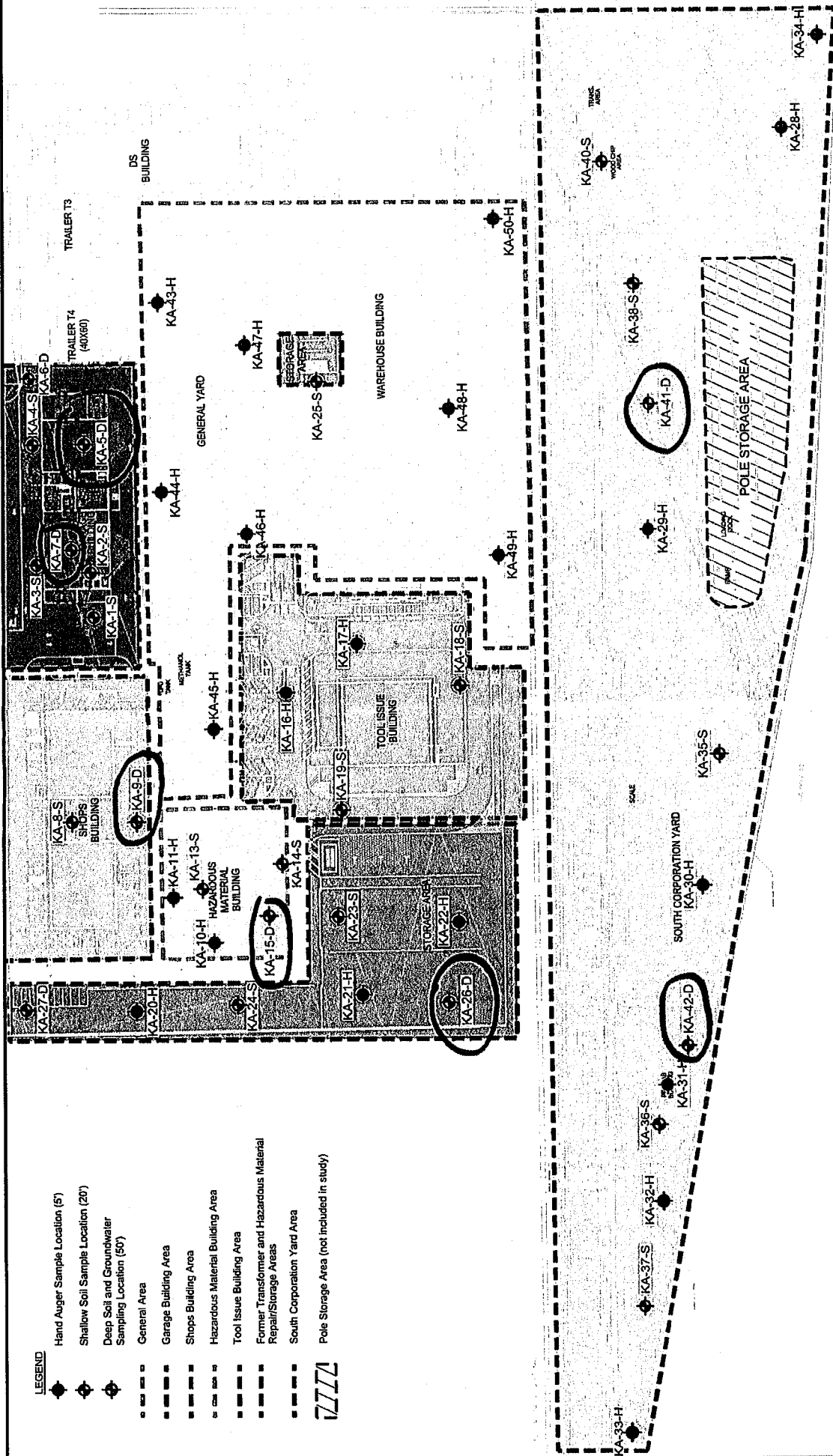
**SITE ADDRESS: 1708 59<sup>TH</sup> ST**

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
57020-G	KA-42D					
Comments:						

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
Comments:						

Permit Number	Boring Name/ID	Inspected By	Date	Total Depth (ft)	Depth to Water (ft)	Actual Grout Depth (ft)
Comments:						





- LEGEND**
- ◆ Hand Auger Sample Location (5')
  - ◆ Shallow Soil Sample Location (20')
  - ◆ Deep Soil and Groundwater Sampling Location (50')
  - General Area
  - Garage Building Area
  - Shops Building Area
  - Hazardous Material Building Area
  - Tool Issue Building Area
  - Former Transformer and Hazardous Material Repair/Storage Areas
  - South Corporation Yard Area
  - ||||| Pole Storage Area (not included in study)

**CONFIDENTIAL  
PROJECT - ATTORNEY  
CLIENT PRIVILEGE**

The information contained on this graphic representation has been prepared from a survey of the site and is not intended to be used for any other purpose. It is not intended to be used for any other purpose. It is not intended to be used for any other purpose. It is not intended to be used for any other purpose.



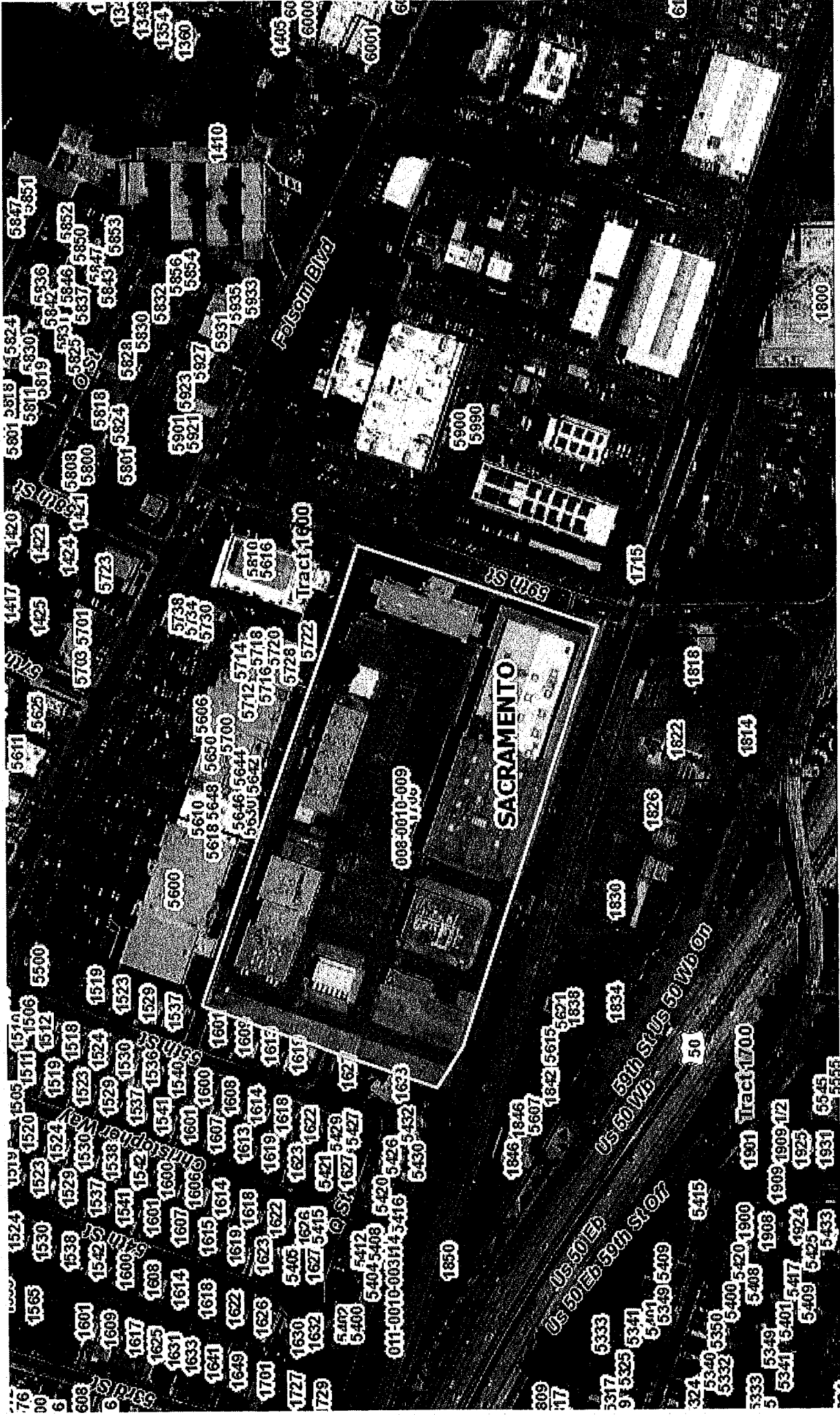
PROJECT NO.: 198610-15-004
DRAWN BY: D. Ross
CHECKED BY: C. Riddle
FILE NAME: SMUD SITE-3.dwg

**SOIL AND GROUNDWATER  
SAMPLE LOCATIONS**

SMUD Corporation Yard  
1709 59th Street  
Sacramento, California 95819

FIGURE

**3**



**Information for Parcel:**  
 008-0010-009-0000

PROPERTY INFORMATION

<b>Assessor Parcel #</b>	00800100090000
<b>Situs Address</b>	1708 59TH ST
<b>Postal City/Zip</b>	SACRAMENTO 95819
<b>Jurisdiction</b>	SACRAMENTO

PARCEL ADDRESSES

<b>Address</b>	<b>Source</b>
1708 59TH ST	SAC_MAD
1730 59TH ST	SAC_MAD

OWNER INFORMATION

<b>Owner</b>	S M U D
<b>Mailing Address</b>	PO BOX 15830 SACRAMENTO, CA 95852
<b>Transfer Date</b>	1850-09-09
<b>Transfer Type</b>	TENANCY IN COMMON DEED
<b>Deed</b>	Microfiche Index is 18500909, 89055

POLITICAL DISTRICTS

<b>County Supervisor District</b>	<u>Phil Serna - District 1</u>
<b>Sacramento City Council</b>	<u>Jeff Harris - District 3</u>
<b>State Assembly District</b>	Kevin McCarty (7)
<b>State Senate District</b>	Richard Pan (6)
<b>US Congressional District</b>	DORIS MATSUI (6)

TAGS

Parcel NOT in  
 Unincorporated  
 area

The parcel listed on this record is NOT within the county jurisdiction. Please review prior to issuance. This may be caused by a temporary failure to connect to GIS during the submittal process. After review if the parcel should NOT have been allowed: Please open a General Issues case with this record number and a detailed description. If possible make sure to include the approximate time of day when this record was initially created.

PARCEL NOTES

No Parcel Notes are available for this parcel.

EASEMENTS

No easements are available for this parcel.

<b>Doc.#</b>	<b>Type</b>	<b>Dept.</b>	<b>Rec'd Date</b>
--------------	-------------	--------------	-------------------

FEMA FLOOD ZONE

**FEMA Flood Zone:** Not in a FEMA Flood Zone

EMD

**Septic Test Drill Requirements:** No Test Drill Required



## Contractor's License Detail for License # 485165

**DISCLAIMER: A license status check provides information taken from the CSLB license database. Before relying on this information, you should be aware of the following limitations.**

CSLB complaint disclosure is restricted by law (B&P 7124.6) If this entity is subject to public complaint disclosure, a link for complaint disclosure will appear below. Click on the link or button to obtain complaint and/or legal action information.

Per B&P 7071.17, only construction related civil judgments reported to the CSLB are disclosed.

Arbitrations are not listed unless the contractor fails to comply with the terms of the arbitration.

Due to workload, there may be relevant information that has not yet been entered onto the Board's license database.

### Business Information

GREGG DRILLING & TESTING INC  
2726 WALNUT AVENUE  
SIGNAL HILL, CA 90755  
Business Phone Number:(562) 427-6899

Entity Corporation

Issue Date 01/09/1986

Expire Date 01/31/2016

### License Status

**This license is current and active.**

All information below should be reviewed.

### Classifications

C57 - WELL DRILLING

### Bonding Information

#### Contractor's Bond

This license filed a Contractor's Bond with ARGONAUT INSURANCE COMPANY.

Bond Number: SUR0019935

Bond Amount: \$12,500

Effective Date: 12/30/2012

Contractor's Bond History

#### Bond of Qualifying Individual

The Responsible Managing Officer (RMO) GREGG JOHN MICHAEL certified that he/she owns 10 percent or more of the voting stock/equity of the corporation. A bond of qualifying individual is not required.

Effective Date: 03/05/1993

BQI's Bond History

### Workers' Compensation

This license has workers compensation insurance with the OLD REPUBLIC GENERAL INSURANCE CORPORATION

Policy Number:A1CW010415

Effective Date: 08/01/2014

Expire Date: 08/01/2016

Workers' Compensation History

### Other

Personnel listed on this license (current or disassociated) are listed on other licenses.

[Home](#) | [Online Services](#) | [License Detail](#) | [Personnel List](#)

## Contractor's License Detail (Personnel List)

**Contractor License #** 485165  
**Contractor Name** GREGG DRILLING & TESTING INC

Click on the person's name to see a more detailed page of information on that person

### Personnel Currently Associated with License

**Name** [JOHN MICHAEL GREGG](#)  
**Title** RMO / CEO / PRES  
**Association Date** 02/29/1988  
**Classification** C57  
**Additional Classification** [There are additional classifications that can be viewed by selecting this link.](#)  
**Name** [CHRISTIAN PETER CHRISTENSEN](#)  
**Title** OFFICER  
**Association Date** 12/27/1999  
**Name** [JOHN PATRICK KEATING](#)  
**Title** OFFICER  
**Association Date** 12/27/1999

### Personnel No Longer Associated with License

**Name** [KATHLEEN GAIL GREGG](#)  
**Title** OFFICER  
**Association Date** 01/09/1986  
**Disassociation Date** 12/27/1999  
**Name** [BEVERLEE WILLIAMS GREGG](#)  
**Title** OFFICER  
**Association Date** 02/29/1988  
**Disassociation Date** 01/25/1990  
**Name** [DEAN OAKLEY GREGG](#)  
**Title** OFFICER  
**Association Date** 01/09/1986  
**Disassociation Date** 12/27/1999  
**Classification** C57  
**Name** [SONJA DE KEYSER-MEURS](#)  
**Title** OFFICER  
**Association Date** 01/25/1990  
**Disassociation Date** 12/27/1999

## C-57 LICENSE SIGNATURE AUTHORITY

### AUTHORIZED SIGNATURES

COMPANY	LICENSE	RMO/RME/OFFICER	DATE	AUTHORIZED SIGNATURES
Fillner Construction (A/B Lic)	177928	Michael Carruth	12/19/2008	Dan Clark
Florin Resource Conservation District (see Elk Grove Water District)				
Gary C. Tanko Well Drilling	282051	Anthony Segarra	12/15/2004	Dennis Irvin
Geocon Consultants	716050	Robert Michael Kimball	1/30/2014	Sean M. Dixon, Rebecca Silva (added 11/16/15)
Gregg Drilling and Testing Inc.	485165	John Gregg	12/17/1996	Chris Christensen and Chris Pruner; Mary Walden (added 12-14-98)
Gregg In Situ Inc.	656407	John Gregg	6/24/2005	Chris Christensen and Mary Walden
Hedman Drilling	800802	Ron Hedman	3/18/2008	Dan Hedman
Hydro Resources	832718	Michelle Strother	5/19/2014	Perry McMahon
Kirby's Pump & Mechanical, Inc	538234	Walter Kirby	9/21/2006	George Collier and Ronald Brejle (C-61/D-21 Pumps)
Layne Christensen Company	510011	<del>Robert Eretth</del>	<del>12/29/2004</del>	<del>Richard Eberlein, George Gervais, Eric Vincent, Dan Morris, and Tim Parks; Rachel Smith and Rebecca Gervais (added 2-22-08)</del>
McGuire & Hester	95879	Michael Hester	6/20/2013	Brian Unruh
M. E. Seebeck	801473	Melvin Edward Seebeck	1/18/2013	Mike Seebeck
Mitchell Drilling Environmental	672617	Harold David George	5/11/2005	Marilyn Millioti
National EWP, Inc.	953646	Jeffrey D. Morgan	9/5/2012	Tom Moreland, Timothy Cechini, Kenneth Cook, Christopher Tatum, James Whitley, Jacob Gallagher (added 1/31/13)
National EWP, Inc.	953646	Sharon Pannell	7/17/2015	Ray Theiss
Neil O. Anderson and Associates	669004	Neil O. Anderson	8/2/2006	Garret S.H. Hubbard, Rob Holmer, Dave Welch, Noah Smith, Patrick C. Dell, Ryan King (added 12/5/12), Anthony Tran (added 3/6/14)
Nor-Cal Pump & Well Service	731189	Nar Heer, Harry Heer	1/30/2006	Marisa Ford
PC Exploration Inc.	265556	Scott Fleming	7/18/2005	Sonne Fleming
PG&E	339629	Larry Hartsell	12/5/2011	PG&E Estimators in Sacramento
Pitcher Drilling Co.	263085	John Michael Gregg	6/5/2006	Terry Shewchuk and Virgil Baker



Countywide Services Agency  
 Environmental Management Department  
 Environmental Compliance Division  
 Elise Rothschild, Chief



Bradley J. Hudson, County Executive  
 Ann Edwards, Chief Deputy County Executive  
 Val F. Siebal, Department Director

County of Sacramento

WELL DRILLER'S AUTHORIZATION LETTER

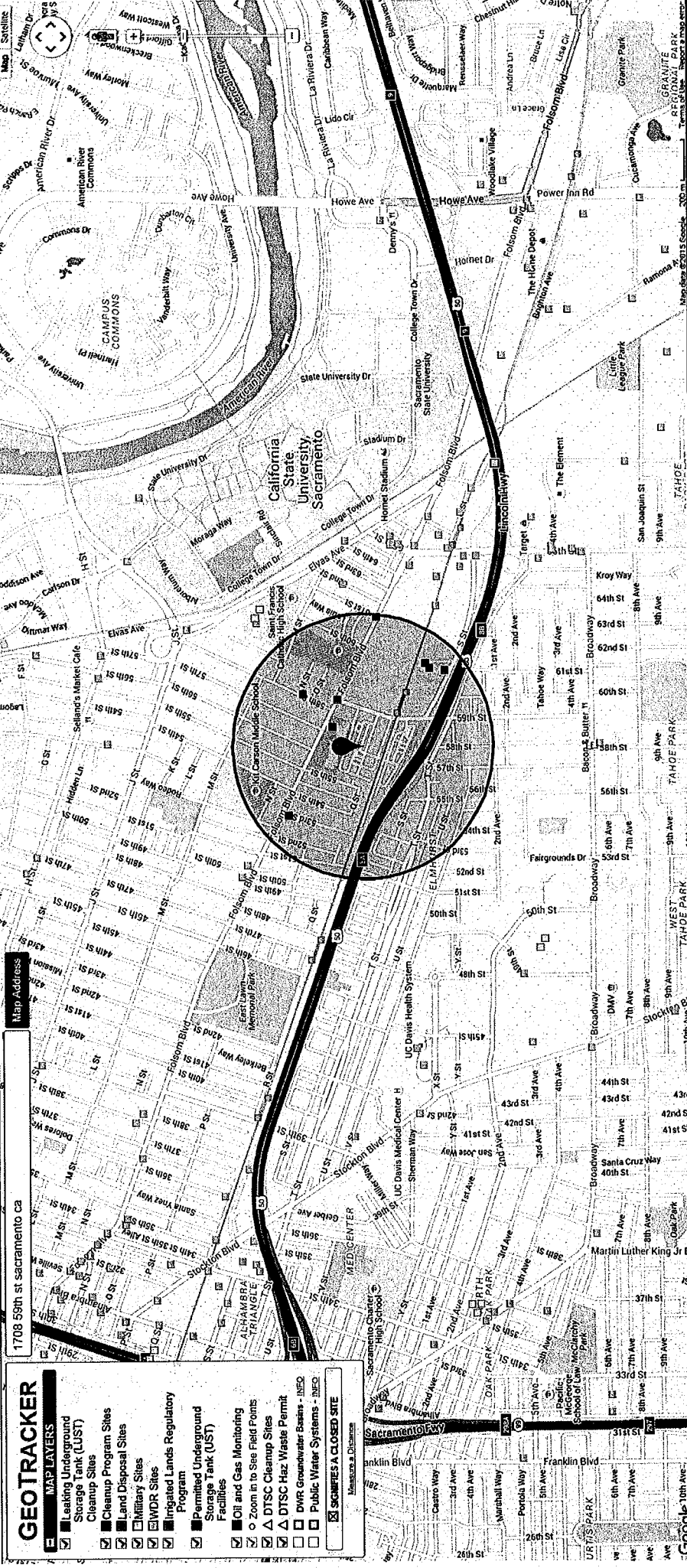
Site Address	SMUD Corporation Yard 1708 59 <sup>th</sup> Street Sacramento, California 95819		
Well Driller	Gregg Drilling		
Driller's Address	950 Howe Road, Martinez, California 94553		
Driller's Phone No.	(925) 313-5800		
C-57 License No.	485165	Exp. Date	925-313-5800

For the sole purpose of procuring permits for the construction, modification, repair, or destruction of wells or soil borings and the installation, repair, or replacement of well pumps at the aforementioned site, I hereby designate the following entity(ies) to act as my authorized representative:

Name(s)	Mike Van Den Enden
Company	Kleinfelder
Address	2987 Prospect Park Dr., Ste 200
City, State, Zip	Rancho Cordova 95670

I understand that as the applicant for permits for activities regulated under Chapter 6.28 of the Sacramento County Code, I am responsible for compliance with all provisions of that Chapter. I further understand that upon written notification to the EMD, I may rescind this authorization.

Signature	<i>Chris Pruner</i>
Printed	Chris Pruner
Title: RMO, RME, Officer	Operations Manager
Date:	11/23/15



### GEOTRACKER

**MAP LAYERS**

- Leading Underground Storage Tank (LUST) Cleanup Sites
- Cleanup Program Sites
- Land Disposal Sites
- Military Sites
- WDR Sites
- Impaired Lands Regulatory Program
- Permitted Underground Storage Tank (UST) Facilities
- Oil and Gas Monitoring
- Zoom in to see Field Points
- DTSC Cleanup Sites
- DTSC Haz Waste Permit
- DWR Groundwater Basins - INEQ
- Public Water Systems - INEQ
- SGMFAS A CLOSED SITE



**APPENDIX C**  
**FIELD SHEETS**

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SAMPLE DATA SHEET

Page 1 of 2

Project Name SMUD  
 Project No. 138810  
 Sampler Name/No. Craig Riddle 9099

Site / Boring / Well / Barrel No.	Date	Time	Sample No.	Sample Interval (feet)	PID (ppm)	Receiving Lab	Analysis	Matrix
KA- <del>43</del> -H-1	5-10-15	0848	KA- <del>43</del> -H-1	0.5-1	N/A	BCLAB	see Col 13-14	Soil 6" tube 2" dia
KA-43-H-1		1010	KA-43-H-5	4.5-5				
KA-44-H		1040	KA-44-H-1.5	1-1.5				
"		1055	KA-44-H-5	4.5-5				
KA-47-H		1120	KA-47-H-1.5	1-1.5				
"		1135	KA-47-H-5	4.5-5				
KA-46-H		1230	KA-46-H-5	4.5-5				
"		1155	KA-46-H-1.5	1-1.5				
KA-45-H		1325	KA-45-H-1.5	1-1.5				
"		1340	KA-45-H-5	4.5-5				
KA-16-H		1410	KA-16-H-1.5	1-1.5				
"		1430	KA-16-H-5	4.5-5				
KA-17-H		1455	KA-17-H-1.5	1-1.5				
"		1500	KA-17-H-5	4.5-5				
KA-49-H	5-19-15	810	KA-49-H-1.5	1-1.5			12715	
"		820	KA-49-H-3	2.5-3				
KA-48-H		840	KA-48-H-2	1.5-2				
KA-50-H		0920	KA-50-H-3	2.5-3				
"		0927	KA-50-H-5	4.5-5				
KA-10-H		0940	KA-10-H-1.5	1-1.5				
"		1040	KA-10-H-4.5	4-4.5				
KA-20-H		1115	KA-20-H-1.5	1-1.5				
"		1255	KA-20-H-5	4.5-5				
KA-11-H		1305	KA-11-H-1.5	1-1.5				
"		1320	KA-11-H-5	4.5-5				
KA-21-H		1330	KA-21-H-1.5	1-1.5				
"		1340	KA-21-H-5	4.5-5				
KA-22-H		1405	KA-22-H-2	1.5-2				
"		1409	KA-22-H-5	4.5-5				
KA-33-H		1420	KA-33-H-1	0.5-1				
"		1430	KA-33-H-5	4.5-5				





KLEINFELDER

SAMPLE DATA SHEET

Page:      of     

Project Name SMOD: Site Wide Phase II ESA  
 Project # 138810 / 15-0003  
 Site Location 1708 59<sup>th</sup> Street, Sacramento, CA  
 Sampler Name/# Michael 11083

Sample ID #	Date	Time	Containers	Receiving Lab	Matrix	Analysis	Chain-of-Custody #	Notes
KA-0-D-0	5/21/15	1330	SS	BC	Soil		<del>03930</del>	
KA-0-D-11	↓	1340	↓	↓	↓		↓	
KA-0-D-10		1350						
KA-0-D-21		1400						
KA-0-D-20		1415						
KA-0-D-31		1430						
KA-0-D-30		1450						
KA-0-D-41		1510						
KA-0-D-40		1525						
KA-0-D-51	↓	1540						
KA-9-D-0	5/22/15	0840						
KA-9-D-11	↓	0850						
KA-9-D-10		0900						
KA-9-D-21		0915						
KA-9-D-20		0930						
KA-9-D-31		0945						
KA-9-D-30		1025						
KA-9-D-41		1040						
KA-9-D-40		1055						
KA-9-D-51		1110					↓	
KA-27-D-0		1340					<del>03931</del>	
KA-27-D-11		1350						
KA-27-D-10		1400						
KA-27-D-21		1410						
KA-27-D-20		1420						
KA-27-D-31	↓	1435	↓	↓	↓			

























**KLEINFELDER**  
**SOIL GAS PURGE DATA SHEET (USING PUMP AND ROTOMETER)**

Project Name: SMUD 59th Street

Project No.: 138810

Sampler Name/No.: Julie Hernandez and Sean Echeverria

Probe ID (Sample Point)	Date	Start PurgeTime	Purge Volume	Finish PurgeTime	Helium % in Shroud	Helium % in Tedlar
			(mL)			
KA-2-S	6/18/15	1030	1L	1035	15%	0 ppm
KA-2-S	6/18/15	1037	1L	1041	15.2%	0 ppm
KA-11-H	6/18/15	1203	1L	1207	15.5%	0 ppm
KA-11-H	6/18/15	1208	1L	1212	11%	0 ppm
KA-8-S	6/18/15	1352	1L	1356	16.5%	0 ppm
KA-8-S	6/18/15	1358	1L	1402	17.5%	0 ppm

**SHUT IN TEST**

Summa Canister ID	Flow Controller ID	Date	Start Time	Start Vacuum	End Time	End Vacuum
36036	40799	6/18/15	9:12	>30	9:42	>30
<del>34346</del>						
33663	FC00742	6/18/15	9:53	30	10:25	30
0000001649	FC00200	6/18/15	1335	>30	1405	>30



**KLEINFELDER**  
**SOIL GAS PURGE DATA SHEET (USING PUMP AND ROTOMETER)**

Project Name: SMUD 59th Street

Project No.: 138810

Sampler Name/No.: Julie Hernandez and Sean Echeverria

Probe ID (Sample Point)	Date	Start PurgeTime	Purge Volume	Finish PurgeTime	Helium % in Shroud	Helium % in Tedlar
			(mL)			
KA-17-H	6/18/15 <sup>19 JH</sup>	0833	1L	0837	18%	0 ppm <del>18% JH</del>
KA-17-H	6/18/15 <sup>19 JH</sup>	0845	1L	0849	12%	0 ppm
KA-19-S	6/19/15	1100	1L	1104	20%	0 ppm
KA-19-8	6/19/15	1105	1L	1109	18%	0 ppm
KA-31-H	6/19/15	1238	1L	1242	20%	0 ppm
KA-31-H	6/19/15 <sup>JH</sup>	1244	1L	1246	22%	0 ppm

**SHUT IN TEST**

Summa Canister ID	Flow Controller ID	Date	Start Time	Start Vacuum	End Time	End Vacuum
34203	000006713	6/18/15 <sup>19 JH</sup>	0805	730	0835	730
33898	FC00511	6/18/15 <sup>19 JH</sup>	0805	730	0835	730
34489	FC00703	6/19/15	1010	730	1040	730
33583	FC00714	6/19/15	1026	730	1056	730





### Soil Vapor Sample Data Sheet

Project Name: SMUD 59th Street  
 Project Number: 138810  
 Sampler(s) Name(s): Julie Hernandez and Sean Echeverria

Date: 6/18/15

#### Sample Location and Instrument Information

Sample Location:	AA-1		
Sample ID:	AA-1		
Sample Depth (ft bgs):	N/A		
Helium Detector Make/Model/Serial No.:	N/A		

#### Summa Canister Record

Summa Serial No.:	22499		
Flow Controller No.:	FC 00713		
Start Date/Time	Date: 6/18	Time: 0942	Date: Time:
Stop Date/Time	Date: 6/18	Time: 1312	Date: Time:
Vacuum (in Hg)	Start: 30 <sup>in</sup> 24.5 <sup>in</sup> Hg	Stop: 6 <sup>in</sup> Hg	Start: Stop:
Duplicate Sample ID			

#### Additional Information

Air Temperature (F), Weather Conditions	90°s
% Helium Under Shroud	N/A
Helium Detector Reading (Leak Check)	N/A
Constituents Sampled	See COC
Container Description	6 L Summa
Seals Checked	Yes
Tracer Gas Test	Successful
Photo Taken	Yes
Purge Time and Volume	Time= N/A Vol.= N/A
Comments:	



### Soil Vapor Sample Data Sheet

**Date:** 6/18/14

**Project Name:** SMUD 59th Street

**Project Number:** 138810

**Sampler(s) Name(s):** Julie Hernandez and Sean Echeverria

#### Sample Location and Instrument Information

Sample Location:	KA-2-S		KA-11-H		KA-8-S	
Sample ID:	KA-2-S-SV		KA-11-H-SV		KA-8-S-SV	
Sample Depth (ft bgs):	4.5 ft		4.5 ft		4.5 ft	
Helium Detector Make/Model/Serial No.:	MGD 2002 / NA		MGD 2002 / N/A		MGD 2002 / N/A	
<b>Summa Canister Record</b>						
Summa Serial No.:	36036		33663		000001049	
Flow Controller No.:	40799		FC00742		FC00200	
Start Date/Time	Date: 6/18	Time: 11:02	Date: 6/18	Time: 12:32	Date: 6/18	Time: 14:28
Stop Date/Time	Date: 6/18	Time: 11:38	Date: 6/18	Time: 13:07	Date: 6/18	Time: 15:03
Vacuum (in Hg)	Start: 730" Hg	Stop: 6" Hg	Start: 30" Hg	Stop: 5" Hg	Start: 780" Hg	Stop: 6" Hg
Duplicate Sample ID	N/A		N/A			

#### Additional Information

Air Temperature (F), Weather Conditions	90s		90s		90s	
% Helium Under Shroud	12.5%		10.5%		10%	
Helium Detector Reading (Leak Check)	0 ppm		0 ppm		0 ppm	
Constituents Sampled	See COC		See COC		See COC	
Container Description	6 L Summa		6 L Summa		6 L Summa	
Seals Checked	Yes	No	Yes	No	Yes	No
Tracer Gas Test	Successful	Unsuccessful	Successful	Unsuccessful	Successful	Unsuccessful
Photo Taken	Yes	No	Yes	No	Yes	No
Purge Time and Volume	Time=	Vol.=	Time=	Vol.=	Time=	Vol.=
Comments:						





### Soil Vapor Sample Data Sheet

**Date:** 6/19/15

**Project Name:** SMUD 59th Street  
**Project Number:** 138810  
**Sampler(s) Name(s):** Julie Hernandez and Sean Echeverria

#### Sample Location and Instrument Information

Sample Location:	KA-17-H	KA-17-H	KA-19-S
Sample ID:	KA-17-H-SV	KA-17-H-SVD	KA-19-S-SV
Sample Depth (ft bgs):	4.5'	4.5'	4.5'
Helium Detector Make/Model/Serial No.:	MGD 2002 / N/A	MGD 2002 / N/A	MGD 2002 / N/A

#### Summa Canister Record

Summa Serial No.:	33898	33583	33583
Flow Controller No.:	FC00511	FC00714	FC00714
Start Date/Time	Date: 6/19 Time: 0854	Date: 6/19 Time: 0954	Date: 6/19 Time: 11:20
Stop Date/Time	Date: 6/19 Time: 0930	Date: 6/19 Time: 0930	Date: 6/19 Time: 11:56
Vacuum (in Hg)	Start: >30 Stop: 5" Hg	Start: >30 Stop: 5" Hg	Start: >30" Hg Stop: 6" Hg
Duplicate Sample ID			

#### Additional Information

Air Temperature (F), Weather Conditions	90s 90s
% Helium Under Shroud	10% 10%
Helium Detector Reading (Leak Check)	0 ppm 0 ppm
Constituents Sampled	See CoC See CoC
Container Description	6 L Summa 6 L Summa
Seals Checked	Yes No
Tracer Gas Test	Successful Unsuccessful
Photo Taken	Yes No
Purge Time and Volume	Time= Vol.=
Comments:	





## Soil Vapor Sample Data Sheet

Project Name: SMUD 59th Street  
 Project Number: 138810  
 Sampler(s) Name(s): Julie Hernandez and Sean Echeverria

Date: 6/19/15

### Sample Location and Instrument Information

Sample Location:	KA-31-H
Sample ID:	KA-31-H-SV
Sample Depth (ft bgs):	4.5'
Helium Detector Make/Model/Serial No.:	MGD 2002 / N/A

### Summa Canister Record

Summa Serial No.:	34489							
Flow Controller No.:	FC00703							
Start Date/Time	Date:	6/19	Time:	12:52	Date:		Time:	
Stop Date/Time	Date:	6/19	Time:	13:24	Date:		Time:	
Vacuum (in Hg)	Start:	>30" Hg	Stop:	6" Hg	Start:		Stop:	
Duplicate Sample ID								

### Additional Information

Air Temperature (F), Weather Conditions	90s					
% Helium Under Shroud	10%					
Helium Detector Reading (Leak Check)	0 ppm					
Constituents Sampled	See COC					
Container Description	6 L Summa					
Seals Checked	Yes	No	Yes	No	Yes	No
Tracer Gas Test	Successful	Unsuccessful	Successful	Unsuccessful	Successful	Unsuccessful
Photo Taken	Yes	No	Yes	No	Yes	No
Purge Time and Volume	Time=	Vol.=	Time=	Vol.=	Time=	Vol.=
Comments:						



## Soil Vapor Sample Data Sheet

Project Name: SMUD 59th Street  
 Project Number: 138810  
 Sampler(s) Name(s): Julie Hernandez and Sean Echeverria

Date: 6/19/15

### Sample Location and Instrument Information

Sample Location:	AA-2
Sample ID:	AA-2
Sample Depth (ft bgs):	N/A
Helium Detector Make/Model/Serial No.:	

### Summa Canister Record

Summa Serial No.:	34346							
Flow Controller No.:	FCDD 427							
Start Date/Time	Date:	6/19	Time:	0801	Date:		Time:	
Stop Date/Time	Date:	6/19	Time:	1345	Date:		Time:	
Vacuum (in Hg)	Start:	28.5" Hg	Stop:	8.5" Hg	Start:		Stop:	
Duplicate Sample ID								

### Additional Information

Air Temperature (F), Weather Conditions						
% Helium Under Shroud						
Helium Detector Reading (Leak Check)						
Constituents Sampled						
Container Description	6 L Summa		6 L Summa		6 L Summa	
Seals Checked	Yes	No	Yes	No	Yes	No
Tracer Gas Test	Successful	Unsuccessful	Successful	Unsuccessful	Successful	Unsuccessful
Photo Taken	Yes	No	Yes	No	Yes	No
Purge Time and Volume	Time=	Vol.=	Time=	Vol.=	Time=	Vol.=
Comments:						



**KLEINFELDER**  
**SOIL GAS PURGE DATA SHEET (USING PUMP AND ROTOMETER)**

**Project Name:** SMUD 59th Street

**Project No.:** 138810

**Sampler Name/No.:** Julie Hernandez and Sean Echeverria

Probe ID (Sample Point)	Date	Start PurgeTime	Purge Volume	Finish PurgeTime
			(mL)	
KA-11-H-SV	7/1/15	05:55	0.5 L	05:57
KA-17-H-SV	7/1/15	06:23	0.5 L	06:25
KA-19-S-SV	7/1/15	06:48	0.5 L	06:50
KA-2-S-SV	7/1/15	07:10	0.5 L	07:12
KA-31-H-SV	7/1/15	07:36	0.5 L	07:38
KA-8-S-SV	7/1/15	08:05	0.5 L	08:07





### Soil Vapor Sample Data Sheet

Project Name: SMUD 59th Street Date: 7/1/2015  
 Project Number: 138810  
 Sampler(s) Name(s): Julie Hernandez and Sean Echeverria

#### Sample Location

Sample Location:	KA-11-H	KA-17-H	KA-17-H
Sample ID:	KA-11-11-SV	KA-17-H-SV	KA-17-H-SVD
Sample Depth (ft bgs):	4.5'	4.5'	4.5'

#### Sampling Record

Total Volume of Air (mL)	1020 mL		
Start Date/Time	Date: 7/1/15	Time: 0605	Time: 0630
Stop Date/Time	Date: 7/1/15	Time: 0611	Time: 0636

#### Additional Information

Air Temperature (F), Weather Conditions	70s, overcast		
Constituents Sampled	see COC		
Container Description	Glass Sorbent Tube		
Purge Time and Volume	Time= 2 min	Vol.= 0.5L	Vol.= 0.5L

Comments:	see COC	70s, overcast	see COC
	Glass Sorbent Tube	Glass Sorbent Tube	Glass Sorbent Tube
	Time= 2 min	Time= 2 min	Time= 2 min
	Vol.= 0.5L	Vol.= 0.5L	Vol.= 0.5L



### Soil Vapor Sample Data Sheet

Project Name: SMUD 59th Street      Date: 7/1/2015  
 Project Number: 138810  
 Sampler(s) Name(s): Julie Hernandez and Sean Echeverria

Sample Location	
Sample Location:	KA-2-S
Sample ID:	KA-2-S-SV
Sample Depth (ft bgs):	4.5'
	KA-31-H
	KA-31-H-SV
	4.5'

Sampling Record			
Total Volume of Air (mL)	1020 mL	1020 mL	1020 mL
Start Date/Time	Date: 7/1/15    Time: 0653	Date: 7/1/15    Time: 0715	Date: 7/1/15    Time: 0740
Stop Date/Time	Date: 7/1/15    Time: 0659	Date: 7/1/15    Time: 0721	Date: 7/1/15    Time: 0746

Additional Information			
Air Temperature (F), Weather Conditions	70s, Sunny	80s, Sunny	80s, sunny
Constituents Sampled	see COC	see COC	see COC
Container Description	Glass Sorbent Tube	Glass Sorbent Tube	Glass Sorbent Tube
Purge Time and Volume	Time= 2min    Vol.= 0.5L	Time= 2 min    Vol.= 0.5L	Time= 2 min    Vol.= 0.5L
Comments:			



### Soil Vapor Sample Data Sheet

Project Name: SMUD 59th Street Date: 7/1/2015  
 Project Number: 138810  
 Sampler(s) Name(s): Julie Hernandez and Sean Echeverria

Sample Location	
Sample Location:	KA-8-S
Sample ID:	KA-8-S-SV
Sample Depth (ft bgs):	4.5'

Sampling Record			
Total Volume of Air (mL)			
1020 mL			
Start Date/Time	Date:	Time:	Date: Time:
	7/1/15	0810	
Stop Date/Time	Date:	Time:	Date: Time:
	7/1/15	0816	

Additional Information	
Air Temperature (F), Weather Conditions	80s, sunny
Constituents Sampled	see COC
Container Description	Glass Sorbent Tube
Purge Time and Volume	Time= 2min Vol.= 0.5 mL
Comments:	

Air Temperature (F), Weather Conditions	see COC
Constituents Sampled	see COC
Container Description	Glass Sorbent Tube
Purge Time and Volume	Time= Vol.=
Comments:	





**APPENDIX D**  
**BORING LOGS**

---

**SAMPLE/SAMPLER TYPE GRAPHICS**

MODIFIED CALIFORNIA SAMPLER  
(2 or 2-1/2 in. (50.8 or 63.5 mm.) outer diameter)

**WELL MATERIAL GRAPHICS**

SAND  
SLOTTED SCREEN  
SOLID WALL PIPE

**WELL BACKFILL MATERIAL GRAPHICS**

BENTONITE  
SAND  
SOLID WALL PIPE

**GROUND WATER GRAPHICS**

WATER LEVEL (level where first observed)  
WATER LEVEL (level after exploration completion)  
WATER LEVEL (additional levels after exploration)  
OBSERVED SEEPAGE

**NOTES**

The report and graphics key are an integral part of these logs. All data and interpretations in this log are subject to the explanations and limitations stated in the report.

Lines separating strata on the logs represent approximate boundaries only. Actual transitions may be gradual or differ from those shown.

No warranty is provided as to the continuity of soil or rock conditions between individual sample locations.

Logs represent general soil or rock conditions observed at the point of exploration on the date indicated.

In general, Unified Soil Classification System designations presented on the logs were based on visual classification in the field and were modified where appropriate based on gradation and index property testing.

Fine grained soils that plot within the hatched area on the Plasticity Chart, and coarse grained soils with between 5% and 12% passing the No. 200 sieve require dual USCS symbols, ie., GW-GM, GP-GM, GW-GC, GP-GC, GC-GM, SW-SM, SP-SM, SW-SC, SP-SC, SC-SM.

If sampler is not able to be driven at least 6 inches then 50/X indicates number of blows required to drive the identified sampler X inches with a 140 pound hammer falling 30 inches.

**Abbreviations**

PID - Photoionization Detector

**UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487)**

GRAVELS (More than half of coarse fraction is larger than the #4 sieve)	CLEAN GRAVEL WITH <5% FINES	Cu ≥ 4 and 1 ≤ Cc ≤ 3		GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES	
		Cu < 4 and/or 1 > Cc > 3		GP	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES	
	GRAVELS WITH 5% TO 12% FINES	Cu ≥ 4 and 1 ≤ Cc ≤ 3		GW-GM	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE FINES	
		Cu < 4 and/or 1 > Cc > 3		GP-GC	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE CLAY FINES	
	GRAVELS WITH > 12% FINES			GM	SILTY GRAVELS, GRAVEL-SILT-SAND MIXTURES	
				GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES	
			GC-GM	CLAYEY GRAVELS, GRAVEL-SAND-CLAY-SILT MIXTURES		
COARSE GRAINED SOILS (More than half of coarse fraction is smaller than the #4 sieve)	CLEAN SANDS WITH <5% FINES	Cu ≥ 6 and 1 ≤ Cc ≤ 3		SW	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES	
		Cu < 6 and/or 1 > Cc > 3		SP	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES	
	SANDS WITH 5% TO 12% FINES	Cu ≥ 6 and 1 ≤ Cc ≤ 3		SW-SM	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE FINES	
		Cu < 6 and/or 1 > Cc > 3		SW-SC	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE CLAY FINES	
	SANDS WITH > 12% FINES			SP-SM	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE FINES	
				SP-SC	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE CLAY FINES	
				SM	SILTY SANDS, SAND-GRAVEL-SILT MIXTURES	
	FINE GRAINED SOILS (More than half of material is smaller than the #200 sieve)	SILTS AND CLAYS (Liquid Limit less than 50)			ML	INORGANIC SILTS AND VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, SILTS WITH SLIGHT PLASTICITY
					CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				CL-ML	INORGANIC CLAYS-SILTS OF LOW PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
SILTS AND CLAYS (Liquid Limit greater than 50)			OL	ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PLASTICITY		
			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILT		
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS		
		OH	ORGANIC CLAYS & ORGANIC SILTS OF MEDIUM-TO-HIGH PLASTICITY			

<p><b>KLEINFELDER</b> Bright People. Right Solutions.</p>	PROJECT NO.: 138810	<p><b>GRAPHICS KEY</b></p> <p>SMUD Corporation Yard 1798 59th Street Sacramento, California</p>	FIGURE
	<p>DRAWN BY: DR</p> <p>CHECKED BY: CR</p> <p>DATE: 7/28/2015</p> <p>REVISED: 2/15/2016</p>		D-1









PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 6/01/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION

Location Offset: 59th Street  
 Surface Condition: Asphalt

Lithologic Description

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log	Lithologic Description
0 - 4							ASPHALT: about 4 inches
4 - 7							AGGREGATE BASE: about 3 to 4 inches FILL
7 - 10			6	0	0		Silty SAND with Gravel (SM): olive brown, moist, very loose, fine to coarse sand, fine subrounded to rounded gravel up to 1/4 inch [FILL]
10 - 15			11	0	0		rounded gravel
15 - 20			16	0	0		Pea Gravel (#4), less than 10% fines [FILL]
20 - 21.5			21	0	0		Poorly-graded SAND with Gravel (SP): brown, moist, dense, fine to coarse sand, fine subrounded gravel [NATIVE]

The borehole was terminated at approximately 21.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 Hand Auger to 5 feet  
 The boring was backfilled with on June 01, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-1-S**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

**D-2**

GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 5/29/2015  
**Logged By:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available  
**Plunge:** -90 degrees  
**Weather:** Not Available  
**Drilling Company:** \_\_\_\_\_  
**Drill Crew:** \_\_\_\_\_  
**Drilling Equipment:** \_\_\_\_\_  
**Drilling Method:** See Drilling Method Column  
**Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION

Location Offset: 59th Street  
 Surface Condition: Concrete

Lithologic Description

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log	Lithologic Description
0 - 0.5							<b>CONCRETE:</b> about 7 inches
0.5 - 0.6							<b>AGGREGATE BASE:</b> about 8 inches
0.6 - 2.2			6				<b>Lean CLAY with Sand and Gravel (CL):</b> reddish brown, moist, firm, fine to medium sand, fine gravel, some cobbles, no odor
2.2 - 3.4			11				<b>SILT with Sand (ML):</b> low plasticity, reddish brown, moist, firm to hard, no odor
3.4 - 19.9			16				<b>Poorly-graded SAND (SP):</b> brown, moist, medium dense, fine to medium sand, no odor
19.9 - 21.5			21		1.9		

The borehole was terminated at approximately 21.5 ft. below ground surface.

**GROUNDWATER LEVEL INFORMATION:**  
 Groundwater was not encountered during drilling or after completion.  
**GENERAL NOTES:**  
 Hand Auger to 5 feet  
 The boring was backfilled with on May 29, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

BORING LOG KA-2-S

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

D-3

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

Date Begin - End: 6/01/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

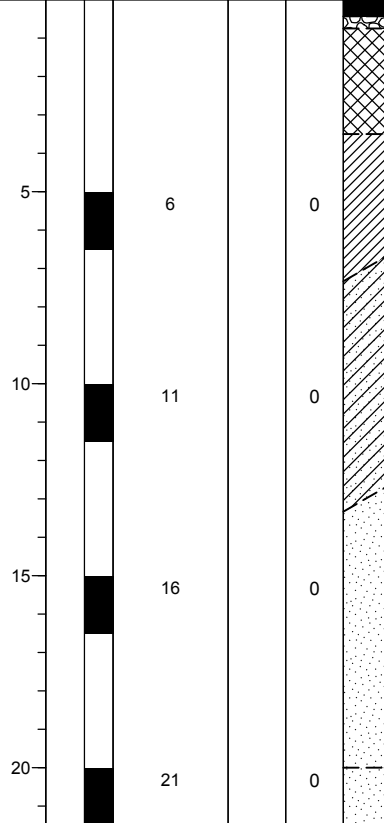
BORING LOG KA-3-S

FIELD EXPLORATION

Location Offset: 59th Street  
 Surface Condition: Asphalt

Depth (feet)  
 Drilling Method  
 Sample Type  
 Sample Number  
 Recovery (NR=No Recovery)  
 PID / FID (ppmv)  
 Graphical Log

Lithologic Description



ASPHALT: about 5 inches  
 AGGREGATE BASE: about 3 to 4 inches  
 FILL  
 Sandy Lean CLAY (CL): low plasticity, reddish brown, moist, soft to firm, fine sand  
 Clayey SAND (SC): reddish brown, moist, loose, fine to medium sand  
 Poorly-graded SAND with Gravel (SP): brown, moist, fine to coarse sand, fine subangular gravel up to 1/4 inch  
 Poorly-graded SAND (SP): gray, moist, fine to coarse sand

The borehole was terminated at approximately 21.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 Hand Auger to 5 feet  
 The boring was backfilled with on June 01, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

BORING LOG KA-3-S

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

D-4

PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]



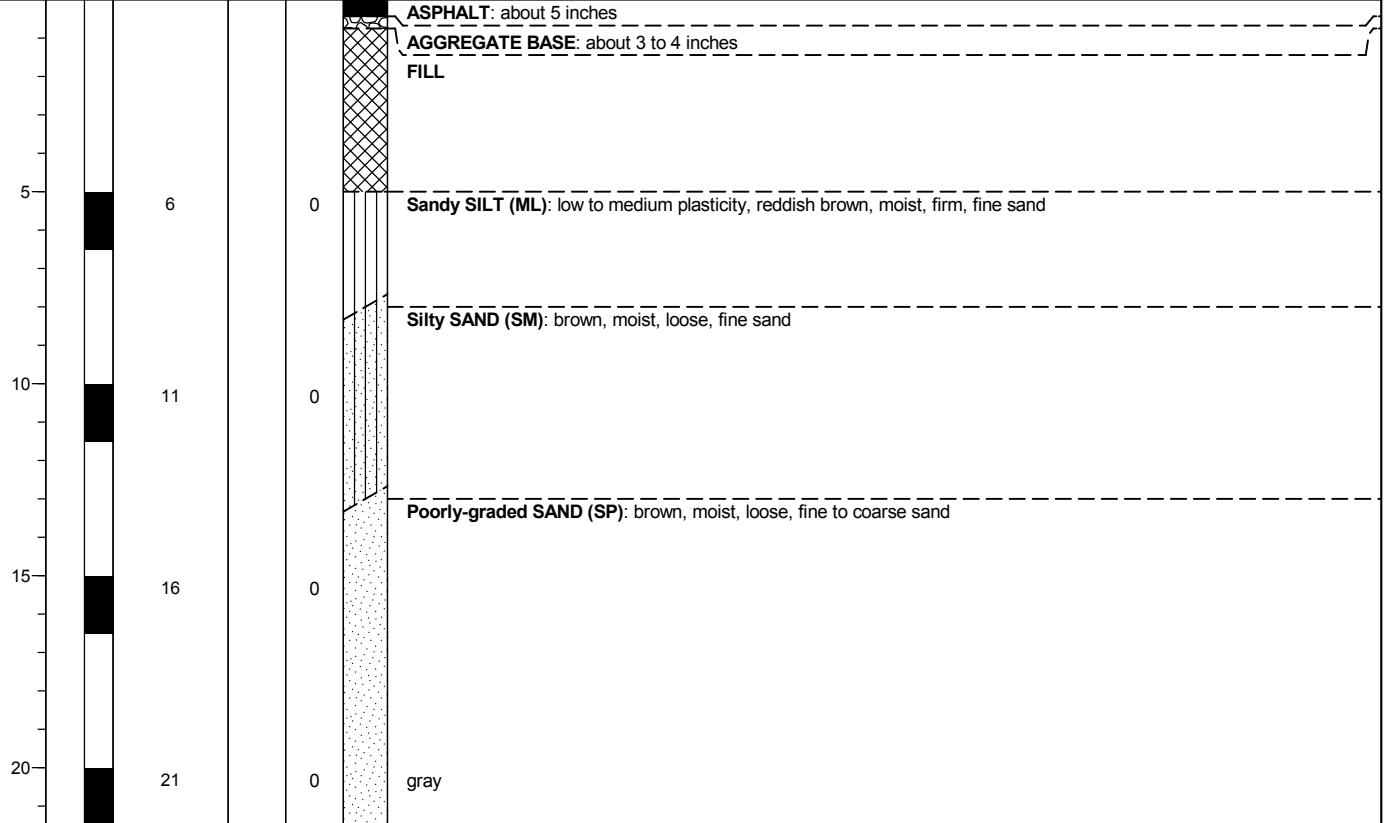
PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 6/01/2015  
**Logged By:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available  
**Plunge:** -90 degrees  
**Weather:** Not Available  
**Drilling Company:** \_\_\_\_\_  
**Drill Crew:** \_\_\_\_\_  
**Drilling Equipment:** \_\_\_\_\_  
**Drilling Method:** See Drilling Method Column  
**Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION

Location Offset: 59th Street  
 Surface Condition: Asphalt

Lithologic Description



The borehole was terminated at approximately 21.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 Hand Auger to 5 feet  
 The boring was backfilled with on June 01, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-4-S**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

**D-5**

GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

**Date Begin - End:** 5/28/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION	
								Surface Condition: Concrete	Lithologic Description	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.	
0 - 7							<b>CONCRETE:</b> about 7 inches				
7 - 10							<b>AGGREGATE BASE:</b> about 1 to 3 inches				
10 - 11			6		9 17 23	1.7	Lean <b>CLAY (CL):</b> medium plasticity, brown, dry, very soft, with clack organics, no odor, silty				
11 - 12							firm				
12 - 13			11		8 9 19	0.9 2.8	<b>Silty SAND (SM):</b> dark brown, dry, medium dense, fine subrounded sand, no odor				
13 - 14											
14 - 15			16		18 11 15	0.9	<b>Poorly-graded SAND (SP):</b> brown, dry, medium dense, medium subrounded sand, no odor				
15 - 16											
16 - 17			21		7 9 17	1.8	moist				
17 - 18											
18 - 19			26		10 19 21	1.4	light brownish gray				
19 - 20											
20 - 21			31		4 6 8	2.1	<b>Sandy SILT (ML):</b> non-plastic, yellowish brown, moist, soft, black organics, no odor				
21 - 22											

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PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-5-D**  
 SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-6**  
 PAGE: 1 of 2

PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 5/28/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION	TEMPORARY WELL CONSTRUCTION
								Surface Condition: Concrete	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.
								Lithologic Description	
40			36		15 20 50/4"	3.3		<b>SILT (ML):</b> low plasticity, brown, moist, firm to hard, with subrounded gravel inclusions, no odor, clayey	
41			41		50/6"	2.9		<b>Fat CLAY (CH):</b> light brownish gray, wet, hard, strongly cemented, with gravel fragments, no odor	
45			46		16 15 20	2.4		<b>Poorly-graded SAND (SP):</b> gray, wet, medium dense, subrounded sand, no odor	
50	<p>The borehole was terminated at approximately 46.5 ft. below ground surface.</p>								<p><u>GROUNDWATER LEVEL INFORMATION:</u>            ∇ Groundwater was observed at approximately 40 ft. below ground surface during drilling.</p> <p><u>GENERAL NOTES:</u>            The boring was backfilled with _____ on May 28, 2015.</p>



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-5-D**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-6**

PAGE: 2 of 2

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]



**Date Begin - End:** 5/21/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION	
								Surface Condition: Asphalt	Lithologic Description	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.	
0								ASPHALT: about 9 inches			
								AGGREGATE BASE: about 1 to 2 inches			
								Silty SAND (SM): brown, dry, subangular sand			
								Lean CLAY (CL): low plasticity, reddish brown, moist, soft brown, dry, with gravel inclusions, silty			
5			6		8	0.0		Lean CLAY (CL): low plasticity, brown, dry, stiff, no odor, silty			
					15						
					15						
10			11		3	0.0		Poorly-graded SAND (SP): brown, moist, loose, subangular medium sand, no odor			
					4						
					6						
15			16		5	0.0		Poorly-graded SAND with Gravel (SP): dark brown, moist, loose, subangular sand and gravel, no odor			
					6						
					17						
20			21		7	0.0		gray			
					9						
					10						
25			26		5	0.0		Poorly-graded SAND (SP): gray, moist, loose, subangular medium sand, no odor			
					9						
					23						
30			31		17	0.0		Well-graded SAND with Gravel (SW): gray, moist, medium dense, subangular sand and gravel, no odor			
					24						
					34						

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PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-6-D**  
 SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-7**  
 PAGE: 1 of 2

PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 5/21/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION	TEMPORARY WELL CONSTRUCTION
								Surface Condition: Asphalt	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.
Lithologic Description									
36			36		13 10 21	0.0		<b>Sandy Lean CLAY (CL):</b> medium plasticity, light brown, moist, stiff, organic inclusions, iron oxide stains, no odor, silty	
40			41		13 46 50/5"	0.0		<b>Sandy Lean CLAY (CL):</b> medium plasticity, grayish brown, moist, stiff, iron oxide stains, no odor	BLANK CASING
45			46		14 17 31	0.0		<b>Poorly-graded SAND (SP):</b> gray, wet, medium dense, subrounded sand, no odor	BENTONITE
50			51		13 48 50/3"	0.0		<b>Fat CLAY (CH):</b> high plasticity, gray, wet, very stiff	#3 SAND
									0.020" SCREEN

The borehole was terminated at approximately 51.5 ft. below ground surface.

**GROUNDWATER LEVEL INFORMATION:**  
 ∇ Groundwater was observed at approximately 44 ft. below ground surface during drilling.  
 ▼ Groundwater was observed at approximately 40 ft. below ground surface at the end of drilling.  
**GENERAL NOTES:**  
 The boring was backfilled with \_\_\_\_\_ on May 21, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-6-D**  
 SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-7**  
 PAGE: 2 of 2

GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 5/29/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION	
								Location Offset: Building F Surface Condition: Concrete	Lithologic Description	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.	
5			6		7	0.3					
					27						
					42						
10			11		8	0.7					
					12						
					11						
15			16		6	1.2					
					9						
					11						
20			21		7						
					12						
					29						
25			26		8	1.8					
					18						
					19						
30			31		21	1.3					
					47						
					54						

BLANK CASING



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

BORING LOG KA-7-D

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

D-8

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

<b>Date Begin - End:</b> 5/29/2015	<b>Drilling Company:</b> _____	<b>BORING LOG KA-7-D</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION	TEMPORARY WELL CONSTRUCTION
								Location Offset: Building F Surface Condition: Concrete	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.
Lithologic Description									
▽			36		11 33 53	0.5		<b>SILT with Sand (ML):</b> low plasticity, light brownish gray, no odor, moist, firm, fine sand	<p>BLANK CASING</p> <p>BENTONITE</p> <p>#3 SAND</p> <p>0.020" SCREEN</p>
40			41		13 50/6"	0.5		<b>Silty SAND (SM):</b> low plasticity, light brown, no odor, moist to wet, dense, moderately to strongly cemented	
45			46		11 11 18	0.0		<b>Poorly-graded SAND (SP):</b> low plasticity, olive gray, no odor, wet, loose, fine to medium sand	
50	<p>The borehole was terminated at approximately 46.5 ft. below ground surface.</p> <p><u>GROUNDWATER LEVEL INFORMATION:</u>            ▽ Groundwater was observed at approximately 40 ft. below ground surface during drilling.</p> <p><u>GENERAL NOTES:</u>            Hand Auger to 5 feet            The boring was backfilled with _____ on May 29, 2015.</p>								
55									
60									
65									

<p><b>KLEINFELDER</b> Bright People. Right Solutions.</p>	PROJECT NO.: 138810	<b>BORING LOG KA-7-D</b>  SMUD Corporation Yard 1798 59th Street Sacramento, California	FIGURE
	DRAWN BY: DR		D-8
CHECKED BY: CR	DATE: 7/28/2015		
REvised: 2/15/2016			PAGE: 2 of 2

GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]



PLOTTED: 02/15/2016 08:23 AM BY: dross

Date Begin - End: 6/03/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

HAND EXPLORATION LOG KA-8-S

FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log
			2		0	
5			5		0	

Location Offset: 59th Street  
 Surface Condition: Concrete

Lithologic Description

**CONCRETE:** about 12 inches  
 -----  
**AGGREGATE BASE:** about 3 to 4 inches  
 -----  
**Sandy Lean CLAY (CL):** low plasticity, dark brown, moist, soft, fine to medium sand [FILL]  
 -----  
**Lean CLAY (CL):** low plasticity, yellowish brown, moist, firm to hard, [NATIVE]

The borehole was terminated at approximately 5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 The hand exploration was backfilled with on June 03, 2015.

5  
10  
15  
20  
25  
30



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

HAND EXPLORATION LOG KA-8-S

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

D-9

PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 5/22/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION	
								Surface Condition: Asphalt	Lithologic Description	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.	
								ASPHALT: about 4 inches			
								AGGREGATE BASE: about 1 inch			
								SILT with Sand (ML): non-plastic, reddish brown, dry, soft gravel inclusions			
								SILT (ML): non-plastic, brown, dry, soft, silty			
5			6		NA	0.0		Lean CLAY (CL): low plasticity, brown, no odor, dry, very stiff, iron oxide staining, silty			
					13 37 50/3"						
10			11			0.0		medium plasticity			
					8 16 23						
15			16			0.0		Poorly-graded SAND (SP): brown, no odor, dry, loose, subangular fine sand, iron oxide staining			
					7 8 14						
20			21			0.0		medium sand			
					6 12 18						
25			26			0.0		Lean CLAY (CL): low plasticity, gray, no odor, dry, stiff, iron oxide staining, silty			
					6 12 18						
30			31			0.0		Poorly-graded SAND (SP): gray, no odor, dry, medium dense, subrounded medium sand			
					7 13 22						

BLANK CASING ●



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-9-D**  
 SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-10**  
 PAGE: 1 of 2

GINT FILE: L:\2016\projects\138810\gint\138810\logs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 5/22/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION	
								Surface Condition: Asphalt	Lithologic Description	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.	
36			36		8 20 32	0.0		Lean <b>CLAY (CL)</b> : medium plasticity, light grayish brown, no odor, moist, very soft, fine sand, iron oxide staining, silty			
40			41		7 17 34	0.0					BLANK CASING
45			46		7 11 25	0.0		Clayey <b>SAND (SC)</b> : no odor, wet, loose, subangular fine to medium sand, silty			BENTONITE
50			51		11 14 21	0.0		Poorly-graded <b>SAND (SP)</b> : gray, no odor, wet, medium dense, subangular medium sand			#3 SAND
											0.020" SCREEN

The borehole was terminated at approximately 51.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 ∇ Groundwater was observed at approximately 45 ft. below ground surface during drilling.  
GENERAL NOTES:  
 The boring was backfilled with on May 22, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-9-D**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

**D-10**

GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

Date Begin - End: 6/03/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

**HAND EXPLORATION LOG KA-10-H**

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		
							Surface Condition: Concrete Slab	Lithologic Description	
			1.5		0		<p><b>CONCRETE SLAB</b></p> <p><b>AGGREGATE BASE:</b> about 1-1/2 inches</p> <p><b>Clayey SAND with Gravel (SC):</b> reddish brown, moist, dense, fine to medium sand</p>		
			4.5		0				
5	The borehole was terminated at approximately 4.5 ft. below ground surface.							<p><u>GROUNDWATER LEVEL INFORMATION:</u>            Groundwater was not encountered during drilling or after completion.</p> <p><u>GENERAL NOTES:</u>            The hand exploration was backfilled with on June 03, 2015.</p>	
10									



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**HAND EXPLORATION LOG KA-10-H**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-11**  
 PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]



PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 5/19/2015  
**Logged By:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available  
**Plunge:** -90 degrees  
**Weather:** Not Available

**Drilling Company:** \_\_\_\_\_  
**Drill Crew:** \_\_\_\_\_  
**Drilling Equipment:** \_\_\_\_\_  
**Drilling Method:** See Drilling Method Column  
**Borehole Diameter:** \_\_\_\_\_

**HAND EXPLORATION LOG KA-11-H**

FIELD EXPLORATION						
Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log
						Surface Condition: Concrete Slab
						Lithologic Description
			1.5			<b>CONCRETE SLAB</b> ----- <b>Lean CLAY with Sand (CL):</b> low plasticity, dark brown, moist, hard, fine sand ----- <b>Clayey SAND (SC):</b> low plasticity, reddish brown, moist, hard, fine to medium sand
5			4.5			
						The borehole was terminated at approximately 5 ft. below ground surface.  <u>GROUNDWATER LEVEL INFORMATION:</u> Groundwater was not encountered during drilling or after completion. <u>GENERAL NOTES:</u> The hand exploration was backfilled with _____ on May 19, 2015.
10						



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**HAND EXPLORATION LOG KA-11-H**  
  
 SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
  
**D-12**  
  
 PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 6/01/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION

Location Offset: 59th Street  
 Surface Condition: Concrete

Lithologic Description

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	Lithologic Description
0								<b>CONCRETE:</b> about 6 inches
								<b>AGGREGATE BASE:</b> about 3 to 4 inches
								<b>Silty SAND with Gravel (SM):</b> reddish brown, moist, loose, fine sand and gravel [FILL]
5			6		4 3 4	0		<b>Silty SAND (SM):</b> reddish brown, moist, loose, fine sand
10			11		5 9 18	0		<b>SILT with Sand (ML):</b> low plasticity, olive brown, moist, firm, iron oxide staining
15			16		5 10 11	0		<b>Silty SAND (ML):</b> olive brown, moist, loose, fine sand, iron oxide staining
20			21		5 10 17	0		gray, fine to medium sand

The borehole was terminated at approximately 21.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 Hand Auger to 5 feet  
 The boring was backfilled with on June 01, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-13-S**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-13**  
 PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 6/02/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION

Location Offset: 59th Street  
 Surface Condition: Asphalt

Lithologic Description

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	Lithologic Description
0 - 6								ASPHALT: about 6 inches
6 - 9								AGGREGATE BASE: about 3 to 4 inches
9 - 10								FILL
10 - 17			6		2 2 2	0		Clayey SAND (SC): reddish brown, moist, very loose, fine to medium sand
17 - 21			11		2 3 4	0		Poorly-graded SAND with Clay (SP-SC): moist, very loose, fine to medium sand
21 - 25			16		4 6 8	0		Poorly-graded SAND with Silt (SP-SM): moist, loose, fine sand
25 - 21.5			21		9 12 17	0		

The borehole was terminated at approximately 21.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 Hand Auger to 5 feet  
 The boring was backfilled with on June 02, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-14-S**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-14**  
 PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

**Date Begin - End:** 5/26/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION	
								Surface Condition: Asphalt	Lithologic Description	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.	
0								ASPHALT: about 5 inches			
0								AGGREGATE BASE: dry, loose, about 1 to 3 inches			
0								Lean CLAY (CL): medium plasticity, brown, no odor, moist, soft, gravel up to 1/2 inch, silty			
5			6		3 2 3	0.0		Clayey SAND (SC): medium plasticity, brown, no odor, dry, very loose, fine sand			
10			11		3 3 2	0.0		Poorly-graded SAND (SP): brown, no odor, dry, very loose, subrounded fine sand			
15			16		4 6 8	0.0		gray, no odor, moist, loose, subrounded medium sand			
20			21		7 7 8	0.0					
25			26		8 9 10	0.0		subrounded fine to medium sand			
30			31		5 9 18	0.0		medium dense, subrounded medium sand			
										BLANK CASING	



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-15-D**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

**D-15**


PAGE: 1 of 2



PLOTTED: 02/15/2016 08:23 AM BY: dross

<b>Date Begin - End:</b> 5/26/2015	<b>Drilling Company:</b> _____	<b>BORING LOG KA-15-D</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION
								Surface Condition: Asphalt	Lithologic Description	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.
▽			36		5 10 18	0.0		Lean <b>CLAY (CL)</b> : medium plasticity, yellowish brown, no odor, moist, stiff, iron oxide staining, silty		
40			41		22 50/5"	0.0		light brownish gray, no odor, wet, hard, black organics	BLANK CASING	●
45			46		12 45 50/5"	0.0		Silty <b>SAND (SM)</b> : light brown, no odor, wet, very dense, medium plasticity fines, medium sand, iron oxide staining	BENTONITE	●
50			51		23 40 50/2"	0.0		Lean <b>CLAY (CL)</b> : medium plasticity, olive brown, no odor, wet, hard, iron oxide staining, silty	#3 SAND	●
									0.020" SCREEN	●
55	<p>The borehole was terminated at approximately 51.5 ft. below ground surface.</p> <p><b>GROUNDWATER LEVEL INFORMATION:</b>            ▽ Groundwater was observed at approximately 40 ft. below ground surface during drilling.</p> <p><b>GENERAL NOTES:</b>            The boring was backfilled with on May 26, 2015.</p>									
60										
65										

 <p><b>KLEINFELDER</b> Bright People. Right Solutions.</p>	PROJECT NO.: 138810	<b>BORING LOG KA-15-D</b>  SMUD Corporation Yard 1798 59th Street Sacramento, California	FIGURE
	DRAWN BY: DR		<b>D-15</b>
CHECKED BY: CR	DATE: 7/28/2015		
REvised: 2/15/2016			PAGE: 2 of 2

GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

Date Begin - End: 5/18/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

**HAND EXPLORATION LOG KA-16-H**

FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log	Lithologic Description
							Surface Condition: Asphalt
			1.5		0		ASPHALT: about 3 to 4 inches
			4.5		0		AGGREGATE BASE: about 3 inches Lean CLAY (CL): low plasticity, reddish brown, moist, hard, fine to medium sand

The borehole was terminated at approximately 5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 The hand exploration was backfilled with on May 18, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

HAND EXPLORATION LOG KA-16-H

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

D-16

GINT FILE: L:\2016\projects\138810\gint\138810\logs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

Date Begin - End: 5/18/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

**HAND EXPLORATION LOG KA-17-H**

FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log	Lithologic Description
							Surface Condition: Asphalt
			1.5		0		ASPHALT: about 3 to 4 inches
							AGGREGATE BASE: about 3 inches
			4.5		0		Sandy Lean CLAY (CL): low plasticity, reddish brown, moist, firm, fine to medium sand
5							soft

The borehole was terminated at approximately 5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 The hand exploration was backfilled with on May 18, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

HAND EXPLORATION LOG KA-17-H

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

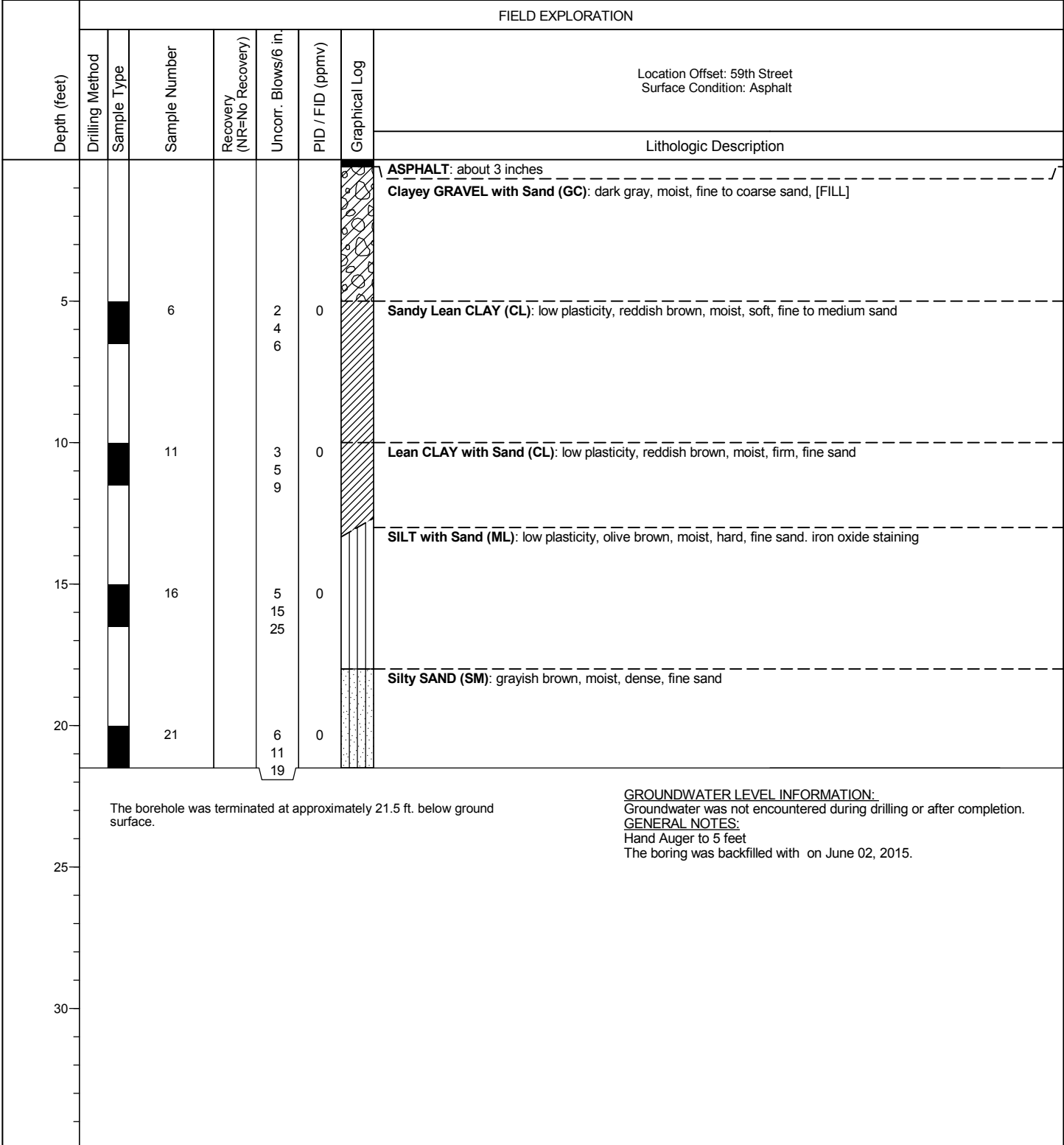
FIGURE

D-17

GINT FILE: L:\2016\projects\138810\gint\138810\logs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

<b>Date Begin - End:</b> 6/02/2015	<b>Drilling Company:</b> _____	<b>BORING LOG KA-18-S</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	



GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]


	PROJECT NO.: 138810	<b>BORING LOG KA-18-S</b>  SMUD Corporation Yard 1798 59th Street Sacramento, California	FIGURE
	DRAWN BY: DR		D-18
CHECKED BY: CR	DATE: 7/28/2015		
REvised: 2/15/2016			PAGE: 1 of 1



PLOTTED: 02/15/2016 08:23 AM BY: dross

<b>Date Begin - End:</b> 6/02/2015	<b>Drilling Company:</b> _____	<b>BORING LOG KA-19-S</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

FIELD EXPLORATION								
Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	Location Offset: 59th Street Surface Condition: Asphalt
								Lithologic Description
								<b>ASPHALT:</b> about 5 inches <b>AGGREGATE BASE:</b> about 3 to 4 inches <b>FILL</b>
5			6		1 2 3	0		Lean <b>CLAY with Sand (CL):</b> low plasticity, reddish brown, moist, soft, fine sand
10			11		4 5 9	0		Poorly-graded <b>SAND (SP):</b> reddish brown, moist, loose, fine to medium sand
15			16		2 7 11	0		Sandy <b>SILT (ML):</b> low plasticity, reddish brown, moist, soft to firm, fine sand, iron oxide staining  olive brown
20			21		2 7 12	0		Poorly-graded <b>SAND (SP):</b> reddish brown, moist, loose, fine to medium sand
25	The borehole was terminated at approximately 21.5 ft. below ground surface.							<b>GROUNDWATER LEVEL INFORMATION:</b> Groundwater was not encountered during drilling or after completion. <b>GENERAL NOTES:</b> Hand Auger to 5 feet The boring was backfilled with _____ on June 02, 2015.

 <b>KLEINFELDER</b> <i>Bright People. Right Solutions.</i>	PROJECT NO.: 138810	<b>BORING LOG KA-19-S</b>  SMUD Corporation Yard 1798 59th Street Sacramento, California	FIGURE
	DRAWN BY: DR		D-19
CHECKED BY: CR	DATE: 7/28/2015		
REvised: 2/15/2016			PAGE: 1 of 1



GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
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PLOTTED: 02/15/2016 08:23 AM BY: dross

Date Begin - End: 5/29/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

**HAND EXPLORATION LOG KA-20-H**

FIELD EXPLORATION						
Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log
						Surface Condition: Concrete Slab
						Lithologic Description
			1.5		0	 <b>CONCRETE SLAB:</b> about 12 inches
			5		0	 <b>Silty SAND (SM):</b> reddish brown, moist, dense, fine to medium sand
5						
						<p>The borehole was terminated at approximately 5 ft. below ground surface.</p> <p><u>GROUNDWATER LEVEL INFORMATION:</u>            Groundwater was not encountered during drilling or after completion.</p> <p><u>GENERAL NOTES:</u>            The hand exploration was backfilled with on May 29, 2015.</p>
10						



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**HAND EXPLORATION LOG KA-20-H**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-20**  
 PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 5/19/2015  
**Logged By:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available  
**Plunge:** -90 degrees  
**Weather:** Not Available

**Drilling Company:** \_\_\_\_\_  
**Drill Crew:** \_\_\_\_\_  
**Drilling Equipment:** \_\_\_\_\_  
**Drilling Method:** See Drilling Method Column  
**Borehole Diameter:** \_\_\_\_\_

**HAND EXPLORATION LOG KA-21-H**

FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log	Lithologic Description
							Surface Condition: Concrete Slab
			1.5		0		<b>CONCRETE SLAB:</b> about 12 inches
							<b>Clayey SAND (SC):</b> reddish brown, moist, dense, fine sand
			5		0		<b>Sandy Lean CLAY (CL):</b> low plasticity, dark brown, moist, firm, fine sand
5							
10							

The borehole was terminated at approximately 5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 The hand exploration was backfilled with \_\_\_\_\_ on May 19, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

HAND EXPLORATION LOG KA-21-H

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

D-21

GINT FILE: L:\2016\projects\138810\gint\138810\logs.gpj  
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PLOTTED: 02/15/2016 08:23 AM BY: dross

Date Begin - End: 5/19/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

**HAND EXPLORATION LOG KA-22-H**

FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log	
							Surface Condition: Concrete Slab
							Lithologic Description
			1.5		0		<b>CONCRETE SLAB:</b> about 8 inches <b>AGGREGATE BASE:</b> about 3 inches <b>Sandy Lean CLAY (CL):</b> low plasticity, reddish brown, moist, firm, fine to medium sand
5			5		0		soft, fine sand

The borehole was terminated at approximately 5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 The hand exploration was backfilled with on May 19, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**HAND EXPLORATION LOG KA-22-H**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

**D-22**

GINT FILE: L:\2016\projects\138810\gint\138810\logs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]



PLOTTED: 02/15/2016 08:23 AM BY: dross


**Date Begin - End:** 6/02/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION

Location Offset: 59th Street  
 Surface Condition: Concrete

Lithologic Description

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	Lithologic Description
0								CONCRETE: about 12 inches
0								AGGREGATE BASE: about 3 to 4 inches
0								FILL
5			6		1 2 4	0		Sandy Lean CLAY (CL): low plasticity, reddish brown, moist, soft, fine to medium sand
10			11		3 6 9	0		
15			16		3 8 9	0		Poorly-graded SAND with Clay (SP-SC): brown, moist, loose, fine to medium sand
20			21		10 12 14	0		Poorly-graded SAND (SP): gray, moist, dense, fine to coarse sand, trace fine gravel
21.5	The borehole was terminated at approximately 21.5 ft. below ground surface.							
21.5	<p><u>GROUNDWATER LEVEL INFORMATION:</u>                      Groundwater was not encountered during drilling or after completion.  <u>GENERAL NOTES:</u>                      Hand Auger to 5 feet                      The boring was backfilled with on June 02, 2015.</p>							

	PROJECT NO.: 138810	<b>BORING LOG KA-23-S</b>  SMUD Corporation Yard 1798 59th Street Sacramento, California	FIGURE
	DRAWN BY: DR		D-23
	CHECKED BY: CR		
	DATE: 7/28/2015		
	REVISED: 2/15/2016		
			PAGE: 1 of 1

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 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

**Date Begin - End:** 6/02/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION

Location Offset: 59th Street  
 Surface Condition: Concrete

Lithologic Description

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	
0 - 10			6		2 2 3	0		CONCRETE: about 10 inches AGGREGATE BASE: about 3 to 4 inches FILL
10 - 15			11		1 2 4	0		Clayey SAND (SC): reddish brown, moist, very loose, fine to medium sand
15 - 20			16		2 4 6	0		Poorly-graded SAND (SP): brown, moist, very loose, fine to medium sand
20 - 21.5			21		10 12 16	0		grayish brown

The borehole was terminated at approximately 21.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 Hand Auger to 5 feet  
 The boring was backfilled with on June 02, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-24-S**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

**D-24**

PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 6/01/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION


Location Offset: 59th Street  
 Surface Condition: Concrete

Lithologic Description

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	Lithologic Description
0 - 6							CONCRETE: about 6 inches	
6 - 9							AGGREGATE BASE: about 3 to 4 inches	
9 - 10							FILL	
10 - 13			6		2 6 8	0	Lean CLAY with Sand (CL): low plasticity, reddish brown, moist, soft to firm, fine to medium sand	
13 - 15			11		2 2 3	0	Poorly-graded SAND (SP): brown, moist, very loose, fine to medium sand	
15 - 18			16		1 2 4	0	Poorly-graded SAND with Silt (SP-SM): light brown, moist, very loose, fine to medium sand	
18 - 21			21		2 12 22	0	Sandy SILT (ML): low plasticity, light brown, moist, firm, fine to medium sand, iron oxide staining	
21 - 25								

The borehole was terminated at approximately 21.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 Hand Auger to 5 feet  
 The boring was backfilled with on June 01, 2015.

	PROJECT NO.: 138810	<b>BORING LOG KA-25-S</b>  SMUD Corporation Yard 1798 59th Street Sacramento, California	FIGURE
	DRAWN BY: DR		D-25
	CHECKED BY: CR		
	DATE: 7/28/2015		
	REVISED: 2/15/2016		
			PAGE: 1 of 1

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PLOTTED: 02/15/2016 08:23 AM BY: dross

<b>Date Begin - End:</b> 5/26/2015	<b>Drilling Company:</b> _____	<b>BORING LOG KA-26-D</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION	
								Surface Condition: Concrete	Lithologic Description	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.	
5			6		2 2 3	0.0					
10			11		2 3 3	0.0					
15			16		4 10 10	0.0					
20			21		7 12 12	0.0					
25			26		4 7 11	0.0					
30			31		7 10 8	0.0					

BLANK CASING

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 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

<p><b>KLEINFELDER</b> Bright People. Right Solutions.</p>	PROJECT NO.: 138810	<b>BORING LOG KA-26-D</b>  SMUD Corporation Yard 1798 59th Street Sacramento, California	FIGURE
	DRAWN BY: DR		<b>D-26</b>
CHECKED BY: CR	DATE: 7/28/2015		
REvised: 2/15/2016			PAGE: 1 of 2



PLOTTED: 02/15/2016 08:23 AM BY: dross

<b>Date Begin - End:</b> 5/26/2015	<b>Drilling Company:</b> _____	<b>BORING LOG KA-26-D</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION	TEMPORARY WELL CONSTRUCTION	
								Surface Condition: Concrete	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.	
Lithologic Description										
36			36		6 10 13	0.0		<b>Silty SAND (SM):</b> light grayish brown, no odor, moist, medium dense, subrounded fine sand		
40			41		8 8 15	0.0		<b>Lean CLAY (CL):</b> medium plasticity, light brown, wet, hard, iron oxide staining, silty		
45			46		14 26 47	0.0		light grayish brown		
50			51		8 28	0.0		light brown, black organics		
50/5"								<p>The borehole was terminated at approximately 51.5 ft. below ground surface.</p> <p><b>GROUNDWATER LEVEL INFORMATION:</b>   Groundwater was observed at approximately 40 ft. below ground surface during drilling.</p> <p><b>GENERAL NOTES:</b>                      The boring was backfilled with _____ on May 26, 2015.</p>		

<p><b>KLEINFELDER</b> Bright People. Right Solutions.</p>	PROJECT NO.: 138810	<b>BORING LOG KA-26-D</b>  SMUD Corporation Yard 1798 59th Street Sacramento, California	FIGURE
	DRAWN BY: DR		CHECKED BY: CR
DATE: 7/28/2015	REVISD: 2/15/2016		PAGE: 2 of 2


GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
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PLOTTED: 02/15/2016 08:23 AM BY: dross

<b>Date Begin - End:</b> 5/22/2015	<b>Drilling Company:</b> _____	<b>BORING LOG KA-27-D</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION	
								Surface Condition: Concrete	Lithologic Description	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.	
								CONCRETE: about 8 inches			
								AGGREGATE BASE: about 1 to 1-1/2 inches			
								Silty SAND (SM): reddish brown, dry			
5			6		2 3 7	0.0		Lean CLAY (CL): medium plasticity, brown, dry, soft, silty			
								medium plasticity, no odor			
10			11		3 9 11	0.0		Poorly-graded SAND (SP): reddish brown, no odor, dry, loose, angular sand			
15			16		4 8 12	0.0		Clayey SAND (SC): dark reddish brown, no odor, dry, loose, subrounded fine sand, organics			
20			21		6 12 20	0.0		Sandy SILT (ML): low plasticity, brown, no odor, moist, firm			
25			26		7 11 14	0.0		Poorly-graded SAND (SP): gray, no odor, moist, medium dense, subangular fine to medium sand			
30			31		11 12 14	0.0		Sandy Lean CLAY (CL): medium plasticity, grayish brown, no odor, moist, very stiff			

BLANK CASING

	PROJECT NO.: 138810	<b>BORING LOG KA-27-D</b>	FIGURE <b>D-27</b>
	DRAWN BY: DR		
CHECKED BY: CR	DATE: 7/28/2015	SMUD Corporation Yard 1798 59th Street Sacramento, California	
REvised: 2/15/2016			
			PAGE: 1 of 2

GINT FILE: L:\2016\projects\138810\gint\138810\bllogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

<b>Date Begin - End:</b> 5/22/2015	<b>Drilling Company:</b> _____	<b>BORING LOG KA-27-D</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION	
								Surface Condition: Concrete	Lithologic Description	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.	
▽			36		9 11 24	0.0	[Hatched Box]	<b>Sandy Lean CLAY (CL):</b> medium plasticity, grayish brown, no odor, moist, very stiff		BLANK CASING	●
40			41		16 25 50/4"	0.0	[Hatched Box]	medium plasticity, light gray, no odor, wet, hard			
45			46		13 25 50		[Hatched Box]	medium plasticity, light brown, no odor, fine sand		BENTONITE	●
50			51		13 23 50/4"	0.0	[Hatched Box]	<b>Clayey SILT (ML):</b> low plasticity, light gray, no odor, wet, organics		#3 SAND	●
										0.020" SCREEN	●

The borehole was terminated at approximately 51.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 ▽ Groundwater was observed at approximately 40 ft. below ground surface during drilling.  
GENERAL NOTES:  
 The boring was backfilled with on May 22, 2015.

<p><b>KLEINFELDER</b> Bright People. Right Solutions.</p>	PROJECT NO.: 138810	<b>BORING LOG KA-27-D</b>  SMUD Corporation Yard 1798 59th Street Sacramento, California	FIGURE
	DRAWN BY: DR		<b>D-27</b>
CHECKED BY: CR	DATE: 7/28/2015		
REvised: 2/15/2016			PAGE: 2 of 2

GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

Date Begin - End: 5/20/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

**HAND EXPLORATION LOG KA-28-H**

FIELD EXPLORATION						
Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log
						Surface Condition: Asphalt
						Lithologic Description
			1.5		0	ASPHALT: up to 6 inches AGGREGATE BASE: about 1 to 3 inches Silty SAND (SM): light brown, dry, firm, with fine to coarse gravel
			5		0	Lean CLAY (CL): medium plasticity, light brown, moist, firm Lean CLAY (CL): medium plasticity, light brown, moist, firm, silty
5						
10						

The borehole was terminated at approximately 5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 The hand exploration was backfilled with on May 20, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**HAND EXPLORATION LOG KA-28-H**  
 SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-28**  
 PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]



PLOTTED: 02/15/2016 08:23 AM BY: dross

Date Begin - End: 5/20/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

**HAND EXPLORATION LOG KA-29-H**

FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log	Lithologic Description
							Surface Condition: Asphalt
			1.5		0		ASPHALT: up to 6 inches
							AGGREGATE BASE: about 1 to 4 inches
							Lean CLAY with Sand (CL): medium plasticity, brown, dry, soft, fine sand, silty
							Fat CLAY (CH): high plasticity, dark brown, moist, soft
							Sandy Fat CLAY (CH): high plasticity, light brown, moist, soft
5			5		0		
							<p>The borehole was terminated at approximately 5 ft. below ground surface.</p> <p><u>GROUNDWATER LEVEL INFORMATION:</u>            Groundwater was not encountered during drilling or after completion.</p> <p><u>GENERAL NOTES:</u>            The hand exploration was backfilled with on May 20, 2015.</p>
10							



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**HAND EXPLORATION LOG KA-29-H**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-29**  
 PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

Date Begin - End: 5/20/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

HAND EXPLORATION LOG KA-30-H

FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log	
							Surface Condition: Asphalt
							Lithologic Description
			1.5		0		ASPHALT: up to 6 inches
							AGGREGATE BASE: about 1 to 2 inches
							Silty SAND (SM): non-plastic, brown, dry, firm  non-plastic, dark brown, moist
5			5		0		Lean CLAY (CL): medium plasticity, reddish brown, moist, firm, silty
							<p>The borehole was terminated at approximately 5 ft. below ground surface.</p> <p><u>GROUNDWATER LEVEL INFORMATION:</u>            Groundwater was not encountered during drilling or after completion.</p> <p><u>GENERAL NOTES:</u>            The hand exploration was backfilled with on May 20, 2015.</p>



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016




HAND EXPLORATION LOG KA-30-H


SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
 D-30  
 PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

<b>Date Begin - End:</b> 5/20/2015	<b>Drilling Company:</b> _____	<b>HAND EXPLORATION LOG KA-31-H</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION
							Surface Condition: Concrete
							Lithologic Description
			1.5				<b>CONCRETE:</b> about 6 inches
			4				<b>AGGREGATE BASE:</b> about 1 inch
							<b>Silty SAND (SM):</b> non-plastic, brown, dry
5							<p>The borehole was terminated because of practical auger refusal at approximately 4 ft. below ground surface.</p> <p><u>GROUNDWATER LEVEL INFORMATION:</u> Groundwater was not encountered during drilling or after completion.</p> <p><u>GENERAL NOTES:</u> The hand exploration was backfilled with _____ on May 20, 2015.</p>
10							

 <p><b>KLEINFELDER</b> <i>Bright People. Right Solutions.</i></p>	PROJECT NO.: 138810	<b>HAND EXPLORATION LOG KA-31-H</b>	FIGURE
	DRAWN BY: DR		D-31
	CHECKED BY: CR	SMUD Corporation Yard 1798 59th Street Sacramento, California	
	DATE: 7/28/2015		
	REVISED: 2/15/2016		
			PAGE: 1 of 1

PLOTTED: 02/15/2016 08:23 AM BY: dross

Date Begin - End: 5/20/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

**HAND EXPLORATION LOG KA-32-H**

FIELD EXPLORATION

Depth (feet)  
 Drilling Method  
 Sample Type  
 Sample Number  
 Recovery (NR=No Recovery)  
 PID / FID (ppmv)  
 Graphical Log

Surface Condition: Asphalt

Lithologic Description

ASPHALT: about 4 inches  
 AGGREGATE BASE: about 1 to 2 inches  
 Silty SAND (SM): non-plastic, light brown, moist  
 Lean CLAY (CL): medium plasticity, dark brown, moist, soft, silty

brown

5

The borehole was terminated at approximately 5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 The hand exploration was backfilled with on May 20, 2015.

10



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

HAND EXPLORATION LOG KA-32-H

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

D-32

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]



PLOTTED: 02/15/2016 08:23 AM BY: dross

Date Begin - End: 5/29/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

HAND EXPLORATION LOG KA-33-H

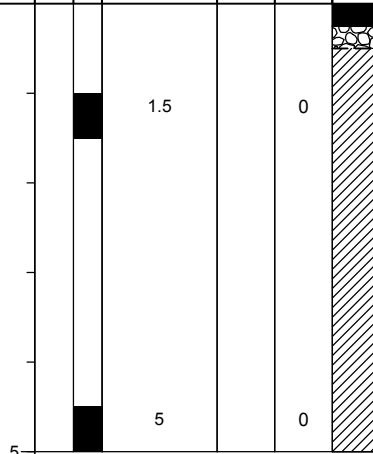
FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log
--------------	-----------------	-------------	---------------	---------------------------	------------------	---------------

Surface Condition: Asphalt

Lithologic Description

ASPHALT: about 3 inches  
 AGGREGATE BASE  
 Sandy Lean CLAY (CL): low plasticity, reddish brown, moist, soft to firm, fine to medium sand



The borehole was terminated at approximately 5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 The hand exploration was backfilled with on May 29, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

HAND EXPLORATION LOG KA-33-H

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

D-33

PAGE: 1 of 1


GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

**HAND EXPLORATION LOG KA-34-H**

**Date Begin - End:** 5/20/2015  
**Logged By:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available  
**Plunge:** -90 degrees  
**Weather:** Not Available  
**Drilling Company:** \_\_\_\_\_  
**Drill Crew:** \_\_\_\_\_  
**Drilling Equipment:** \_\_\_\_\_  
**Drilling Method:** See Drilling Method Column  
**Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION						
Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log
						Surface Condition: Asphalt
						Lithologic Description
			1.5		0	<b>ASPHALT:</b> about 6 inches <b>AGGREGATE BASE:</b> about 3 inches <b>Silty SAND (SM):</b> non-plastic, light brown, dry, loose, fine to medium rounded sand
5			5		0	<b>Sandy Lean CLAY (CL):</b> low plasticity, reddish brown, moist, soft, fine sand
<p>The borehole was terminated at approximately 5 ft. below ground surface.</p> <p><u>GROUNDWATER LEVEL INFORMATION:</u>            Groundwater was not encountered during drilling or after completion.</p> <p><u>GENERAL NOTES:</u>            The hand exploration was backfilled with _____ on May 20, 2015.</p>						

	PROJECT NO.: 138810	HAND EXPLORATION LOG KA-34-H	FIGURE
	DRAWN BY: DR		SMUD Corporation Yard 1798 59th Street Sacramento, California
CHECKED BY: CR	DATE: 7/28/2015		
REvised: 2/15/2016			PAGE: 1 of 1

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 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 6/02/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION

Location Offset: 59th Street  
 Surface Condition: Asphalt

Lithologic Description

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	Lithologic Description
0 - 5			6		2 5 6	0	ASPHALT: about 5 inches FILL	
5 - 10			11		3 3 5	0	Clayey SAND (SC): reddish brown, moist, loose, fine to medium sand	
10 - 15			16		6 7 10	0	Poorly-graded SAND (SP): reddish brown, moist, very loose, fine to medium sand	grayish brown
15 - 21			21		5 8 12	0		gray
<p>The borehole was terminated at approximately 21.5 ft. below ground surface.</p>								<p><u>GROUNDWATER LEVEL INFORMATION:</u>                      Groundwater was not encountered during drilling or after completion.  <u>GENERAL NOTES:</u>                      Hand Auger to 5 feet                      The boring was backfilled with on June 02, 2015.</p>



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

BORING LOG KA-35-S

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
 D-35  
 PAGE: 1 of 1

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PLOTTED: 02/15/2016 08:23 AM BY: dross

**Date Begin - End:** 6/03/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION

Location Offset: 59th Street  
 Surface Condition: Asphalt

Lithologic Description

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	Lithologic Description
0 - 4							CONCRETE: about 4 inches	
4 - 5							FILL	
5 - 10			6		5 10 18	0	Sandy Lean CLAY (CL): low plasticity, reddish brown, moist, firm to hard, fine sand	
10 - 15			11		3 6 9	0	Clayey SAND (SC): reddish brown, moist, loose, fine to medium sand	
15 - 20			16		7 11 12	0	Poorly-graded SAND (SP): grayish brown, moist, loose, fine to medium sand	
20 - 21.5			21		5 9 12	0		

The borehole was terminated at approximately 21.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 Hand Auger to 5 feet  
 The boring was backfilled with on June 03, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-36-S**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-36**  
 PAGE: 1 of 1

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**Date Begin - End:** 6/03/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION

Location Offset: 59th Street  
 Surface Condition: Asphalt

Lithologic Description

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	Lithologic Description
0								ASPHALT: about 3 inches
0								AGGREGATE BASE: about 3 to 4 inches
0								FILL
0								Lean CLAY with Sand (CL): low to medium plasticity, reddish brown, moist, very hard, fine sand
5			6		17 30 42	0		
10			11		2 5 6	0		Clayey SAND (SC): reddish brown, moist, loose, fine to medium sand
15			16		5 8 10	0		
20			21		5 9 14	0		Lean CLAY (CL): low plasticity, olive brown, moist, soft to firm, fine sand, iron oxide staining
20								Clayey SAND (SC): olive brown, moist, loose, fine to medium sand

The borehole was terminated at approximately 21.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 Hand Auger to 5 feet  
 The boring was backfilled with on June 03, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-37-S**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

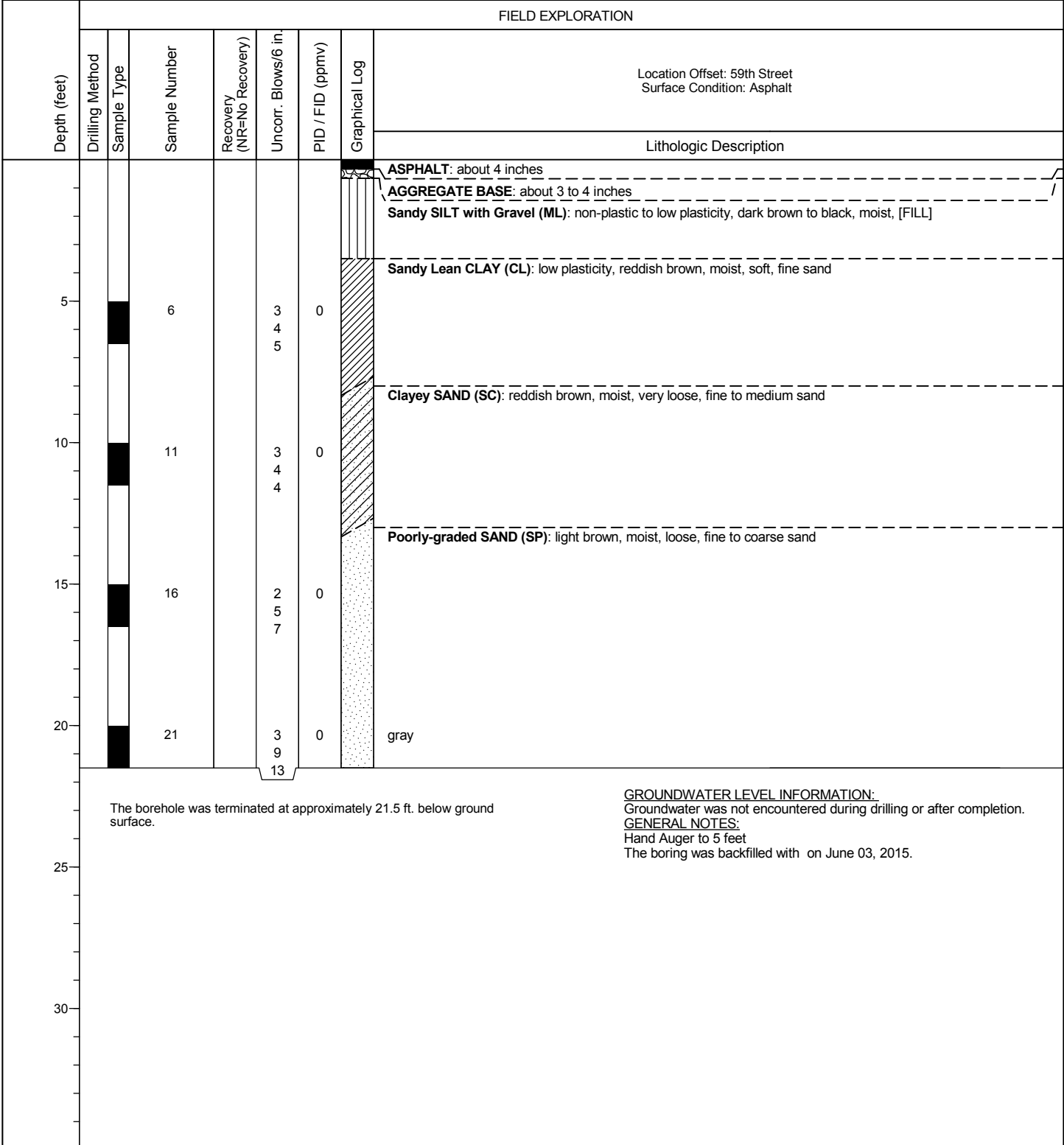
FIGURE

**D-37**


GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
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PLOTTED: 02/15/2016 08:23 AM BY: dross

<b>Date Begin - End:</b> 6/03/2015	<b>Drilling Company:</b> _____	<b>BORING LOG KA-38-S</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	



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 <b>Bright People. Right Solutions.</b>	PROJECT NO.: 138810	<b>BORING LOG KA-38-S</b>	FIGURE
	DRAWN BY: DR		SMUD Corporation Yard 1798 59th Street Sacramento, California
CHECKED BY: CR	DATE: 7/28/2015	PAGE: 1 of 1	
REvised: 2/15/2016			

**Date Begin - End:** 6/03/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

FIELD EXPLORATION

Location Offset: 59th Street  
 Surface Condition: Asphalt

Lithologic Description

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	Lithologic Description
0 - 4							ASPHALT: about 4 inches	
4 - 7			6		3 3 7	0	Silty SAND with Gravel (SM): dark brown, moist, fine to medium sand, FILL]	
7 - 10			11		2 4 4	0	Sandy Lean CLAY (CL): low plasticity, reddish brown, moist, soft, fine to medium sand	
10 - 15			16		4 7 12	0	Poorly-graded SAND (SP): reddish brown, moist, loose, fine to coarse sand	
15 - 21			21		4 6 8	0	gray, quartz rich	
21 - 21.5							SILT (ML): low plasticity, yellowish brown, moist, iron oxide staining	

The borehole was terminated at approximately 21.5 ft. below ground surface.

**GROUNDWATER LEVEL INFORMATION:**  
 Groundwater was not encountered during drilling or after completion.  
**GENERAL NOTES:**  
 Hand Auger to 5 feet  
 The boring was backfilled with on June 03, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**BORING LOG KA-40-S**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California


FIGURE

**D-39**

PLOTTED: 02/15/2016 08:24 AM BY: dross

**Date Begin - End:** 5/27/2015 **Drilling Company:** \_\_\_\_\_  
**Logged By:** \_\_\_\_\_ **Drill Crew:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available **Drilling Equipment:** \_\_\_\_\_  
**Plunge:** -90 degrees **Drilling Method:** See Drilling Method Column  
**Weather:** Not Available **Borehole Diameter:** \_\_\_\_\_

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION
								Lithologic Description		Completion Method: #3 Sand, 0.020" Screen, 2" O.D.
								Surface Condition: Asphalt		
								Lithologic Description		
								<b>ASPHALT:</b> about 4 inches <b>AGGREGATE BASE:</b> about 4 inches <b>Sandy SILT with Gravel (ML):</b> low plasticity, brown, no odor, dry, loose		
5			6		2 2 4	0.0		<b>Lean CLAY (CL):</b> medium plasticity, dark brown, no odor, moist, loose, fine sand, silty		
10			11		3 5 3	0.0		<b>Silty SAND (SM):</b> dark brown, no odor, moist, loose, subrounded fine sand		
15			16		3 4 9	0.0		<b>Poorly-graded SAND (SP):</b> light brownish gray, no odor, moist, loose, subrounded medium sand		BLANK CASING
20			21		4 5 9	0.0		gray		
25			26		6 6 7	0.0		<b>Sandy SILT (ML):</b> non-plastic, yellowish brown, no odor, moist, soft, subrounded fine sand		BENTONITE
30			31		5 7 14	0.0		<b>Silty SAND (SM):</b> low plasticity, light brownish gray, no odor, moist, loose, subrounded fine sand		#3 SAND
										0.020" SCREEN

	PROJECT NO.: 138810	<b>BORING LOG KA-41-D</b>  SMUD Corporation Yard 1798 59th Street Sacramento, California	FIGURE
	DRAWN BY: DR		D-40
CHECKED BY: CR	DATE: 7/28/2015		
REvised: 2/15/2016			PAGE: 1 of 2

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<b>Date Begin - End:</b> 5/27/2015	<b>Drilling Company:</b> _____	<b>BORING LOG KA-41-D</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION
								Surface Condition: Asphalt	Lithologic Description	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.
▽ 40			36		6 14 31	0.0	[Pattern]	<b>Poorly-graded SAND (SP):</b> light brownish gray, no odor, moist, medium dense, subrounded fine sand		0.020" SCREEN
40			41		17 41 50/4"	0.0	[Pattern]	<b>Silty CLAY (CL-ML):</b> high plasticity, brown, no odor, moist, hard		
45			46		22 48 50	0.0	[Pattern]	light brown, wet		#3 SAND

The borehole was terminated at approximately 46.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 ▽ Groundwater was observed at approximately 33.5 ft. below ground surface at the end of drilling.  
 ▽ Groundwater was observed at approximately 40 ft. below ground surface during drilling.  
GENERAL NOTES:  
 The boring was backfilled with \_\_\_\_\_ on May 27, 2015.

 <p><b>KLEINFELDER</b> Bright People. Right Solutions.</p>	PROJECT NO.: 138810	<b>BORING LOG KA-41-D</b>  SMUD Corporation Yard 1798 59th Street Sacramento, California	FIGURE
	DRAWN BY: DR		<b>D-40</b>
CHECKED BY: CR	DATE: 7/28/2015		
REvised: 2/15/2016			PAGE: 2 of 2

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<b>Date Begin - End:</b> 5/27/2015	<b>Drilling Company:</b> _____	<b>BORING LOG KA-42-D</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION		TEMPORARY WELL CONSTRUCTION	
								Surface Condition: Asphalt	Lithologic Description	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.	
								ASPHALT: about 4 inches			
								AGGREGATE BASE: about 1 to 3 inches			
								SILT (ML): medium plasticity, dark brown, no odor, dry, very soft, clayey			
5			6		4	0.0		Lean CLAY (CL): medium plasticity, yellowish brown, no odor, dry, very soft, iron oxide staining, silty			
10			11		3	0.0		Poorly-graded SAND (SP): dark brown, no odor, dry, loose, subrounded medium sand			
15			16		5	0.0		Silty SAND (SM): yellowish brown, no odor, dry, very loose, subrounded fine sand			
20			21		6	0.0		Poorly-graded SAND (SP): brown, no odor, dry, loose, subrounded medium sand			
25			26		4	0.0		Silty SAND (SM): medium plasticity, brown, no odor, moist, medium dense, subrounded fine sand			
30			31		10	0.0		light brownish gray			
					18						
					26						

BLANK CASING

BENTONITE  
#3 SAND  
0.020" SCREEN

 <p><b>KLEINFELDER</b> Bright People. Right Solutions.</p>	PROJECT NO.: 138810	<b>BORING LOG KA-42-D</b>  SMUD Corporation Yard 1798 59th Street Sacramento, California	FIGURE
	DRAWN BY: DR		D-41
CHECKED BY: CR	DATE: 7/28/2015		
REvised: 2/15/2016			PAGE: 1 of 2

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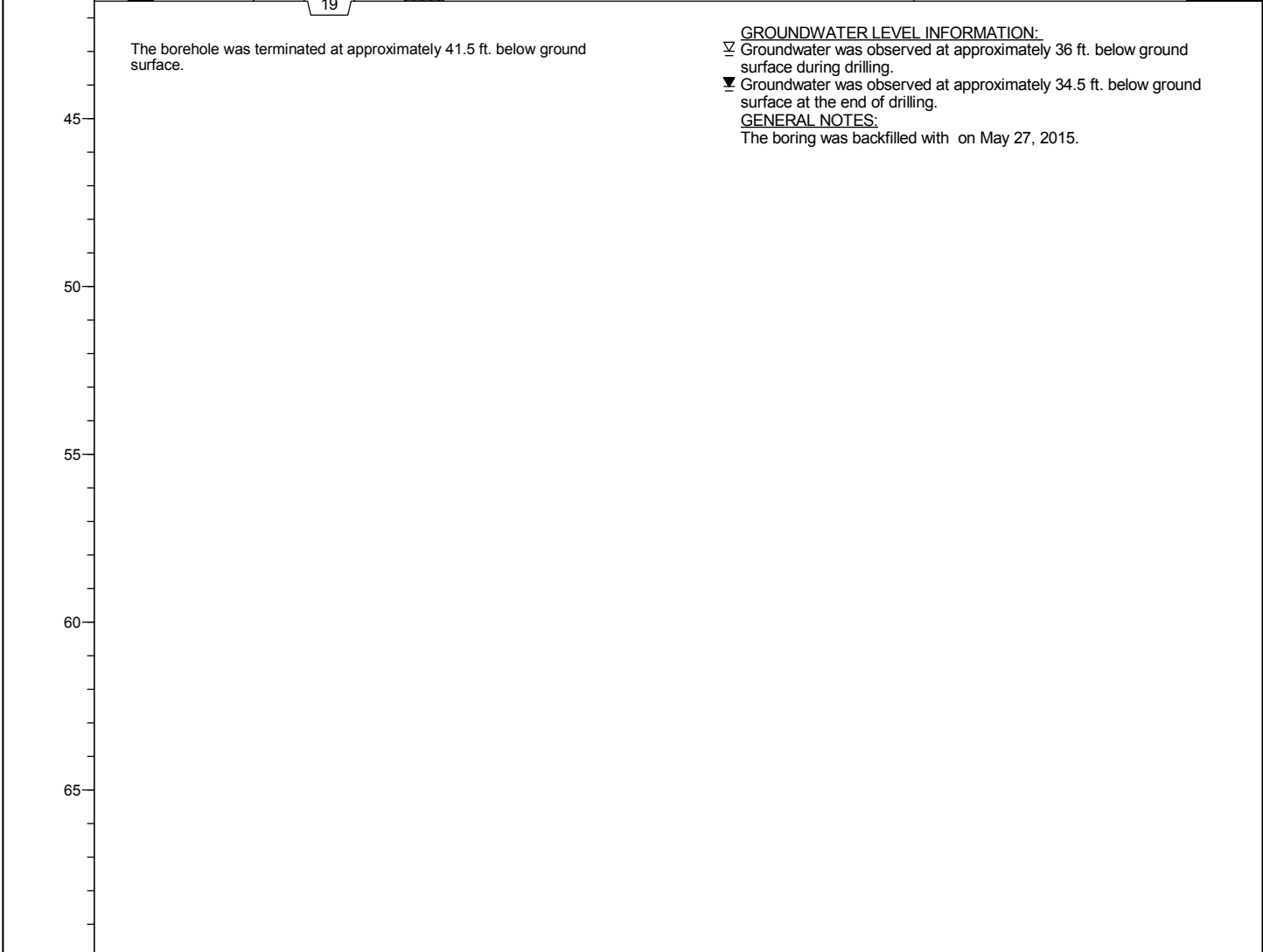
PLOTTED: 02/15/2016 08:24 AM BY: dross

<b>Date Begin - End:</b> 5/27/2015	<b>Drilling Company:</b> _____	<b>BORING LOG KA-42-D</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	Uncorr. Blows/6 in.	PID / FID (ppmv)	Graphical Log	FIELD EXPLORATION	TEMPORARY WELL CONSTRUCTION
								Surface Condition: Asphalt	Completion Method: #3 Sand, 0.020" Screen, 2" O.D.
Lithologic Description									
▽			36		5 9 9			<b>Silty SAND (SM):</b> medium plasticity, brown, no odor, moist, medium dense, subrounded fine sand wet, loose	0.020" SCREEN
40			41		12 12 19	0.0			

The borehole was terminated at approximately 41.5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 ▽ Groundwater was observed at approximately 36 ft. below ground surface during drilling.  
 ▽ Groundwater was observed at approximately 34.5 ft. below ground surface at the end of drilling.  
GENERAL NOTES:  
 The boring was backfilled with \_\_\_\_\_ on May 27, 2015.



 <b>Bright People. Right Solutions.</b>	PROJECT NO.: 138810	<b>BORING LOG KA-42-D</b>	FIGURE
	DRAWN BY: DR	SMUD Corporation Yard 1798 59th Street Sacramento, California	<b>D-41</b>
CHECKED BY: CR	DATE: 7/28/2015		
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Date Begin - End: 5/28/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

HAND EXPLORATION LOG KA-43-H

FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log	
							Surface Condition: Bare Earth
							Lithologic Description
			1		0		Silty SAND with Gravel (SM): light brown, moist, loose, fine to coarse sand, fine gravel
			5		0		Sandy Lean CLAY (CL): low plasticity, reddish brown, moist, soft to firm, fine to medium sand

The borehole was terminated at approximately 5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 The hand exploration was backfilled with on May 28, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

HAND EXPLORATION LOG KA-43-H

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

D-42

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GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]



PLOTTED: 02/15/2016 08:24 AM BY: dross

**Date Begin - End:** 5/28/2015  
**Logged By:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available  
**Plunge:** -90 degrees  
**Weather:** Not Available

**Drilling Company:** \_\_\_\_\_  
**Drill Crew:** \_\_\_\_\_  
**Drilling Equipment:** \_\_\_\_\_  
**Drilling Method:** See Drilling Method Column  
**Borehole Diameter:** \_\_\_\_\_

**HAND EXPLORATION LOG KA-44-H**

FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log	Lithologic Description
							Surface Condition: Bare Earth
			1.5		0		<b>ASPHALT:</b> about 3-1/2 inches <b>AGGREGATE BASE:</b> about 4 inches <b>Sandy Lean CLAY (CL):</b> low plasticity, reddish brown, moist, soft, fine sand
			5		0		<b>Sandy SILT (ML):</b> low plasticity, light brown, moist, soft, fine sand <b>Sandy Lean CLAY (CL):</b> low plasticity, reddish brown, moist, soft, fine sand
5							<p>The borehole was terminated at approximately 5 ft. below ground surface.</p> <p><u>GROUNDWATER LEVEL INFORMATION:</u>            Groundwater was not encountered during drilling or after completion.</p> <p><u>GENERAL NOTES:</u>            The hand exploration was backfilled with _____ on May 28, 2015.</p>
10							



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**HAND EXPLORATION LOG KA-44-H**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-43**  
 PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:24 AM BY: dross

Date Begin - End: 5/18/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

**HAND EXPLORATION LOG KA-45-H**

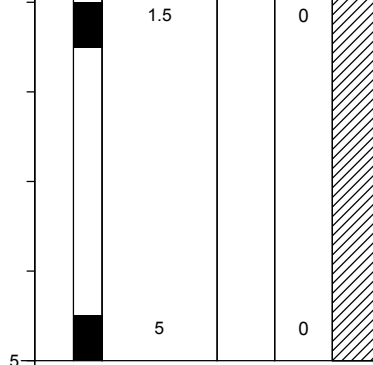
FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log
--------------	-----------------	-------------	---------------	---------------------------	------------------	---------------

Surface Condition: Asphalt

Lithologic Description

ASPHALT: about 3 to 4 inches  
 AGGREGATE BASE: about 3 inches  
 Sandy Lean CLAY (CL): low plasticity, reddish brown, moist, hard, fine to medium sand



The borehole was terminated at approximately 5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 The hand exploration was backfilled with on May 18, 2015.

10

5



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

HAND EXPLORATION LOG KA-45-H

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

**D-44**

PLOTTED: 02/15/2016 08:24 AM BY: dross

Date Begin - End: 5/18/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

**HAND EXPLORATION LOG KA-46-H**

FIELD EXPLORATION						
Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log
						Surface Condition: Asphalt
						Lithologic Description
			1.5		0	ASPHALT: about 3 to 4 inches AGGREGATE BASE: about 3 inches Sandy Lean CLAY (CL): low plasticity, reddish brown, moist, firm to hard, fine to medium sand
5			5		0	
<p>The borehole was terminated at approximately 5 ft. below ground surface.</p> <p><u>GROUNDWATER LEVEL INFORMATION:</u>            Groundwater was not encountered during drilling or after completion.</p> <p><u>GENERAL NOTES:</u>            The hand exploration was backfilled with on May 18, 2015.</p>						



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

**HAND EXPLORATION LOG KA-46-H**

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE  
**D-45**  
 PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

PLOTTED: 02/15/2016 08:24 AM BY: dross

Date Begin - End: 5/18/2015  
 Logged By:  
 Hor.-Vert. Datum: Not Available  
 Plunge: -90 degrees  
 Weather: Not Available

Drilling Company:  
 Drill Crew:  
 Drilling Equipment:  
 Drilling Method: See Drilling Method Column  
 Borehole Diameter:

**HAND EXPLORATION LOG KA-47-H**

FIELD EXPLORATION

Depth (feet)  
 Drilling Method  
 Sample Type  
 Sample Number  
 Recovery (NR=No Recovery)  
 PID / FID (ppmv)  
 Graphical Log

Surface Condition: Asphalt

Lithologic Description

ASPHALT: about 3-1/2 inches  
 AGGREGATE BASE: about 3 inches  
 Sandy Lean CLAY (CL): low plasticity, reddish brown, moist, hard, fine to medium sand

firm  
 hard

5

10

The borehole was terminated at approximately 5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 The hand exploration was backfilled with on May 18, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

HAND EXPLORATION LOG KA-47-H


SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California


FIGURE

D-46



<b>Date Begin - End:</b> 5/19/2015	<b>Drilling Company:</b> _____	<b>HAND EXPLORATION LOG KA-48-H</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

FIELD EXPLORATION						
Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log
						Surface Condition: Concrete
						Lithologic Description
			2		0	 <p><b>CONCRETE SLAB:</b> about 8 inches</p> <p><b>AGGREGATE BASE:</b> about 2 inches</p> <p><b>Silty SAND with Gravel (SM):</b> dark brown, moist, dense, fine to coarse sand</p>
5						<p>The borehole was terminated because of practical auger refusal at approximately 2 ft. below ground surface.</p> <p><u>GROUNDWATER LEVEL INFORMATION:</u> Groundwater was not encountered during drilling or after completion.</p> <p><u>GENERAL NOTES:</u> The hand exploration was backfilled with _____ on May 19, 2015.</p>
10						


 <p><b>KLEINFELDER</b> Bright People. Right Solutions.</p>	PROJECT NO.: 138810	<b>HAND EXPLORATION LOG KA-48-H</b>	FIGURE  <b>D-47</b>
	DRAWN BY: DR		
	CHECKED BY: CR		
	DATE: 7/28/2015	SMUD Corporation Yard 1798 59th Street Sacramento, California	
	REVISED: 2/15/2016		
			PAGE: 1 of 1

PLOTTED: 02/15/2016 08:24 AM BY: dross

<b>Date Begin - End:</b> 5/19/2015	<b>Drilling Company:</b> _____	<b>HAND EXPLORATION LOG KA-49-H</b>
<b>Logged By:</b> _____	<b>Drill Crew:</b> _____	
<b>Hor.-Vert. Datum:</b> Not Available	<b>Drilling Equipment:</b> _____	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> See Drilling Method Column	
<b>Weather:</b> Not Available	<b>Borehole Diameter:</b> _____	

FIELD EXPLORATION						
Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log
						Surface Condition: Asphalt
						Lithologic Description
			1.5	0		<div style="border: 1px dashed black; padding: 2px;"> <b>ASPHALT:</b> about 2 inches  <b>AGGREGATE BASE:</b> about 3 inches  <b>Sandy Lean CLAY (CL):</b> low plasticity, reddish brown, moist, firm to hard, fine to coarse sand                 </div>
			3	0		
5						<p>The borehole was terminated because of practical auger refusal at approximately 3 ft. below ground surface.</p> <p><u>GROUNDWATER LEVEL INFORMATION:</u> Groundwater was not encountered during drilling or after completion.</p> <p><u>GENERAL NOTES:</u> The hand exploration was backfilled with on May 19, 2015.</p>
10						

GINT FILE: L:\2016\projects\138810\gint\138810blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

 <p><b>KLEINFELDER</b> Bright People. Right Solutions.</p>	PROJECT NO.: 138810	<b>HAND EXPLORATION LOG KA-49-H</b>	FIGURE  <b>D-48</b>
	DRAWN BY: DR CHECKED BY: CR DATE: 7/28/2015 REVISED: 2/15/2016		
			PAGE: 1 of 1

PLOTTED: 02/15/2016 08:24 AM BY: dross

**Date Begin - End:** 5/19/2015  
**Logged By:** \_\_\_\_\_  
**Hor.-Vert. Datum:** Not Available  
**Plunge:** -90 degrees  
**Weather:** Not Available

**Drilling Company:** \_\_\_\_\_  
**Drill Crew:** \_\_\_\_\_  
**Drilling Equipment:** \_\_\_\_\_  
**Drilling Method:** See Drilling Method Column  
**Borehole Diameter:** \_\_\_\_\_

**HAND EXPLORATION LOG KA-50-H**

FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log
			3.5		0	
5			5		0	

Surface Condition: Asphalt

Lithologic Description

**ASPHALT:** about 3 inches  
**AGGREGATE BASE**  
**Silty SAND with Gravel (SM):** moist, dense, fine to coarse sand, angular gravel up tp 3 inches  
**Sandy Lean CLAY (CL):** low plasticity, reddish brown, moist, soft, fine to medium sand

The borehole was terminated at approximately 5 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:  
 Groundwater was not encountered during drilling or after completion.  
GENERAL NOTES:  
 The hand exploration was backfilled with on May 19, 2015.



PROJECT NO.: 138810  
 DRAWN BY: DR  
 CHECKED BY: CR  
 DATE: 7/28/2015  
 REVISED: 2/15/2016

HAND EXPLORATION LOG KA-50-H

SMUD Corporation Yard  
 1798 59th Street  
 Sacramento, California

FIGURE

D-49

PAGE: 1 of 1

GINT FILE: L:\2016\projects\138810\gint\138810\blogs.gpj  
 GINT TEMPLATE: C:\KLF\_STANDARD\_GINT\_LIBRARY\_2016.GLB [KLF\_ENVIRONMENTAL LOG]

**APPENDIX E**  
**ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORMS**

---





Date of Report: 06/04/2015

Sue Gardner

SMUD

6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Client Project: [none]  
BCL Project: 138810  
BCL Work Order: 1512479  
Invoice ID: B204866

Enclosed are the results of analyses for samples received by the laboratory on 5/21/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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EPA Method 1664.....	14
Total Concentrations (TTLC).....	15
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Volatile Organic Analysis (EPA Method 8260B).....	16
Total Petroleum Hydrocarbons.....	19
EPA Method 1664.....	20
Total Concentrations (TTLC).....	21
<b>1512479-05 - KA-47-H-1.5</b>	
Volatile Organic Analysis (EPA Method 8260B).....	22
Total Petroleum Hydrocarbons.....	25
EPA Method 1664.....	26
Total Concentrations (TTLC).....	27
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Total Petroleum Hydrocarbons.....	31
EPA Method 1664.....	32
Total Concentrations (TTLC).....	33
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EPA Method 1664.....	38
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Total Petroleum Hydrocarbons.....	43
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Total Concentrations (TTLC).....	45
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## Quality Control Reports

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**KLEINFELDER**  
Bright People. Right Solutions.

PROJECT NO. 138810 PROJECT NAME SMUD  
L.P. NO. (P.O. NO.) CUNIG RIDDLE / 9099  
SAMPLERS: (Signature/Number)  
DATE MM/DD/YY SAMPLE I.D. MATRIX

DATE	SAMPLE I.D.	MATRIX	NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	RECEIVING LAB:	INSTRUCTIONS/REMARKS
5/10/15	0848	Soil	1	6.55 Tube	TPH-g TPH-p TPH-d-no oil & grease VOCs PCEs SVCs COPC	BC Lab	Standard TAT
10/10	KA-43-H-5						* Hold pending analysis
10/40	KA-44-H-15						*
10/55	KA-44-H-5						*
10/20	KA-47-H-15						*
11/35	KA-47-H-5						*
11/55	KA-46-H-15						*
12/20	KA-48-H-5						*
13/25	KA-45-H-15						* If you have any questions, Please contact Sue Gardner 916-346-1701
13/40	KA-45-H-5						*
14/10	KA-10-H-15						*
14/30	KA-10-H-5						*
14/55	KA-17-H-15						*
15/00	KA-17-H-5						*
<p>GTK BY: </p> <p>DISTRIBUTION: </p> <p>SUB OUT: </p>						<p>Send Results To: Sue Gardner sgardner@kleinfelder.com 3077 Fir Circle Sacramento CA 95827</p> <p>Attn:</p>	

Instructions/Remarks: Standard TAT

Received by (Signature): Date/Time: 5/10/15 1630  
 Sample Control # 2 S.L.  
 Received by (Signature): Date/Time: 5/10/15 1420  
 Received for Laboratory by (Signature): MMB Date/Time: 5/15/15  
 White - Sampler

Canary - Return Copy To Shipper  
Pink - Lab Copy

**CHAIN OF CUSTODY**  
COC NO 18714

ENV-02 REV 05/08

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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PROJECT NO	PROJECT NAME		DATE MM/DD/YY	SAMPLE I.D. HH-MM-SS	MATRIX	NO OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	RECEIVING LAB	INSTRUCTIONS/REMARKS
	LP NO (PC. NO.)	SAMPLERS (Signature/Number)								
1512479	1512479	1512479	11/15/11	11-15-11	Soil	1	1	Asst. 100	1512479	1512479
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

White - Sampler  
 Canary - Return Copy to Shipper  
 Pink - Lab Copy  
 CHAIN OF CUSTODY  
 COC 1512479

ENV-02 REV 05/06

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 of 2

Submission #: 15-12479

**SHIPPING INFORMATION**  
 Federal Express  UPS  Hand Delivery   
 BC Lab Field Service  Other  (Specify) mw

**SHIPPING CONTAINER**  
 Ice Chest  None  Box   
 Other  (Specify) \_\_\_\_\_

**FREE LIQUID**  
 YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_  
 Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

**COC Received**  
 YES  NO

Emissivity: \_\_\_\_\_ Container: Soil sleeve Thermometer ID: 228 Date/Time 5/21/15  
 Temperature: (A) 3.3 °C (C) 35 °C Analyst Init MW 0830

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
 Sample Numbering Completed By: MW Date/Time: 5/21/15 0830 (S:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\SAMREC)  
 A = Actual / C = Corrected



BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 2 Of 2

Submission #: 15-12479

<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) <u>Other</u>		<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____	<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>
--	--	---	--

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_  
 Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  
 YES  NO

Emissivity: \_\_\_\_\_ Container: Soil Sleeve Thermometer ID: 228 Date/Time 5/21/15  
 Temperature: (A) 3.3 °C (C) 35 °C Analyst Init MM 0830

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PT PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE	A	A	A	A						
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
 Sample Numbering Completed By: MM Date/Time: 5/21/15 0830 (S:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\SAMREC)  
 A = Actual / C = Corrected



SMUD  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1512479-01	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 08:48
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-43-H-1	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1512479-02	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 10:10
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-43-H-5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1512479-03	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 10:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-44-H-1.5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1512479-04	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 10:55
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-44-H-5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1512479-05	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 11:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-47-H-1.5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1512479-06	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 11:35
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-47-H-5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1512479-07	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 11:55
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-46-H-1.5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1512479-08	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 12:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-46-H-5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1512479-09	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 13:25
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-45-H-1.5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1512479-10	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 13:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-45-H-5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1512479-11	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 14:10
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-16-H-1.5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1512479-12	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 14:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-16-H-5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1512479-13	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 14:55
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-17-H-1.5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1512479-14	<b>COC Number:</b>	---	<b>Receive Date:</b> 05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/18/2015 15:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-17-H-5	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil

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Reported: 06/04/2015 12:58
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with 2 columns: BCL Sample ID (1512479-01) and Client Sample Name (KA-43-H-1, 5/18/2015 8:48:00AM, Craig Riddle/9099)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their analysis results.

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-01	<b>Client Sample Name:</b> KA-43-H-1, 5/18/2015 8:48:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-01	<b>Client Sample Name:</b> KA-43-H-1, 5/18/2015 8:48:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	106	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	107	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 03:19	JMS	MS-V3	1	BYE2342

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512479-01	<b>Client Sample Name:</b> KA-43-H-1, 5/18/2015 8:48:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	78.3	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 20:46	MWB	GC-13	0.993	BYE2580

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1512479-01	<b>Client Sample Name:</b> KA-43-H-1, 5/18/2015 8:48:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.996	BYF0399

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1512479-01	<b>Client Sample Name:</b> KA-43-H-1, 5/18/2015 8:48:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	4.9	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	90	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.30	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	30	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.7	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	20	mg/kg	1.0	0.050	EPA-6010B	0.20		1
Lead	9.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	0.063	mg/kg	0.16	0.036	EPA-7471A	ND	J	2
Molybdenum	0.074	mg/kg	2.5	0.050	EPA-6010B	ND	J	1
Nickel	29	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	45	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	38	mg/kg	2.5	0.087	EPA-6010B	0.41		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	05/28/15	05/29/15 07:25	ARD	PE-OP3	1	BYE2488
2	EPA-7471A	05/27/15	05/27/15 13:36	MEV	CETAC1	1.025	BYE2245

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Reported: 06/04/2015 12:58
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with 2 columns: BCL Sample ID (1512479-03) and Client Sample Name (KA-44-H-1.5, 5/18/2015 10:40:00AM, Craig Riddle/9099)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their analysis results.

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Reported: 06/04/2015 12:58
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with columns: BCL Sample ID, Client Sample Name, Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their analysis results.

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-03	<b>Client Sample Name:</b> KA-44-H-1.5, 5/18/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	107	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 03:42	JMS	MS-V3	1	BYE2342

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512479-03	<b>Client Sample Name:</b> KA-44-H-1.5, 5/18/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	68.4	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 20:23	MWB	GC-13	0.993	BYE2580

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1512479-03	<b>Client Sample Name:</b> KA-44-H-1.5, 5/18/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.998	BYF0399

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1512479-03	<b>Client Sample Name:</b> KA-44-H-1.5, 5/18/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	30	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	92	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.31	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	27	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	7.1	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	15	mg/kg	1.0	0.050	EPA-6010B	0.20		1
Lead	9.1	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	21	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	42	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	31	mg/kg	2.5	0.087	EPA-6010B	0.40		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	05/28/15	05/29/15 07:26	ARD	PE-OP3	0.971	BYE2488
2	EPA-7471A	05/27/15	05/27/15 13:42	MEV	CETAC1	1.008	BYE2245

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SMUD  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-05	<b>Client Sample Name:</b> KA-47-H-1.5, 5/18/2015 11:20:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/04/2015 12:58
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with 2 columns: BCL Sample ID (1512479-05) and Client Sample Name (KA-47-H-1.5, 5/18/2015 11:20:00AM, Craig Riddle/9099)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their analysis results.

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-05	<b>Client Sample Name:</b> KA-47-H-1.5, 5/18/2015 11:20:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	107	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/22/15 16:05	JMS	MS-V3	1	BYE1396

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512479-05	<b>Client Sample Name:</b> KA-47-H-1.5, 5/18/2015 11:20:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	69.1	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 16:36	MWB	GC-13	1.003	BYE2580

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1512479-05	<b>Client Sample Name:</b> KA-47-H-1.5, 5/18/2015 11:20:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.994	BYF0399

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1512479-05	<b>Client Sample Name:</b> KA-47-H-1.5, 5/18/2015 11:20:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	4.0	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	100	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.30	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	28	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.5	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	16	mg/kg	1.0	0.050	EPA-6010B	0.20		1
Lead	5.3	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	0.10	mg/kg	0.16	0.036	EPA-7471A	ND	J	2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	22	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	47	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	33	mg/kg	2.5	0.087	EPA-6010B	0.40		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	05/28/15	05/29/15 07:27	ARD	PE-OP3	0.971	BYE2488
2	EPA-7471A	05/27/15	05/27/15 12:54	MEV	CETAC1	1.008	BYE2245

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-07	<b>Client Sample Name:</b> KA-46-H-1.5, 5/18/2015 11:55:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Sacramento, CA 95852-0830

Reported: 06/04/2015 12:58
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with 2 columns: BCL Sample ID (1512479-07) and Client Sample Name (KA-46-H-1.5, 5/18/2015 11:55:00AM, Craig Riddle/9099)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their detection results.

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-07	<b>Client Sample Name:</b> KA-46-H-1.5, 5/18/2015 11:55:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	107	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	105	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/22/15 16:28	JMS	MS-V3	1	BYE1396

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512479-07	<b>Client Sample Name:</b> KA-46-H-1.5, 5/18/2015 11:55:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	20	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	75.3	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 21:54	MWB	GC-13	0.990	BYE2580

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1512479-07	<b>Client Sample Name:</b> KA-46-H-1.5, 5/18/2015 11:55:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	30	mg/kg	50	25	EPA-1664A HEM	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.998	BYF0399

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1512479-07	<b>Client Sample Name:</b> KA-46-H-1.5, 5/18/2015 11:55:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	6.5	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	88	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.27	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	32	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	7.6	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	18	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	8.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	0.075	mg/kg	0.16	0.036	EPA-7471A	ND	J	2
Molybdenum	0.24	mg/kg	2.5	0.050	EPA-6010B	ND	J	1
Nickel	32	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	39	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	35	mg/kg	2.5	0.087	EPA-6010B	0.50		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	05/29/15	06/01/15	11:43	ARD	PE-OP3	0.971	BYE2572
2	EPA-7471A	05/27/15	05/27/15	13:45	MEV	CETAC1	1.025	BYE2245

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-09	<b>Client Sample Name:</b> KA-45-H-1.5, 5/18/2015 1:25:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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SMUD  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-09	<b>Client Sample Name:</b> KA-45-H-1.5, 5/18/2015 1:25:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-09	<b>Client Sample Name:</b> KA-45-H-1.5, 5/18/2015 1:25:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	106	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	106	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/22/15 16:51	JMS	MS-V3	1	BYE1396

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512479-09	<b>Client Sample Name:</b> KA-45-H-1.5, 5/18/2015 1:25:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	55.3	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 16:59	MWB	GC-13	0.997	BYE2580

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1512479-09	<b>Client Sample Name:</b> KA-45-H-1.5, 5/18/2015 1:25:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.990	BYF0399

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1512479-09	<b>Client Sample Name:</b> KA-45-H-1.5, 5/18/2015 1:25:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	7.4	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	97	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.56	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	51	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	5.5	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	16	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	6.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	0.039	mg/kg	0.16	0.036	EPA-7471A	ND	J	2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	32	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	1.0	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	0.16	mg/kg	0.50	0.067	EPA-6010B	ND	J	1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	57	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	27	mg/kg	2.5	0.087	EPA-6010B	0.49		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	05/29/15	06/01/15	11:47	ARD	PE-OP3	0.962	BYE2572
2	EPA-7471A	05/27/15	05/27/15	13:47	MEV	CETAC1	1.008	BYE2245

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-11	<b>Client Sample Name:</b> KA-16-H-1.5, 5/18/2015 2:10:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512479-11		Client Sample Name: KA-16-H-1.5, 5/18/2015 2:10:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-11	<b>Client Sample Name:</b> KA-16-H-1.5, 5/18/2015 2:10:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	106	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	103	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/22/15 17:14	JMS	MS-V3	1	BYE1396

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512479-11	<b>Client Sample Name:</b> KA-16-H-1.5, 5/18/2015 2:10:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	103	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 17:22	MWB	GC-13	1.017	BYE2580

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1512479-11	<b>Client Sample Name:</b> KA-16-H-1.5, 5/18/2015 2:10:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.990	BYF0399

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SMUD  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1512479-11	<b>Client Sample Name:</b> KA-16-H-1.5, 5/18/2015 2:10:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	3.9	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	60	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.30	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	25	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.7	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	13	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	5.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	0.047	mg/kg	0.16	0.036	EPA-7471A	ND	J	2
Molybdenum	0.10	mg/kg	2.5	0.050	EPA-6010B	ND	J	1
Nickel	19	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	47	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	26	mg/kg	2.5	0.087	EPA-6010B	0.50		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	05/29/15	06/01/15	11:48	ARD	PE-OP3	0.971	BYE2572
2	EPA-7471A	05/27/15	05/27/15	13:49	MEV	CETAC1	1.008	BYE2245

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-13	<b>Client Sample Name:</b> KA-17-H-1.5, 5/18/2015 2:55:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/04/2015 12:58
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with columns: BCL Sample ID, Client Sample Name, Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical constituents and their analysis results.

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1512479-13	<b>Client Sample Name:</b> KA-17-H-1.5, 5/18/2015 2:55:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	106	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	100	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/22/15 17:37	JMS	MS-V3	1	BYE1396

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512479-13	<b>Client Sample Name:</b> KA-17-H-1.5, 5/18/2015 2:55:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	63.2	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 17:44	MWB	GC-13	0.997	BYE2580

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1512479-13	<b>Client Sample Name:</b> KA-17-H-1.5, 5/18/2015 2:55:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.998	BYF0399

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1512479-13	<b>Client Sample Name:</b> KA-17-H-1.5, 5/18/2015 2:55:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	100	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.30	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	28	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	7.4	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	16	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	6.5	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	24	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	43	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	39	mg/kg	2.5	0.087	EPA-6010B	0.50		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	05/29/15	06/01/15	11:50	ARD	PE-OP3	0.971	BYE2572
2	EPA-7471A	05/27/15	05/27/15	13:51	MEV	CETAC1	1.008	BYE2245

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE1396</b>						
Benzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYE1396-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYE1396-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYE1396-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYE1396-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYE1396-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0012	

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE1396</b>						
cis-1,3-Dichloropropene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYE1396-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYE1396-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYE1396-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYE1396-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYE1396-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYE1396-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYE1396-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYE1396-BLK1	ND	mg/kg	0.0050	0.0012	
Total Purgeable Petroleum Hydrocarbons	BYE1396-BLK1	ND	mg/kg	0.20	0.020	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYE1396-BLK1</b>	<b>95.5</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYE1396-BLK1</b>	<b>104</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYE1396-BLK1</b>	<b>108</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2342</b>						
Benzene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYE2342-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYE2342-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYE2342-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYE2342-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYE2342-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYE2342-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYE2342-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYE2342-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYE2342-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYE2342-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYE2342-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYE2342-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYE2342-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYE2342-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYE2342-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYE2342-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYE2342-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYE2342-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYE2342-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYE2342-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYE2342-BLK1	ND	mg/kg	0.0050	0.0012	

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6201 S Street/P.O. Box 15830
Sacramento, CA 95852-0830

Reported: 06/04/2015 12:58
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Table with 7 columns: Constituent, QC Sample ID, MB Result, Units, PQL, MDL, Lab Quals. Includes a QC Batch ID: BYE2342 and various chemical constituents with their respective results and limits.

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYE1396</b>										
Benzene	BYE1396-BS1	LCS	0.11564	0.12500	mg/kg	92.5		70 - 130		
Bromodichloromethane	BYE1396-BS1	LCS	0.12138	0.12500	mg/kg	97.1		70 - 130		
Chlorobenzene	BYE1396-BS1	LCS	0.11871	0.12500	mg/kg	95.0		70 - 130		
Chloroethane	BYE1396-BS1	LCS	0.10048	0.12500	mg/kg	80.4		70 - 130		
1,4-Dichlorobenzene	BYE1396-BS1	LCS	0.11889	0.12500	mg/kg	95.1		70 - 130		
1,1-Dichloroethane	BYE1396-BS1	LCS	0.11733	0.12500	mg/kg	93.9		70 - 130		
1,1-Dichloroethene	BYE1396-BS1	LCS	0.13021	0.12500	mg/kg	104		70 - 130		
Toluene	BYE1396-BS1	LCS	0.11821	0.12500	mg/kg	94.6		70 - 130		
Trichloroethene	BYE1396-BS1	LCS	0.12492	0.12500	mg/kg	99.9		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE1396-BS1	LCS	0.047300	0.050000	mg/kg	94.6		70 - 121		
Toluene-d8 (Surrogate)	BYE1396-BS1	LCS	0.048860	0.050000	mg/kg	97.7		81 - 117		
4-Bromofluorobenzene (Surrogate)	BYE1396-BS1	LCS	0.050830	0.050000	mg/kg	102		74 - 121		
<b>QC Batch ID: BYE2342</b>										
Benzene	BYE2342-BS1	LCS	0.096920	0.12500	mg/kg	77.5		70 - 130		
Bromodichloromethane	BYE2342-BS1	LCS	0.097630	0.12500	mg/kg	78.1		70 - 130		
Chlorobenzene	BYE2342-BS1	LCS	0.096190	0.12500	mg/kg	77.0		70 - 130		
Chloroethane	BYE2342-BS1	LCS	0.087750	0.12500	mg/kg	70.2		70 - 130		
1,4-Dichlorobenzene	BYE2342-BS1	LCS	0.097510	0.12500	mg/kg	78.0		70 - 130		
1,1-Dichloroethane	BYE2342-BS1	LCS	0.098930	0.12500	mg/kg	79.1		70 - 130		
1,1-Dichloroethene	BYE2342-BS1	LCS	0.11038	0.12500	mg/kg	88.3		70 - 130		
Toluene	BYE2342-BS1	LCS	0.10006	0.12500	mg/kg	80.0		70 - 130		
Trichloroethene	BYE2342-BS1	LCS	0.10591	0.12500	mg/kg	84.7		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE2342-BS1	LCS	0.045870	0.050000	mg/kg	91.7		70 - 121		
Toluene-d8 (Surrogate)	BYE2342-BS1	LCS	0.048890	0.050000	mg/kg	97.8		81 - 117		
4-Bromofluorobenzene (Surrogate)	BYE2342-BS1	LCS	0.052450	0.050000	mg/kg	105		74 - 121		

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Reported: 06/04/2015 12:58
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quals. Includes two sections for QC Batch IDs: BYE1396 and BYE2342.

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYE2342</b>		Used client sample: N								
1,1-Dichloroethene	MS	1511019-40	ND	0.12755	0.12500	mg/kg		102		70 - 130
	MSD	1511019-40	ND	0.11314	0.12500	mg/kg	12.0	90.5	20	70 - 130
Toluene	MS	1511019-40	ND	0.11104	0.12500	mg/kg		88.8		70 - 130
	MSD	1511019-40	ND	0.10038	0.12500	mg/kg	10.1	80.3	20	70 - 130
Trichloroethene	MS	1511019-40	ND	0.11997	0.12500	mg/kg		96.0		70 - 130
	MSD	1511019-40	ND	0.10708	0.12500	mg/kg	11.4	85.7	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-40	ND	0.049410	0.050000	mg/kg		98.8		70 - 121
	MSD	1511019-40	ND	0.049080	0.050000	mg/kg	0.7	98.2		70 - 121
Toluene-d8 (Surrogate)	MS	1511019-40	ND	0.048790	0.050000	mg/kg		97.6		81 - 117
	MSD	1511019-40	ND	0.049630	0.050000	mg/kg	1.7	99.3		81 - 117
4-Bromofluorobenzene (Surrogate)	MS	1511019-40	ND	0.050800	0.050000	mg/kg		102		74 - 121
	MSD	1511019-40	ND	0.052420	0.050000	mg/kg	3.1	105		74 - 121

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

## Total Petroleum Hydrocarbons

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2580</b>						
TPH - Diesel (FFP)	BYE2580-BLK1	ND	mg/kg	10	1.2	
TPH - Motor Oil	BYE2580-BLK1	ND	mg/kg	20	6.5	
<b>Tetracosane (Surrogate)</b>	<b>BYE2580-BLK1</b>	<b>78.5</b>	<b>%</b>	<b>20 - 145 (LCL - UCL)</b>		

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYE2580</b>										
TPH - Diesel (FFP)	BYE2580-BS1	LCS	81.260	84.175	mg/kg	96.5		64	124	
Tetracosane (Surrogate)	BYE2580-BS1	LCS	2.8448	3.3670	mg/kg	84.5		20	145	

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Total Petroleum Hydrocarbons

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent		Lab Quals
								Recovery	RPD	
<b>QC Batch ID: BYE2580</b>		Used client sample: N								
TPH - Diesel (FFP)	MS	1511019-43	ND	85.736	84.459	mg/kg		102		52 - 131
	MSD	1511019-43	ND	72.030	84.459	mg/kg	17.4	85.3	30	52 - 131
Tetracosane (Surrogate)	MS	1511019-43	ND	3.0868	3.3784	mg/kg		91.4		20 - 145
	MSD	1511019-43	ND	2.5473	3.3784	mg/kg	19.2	75.4		20 - 145

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0399</b>						
Oil and Grease	BYF0399-BLK1	ND	mg/kg	50	25	

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0399</b>										
Oil and Grease	BYF0399-BS1	LCS	688.25	782.87	mg/kg	87.9		59	117	

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
									RPD	Percent Recovery	
<b>QC Batch ID: BYF0399</b>		Used client sample: N									
Oil and Grease	DUP	1511019-40	ND	ND		mg/kg				30	
	MS	1511019-40	ND	737.57	781.31	mg/kg		94.4		56 - 111	
	MSD	1511019-40	ND	682.90	781.31	mg/kg	7.7	87.4	30	56 - 111	

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
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**QC Batch ID: BYE2245**

Mercury	BYE2245-BLK1	ND	mg/kg	0.16	0.036	
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**QC Batch ID: BYE2488**

Antimony	BYE2488-BLK1	ND	mg/kg	5.0	0.33	
Arsenic	BYE2488-BLK1	ND	mg/kg	1.0	0.40	
Barium	BYE2488-BLK1	ND	mg/kg	0.50	0.18	
Beryllium	BYE2488-BLK1	ND	mg/kg	0.50	0.047	
Cadmium	BYE2488-BLK1	ND	mg/kg	0.50	0.052	
Chromium	BYE2488-BLK1	ND	mg/kg	0.50	0.050	
Cobalt	BYE2488-BLK1	ND	mg/kg	2.5	0.098	
<b>Copper</b>	<b>BYE2488-BLK1</b>	<b>0.20462</b>	<b>mg/kg</b>	<b>1.0</b>	<b>0.050</b>	<b>J</b>
Lead	BYE2488-BLK1	ND	mg/kg	2.5	0.28	
Molybdenum	BYE2488-BLK1	ND	mg/kg	2.5	0.050	
Nickel	BYE2488-BLK1	ND	mg/kg	0.50	0.15	
Selenium	BYE2488-BLK1	ND	mg/kg	1.0	0.98	
Silver	BYE2488-BLK1	ND	mg/kg	0.50	0.067	
Thallium	BYE2488-BLK1	ND	mg/kg	5.0	0.64	
Vanadium	BYE2488-BLK1	ND	mg/kg	0.50	0.11	
<b>Zinc</b>	<b>BYE2488-BLK1</b>	<b>0.40935</b>	<b>mg/kg</b>	<b>2.5</b>	<b>0.087</b>	<b>J</b>

**QC Batch ID: BYE2572**

Antimony	BYE2572-BLK1	ND	mg/kg	5.0	0.33	
Arsenic	BYE2572-BLK1	ND	mg/kg	1.0	0.40	
Barium	BYE2572-BLK1	ND	mg/kg	0.50	0.18	
Beryllium	BYE2572-BLK1	ND	mg/kg	0.50	0.047	
Cadmium	BYE2572-BLK1	ND	mg/kg	0.50	0.052	
Chromium	BYE2572-BLK1	ND	mg/kg	0.50	0.050	
Cobalt	BYE2572-BLK1	ND	mg/kg	2.5	0.098	
<b>Copper</b>	<b>BYE2572-BLK1</b>	<b>0.11197</b>	<b>mg/kg</b>	<b>1.0</b>	<b>0.050</b>	<b>J</b>
Lead	BYE2572-BLK1	ND	mg/kg	2.5	0.28	
Molybdenum	BYE2572-BLK1	ND	mg/kg	2.5	0.050	
Nickel	BYE2572-BLK1	ND	mg/kg	0.50	0.15	
Selenium	BYE2572-BLK1	ND	mg/kg	1.0	0.98	
Silver	BYE2572-BLK1	ND	mg/kg	0.50	0.067	
Thallium	BYE2572-BLK1	ND	mg/kg	5.0	0.64	

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTL)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2572</b>						
Vanadium	BYE2572-BLK1	ND	mg/kg	0.50	0.11	
Zinc	BYE2572-BLK1	0.51422	mg/kg	2.5	0.087	J

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Reported: 06/04/2015 12:58  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYE2245</b>										
Mercury	BYE2245-BS1	LCS	0.85712	0.80000	mg/kg	107		80 - 120		
<b>QC Batch ID: BYE2488</b>										
Antimony	BYE2488-BS1	LCS	93.999	100.00	mg/kg	94.0		75 - 125		
Arsenic	BYE2488-BS1	LCS	9.3808	10.000	mg/kg	93.8		75 - 125		
Barium	BYE2488-BS1	LCS	109.13	100.00	mg/kg	109		75 - 125		
Beryllium	BYE2488-BS1	LCS	9.4081	10.000	mg/kg	94.1		75 - 125		
Cadmium	BYE2488-BS1	LCS	9.9138	10.000	mg/kg	99.1		75 - 125		
Chromium	BYE2488-BS1	LCS	99.015	100.00	mg/kg	99.0		75 - 125		
Cobalt	BYE2488-BS1	LCS	97.061	100.00	mg/kg	97.1		75 - 125		
Copper	BYE2488-BS1	LCS	99.739	100.00	mg/kg	99.7		75 - 125		
Lead	BYE2488-BS1	LCS	98.091	100.00	mg/kg	98.1		75 - 125		
Molybdenum	BYE2488-BS1	LCS	100.36	100.00	mg/kg	100		75 - 125		
Nickel	BYE2488-BS1	LCS	102.37	100.00	mg/kg	102		75 - 125		
Selenium	BYE2488-BS1	LCS	9.8623	10.000	mg/kg	98.6		75 - 125		
Silver	BYE2488-BS1	LCS	9.2758	10.000	mg/kg	92.8		75 - 125		
Thallium	BYE2488-BS1	LCS	112.70	100.00	mg/kg	113		75 - 125		
Vanadium	BYE2488-BS1	LCS	103.45	100.00	mg/kg	103		75 - 125		
Zinc	BYE2488-BS1	LCS	99.016	100.00	mg/kg	99.0		75 - 125		
<b>QC Batch ID: BYE2572</b>										
Antimony	BYE2572-BS1	LCS	101.60	100.00	mg/kg	102		75 - 125		
Arsenic	BYE2572-BS1	LCS	9.8999	10.000	mg/kg	99.0		75 - 125		
Barium	BYE2572-BS1	LCS	99.912	100.00	mg/kg	99.9		75 - 125		
Beryllium	BYE2572-BS1	LCS	9.4858	10.000	mg/kg	94.9		75 - 125		
Cadmium	BYE2572-BS1	LCS	10.206	10.000	mg/kg	102		75 - 125		
Chromium	BYE2572-BS1	LCS	104.29	100.00	mg/kg	104		75 - 125		
Cobalt	BYE2572-BS1	LCS	102.65	100.00	mg/kg	103		75 - 125		
Copper	BYE2572-BS1	LCS	99.049	100.00	mg/kg	99.0		75 - 125		
Lead	BYE2572-BS1	LCS	102.87	100.00	mg/kg	103		75 - 125		
Molybdenum	BYE2572-BS1	LCS	102.55	100.00	mg/kg	103		75 - 125		
Nickel	BYE2572-BS1	LCS	108.21	100.00	mg/kg	108		75 - 125		
Selenium	BYE2572-BS1	LCS	10.216	10.000	mg/kg	102		75 - 125		
Silver	BYE2572-BS1	LCS	9.6712	10.000	mg/kg	96.7		75 - 125		
Thallium	BYE2572-BS1	LCS	115.72	100.00	mg/kg	116		75 - 125		

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**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYE2572</b>										
Vanadium	BYE2572-BS1	LCS	108.13	100.00	mg/kg	108		75 - 125		
Zinc	BYE2572-BS1	LCS	103.92	100.00	mg/kg	104		75 - 125		

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SMUD
6201 S Street/P.O. Box 15830
Sacramento, CA 95852-0830

Reported: 06/04/2015 12:58
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quals. Includes sections for QC Batch ID: BYE2245 and BYE2488.

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Sacramento, CA 95852-0830

Reported: 06/04/2015 12:58
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quals. Includes QC Batch ID: BYE2488 and Used client sample: N.

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quals. Includes QC Batch ID: BYE2572 and Used client sample: Y - Description: KA-31-H-1, 05/20/2015 10:23.

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Sacramento, CA 95852-0830

Reported: 06/04/2015 12:58
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Qualls. Includes QC Batch ID: BYE2572 and Used client sample: Y - Description: KA-31-H-1, 05/20/2015 10:23.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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Sacramento, CA 95852-0830

**Reported:** 06/04/2015 12:58  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

**Notes And Definitions**

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A02 The difference between duplicate readings is less than the quantitation limit.
- A40 Initial calibration linearity criteria not met.
- Q03 Matrix spike recovery(s) is(are) not within the control limits.



**BC Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 06/05/2015

Sue Gardner

SMUD

6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Client Project: [none]

BCL Project: 138810

BCL Work Order: 1512480

Invoice ID: B204957

Enclosed are the results of analyses for samples received by the laboratory on 5/21/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton

Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK USTT01



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Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1512480 Page 1 of 4



PROJECT NO. 138810		PROJECT NAME SMUD			NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS										RECEIVING LAB: BC Lab						
L.P. NO. (PO. NO.)	SAMPLERS: (Signature/Number) Craig Riddle / 9099						DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX	TPH-g	TPH-d	TPH-a	VOC	PCB	SVOCs	PAHs	Metals	Other	INSTRUCTIONS/REMARKS			
1	5/19/15	0810	KA-49-H-1.5	Soil	1	1.55 tube							X	X	X	X	X	X	X		X	X	* Hold pending analysis
2		0820	KA-49-H-3															*					
3		0840	KA-48-H-2																				
4		0920	KA-50-H-3																				
5		0927	KA-50-H-5															*					
6		0940	KA-10-H-1.5																				
7		1040	KA-10-H-4.5															*					
8		1115	KA-20-H-1.5															*					
9		1255	KA-20-H-5															*					
10		1305	KA-11-H-1.5																				
11		1320	KA-11-H-5															*					
12		1330	KA-21-H-1.5																				
13		1340	KA-21-H-5															*					
14		1405	KA-22-H-2																				
15		1409	KA-22-H-5															*					
16		1420	KA-33-H-1																				
17		1430	KA-33-H-5															*					
18	<div style="display: flex; justify-content: space-between;"> <div> <p>Relinquished by: (Signature) </p> <p>Relinquished by: (Signature) </p> <p>Relinquished by: (Signature) </p> </div> <div> <p>Date/Time 5/19/15 1530</p> <p>Date/Time 5/19/15 1520</p> <p>Date/Time 5/19/15 1500</p> </div> <div> <p>Received by: (Signature) </p> <p>Received by: (Signature) </p> <p>Received for Laboratory by: (Signature) </p> </div> <div> <p>Instructions/Remarks: Sample control #2 S.L.</p> <p>Standard TAT</p> </div> <div> <p>Send Results To: Sue Gardner sgardner@kleinfelder.com 3077 Fife Circle Sacramento CA 95827</p> </div> </div>																						
19																		CHK BY		DISTRIBUTION		SUB OUT <input type="checkbox"/>	
20																							

15-12480

Standard TAT

If you have any questions, please contact Sue Gardner @ 916-306-1701

CHK BY DISTRIBUTION SUB OUT

Report ID: 1000360782 All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation. Page 4 of 88



Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1512480 Page 2 of 4

Chain of Custody and Cooler Receipt Form for 1512480 Page 2 of 4



PROJECT NO.		PROJECT NAME		NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	RECEIVING LAB		
LP NO (PO NO.)	SAMPLERS (Signature/Number)						INSTRUCTIONS/REMARKS		
DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX						
1	1/11/15	1211	KA-49-H-1.5	SOIL	1	48	XXXXXX	X	
2		1510	KA-41-H-3						X
3		1510	KA-48-H-2				XXXXXX	X	
4		1510	KA-51-H-3				XXXXXX	X	
5		1513	KA-50-H-5						X
6		1510	KA-10-H-1.5				XXXXXX	X	
7		1510	KA-10-H-4.5						X
8		1515	KA-20-H-1.5				XXXXXX	X	
9		1515	KA-10-H-5						X
10		1515	KA-10-H-1.5				XXXXXX	X	
11		1520	KA-11-H-5						X
12		1520	KA-11-H-1.5				XXXXXX	X	
13		1520	KA-11-H-5						X
14		1515	KA-22-H-2				XXXXXX	X	
15		1517	KA-22-H-5						X
16		1510	KA-33-H-1				XXXXXX	X	
17		1512	KA-33-H-5						X
18									
19									
20									

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Instructions/Remarks:	Send Results To:
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)		

ENV-02 REV 05/08

White - Sampler

Canary - Return Copy To Shipper

Pink - Lab Copy

CHAIN OF CUSTODY

COC

15115

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BC LABORATORIES INC.

COOLER RECEIPT FORM

Rev. No. 18 09/04/14

Page 1 Of 2

Submission #: 15-12480

SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery   
BC Lab Field Service  Other (Specify) *MTA*

SHIPPING CONTAINER

Ice Chest  None  Box   
Other (Specify) \_\_\_\_\_

FREE LIQUID

YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments:

Custody Seals Ice Chest  Containers  None  Comments:  
Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO

Emissivity: \_\_\_\_\_ Container: *SOIL STEW* Thermometer ID: *228*  
Temperature: (A) *3.3* °C / (C) *35* °C

Date/Time: *5/21/15*  
Analyst Init: *MM 0830*

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE /NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL -504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEVE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
Sample Numbering Completed By: *MM* Date/Time: *5/21/15 13:50* (S:\WPDoc\WordPerfect\LAB DOCS\FORMS\SAMREC)

A = Actual / C = Corrected



BC LABORATORIES INC.

COOLER RECEIPT FORM

Rev. No. 18 09/04/14

Page 2 of 2

Submission #: 15-12480

SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery  BC Lab Field Service  Other (Specify) *Other*

SHIPPING CONTAINER

Ice Chest  None  Box  Other (Specify)

FREE LIQUID YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments:

Custody Seals Ice Chest  Containers  None  Comments: Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO

Emissivity: \_\_\_\_\_ Container: *Soil Steady* Thermometer ID: *228*

Temperature: (A) *3.3* °C / (C) *35* °C

Date/Time *5/21/15*

Analyst Init *MW 0830*

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE /NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE		A	A	A	A	A	A	A		
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
Sample Numbering Completed By: *MW* Date/Time: *5/21/15 13:00* (S:\WPDOe\WordPerfect\LAB\_DOC\FORMS\SA\MRC)

A = Actual / C = Corrected



SMUD  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

#### Laboratory Client Sample Information

<b>1512480-01</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 08:10
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-49-H-1.5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-02</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 08:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-49-H-3	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-03</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 08:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-48-H-2	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-04</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 09:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-50-H-3	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-05</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 09:27
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-50-H-5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-06</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 09:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-10-H-1.5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-07</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 10:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-10-H-4.5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil



SMUD  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

**Laboratory**      **Client Sample Information**

<b>1512480-08</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 11:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-20-H-1.5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-09</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 12:55
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-20-H-5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-10</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 13:05
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-11-H-1.5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-11</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 13:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-11-H-5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-12</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 13:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-21-H-1.5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-13</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 13:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-21-H-5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-14</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 14:05
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-22-H-2	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil





SMUD  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

**Laboratory**

**Client Sample Information**

<b>1512480-15</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 14:09
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-22-H-5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-16</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 14:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-33-H-1	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512480-17</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/19/2015 14:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-33-H-5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil



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Reported: 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512480-01	Client Sample Name:	KA-49-H-1.5, 5/19/2015 8:10:00AM, Craig Riddle/9099				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
Benzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Bromobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Bromochloromethane	ND	mg/kg	0.010	0.0018	EPA-8260B	ND	A10,Z1	1	
Bromodichloromethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1	
Bromoform	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
Bromomethane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,A40,V01, Z1	1	
n-Butylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
sec-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
tert-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
Carbon tetrachloride	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1	
Chlorobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Chloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Chloroform	ND	mg/kg	0.010	0.0013	EPA-8260B	ND	A10,Z1	1	
Chloromethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
2-Chlorotoluene	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1	
4-Chlorotoluene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Dibromochloromethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1	
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1	
1,2-Dibromoethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1	
Dibromomethane	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1	
1,2-Dichlorobenzene	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1	
1,3-Dichlorobenzene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
1,4-Dichlorobenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
Dichlorodifluoromethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
1,1-Dichloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
1,2-Dichloroethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1	
1,1-Dichloroethene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
cis-1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
trans-1,2-Dichloroethene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Total 1,2-Dichloroethene	ND	mg/kg	0.020	0.0052	EPA-8260B	ND	A10,Z1	1	
1,2-Dichloropropane	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1	
1,3-Dichloropropane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1	
2,2-Dichloropropane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	



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Reported: 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512480-01 Client Sample Name: KA-49-H-1.5, 5/19/2015 8:10:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
cis-1,3-Dichloropropene	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total 1,3-Dichloropropene	ND	mg/kg	0.020	0.0040	EPA-8260B	ND	A10,Z1	1
Ethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Hexachlorobutadiene	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1
Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
p-Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Methylene chloride	ND	mg/kg	0.020	0.0048	EPA-8260B	ND	A10,Z1	1
Methyl tbutyl ether	ND	mg/kg	0.010	0.0010	EPA-8260B	ND	A10,Z1	1
Naphthalene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
n-Propylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Styrene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Tetrachloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Toluene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.010	0.0015	EPA-8260B	ND	A10,Z1	1
Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Trichlorofluoromethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Vinyl chloride	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
Total Xylenes	ND	mg/kg	0.020	0.0068	EPA-8260B	ND	A10,Z1	1
p- & m-Xylenes	ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10,Z1	1
o-Xylene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.40	0.040	Luft-GCMS	ND	A10,Z1	1
1,2-Dichloroethane-d4 (Surrogate)	103	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512480-01      **Client Sample Name:** KA-49-H-1.5, 5/19/2015 8:10:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.5	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/26/15 12:35	ADC	MS-V2	2	BYE2145



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### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512480-01	<b>Client Sample Name:</b> KA-49-H-1.5, 5/19/2015 8:10:00AM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    20    2.4    EPA-8015B/FFP    ND    A01    1
TPH - Motor Oil	40    mg/kg    40    13    EPA-8015B/FFP    ND    A01    1
Tetracosane (Surrogate)	67.1    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    A01    1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/02/15 19:25	MWB	GC-13	2	BYE2580



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Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

BCL Sample ID: 1512480-01 Client Sample Name: KA-49-H-1.5, 5/19/2015 8:10:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	57	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.994	BYF0399





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**Reported:** 06/05/2015 9:44  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512480-01      **Client Sample Name:** KA-49-H-1.5, 5/19/2015 8:10:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	15	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.35	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	33	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	9.0	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	22	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	9.4	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	34	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	47	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	42	mg/kg	2.5	0.087	EPA-6010B	0.51		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 12:53	ARD	PE-OP3	0.990	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:25	MEV	CETAC1	0.992	BYE2303



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Project: 138810  
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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512480-03	Client Sample Name:	KA-48-H-2, 5/19/2015 8:40:00AM, Craig Riddle/9099				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
Benzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Bromobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Bromochloromethane	ND	mg/kg	0.010	0.0018	EPA-8260B	ND	A10,Z1	1	
Bromodichloromethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1	
Bromoform	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
Bromomethane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,A40,V01, Z1	1	
n-Butylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
sec-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
tert-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
Carbon tetrachloride	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1	
Chlorobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Chloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Chloroform	ND	mg/kg	0.010	0.0013	EPA-8260B	ND	A10,Z1	1	
Chloromethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
2-Chlorotoluene	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1	
4-Chlorotoluene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Dibromochloromethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1	
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1	
1,2-Dibromoethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1	
Dibromomethane	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1	
1,2-Dichlorobenzene	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1	
1,3-Dichlorobenzene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
1,4-Dichlorobenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
Dichlorodifluoromethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
1,1-Dichloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
1,2-Dichloroethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1	
1,1-Dichloroethene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
cis-1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
trans-1,2-Dichloroethene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Total 1,2-Dichloroethene	ND	mg/kg	0.020	0.0052	EPA-8260B	ND	A10,Z1	1	
1,2-Dichloropropane	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1	
1,3-Dichloropropane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1	
2,2-Dichloropropane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	



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**Reported:** 06/05/2015 9:44  
Project: 138810  
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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512480-03	Client Sample Name:	KA-48-H-2, 5/19/2015 8:40:00AM, Craig Riddle/9099					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
cis-1,3-Dichloropropene	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total 1,3-Dichloropropene	ND	mg/kg	0.020	0.0040	EPA-8260B	ND	A10,Z1	1
Ethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Hexachlorobutadiene	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1
Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
p-Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Methylene chloride	ND	mg/kg	0.020	0.0048	EPA-8260B	ND	A10,Z1	1
Methyl tbutyl ether	ND	mg/kg	0.010	0.0010	EPA-8260B	ND	A10,Z1	1
Naphthalene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
n-Propylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Styrene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Tetrachloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Toluene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.010	0.0015	EPA-8260B	ND	A10,Z1	1
Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Trichlorofluoromethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Vinyl chloride	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
Total Xylenes	ND	mg/kg	0.020	0.0068	EPA-8260B	ND	A10,Z1	1
p- & m-Xylenes	ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10,Z1	1
o-Xylene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.40	0.040	Luft-GCMS	ND	A10,Z1	1
1,2-Dichloroethane-d4 (Surrogate)	101	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512480-03      **Client Sample Name:** KA-48-H-2, 5/19/2015 8:40:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.1	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/26/15 12:58	ADC	MS-V2	2	BYE2145



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### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512480-03	<b>Client Sample Name:</b> KA-48-H-2, 5/19/2015 8:40:00AM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
TPH - Diesel (FFP)	15    mg/kg    10    1.2    EPA-8015B/FFP    ND    A52    1
TPH - Motor Oil	75    mg/kg    20    6.5    EPA-8015B/FFP    ND       1
Tetracosane (Surrogate)	65.8    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 22:17	MWB	GC-13	1	BYE2580



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Project Number: [none]  
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### EPA Method 1664

BCL Sample ID: 1512480-03 Client Sample Name: KA-48-H-2, 5/19/2015 8:40:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	140	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.992	BYF0399





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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

BCL Sample ID: 1512480-03 Client Sample Name: KA-48-H-2, 5/19/2015 8:40:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	60	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	100	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.31	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	32	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	9.8	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	26	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	34	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	33	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	43	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	61	mg/kg	2.5	0.087	EPA-6010B	0.50		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 12:55	ARD	PE-OP3	0.971	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:14	MEV	CETAC1	0.992	BYE2303



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512480-04	Client Sample Name:	KA-50-H-3, 5/19/2015 9:20:00AM, Craig Riddle/9099					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoforn	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512480-04 Client Sample Name: KA-50-H-3, 5/19/2015 9:20:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GCMS	ND		1
1,2-Dichloroethane-4d (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512480-04      **Client Sample Name:** KA-50-H-3, 5/19/2015 9:20:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.5	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/22/15 14:39	ADC	MS-V2	1	BYE2145



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### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512480-04	<b>Client Sample Name:</b> KA-50-H-3, 5/19/2015 9:20:00AM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	57.0    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 18:07	MWB	GC-13	1.007	BYE2580



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### EPA Method 1664

**BCL Sample ID:** 1512480-04      **Client Sample Name:** KA-50-H-3, 5/19/2015 9:20:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.996	BYF0399





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Project: 138810  
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Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

BCL Sample ID: 1512480-04 Client Sample Name: KA-50-H-3, 5/19/2015 9:20:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	110	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.36	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	31	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.8	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	20	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	8.5	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	29	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	47	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	41	mg/kg	2.5	0.087	EPA-6010B	0.49		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 12:56	ARD	PE-OP3	0.962	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:27	MEV	CETAC1	0.977	BYE2303



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### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512480-06	<b>Client Sample Name:</b> KA-10-H-1.5, 5/19/2015 9:40:00AM, Craig Riddle/9099							
<b>Constituent</b>	<b>Result</b>	<b>Units</b>	<b>PQL</b>	<b>MDL</b>	<b>Method</b>	<b>MB Bias</b>	<b>Lab Quas</b>	<b>Run #</b>
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
<b>PCB-1260</b>	<b>0.0037</b>	<b>mg/kg</b>	<b>0.010</b>	<b>0.0016</b>	<b>EPA-8082</b>	ND	<b>J</b>	<b>1</b>
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	60.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/28/15	05/29/15 11:03	ZZZ	GC-15	1.003	BYE2561



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Project: 138810  
Project Number: [none]  
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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512480-06		Client Sample Name: KA-10-H-1.5, 5/19/2015 9:40:00AM, Craig Riddle/9099		MB	Lab	Run #		
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512480-06 Client Sample Name: KA-10-H-1.5, 5/19/2015 9:40:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GCMS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	112	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512480-06      **Client Sample Name:** KA-10-H-1.5, 5/19/2015 9:40:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Toluene-d8 (Surrogate)	98.3	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.7	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/22/15 15:01	ADC	MS-V2	1	BYE2145



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### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512480-06	<b>Client Sample Name:</b> KA-10-H-1.5, 5/19/2015 9:40:00AM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	4.1    mg/kg    10    1.2    EPA-8015B/FFP    ND    JA52    1
TPH - Motor Oil	22    mg/kg    20    6.5    EPA-8015B/FFP    ND       1
Tetracosane (Surrogate)	69.8    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 21:31	MWB	GC-13	1.003	BYE2580





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Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

BCL Sample ID: 1512480-06 Client Sample Name: KA-10-H-1.5, 5/19/2015 9:40:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	56	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.998	BYF0399



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512480-06      **Client Sample Name:** KA-10-H-1.5, 5/19/2015 9:40:00AM, Craig Riddle/9099

Constituent	Result	Units	PAL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	29	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	95	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.32	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	27	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.7	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	14	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	9.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	0.057	mg/kg	2.5	0.050	EPA-6010B	ND	J	1
Nickel	21	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	46	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	33	mg/kg	2.5	0.087	EPA-6010B	0.50		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 12:59	ARD	PE-OP3	0.971	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:29	MEV	CETAC1	0.977	BYE2303



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**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512480-08	<b>Client Sample Name:</b> KA-20-H-1.5, 5/19/2015 11:15:00AM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    mg/kg    0.010    0.0027    EPA-8082    ND          1
PCB-1221	ND    mg/kg    0.010    0.0038    EPA-8082    ND          1
PCB-1232	ND    mg/kg    0.010    0.0024    EPA-8082    ND          1
PCB-1242	ND    mg/kg    0.010    0.0040    EPA-8082    ND          1
PCB-1248	ND    mg/kg    0.010    0.0026    EPA-8082    ND          1
PCB-1254	ND    mg/kg    0.010    0.0032    EPA-8082    ND          1
PCB-1260	ND    mg/kg    0.010    0.0016    EPA-8082    ND          1
<b>Total PCB's (Summation)</b>	ND    mg/kg    0.010    0.0050    EPA-8082    ND          1
<b>Decachlorobiphenyl (Surrogate)</b>	61.7    %    40 - 120 (LCL - UCL)    EPA-8082             1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-8082	05/28/15	05/29/15	09:08	ZZZ	GC-15	0.993	BYE2561	



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512480-08	Client Sample Name:	KA-20-H-1.5, 5/19/2015 11:15:00AM, Craig Riddle/9099					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512480-08		Client Sample Name: KA-20-H-1.5, 5/19/2015 11:15:00AM, Craig Riddle/9099		MB	Lab	Run #		
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1



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**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512480-08      **Client Sample Name:** KA-20-H-1.5, 5/19/2015 11:15:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
4-Bromofluorobenzene (Surrogate)	97.9	%	74 - 121 (LCL - UCL)	EPA-8260B		Bias	Quals	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/22/15 15:23	ADC	MS-V2	1	BYE2145





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**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512480-08	<b>Client Sample Name:</b> KA-20-H-1.5, 5/19/2015 11:15:00AM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	63.3    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 18:30	MWB	GC-13	1	BYE2580



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512480-08      **Client Sample Name:** KA-20-H-1.5, 5/19/2015 11:15:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.996	BYF0399



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**Reported:** 06/05/2015 9:44  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512480-08      **Client Sample Name:** KA-20-H-1.5, 5/19/2015 11:15:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	4.9	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	94	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.33	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	35	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	9.1	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	21	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	6.4	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	42	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	50	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	39	mg/kg	2.5	0.087	EPA-6010B	0.49		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 13:00	ARD	PE-OP3	0.962	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:36	MEV	CETAC1	0.962	BYE2303



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**Reported:** 06/05/2015 9:44  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512480-10	<b>Client Sample Name:</b> KA-1-H-1.5, 5/19/2015 1:05:00PM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
PCB-1016	ND    mg/kg    0.010    0.0027    EPA-8082    ND          1
PCB-1221	ND    mg/kg    0.010    0.0038    EPA-8082    ND          1
PCB-1232	ND    mg/kg    0.010    0.0024    EPA-8082    ND          1
PCB-1242	ND    mg/kg    0.010    0.0040    EPA-8082    ND          1
PCB-1248	ND    mg/kg    0.010    0.0026    EPA-8082    ND          1
PCB-1254	ND    mg/kg    0.010    0.0032    EPA-8082    ND          1
<b>PCB-1260</b>	<b>0.0068</b> <b>mg/kg</b> <b>0.010</b> <b>0.0016</b> <b>EPA-8082</b> <b>ND</b> <b>J</b> <b>1</b>
<b>Total PCB's (Summation)</b>	<b>0.0068</b> <b>mg/kg</b> <b>0.010</b> <b>0.0050</b> <b>EPA-8082</b> <b>ND</b> <b>J</b> <b>1</b>
Decachlorobiphenyl (Surrogate)	50.0    %    40 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/28/15	05/29/15 09:18	ZZZ	GC-15	1.017	BYE2561



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**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512480-10	Client Sample Name:	KA-11-H-1.5, 5/19/2015 1:05:00PM, Craig Riddle/9099				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1	
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1	
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1	
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1	
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1	
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1	
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1	
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1	
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1	
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1	
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1	
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1	
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1	
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1	
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1	
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1	
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1	
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1	
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1	
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1	
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1	
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1	
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1	
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1	
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1	
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1	
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1	
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1	
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1	
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1	
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1	
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1	
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1	



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512480-10		Client Sample Name: KA-11-H-1.5, 5/19/2015		1:05:00PM, Craig Riddle/9099				
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GCMS	ND		1
1,2-Dichloroethane-4d (Surrogate)	110	%	70 - 121 (LCL - UCL)		EPA-8260B			1





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**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512480-10      **Client Sample Name:** KA-11-H-1.5, 5/19/2015 1:05:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.4	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/22/15 15:46	ADC	MS-V2	1	BYE2145



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**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512480-10	<b>Client Sample Name:</b> KA-1-H-1.5, 5/19/2015 1:05:00PM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	15    mg/kg    10    1.2    EPA-8015B/FFP    ND          1
TPH - Motor Oil	23    mg/kg    20    6.5    EPA-8015B/FFP    ND          1
Tetracosane (Surrogate)	80.5    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 21:09	MWB	GC-13	1.007	BYE2580



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### EPA Method 1664

**BCL Sample ID:** 1512480-10      **Client Sample Name:** KA-1-H-1.5, 5/19/2015 1:05:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
						Bias	Quals	
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time	Time				Batch ID	Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15	12:15	MAM	MAN-SV	0.994	BYF0399	



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512480-10      **Client Sample Name:** KA-11-H-1.5, 5/19/2015 1:05:00PM, Craig Riddle/9099

Constituent	Result	Units	PAL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.9	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	88	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.30	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	31	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	9.6	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	19	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	7.3	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	31	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	46	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	46	mg/kg	2.5	0.087	EPA-6010B	0.49		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 13:02	ARD	PE-OP3	0.943	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:38	MEV	CETAC1	0.992	BYE2303



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**Reported:** 06/05/2015 9:44  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512480-12	<b>Client Sample Name:</b> KA-21-H-1.5, 5/19/2015 1:30:00PM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    mg/kg    0.010    0.0027    EPA-8082    ND          1
PCB-1221	ND    mg/kg    0.010    0.0038    EPA-8082    ND          1
PCB-1232	ND    mg/kg    0.010    0.0024    EPA-8082    ND          1
PCB-1242	ND    mg/kg    0.010    0.0040    EPA-8082    ND          1
PCB-1248	ND    mg/kg    0.010    0.0026    EPA-8082    ND          1
PCB-1254	ND    mg/kg    0.010    0.0032    EPA-8082    ND          1
PCB-1260	ND    mg/kg    0.010    0.0016    EPA-8082    ND          1
<b>Total PCB's (Summation)</b>	ND    mg/kg    0.010    0.0050    EPA-8082    ND          1
Decachlorobiphenyl (Surrogate)	48.3    %    40 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/28/15	05/29/15 09:29	ZZZ	GC-15	0.997	BYE2561



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**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512480-12	Client Sample Name:	KA-21-H-1.5, 5/19/2015 1:30:00PM, Craig Riddle/9099			MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals	
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1





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**Reported:** 06/05/2015 9:44  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512480-12		Client Sample Name: KA-21-H-1.5, 5/19/2015		1:30:00PM, Craig Riddle/9099				
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	116	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	81 - 117 (LCL - UCL)		EPA-8260B			1



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512480-12      **Client Sample Name:** KA-21-H-1.5, 5/19/2015 1:30:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
4-Bromofluorobenzene (Surrogate)	100	%	74 - 121 (LCL - UCL)	EPA-8260B		Bias	Quals	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/22/15 16:08	ADC	MS-V2	1	BYE2145



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### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512480-12	<b>Client Sample Name:</b> KA-21-H-1.5, 5/19/2015 1:30:00PM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	69.6    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/01/15 19:38	MWB	GC-13	1.003	BYE2580



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Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512480-12      **Client Sample Name:** KA-21-H-1.5, 5/19/2015 1:30:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.998	BYF0399



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512480-12      **Client Sample Name:** KA-21-H-1.5, 5/19/2015 1:30:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	3.6	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	82	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.28	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	31	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.4	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	19	mg/kg	1.0	0.050	EPA-6010B	0.10		1
Lead	5.4	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	37	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	47	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	35	mg/kg	2.5	0.087	EPA-6010B	0.48		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 13:04	ARD	PE-OP3	0.935	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:40	MEV	CETAC1	1.008	BYE2303



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**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512480-14	<b>Client Sample Name:</b> KA-22-H-2, 5/19/2015 2:05:00PM, Craig Riddle/9099							
<b>Constituent</b>	<b>Result</b>	<b>Units</b>	<b>PQL</b>	<b>MDL</b>	<b>Method</b>	<b>MB Bias</b>	<b>Lab Quals</b>	<b>Run #</b>
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
<b>Total PCB's (Summation)</b>	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
<b>Decachlorobiphenyl (Surrogate)</b>	55.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run			QC	
			Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8082	05/28/15	05/29/15 11:25	ZZZ	GC-15	0.997	BYE2561



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512480-14	Client Sample Name:	KA-22-H-2, 5/19/2015 2:05:00PM, Craig Riddle/9099				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
Benzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Bromobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Bromochloromethane	ND	mg/kg	0.010	0.0018	EPA-8260B	ND	A10,Z1	1	
Bromodichloromethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1	
Bromoform	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
Bromomethane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,A40,V01, Z1	1	
n-Butylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
sec-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
tert-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
Carbon tetrachloride	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1	
Chlorobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Chloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Chloroform	ND	mg/kg	0.010	0.0013	EPA-8260B	ND	A10,Z1	1	
Chloromethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
2-Chlorotoluene	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1	
4-Chlorotoluene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Dibromochloromethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1	
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1	
1,2-Dibromoethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1	
Dibromomethane	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1	
1,2-Dichlorobenzene	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1	
1,3-Dichlorobenzene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
1,4-Dichlorobenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
Dichlorodifluoromethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
1,1-Dichloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
1,2-Dichloroethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1	
1,1-Dichloroethene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
cis-1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
trans-1,2-Dichloroethene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Total 1,2-Dichloroethene	ND	mg/kg	0.020	0.0052	EPA-8260B	ND	A10,Z1	1	
1,2-Dichloropropane	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1	
1,3-Dichloropropane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1	
2,2-Dichloropropane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	





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Project: 138810  
Project Number: [none]  
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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512480-14	Client Sample Name:	KA-22-H-2, 5/19/2015 2:05:00PM, Craig Riddle/9099					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
cis-1,3-Dichloropropene	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total 1,3-Dichloropropene	ND	mg/kg	0.020	0.0040	EPA-8260B	ND	A10,Z1	1
Ethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Hexachlorobutadiene	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1
Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
p-Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Methylene chloride	ND	mg/kg	0.020	0.0048	EPA-8260B	ND	A10,Z1	1
Methyl tbutyl ether	ND	mg/kg	0.010	0.0010	EPA-8260B	ND	A10,Z1	1
Naphthalene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
n-Propylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Styrene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Tetrachloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Toluene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.010	0.0015	EPA-8260B	ND	A10,Z1	1
Trichloroethene	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Trichlorofluoromethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Vinyl chloride	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
Total Xylenes	ND	mg/kg	0.020	0.0068	EPA-8260B	ND	A10,Z1	1
p- & m-Xylenes	ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10,Z1	1
o-Xylene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
1,2-Dichloroethane-d4 (Surrogate)	89.1	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260B			1



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**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512480-14      **Client Sample Name:** KA-22-H-2, 5/19/2015 2:05:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
4-Bromofluorobenzene (Surrogate)	95.3	%	74 - 121 (LCL - UCL)	EPA-8260B		Bias	Quals	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/27/15 14:33	ADC	MS-V2	2	BYE2145



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**Reported:** 06/05/2015 9:44  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512480-14	<b>Client Sample Name:</b> KA-22-H-2, 5/19/2015 2:05:00PM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	70.9    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-8015B/FFP	05/28/15	06/01/15	20:01	MWB	GC-13	0.997	BYE2580	



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512480-14      **Client Sample Name:** KA-22-H-2, 5/19/2015 2:05:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
						Bias	Quals	
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time	Time				Batch ID	Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15	12:15	MAM	MAN-SV	0.992	BYF0399	



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**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

BCL Sample ID: 1512480-14 Client Sample Name: KA-22-H-2, 5/19/2015 2:05:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.3	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	100	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.35	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	41	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	10	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	22	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	7.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	39	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	49	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	44	mg/kg	2.5	0.087	EPA-6010B	0.50		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 13:05	ARD	PE-OP3	0.971	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:42	MEV	CETAC1	0.992	BYE2303



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**Reported:** 06/05/2015 9:44  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512480-16	<b>Client Sample Name:</b> KA-33-H-1, 5/19/2015 2:20:00PM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    mg/kg    0.010    0.0027    EPA-8082    ND          1
PCB-1221	ND    mg/kg    0.010    0.0038    EPA-8082    ND          1
PCB-1232	ND    mg/kg    0.010    0.0024    EPA-8082    ND          1
PCB-1242	ND    mg/kg    0.010    0.0040    EPA-8082    ND          1
PCB-1248	ND    mg/kg    0.010    0.0026    EPA-8082    ND          1
PCB-1254	ND    mg/kg    0.010    0.0032    EPA-8082    ND          1
PCB-1260	ND    mg/kg    0.010    0.0016    EPA-8082    ND          1
Total PCB's (Summation)	ND    mg/kg    0.010    0.0050    EPA-8082    ND          1
Decachlorobiphenyl (Surrogate)	51.7    %    40 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/28/15	05/29/15 09:50	ZZZ	GC-15	1.017	BYE2561



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**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512480-16	Client Sample Name:	KA-33-H-1, 5/19/2015 2:20:00PM, Craig Riddle/9099				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
Benzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Bromobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Bromochloromethane	ND	mg/kg	0.010	0.0018	EPA-8260B	ND	A10,Z1	1	
Bromodichloromethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1	
Bromoform	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
Bromomethane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,A40,V01, Z1	1	
n-Butylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
sec-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
tert-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
Carbon tetrachloride	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1	
Chlorobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Chloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Chloroform	ND	mg/kg	0.010	0.0013	EPA-8260B	ND	A10,Z1	1	
Chloromethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
2-Chlorotoluene	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1	
4-Chlorotoluene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Dibromochloromethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1	
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1	
1,2-Dibromoethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1	
Dibromomethane	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1	
1,2-Dichlorobenzene	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1	
1,3-Dichlorobenzene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
1,4-Dichlorobenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
Dichlorodifluoromethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
1,1-Dichloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
1,2-Dichloroethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1	
1,1-Dichloroethene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
cis-1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
trans-1,2-Dichloroethene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Total 1,2-Dichloroethene	ND	mg/kg	0.020	0.0052	EPA-8260B	ND	A10,Z1	1	
1,2-Dichloropropane	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1	
1,3-Dichloropropane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1	
2,2-Dichloropropane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	





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Reported: 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512480-16	Client Sample Name:	KA-33-H-1, 5/19/2015 2:20:00PM, Craig Riddle/9099					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
cis-1,3-Dichloropropene	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total 1,3-Dichloropropene	ND	mg/kg	0.020	0.0040	EPA-8260B	ND	A10,Z1	1
Ethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Hexachlorobutadiene	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1
Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
p-Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Methylene chloride	ND	mg/kg	0.020	0.0048	EPA-8260B	ND	A10,Z1	1
Methyl tbutyl ether	ND	mg/kg	0.010	0.0010	EPA-8260B	ND	A10,Z1	1
Naphthalene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
n-Propylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Styrene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Tetrachloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Toluene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.010	0.0015	EPA-8260B	ND	A10,Z1	1
Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Trichlorofluoromethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Vinyl chloride	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
Total Xylenes	ND	mg/kg	0.020	0.0068	EPA-8260B	ND	A10,Z1	1
p- & m-Xylenes	ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10,Z1	1
o-Xylene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.40	0.040	Luft-GCMS	ND	A10,Z1	1
1,2-Dichloroethane-d4 (Surrogate)	94.2	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512480-16      **Client Sample Name:** KA-33-H-1, 5/19/2015 2:20:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
Toluene-d8 (Surrogate)	98.3	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.5	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/27/15 14:56	ADC	MS-V2	2	BYE2145



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**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512480-16	<b>Client Sample Name:</b> KA-33-H-1, 5/19/2015 2:20:00PM, Craig Riddle/9099							
<b>Constituent</b>	<b>Result</b>	<b>Units</b>	<b>PQL</b>	<b>MDL</b>	<b>Method</b>	<b>MB Bias</b>	<b>Lab Quats</b>	<b>Run #</b>
TPH - Diesel (FFP)	4.9	mg/kg	10	1.2	EPA-8015B/FFP	ND	J,A52	1
TPH - Motor Oil	59	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	77.3	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	06/02/15 00:32	MWB	GC-13	0.997	BYE2580



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Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512480-16      **Client Sample Name:** KA-33-H-1, 5/19/2015 2:20:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.994	BYF0412



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Project: 138810  
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Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

BCL Sample ID: 1512480-16 Client Sample Name: KA-33-H-1, 5/19/2015 2:20:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	10	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	120	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.37	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	0.11	mg/kg	0.50	0.052	EPA-6010B	ND	J	1
Chromium	38	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	9.9	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	26	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	40	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	0.049	mg/kg	0.16	0.036	EPA-7471A	ND	J	2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	37	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	0.067	mg/kg	0.50	0.067	EPA-6010B	ND	J	1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	48	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	84	mg/kg	2.5	0.087	EPA-6010B	0.50		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 13:07	ARD	PE-OP3	0.971	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:44	MEV	CETAC1	1.008	BYE2303



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Project: 138810  
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Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2561</b>						
PCB-1016	BYE2561-BLK1	ND	mg/kg	0.010	0.0027	
PCB-1221	BYE2561-BLK1	ND	mg/kg	0.010	0.0038	
PCB-1232	BYE2561-BLK1	ND	mg/kg	0.010	0.0024	
PCB-1242	BYE2561-BLK1	ND	mg/kg	0.010	0.0040	
PCB-1248	BYE2561-BLK1	ND	mg/kg	0.010	0.0026	
PCB-1254	BYE2561-BLK1	ND	mg/kg	0.010	0.0032	
PCB-1260	BYE2561-BLK1	ND	mg/kg	0.010	0.0016	
Total PCBs (Summation)	BYE2561-BLK1	ND	mg/kg	0.010	0.0050	
Decachlorobiphenyl (Surrogate)	BYE2561-BLK1	88.3	%	40 - 120 (LCL - UCL)		



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Project: 138810  
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### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	Percent Recovery	
<b>QC Batch ID: BYE2561</b>									
PCB-1016	BYE2561-BS1	LCS	0.091892	0.084459	mg/kg	109		60 - 120	
PCB-1260	BYE2561-BS1	LCS	0.087162	0.084459	mg/kg	103		60 - 120	
Decachlorobiphenyl (Surrogate)	BYE2561-BS1	LCS	0.019595	0.020270	mg/kg	96.7		40 - 120	





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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits	
								Percent Recovery	RPD
<b>QC Batch ID: BYE2561</b>									
Used client sample: N									
PCB-1016	MS	1511019-69	ND	0.075828	0.082781	mg/kg	8.3	91.6	50 - 130
	MSD	1511019-69	ND	0.082373	0.084746	mg/kg	8.3	97.2	30 - 130
PCB-1260	MS	1511019-69	ND	0.069205	0.082781	mg/kg	10.2	83.6	50 - 120
	MSD	1511019-69	ND	0.076610	0.084746	mg/kg	10.2	90.4	30 - 120
Decachlorobiphenyl (Surrogate)	MS	1511019-69	ND	0.015563	0.019868	mg/kg	8.5	78.3	40 - 120
	MSD	1511019-69	ND	0.016949	0.020339	mg/kg	8.5	83.3	40 - 120



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Project: 138810  
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## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2145</b>						
Benzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYE2145-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYE2145-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYE2145-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYE2145-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	



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**Reported:** 06/05/2015 9:44  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2145</b>						
cis-1,3-Dichloropropene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYE2145-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYE2145-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYE2145-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYE2145-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYE2145-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYE2145-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	
Total Purgeable Petroleum Hydrocarbons	BYE2145-BLK1	ND	mg/kg	0.20	0.020	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYE2145-BLK1</b>	<b>94.6</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYE2145-BLK1</b>	<b>100</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYE2145-BLK1</b>	<b>97.3</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		



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### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYE2145</b>										
Benzene	BYE2145-BS1	LCS	0.12035	0.12500	mg/kg	96.3		70	130	
Bromodichloromethane	BYE2145-BS1	LCS	0.12375	0.12500	mg/kg	99.0		70	130	
Chlorobenzene	BYE2145-BS1	LCS	0.12961	0.12500	mg/kg	104		70	130	
Chloroethane	BYE2145-BS1	LCS	0.11262	0.12500	mg/kg	90.1		70	130	
1,4-Dichlorobenzene	BYE2145-BS1	LCS	0.12632	0.12500	mg/kg	101		70	130	
1,1-Dichloroethane	BYE2145-BS1	LCS	0.11284	0.12500	mg/kg	90.3		70	130	
1,1-Dichloroethene	BYE2145-BS1	LCS	0.11982	0.12500	mg/kg	95.9		70	130	
Toluene	BYE2145-BS1	LCS	0.12425	0.12500	mg/kg	99.4		70	130	
Trichloroethene	BYE2145-BS1	LCS	0.12586	0.12500	mg/kg	101		70	130	
1,2-Dichloroethane-d4 (Surrogate)	BYE2145-BS1	LCS	0.045820	0.050000	mg/kg	91.6		70	121	
Toluene-d8 (Surrogate)	BYE2145-BS1	LCS	0.049700	0.050000	mg/kg	99.4		81	117	
4-Bromofluorobenzene (Surrogate)	BYE2145-BS1	LCS	0.048600	0.050000	mg/kg	97.2		74	121	



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**Project Manager:** Sue Gardner

## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYE2145</b>										
Used client sample: N										
Benzene	MS	1511019-42	ND	0.10752	0.12500	mg/kg		86.0		70 - 130
	MSD	1511019-42	ND	0.10843	0.12500	mg/kg		86.7		20 70 - 130
Bromodichloromethane	MS	1511019-42	ND	0.11472	0.12500	mg/kg		91.8		70 - 130
	MSD	1511019-42	ND	0.11603	0.12500	mg/kg		92.8		20 70 - 130
Chlorobenzene	MS	1511019-42	ND	0.11233	0.12500	mg/kg		89.9		70 - 130
	MSD	1511019-42	ND	0.10989	0.12500	mg/kg		87.9		20 70 - 130
Chloroethane	MS	1511019-42	ND	0.10681	0.12500	mg/kg		85.4		70 - 130
	MSD	1511019-42	ND	0.10539	0.12500	mg/kg		84.3		20 70 - 130
1,4-Dichlorobenzene	MS	1511019-42	ND	0.11092	0.12500	mg/kg		88.7		70 - 130
	MSD	1511019-42	ND	0.11041	0.12500	mg/kg		88.3		20 70 - 130
1,1-Dichloroethane	MS	1511019-42	ND	0.10459	0.12500	mg/kg		83.7		70 - 130
	MSD	1511019-42	ND	0.10344	0.12500	mg/kg		82.8		20 70 - 130
1,1-Dichloroethene	MS	1511019-42	ND	0.10833	0.12500	mg/kg		86.7		70 - 130
	MSD	1511019-42	ND	0.10774	0.12500	mg/kg		86.2		20 70 - 130
Toluene	MS	1511019-42	ND	0.11283	0.12500	mg/kg		90.3		70 - 130
	MSD	1511019-42	ND	0.11241	0.12500	mg/kg		89.9		20 70 - 130
Trichloroethene	MS	1511019-42	ND	0.11080	0.12500	mg/kg		88.6		70 - 130
	MSD	1511019-42	ND	0.11113	0.12500	mg/kg		88.9		20 70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-42	ND	0.047170	0.050000	mg/kg		94.3		70 - 121
	MSD	1511019-42	ND	0.046930	0.050000	mg/kg		93.9		70 - 121
Toluene-d8 (Surrogate)	MS	1511019-42	ND	0.049860	0.050000	mg/kg		99.7		81 - 117
	MSD	1511019-42	ND	0.049460	0.050000	mg/kg		98.9		81 - 117
4-Bromofluorobenzene (Surrogate)	MS	1511019-42	ND	0.049290	0.050000	mg/kg		98.6		74 - 121
	MSD	1511019-42	ND	0.049650	0.050000	mg/kg		99.3		74 - 121



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### Total Petroleum Hydrocarbons

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2580</b>						
TPH - Diesel (FFP)	BYE2580-BLK1	ND	mg/kg	10	1.2	
TPH - Motor Oil	BYE2580-BLK1	ND	mg/kg	20	6.5	
<b>Tetracosane (Surrogate)</b>	<b>BYE2580-BLK1</b>	<b>78.5</b>	<b>%</b>	<b>20 - 145 (LCL - UCL)</b>		



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### Total Petroleum Hydrocarbons

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	Percent Recovery	
<b>QC Batch ID: BYE2580</b>									
TPH - Diesel (FFP)	BYE2580-BS1	LCS	81.260	84.175	mg/kg	96.5	64	124	
Tetracosane (Surrogate)	BYE2580-BS1	LCS	2.8448	3.3670	mg/kg	84.5	20	145	





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### Total Petroleum Hydrocarbons

#### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYE2580</b>										
Used client sample: N										
TPH - Diesel (FFP)	MS	1511019-43	ND	85.736	84.459	mg/kg	17.4	102		52 - 131
	MSD	1511019-43	ND	72.030	84.459	mg/kg	17.4	85.3	30	52 - 131
Tetracosane (Surrogate)	MS	1511019-43	ND	3.0868	3.3784	mg/kg	19.2	91.4		20 - 145
	MSD	1511019-43	ND	2.5473	3.3784	mg/kg	19.2	75.4		20 - 145



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**EPA Method 1664**

**Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0399</b>						
Oil and Grease	BYF0399-BLK1	ND	mg/kg	50	25	
<b>QC Batch ID: BYF0412</b>						
Oil and Grease	BYF0412-BLK1	ND	mg/kg	50	25	



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**EPA Method 1664**

**Quality Control Report - Laboratory Control Sample**

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	Percent Recovery	
<b>QC Batch ID: BYF0399</b>									
Oil and Grease	BYF0399-BS1	LCS	688.25	782.87	mg/kg	87.9		59 - 117	
<b>QC Batch ID: BYF0412</b>									
Oil and Grease	BYF0412-BS1	LCS	697.03	778.22	mg/kg	89.6		59 - 117	



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### EPA Method 1664

### Quality Control Report - Precision & Accuracy

Constituent	Source	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYF0399</b>										
Used client sample: N										
Oil and Grease	DUP	1511019-40	ND	ND		mg/kg			30	
	MS	1511019-40	ND	737.57	781.31	mg/kg	94.4	94.4	56 - 111	
	MSD	1511019-40	ND	682.90	781.31	mg/kg	7.7	87.4	30	56 - 111
<b>QC Batch ID: BYF0412</b>										
Used client sample: N										
Oil and Grease	DUP	1511019-41	ND	ND		mg/kg			30	
	MS	1511019-41	ND	727.63	781.31	mg/kg	93.1	93.1	56 - 111	
	MSD	1511019-41	ND	678.93	781.31	mg/kg	6.9	86.9	30	56 - 111



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### Total Concentrations (TTLC)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2303</b>						
Mercury	BYE2303-BLK1	ND	mg/kg	0.16	0.036	
<b>QC Batch ID: BYE2572</b>						
Antimony	BYE2572-BLK1	ND	mg/kg	5.0	0.33	
Arsenic	BYE2572-BLK1	ND	mg/kg	1.0	0.40	
Barium	BYE2572-BLK1	ND	mg/kg	0.50	0.18	
Beryllium	BYE2572-BLK1	ND	mg/kg	0.50	0.047	
Cadmium	BYE2572-BLK1	ND	mg/kg	0.50	0.052	
Chromium	BYE2572-BLK1	ND	mg/kg	0.50	0.050	
Cobalt	BYE2572-BLK1	ND	mg/kg	2.5	0.098	
<b>Copper</b>	<b>BYE2572-BLK1</b>	<b>0.11197</b>	<b>mg/kg</b>	<b>1.0</b>	<b>0.050</b>	<b>J</b>
Lead	BYE2572-BLK1	ND	mg/kg	2.5	0.28	
Molybdenum	BYE2572-BLK1	ND	mg/kg	2.5	0.050	
Nickel	BYE2572-BLK1	ND	mg/kg	0.50	0.15	
Selenium	BYE2572-BLK1	ND	mg/kg	1.0	0.98	
Silver	BYE2572-BLK1	ND	mg/kg	0.50	0.067	
Thallium	BYE2572-BLK1	ND	mg/kg	5.0	0.64	
Vanadium	BYE2572-BLK1	ND	mg/kg	0.50	0.11	
<b>Zinc</b>	<b>BYE2572-BLK1</b>	<b>0.51422</b>	<b>mg/kg</b>	<b>2.5</b>	<b>0.087</b>	<b>J</b>



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### Total Concentrations (TTLC)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quats
							RPD	RPD	

**QC Batch ID: BYE2303**

Mercury	BYE2303-BS1	LCS	0.84000	0.80000	mg/kg	105	80 - 120	
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**QC Batch ID: BYE2572**

Antimony	BYE2572-BS1	LCS	101.60	100.00	mg/kg	102	75 - 125	
Arsenic	BYE2572-BS1	LCS	9.8999	10.000	mg/kg	99.0	75 - 125	
Barium	BYE2572-BS1	LCS	99.912	100.00	mg/kg	99.9	75 - 125	
Beryllium	BYE2572-BS1	LCS	9.4858	10.000	mg/kg	94.9	75 - 125	
Cadmium	BYE2572-BS1	LCS	10.206	10.000	mg/kg	102	75 - 125	
Chromium	BYE2572-BS1	LCS	104.29	100.00	mg/kg	104	75 - 125	
Cobalt	BYE2572-BS1	LCS	102.65	100.00	mg/kg	103	75 - 125	
Copper	BYE2572-BS1	LCS	99.049	100.00	mg/kg	99.0	75 - 125	
Lead	BYE2572-BS1	LCS	102.87	100.00	mg/kg	103	75 - 125	
Molybdenum	BYE2572-BS1	LCS	102.55	100.00	mg/kg	103	75 - 125	
Nickel	BYE2572-BS1	LCS	108.21	100.00	mg/kg	108	75 - 125	
Selenium	BYE2572-BS1	LCS	10.216	10.000	mg/kg	102	75 - 125	
Silver	BYE2572-BS1	LCS	9.6712	10.000	mg/kg	96.7	75 - 125	
Thallium	BYE2572-BS1	LCS	115.72	100.00	mg/kg	116	75 - 125	
Vanadium	BYE2572-BS1	LCS	108.13	100.00	mg/kg	108	75 - 125	
Zinc	BYE2572-BS1	LCS	103.92	100.00	mg/kg	104	75 - 125	



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### Total Concentrations (TTLC)

### Quality Control Report - Precision & Accuracy

Constituent	Source Sample ID	Source Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		
							RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BYE2303</b>									
Used client sample: Y - Description: KA-48-H-2, 05/19/2015 08:40									
Mercury	DUP	1512480-03	ND	ND	mg/kg			20	
	MS	1512480-03	ND	0.86873	mg/kg	109		80 - 120	
	MSD	1512480-03	ND	0.85651	mg/kg	108		80 - 120	
<b>QC Batch ID: BYE2572</b>									
Used client sample: Y - Description: KA-31-H-1, 05/20/2015 10:23									
Antimony	DUP	1512481-11	ND	ND	mg/kg			20	
	MS	1512481-11	ND	20.656	mg/kg	20.7		16 - 119	
	MSD	1512481-11	ND	19.420	mg/kg	19.4		16 - 119	
Arsenic	DUP	1512481-11	6.9264	6.8650	mg/kg	0.9		20	
	MS	1512481-11	6.9264	14.827	mg/kg	79.0		75 - 125	
	MSD	1512481-11	6.9264	14.675	mg/kg	77.5		75 - 125	
Barium	DUP	1512481-11	110.48	110.88	mg/kg	0.4		20	
	MS	1512481-11	110.48	186.15	mg/kg	75.7		75 - 125	
	MSD	1512481-11	110.48	188.60	mg/kg	78.1		75 - 125	
Beryllium	DUP	1512481-11	0.34128	0.33945	mg/kg	0.5		20	J
	MS	1512481-11	0.34128	8.9188	mg/kg	85.8		75 - 125	
	MSD	1512481-11	0.34128	8.5018	mg/kg	81.6		75 - 125	
Cadmium	DUP	1512481-11	0.061461	0.056120	mg/kg	9.1		20	J
	MS	1512481-11	0.061461	8.9640	mg/kg	89.0		75 - 125	
	MSD	1512481-11	0.061461	8.7307	mg/kg	86.7		75 - 125	
Chromium	DUP	1512481-11	36.985	36.180	mg/kg	2.2		20	
	MS	1512481-11	36.985	125.45	mg/kg	88.5		75 - 125	
	MSD	1512481-11	36.985	119.70	mg/kg	82.7		75 - 125	
Cobalt	DUP	1512481-11	10.149	10.111	mg/kg	0.4		20	
	MS	1512481-11	10.149	91.368	mg/kg	81.2		75 - 125	
	MSD	1512481-11	10.149	89.878	mg/kg	79.7		75 - 125	
Copper	DUP	1512481-11	23.762	23.307	mg/kg	1.9		20	
	MS	1512481-11	23.762	112.23	mg/kg	88.5		75 - 125	
	MSD	1512481-11	23.762	110.11	mg/kg	86.4		75 - 125	
Lead	DUP	1512481-11	26.731	26.329	mg/kg	1.5		20	
	MS	1512481-11	26.731	112.99	mg/kg	86.3		75 - 125	
	MSD	1512481-11	26.731	112.47	mg/kg	85.7		75 - 125	
Molybdenum	DUP	1512481-11	0.11807	0.13604	mg/kg	14.1		20	J
	MS	1512481-11	0.11807	79.881	mg/kg	79.8		75 - 125	
	MSD	1512481-11	0.11807	78.844	mg/kg	78.7		75 - 125	
Nickel	DUP	1512481-11	35.225	34.354	mg/kg	2.5		20	
	MS	1512481-11	35.225	121.95	mg/kg	86.7		75 - 125	
	MSD	1512481-11	35.225	119.16	mg/kg	83.9		75 - 125	





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### Total Concentrations (TTLC)

### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYE2572</b>										
Used client sample: Y - Description: KA-31-H-1, 05/20/2015 10:23										
Selenium	DUP	1512481-11	ND	ND		mg/kg			20	
	MS	1512481-11	ND	7.8938	10.000	mg/kg		78.9	75 - 125	
	MSD	1512481-11	ND	8.0293	10.000	mg/kg	1.7	80.3	20	75 - 125
Silver	DUP	1512481-11	ND	ND		mg/kg			20	
	MS	1512481-11	ND	8.7162	10.000	mg/kg		87.2	75 - 125	
	MSD	1512481-11	ND	8.3948	10.000	mg/kg	3.8	83.9	20	75 - 125
Thallium	DUP	1512481-11	ND	ND		mg/kg			20	
	MS	1512481-11	ND	91.224	100.00	mg/kg		91.2	75 - 125	
	MSD	1512481-11	ND	88.966	100.00	mg/kg	2.5	89.0	20	75 - 125
Vanadium	DUP	1512481-11	49.211	48.320	100.00	mg/kg	1.8		20	
	MS	1512481-11	49.211	140.59	100.00	mg/kg		91.4	75 - 125	
	MSD	1512481-11	49.211	136.83	100.00	mg/kg	2.7	87.6	20	75 - 125
Zinc	DUP	1512481-11	58.954	55.286	100.00	mg/kg	6.4		20	
	MS	1512481-11	58.954	134.36	100.00	mg/kg		75.4	75 - 125	
	MSD	1512481-11	58.954	134.65	100.00	mg/kg	0.2	75.7	20	75 - 125



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**Reported:** 06/05/2015 9:44  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

**Notes And Definitions**

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A01 Detection and quantitation limits are raised due to sample dilution.
- A10 Detection and quantitation limits were raised due to matrix interference.
- A40 Initial calibration linearity criteria not met.
- A52 Chromatogram not typical of diesel.
- V01 The Initial Calibration Verification (ICV) recovery is not within established control limits.
- Z1 The sample was analyzed at a dilution due to matrix interference of the internal standards.



**BC Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 06/05/2015

Sue Gardner

SMUD

6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Client Project: [none]

BCL Project: 138810

BCL Work Order: 1512481

Invoice ID: B204958

Enclosed are the results of analyses for samples received by the laboratory on 5/21/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton

Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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Environmental Testing Laboratory Since 1949



Chain of Custody and Cooler Receipt Form for 1512481 Page 1 of 4



PROJECT NO. 138810		PROJECT NAME SMUD		NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	RECEIVING LAB: BC Lab
L.P. NO. (PO. NO.)	SAMPLERS: (Signature/Number) Mike Van Den Enden / 11083						
DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX				

NO.	DATE	SAMPLE I.D. TIME	SAMPLE I.D.	MATRIX	NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	REMARKS
1	5/20/15	0815	KA-34-H-2	SOIL	1	SS-Flu	TPH-g TPH-d TPH-d VOCs including EPA 601, 606 PBCs including EPA 601, 606 SILICES - EPA 802 CHM-17 including EPA 601, 606 Copper - EPA 601, 606 Organochlorine Pesticides - EPA 802 HPL*	* Hold pending analysis
2		0825	KA-34-H-5					*
3		0845	KA-28-H-1					*
4		0850	KA-28-H-5					*
5		0908	KA-29-H-1					*
6		0918	KA-29-H-5					*
7		0940	KA-30-H-1					*
8		0945	KA-30-H-5					*
9		1005	KA-32-H-1					*
10		1010	KA-32-H-5					*
11		1023	KA-31-H-1					*
12		1035	KA-31-H-4					* If you have any questions, please contact Sue Gardner @ 916-366-1701
13								
14								
15								
16								
17								
18								
19								
20								

CHK BY	DISTRIBUTION
	SUB OUT <input type="checkbox"/>

Relinquished by: (Signature) 	Date/Time 5/20/15 1200	Received by: (Signature) Sample Control #2 S.L.	Instructions/Remarks: Standard TAT	Send Results To: Sue Gardner Sgardner@kleinfelder.com 3077 Fite Circle Sacramento CA 95827
Relinquished by: (Signature) 	Date/Time 5/21/15 1420	Received by: (Signature) 		Attn:
Relinquished by: (Signature) 	Date/Time 5/21/15 1500	Received for Laboratory by: (Signature) MVP 5/21 0830		

ENV-02 REV 05/08 White - Sampler Canary - Return Copy To Shipper Pink - Lab Copy COC No 18716

CHAIN OF CUSTODY

Report ID: 1000360783  
 All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.  
 4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com  
 Page 4 of 78



PROJECT NO. 138810		PROJECT NAME ASPH				NO OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	RECEIVING LAB DC Lab													
LP NO. (PO. NO.)	SAMPLERS (Signature/Number) Mike Van Der Horst/1053			DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS				SAMPLE I.D.	MATRIX	INSTRUCTIONS/REMARKS Sample #77											
1	5/2/05	1055	KA-01-H-2			Soil	1						X	X	X	X	X	X	X	X	X	X
2		1025	KA-04-H-5																			
3		1845	KA-23-H-1					X	X	X	X	X	X	X	X	X	X	X	X			
4		1850	KA-1-H-5																			
5		0705	KA-21-H-1					X	X	X	X	X	X	X	X	X	X	X	X			
6		0710	KA-27-H-5																			
7		0740	KA-2-H-1					X	X	X	X	X	X	X	X	X	X	X	X			
8		1045	KA-30-H-5																			
9		1015	KA-32-H-1					X	X	X	X	X	X	X	X	X	X	X	X			
10		1010	KA-32-H-5																			
11		1025	KA-31-H-1					X	X	X	X	X	X	X	X	X	X	X	X			
12		1035	KA-31-H-4																			
13																						
14																						
15																						
16																						
17																						
18																						
19																						
20																						
Relinquished by: (Signature) [Signature]		Date/Time 5/2/05	Received by: (Signature) [Signature]		Instructions/Remarks: Sample #77						Send Results To: DC Lab Bakerfield 4100 Atlas Court Bakerfield, CA 93308											
Relinquished by: (Signature) [Signature]		Date/Time 5/2/05	Received by: (Signature) [Signature]								Attn:											
Relinquished by: (Signature) [Signature]		Date/Time 5/2/05	Received for Laboratory by: (Signature) [Signature]																			

ENV-02 REV 05/08          White - Sampler          Canary - Return Copy To Shipper          Pink - Lab Copy          COC 010716

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.





*[Signature]*

BC LABORATORIES INC.

COOLER RECEIPT FORM

Rev. No. 18 09/04/14

Page 1 of 2

Submission #: 15-12481

SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery   
BC Lab Field Service  Other (Specify) MTA

SHIPPING CONTAINER

Ice Chest  None  Box   
Other (Specify)

FREE LIQUID

YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments:

Custody Seals Ice Chest  Containers  None  Comments:  
Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO

Emissivity: --- Container: Soil Stead Thermometer ID: 228  
Temperature: (A) 3.3 °C (LC) 35 °C

Date/Time 5/21/15  
Analyst Init MM 0830

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE /NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/808										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 551.1										
3oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
3 OZ. JAR										
32 OZ. JAR										
SOIL SIL.EVEE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
PERVIOUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:  
Sample Numbering Completed By: MM Date/Time: 5/21/15 13:50 (S:\WPDoc\WordPerfct\LAB\_DCCS\FORMS\SAMREC)

A = Actual / C = Corrected

BC LABORATORIES INC.

COOLER RECEIPT FORM

Rev. No. 18 09/04/14

Page 2 of 2

Submission #: 15-12481

SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery   
BC Lab Field Service  Other (Specify) Other

SHIPPING CONTAINER

Ice Chest  None  Box   
Other (Specify) \_\_\_\_\_

FREE LIQUID  
YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_  
Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO

Emissivity: \_\_\_\_\_ Container: Soil Steer  
Temperature: (A) 3.3 °C (C) 35 °C Thermometer ID: 228

Date/Time 5/21/15  
Analyst Init MM 0830

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/8080										
QT EPA 515, 18150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLURRY		A								
SOIL SLURRY			A							
PCB VIAL										
PLASTIC BAG										
FERRIC IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
Sample Numbering Completed By: MM Date/Time: 5/21/15 13:00 (S:\WPDoc\WordPerCell\LAB\_DOC\SFOR\MS\AMREC)

A = Actual / C = Corrected



SMUD  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/05/2015 9:46  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

#### Laboratory Client Sample Information

<b>1512481-01</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/20/2015 08:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-34-H-2	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512481-02</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/20/2015 08:25
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-34-H-5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512481-03</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/20/2015 08:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-28-H-1	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512481-04</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/20/2015 08:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-28-H-5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512481-05</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/20/2015 09:08
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-29-H-1	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil

<b>1512481-06</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/20/2015 09:18
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-29-H-5	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512481-07</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015 08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/20/2015 09:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-30-H-1	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil



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6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/05/2015 9:46  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

**Laboratory**      **Client Sample Information**

<b>1512481-08</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015	08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/20/2015	09:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---	
	<b>Sampling Point:</b>	KA-30-H-5	<b>Lab Matrix:</b>	Solids	
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil	

<b>1512481-09</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015	08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/20/2015	10:05
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---	
	<b>Sampling Point:</b>	KA-32-H-1	<b>Lab Matrix:</b>	Solids	
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil	

<b>1512481-10</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015	08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/20/2015	10:10
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---	
	<b>Sampling Point:</b>	KA-32-H-5	<b>Lab Matrix:</b>	Solids	
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil	

<b>1512481-11</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015	08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/20/2015	10:23
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---	
	<b>Sampling Point:</b>	KA-31-H-1	<b>Lab Matrix:</b>	Solids	
	<b>Sampled By:</b>	---	<b>Sample Type:</b>	Soil	

<b>1512481-12</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/21/2015	08:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/20/2015	10:35
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---	
	<b>Sampling Point:</b>	KA-31-H-4	<b>Lab Matrix:</b>	Solids	
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil	



SMUD  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/05/2015 9:46  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512481-01	<b>Client Sample Name:</b> KA-34-H-2, 5/20/2015 8:15:00AM, Mike Van Den Eenden/11083	
<b>Constituent</b>	<b>Result</b>	<b>Units PQL MDL Method MB Bias Lab Quats Run #</b>
PCB-1016	ND	mg/kg 0.010 0.0027 EPA-8082 ND
PCB-1221	ND	mg/kg 0.010 0.0038 EPA-8082 ND
PCB-1232	ND	mg/kg 0.010 0.0024 EPA-8082 ND
PCB-1242	ND	mg/kg 0.010 0.0040 EPA-8082 ND
PCB-1248	ND	mg/kg 0.010 0.0026 EPA-8082 ND
PCB-1254	ND	mg/kg 0.010 0.0032 EPA-8082 ND
PCB-1260	ND	mg/kg 0.010 0.0016 EPA-8082 ND
Total PCB's (Summation)	ND	mg/kg 0.010 0.0050 EPA-8082 ND
Decachlorobiphenyl (Surrogate)	41.7	% 40 - 120 (LCL - UCL) EPA-8082

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/28/15	05/29/15 10:32	ZZZ	GC-15	0.987	BYE2561



SMUD  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/05/2015 9:46  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512481-01 Client Sample Name: KA-34-H-2, 5/20/2015 8:15:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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Reported: 06/05/2015 9:46  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512481-01	Client Sample Name:	KA-34-H-2, 5/20/2015 8:15:00AM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GCMS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.7	%	70 - 121 (LCL - UCL)		EPA-8260B			1





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Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512481-01      **Client Sample Name:** KA-34-H-2, 5/20/2015 8:15:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
Toluene-d8 (Surrogate)	99.8	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	94.9	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/28/15 10:44	ADC	MS-V2	1	BYE2145



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### Total Petroleum Hydrocarbons

**BCL Sample ID:** 1512481-01      **Client Sample Name:** KA-34-H-2, 5/20/2015 8:15:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	67.6	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	05/29/15 18:17	MWB	GC-13	1	BYE2582



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Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512481-01      **Client Sample Name:** KA-34-H-2, 5/20/2015 8:15:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.996	BYF0399



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**Reported:** 06/05/2015 9:46  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512481-01      **Client Sample Name:** KA-34-H-2, 5/20/2015 8:15:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	4.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	120	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.38	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	40	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	11	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	25	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	8.0	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	0.25	mg/kg	2.5	0.050	EPA-6010B	ND	J	1
Nickel	41	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	49	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	49	mg/kg	2.5	0.087	EPA-6010B	0.51		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 11:21	ARD	PE-OP3	0.990	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:46	MEV	CETAC1	1.008	BYE2303



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**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512481-03	<b>Client Sample Name:</b> KA-28-H-1, 5/20/2015 8:45:00AM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    mg/kg    0.010    0.0027    EPA-8082    ND          1
PCB-1221	ND    mg/kg    0.010    0.0038    EPA-8082    ND          1
PCB-1232	ND    mg/kg    0.010    0.0024    EPA-8082    ND          1
PCB-1242	ND    mg/kg    0.010    0.0040    EPA-8082    ND          1
PCB-1248	ND    mg/kg    0.010    0.0026    EPA-8082    ND          1
PCB-1254	ND    mg/kg    0.010    0.0032    EPA-8082    ND          1
PCB-1260	ND    mg/kg    0.010    0.0016    EPA-8082    ND          1
Total PCB's (Summation)	ND    mg/kg    0.010    0.0050    EPA-8082    ND          1
Decachlorobiphenyl (Surrogate)	46.7    %    40 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/28/15	05/29/15 10:42	ZZZ	GC-15	1.017	BYE2561



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512481-03 Client Sample Name: KA-28-H-1, 5/20/2015 8:45:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512481-03 Client Sample Name: KA-28-H-1, 5/20/2015 8:45:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GCMS	ND		1
1,2-Dichloroethane-4d (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260B			1





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**Reported:** 06/05/2015 9:46  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512481-03      **Client Sample Name:** KA-28-H-1, 5/20/2015 8:45:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.6	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/22/15 18:00	ADC	MS-V2	1	BYE2145



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**Reported:** 06/05/2015 9:46  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512481-03	<b>Client Sample Name:</b> KA-28-H-1, 5/20/2015 8:45:00AM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND          1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND          1
Tetracosane (Surrogate)	67.9    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	05/29/15 18:40	MWB	GC-13	0.997	BYE2582



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**Reported:** 06/05/2015 9:46  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512481-03      **Client Sample Name:** KA-28-H-1, 5/20/2015 8:45:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.998	BYF0399



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**Reported:** 06/05/2015 9:46  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512481-03      **Client Sample Name:** KA-28-H-1, 5/20/2015 8:45:00AM, Craig Riddle/9099

Constituent	Result	Units	PAL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.35	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	37	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	10	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	22	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	6.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	0.22	mg/kg	2.5	0.050	EPA-6010B	ND	J	1
Nickel	37	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	2.0	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	47	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	44	mg/kg	2.5	0.087	EPA-6010B	0.49		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 11:23	ARD	PE-OP3	0.943	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:48	MEV	CETAC1	1.008	BYE2303



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**Reported:** 06/05/2015 9:46  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512481-05	<b>Client Sample Name:</b> KA-29-H-1, 5/20/2015 9:08:00AM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    mg/kg    0.010    0.0027    EPA-8082    ND          1
PCB-1221	ND    mg/kg    0.010    0.0038    EPA-8082    ND          1
PCB-1232	ND    mg/kg    0.010    0.0024    EPA-8082    ND          1
PCB-1242	ND    mg/kg    0.010    0.0040    EPA-8082    ND          1
PCB-1248	ND    mg/kg    0.010    0.0026    EPA-8082    ND          1
PCB-1254	ND    mg/kg    0.010    0.0032    EPA-8082    ND          1
<b>PCB-1260</b>	<b>0.051</b> <b>mg/kg</b> <b>0.010</b> <b>0.0016</b> <b>EPA-8082</b> <b>ND</b> <b>1</b>
<b>Total PCB's (Summation)</b>	<b>0.051</b> <b>mg/kg</b> <b>0.010</b> <b>0.0050</b> <b>EPA-8082</b> <b>ND</b> <b>1</b>
Decachlorobiphenyl (Surrogate)	45.0    %    40 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/28/15	05/29/15 10:53	ZZZ	GC-15	1.014	BYE2561



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**Reported:** 06/05/2015 9:46  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512481-05	Client Sample Name:	KA-29-H-1, 5/20/2015 9:08:00AM, Craig Riddle/9099					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512481-05	Client Sample Name:	KA-29-H-1, 5/20/2015 9:08:00AM, Craig Riddle/9099					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GCMS	ND		1
1,2-Dichloroethane-4d (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260B			1





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### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512481-05      **Client Sample Name:** KA-29-H-1, 5/20/2015 9:08:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	95.1	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/22/15 18:45	ADC	MS-V2	1	BYE2145



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### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1512481-05	Client Sample Name:	KA-29-H-1, 5/20/2015 9:08:00AM, Craig Riddle/9099			MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals	
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzofluoranthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzofluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzofluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzoflapyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzofluoranthene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzofluoranthene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl)ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofluoranthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1



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### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1512481-05	Client Sample Name:	KA-29-H-1, 5/20/2015 9:08:00AM, Craig Riddle/9099			MB	Lab	Run #
Constituent	Result	Units	PAL	MDL	Method	Bias	Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1



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### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID: 1512481-05 Client Sample Name: KA-29-H-1, 5/20/2015 9:08:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	mg/kg	0.10	0.037	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Phenanthrene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Pyrene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	mg/kg	0.20	0.022	EPA-8270C	ND		1
2-Chlorophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	mg/kg	0.10	0.035	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.50	0.012	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	mg/kg	0.50	0.0077	EPA-8270C	ND		1
2-Methylphenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	mg/kg	0.20	0.033	EPA-8270C	ND		1
2-Nitrophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
4-Nitrophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
Pentachlorophenol	ND	mg/kg	0.20	0.013	EPA-8270C	ND		1
Phenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	mg/kg	0.20	0.017	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	44.7	%	20 - 130 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	74.1	%	30 - 130 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	101	%	30 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	79.4	%	20 - 140 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	75.1	%	20 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	66.7	%	30 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	05/28/15	06/01/15 18:56	VH1	MS-B1	1.003	BYE2595



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### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512481-05	<b>Client Sample Name:</b> KA-29-H-1, 5/20/2015 9:08:00AM, Craig Riddle/9099
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	6.1    mg/kg    10    1.2    EPA-8015B/FFP    ND    J    1
TPH - Motor Oil	23    mg/kg    20    6.5    EPA-8015B/FFP    ND       1
Tetracosane (Surrogate)	74.6    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	05/29/15 19:02	MWB	GC-13	1.014	BYE2582



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**Reported:** 06/05/2015 9:46  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512481-05      **Client Sample Name:** KA-29-H-1, 5/20/2015 9:08:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.992	BYF0399



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512481-05      **Client Sample Name:** KA-29-H-1, 5/20/2015 9:08:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.8	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	120	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.35	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	40	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	11	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	26	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	9.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	41	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	48	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	48	mg/kg	2.5	0.087	EPA-6010B	0.50		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 11:38	ARD	PE-OP3	0.980	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:51	MEV	CETAC1	1.025	BYE2303





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**Reported:** 06/05/2015 9:46  
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Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512481-07	Client Sample Name:	KA-30-H-1, 5/20/2015 9:40:00AM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Bromobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Bromochloromethane	ND	mg/kg	0.010	0.0018	EPA-8260B	ND	A10,Z1	1
Bromodichloromethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1
Bromoform	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Bromomethane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,A40,V01, Z1	1
n-Butylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
sec-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
tert-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Carbon tetrachloride	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Chlorobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Chloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
Chloroform	ND	mg/kg	0.010	0.0013	EPA-8260B	ND	A10,Z1	1
Chloromethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
2-Chlorotoluene	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1
4-Chlorotoluene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
Dibromochloromethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1
1,2-Dibromoethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1
Dibromomethane	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1
1,2-Dichlorobenzene	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1
1,3-Dichlorobenzene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,4-Dichlorobenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Dichlorodifluoromethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,1-Dichloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,2-Dichloroethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1
1,1-Dichloroethene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
cis-1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
trans-1,2-Dichloroethene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
Total 1,2-Dichloroethene	ND	mg/kg	0.020	0.0052	EPA-8260B	ND	A10,Z1	1
1,2-Dichloropropane	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1
1,3-Dichloropropane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
2,2-Dichloropropane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512481-07	Client Sample Name:	KA-30-H-1, 5/20/2015 9:40:00AM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
cis-1,3-Dichloropropene	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total 1,3-Dichloropropene	ND	mg/kg	0.020	0.0040	EPA-8260B	ND	A10,Z1	1
Ethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Hexachlorobutadiene	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1
Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
p-Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Methylene chloride	ND	mg/kg	0.020	0.0048	EPA-8260B	ND	A10,Z1	1
Methyl t-butyl ether	ND	mg/kg	0.010	0.0010	EPA-8260B	ND	A10,Z1	1
Naphthalene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
n-Propylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Styrene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Tetrachloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Toluene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.010	0.0015	EPA-8260B	ND	A10,Z1	1
Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Trichlorofluoromethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Vinyl chloride	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
Total Xylenes	ND	mg/kg	0.020	0.0068	EPA-8260B	ND	A10,Z1	1
p- & m-Xylenes	ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10,Z1	1
o-Xylene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.40	0.040	Luft-GCMS	ND	A10,Z1	1
1,2-Dichloroethane-d4 (Surrogate)	97.7	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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Project: 138810  
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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512481-07      **Client Sample Name:** KA-30-H-1, 5/20/2015 9:40:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
Toluene-d8 (Surrogate)	99.8	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.6	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/27/15 15:40	ADC	MS-V2	2	BYE2183



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### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b>	1512481-07	<b>Client Sample Name:</b>	KA-30-H-1, 5/20/2015 9:40:00AM, Mike Van Den Eenden/11083					
<b>Constituent</b>	<b>Result</b>	<b>Units</b>	<b>PQL</b>	<b>MDL</b>	<b>Method</b>	<b>MB Bias</b>	<b>Lab Quals</b>	<b>Run #</b>
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	63.8	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-8015B/FFP	05/28/15	05/29/15	19:25	MWB	GC-13	1.017	BYE2582	



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512481-07      **Client Sample Name:** KA-30-H-1, 5/20/2015 9:40:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:15	MAM	MAN-SV	0.996	BYF0399



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**Reported:** 06/05/2015 9:46  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512481-07      **Client Sample Name:** KA-30-H-1, 5/20/2015 9:40:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.1	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.33	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	0.081	mg/kg	0.50	0.052	EPA-6010B	ND	J	1
Chromium	35	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	9.4	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	24	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	24	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	34	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	1.1	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	46	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	70	mg/kg	2.5	0.087	EPA-6010B	0.49		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 11:40	ARD	PE-OP3	0.943	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:53	MEV	CETAC1	1.025	BYE2303



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Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512481-09	Client Sample Name:	KA-32-H-1, 5/20/2015 10:05:00AM, Mike Van Den Enden/11083				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
Benzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Bromobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Bromochloromethane	ND	mg/kg	0.010	0.0018	EPA-8260B	ND	A10,Z1	1	
Bromodichloromethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1	
Bromoform	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
Bromomethane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,A40,V01, Z1	1	
n-Butylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
sec-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
tert-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
Carbon tetrachloride	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1	
Chlorobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
Chloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Chloroform	ND	mg/kg	0.010	0.0013	EPA-8260B	ND	A10,Z1	1	
Chloromethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
2-Chlorotoluene	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1	
4-Chlorotoluene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Dibromochloromethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1	
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1	
1,2-Dibromoethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1	
Dibromomethane	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1	
1,2-Dichlorobenzene	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1	
1,3-Dichlorobenzene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
1,4-Dichlorobenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1	
Dichlorodifluoromethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
1,1-Dichloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
1,2-Dichloroethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1	
1,1-Dichloroethene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1	
cis-1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	
trans-1,2-Dichloroethene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1	
Total 1,2-Dichloroethene	ND	mg/kg	0.020	0.0052	EPA-8260B	ND	A10,Z1	1	
1,2-Dichloropropane	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1	
1,3-Dichloropropane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1	
2,2-Dichloropropane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1	



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Reported: 06/05/2015 9:46  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512481-09		Client Sample Name: KA-32-H-1, 5/20/2015 10:05:00AM, Mike Van Den Eenden/11083						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
cis-1,3-Dichloropropene	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total 1,3-Dichloropropene	ND	mg/kg	0.020	0.0040	EPA-8260B	ND	A10,Z1	1
Ethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Hexachlorobutadiene	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1
Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
p-Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Methylene chloride	ND	mg/kg	0.020	0.0048	EPA-8260B	ND	A10,Z1	1
Methyl tbutyl ether	ND	mg/kg	0.010	0.0010	EPA-8260B	ND	A10,Z1	1
Naphthalene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
n-Propylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Styrene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Tetrachloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Toluene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.010	0.0015	EPA-8260B	ND	A10,Z1	1
Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Trichlorofluoromethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Vinyl chloride	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
Total Xylenes	ND	mg/kg	0.020	0.0068	EPA-8260B	ND	A10,Z1	1
p- & m-Xylenes	ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10,Z1	1
o-Xylene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.40	0.040	Luft-GCMS	ND	A10,Z1	1
1,2-Dichloroethane-d4 (Surrogate)	90.1	%	70 - 121 (LCL - UCL)		EPA-8260B			1





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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512481-09      **Client Sample Name:** KA-32-H-1, 5/20/2015 10:05:00AM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Toluene-d8 (Surrogate)	99.3	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.7	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/27/15 16:02	ADC	MS-V2	2	BYE2183



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### Total Petroleum Hydrocarbons

**BCL Sample ID:** 1512481-09      **Client Sample Name:** KA-32-H-1, 5/20/2015 10:05:00AM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	14	mg/kg	20	6.5	EPA-8015B/FFP	ND	J	1
Tetracosane (Surrogate)	57.7	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	05/29/15 19:47	MWB	GC-13	1.010	BYE2582



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Project Manager: Sue Gardner

### EPA Method 1664

BCL Sample ID: 1512481-09 Client Sample Name: KA-32-H-1, 5/20/2015 10:05:00AM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	34	mg/kg	50	25	EPA-1664A HEM	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.996	BYF0412



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512481-09      **Client Sample Name:** KA-32-H-1, 5/20/2015 10:05:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.0	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	99	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.28	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	0.095	mg/kg	0.50	0.052	EPA-6010B	ND	J	1
Chromium	36	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	9.3	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	23	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	20	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	0.041	mg/kg	0.16	0.036	EPA-7471A	ND	J	2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	35	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	0.10	mg/kg	0.50	0.067	EPA-6010B	ND	J	1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	42	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	57	mg/kg	2.5	0.087	EPA-6010B	0.49		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 11:41	ARD	PE-OP3	0.943	BYE2572
2	EPA-7471A	05/27/15	05/28/15 15:55	MEV	CETAC1	0.962	BYE2303



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512481-11	Client Sample Name:	KA-31-H-1, 5/20/2015 10:23:00AM			MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals	
Benzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Bromobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Bromochloromethane	ND	mg/kg	0.010	0.0018	EPA-8260B	ND	A10,Z1	1
Bromodichloromethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1
Bromoform	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Bromomethane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,A40,V01, Z1	1
n-Butylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
sec-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
tert-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Carbon tetrachloride	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Chlorobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Chloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
Chloroform	ND	mg/kg	0.010	0.0013	EPA-8260B	ND	A10,Z1	1
Chloromethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
2-Chlorotoluene	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1
4-Chlorotoluene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
Dibromochloromethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1
1,2-Dibromoethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1
Dibromomethane	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1
1,2-Dichlorobenzene	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1
1,3-Dichlorobenzene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,4-Dichlorobenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Dichlorodifluoromethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,1-Dichloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,2-Dichloroethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1
1,1-Dichloroethene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
cis-1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
trans-1,2-Dichloroethene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
Total 1,2-Dichloroethene	ND	mg/kg	0.020	0.0052	EPA-8260B	ND	A10,Z1	1
1,2-Dichloropropane	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1
1,3-Dichloropropane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
2,2-Dichloropropane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1



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Project: 138810  
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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512481-11	Client Sample Name:	KA-31-H-1, 5/20/2015 10:23:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
cis-1,3-Dichloropropene	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total 1,3-Dichloropropene	ND	mg/kg	0.020	0.0040	EPA-8260B	ND	A10,Z1	1
Ethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Hexachlorobutadiene	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1
Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
p-Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Methylene chloride	ND	mg/kg	0.020	0.0048	EPA-8260B	ND	A10,Z1	1
Methyl tbutyl ether	ND	mg/kg	0.010	0.0010	EPA-8260B	ND	A10,Z1	1
Naphthalene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
n-Propylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Styrene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Tetrachloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Toluene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.010	0.0015	EPA-8260B	ND	A10,Z1	1
Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Trichlorofluoromethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Vinyl chloride	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
Total Xylenes	ND	mg/kg	0.020	0.0068	EPA-8260B	ND	A10,Z1	1
p- & m-Xylenes	ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10,Z1	1
o-Xylene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.40	0.040	Luft-GCMS	ND	A10,Z1	1
1,2-Dichloroethane-4d (Surrogate)	92.7	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512481-11 Client Sample Name: KA-31-H-1, 5/20/2015 10:23:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	94.7	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/27/15 16:25	ADC	MS-V2	2	BYE2183



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### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512481-11	<b>Client Sample Name:</b> KA-31-H-1, 5/20/2015 10:23:00AM
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	89.9    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/28/15	05/29/15 20:10	MWB	GC-13	1.010	BYE2582





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### EPA Method 1664

BCL Sample ID: 1512481-11 Client Sample Name: KA-31-H-1, 5/20/2015 10:23:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.996	BYF0412



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**Reported:** 06/05/2015 9:46  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512481-11 **Client Sample Name:** KA-31-H-1, 5/20/2015 10:23:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	6.9	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.34	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	0.061	mg/kg	0.50	0.052	EPA-6010B	ND	J	1
Chromium	37	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	10	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	24	mg/kg	1.0	0.050	EPA-6010B	0.11		1
Lead	27	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	0.12	mg/kg	2.5	0.050	EPA-6010B	ND	J	1
Nickel	35	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	49	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	59	mg/kg	2.5	0.087	EPA-6010B	0.51		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/01/15 11:11	ARD	PE-OP3	1	BYE2572
2	EPA-7471A	05/27/15	05/28/15 16:01	MEV	CETAC1	0.992	BYE2303



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### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2561</b>						
PCB-1016	BYE2561-BLK1	ND	mg/kg	0.010	0.0027	
PCB-1221	BYE2561-BLK1	ND	mg/kg	0.010	0.0038	
PCB-1232	BYE2561-BLK1	ND	mg/kg	0.010	0.0024	
PCB-1242	BYE2561-BLK1	ND	mg/kg	0.010	0.0040	
PCB-1248	BYE2561-BLK1	ND	mg/kg	0.010	0.0026	
PCB-1254	BYE2561-BLK1	ND	mg/kg	0.010	0.0032	
PCB-1260	BYE2561-BLK1	ND	mg/kg	0.010	0.0016	
Total PCBs (Summation)	BYE2561-BLK1	ND	mg/kg	0.010	0.0050	
Decachlorobiphenyl (Surrogate)	BYE2561-BLK1	88.3	%	40 - 120 (LCL - UCL)		



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### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	Percent Recovery	
<b>QC Batch ID: BYE2561</b>									
PCB-1016	BYE2561-BS1	LCS	0.091892	0.084459	mg/kg	109	60 - 120		
PCB-1260	BYE2561-BS1	LCS	0.087162	0.084459	mg/kg	103	60 - 120		
Decachlorobiphenyl (Surrogate)	BYE2561-BS1	LCS	0.019595	0.020270	mg/kg	96.7	40 - 120		



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Project: 138810  
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Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab Quais
								Percent Recovery	RPD	
<b>QC Batch ID: BYE2561</b>										
Used client sample: N										
PCB-1016	MS	1511019-69	ND	0.075828	0.082781	mg/kg	8.3	91.6	50 - 130	
	MSD	1511019-69	ND	0.082373	0.084746	mg/kg	8.3	97.2	30	50 - 130
PCB-1260	MS	1511019-69	ND	0.069205	0.082781	mg/kg		83.6	50 - 120	
	MSD	1511019-69	ND	0.076610	0.084746	mg/kg	10.2	90.4	30	50 - 120
Decachlorobiphenyl (Surrogate)	MS	1511019-69	ND	0.0115563	0.019868	mg/kg		78.3	40 - 120	
	MSD	1511019-69	ND	0.016949	0.020339	mg/kg	8.5	83.3	40 - 120	



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2145</b>						
Benzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYE2145-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYE2145-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYE2145-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYE2145-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	



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### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2145</b>						
cis-1,3-Dichloropropene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYE2145-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYE2145-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYE2145-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYE2145-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYE2145-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYE2145-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYE2145-BLK1	ND	mg/kg	0.0050	0.0012	
Total Purgeable Petroleum Hydrocarbons	BYE2145-BLK1	ND	mg/kg	0.20	0.020	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYE2145-BLK1</b>	<b>94.6</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYE2145-BLK1</b>	<b>100</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYE2145-BLK1</b>	<b>97.3</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		



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## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2183</b>						
Benzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYE2183-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYE2183-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYE2183-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYE2183-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYE2183-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0012	





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## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2183</b>						
cis-1,3-Dichloropropene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYE2183-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYE2183-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYE2183-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2-trifluoroethane	BYE2183-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYE2183-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYE2183-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYE2183-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYE2183-BLK1	ND	mg/kg	0.0050	0.0012	
Total Purgeable Petroleum Hydrocarbons	BYE2183-BLK1	ND	mg/kg	0.20	0.020	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYE2183-BLK1</b>	<b>101</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYE2183-BLK1</b>	<b>102</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYE2183-BLK1</b>	<b>99.1</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		



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### Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	Recovery	
<b>QC Batch ID: BYE2145</b>									
Benzene	BYE2145-BS1	LCS	0.12035	0.12500	mg/kg	96.3	70	- 130	
Bromodichloromethane	BYE2145-BS1	LCS	0.12375	0.12500	mg/kg	99.0	70	- 130	
Chlorobenzene	BYE2145-BS1	LCS	0.12961	0.12500	mg/kg	104	70	- 130	
Chloroethane	BYE2145-BS1	LCS	0.11262	0.12500	mg/kg	90.1	70	- 130	
1,4-Dichlorobenzene	BYE2145-BS1	LCS	0.12632	0.12500	mg/kg	101	70	- 130	
1,1-Dichloroethane	BYE2145-BS1	LCS	0.11284	0.12500	mg/kg	90.3	70	- 130	
1,1-Dichloroethene	BYE2145-BS1	LCS	0.11982	0.12500	mg/kg	95.9	70	- 130	
Toluene	BYE2145-BS1	LCS	0.12425	0.12500	mg/kg	99.4	70	- 130	
Trichloroethene	BYE2145-BS1	LCS	0.12586	0.12500	mg/kg	101	70	- 130	
1,2-Dichloroethane-d4 (Surrogate)	BYE2145-BS1	LCS	0.045820	0.050000	mg/kg	91.6	70	- 121	
Toluene-d8 (Surrogate)	BYE2145-BS1	LCS	0.049700	0.050000	mg/kg	99.4	81	- 117	
4-Bromofluorobenzene (Surrogate)	BYE2145-BS1	LCS	0.048600	0.050000	mg/kg	97.2	74	- 121	
<b>QC Batch ID: BYE2183</b>									
Benzene	BYE2183-BS1	LCS	0.12562	0.12500	mg/kg	100	70	- 130	
Bromodichloromethane	BYE2183-BS1	LCS	0.12899	0.12500	mg/kg	103	70	- 130	
Chlorobenzene	BYE2183-BS1	LCS	0.12479	0.12500	mg/kg	99.8	70	- 130	
Chloroethane	BYE2183-BS1	LCS	0.12021	0.12500	mg/kg	96.2	70	- 130	
1,4-Dichlorobenzene	BYE2183-BS1	LCS	0.12286	0.12500	mg/kg	98.3	70	- 130	
1,1-Dichloroethane	BYE2183-BS1	LCS	0.12225	0.12500	mg/kg	97.8	70	- 130	
1,1-Dichloroethene	BYE2183-BS1	LCS	0.12285	0.12500	mg/kg	98.3	70	- 130	
Toluene	BYE2183-BS1	LCS	0.12392	0.12500	mg/kg	99.1	70	- 130	
Trichloroethene	BYE2183-BS1	LCS	0.12235	0.12500	mg/kg	97.9	70	- 130	
1,2-Dichloroethane-d4 (Surrogate)	BYE2183-BS1	LCS	0.050200	0.050000	mg/kg	100	70	- 121	
Toluene-d8 (Surrogate)	BYE2183-BS1	LCS	0.049930	0.050000	mg/kg	99.9	81	- 117	
4-Bromofluorobenzene (Surrogate)	BYE2183-BS1	LCS	0.049550	0.050000	mg/kg	99.1	74	- 121	



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### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYE2145</b> Used client sample: N										
Benzene	MSD	1511019-42	ND	0.10752	0.12500	mg/kg	0.8	86.0	70 - 130	
				0.10843	0.12500	mg/kg	0.8	86.7	20	70 - 130
Bromodichloromethane	MSD	1511019-42	ND	0.11472	0.12500	mg/kg	1.1	91.8	70 - 130	
				0.11603	0.12500	mg/kg	1.1	92.8	20	70 - 130
Chlorobenzene	MSD	1511019-42	ND	0.11233	0.12500	mg/kg	2.2	89.9	70 - 130	
				0.10989	0.12500	mg/kg	2.2	87.9	20	70 - 130
Chloroethane	MSD	1511019-42	ND	0.10681	0.12500	mg/kg	1.3	85.4	70 - 130	
				0.10539	0.12500	mg/kg	1.3	84.3	20	70 - 130
1,4-Dichlorobenzene	MSD	1511019-42	ND	0.11092	0.12500	mg/kg	0.5	88.7	70 - 130	
				0.11041	0.12500	mg/kg	0.5	88.3	20	70 - 130
1,1-Dichloroethane	MSD	1511019-42	ND	0.10459	0.12500	mg/kg	1.1	83.7	70 - 130	
				0.10344	0.12500	mg/kg	1.1	82.8	20	70 - 130
1,1-Dichloroethene	MSD	1511019-42	ND	0.10833	0.12500	mg/kg	0.5	86.7	70 - 130	
				0.10774	0.12500	mg/kg	0.5	86.2	20	70 - 130
Toluene	MSD	1511019-42	ND	0.11283	0.12500	mg/kg	0.4	90.3	70 - 130	
				0.11241	0.12500	mg/kg	0.4	89.9	20	70 - 130
Trichloroethene	MSD	1511019-42	ND	0.11080	0.12500	mg/kg	0.3	88.6	70 - 130	
				0.11113	0.12500	mg/kg	0.3	88.9	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MSD	1511019-42	ND	0.047170	0.050000	mg/kg	0.5	94.3	70 - 121	
				0.046930	0.050000	mg/kg	0.5	93.9		70 - 121
Toluene-d8 (Surrogate)	MSD	1511019-42	ND	0.049860	0.050000	mg/kg	0.8	99.7	81 - 117	
				0.049460	0.050000	mg/kg	0.8	98.9		81 - 117
4-Bromofluorobenzene (Surrogate)	MSD	1511019-42	ND	0.049290	0.050000	mg/kg	0.7	98.6	74 - 121	
				0.049650	0.050000	mg/kg	0.7	99.3		74 - 121
<b>QC Batch ID: BYE2183</b> Used client sample: N										
Benzene	MSD	1511019-43	ND	0.11726	0.12500	mg/kg	4.1	93.8	70 - 130	
				0.11252	0.12500	mg/kg	4.1	90.0	20	70 - 130
Bromodichloromethane	MSD	1511019-43	ND	0.12174	0.12500	mg/kg	4.6	97.4	70 - 130	
				0.11628	0.12500	mg/kg	4.6	93.0	20	70 - 130
Chlorobenzene	MSD	1511019-43	ND	0.11462	0.12500	mg/kg	4.4	91.7	70 - 130	
				0.10966	0.12500	mg/kg	4.4	87.7	20	70 - 130
Chloroethane	MSD	1511019-43	ND	0.11297	0.12500	mg/kg	3.6	90.4	70 - 130	
				0.10894	0.12500	mg/kg	3.6	87.2	20	70 - 130
1,4-Dichlorobenzene	MSD	1511019-43	ND	0.11286	0.12500	mg/kg	5.0	90.3	70 - 130	
				0.10738	0.12500	mg/kg	5.0	85.9	20	70 - 130
1,1-Dichloroethane	MSD	1511019-43	ND	0.11584	0.12500	mg/kg	5.5	92.7	70 - 130	
				0.10969	0.12500	mg/kg	5.5	87.8	20	70 - 130



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYE2183</b>										
1,1-Dichloroethene	MSD	1511019-43	ND	0.11817	0.12500	mg/kg	6.3	94.5	70 - 130	
				0.11098	0.12500	mg/kg	6.3	88.8	20	70 - 130
Toluene	MSD	1511019-43	ND	0.11960	0.12500	mg/kg	4.4	95.7	70 - 130	
				0.11450	0.12500	mg/kg	4.4	91.6	20	70 - 130
Trichloroethene	MSD	1511019-43	ND	0.12021	0.12500	mg/kg	5.7	96.2	70 - 130	
				0.11360	0.12500	mg/kg	5.7	90.9	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MSD	1511019-43	ND	0.050880	0.050000	mg/kg	3.1	102	70 - 121	
				0.049330	0.050000	mg/kg	3.1	98.7		70 - 121
Toluene-d8 (Surrogate)	MSD	1511019-43	ND	0.050270	0.050000	mg/kg	0.2	101	81 - 117	
				0.050150	0.050000	mg/kg	0.2	100		81 - 117
4-Bromofluorobenzene (Surrogate)	MSD	1511019-43	ND	0.048890	0.050000	mg/kg	0.6	97.8	74 - 121	
				0.048620	0.050000	mg/kg	0.6	97.2		74 - 121



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## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
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**QC Batch ID: BYE2595**

Acenaphthene	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
Acenaphthylene	BYE2595-BLK1	ND	mg/kg	0.10	0.019	
Aldrin	BYE2595-BLK1	ND	mg/kg	0.10	0.024	
Aniline	BYE2595-BLK1	ND	mg/kg	0.20	0.053	
Anthracene	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
Benzidine	BYE2595-BLK1	ND	mg/kg	3.0	0.22	
Benzol[a]anthracene	BYE2595-BLK1	ND	mg/kg	0.10	0.012	
Benzol[b]fluoranthene	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
Benzol[k]fluoranthene	BYE2595-BLK1	ND	mg/kg	0.10	0.019	
Benzol[a]pyrene	BYE2595-BLK1	ND	mg/kg	0.10	0.015	
Benzol[g,h,i]perylene	BYE2595-BLK1	ND	mg/kg	0.10	0.056	
Benzoic acid	BYE2595-BLK1	ND	mg/kg	0.50	0.067	
Benzyl alcohol	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
Benzyl butyl phthalate	BYE2595-BLK1	ND	mg/kg	0.10	0.021	
alpha-BHC	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
beta-BHC	BYE2595-BLK1	ND	mg/kg	0.10	0.021	
delta-BHC	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
gamma-BHC (Lindane)	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
bis(2-Chloroethoxy)methane	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
bis(2-Chloroethyl) ether	BYE2595-BLK1	ND	mg/kg	0.10	0.016	
bis(2-Chloroisopropyl) ether	BYE2595-BLK1	ND	mg/kg	0.10	0.021	
bis(2-Ethylhexyl)phthalate	BYE2595-BLK1	ND	mg/kg	0.20	0.043	
4-Bromophenyl phenyl ether	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
4-Chloroaniline	BYE2595-BLK1	ND	mg/kg	0.10	0.027	
2-Chloronaphthalene	BYE2595-BLK1	ND	mg/kg	0.10	0.020	
4-Chlorophenyl phenyl ether	BYE2595-BLK1	ND	mg/kg	0.10	0.015	
Chrysene	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
4,4'-DDD	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
4,4'-DDE	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
4,4'-DDT	BYE2595-BLK1	ND	mg/kg	0.10	0.019	
Dibenz[a,h]anthracene	BYE2595-BLK1	ND	mg/kg	0.10	0.019	
Dibenzofuran	BYE2595-BLK1	ND	mg/kg	0.10	0.020	
1,2-Dichlorobenzene	BYE2595-BLK1	ND	mg/kg	0.10	0.020	
1,3-Dichlorobenzene	BYE2595-BLK1	ND	mg/kg	0.10	0.021	



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## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
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**QC Batch ID: BYE2595**

1,4-Dichlorobenzene	BYE2595-BLK1	ND	mg/kg	0.10	0.019	
3,3-Dichlorobenzidine	BYE2595-BLK1	ND	mg/kg	0.20	0.0067	
Dieldrin	BYE2595-BLK1	ND	mg/kg	0.10	0.031	
Diethyl phthalate	BYE2595-BLK1	ND	mg/kg	0.10	0.019	
Dimethyl phthalate	BYE2595-BLK1	ND	mg/kg	0.10	0.020	
Di-n-butyl phthalate	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
2,4-Dinitrotoluene	BYE2595-BLK1	ND	mg/kg	0.10	0.022	
2,6-Dinitrotoluene	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
Di-n-octyl phthalate	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
1,2-Diphenylhydrazine	BYE2595-BLK1	ND	mg/kg	0.10	0.019	
Endosulfan I	BYE2595-BLK1	ND	mg/kg	0.20	0.020	
Endosulfan II	BYE2595-BLK1	ND	mg/kg	0.20	0.021	
Endosulfan sulfate	BYE2595-BLK1	ND	mg/kg	0.10	0.021	
Endrin	BYE2595-BLK1	ND	mg/kg	0.20	0.025	
Endrin aldehyde	BYE2595-BLK1	ND	mg/kg	0.50	0.022	
Fluoranthene	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
Fluorene	BYE2595-BLK1	ND	mg/kg	0.10	0.019	
Heptachlor	BYE2595-BLK1	ND	mg/kg	0.10	0.021	
Heptachlor epoxide	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
Hexachlorobenzene	BYE2595-BLK1	ND	mg/kg	0.10	0.016	
Hexachlorobutadiene	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
Hexachlorocyclopentadiene	BYE2595-BLK1	ND	mg/kg	0.10	0.019	
Hexachloroethane	BYE2595-BLK1	ND	mg/kg	0.10	0.020	
Indeno[1,2,3-cd]pyrene	BYE2595-BLK1	ND	mg/kg	0.10	0.072	
Isophorone	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
2-Methylnaphthalene	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
Naphthalene	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
2-Naphthylamine	BYE2595-BLK1	ND	mg/kg	3.0	0.16	
2-Nitroaniline	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
3-Nitroaniline	BYE2595-BLK1	ND	mg/kg	0.20	0.015	
4-Nitroaniline	BYE2595-BLK1	ND	mg/kg	0.20	0.025	
Nitrobenzene	BYE2595-BLK1	ND	mg/kg	0.10	0.015	
N-Nitrosodimethylamine	BYE2595-BLK1	ND	mg/kg	0.10	0.037	
N-Nitrosodi-N-propylamine	BYE2595-BLK1	ND	mg/kg	0.10	0.021	



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## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2595</b>						
N-Nitrosodiphenylamine	BYE2595-BLK1	ND	mg/kg	0.10	0.021	
Phenanthrene	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
Pyrene	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
1,2,4-Trichlorobenzene	BYE2595-BLK1	ND	mg/kg	0.10	0.018	
4-Chloro-3-methylphenol	BYE2595-BLK1	ND	mg/kg	0.20	0.022	
2-Chlorophenol	BYE2595-BLK1	ND	mg/kg	0.10	0.016	
2,4-Dichlorophenol	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
2,4-Dimethylphenol	BYE2595-BLK1	ND	mg/kg	0.10	0.035	
4,6-Dinitro-2-methylphenol	BYE2595-BLK1	ND	mg/kg	0.50	0.012	
2,4-Dinitrophenol	BYE2595-BLK1	ND	mg/kg	0.50	0.0077	
2-Methylphenol	BYE2595-BLK1	ND	mg/kg	0.10	0.017	
3- & 4-Methylphenol	BYE2595-BLK1	ND	mg/kg	0.20	0.033	
2-Nitrophenol	BYE2595-BLK1	ND	mg/kg	0.10	0.016	
4-Nitrophenol	BYE2595-BLK1	ND	mg/kg	0.20	0.018	
Pentachlorophenol	BYE2595-BLK1	ND	mg/kg	0.20	0.013	
Phenol	BYE2595-BLK1	ND	mg/kg	0.10	0.016	
2,4,5-Trichlorophenol	BYE2595-BLK1	ND	mg/kg	0.20	0.018	
2,4,6-Trichlorophenol	BYE2595-BLK1	ND	mg/kg	0.20	0.017	
<b>2-Fluorophenol (Surrogate)</b>	<b>BYE2595-BLK1</b>	<b>39.9</b>	<b>%</b>	<b>20 - 130 (LCL - UCL)</b>		
<b>Phenol-d5 (Surrogate)</b>	<b>BYE2595-BLK1</b>	<b>73.1</b>	<b>%</b>	<b>30 - 130 (LCL - UCL)</b>		
<b>Nitrobenzene-d5 (Surrogate)</b>	<b>BYE2595-BLK1</b>	<b>105</b>	<b>%</b>	<b>30 - 130 (LCL - UCL)</b>		
<b>2-Fluorobiphenyl (Surrogate)</b>	<b>BYE2595-BLK1</b>	<b>77.8</b>	<b>%</b>	<b>20 - 140 (LCL - UCL)</b>		
<b>2,4,6-Tribromophenol (Surrogate)</b>	<b>BYE2595-BLK1</b>	<b>74.0</b>	<b>%</b>	<b>20 - 150 (LCL - UCL)</b>		
<b>p-Terphenyl-d14 (Surrogate)</b>	<b>BYE2595-BLK1</b>	<b>79.0</b>	<b>%</b>	<b>30 - 150 (LCL - UCL)</b>		



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## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	Percent Recovery	
<b>QC Batch ID: BYE2595</b>									
Aceaphithene	BYE2595-BS1	LCS	1.3397	1.6835	mg/kg	79.6	50 - 140		
1,4-Dichlorobenzene	BYE2595-BS1	LCS	1.3283	1.6835	mg/kg	78.9	40 - 140		
2,4-Dinitrotoluene	BYE2595-BS1	LCS	1.4887	1.6835	mg/kg	88.4	40 - 140		
Hexachlorobenzene	BYE2595-BS1	LCS	0.71567	1.3468	mg/kg	53.1	40 - 130		
Hexachlorobutadiene	BYE2595-BS1	LCS	1.0103	1.6835	mg/kg	60.0	40 - 120		
Hexachloroethane	BYE2595-BS1	LCS	1.5227	1.6835	mg/kg	90.4	40 - 120		
Nitrobenzene	BYE2595-BS1	LCS	1.0527	1.6835	mg/kg	62.5	40 - 130		
N-Nitrosodi-N-propylamine	BYE2595-BS1	LCS	1.2287	1.6835	mg/kg	73.0	40 - 120		
Pyrene	BYE2595-BS1	LCS	1.4303	1.6835	mg/kg	85.0	40 - 150		
1,2,4-Trichlorobenzene	BYE2595-BS1	LCS	1.1390	1.6835	mg/kg	67.7	40 - 140		
4-Chloro-3-methylphenol	BYE2595-BS1	LCS	1.2270	1.6835	mg/kg	72.9	40 - 130		
2-Chlorophenol	BYE2595-BS1	LCS	0.99300	1.6835	mg/kg	59.0	40 - 130		
2-Methylphenol	BYE2595-BS1	LCS	1.1960	1.6835	mg/kg	71.0	40 - 140		
3- & 4-Methylphenol	BYE2595-BS1	LCS	2.6630	3.3670	mg/kg	79.1	40 - 120		
4-Nitrophenol	BYE2595-BS1	LCS	1.1450	1.6835	mg/kg	68.0	20 - 120		
Pentachlorophenol	BYE2595-BS1	LCS	0.91500	1.3468	mg/kg	67.9	20 - 130		
Phenol	BYE2595-BS1	LCS	1.0243	1.6835	mg/kg	60.8	40 - 120		
2,4,6-Trichlorophenol	BYE2595-BS1	LCS	0.97433	1.6835	mg/kg	57.9	40 - 130		
2-Fluorophenol (Surrogate)	BYE2595-BS1	LCS	0.88700	2.6936	mg/kg	32.9	20 - 130		
Phenol-d5 (Surrogate)	BYE2595-BS1	LCS	1.5600	2.6936	mg/kg	57.9	30 - 130		
Nitrobenzene-d5 (Surrogate)	BYE2595-BS1	LCS	2.1367	2.6936	mg/kg	79.3	30 - 130		
2-Fluorobiphenyl (Surrogate)	BYE2595-BS1	LCS	1.8083	2.6936	mg/kg	67.1	20 - 140		
2,4,6-Tribromophenol (Surrogate)	BYE2595-BS1	LCS	1.7990	2.6936	mg/kg	66.8	20 - 150		
p-Terphenyl-d14 (Surrogate)	BYE2595-BS1	LCS	0.79133	1.3468	mg/kg	58.8	30 - 150		





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### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
QC Batch ID: BYE2595 Used client sample: N										
Acenaphthene	MS	1511019-71	ND	1.7061	1.6892	mg/kg		101	40 - 140	
	MSD	1511019-71	ND	1.6415	1.6722	mg/kg	3.9	98.2	30 - 140	
1,4-Dichlorobenzene	MS	1511019-71	ND	1.6696	1.6892	mg/kg		98.8	30 - 150	
	MSD	1511019-71	ND	1.6918	1.6722	mg/kg	1.3	101	30 - 150	
2,4-Dinitrotoluene	MS	1511019-71	ND	2.0412	1.6892	mg/kg		121	30 - 140	
	MSD	1511019-71	ND	1.9835	1.6722	mg/kg	2.9	119	30 - 140	
Hexachlorobenzene	MS	1511019-71	ND	0.86976	1.3514	mg/kg		64.4	30 - 140	
	MSD	1511019-71	ND	0.84510	1.3378	mg/kg	2.9	63.2	30 - 140	
Hexachlorobutadiene	MS	1511019-71	ND	1.2815	1.6892	mg/kg		75.9	20 - 140	
	MSD	1511019-71	ND	1.1938	1.6722	mg/kg	7.1	71.4	30 - 140	
Hexachloroethane	MS	1511019-71	ND	1.8917	1.6892	mg/kg		112	30 - 140	
	MSD	1511019-71	ND	1.8443	1.6722	mg/kg	2.5	110	30 - 140	
Nitrobenzene	MS	1511019-71	ND	1.3467	1.6892	mg/kg		79.7	30 - 140	
	MSD	1511019-71	ND	1.2503	1.6722	mg/kg	7.4	74.8	30 - 140	
N-Nitrosodi-N-propylamine	MS	1511019-71	ND	1.6381	1.6892	mg/kg		97.0	30 - 120	
	MSD	1511019-71	ND	1.5750	1.6722	mg/kg	3.9	94.2	30 - 120	
Pyrene	MS	1511019-71	ND	1.9122	1.6892	mg/kg		113	40 - 150	
	MSD	1511019-71	ND	1.9277	1.6722	mg/kg	0.8	115	30 - 150	
1,2,4-Trichlorobenzene	MS	1511019-71	ND	1.4333	1.6892	mg/kg		84.9	30 - 150	
	MSD	1511019-71	ND	1.3499	1.6722	mg/kg	6.0	80.7	30 - 150	
4-Chloro-3-methylphenol	MS	1511019-71	ND	1.6259	1.6892	mg/kg		96.3	40 - 130	
	MSD	1511019-71	ND	1.5192	1.6722	mg/kg	6.8	90.9	30 - 130	
2-Chlorophenol	MS	1511019-71	ND	1.2353	1.6892	mg/kg		73.1	40 - 130	
	MSD	1511019-71	ND	1.1672	1.6722	mg/kg	5.7	69.8	30 - 130	
2-Methylphenol	MS	1511019-71	ND	1.5200	1.6892	mg/kg		90.0	30 - 140	
	MSD	1511019-71	ND	1.5209	1.6722	mg/kg	0.1	90.9	30 - 140	
3- & 4-Methylphenol	MS	1511019-71	ND	3.3536	3.3784	mg/kg		99.3	40 - 130	
	MSD	1511019-71	ND	3.2334	3.3445	mg/kg	3.6	96.7	30 - 130	
4-Nitrophenol	MS	1511019-71	ND	1.4818	1.6892	mg/kg		87.7	20 - 140	
	MSD	1511019-71	ND	1.4281	1.6722	mg/kg	3.7	85.4	30 - 140	
Pentachlorophenol	MS	1511019-71	ND	1.1759	1.3514	mg/kg		87.0	20 - 130	
	MSD	1511019-71	ND	1.1176	1.3378	mg/kg	5.1	83.5	30 - 130	
Phenol	MS	1511019-71	ND	1.2446	1.6892	mg/kg		73.7	30 - 130	
	MSD	1511019-71	ND	1.2616	1.6722	mg/kg	1.4	75.4	30 - 130	
2,4,6-Trichlorophenol	MS	1511019-71	ND	1.2408	1.6892	mg/kg		73.5	40 - 130	
	MSD	1511019-71	ND	1.1883	1.6722	mg/kg	4.3	71.1	30 - 130	



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**Project Manager:** Sue Gardner

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits	
								Percent Recovery	RPD
<b>QC Batch ID: BYE2595</b>									
Used client sample: N									
2-Fluorophenol (Surrogate)	MS	1511019-71	ND	1.1573	2.7027	mg/kg	2.4	42.8	20 - 130
	MSD	1511019-71	ND	1.1303	2.6756	mg/kg	2.4	42.2	20 - 130
Phenol-d5 (Surrogate)	MS	1511019-71	ND	1.9514	2.7027	mg/kg	1.1	72.2	30 - 130
	MSD	1511019-71	ND	1.9724	2.6756	mg/kg	1.1	73.7	30 - 130
Nitrobenzene-d5 (Surrogate)	MS	1511019-71	ND	2.6491	2.7027	mg/kg	1.1	98.0	30 - 130
	MSD	1511019-71	ND	2.6793	2.6756	mg/kg	1.1	100	30 - 130
2-Fluorobiphenyl (Surrogate)	MS	1511019-71	ND	2.2184	2.7027	mg/kg	1.0	82.1	20 - 140
	MSD	1511019-71	ND	2.1963	2.6756	mg/kg	1.0	82.1	20 - 140
2,4,6-Tribromophenol (Surrogate)	MS	1511019-71	ND	2.2784	2.7027	mg/kg	4.7	84.3	20 - 150
	MSD	1511019-71	ND	2.1733	2.6756	mg/kg	4.7	81.2	20 - 150
p-Terphenyl-d14 (Surrogate)	MS	1511019-71	ND	1.0694	1.3514	mg/kg	1.6	79.1	30 - 150
	MSD	1511019-71	ND	1.0861	1.3378	mg/kg	1.6	81.2	30 - 150



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**Reported:** 06/05/2015 9:46  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2582</b>						
TPH - Diesel (FFP)	BYE2582-BLK1	ND	mg/kg	10	1.2	
TPH - Motor Oil	BYE2582-BLK1	ND	mg/kg	20	6.5	
<b>Tetracosane (Surrogate)</b>	<b>BYE2582-BLK1</b>	<b>77.9</b>	<b>%</b>	<b>20 - 145 (LCL - UCL)</b>		



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**Reported:** 06/05/2015 9:46  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	RPD	
<b>QC Batch ID: BYE2582</b>									
TPH - Diesel (FFP)	BYE2582-BS1	LCS	71.020	82.237	mg/kg	86.4	64	124	
Tetracosane (Surrogate)	BYE2582-BS1	LCS	3.0130	3.2895	mg/kg	91.6	20	145	



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**Reported:** 06/05/2015 9:46  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

#### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYE2582</b>										
Used client sample: N										
TPH - Diesel (FFP)	MS	1511019-69	ND	74.296	84.746	mg/kg	0.3	87.7		52 - 131
	MSD	1511019-69	ND	74.549	83.056	mg/kg		89.8	30	52 - 131
Tetracosane (Surrogate)	MS	1511019-69	ND	3.1429	3.3898	mg/kg	0.8	92.7		20 - 145
	MSD	1511019-69	ND	3.1186	3.3223	mg/kg		93.9		20 - 145



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

**EPA Method 1664**

**Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0399</b>						
Oil and Grease	BYF0399-BLK1	ND	mg/kg	50	25	
<b>QC Batch ID: BYF0412</b>						
Oil and Grease	BYF0412-BLK1	ND	mg/kg	50	25	



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	Percent Recovery	
<b>QC Batch ID: BYF0399</b>									
Oil and Grease	BYF0399-BS1	LCS	688.25	782.87	mg/kg	87.9		59 - 117	
<b>QC Batch ID: BYF0412</b>									
Oil and Grease	BYF0412-BS1	LCS	697.03	778.22	mg/kg	89.6		59 - 117	



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYF0399</b>										
Used client sample: N										
Oil and Grease	DUP	1511019-40	ND	ND		mg/kg			30	
	MS	1511019-40	ND	737.57	781.31	mg/kg	94.4		56 - 111	
	MSD	1511019-40	ND	682.90	781.31	mg/kg	7.7	87.4	30	56 - 111
<b>QC Batch ID: BYF0412</b>										
Used client sample: N										
Oil and Grease	DUP	1511019-41	ND	ND		mg/kg			30	
	MS	1511019-41	ND	727.63	781.31	mg/kg	93.1		56 - 111	
	MSD	1511019-41	ND	678.93	781.31	mg/kg	6.9	86.9	30	56 - 111





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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2303</b>						
Mercury	BYE2303-BLK1	ND	mg/kg	0.16	0.036	
<b>QC Batch ID: BYE2572</b>						
Antimony	BYE2572-BLK1	ND	mg/kg	5.0	0.33	
Arsenic	BYE2572-BLK1	ND	mg/kg	1.0	0.40	
Barium	BYE2572-BLK1	ND	mg/kg	0.50	0.18	
Beryllium	BYE2572-BLK1	ND	mg/kg	0.50	0.047	
Cadmium	BYE2572-BLK1	ND	mg/kg	0.50	0.052	
Chromium	BYE2572-BLK1	ND	mg/kg	0.50	0.050	
Cobalt	BYE2572-BLK1	ND	mg/kg	2.5	0.098	
<b>Copper</b>	<b>BYE2572-BLK1</b>	<b>0.11197</b>	<b>mg/kg</b>	<b>1.0</b>	<b>0.050</b>	<b>J</b>
Lead	BYE2572-BLK1	ND	mg/kg	2.5	0.28	
Molybdenum	BYE2572-BLK1	ND	mg/kg	2.5	0.050	
Nickel	BYE2572-BLK1	ND	mg/kg	0.50	0.15	
Selenium	BYE2572-BLK1	ND	mg/kg	1.0	0.98	
Silver	BYE2572-BLK1	ND	mg/kg	0.50	0.067	
Thallium	BYE2572-BLK1	ND	mg/kg	5.0	0.64	
Vanadium	BYE2572-BLK1	ND	mg/kg	0.50	0.11	
<b>Zinc</b>	<b>BYE2572-BLK1</b>	<b>0.51422</b>	<b>mg/kg</b>	<b>2.5</b>	<b>0.087</b>	<b>J</b>



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**Reported:** 06/05/2015 9:46  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	

**QC Batch ID: BYE2303**

Mercury	BYE2303-BS1	LCS	0.84000	0.80000	mg/kg	105		80 - 120	
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**QC Batch ID: BYE2572**

Antimony	BYE2572-BS1	LCS	101.60	100.00	mg/kg	102		75 - 125	
Arsenic	BYE2572-BS1	LCS	9.8999	10.000	mg/kg	99.0		75 - 125	
Barium	BYE2572-BS1	LCS	99.912	100.00	mg/kg	99.9		75 - 125	
Beryllium	BYE2572-BS1	LCS	9.4858	10.000	mg/kg	94.9		75 - 125	
Cadmium	BYE2572-BS1	LCS	10.206	10.000	mg/kg	102		75 - 125	
Chromium	BYE2572-BS1	LCS	104.29	100.00	mg/kg	104		75 - 125	
Cobalt	BYE2572-BS1	LCS	102.65	100.00	mg/kg	103		75 - 125	
Copper	BYE2572-BS1	LCS	99.049	100.00	mg/kg	99.0		75 - 125	
Lead	BYE2572-BS1	LCS	102.87	100.00	mg/kg	103		75 - 125	
Molybdenum	BYE2572-BS1	LCS	102.55	100.00	mg/kg	103		75 - 125	
Nickel	BYE2572-BS1	LCS	108.21	100.00	mg/kg	108		75 - 125	
Selenium	BYE2572-BS1	LCS	10.216	10.000	mg/kg	102		75 - 125	
Silver	BYE2572-BS1	LCS	9.6712	10.000	mg/kg	96.7		75 - 125	
Thallium	BYE2572-BS1	LCS	115.72	100.00	mg/kg	116		75 - 125	
Vanadium	BYE2572-BS1	LCS	108.13	100.00	mg/kg	108		75 - 125	
Zinc	BYE2572-BS1	LCS	103.92	100.00	mg/kg	104		75 - 125	



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Reported: 06/05/2015 9:46  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Precision & Accuracy

Constituent	Source Sample ID	Source Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		
							RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BYE2303</b>									
Used client sample: Y - Description: KA-48-H-2, 05/19/2015 08:40									
Mercury	DUP	1512480-03	ND	ND	mg/kg			20	
	MS	1512480-03	ND	0.86873	mg/kg	109		80 - 120	
	MSD	1512480-03	ND	0.85651	mg/kg	108		80 - 120	
<b>QC Batch ID: BYE2572</b>									
Used client sample: Y - Description: KA-31-H-1, 05/20/2015 10:23									
Antimony	DUP	1512481-11	ND	ND	mg/kg			20	
	MS	1512481-11	ND	20.656	mg/kg	20.7		16 - 119	
	MSD	1512481-11	ND	19.420	mg/kg	19.4		16 - 119	
Arsenic	DUP	1512481-11	6.9264	6.8650	mg/kg	0.9		20	
	MS	1512481-11	6.9264	14.827	mg/kg	79.0		75 - 125	
	MSD	1512481-11	6.9264	14.675	mg/kg	77.5		75 - 125	
Barium	DUP	1512481-11	110.48	110.88	mg/kg	0.4		20	
	MS	1512481-11	110.48	186.15	mg/kg	75.7		75 - 125	
	MSD	1512481-11	110.48	188.60	mg/kg	78.1		75 - 125	
Beryllium	DUP	1512481-11	0.34128	0.33945	mg/kg	0.5		20	J
	MS	1512481-11	0.34128	8.9188	mg/kg	85.8		75 - 125	
	MSD	1512481-11	0.34128	8.5018	mg/kg	81.6		75 - 125	
Cadmium	DUP	1512481-11	0.061461	0.056120	mg/kg	9.1		20	J
	MS	1512481-11	0.061461	8.9640	mg/kg	89.0		75 - 125	
	MSD	1512481-11	0.061461	8.7307	mg/kg	86.7		75 - 125	
Chromium	DUP	1512481-11	36.985	36.180	mg/kg	2.2		20	
	MS	1512481-11	36.985	125.45	mg/kg	88.5		75 - 125	
	MSD	1512481-11	36.985	119.70	mg/kg	82.7		75 - 125	
Cobalt	DUP	1512481-11	10.149	10.111	mg/kg	0.4		20	
	MS	1512481-11	10.149	91.368	mg/kg	81.2		75 - 125	
	MSD	1512481-11	10.149	89.878	mg/kg	79.7		75 - 125	
Copper	DUP	1512481-11	23.762	23.307	mg/kg	1.9		20	
	MS	1512481-11	23.762	112.23	mg/kg	88.5		75 - 125	
	MSD	1512481-11	23.762	110.11	mg/kg	86.4		75 - 125	
Lead	DUP	1512481-11	26.731	26.329	mg/kg	1.5		20	
	MS	1512481-11	26.731	112.99	mg/kg	86.3		75 - 125	
	MSD	1512481-11	26.731	112.47	mg/kg	85.7		75 - 125	
Molybdenum	DUP	1512481-11	0.11807	0.13604	mg/kg	14.1		20	J
	MS	1512481-11	0.11807	79.881	mg/kg	79.8		75 - 125	
	MSD	1512481-11	0.11807	78.844	mg/kg	78.7		75 - 125	
Nickel	DUP	1512481-11	35.225	34.354	mg/kg	2.5		20	
	MS	1512481-11	35.225	121.95	mg/kg	86.7		75 - 125	
	MSD	1512481-11	35.225	119.16	mg/kg	83.9		75 - 125	



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**Reported:** 06/05/2015 9:46  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYE2572</b>										
Used client sample: Y - Description: KA-31-H-1, 05/20/2015 10:23										
Selenium	DUP	1512481-11	ND	ND		mg/kg			20	
	MS	1512481-11	ND	7.8938	10.000	mg/kg		78.9	75 - 125	
	MSD	1512481-11	ND	8.0293	10.000	mg/kg	1.7	80.3	20	75 - 125
Silver	DUP	1512481-11	ND	ND		mg/kg			20	
	MS	1512481-11	ND	8.7162	10.000	mg/kg		87.2	75 - 125	
	MSD	1512481-11	ND	8.3948	10.000	mg/kg	3.8	83.9	20	75 - 125
Thallium	DUP	1512481-11	ND	ND		mg/kg			20	
	MS	1512481-11	ND	91.224	100.00	mg/kg		91.2	75 - 125	
	MSD	1512481-11	ND	88.966	100.00	mg/kg	2.5	89.0	20	75 - 125
Vanadium	DUP	1512481-11	49.211	48.320		mg/kg	1.8		20	
	MS	1512481-11	49.211	140.59	100.00	mg/kg		91.4	75 - 125	
	MSD	1512481-11	49.211	136.83	100.00	mg/kg	2.7	87.6	20	75 - 125
Zinc	DUP	1512481-11	58.954	55.286		mg/kg	6.4		20	
	MS	1512481-11	58.954	134.36	100.00	mg/kg		75.4	75 - 125	
	MSD	1512481-11	58.954	134.65	100.00	mg/kg	0.2	75.7	20	75 - 125



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**Reported:** 06/05/2015 9:46  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

**Notes And Definitions**

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A10 Detection and quantitation limits were raised due to matrix interference.
- A40 Initial calibration linearity criteria not met.
- V01 The Initial Calibration Verification (ICV) recovery is not within established control limits.
- Z1 The sample was analyzed at a dilution due to matrix interference of the internal standards.



**BC Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 06/09/2015

Sue Gardner

SMUD

6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Client Project: [none]  
BCL Project: 138810  
BCL Work Order: 1512851  
Invoice ID: B205270

Enclosed are the results of analyses for samples received by the laboratory on 5/27/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101



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**BC Laboratories, Inc.**  
Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1512851 Page 1 of 8



15-12851

PROJECT NO. 138810		PROJECT NAME SMUD		NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	RECEIVING LAB: BC Lab	
L.P. NO. (PO. NO.)	SAMPLERS: (Signature/Number) Mice Van Der Ende 11083						INSTRUCTIONS/REMARKS Standard TAT	
DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX					
1-1	05-24-15	1330	KA-6-D-6	Soil	1155 mice	TPH-9 TPH-2 VOCs (+19TEX) SVOCs CAM17 PCBs	EPAS 8760 MD-DLL 5760 6000 7000 7000	
2-2	↓	1450	KA-6-D-36	✓				
3-3	↓	1525	KA-6-D-46	✓				
4-4	↓		KA-6-D					
-4-5	05-22-15	0840	KA-9-D-6	✓				
-5-6	↓	1025	KA-9-D-36	✓				
-6-7	↓	1110	KA-9-D-51	✓				
8-8	↓		KA-9-D					
-7-9	↓	1340	KA-27-D-6	✓				
-8-10	↓	1500	KA-27-D-36	✓				
-9-11	↓	1535	KA-27-D-46	✓				
12-12	↓		KA-27-D					
10-13	05-26-15	0845	KA-26-D-6	✓				
-11-14	↓	0950	KA-26-D-36	✓				
-12-15	↓	1055	KA-26-D-51	✓				
16-16	↓		KA-26-D					
-13-17	↓	1315	KA-15-D-6	✓				
-14-18	↓	1415	KA-15-D-36	✓				
-15-19	↓	1450	KA-15-D-46	✓				
20-20								

CHK BY: [Signature] DISTRIBUTION:  SUB IN  MAR  RXN   
SUB-OUT

Relinquished by: (Signature) <u>[Signature]</u> 4098	Date/Time 5-27-15 8:20	Received by: (Signature) <u>[Signature]</u>	Instructions/Remarks: Standard TAT	Send Results To: sgardner@kleinfelder.com 3077 Rite wade Sacramento CA 95827 Attn:
Relinquished by: (Signature) <u>[Signature]</u>	Date/Time 5/27/15 1000	Received by: (Signature) <u>[Signature]</u>		
Relinquished by: (Signature) <u>[Signature]</u>	Date/Time 5-27-15 1940	Received for Laboratory by: (Signature) <u>[Signature]</u> 50745 2150		

ENV-02 REV 05/09 REC. 5/27/15 2150 White - Sampler Canary - Return Copy To Shipper CHAIN OF CUSTODY RCL. 5/27/15 Lab Cpy COC No 18720

Report ID: 1000362152  
4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com  
Page 5 of 146

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15-12851

PROJECT NO. 138810		PROJECT NAME SMVD			NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	RECEIVING LAB: BC Lab									
L.P. NO. (PO. NO.)		SAMPLERS: (Signature/Number) Mikela Dan Eder 11083						INSTRUCTIONS/REMARKS									
DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX	HOLD													
16 05-21-15	1340	KA-6D-11	soil														
17 2	1350	" -16															
18 3	1400	" -21															
19 4	1415	" -26															
20 5	1430	" -31															
21 6	1510	" -41															
22 7	1540	" -51															
23 8	05-22-15 0850	KA-9-D-11															
24 9	0900	" -16															
25 10	0915	" -21															
26 11	0930	" -26															
27 12	0945	" -31															
28 13	1040	" -41															
29 14	1055	" -46															
30 15	05-22-15 1350	KA-27-D-11															
31 16	1400	" -16															
32 17	1410	" -21															
33 18	1420	" -26															
34 19	1435	" -31															
35 20	1520	" -41															
36 21	1600	" -51															

Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 5/27/15 16:00	Received by: (Signature) <i>[Signature]</i>	Instructions/Remarks:	Send Results To:
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 5-27-15 8:20	Received by: (Signature) <i>[Signature]</i>	5/27/15 2250	S Gardner @ Kleinfelder. con
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 5/27/15 10:00	Received for Laboratory by: (Signature) <i>[Signature]</i>		

REC- 5/27/15 19:40      REL- 5/27/15 2250

White - Sampler      Canary - Return Copy To Shipper      Pink - Lab Copy

**CHAIN OF CUSTODY**

COC No 18721

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Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1512851 Page 3 of 8



15-12851

PROJECT NO. 138810		PROJECT NAME SMUD		NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	RECEIVING LAB: BC Lab														
L.P. NO. (P.O. NO.)		SAMPLERS: (Signature/Number)					INSTRUCTIONS/REMARKS														
DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX																		
37 1	05-26-15 0850	KA-26-D-11	Soil	1	SS Jar																
38 2	0905	" -16																			
39 3	0915	" -21																			
40 4	0930	" -26																			
41 5	0940	" -31																			
42 6	1000	" -41																			
43 7	1045	" -46																			
44 8	1320	KA-15-D-11																			
45 9	1330	" -16																			
46 10	1340	" -21																			
47 11	1350	" -26																			
48 12	1400	" -31																			
49 13	1430	" -41																			
50 14	1520	" -51																			
15																					
16																					
17																					
18																					
19																					
20																					

HOLD

Relinquished by: (Signature) <i>[Signature]</i> 4098	Date/Time 5-27-15 2:20	Received by: (Signature) <i>[Signature]</i>	Instructions/Remarks:	Send Results To: sgardner@kleinfelder.com Attn: 916 366-2310
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 5/27/15 1000	Received by: (Signature) <i>[Signature]</i>		
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 5-27-15 1946	Received for Laboratory by: (Signature) <i>[Signature]</i>		

ENV-02 REV 05/08  
 White - Sampler  
 Canary - Return Copy To Shipper  
 Pink - Lab Copy  
 REL. *[Signature]* 5/27/15 2250  
 CHAIN OF CUSTODY  
 COC No 18722

Report ID: 1000362152  
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BC LABORATORIES INC.

COOLER RECEIPT FORM

Rev. No. 18 09/04/14

Page 1 of 5

Submission #: 15-12851

SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery   
BC Lab Field Service  Other  (Specify) \_\_\_\_\_

SHIPPING CONTAINER

Ice Chest  None  Box   
Other  (Specify) \_\_\_\_\_

FREE LIQUID

YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_  
Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received YES  NO  Emissivity: 0.9 <sup>TDZ</sup> Container: Soil Sleeve Thermometer ID: 208719 Date/Time: 5/27/15  
Temperature: (A) 1.2 °C / (C) 1.4 °C <sup>728</sup> <sub>SP2K</sub> Analyst Init: KIB 2358

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE /NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE		A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
Sample Numbering Completed By: VV Date/Time: 5-20-15 0835 (S:\WP\post\WordPerfect\LAB\_DOC\SI\FORMS\SIAMREC)

A = Actual / C = Corrected

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 2 of 5

Submission #: 15-12851

SHIPING INFORMATION  
 Federal Express  UPS  Hand Delivery   
 BC Lab Field Service  Other  (Specify) \_\_\_\_\_

SHIPING CONTAINER  
 Ice Chest  None  Box   
 Other  (Specify) \_\_\_\_\_

FREE LIQUID  
 YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals  
 Ice Chest  Containers  None  Comments: \_\_\_\_\_  
 Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO  Emissivity: 0.9 Container: Soil Sleeve Thermometer ID: 208716 Date/Time: 5/27/15  
 Temperature: (A) 1.2 °C (C) 1.4 °C Analyst Init: HJB 0258

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	20
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE/NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 547										
8oz Amber EPA 548										
8oz Amber EPA 548										
40ml EPA 531.1										
QT EPA 632										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE		A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Stunna Gauster										

Comments: \_\_\_\_\_  
 Sample Numbering Completed By: NVI Date/Time: 5-20-15 0835 (S:\WPDoc\wv\ref\en\LAB\_DOCS\FORMS\SA\MRC1

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 3 of 5

Submission #: 15-12851

**SHIPPING INFORMATION**

Federal Express  UPS  Hand Delivery   
 BC Lab Field Service  Other  (Specify) \_\_\_\_\_

**SHIPPING CONTAINER**

Ice Chest  None  Box   
 Other  (Specify) \_\_\_\_\_

**FREE LIQUID**  
 YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_  
 Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

**COC Received**  YES  NO  
 Emissivity: 0.9 Container: Soil Sleeve Thermometer ID: 208V10 Date/Time: 5/17/15  
 Temperature: (A) 1.2 °C (C) 1.4 °C 228 °F SP2K Analyst Init: KIB 2258

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	21	22	23	24	25	26	27	28	29	30
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE /NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/6080										
QT EPA 515, 1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M4										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE		A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
PERVIOUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
 Sample Numbering Completed By: YV Date/Time: 5-28-15 0835 (S:\WP\active\perf\entlab\DOC\S\FORMS\SAMREC1

BC LABORATORIES INC.

COOLER RECEIPT FORM

Rev. No. 18 09/04/14

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Submission #: 15-12851

SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery   
BC Lab Field Service  Other  (Specify) \_\_\_\_\_

SHIPPING CONTAINER

Ice Chest  None  Box   
Other  (Specify) \_\_\_\_\_

FREE LIQUID

YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals

Ice Chest   
Intact? Yes  No

Containers   
Intact? Yes  No

None  Comments: \_\_\_\_\_

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO

Emissivity: 0.9 Container: Soil Sleeve Thermometer ID: 228  
Temperature: (A) 1.2 °C / (C) 1.4 °C

Date/Time: 5/27/15  
Analyst Int: KIB 0358

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	3_1	3_2	3_3	3_4	3_5	3_6	3_7	3_8	3_9	4_0
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE /NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/8080										
QT EPA 515./8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
FERROUS ION										
ENCORE										
SMART KIT										
Shimma Canister										

Comments: \_\_\_\_\_  
Sample Numbering Completed By: VVI Date/Time: 5-28-15 0835 [S:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\SAWREC]



BC LABORATORIES INC. 9-28-15 COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 5 of 5

Submission #: 15-12851

SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery  BC Lab Field Service  Other  (Specify) \_\_\_\_\_

SHIPPING CONTAINER

Ice Chest  None  Box  Other  (Specify) \_\_\_\_\_

FREE LIQUID

YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_

Intact? Yes  No

Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO

Emissivity: 0.9-10.12 Container: Soil Sleeve Thermometer ID: 208V16 Date/Time: 5/27/15  
Temperature: (A) 1.2 °C (C) 1.4 °C Analyst Init: HIB 0358

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	41	42	43	44	45	46	47	48	49	50
OT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
OT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE/NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
OT EPA 413.1, 413.2, 418.1										
PT ODOB										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
OT EPA 508/608/8080										
OT EPA 515.1/8150										
OT EPA 525										
OT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
OT EPA 549										
OT EPA 632										
OT EPA 8015M										
OT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: NO TIME ON -SD Date/Time: 5-28-15 0335 (S:\WPDoc\Word\Facil\LAB DOCS\FORMS\AMR01)

Sample Numbering Completed By: VVI



SMUD  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

**Laboratory**

**Client Sample Information**

<b>1512851-01</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/21/2015 13:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-6-D-6	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-02</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/21/2015 14:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-6-D-36	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-03</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/21/2015 15:25
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-6-D-46	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-04</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 08:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-9-D-6	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-05</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 10:25
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-9-D-36	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-06</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 11:10
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-9-D-51	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-07</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 13:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-27-D-6	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil



SMUD  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

**Laboratory**      **Client Sample Information**

<b>1512851-08</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 15:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-27-D-36	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-09</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 15:35
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-27-D-46	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-10</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 08:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-26-D-6	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-11</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 09:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-26-D-36	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-12</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 10:55
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-26-D-51	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-13</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 13:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-15-D-6	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-14</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 14:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-15-D-36	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

#### Laboratory Client Sample Information

<b>1512851-15</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 14:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-15-D-46	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-16</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/21/2015 13:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-6-D-11	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-17</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/21/2015 13:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-6-D-16	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-18</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/21/2015 14:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-6-D-21	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-19</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/21/2015 14:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-6-D-26	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-20</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/21/2015 14:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-6-D-31	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-21</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/21/2015 15:10
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-6-D-41	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

#### Laboratory Client Sample Information

<b>1512851-22</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/21/2015 15:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-6-D-51	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-23</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 08:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-9-D-11	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-24</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 09:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-9-D-16	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-25</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 09:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-9-D-21	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-26</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 09:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-9-D-26	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-27</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 09:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-9-D-31	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-28</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 10:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-9-D-41	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

#### Laboratory Client Sample Information

<b>1512851-29</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 10:55
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-9-D-46	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-30</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 13:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-27-D-11	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-31</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 14:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-27-D-16	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-32</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 14:10
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-27-D-21	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-33</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 14:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-27-D-26	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-34</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 14:35
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-27-D-31	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-35</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 15:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-27-D-41	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

**Laboratory**      **Client Sample Information**

<b>1512851-36</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/22/2015 16:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-27-D-51	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-37</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 08:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-26-D-11	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-38</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 09:05
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-26-D-16	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-39</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 09:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-26-D-21	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-40</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 09:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-26-D-26	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-41</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 09:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-26-D-31	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-42</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 10:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-26-D-41	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

**Laboratory**

**Client Sample Information**

<b>1512851-43</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 10:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-26-D-46	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-44</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 13:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-15-D-11	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-45</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 13:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-15-D-16	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-46</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 13:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-15-D-21	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-47</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 13:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-15-D-26	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-48</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 14:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-15-D-31	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

<b>1512851-49</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 14:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-15-D-41	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil





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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

**Laboratory**

**Client Sample Information**

<b>1512851-50</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/27/2015 22:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/26/2015 15:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-15-D-51	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083	<b>Sample Type:</b>	Soil



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-01 Client Sample Name: KA-6-D-6, 5/21/2015 1:30:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-01 Client Sample Name: KA-6-D-6, 5/21/2015 1:30:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GCMS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-01      **Client Sample Name:** KA-6-D-6, 5/21/2015 1:30:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.1	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/27/15	05/28/15 17:54	ADC	MS-V2	1	BYE2371



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512851-01	<b>Client Sample Name:</b> KA-6-D-6, 5/21/2015 1:30:00PM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	57.7    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-8015B/FFP	05/29/15	06/02/15 08:01		MWB	GC-13	1.014	BYF0064	



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512851-01      **Client Sample Name:** KA-6-D-6, 5/21/2015 1:30:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	1	BYF0412



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-01      **Client Sample Name:** KA-6-D-6, 5/21/2015 1:30:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	7.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	92	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.52	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	46	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	11	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	24	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	8.3	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	0.52	mg/kg	2.5	0.050	EPA-6010B	ND	J	1
Nickel	45	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	61	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	40	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:26	ARD	PE-OP3	0.943	BYF0110
2	EPA-7471A	06/03/15	06/03/15 12:57	JRG	CETAC2	0.977	BYF0263



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**Reported:** 06/09/2015 18:22  
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Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-02	Client Sample Name:	KA-6-D-36, 5/21/2015 2:50:00PM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1





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Project: 138810  
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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-02 Client Sample Name: KA-6-D-36, 5/21/2015 2:50:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	0.082	mg/kg	0.20	0.020	Luft-GC/MS	ND	J	1
1,2-Dichloroethane-4d (Surrogate)	97.6	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-02      **Client Sample Name:** KA-6-D-36, 5/21/2015 2:50:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	95.2	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/27/15	05/28/15 18:17	ADC	MS-V2	1	BYE2371



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

**BCL Sample ID:** 1512851-02      **Client Sample Name:** KA-6-D-36, 5/21/2015 2:50:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	65.3	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/29/15	06/02/15 08:24	MWB	GC-13	1.014	BYF0064



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512851-02      **Client Sample Name:** KA-6-D-36, 5/21/2015 2:50:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.992	BYF0412



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-02      **Client Sample Name:** KA-6-D-36, 5/21/2015 2:50:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	1.5	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	72	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.34	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	31	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	7.6	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	12	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	4.8	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	28	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	38	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	30	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:28	ARD	PE-OP3	0.943	BYF0110
2	EPA-7471A	06/04/15	06/05/15 14:07	MEV	CETAC1	1.008	BYF0429



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-03		Client Sample Name: KA-6-D-46, 5/21/2015 3:25:00PM, Mike Van Den Eenden/11083		MB	Lab	Run #		
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-03	Client Sample Name:	KA-6-D-46, 5/21/2015 3:25:00PM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GCMS	ND		1
1,2-Dichloroethane-4d (Surrogate)	97.5	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-03      **Client Sample Name:** KA-6-D-46, 5/21/2015 3:25:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Toluene-d8 (Surrogate)	99.6	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.3	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 09:35	ADC	MS-V2	1	BYE2371





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**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

**BCL Sample ID:** 1512851-03      **Client Sample Name:** KA-6-D-46, 5/21/2015 3:25:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	71.9	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/29/15	06/02/15 08:46	MWB	GC-13	1.014	BYF0064



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### EPA Method 1664

**BCL Sample ID:** 1512851-03      **Client Sample Name:** KA-6-D-46, 5/21/2015 3:25:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.992	BYF0412



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-03      **Client Sample Name:** KA-6-D-46, 5/21/2015 3:25:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	1.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	69	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.22	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	25	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.0	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	11	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	4.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	52	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		3
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	30	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	27	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:39	ARD	PE-OP3	0.980	BYF0110
2	EPA-7471A	06/04/15	06/05/15 14:18	MEV	CETAC1	0.962	BYF0429
3	EPA-6010B	06/01/15	06/03/15 07:25	ARD	PE-OP3	0.980	BYF0110



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Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512851-04	<b>Client Sample Name:</b> KA-9-D-6, 5/22/2015 8:40:00AM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    mg/kg    0.010    0.0027    EPA-8082    ND          1
PCB-1221	ND    mg/kg    0.010    0.0038    EPA-8082    ND          1
PCB-1232	ND    mg/kg    0.010    0.0024    EPA-8082    ND          1
PCB-1242	ND    mg/kg    0.010    0.0040    EPA-8082    ND          1
PCB-1248	ND    mg/kg    0.010    0.0026    EPA-8082    ND          1
PCB-1254	ND    mg/kg    0.010    0.0032    EPA-8082    ND          1
PCB-1260	ND    mg/kg    0.010    0.0016    EPA-8082    ND          1
Total PCB's (Summation)	ND    mg/kg    0.010    0.0050    EPA-8082    ND          1
Decachlorobiphenyl (Surrogate)	63.3    %    40 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/29/15	06/01/15 15:17	ZZZ	GC-15	1.014	BYF0052



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**Reported:** 06/09/2015 18:22  
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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-04	Client Sample Name:	KA-9-D-6, 5/22/2015 8:40:00AM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-04 Client Sample Name: KA-9-D-6, 5/22/2015 8:40:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GCMS	ND		1
1,2-Dichloroethane-4d (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-04      **Client Sample Name:** KA-9-D-6, 5/22/2015 8:40:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Toluene-d8 (Surrogate)	99.4	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.2	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 09:58	ADC	MS-V2	1	BYE2371



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512851-04	<b>Client Sample Name:</b> KA-9-D-6, 5/22/2015 8:40:00AM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	71.6    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-8015B/FFP	05/29/15	06/02/15	09:09	MWB	GC-13	0.984	BYF0064	





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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512851-04      **Client Sample Name:** KA-9-D-6, 5/22/2015 8:40:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.992	BYF0412



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-04      **Client Sample Name:** KA-9-D-6, 5/22/2015 8:40:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PAL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	6.3	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	160	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.40	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	0.081	mg/kg	0.50	0.052	EPA-6010B	ND	J	1
Chromium	44	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	13	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	30	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	8.4	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	60	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	52	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	54	mg/kg	2.5	0.087	EPA-6010B	0.16		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:16	ARD	PE-OP3	1	BYF0110
2	EPA-7471A	06/04/15	06/05/15 14:20	MEV	CETAC1	1.025	BYF0429



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### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512851-05	<b>Client Sample Name:</b> KA-9-D-36, 5/22/2015 10:25:00AM, Mike Van Den Eenden/11083							
<b>Constituent</b>	<b>Result</b>	<b>Units</b>	<b>PQL</b>	<b>MDL</b>	<b>Method</b>	<b>MB Bias</b>	<b>Lab Quals</b>	<b>Run #</b>
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
<b>Total PCB's (Summation)</b>	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	66.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run			QC	
			Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8082	05/29/15	06/01/15 15:27	ZZZ	GC-15	0.990	BYF0052



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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-05	Client Sample Name:	KA-9-D-36, 5/22/2015 10:25:00AM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoforn	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-05 Client Sample Name: KA-9-D-36, 5/22/2015 10:25:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	0.092	mg/kg	0.20	0.020	Luft-GC/MS	ND	J	1
1,2-Dichloroethane-4d (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-05      **Client Sample Name:** KA-9-D-36, 5/22/2015 10:25:00AM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Toluene-d8 (Surrogate)	98.5	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.6	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 00:20	ADC	MS-V2	1	BYE2371



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512851-05	<b>Client Sample Name:</b> KA-9-D-36, 5/22/2015 10:25:00AM, Mike Van Den Enden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	64.6    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/29/15	06/02/15 10:40	MWB	GC-13	1.007	BYF0064



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512851-05      **Client Sample Name:** KA-9-D-36, 5/22/2015 10:25:00AM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.996	BYF0412





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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-05      **Client Sample Name:** KA-9-D-36, 5/22/2015 10:25:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PAL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	1.0	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	35	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.32	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	35	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	5.7	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	8.2	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	4.3	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	26	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		3
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	24	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	19	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:41	ARD	PE-OP3	0.980	BYF0110
2	EPA-7471A	06/04/15	06/05/15 14:22	MEV	CETAC1	0.962	BYF0429
3	EPA-6010B	06/01/15	06/03/15 07:27	ARD	PE-OP3	0.980	BYF0110



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Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512851-06	<b>Client Sample Name:</b> KA-9-D-51, 5/22/2015 11:10:00AM, Mike Van Den Eenden/11083							
<b>Constituent</b>	<b>Result</b>	<b>Units</b>	<b>PQL</b>	<b>MDL</b>	<b>Method</b>	<b>MB Bias</b>	<b>Lab Quals</b>	<b>Run #</b>
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
<b>Total PCB's (Summation)</b>	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	78.3	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run			QC	
			Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8082	05/29/15	06/01/15 15:38	ZZZ	GC-15	0.997	BYF00652



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-06	Client Sample Name:	KA-9-D-51, 5/22/2015 11:10:00AM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-06		Client Sample Name: KA-9-D-51, 5/22/2015 11:10:00AM, Mike Van Den Eenden/1083		MB	Lab	Run #		
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GCMS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-06      **Client Sample Name:** KA-9-D-51, 5/22/2015 11:10:00AM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	87.3	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 17:55	ADC	MS-V2	1	BYE2371



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**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512851-06	<b>Client Sample Name:</b> KA-9-D-51, 5/22/2015 11:10:00AM, Mike Van Den Enden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	77.6    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/29/15	06/02/15 11:02	MWB	GC-13	1.017	BYF0064



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### EPA Method 1664

**BCL Sample ID:** 1512851-06      **Client Sample Name:** KA-9-D-51, 5/22/2015 11:10:00AM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.996	BYF0412



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

BCL Sample ID: 1512851-06 Client Sample Name: KA-9-D-51, 5/22/2015 11:10:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	1.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	70	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.17	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	58	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	10	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	8.9	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	3.1	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	100	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		3
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	24	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	24	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:43	ARD	PE-OP3	0.943	BYF0110
2	EPA-7471A	06/04/15	06/05/15 14:28	MEV	CETAC1	0.962	BYF0429
3	EPA-6010B	06/01/15	06/03/15 07:31	ARD	PE-OP3	0.943	BYF0110





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### PCB Analysis (EPA Method 8082)

**BCL Sample ID:** 1512851-07      **Client Sample Name:** KA-27-D-6, 5/22/2015 1:40:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	55.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/29/15	06/01/15 15:48	ZZZ	GC-15	1.003	BYF0052



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-07		Client Sample Name: KA-27-D-6, 5/22/2015 1:40:00PM, Mike Van Den Eenden/11083		MB	Lab	Run #		
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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Project: 138810  
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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-07 Client Sample Name: KA-27-D-6, 5/22/2015 1:40:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-07      **Client Sample Name:** KA-27-D-6, 5/22/2015 1:40:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
4-Bromofluorobenzene (Surrogate)	98.8	%	74 - 121 (LCL - UCL)	EPA-8260B		Bias	Quals	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 01:06	ADC	MS-V2	1	BYE2371



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

**BCL Sample ID:** 1512851-07      **Client Sample Name:** KA-27-D-6, 5/22/2015 1:40:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	68.0	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/29/15	06/02/15 11:25	MWB	GC-13	1.014	BYF0064



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

**EPA Method 1664**

**BCL Sample ID:** 1512851-07      **Client Sample Name:** KA-27-D-6, 5/22/2015 1:40:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.992	BYF0412



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-07      **Client Sample Name:** KA-27-D-6, 5/22/2015 1:40:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	6.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	98	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.45	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	25	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.6	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	13	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	6.0	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	24	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		3
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	52	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	31	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:44	ARD	PE-OP3	0.943	BYF0110
2	EPA-7471A	06/04/15	06/05/15 14:31	MEV	CETAC1	0.977	BYF0429
3	EPA-6010B	06/01/15	06/03/15 07:33	ARD	PE-OP3	0.943	BYF0110



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**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512851-08	<b>Client Sample Name:</b> KA-27-D-36, 5/22/2015 3:00:00PM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND   mg/kg   0.010   0.0027   EPA-8082   ND   ND   1
PCB-1221	ND   mg/kg   0.010   0.0038   EPA-8082   ND   ND   1
PCB-1232	ND   mg/kg   0.010   0.0024   EPA-8082   ND   ND   1
PCB-1242	ND   mg/kg   0.010   0.0040   EPA-8082   ND   ND   1
PCB-1248	ND   mg/kg   0.010   0.0026   EPA-8082   ND   ND   1
PCB-1254	ND   mg/kg   0.010   0.0032   EPA-8082   ND   ND   1
PCB-1260	ND   mg/kg   0.010   0.0016   EPA-8082   ND   ND   1
<b>Total PCB's (Summation)</b>	ND   mg/kg   0.010   0.0050   EPA-8082   ND   ND   1
Decachlorobiphenyl (Surrogate)	60.0   %   40 - 120 (LCL - UCL)   EPA-8082   ND   ND   1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/29/15	06/01/15 15:59	ZZZ	GC-15	1.007	BYF0052





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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-08	Client Sample Name:	KA-27-D-36, 5/22/2015 3:00:00PM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-08 Client Sample Name: KA-27-D-36, 5/22/2015 3:00:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	90.4	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1



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### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-08      **Client Sample Name:** KA-27-D-36, 5/22/2015 3:00:00PM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
4-Bromofluorobenzene (Surrogate)	93.0	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 13:01	ADC	MS-V2	1	BYE2431



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### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512851-08	<b>Client Sample Name:</b> KA-27-D-36, 5/22/2015 3:00:00PM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
TPH - Diesel (FFP)	ND   mg/kg   10   1.2   EPA-8015B/FFP   ND   1
TPH - Motor Oil	ND   mg/kg   20   6.5   EPA-8015B/FFP   ND   1
Tetracosane (Surrogate)	80.6   %   20 - 145 (LCL - UCL)   EPA-8015B/FFP   1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/29/15	06/02/15 11:48	MWB	GC-13	1.007	BYF0064



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### EPA Method 1664

**BCL Sample ID:** 1512851-08      **Client Sample Name:** KA-27-D-36, 5/22/2015 3:00:00PM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.994	BYF0412



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-08      **Client Sample Name:** KA-27-D-36, 5/22/2015 3:00:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	0.97	mg/kg	1.0	0.40	EPA-6010B	ND	J	1
Barium	25	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.26	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	24	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	3.6	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	5.8	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	3.3	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	13	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		3
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	24	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	12	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:46	ARD	PE-OP3	0.962	BYF0110
2	EPA-7471A	06/04/15	06/05/15 14:33	MEV	CETAC1	0.992	BYF0429
3	EPA-6010B	06/01/15	06/03/15 07:34	ARD	PE-OP3	0.962	BYF0110



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512851-09	<b>Client Sample Name:</b> KA-27-D-46, 5/22/2015 3:35:00PM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    mg/kg    0.010    0.0027    EPA-8082    ND          1
PCB-1221	ND    mg/kg    0.010    0.0038    EPA-8082    ND          1
PCB-1232	ND    mg/kg    0.010    0.0024    EPA-8082    ND          1
PCB-1242	ND    mg/kg    0.010    0.0040    EPA-8082    ND          1
PCB-1248	ND    mg/kg    0.010    0.0026    EPA-8082    ND          1
PCB-1254	ND    mg/kg    0.010    0.0032    EPA-8082    ND          1
PCB-1260	ND    mg/kg    0.010    0.0016    EPA-8082    ND          1
Total PCB's (Summation)	ND    mg/kg    0.010    0.0050    EPA-8082    ND          1
Decachlorobiphenyl (Surrogate)	58.3    %    40 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/29/15	06/01/15 16:09	ZZZ	GC-15	1.014	BYF0052



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-09	Client Sample Name:	KA-27-D-46, 5/22/2015 3:35:00PM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1





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Reported: 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-09 Client Sample Name: KA-27-D-46, 5/22/2015 3:35:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	87.5	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-09      **Client Sample Name:** KA-27-D-46, 5/22/2015 3:35:00PM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
4-Bromofluorobenzene (Surrogate)	93.1	%	74 - 121 (LCL - UCL)	EP	8260B	Bias	Quals	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 01:51	ADC	MS-V2	1	BYE2431



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512851-09	<b>Client Sample Name:</b> KA-27-D-46, 5/22/2015 3:35:00PM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	75.6    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/29/15	06/02/15 12:11	MWB	GC-13	1.003	BYF0064



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Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512851-09      **Client Sample Name:** KA-27-D-46, 5/22/2015 3:35:00PM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.996	BYF0412



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-09      **Client Sample Name:** KA-27-D-46, 5/22/2015 3:35:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	3.9	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	210	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.31	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	31	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.1	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	16	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	6.0	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	64	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		3
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	40	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	35	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:47	ARD	PE-OP3	0.943	BYF0110
2	EPA-7471A	06/08/15	06/09/15 09:16	MEV	CETAC1	1.025	BYF0706
3	EPA-6010B	06/01/15	06/03/15 07:36	ARD	PE-OP3	0.943	BYF0110



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**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512851-10	<b>Client Sample Name:</b> KA-26-D-6, 5/26/2015 8:45:00AM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND   mg/kg   0.010   0.0027   EPA-8082   ND   ND   1
PCB-1221	ND   mg/kg   0.010   0.0038   EPA-8082   ND   ND   1
PCB-1232	ND   mg/kg   0.010   0.0024   EPA-8082   ND   ND   1
PCB-1242	ND   mg/kg   0.010   0.0040   EPA-8082   ND   ND   1
PCB-1248	ND   mg/kg   0.010   0.0026   EPA-8082   ND   ND   1
PCB-1254	ND   mg/kg   0.010   0.0032   EPA-8082   ND   ND   1
PCB-1260	ND   mg/kg   0.010   0.0016   EPA-8082   ND   ND   1
<b>Total PCB's (Summation)</b>	ND   mg/kg   0.010   0.0050   EPA-8082   ND   ND   1
Decachlorobiphenyl (Surrogate)	55.0   %   40 - 120 (LCL - UCL)   EPA-8082   ND   ND   1

Run #	Method	Prep Date	Run			QC	
			Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8082	05/29/15	06/01/15 16:51	ZZZ	GC-15	1.003	BYF0052



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-10	Client Sample Name:	KA-26-D-6, 5/26/2015 8:45:00AM, Mike Van Den Eerden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-10 Client Sample Name: KA-26-D-6, 5/26/2015 8:45:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.2	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260B			1





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Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-10      **Client Sample Name:** KA-26-D-6, 5/26/2015 8:45:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
4-Bromofluorobenzene (Surrogate)	92.1	%	74 - 121 (LCL - UCL)	EPA-8260B		Bias	Quals	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 02:14	ADC	MS-V2	1	BYE2431



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

**BCL Sample ID:** 1512851-10      **Client Sample Name:** KA-26-D-6, 5/26/2015 8:45:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	71.8	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/29/15	06/02/15 12:34	MWB	GC-13	1.007	BYF0064



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

**EPA Method 1664**

**BCL Sample ID:** 1512851-10      **Client Sample Name:** KA-26-D-6, 5/26/2015 8:45:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.996	BYF0412



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-10      **Client Sample Name:** KA-26-D-6, 5/26/2015 8:45:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	3.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	86	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.38	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	27	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	7.8	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	15	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	5.3	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	25	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		3
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	47	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	33	mg/kg	2.5	0.087	EPA-6010B	0.16		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:49	ARD	PE-OP3	1	BYF0110
2	EPA-7471A	06/08/15	06/09/15 09:18	MEV	CETAC1	1.025	BYF0706
3	EPA-6010B	06/01/15	06/03/15 07:38	ARD	PE-OP3	1	BYF0110



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Project: 138810  
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Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512851-11	<b>Client Sample Name:</b> KA-26-D-36, 5/26/2015 9:50:00AM, Mike Van Den Eenden/11083	
<b>Constituent</b>	<b>Result</b>	<b>Units PQL MDL Method MB Bias Lab Quats Run #</b>
PCB-1016	ND	mg/kg 0.010 0.0027 EPA-8082 ND 1
PCB-1221	ND	mg/kg 0.010 0.0038 EPA-8082 ND 1
PCB-1232	ND	mg/kg 0.010 0.0024 EPA-8082 ND 1
PCB-1242	ND	mg/kg 0.010 0.0040 EPA-8082 ND 1
PCB-1248	ND	mg/kg 0.010 0.0026 EPA-8082 ND 1
PCB-1254	ND	mg/kg 0.010 0.0032 EPA-8082 ND 1
PCB-1260	ND	mg/kg 0.010 0.0016 EPA-8082 ND 1
Total PCB's (Summation)	ND	mg/kg 0.010 0.0050 EPA-8082 ND 1
Decachlorobiphenyl (Surrogate)	55.0	% 40 - 120 (LCL - UCL) EPA-8082 1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/29/15	06/01/15 17:02	ZZZ	GC-15	0.997	BYF0052



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-11	Client Sample Name:	KA-26-D-36, 5/26/2015 9:50:00AM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-11	Client Sample Name:	KA-26-D-36, 5/26/2015 9:50:00AM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1



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Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-11      **Client Sample Name:** KA-26-D-36, 5/26/2015 9:50:00AM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
4-Bromofluorobenzene (Surrogate)	96.0	%	74 - 121 (LCL - UCL)	EP	8260B	Bias	Quals	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 11:29	ADC	MS-V2	1	BYE2431





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### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512851-11	<b>Client Sample Name:</b> KA-26-D-36, 5/26/2015 9:50:00AM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	70.1    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/29/15	06/02/15 12:57	MWB	GC-13	1.014	BYF0064



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### EPA Method 1664

**BCL Sample ID:** 1512851-11      **Client Sample Name:** KA-26-D-36, 5/26/2015 9:50:00AM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.992	BYF0412



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**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-11 **Client Sample Name:** KA-26-D-36, 5/26/2015 9:50:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	0.79	mg/kg	1.0	0.40	EPA-6010B	ND	J	1
Barium	19	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.31	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	22	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	3.9	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	7.9	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	3.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	18	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		3
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	20	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	17	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:50	ARD	PE-OP3	0.935	BYF0110
2	EPA-7471A	06/08/15	06/09/15 09:20	MEV	CETAC1	1.008	BYF0706
3	EPA-6010B	06/01/15	06/03/15 07:39	ARD	PE-OP3	0.935	BYF0110



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### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512851-12	<b>Client Sample Name:</b> KA-26-D-51, 5/26/2015 10:55:00AM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    mg/kg    0.010    0.0027    EPA-8082    ND          1
PCB-1221	ND    mg/kg    0.010    0.0038    EPA-8082    ND          1
PCB-1232	ND    mg/kg    0.010    0.0024    EPA-8082    ND          1
PCB-1242	ND    mg/kg    0.010    0.0040    EPA-8082    ND          1
PCB-1248	ND    mg/kg    0.010    0.0026    EPA-8082    ND          1
PCB-1254	ND    mg/kg    0.010    0.0032    EPA-8082    ND          1
PCB-1260	ND    mg/kg    0.010    0.0016    EPA-8082    ND          1
Total PCB's (Summation)	ND    mg/kg    0.010    0.0050    EPA-8082    ND          1
Decachlorobiphenyl (Surrogate)	63.3    %    40 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/29/15	06/01/15 17:13	ZZZ	GC-15	1	BYF0052



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-12	Client Sample Name:	KA-26-D-51, 5/26/2015 10:55:00AM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-12		Client Sample Name: KA-26-D-51, 5/26/2015 10:55:00AM, Mike Van Den Eenden/11083		MB	Lab	Run #		
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.8	%	81 - 117 (LCL - UCL)		EPA-8260B			1



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-12      **Client Sample Name:** KA-26-D-51, 5/26/2015 10:55:00AM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
4-Bromofluorobenzene (Surrogate)	97.5	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/01/15	06/01/15 19:36	ADC	MS-V2	1	BYF0077



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512851-12	<b>Client Sample Name:</b> KA-26-D-51, 5/26/2015 10:55:00AM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND          1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND          1
Tetracosane (Surrogate)	61.6    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/29/15	06/02/15 13:20	MWB	GC-13	1.017	BYF0064





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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1512851-12      **Client Sample Name:** KA-26-D-51, 5/26/2015 10:55:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.990	BYF0412



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-12      **Client Sample Name:** KA-26-D-51, 5/26/2015 10:55:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	3.3	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	160	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.47	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	23	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	11	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	25	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	7.9	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	28	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		3
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	79	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	49	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:52	ARD	PE-OP3	0.943	BYF0110
2	EPA-7471A	06/08/15	06/09/15 09:27	MEV	CETAC1	0.992	BYF0706
3	EPA-6010B	06/01/15	06/03/15 07:51	ARD	PE-OP3	0.943	BYF0110



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512851-13	<b>Client Sample Name:</b> KA-15-D-6, 5/26/2015 1:15:00PM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    mg/kg    0.010    0.0027    EPA-8082    ND          1
PCB-1221	ND    mg/kg    0.010    0.0038    EPA-8082    ND          1
PCB-1232	ND    mg/kg    0.010    0.0024    EPA-8082    ND          1
PCB-1242	ND    mg/kg    0.010    0.0040    EPA-8082    ND          1
PCB-1248	ND    mg/kg    0.010    0.0026    EPA-8082    ND          1
PCB-1254	ND    mg/kg    0.010    0.0032    EPA-8082    ND          1
PCB-1260	ND    mg/kg    0.010    0.0016    EPA-8082    ND          1
<b>Total PCB's (Summation)</b>	ND    mg/kg    0.010    0.0050    EPA-8082    ND          1
<b>Decachlorobiphenyl (Surrogate)</b>	55.0    %    40 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run			QC	
			Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8082	05/29/15	06/01/15 17:23	ZZZ	GC-15	0.993	BYF0052



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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-13	Client Sample Name:	KA-15-D-6, 5/26/2015 1:15:00PM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoforn	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-13 Client Sample Name: KA-15-D-6, 5/26/2015 1:15:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	0.061	mg/kg	0.20	0.020	Luft-GC/MS	ND	J	1
1,2-Dichloroethane-4d (Surrogate)	112	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-13      **Client Sample Name:** KA-15-D-6, 5/26/2015 1:15:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 02:59	ADC	MS-V2	1	BYE2431



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### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512851-13	<b>Client Sample Name:</b> KA-15-D-6, 5/26/2015 1:15:00PM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	7.1    mg/kg    10    1.2    EPA-8015B/FFP    ND    JA52    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND       1
Tetracosane (Surrogate)	69.5    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/29/15	06/02/15 13:43	MWB	GC-13	0.987	BYF0064



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### EPA Method 1664

**BCL Sample ID:** 1512851-13      **Client Sample Name:** KA-15-D-6, 5/26/2015 1:15:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	1	BYF0412





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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-13      **Client Sample Name:** KA-15-D-6, 5/26/2015 1:15:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	4.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	96	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.45	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	26	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.2	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	16	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	5.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	26	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		3
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	48	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	32	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 18:54	ARD	PE-OP3	0.926	BYF0110
2	EPA-7471A	06/08/15	06/09/15 09:29	MEV	CETAC1	0.977	BYF0706
3	EPA-6010B	06/01/15	06/03/15 07:55	ARD	PE-OP3	0.926	BYF0110



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### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512851-14	<b>Client Sample Name:</b> KA-15-D-36, 5/26/2015 2:15:00PM, Mike Van Den Eenden/11083	
<b>Constituent</b>	<b>Result</b>	<b>Units PQL MDL Method MB Bias Lab Quats Run #</b>
PCB-1016	ND	mg/kg 0.010 0.0027 EPA-8082 ND
PCB-1221	ND	mg/kg 0.010 0.0038 EPA-8082 ND
PCB-1232	ND	mg/kg 0.010 0.0024 EPA-8082 ND
PCB-1242	ND	mg/kg 0.010 0.0040 EPA-8082 ND
PCB-1248	ND	mg/kg 0.010 0.0026 EPA-8082 ND
PCB-1254	ND	mg/kg 0.010 0.0032 EPA-8082 ND
PCB-1260	ND	mg/kg 0.010 0.0016 EPA-8082 ND
Total PCB's (Summation)	ND	mg/kg 0.010 0.0050 EPA-8082 ND
Decachlorobiphenyl (Surrogate)	58.3	% 40 - 120 (LCL - UCL) EPA-8082

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	05/29/15	06/01/15 17:34	ZZZ	GC-15	1	BYF0052



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-14	Client Sample Name:	KA-15-D-36, 5/26/2015 2:15:00PM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512851-14		Client Sample Name: KA-15-D-36, 5/26/2015 2:15:00PM, Mike Van Den Eenden/11083		MB	Lab	Run #		
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>0.083</b>	<b>mg/kg</b>	<b>0.20</b>	<b>0.020</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>J</b>	<b>1</b>
1,2-Dichloroethane-4d (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-14      **Client Sample Name:** KA-15-D-36, 5/26/2015 2:15:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.1	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 03:22	ADC	MS-V2	1	BYE2431



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Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512851-14	<b>Client Sample Name:</b> KA-15-D-36, 5/26/2015 2:15:00PM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	4.0    mg/kg    10    1.2    EPA-8015B/FFP    ND    J,A52    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND       1
Tetracosane (Surrogate)	70.3    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/29/15	06/02/15 14:06	MWB	GC-13	1.014	BYF0064



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### EPA Method 1664

**BCL Sample ID:** 1512851-14      **Client Sample Name:** KA-15-D-36, 5/26/2015 2:15:00PM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	0.992	BYF0412



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**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLIC)

**BCL Sample ID:** 1512851-14      **Client Sample Name:** KA-15-D-36, 5/26/2015 2:15:00PM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	2.5	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.37	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	27	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	11	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	10	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	4.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	26	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		3
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	38	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	24	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 19:00	ARD	PE-OP3	0.952	BYF0110
2	EPA-7471A	06/08/15	06/09/15 09:31	MEV	CETAC1	1.008	BYF0706
3	EPA-6010B	06/01/15	06/03/15 08:00	ARD	PE-OP3	0.952	BYF0110





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### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1512851-15	<b>Client Sample Name:</b> KA-15-D-46, 5/26/2015 2:50:00PM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    mg/kg    0.010    0.0027    EPA-8082    ND          1
PCB-1221	ND    mg/kg    0.010    0.0038    EPA-8082    ND          1
PCB-1232	ND    mg/kg    0.010    0.0024    EPA-8082    ND          1
PCB-1242	ND    mg/kg    0.010    0.0040    EPA-8082    ND          1
PCB-1248	ND    mg/kg    0.010    0.0026    EPA-8082    ND          1
PCB-1254	ND    mg/kg    0.010    0.0032    EPA-8082    ND          1
PCB-1260	ND    mg/kg    0.010    0.0016    EPA-8082    ND          1
Total PCB's (Summation)	ND    mg/kg    0.010    0.0050    EPA-8082    ND          1
Decachlorobiphenyl (Surrogate)	66.7    %    40 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run			QC	
			Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8082	05/29/15	06/01/15 17:44	ZZZ	GC-15	1.010	BYF0052



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-15	Client Sample Name:	KA-15-D-46, 5/26/2015 2:50:00PM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	A40.V01	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1



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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1512851-15	Client Sample Name:	KA-15-D-46, 5/26/2015 2:50:00PM, Mike Van Den Eenden/11083					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl tbutyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	0.065	mg/kg	0.20	0.020	Luft-GC/MS	ND	J	1
1,2-Dichloroethane-4d (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260B			1



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**Project:** 138810  
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**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1512851-15      **Client Sample Name:** KA-15-D-46, 5/26/2015 2:50:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB	Lab	Run #
Toluene-d8 (Surrogate)	103	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.0	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/29/15 03:45	ADC	MS-V2	1	BYE2431



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1512851-15	<b>Client Sample Name:</b> KA-15-D-46, 5/26/2015 2:50:00PM, Mike Van Den Eenden/11083
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    mg/kg    10    1.2    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    mg/kg    20    6.5    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	51.6    %    20 - 145 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time	17:08				MWB	GC-13
1	EPA-8015B/FFP	05/29/15	06/02/15	17:08	MWB	GC-13	1.007	BYF0064	



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Project Number: [none]  
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### EPA Method 1664

**BCL Sample ID:** 1512851-15      **Client Sample Name:** KA-15-D-46, 5/26/2015 2:50:00PM, Mike Van Den Enden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/02/15	06/02/15 12:55	MAM	MAN-SV	1	BYF0412



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**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

BCL Sample ID: 1512851-15 Client Sample Name: KA-15-D-46, 5/26/2015 2:50:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	2.6	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.23	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	23	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	6.6	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	12	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	4.4	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	42	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		3
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	35	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	27	mg/kg	2.5	0.087	EPA-6010B	0.15		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 19:02	ARD	PE-OP3	0.926	BYF0110
2	EPA-7471A	06/08/15	06/09/15 09:33	MEV	CETAC1	0.992	BYF0706
3	EPA-6010B	06/01/15	06/03/15 08:02	ARD	PE-OP3	0.926	BYF0110



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Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0052</b>						
PCB-1016	BYF0052-BLK1	ND	mg/kg	0.010	0.0027	
PCB-1221	BYF0052-BLK1	ND	mg/kg	0.010	0.0038	
PCB-1232	BYF0052-BLK1	ND	mg/kg	0.010	0.0024	
PCB-1242	BYF0052-BLK1	ND	mg/kg	0.010	0.0040	
PCB-1248	BYF0052-BLK1	ND	mg/kg	0.010	0.0026	
PCB-1254	BYF0052-BLK1	ND	mg/kg	0.010	0.0032	
PCB-1260	BYF0052-BLK1	ND	mg/kg	0.010	0.0016	
Total PCB's (Summation)	BYF0052-BLK1	ND	mg/kg	0.010	0.0050	
Decachlorobiphenyl (Surrogate)	BYF0052-BLK1	81.7	%	40 - 120 (LCL - UCL)		





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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	Percent Recovery	
<b>QC Batch ID: BYF0052</b>									
PCB-1016	BYF0052-BS1	LCS	0.086149	0.082508	mg/kg	103	60 - 120		
PCB-1260	BYF0052-BS1	LCS	0.070627	0.082508	mg/kg	85.6	60 - 120		
Decachlorobiphenyl (Surrogate)	BYF0052-BS1	LCS	0.014851	0.019802	mg/kg	75.0	40 - 120		



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Project: 138810  
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Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYF0052</b>										
Used client sample: Y - Description: KA-26-D-6, 05/26/2015 08:45										
PCB-1016	MS	1512851-10	ND	0.10471	0.084175	mg/kg		124		50 - 130
	MSD	1512851-10	ND	0.10709	0.084459	mg/kg	2.2	127		30 50 - 130
PCB-1260	MS	1512851-10	ND	0.072391	0.084175	mg/kg		86.0		50 - 120
	MSD	1512851-10	ND	0.065878	0.084459	mg/kg	9.4	78.0	30	50 - 120
Decachlorobiphenyl (Surrogate)	MS	1512851-10	ND	0.017172	0.020202	mg/kg		85.0		40 - 120
	MSD	1512851-10	ND	0.014189	0.020270	mg/kg	19.0	70.0		40 - 120



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### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2371</b>						
Benzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYE2371-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYE2371-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYE2371-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYE2371-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYE2371-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0012	



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## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2371</b>						
cis-1,3-Dichloropropene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYE2371-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYE2371-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYE2371-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYE2371-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYE2371-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYE2371-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYE2371-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYE2371-BLK1	ND	mg/kg	0.0050	0.0012	
Total Purgeable Petroleum Hydrocarbons	BYE2371-BLK1	ND	mg/kg	0.20	0.020	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYE2371-BLK1</b>	<b>95.8</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYE2371-BLK1</b>	<b>99.5</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYE2371-BLK1</b>	<b>96.4</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		



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### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
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**QC Batch ID: BYE2431**

Benzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYE2431-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYE2431-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYE2431-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYE2431-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYE2431-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0012	



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**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYE2431</b>						
cis-1,3-Dichloropropene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYE2431-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYE2431-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYE2431-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYE2431-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYE2431-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYE2431-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYE2431-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYE2431-BLK1	ND	mg/kg	0.0050	0.0012	
Total Purgeable Petroleum Hydrocarbons	BYE2431-BLK1	ND	mg/kg	0.20	0.020	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYE2431-BLK1</b>	<b>95.9</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYE2431-BLK1</b>	<b>104</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYE2431-BLK1</b>	<b>95.7</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		



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## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0077</b>						
Benzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYF0077-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYF0077-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYF0077-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYF0077-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYF0077-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0012	



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**Project Manager:** Sue Gardner

## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0077</b>						
cis-1,3-Dichloropropene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYF0077-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYF0077-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYF0077-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYF0077-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYF0077-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYF0077-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYF0077-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYF0077-BLK1	ND	mg/kg	0.0050	0.0012	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYF0077-BLK1</b>	<b>101</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYF0077-BLK1</b>	<b>99.9</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYF0077-BLK1</b>	<b>98.4</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		





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Reported: 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	Recovery	
<b>QC Batch ID: BYE2371</b>									
Benzene	BYE2371-BS1	LCS	0.12650	0.12500	mg/kg	101	70 - 130		
Bromodichloromethane	BYE2371-BS1	LCS	0.13094	0.12500	mg/kg	105	70 - 130		
Chlorobenzene	BYE2371-BS1	LCS	0.13441	0.12500	mg/kg	108	70 - 130		
Chloroethane	BYE2371-BS1	LCS	0.12212	0.12500	mg/kg	97.7	70 - 130		
1,4-Dichlorobenzene	BYE2371-BS1	LCS	0.13361	0.12500	mg/kg	107	70 - 130		
1,1-Dichloroethane	BYE2371-BS1	LCS	0.12150	0.12500	mg/kg	97.2	70 - 130		
1,1-Dichloroethene	BYE2371-BS1	LCS	0.13025	0.12500	mg/kg	104	70 - 130		
Toluene	BYE2371-BS1	LCS	0.13008	0.12500	mg/kg	104	70 - 130		
Trichloroethene	BYE2371-BS1	LCS	0.13108	0.12500	mg/kg	105	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE2371-BS1	LCS	0.046070	0.050000	mg/kg	92.1	70 - 121		
Toluene-d8 (Surrogate)	BYE2371-BS1	LCS	0.049500	0.050000	mg/kg	99.0	81 - 117		
4-Bromofluorobenzene (Surrogate)	BYE2371-BS1	LCS	0.048980	0.050000	mg/kg	98.0	74 - 121		
<b>QC Batch ID: BYE2431</b>									
Benzene	BYE2431-BS1	LCS	0.13494	0.12500	mg/kg	108	70 - 130		
Bromodichloromethane	BYE2431-BS1	LCS	0.13467	0.12500	mg/kg	108	70 - 130		
Chlorobenzene	BYE2431-BS1	LCS	0.12680	0.12500	mg/kg	101	70 - 130		
Chloroethane	BYE2431-BS1	LCS	0.12075	0.12500	mg/kg	96.6	70 - 130		
1,4-Dichlorobenzene	BYE2431-BS1	LCS	0.12289	0.12500	mg/kg	98.3	70 - 130		
1,1-Dichloroethane	BYE2431-BS1	LCS	0.13017	0.12500	mg/kg	104	70 - 130		
1,1-Dichloroethene	BYE2431-BS1	LCS	0.13391	0.12500	mg/kg	107	70 - 130		
Toluene	BYE2431-BS1	LCS	0.13353	0.12500	mg/kg	107	70 - 130		
Trichloroethene	BYE2431-BS1	LCS	0.12866	0.12500	mg/kg	103	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE2431-BS1	LCS	0.051380	0.050000	mg/kg	103	70 - 121		
Toluene-d8 (Surrogate)	BYE2431-BS1	LCS	0.050670	0.050000	mg/kg	101	81 - 117		
4-Bromofluorobenzene (Surrogate)	BYE2431-BS1	LCS	0.048790	0.050000	mg/kg	97.6	74 - 121		
<b>QC Batch ID: BYF0077</b>									
Benzene	BYF0077-BS1	LCS	0.12634	0.12500	mg/kg	101	70 - 130		
Bromodichloromethane	BYF0077-BS1	LCS	0.11937	0.12500	mg/kg	95.5	70 - 130		
Chlorobenzene	BYF0077-BS1	LCS	0.11959	0.12500	mg/kg	95.7	70 - 130		
Chloroethane	BYF0077-BS1	LCS	0.13064	0.12500	mg/kg	105	70 - 130		
1,4-Dichlorobenzene	BYF0077-BS1	LCS	0.12773	0.12500	mg/kg	102	70 - 130		
1,1-Dichloroethane	BYF0077-BS1	LCS	0.12498	0.12500	mg/kg	100	70 - 130		
1,1-Dichloroethene	BYF0077-BS1	LCS	0.11274	0.12500	mg/kg	90.2	70 - 130		



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**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	RPD	
<b>QC Batch ID: BYF0077</b>									
Toluene	BYF0077-BS1	LCS	0.12127	0.12500	mg/kg	97.0	70	130	
Trichloroethene	BYF0077-BS1	LCS	0.11892	0.12500	mg/kg	95.1	70	130	
1,2-Dichloroethane-d4 (Surrogate)	BYF0077-BS1	LCS	0.051640	0.050000	mg/kg	103	70	121	
Toluene-d8 (Surrogate)	BYF0077-BS1	LCS	0.050710	0.050000	mg/kg	101	81	117	
4-Bromofluorobenzene (Surrogate)	BYF0077-BS1	LCS	0.049350	0.050000	mg/kg	98.7	74	121	



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### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYE2371</b> Used client sample: N										
Benzene	MS	1511019-44	ND	0.11544	0.12500	mg/kg		92.4	70 - 130	
	MSD	1511019-44	ND	0.11970	0.12500	mg/kg	3.6	95.8	20	70 - 130
Bromodichloromethane	MS	1511019-44	ND	0.11963	0.12500	mg/kg		95.7	70 - 130	
	MSD	1511019-44	ND	0.12058	0.12500	mg/kg	0.8	96.5	20	70 - 130
Chlorobenzene	MS	1511019-44	ND	0.11146	0.12500	mg/kg		89.2	70 - 130	
	MSD	1511019-44	ND	0.11335	0.12500	mg/kg	1.7	90.7	20	70 - 130
Chloroethane	MS	1511019-44	ND	0.11223	0.12500	mg/kg		89.8	70 - 130	
	MSD	1511019-44	ND	0.11557	0.12500	mg/kg	2.9	92.5	20	70 - 130
1,4-Dichlorobenzene	MS	1511019-44	ND	0.10935	0.12500	mg/kg		87.5	70 - 130	
	MSD	1511019-44	ND	0.11433	0.12500	mg/kg	4.5	91.5	20	70 - 130
1,1-Dichloroethane	MS	1511019-44	ND	0.11028	0.12500	mg/kg		88.2	70 - 130	
	MSD	1511019-44	ND	0.11590	0.12500	mg/kg	5.0	92.7	20	70 - 130
1,1-Dichloroethene	MS	1511019-44	ND	0.11661	0.12500	mg/kg		93.3	70 - 130	
	MSD	1511019-44	ND	0.12247	0.12500	mg/kg	4.9	98.0	20	70 - 130
Toluene	MS	1511019-44	ND	0.11805	0.12500	mg/kg		94.4	70 - 130	
	MSD	1511019-44	ND	0.12200	0.12500	mg/kg	3.3	97.6	20	70 - 130
Trichloroethene	MS	1511019-44	ND	0.11712	0.12500	mg/kg		93.7	70 - 130	
	MSD	1511019-44	ND	0.11769	0.12500	mg/kg	0.5	94.2	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-44	ND	0.048830	0.050000	mg/kg		97.7	70 - 121	
	MSD	1511019-44	ND	0.050790	0.050000	mg/kg	3.9	102		70 - 121
Toluene-d8 (Surrogate)	MS	1511019-44	ND	0.049920	0.050000	mg/kg		99.8	81 - 117	
	MSD	1511019-44	ND	0.050450	0.050000	mg/kg	1.1	101		81 - 117
4-Bromofluorobenzene (Surrogate)	MS	1511019-44	ND	0.049170	0.050000	mg/kg		98.3	74 - 121	
	MSD	1511019-44	ND	0.049460	0.050000	mg/kg	0.6	98.9		74 - 121
<b>QC Batch ID: BYE2431</b> Used client sample: N										
Benzene	MS	1511019-45	ND	0.11768	0.12500	mg/kg		94.1	70 - 130	
	MSD	1511019-45	ND	0.12328	0.12500	mg/kg	4.6	98.6	20	70 - 130
Bromodichloromethane	MS	1511019-45	ND	0.12019	0.12500	mg/kg		96.2	70 - 130	
	MSD	1511019-45	ND	0.12400	0.12500	mg/kg	3.1	99.2	20	70 - 130
Chlorobenzene	MS	1511019-45	ND	0.11121	0.12500	mg/kg		89.0	70 - 130	
	MSD	1511019-45	ND	0.11429	0.12500	mg/kg	2.7	91.4	20	70 - 130
Chloroethane	MS	1511019-45	ND	0.10168	0.12500	mg/kg		81.3	70 - 130	
	MSD	1511019-45	ND	0.11107	0.12500	mg/kg	8.8	88.9	20	70 - 130
1,4-Dichlorobenzene	MS	1511019-45	ND	0.10980	0.12500	mg/kg		87.8	70 - 130	
	MSD	1511019-45	ND	0.11175	0.12500	mg/kg	1.8	89.4	20	70 - 130
1,1-Dichloroethane	MS	1511019-45	ND	0.11160	0.12500	mg/kg		89.3	70 - 130	
	MSD	1511019-45	ND	0.11928	0.12500	mg/kg	6.7	95.4	20	70 - 130



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### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery

**QC Batch ID: BYE2431**

Used client sample: N

1,1-Dichloroethene	MS	1511019-45	ND	0.11494	0.12500	mg/kg		92.0		70 - 130
	MSD	1511019-45	ND	0.11857	0.12500	mg/kg	3.1	94.9	20	70 - 130
Toluene	MS	1511019-45	ND	0.11680	0.12500	mg/kg		93.4		70 - 130
	MSD	1511019-45	ND	0.12010	0.12500	mg/kg	2.8	96.1	20	70 - 130
Trichloroethene	MS	1511019-45	ND	0.11331	0.12500	mg/kg		90.6		70 - 130
	MSD	1511019-45	ND	0.11820	0.12500	mg/kg	4.2	94.6	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-45	ND	0.051930	0.050000	mg/kg		104		70 - 121
	MSD	1511019-45	ND	0.052220	0.050000	mg/kg	0.6	104		70 - 121
Toluene-d8 (Surrogate)	MS	1511019-45	ND	0.051410	0.050000	mg/kg		103		81 - 117
	MSD	1511019-45	ND	0.050470	0.050000	mg/kg	1.8	101		81 - 117
4-Bromofluorobenzene (Surrogate)	MS	1511019-45	ND	0.050990	0.050000	mg/kg		102		74 - 121
	MSD	1511019-45	ND	0.049840	0.050000	mg/kg	2.3	99.7		74 - 121

**QC Batch ID: BYF0077**

Used client sample: N

Benzene	MS	1511019-47	ND	0.11927	0.12500	mg/kg		95.4		70 - 130
	MSD	1511019-47	ND	0.11729	0.12500	mg/kg	1.7	93.8	20	70 - 130
Bromodichloromethane	MS	1511019-47	ND	0.11258	0.12500	mg/kg		90.1		70 - 130
	MSD	1511019-47	ND	0.11143	0.12500	mg/kg	1.0	89.1	20	70 - 130
Chlorobenzene	MS	1511019-47	ND	0.10852	0.12500	mg/kg		86.8		70 - 130
	MSD	1511019-47	ND	0.11076	0.12500	mg/kg	2.0	88.6	20	70 - 130
Chloroethane	MS	1511019-47	ND	0.11506	0.12500	mg/kg		92.0		70 - 130
	MSD	1511019-47	ND	0.11280	0.12500	mg/kg	2.0	90.2	20	70 - 130
1,4-Dichlorobenzene	MS	1511019-47	ND	0.11156	0.12500	mg/kg		89.2		70 - 130
	MSD	1511019-47	ND	0.11483	0.12500	mg/kg	2.9	91.9	20	70 - 130
1,1-Dichloroethane	MS	1511019-47	ND	0.11786	0.12500	mg/kg		94.3		70 - 130
	MSD	1511019-47	ND	0.11705	0.12500	mg/kg	0.7	93.6	20	70 - 130
1,1-Dichloroethene	MS	1511019-47	ND	0.10787	0.12500	mg/kg		86.3		70 - 130
	MSD	1511019-47	ND	0.10544	0.12500	mg/kg	2.3	84.4	20	70 - 130
Toluene	MS	1511019-47	ND	0.11491	0.12500	mg/kg		91.9		70 - 130
	MSD	1511019-47	ND	0.11385	0.12500	mg/kg	0.9	91.1	20	70 - 130
Trichloroethene	MS	1511019-47	ND	0.11296	0.12500	mg/kg		90.4		70 - 130
	MSD	1511019-47	ND	0.11161	0.12500	mg/kg	1.2	89.3	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-47	ND	0.054570	0.050000	mg/kg		109		70 - 121
	MSD	1511019-47	ND	0.053160	0.050000	mg/kg	2.6	106		70 - 121
Toluene-d8 (Surrogate)	MS	1511019-47	ND	0.050760	0.050000	mg/kg		102		81 - 117
	MSD	1511019-47	ND	0.050650	0.050000	mg/kg	0.2	101		81 - 117
4-Bromofluorobenzene (Surrogate)	MS	1511019-47	ND	0.050070	0.050000	mg/kg		100		74 - 121
	MSD	1511019-47	ND	0.049640	0.050000	mg/kg	0.9	99.3		74 - 121



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**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0064</b>						
TPH - Diesel (FFP)	BYF0064-BLK1	ND	mg/kg	10	1.2	
TPH - Motor Oil	BYF0064-BLK1	ND	mg/kg	20	6.5	
<b>Tetracosane (Surrogate)</b>	<b>BYF0064-BLK1</b>	<b>70.6</b>	<b>%</b>	<b>20 - 145 (LCL - UCL)</b>		



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### Total Petroleum Hydrocarbons

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	RPD	
<b>QC Batch ID: BYF0064</b>									
TPH - Diesel (FFP)	BYF0064-BS1	LCS	62.949	83.893	mg/kg	75.0	64	124	
Tetracosane (Surrogate)	BYF0064-BS1	LCS	2.6121	3.3557	mg/kg	77.8	20	145	



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### Total Petroleum Hydrocarbons

#### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYF0064</b>										
Used client sample: Y - Description: KA-15-D-46, 05/26/2015 14:50										
TPH - Diesel (FFP)	MS	1512851-15	ND	59.885	83.333	mg/kg	8.2	71.9	52 - 131	
	MSD	1512851-15	ND	64.998	83.056	mg/kg	8.2	78.3	30 - 52 - 131	
Tetracosane (Surrogate)	MS	1512851-15	ND	2.4483	3.3333	mg/kg	5.8	73.4	20 - 145	
	MSD	1512851-15	ND	2.5955	3.3223	mg/kg	5.8	78.1	20 - 145	



**BC Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

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### EPA Method 1664

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Oil and Grease	BYF0412-BLK1	ND	mg/kg	50	25	





**BC Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

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### EPA Method 1664

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	Percent Recovery	
Oil and Grease	BYF0412-BS1	LCS	697.03	778.22	mg/kg	89.6		59 - 117	

**QC Batch ID: BYF0412**



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### EPA Method 1664

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYF0412</b>										
Used client sample: N										
Oil and Grease	DUP	1511019-41	ND	ND		mg/kg			30	
	MS	1511019-41	ND	727.63	781.31	mg/kg		93.1		56 - 111
	MSD	1511019-41	ND	678.93	781.31	mg/kg	6.9	86.9	30	56 - 111



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### Total Concentrations (TTLC)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0110</b>						
Antimony	BYF0110-BLK1	ND	mg/kg	5.0	0.33	
Arsenic	BYF0110-BLK1	ND	mg/kg	1.0	0.40	
Barium	BYF0110-BLK1	ND	mg/kg	0.50	0.18	
Beryllium	BYF0110-BLK1	ND	mg/kg	0.50	0.047	
Cadmium	BYF0110-BLK1	ND	mg/kg	0.50	0.052	
Chromium	BYF0110-BLK1	ND	mg/kg	0.50	0.050	
Cobalt	BYF0110-BLK1	ND	mg/kg	2.5	0.098	
Copper	BYF0110-BLK1	ND	mg/kg	1.0	0.050	
Lead	BYF0110-BLK1	ND	mg/kg	2.5	0.28	
Molybdenum	BYF0110-BLK1	ND	mg/kg	2.5	0.050	
Nickel	BYF0110-BLK1	ND	mg/kg	0.50	0.15	
Selenium	BYF0110-BLK1	ND	mg/kg	1.0	0.98	
Silver	BYF0110-BLK1	ND	mg/kg	0.50	0.067	
Thallium	BYF0110-BLK1	ND	mg/kg	5.0	0.64	
Vanadium	BYF0110-BLK1	ND	mg/kg	0.50	0.11	
Zinc	BYF0110-BLK1	0.15781	mg/kg	2.5	0.087	J
<b>QC Batch ID: BYF0263</b>						
Mercury	BYF0263-BLK1	ND	mg/kg	0.16	0.036	
<b>QC Batch ID: BYF0429</b>						
Mercury	BYF0429-BLK1	ND	mg/kg	0.16	0.036	
<b>QC Batch ID: BYF0706</b>						
Mercury	BYF0706-BLK1	ND	mg/kg	0.16	0.036	



SMUD  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0110</b>										
Antimony	BYF0110-BS1	LCS	104.86	100.00	mg/kg	105		75	- 125	
Arsenic	BYF0110-BS1	LCS	10.533	10.000	mg/kg	105		75	- 125	
Barium	BYF0110-BS1	LCS	99.125	100.00	mg/kg	99.1		75	- 125	
Beryllium	BYF0110-BS1	LCS	10.024	10.000	mg/kg	100		75	- 125	
Cadmium	BYF0110-BS1	LCS	10.324	10.000	mg/kg	103		75	- 125	
Chromium	BYF0110-BS1	LCS	107.01	100.00	mg/kg	107		75	- 125	
Cobalt	BYF0110-BS1	LCS	101.50	100.00	mg/kg	101		75	- 125	
Copper	BYF0110-BS1	LCS	96.878	100.00	mg/kg	96.9		75	- 125	
Lead	BYF0110-BS1	LCS	100.30	100.00	mg/kg	100		75	- 125	
Molybdenum	BYF0110-BS1	LCS	100.68	100.00	mg/kg	101		75	- 125	
Nickel	BYF0110-BS1	LCS	108.90	100.00	mg/kg	109		75	- 125	
Selenium	BYF0110-BS1	LCS	10.682	10.000	mg/kg	107		75	- 125	
Silver	BYF0110-BS1	LCS	9.8942	10.000	mg/kg	98.9		75	- 125	
Thallium	BYF0110-BS1	LCS	116.07	100.00	mg/kg	116		75	- 125	
Vanadium	BYF0110-BS1	LCS	110.15	100.00	mg/kg	110		75	- 125	
Zinc	BYF0110-BS1	LCS	99.818	100.00	mg/kg	99.8		75	- 125	
<b>QC Batch ID: BYF0263</b>										
Mercury	BYF0263-BS1	LCS	0.85200	0.80000	mg/kg	106		80	- 120	
<b>QC Batch ID: BYF0429</b>										
Mercury	BYF0429-BS1	LCS	0.84544	0.80000	mg/kg	106		80	- 120	
<b>QC Batch ID: BYF0706</b>										
Mercury	BYF0706-BS1	LCS	0.82736	0.80000	mg/kg	103		80	- 120	



### Total Concentrations (TTLC)

### Quality Control Report - Precision & Accuracy

Constituent	Source	Sample ID	Result	Spike	Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery

QC Batch ID: BYF0110 Used client sample: Y - Description: KA-9-D-6; 05/22/2015 08:40

Antimony	DUP	1512851-04	ND	ND		mg/kg			20		
	MS	1512851-04	ND	11.609	100.00	mg/kg		11.6		16 - 119	Q03
	MSD	1512851-04	ND	11.249	100.00	mg/kg		11.2	20	16 - 119	Q03
Arsenic	DUP	1512851-04	6.2831	6.5296		mg/kg		3.8	20		
	MS	1512851-04	6.2831	15.030	10.000	mg/kg		87.5		75 - 125	
	MSD	1512851-04	6.2831	16.272	10.000	mg/kg		7.9	99.9	20	75 - 125
Barium	DUP	1512851-04	161.99	157.66		mg/kg		2.7	20		
	MS	1512851-04	161.99	251.52	100.00	mg/kg		89.5		75 - 125	
	MSD	1512851-04	161.99	286.58	100.00	mg/kg		13.0	125	20	75 - 125
Beryllium	DUP	1512851-04	0.40242	0.38433		mg/kg		4.6	20		J
	MS	1512851-04	0.40242	9.0817	10.000	mg/kg		86.8		75 - 125	
	MSD	1512851-04	0.40242	8.8919	10.000	mg/kg		2.1	84.9	20	75 - 125
Cadmium	DUP	1512851-04	0.081353	0.057244		mg/kg		34.8	20		J,A02
	MS	1512851-04	0.081353	8.6428	10.000	mg/kg		85.6		75 - 125	
	MSD	1512851-04	0.081353	8.6407	10.000	mg/kg		0.0	85.6	20	75 - 125
Chromium	DUP	1512851-04	43.745	41.826		mg/kg		4.5	20		
	MS	1512851-04	43.745	129.84	100.00	mg/kg		86.1		75 - 125	
	MSD	1512851-04	43.745	134.43	100.00	mg/kg		3.5	90.7	20	75 - 125
Cobalt	DUP	1512851-04	13.195	12.715		mg/kg		3.7	20		
	MS	1512851-04	13.195	92.323	100.00	mg/kg		79.1		75 - 125	
	MSD	1512851-04	13.195	92.190	100.00	mg/kg		0.1	79.0	20	75 - 125
Copper	DUP	1512851-04	29.854	28.857		mg/kg		3.4	20		
	MS	1512851-04	29.854	115.38	100.00	mg/kg		85.5		75 - 125	
	MSD	1512851-04	29.854	119.09	100.00	mg/kg		3.2	89.2	20	75 - 125
Lead	DUP	1512851-04	8.3844	8.1279		mg/kg		3.1	20		
	MS	1512851-04	8.3844	94.597	100.00	mg/kg		86.2		75 - 125	
	MSD	1512851-04	8.3844	94.556	100.00	mg/kg		0.0	86.2	20	75 - 125
Molybdenum	DUP	1512851-04	ND	ND		mg/kg			20		
	MS	1512851-04	ND	72.371	100.00	mg/kg		72.4		75 - 125	Q03
	MSD	1512851-04	ND	68.860	100.00	mg/kg		5.0	68.9	20	75 - 125
Nickel	DUP	1512851-04	59.795	57.696		mg/kg		3.6	20		
	MS	1512851-04	59.795	140.27	100.00	mg/kg		80.5		75 - 125	
	MSD	1512851-04	59.795	149.93	100.00	mg/kg		6.7	90.1	20	75 - 125
Selenium	DUP	1512851-04	ND	ND		mg/kg			20		
	MS	1512851-04	ND	9.6580	10.000	mg/kg		96.6		75 - 125	
	MSD	1512851-04	ND	8.5367	10.000	mg/kg		12.3	85.4	20	75 - 125
Silver	DUP	1512851-04	ND	ND		mg/kg			20		
	MS	1512851-04	ND	8.5409	10.000	mg/kg		85.4		75 - 125	
	MSD	1512851-04	ND	8.3392	10.000	mg/kg		2.4	83.4	20	75 - 125



SMUD  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/09/2015 18:22  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
								RPD	Percent Recovery
<b>QC Batch ID: BYF0110</b>									
Used client sample: Y - Description: KA-9-D-6, 05/22/2015 08:40									
Thallium	DUP	1512851-04	ND	ND	mg/kg			20	
	MS	1512851-04	ND	86.097	mg/kg	100.00	86.1		75 - 125
	MSD	1512851-04	ND	84.429	mg/kg	100.00	84.4	20	75 - 125
Vanadium	DUP	1512851-04	51.514	49.390	mg/kg	4.2	89.2	20	75 - 125
	MS	1512851-04	51.514	140.68	mg/kg	100.00	95.7	20	75 - 125
	MSD	1512851-04	51.514	147.20	mg/kg	100.00	4.5	20	75 - 125
Zinc	DUP	1512851-04	53.513	51.958	mg/kg	2.9	76.3	20	75 - 125
	MS	1512851-04	53.513	129.85	mg/kg	100.00	81.1	20	75 - 125
	MSD	1512851-04	53.513	134.57	mg/kg	100.00	3.6	20	75 - 125
<b>QC Batch ID: BYF0263</b>									
Used client sample: Y - Description: KA-6-D-6, 05/21/2015 13:30									
Mercury	DUP	1512851-01	ND	ND	mg/kg			20	
	MS	1512851-01	ND	0.84109	mg/kg	0.78125	108		80 - 120
	MSD	1512851-01	ND	0.83641	mg/kg	0.78125	107	20	80 - 120
<b>QC Batch ID: BYF0429</b>									
Used client sample: Y - Description: KA-6-D-36, 05/21/2015 14:50									
Mercury	DUP	1512851-02	ND	ND	mg/kg			20	
	MS	1512851-02	ND	0.84839	mg/kg	0.80645	105		80 - 120
	MSD	1512851-02	ND	0.84984	mg/kg	0.80645	105	20	80 - 120
<b>QC Batch ID: BYF0706</b>									
Used client sample: N									
Mercury	DUP	1512771-01	0.079672	0.067705	mg/kg	16.2	102	20	80 - 120
	MS	1512771-01	0.079672	0.91525	mg/kg	0.81967	102		80 - 120
	MSD	1512771-01	0.079672	0.91164	mg/kg	0.81967	0.4	20	80 - 120

J



SMUD  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/09/2015 18:22  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

**Notes And Definitions**

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A02 The difference between duplicate readings is less than the quantitation limit.
- A40 Initial calibration linearity criteria not met.
- A52 Chromatogram not typical of diesel.
- Q03 Matrix spike recovery(s) is(are) not within the control limits.
- V01 The Initial Calibration Verification (ICV) recovery is not within established control limits.



Date of Report: 06/12/2015

Sue Gardner

SMUD

6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Client Project: [none]  
BCL Project: 138810  
BCL Work Order: 1513251  
Invoice ID: B205629

Enclosed are the results of analyses for samples received by the laboratory on 6/2/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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### Total Concentrations (TTLIC)

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PROJECT NO.		PROJECT NAME		RECEIVING LAB.		INSTRUCTIONS/REMARKS			
138810		SMUD		BC Lab		Standard TAT			
L.P. NO. (P.O. NO.)		SAMPLERS (Signature/Number)		NO. OF CON-TAINERS		TYPE OF CON-TAINERS			
Mike Van Den Ender				1		1155 6-Hold			
DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX	ANALYSIS	TPH + EPABED	VOCs (Total)	SUCCS (BATO)	Cam T Models (BATO)	PHS FR BATO
5/27/15	0815	KA-41-D-6	soil	X	X	X	X	X	X
	0850	KA-41-D-26		X	X	X	X	X	X
	0920	KA-41-D-36		X	X	X	X	X	X
	1300	KA-42-D-6		X	X	X	X	X	X
	1410	KA-42-D-26		X	X	X	X	X	X
	1455	KA-42-D-36		X	X	X	X	X	X
5/28/15	0915	KA-5-D-6		X	X	X	X	X	X
	1055	KA-5-D-36		X	X	X	X	X	X
	1200	KA-5-D-46		X	X	X	X	X	X
7/21/15	0835	KA-7-D-6		X	X	X	X	X	X
	1025	KA-7-D-36		X	X	X	X	X	X
	1110	KA-7-D-46		X	X	X	X	X	X
	1320	KA-2-S-6		X	X	X	X	X	X
	1350	KA-2-S-16		X	X	X	X	X	X
				CHIEF DISTRIBUTION					
				SUB-OUT					
Relinquished by: (Signature) <i>[Signature]</i> 4098				Date/Time 6-1-15 1752		Received by: (Signature) <i>[Signature]</i>		Date/Time 6-1-15 1000	
Relinquished by: (Signature) <i>[Signature]</i>				Date/Time 6-1-15 1000		Received by: (Signature) <i>[Signature]</i>		Date/Time 6-2-15	
Relinquished by: (Signature) <i>[Signature]</i>				Date/Time		Received by: (Signature)		Date/Time	
Instructions/Remarks: Sgardner & Kleinfelder con				Send Results To: Kleinfelder 3077 Fite Circle Sac CA 95822 Attn: Sue Gardner					

COC # 18733

Pink - Lab Copy

White - Sampler

Canary - Return Copy To Shipper

**CHAIN OF CUSTODY**

ENV-02 REV 05/08

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PROJECT NO. L.R. NO. (P.O. NO.)	PROJECT NAME SAMPLERS: (Signature/Number)	DATE MM/DD/YY	SAMPLE I.D. HH:MM:SS	MATRIX	NO. OF CON-TAINERS	TYPE OF CON-TAINERS	ANALYSIS	RECEIVING LAB: INSTRUCTIONS/REMARKS									
									DATE/TIME MM/DD/YY	DATE/TIME MM/DD/YY	DATE/TIME MM/DD/YY						
138810	SMVD Mike Van Den Einden	5/27/15	0830	KA-41-D-11	1	SS		BC Labs Standard TAT									
			0830	" -16V				Hold									
			0835	" -21V				Hold									
			0905	" -31V													
			0935	" -41V													
			1315	KA-42-D-11													
			1325	" -16V													
			1340	" -21V													
			1425	" -31V													
			1515	" -41V													
			0930	KA-5-D-11													
			0945	" -16V													
			0955	" -21V													
			1010	" -26V													
			1030	" -31V													
			1125	" -41V													
			0845	KA-7-D-11													
			0915	" -16V													
			0930	" -21V													
			0950	" -26V													
<table border="1"> <tr> <td>Relinquished by: (Signature) <i>[Signature]</i></td> <td>Date/Time 6-10-15 7:52</td> <td>Received by: (Signature) <i>[Signature]</i></td> </tr> <tr> <td>Relinquished by: (Signature) <i>[Signature]</i></td> <td>Date/Time 4/15/10 1000</td> <td>Received by: (Signature) MNR 6/2/15 0800</td> </tr> <tr> <td>Relinquished by: (Signature) <i>[Signature]</i></td> <td>Date/Time</td> <td>Received for Laboratory by: (Signature)</td> </tr> </table>									Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 6-10-15 7:52	Received by: (Signature) <i>[Signature]</i>	Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 4/15/10 1000	Received by: (Signature) MNR 6/2/15 0800	Relinquished by: (Signature) <i>[Signature]</i>	Date/Time	Received for Laboratory by: (Signature)
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 6-10-15 7:52	Received by: (Signature) <i>[Signature]</i>															
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 4/15/10 1000	Received by: (Signature) MNR 6/2/15 0800															
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time	Received for Laboratory by: (Signature)															

Send Results To:  
Kleinfelder SAC  
916 366-1701

Attn:

White - Sampler  
Canary - Return Copy To Shipper  
**CHAIN OF CUSTODY**

Pink - Lab Copy

ENV-02 REV 05/08



PROJECT NO.		PROJECT NAME		DATE	SAMPLE I.D.	MATRIX	NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	RECEIVING LAB:	INSTRUCTIONS/REMARKS
L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number)	SAMPLE I.D.	SAMPLE I.D.								
138810	SMUD	Mike Van Den Erden	KA-7-D-31M Spil	5/27/15	1005		1	SS	X	BC Labs	Standard TAT
-36			11 - 411		1050						
-37			KA-2-S-110		1355						MISSING
-38			11 - 211		1405						Hold
-39			KA-41-D-46 soil	5/27/15	1000						
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
<i>[Signature]</i>	6-1-15 7:53	<i>[Signature]</i>	6/2/15
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
<i>[Signature]</i>	4/15/10 00	MMS	6/2/15
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time

Send Results To:	Attn:
Kleinfelder SAC	916 366-1701

White - Sampler  
Canary - Return Copy To Shipper  
Pink - Lab Copy

**CHAIN OF CUSTODY**

ENV-02 REV/05/08

COC # 18735

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BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 4 Of 4

Submission #: 15-13251

<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input type="checkbox"/> Other <input checked="" type="checkbox"/> (Specify) <u>aircon</u>		<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____	<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____			
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: _____ Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>			
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.50</u> Container: <u>SOIL SLEEVE</u> Thermometer ID: <u>208</u> Date/Time: <u>6/2/15</u> Temperature: (A) <u>2.8</u> °C / (C) _____ °C Analyst Init: <u>MMB 08150</u>	

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE	<u>X10</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
 Sample Numbering Completed By: VN Date/Time: 6/2/15 10:30 (S:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\SAMREC)  
 A = Actual / C = Corrected



BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 2 Of 4

Submission #: 15-13251

SHIPPING INFORMATION: Federal Express  UPS  Hand Delivery  BC Lab Field Service  Other  (Specify) air

SHIPPING CONTAINER: Ice Chest  None  Box  Other  (Specify) \_\_\_\_\_

FREE LIQUID: YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Comments: \_\_\_\_\_

Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received: YES  NO

Emissivity: 0.50 Container: SOIL SLEAVE Thermometer ID: 203 Date/Time: 6/2/15

Temperature: (A) 2.8 °C / (C) \_\_\_\_\_ °C Analyst Init: MWB

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PHA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE	<u>✓</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_

Sample Numbering Completed By: ✓V1 Date/Time: 6/2/15 1030 (S:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\ISAMREC)

A = Actual / C = Corrected





BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 3 Of 4

Submission #: 15-13251

SHIPPING INFORMATION: Federal Express  UPS  Hand Delivery  BC Lab Field Service  Other  (Specify) air

SHIPPING CONTAINER: Ice Chest  None  Box  Other  (Specify) \_\_\_\_\_

FREE LIQUID: YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Comments: \_\_\_\_\_

Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received: YES  NO

Emissivity: 0.50 Container: SOIL SLEEVE Thermometer ID: 208 Date/Time: 6/2/15

Temperature: (A) 2.8 °C / (C) \_\_\_\_\_ °C Analyst Init: MMB

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	21	22	23	24	25	26	27	28	29	30
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE	XOB	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_

Sample Numbering Completed By: MMB Date/Time: 6/2/15 1030 (S:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\SAMREC)

A = Actual / C = Corrected



BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 4 Of 4

Submission #: 15-13251

**SHIPPING INFORMATION**  
 Federal Express  UPS  Hand Delivery  Other  
 BC Lab Field Service  Other  (Specify) Other

**SHIPPING CONTAINER**  
 Ice Chest  None  Box   
 Other  (Specify) \_\_\_\_\_

**FREE LIQUID**  
 YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_  
 Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

**COC Received**  
 YES  NO

Emissivity: 0.50 Container: SOIL SLEEVE Thermometer ID: 208 Date/Time: 6/2/15  
 Temperature: (A) 2.8 °C / (C) \_\_\_\_\_ °C Analyst Init: MMB 08160

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE	<u>XV</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
 Sample Numbering Completed By: VVI Date/Time: 6/2/15 1030 (S:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\ISAMREC)  
 A = Actual / C = Corrected



SMUD  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1513251-01	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/02/2015 10:00
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/27/2015 08:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-41-D-6	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b> Soil
1513251-02	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/02/2015 10:00
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/27/2015 08:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-41-D-26	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b> Soil
1513251-03	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/02/2015 10:00
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/27/2015 09:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-41-D-36	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b> Soil
1513251-04	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/02/2015 10:00
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/27/2015 13:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-42-D-6	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b> Soil
1513251-05	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/02/2015 10:00
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/27/2015 14:10
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-42-D-26	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b> Soil
1513251-06	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/02/2015 10:00
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/27/2015 14:55
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-42-D-36	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b> Soil
1513251-07	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/02/2015 10:00
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 05/28/2015 09:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-5-D-6	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b> Soil

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Sacramento, CA 95852-0830

**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1513251-08	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/28/2015 10:55
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-5-D-36		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083		<b>Sample Type:</b>	Soil
1513251-09	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/28/2015 12:00
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-5-D-46		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083		<b>Sample Type:</b>	Soil
1513251-10	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/29/2015 08:35
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-7-D-6		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083		<b>Sample Type:</b>	Soil
1513251-11	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/29/2015 10:25
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-7-D-36		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083		<b>Sample Type:</b>	Soil
1513251-12	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/29/2015 11:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-7-D-46		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083		<b>Sample Type:</b>	Soil
1513251-13	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/29/2015 13:20
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-2-S-6		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083		<b>Sample Type:</b>	Soil
1513251-14	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/29/2015 13:50
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-2-S-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083		<b>Sample Type:</b>	Soil

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Sacramento, CA 95852-0830

**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1513251-15	<b>COC Number:</b>	---		06/02/2015 10:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/27/2015 08:20
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-41-D-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-16	<b>COC Number:</b>	---		06/02/2015 10:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/27/2015 08:30
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-41-D-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-17	<b>COC Number:</b>	---		06/02/2015 10:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/27/2015 08:35
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-41-D-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-18	<b>COC Number:</b>	---		06/02/2015 10:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/27/2015 09:05
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-41-D-31		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-19	<b>COC Number:</b>	---		06/02/2015 10:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/27/2015 09:35
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-41-D-41		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-20	<b>COC Number:</b>	---		06/02/2015 10:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/27/2015 13:15
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-42-D-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-21	<b>COC Number:</b>	---		06/02/2015 10:00	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/27/2015 13:25
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-42-D-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil

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SMUD  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1513251-22	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/27/2015 13:40
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-42-D-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-23	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/27/2015 14:25
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-42-D-31		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-24	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/27/2015 15:15
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-42-D-41		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-25	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/28/2015 09:30
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-5-D-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-26	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/28/2015 09:45
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-5-D-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-27	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/28/2015 09:55
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-5-D-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-28	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/28/2015 10:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-5-D-26		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1513251-29	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/28/2015 10:30
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-5-D-31		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-30	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/28/2015 11:25
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-5-D-41		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-31	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/29/2015 08:45
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-7-D-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-32	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/29/2015 09:15
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-7-D-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-33	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/29/2015 09:30
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-7-D-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-34	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/29/2015 09:50
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-7-D-26		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil
1513251-35	<b>COC Number:</b>	---		06/02/2015	10:00
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	05/29/2015 10:05
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-7-D-31		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Enden/11083		<b>Sample Type:</b>	Soil

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1513251-36	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/02/2015 10:00
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/29/2015 10:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-7-D-41	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil
1513251-37	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/02/2015 10:00
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/29/2015 13:35
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-2-S-11	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil
1513251-38	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/02/2015 10:00
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/29/2015 14:05
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-2-S-21	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil
1513251-39	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/02/2015 10:00
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/27/2015 10:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-41-D-46	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Mike Van Den Eenden/11083	<b>Sample Type:</b>	Soil

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513251-01	<b>Client Sample Name:</b> KA-41-D-6, 5/27/2015 8:15:00AM, Mike Van Den Ender/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	51.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/04/15	06/05/15 10:05	ZZZ	GC-15	0.997	BYF0569

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with 2 columns: BCL Sample ID (1513251-01) and Client Sample Name (KA-41-D-6, 5/27/2015 8:15:00AM, Mike Van Den Eenden/11083)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Qualls, Run #. Lists various chemical compounds and their analysis results.

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-01	<b>Client Sample Name:</b> KA-41-D-6, 5/27/2015 8:15:00AM, Mike Van Den Eenden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-01	<b>Client Sample Name:</b> KA-41-D-6, 5/27/2015 8:15:00AM, Mike Van Den Ender/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.8	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/02/15	06/03/15 15:57	ADC	MS-V2	1	BYF0077

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID: 1513251-01 Client Sample Name: KA-41-D-6, 5/27/2015 8:15:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID: 1513251-01 Client Sample Name: KA-41-D-6, 5/27/2015 8:15:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-01	<b>Client Sample Name:</b> KA-41-D-6, 5/27/2015 8:15:00AM, Mike Van Den Eenden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	mg/kg	0.10	0.037	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Phenanthrene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Pyrene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	mg/kg	0.20	0.022	EPA-8270C	ND		1
2-Chlorophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	mg/kg	0.10	0.035	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.50	0.012	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	mg/kg	0.50	0.0077	EPA-8270C	ND		1
2-Methylphenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	mg/kg	0.20	0.033	EPA-8270C	ND		1
2-Nitrophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
4-Nitrophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
Pentachlorophenol	ND	mg/kg	0.20	0.013	EPA-8270C	ND		1
Phenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	mg/kg	0.20	0.017	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	95.6	%	20 - 130 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	118	%	30 - 130 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	125	%	30 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	113	%	20 - 140 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	148	%	20 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	97.8	%	30 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/04/15	06/05/15 15:26	VH1	MS-B1	0.983	BYF0550

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-01	<b>Client Sample Name:</b> KA-41-D-6, 5/27/2015 8:15:00AM, Mike Van Den Ender/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	66.7	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 03:36	MWB	GC-13	1	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-01	<b>Client Sample Name:</b> KA-41-D-6, 5/27/2015 8:15:00AM, Mike Van Den Ender/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	0.998	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-01	<b>Client Sample Name:</b> KA-41-D-6, 5/27/2015 8:15:00AM, Mike Van Den Eenden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	4.4	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.46	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	34	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	9.8	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	20	mg/kg	1.0	0.050	EPA-6010B	0.093		1
Lead	6.7	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.062		1
Nickel	34	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	53	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	42	mg/kg	2.5	0.087	EPA-6010B	0.88		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/08/15	06/09/15 12:09	ARD	PE-OP3	0.943	BYF0730
2	EPA-7471A	06/09/15	06/09/15 15:10	MEV	CETAC1	1.008	BYF0874

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513251-02		Client Sample Name: KA-41-D-26, 5/27/2015 8:50:00AM, Mike Van Den Enden/11083						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	85.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/04/15	06/05/15 10:16	ZZZ	GC-15	0.987	BYF0569

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with 2 columns: BCL Sample ID (1513251-02) and Client Sample Name (KA-41-D-26, 5/27/2015 8:50:00AM, Mike Van Den Eenden/11083)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Qualls, Run #. Lists various chemical compounds and their analysis results.

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513251-02		Client Sample Name: KA-41-D-26, 5/27/2015 8:50:00AM, Mike Van Den Enden/11083						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-02	<b>Client Sample Name:</b> KA-41-D-26, 5/27/2015 8:50:00AM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.3	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/02/15	06/02/15 16:49	ADC	MS-V2	1	BYF0077

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-02	<b>Client Sample Name:</b> KA-41-D-26, 5/27/2015 8:50:00AM, Mike Van Den Eenden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-02	<b>Client Sample Name:</b> KA-41-D-26, 5/27/2015 8:50:00AM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-02	<b>Client Sample Name:</b> KA-41-D-26, 5/27/2015 8:50:00AM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	mg/kg	0.10	0.037	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Phenanthrene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Pyrene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	mg/kg	0.20	0.022	EPA-8270C	ND		1
2-Chlorophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	mg/kg	0.10	0.035	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.50	0.012	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	mg/kg	0.50	0.0077	EPA-8270C	ND		1
2-Methylphenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	mg/kg	0.20	0.033	EPA-8270C	ND		1
2-Nitrophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
4-Nitrophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
Pentachlorophenol	ND	mg/kg	0.20	0.013	EPA-8270C	ND		1
Phenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	mg/kg	0.20	0.017	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	95.3	%	20 - 130 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	118	%	30 - 130 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	121	%	30 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	118	%	20 - 140 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	153	%	20 - 150 (LCL - UCL)		EPA-8270C		S09	1
p-Terphenyl-d14 (Surrogate)	108	%	30 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/04/15	06/05/15 15:51	VH1	MS-B1	0.966	BYF0550

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-02	<b>Client Sample Name:</b> KA-41-D-26, 5/27/2015 8:50:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	56.2	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 03:58	MWB	GC-13	0.987	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-02	<b>Client Sample Name:</b> KA-41-D-26, 5/27/2015 8:50:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	1	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1513251-02	<b>Client Sample Name:</b> KA-41-D-26, 5/27/2015 8:50:00AM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	2.0	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	65	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.29	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	49	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.3	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	16	mg/kg	1.0	0.050	EPA-6010B	0.094		1
Lead	4.9	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.062		1
Nickel	43	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	42	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	35	mg/kg	2.5	0.087	EPA-6010B	0.89		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/08/15	06/09/15 12:15	ARD	PE-OP3	0.952	BYF0730
2	EPA-7471A	06/09/15	06/09/15 15:13	MEV	CETAC1	1.008	BYF0874

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513251-03	<b>Client Sample Name:</b> KA-41-D-36, 5/27/2015 9:20:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	73.3	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/04/15	06/05/15 10:27	ZZZ	GC-15	1	BYF0569

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-03	<b>Client Sample Name:</b> KA-41-D-36, 5/27/2015 9:20:00AM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with columns: BCL Sample ID, Client Sample Name, Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their analysis results.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-03	<b>Client Sample Name:</b> KA-41-D-36, 5/27/2015 9:20:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.9	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.1	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/02/15	06/02/15 17:11	ADC	MS-V2	1	BYF0077

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID: 1513251-03 Client Sample Name: KA-41-D-36, 5/27/2015 9:20:00AM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Table with 2 columns: BCL Sample ID (1513251-03) and Client Sample Name (KA-41-D-36, 5/27/2015 9:20:00AM, Mike Van Den Eenden/11083)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Qualls, Run #. Lists various chemical compounds and their test results.

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Table with 2 columns: BCL Sample ID (1513251-03) and Client Sample Name (KA-41-D-36, 5/27/2015 9:20:00AM, Mike Van Den Enden/11083)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical compounds and their test results.

Summary table with columns: Run #, Method, Prep Date, Run Date/Time, Analyst, Instrument, Dilution, QC Batch ID. Shows details for Run #1.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-03	<b>Client Sample Name:</b> KA-41-D-36, 5/27/2015 9:20:00AM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	69.0	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 06:56	MWB	GC-13	1.014	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-03	<b>Client Sample Name:</b> KA-41-D-36, 5/27/2015 9:20:00AM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	0.996	BYF0725

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Sacramento, CA 95852-0830

Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-03	<b>Client Sample Name:</b> KA-41-D-36, 5/27/2015 9:20:00AM, Mike Van Den Eenden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	1.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	94	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.32	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	23	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.0	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	18	mg/kg	1.0	0.050	EPA-6010B	0.095		1
Lead	6.8	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.063		1
Nickel	34	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.1	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	41	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	41	mg/kg	2.5	0.087	EPA-6010B	0.90		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/08/15	06/09/15 12:24	ARD	PE-OP3	0.962	BYF0730
2	EPA-7471A	06/09/15	06/09/15 15:19	MEV	CETAC1	1.008	BYF0874

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513251-04		Client Sample Name: KA-42-D-6, 5/27/2015 1:00:00PM, Mike Van Den Ender/11083						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	66.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/04/15	06/05/15 10:37	ZZZ	GC-15	0.987	BYF0569

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-04	<b>Client Sample Name:</b> KA-42-D-6, 5/27/2015 1:00:00PM, Mike Van Den Eenden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with columns: BCL Sample ID, Client Sample Name, Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical constituents and their analysis results.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-04	<b>Client Sample Name:</b> KA-42-D-6, 5/27/2015 1:00:00PM, Mike Van Den Ender/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.6	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/02/15	06/03/15 16:20	ADC	MS-V2	1	BYF0077

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-04	<b>Client Sample Name:</b> KA-42-D-6, 5/27/2015 1:00:00PM, Mike Van Den Ender/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	81.2	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 07:19	MWB	GC-13	0.993	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-04	<b>Client Sample Name:</b> KA-42-D-6, 5/27/2015 1:00:00PM, Mike Van Den Ender/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	0.992	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-04	<b>Client Sample Name:</b> KA-42-D-6, 5/27/2015 1:00:00PM, Mike Van Den Eenden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.5	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	120	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.56	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	47	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	13	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	22	mg/kg	1.0	0.050	EPA-6010B	0.094		1
Lead	8.7	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.062		1
Nickel	43	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	66	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	44	mg/kg	2.5	0.087	EPA-6010B	0.89		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/08/15	06/09/15 12:27	ARD	PE-OP3	0.952	BYF0730
2	EPA-7471A	06/09/15	06/09/15 15:21	MEV	CETAC1	0.977	BYF0874

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513251-05	<b>Client Sample Name:</b> KA-42-D-26, 5/27/2015 2:10:00PM, Mike Van Den Eenden/11083							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	65.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/04/15	06/05/15 10:48	ZZZ	GC-15	1.014	BYF0569

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-05	<b>Client Sample Name:</b> KA-42-D-26, 5/27/2015 2:10:00PM, Mike Van Den Eenden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with columns: BCL Sample ID, Client Sample Name, Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Qualls, Run #. Lists various chemical constituents and their analysis results.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-05	<b>Client Sample Name:</b> KA-42-D-26, 5/27/2015 2:10:00PM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	100	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/02/15	06/03/15 16:42	ADC	MS-V2	1	BYF0077

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-05	<b>Client Sample Name:</b> KA-42-D-26, 5/27/2015 2:10:00PM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	64.3	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 07:42	MWB	GC-13	1.010	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-05	<b>Client Sample Name:</b> KA-42-D-26, 5/27/2015 2:10:00PM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	0.998	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-05	<b>Client Sample Name:</b> KA-42-D-26, 5/27/2015 2:10:00PM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	0.65	mg/kg	1.0	0.40	EPA-6010B	ND	J	1
Barium	42	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.50	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	32	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	7.1	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	16	mg/kg	1.0	0.050	EPA-6010B	0.099		1
Lead	5.7	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.065		1
Nickel	37	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	28	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	28	mg/kg	2.5	0.087	EPA-6010B	0.93		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/08/15	06/09/15 12:29	ARD	PE-OP3	1	BYF0730
2	EPA-7471A	06/09/15	06/09/15 15:23	MEV	CETAC1	0.992	BYF0874

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513251-06	<b>Client Sample Name:</b> KA-42-D-36, 5/27/2015 2:55:00PM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	70.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/04/15	06/05/15 11:30	ZZZ	GC-15	1.017	BYF0569

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-06	<b>Client Sample Name:</b> KA-42-D-36, 5/27/2015 2:55:00PM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with columns: BCL Sample ID, Client Sample Name, Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Qualls, Run #. Lists various chemical constituents and their analysis results.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-06	<b>Client Sample Name:</b> KA-42-D-36, 5/27/2015 2:55:00PM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	98.8	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.8	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/03/15	06/03/15 17:04	ADC	MS-V2	1	BYF0308

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-06	<b>Client Sample Name:</b> KA-42-D-36, 5/27/2015 2:55:00PM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	57.3	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 08:04	MWB	GC-13	0.987	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-06	<b>Client Sample Name:</b> KA-42-D-36, 5/27/2015 2:55:00PM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	1	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-06	<b>Client Sample Name:</b> KA-42-D-36, 5/27/2015 2:55:00PM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	2.4	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	170	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.31	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	26	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	12	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	9.2	mg/kg	1.0	0.050	EPA-6010B	0.096		1
Lead	4.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.063		1
Nickel	19	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	35	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	22	mg/kg	2.5	0.087	EPA-6010B	0.91		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/08/15	06/09/15 12:31	ARD	PE-OP3	0.971	BYF0730
2	EPA-7471A	06/09/15	06/09/15 15:26	MEV	CETAC1	0.992	BYF0874

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with 2 columns: BCL Sample ID (1513251-07) and Client Sample Name (KA-5-D-6, 5/28/2015 9:15:00AM, Mike Van Den Eenden/11083)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their analysis results.

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with columns: BCL Sample ID, Client Sample Name, Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their analysis results.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-07	<b>Client Sample Name:</b> KA-5-D-6, 5/28/2015 9:15:00AM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.1	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/03/15	06/03/15 17:27	ADC	MS-V2	1	BYF0308

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-07	<b>Client Sample Name:</b> KA-5-D-6, 5/28/2015 9:15:00AM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Table with 2 columns: BCL Sample ID (1513251-07) and Client Sample Name (KA-5-D-6, 5/28/2015 9:15:00AM, Mike Van Den Eenden/11083)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Qualls, Run #. Lists various chemical compounds and their test results.

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SMUD
6201 S Street/P.O. Box 15830
Sacramento, CA 95852-0830

Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Table with 2 columns: BCL Sample ID (1513251-07) and Client Sample Name (KA-5-D-6, 5/28/2015 9:15:00AM, Mike Van Den Eenden/11083)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their test results.

Summary table with columns: Run #, Method, Prep Date, Run Date/Time, Analyst, Instrument, Dilution, QC Batch ID. Shows details for Run #1.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-07	<b>Client Sample Name:</b> KA-5-D-6, 5/28/2015 9:15:00AM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	65.4	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 08:26	MWB	GC-13	1.003	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-07	<b>Client Sample Name:</b> KA-5-D-6, 5/28/2015 9:15:00AM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	0.992	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-07	<b>Client Sample Name:</b> KA-5-D-6, 5/28/2015 9:15:00AM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	7.5	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	120	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.52	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	43	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	12	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	26	mg/kg	1.0	0.050	EPA-6010B	0.097		1
Lead	9.5	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	0.095	mg/kg	2.5	0.050	EPA-6010B	0.064	J	1
Nickel	38	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	59	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	43	mg/kg	2.5	0.087	EPA-6010B	0.92		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/08/15	06/09/15 12:34	ARD	PE-OP3	0.980	BYF0730
2	EPA-7471A	06/09/15	06/09/15 15:28	MEV	CETAC1	1.025	BYF0874

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-08	<b>Client Sample Name:</b> KA-5-D-36, 5/28/2015 10:55:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with columns: BCL Sample ID, Client Sample Name, Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their analysis results.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-08	<b>Client Sample Name:</b> KA-5-D-36, 5/28/2015 10:55:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.2	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/03/15	06/03/15 17:49	ADC	MS-V2	1	BYF0308

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-08	<b>Client Sample Name:</b> KA-5-D-36, 5/28/2015 10:55:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Table with 2 columns: BCL Sample ID (1513251-08) and Client Sample Name (KA-5-D-36, 5/28/2015 10:55:00AM, Mike Van Den Enden/11083)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their test results.

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-08	<b>Client Sample Name:</b> KA-5-D-36, 5/28/2015 10:55:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	mg/kg	0.10	0.037	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Phenanthrene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Pyrene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	mg/kg	0.20	0.022	EPA-8270C	ND		1
2-Chlorophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	mg/kg	0.10	0.035	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.50	0.012	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	mg/kg	0.50	0.0077	EPA-8270C	ND		1
2-Methylphenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	mg/kg	0.20	0.033	EPA-8270C	ND		1
2-Nitrophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
4-Nitrophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
Pentachlorophenol	ND	mg/kg	0.20	0.013	EPA-8270C	ND		1
Phenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	mg/kg	0.20	0.017	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	106	%	20 - 130 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	120	%	30 - 130 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	127	%	30 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	76.6	%	20 - 140 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	114	%	20 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	87.8	%	30 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/04/15	06/05/15 17:08	VH1	MS-B1	0.997	BYF0550

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-08	<b>Client Sample Name:</b> KA-5-D-36, 5/28/2015 10:55:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	57.4	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 08:49	MWB	GC-13	1.007	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-08	<b>Client Sample Name:</b> KA-5-D-36, 5/28/2015 10:55:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	0.990	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-08	<b>Client Sample Name:</b> KA-5-D-36, 5/28/2015 10:55:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	1.5	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	130	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.45	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	33	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	7.0	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	20	mg/kg	1.0	0.050	EPA-6010B	0.099		1
Lead	6.0	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.065		1
Nickel	36	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	35	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	33	mg/kg	2.5	0.087	EPA-6010B	0.93		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/08/15	06/09/15 11:57	ARD	PE-OP3	1	BYF0730
2	EPA-7471A	06/09/15	06/09/15 15:30	MEV	CETAC1	1.025	BYF0874

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SMUD  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-09	<b>Client Sample Name:</b> KA-5-D-46, 5/28/2015 12:00:00PM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Sacramento, CA 95852-0830

Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with 2 columns: BCL Sample ID (1513251-09) and Client Sample Name (KA-5-D-46, 5/28/2015 12:00:00PM, Mike Van Den Enden/11083)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their analysis results.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-09	<b>Client Sample Name:</b> KA-5-D-46, 5/28/2015 12:00:00PM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/03/15	06/04/15 10:53	ADC	MS-V2	1	BYF0308

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-09	<b>Client Sample Name:</b> KA-5-D-46, 5/28/2015 12:00:00PM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Sacramento, CA 95852-0830

Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-09	<b>Client Sample Name:</b> KA-5-D-46, 5/28/2015 12:00:00PM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Table with 2 columns: BCL Sample ID (1513251-09) and Client Sample Name (KA-5-D-46, 5/28/2015 12:00:00PM, Mike Van Den Enden/11083)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their detection results.

Summary table with columns: Run #, Method, Prep Date, Run Date/Time, Analyst, Instrument, Dilution, QC Batch ID. Shows details for Run #1.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-09	<b>Client Sample Name:</b> KA-5-D-46, 5/28/2015 12:00:00PM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	56.2	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 09:11	MWB	GC-13	1.003	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-09	<b>Client Sample Name:</b> KA-5-D-46, 5/28/2015 12:00:00PM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	0.994	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-09	<b>Client Sample Name:</b> KA-5-D-46, 5/28/2015 12:00:00PM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	2.5	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	120	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.26	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	0.060	mg/kg	0.50	0.052	EPA-6010B	ND	J	1
Chromium	24	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.1	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	15	mg/kg	1.0	0.050	EPA-6010B	0.093		1
Lead	5.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.062		1
Nickel	48	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	41	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	34	mg/kg	2.5	0.087	EPA-6010B	0.88		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/08/15	06/09/15	12:38	ARD	PE-OP3	0.943	BYF0730
2	EPA-7471A	06/09/15	06/09/15	15:32	MEV	CETAC1	1.025	BYF0874

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-10	<b>Client Sample Name:</b> KA-7-D-6, 5/29/2015 8:35:00AM, Mike Van Den Eenden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with 2 columns: BCL Sample ID (1513251-10) and Client Sample Name (KA-7-D-6, 5/29/2015 8:35:00AM, Mike Van Den Eenden/11083)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their analysis results.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-10	<b>Client Sample Name:</b> KA-7-D-6, 5/29/2015 8:35:00AM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	103	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/03/15	06/04/15 11:15	ADC	MS-V2	1	BYF0308

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-10	<b>Client Sample Name:</b> KA-7-D-6, 5/29/2015 8:35:00AM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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6201 S Street/P.O. Box 15830
Sacramento, CA 95852-0830

Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Table with 2 columns: BCL Sample ID (1513251-10) and Client Sample Name (KA-7-D-6, 5/29/2015 8:35:00AM, Mike Van Den Eenden/11083)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Qualls, Run #. Lists various chemical compounds and their test results.

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6201 S Street/P.O. Box 15830
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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Table with 2 columns: BCL Sample ID (1513251-10) and Client Sample Name (KA-7-D-6, 5/29/2015 8:35:00AM, Mike Van Den Eenden/11083)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their detection results.

Summary table with columns: Run #, Method, Prep Date, Run Date/Time, Analyst, Instrument, Dilution, QC Batch ID. Provides details for Run #1.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-10	<b>Client Sample Name:</b> KA-7-D-6, 5/29/2015 8:35:00AM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	55.1	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 09:34	MWB	GC-13	0.987	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-10	<b>Client Sample Name:</b> KA-7-D-6, 5/29/2015 8:35:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	0.996	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-10	<b>Client Sample Name:</b> KA-7-D-6, 5/29/2015 8:35:00AM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.8	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	140	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.34	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	41	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	11	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	27	mg/kg	1.0	0.050	EPA-6010B	0.094		1
Lead	7.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	0.21	mg/kg	2.5	0.050	EPA-6010B	0.062	J	1
Nickel	49	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	48	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	42	mg/kg	2.5	0.087	EPA-6010B	0.89		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/08/15	06/09/15 12:40	ARD	PE-OP3	0.952	BYF0730
2	EPA-7471A	06/09/15	06/09/15 15:35	MEV	CETAC1	1.025	BYF0874

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with 2 columns: BCL Sample ID (1513251-11) and Client Sample Name (KA-7-D-36, 5/29/2015 10:25:00AM, Mike Van Den Enden/11083)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their analysis results.

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with columns: BCL Sample ID, Client Sample Name, Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their analysis results.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-11	<b>Client Sample Name:</b> KA-7-D-36, 5/29/2015 10:25:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	103	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	103	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/03/15	06/04/15 00:12	ADC	MS-V2	1	BYF0308

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-11	<b>Client Sample Name:</b> KA-7-D-36, 5/29/2015 10:25:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-11	<b>Client Sample Name:</b> KA-7-D-36, 5/29/2015 10:25:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-11	<b>Client Sample Name:</b> KA-7-D-36, 5/29/2015 10:25:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	mg/kg	0.10	0.037	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Phenanthrene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Pyrene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	mg/kg	0.20	0.022	EPA-8270C	ND		1
2-Chlorophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	mg/kg	0.10	0.035	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.50	0.012	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	mg/kg	0.50	0.0077	EPA-8270C	ND		1
2-Methylphenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	mg/kg	0.20	0.033	EPA-8270C	ND		1
2-Nitrophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
4-Nitrophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
Pentachlorophenol	ND	mg/kg	0.20	0.013	EPA-8270C	ND		1
Phenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	mg/kg	0.20	0.017	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	91.3	%	20 - 130 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	80.4	%	30 - 130 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	88.3	%	30 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	71.8	%	20 - 140 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	96.7	%	20 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	90.4	%	30 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/04/15	06/06/15 00:34	VH1	MS-B2	1.007	BYF0550

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-11	<b>Client Sample Name:</b> KA-7-D-36, 5/29/2015 10:25:00AM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	64.4	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 09:56	MWB	GC-13	1.010	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-11	<b>Client Sample Name:</b> KA-7-D-36, 5/29/2015 10:25:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	0.998	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-11	<b>Client Sample Name:</b> KA-7-D-36, 5/29/2015 10:25:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	2.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	100	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.33	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	21	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.1	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	21	mg/kg	1.0	0.050	EPA-6010B	0.093		1
Lead	7.1	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.062		1
Nickel	25	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	36	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	43	mg/kg	2.5	0.087	EPA-6010B	0.88		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/08/15	06/09/15	12:41	ARD	PE-OP3	0.943	BYF0730
2	EPA-7471A	06/11/15	06/12/15	09:31	MEV	CETAC1	1.025	BYF1123

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-12	<b>Client Sample Name:</b> KA-7-D-46, 5/29/2015 11:10:00AM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with columns: BCL Sample ID, Client Sample Name, Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their analysis results.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-12	<b>Client Sample Name:</b> KA-7-D-46, 5/29/2015 11:10:00AM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.6	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/03/15	06/04/15 11:38	ADC	MS-V2	1	BYF0308

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-12	<b>Client Sample Name:</b> KA-7-D-46, 5/29/2015 11:10:00AM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-12	<b>Client Sample Name:</b> KA-7-D-46, 5/29/2015 11:10:00AM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-12	<b>Client Sample Name:</b> KA-7-D-46, 5/29/2015 11:10:00AM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	mg/kg	0.10	0.037	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Phenanthrene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Pyrene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	mg/kg	0.20	0.022	EPA-8270C	ND		1
2-Chlorophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	mg/kg	0.10	0.035	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.50	0.012	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	mg/kg	0.50	0.0077	EPA-8270C	ND		1
2-Methylphenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	mg/kg	0.20	0.033	EPA-8270C	ND		1
2-Nitrophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
4-Nitrophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
Pentachlorophenol	ND	mg/kg	0.20	0.013	EPA-8270C	ND		1
Phenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	mg/kg	0.20	0.017	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	104	%	20 - 130 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	94.2	%	30 - 130 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	105	%	30 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	96.6	%	20 - 140 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	129	%	20 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	123	%	30 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/04/15	06/06/15 01:02	VH1	MS-B2	1.003	BYF0550

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-12	<b>Client Sample Name:</b> KA-7-D-46, 5/29/2015 11:10:00AM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	75.5	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 10:18	MWB	GC-13	1	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-12	<b>Client Sample Name:</b> KA-7-D-46, 5/29/2015 11:10:00AM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	0.998	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-12	<b>Client Sample Name:</b> KA-7-D-46, 5/29/2015 11:10:00AM, Mike Van Den Enden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	1.4	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	55	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.19	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	29	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	6.4	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	7.4	mg/kg	1.0	0.050	EPA-6010B	0.34		1
Lead	3.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	50	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	35	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	21	mg/kg	2.5	0.087	EPA-6010B	0.97		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/08/15	06/09/15 14:14	ARD	PE-OP3	0.943	BYF0751
2	EPA-7471A	06/11/15	06/12/15 09:33	MEV	CETAC1	0.992	BYF1123

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-13	<b>Client Sample Name:</b> KA-2-S-6, 5/29/2015 1:20:00PM, Mike Van Den Eenden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Bromobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Bromochloromethane	ND	mg/kg	0.010	0.0018	EPA-8260B	ND	A10,Z1	1
Bromodichloromethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1
Bromoform	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Bromomethane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
n-Butylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
sec-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
tert-Butylbenzene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Carbon tetrachloride	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Chlorobenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Chloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
Chloroform	ND	mg/kg	0.010	0.0013	EPA-8260B	ND	A10,Z1	1
Chloromethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
2-Chlorotoluene	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1
4-Chlorotoluene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
Dibromochloromethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1
1,2-Dibromoethane	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	A10,Z1	1
Dibromomethane	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10,Z1	1
1,2-Dichlorobenzene	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1
1,3-Dichlorobenzene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,4-Dichlorobenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Dichlorodifluoromethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,1-Dichloroethane	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,2-Dichloroethane	ND	mg/kg	0.010	0.0017	EPA-8260B	ND	A10,Z1	1
1,1-Dichloroethene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
cis-1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
trans-1,2-Dichloroethene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
Total 1,2-Dichloroethene	ND	mg/kg	0.020	0.0052	EPA-8260B	ND	A10,Z1	1
1,2-Dichloropropane	ND	mg/kg	0.010	0.0016	EPA-8260B	ND	A10,Z1	1
1,3-Dichloropropane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
2,2-Dichloropropane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-13	<b>Client Sample Name:</b> KA-2-S-6, 5/29/2015 1:20:00PM, Mike Van Den Eenden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
cis-1,3-Dichloropropene	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total 1,3-Dichloropropene	ND	mg/kg	0.020	0.0040	EPA-8260B	ND	A10,Z1	1
Ethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Hexachlorobutadiene	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10,Z1	1
Isopropylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
p-Isopropyltoluene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Methylene chloride	ND	mg/kg	0.020	0.0048	EPA-8260B	ND	A10,Z1	1
Methyl t-butyl ether	ND	mg/kg	0.010	0.0010	EPA-8260B	ND	A10,Z1	1
Naphthalene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
n-Propylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Styrene	ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,1,2,2-Tetrachloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Tetrachloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
Toluene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.010	0.0015	EPA-8260B	ND	A10,Z1	1
Trichloroethene	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
Trichlorofluoromethane	ND	mg/kg	0.010	0.0022	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	A10,Z1	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.010	0.0030	EPA-8260B	ND	A10,Z1	1
Vinyl chloride	ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10,Z1	1
Total Xylenes	ND	mg/kg	0.020	0.0068	EPA-8260B	ND	A10,Z1	1
p- & m-Xylenes	ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10,Z1	1
o-Xylene	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	A10,Z1	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.40	0.040	Luft-GC/MS	ND	A10,Z1	1
1,2-Dichloroethane-d4 (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-13	<b>Client Sample Name:</b> KA-2-S-6, 5/29/2015 1:20:00PM, Mike Van Den Eenden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	103	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.9	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/03/15	06/04/15 13:07	ADC	MS-V2	2	BYF0308

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID: 1513251-13 Client Sample Name: KA-2-S-6, 5/29/2015 1:20:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-13	<b>Client Sample Name:</b> KA-2-S-6, 5/29/2015 1:20:00PM, Mike Van Den Eenden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1

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SMUD  
6201 S Street/P.O. Box 15830  
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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513251-13	<b>Client Sample Name:</b> KA-2-S-6, 5/29/2015 1:20:00PM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	mg/kg	0.10	0.037	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Phenanthrene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Pyrene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	mg/kg	0.20	0.022	EPA-8270C	ND		1
2-Chlorophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	mg/kg	0.10	0.035	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.50	0.012	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	mg/kg	0.50	0.0077	EPA-8270C	ND		1
2-Methylphenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	mg/kg	0.20	0.033	EPA-8270C	ND		1
2-Nitrophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
4-Nitrophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
Pentachlorophenol	ND	mg/kg	0.20	0.013	EPA-8270C	ND		1
Phenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	mg/kg	0.20	0.017	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	108	%	20 - 130 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	97.4	%	30 - 130 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	111	%	30 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	106	%	20 - 140 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	120	%	20 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	116	%	30 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/04/15	06/06/15 01:30	VH1	MS-B2	0.984	BYF0550

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-13	<b>Client Sample Name:</b> KA-2-S-6, 5/29/2015 1:20:00PM, Mike Van Den Eenden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	19.2	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 11:49	MWB	GC-13	1.003	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-13	<b>Client Sample Name:</b> KA-2-S-6, 5/29/2015 1:20:00PM, Mike Van Den Eenden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	0.992	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-13	<b>Client Sample Name:</b> KA-2-S-6, 5/29/2015 1:20:00PM, Mike Van Den Eenden/11083
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	7.4	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.37	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	39	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	10	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	30	mg/kg	1.0	0.050	EPA-6010B	0.34		1
Lead	7.4	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	0.74	mg/kg	2.5	0.050	EPA-6010B	ND	J	1
Nickel	47	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	48	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	41	mg/kg	2.5	0.087	EPA-6010B	0.97		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/08/15	06/09/15	13:56	ARD	PE-OP3	0.943	BYF0751
2	EPA-7471A	06/11/15	06/12/15	09:18	MEV	CETAC1	1.008	BYF1123

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-14	<b>Client Sample Name:</b> KA-2-S-16, 5/29/2015 1:50:00PM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-14	<b>Client Sample Name:</b> KA-2-S-16, 5/29/2015 1:50:00PM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513251-14	<b>Client Sample Name:</b> KA-2-S-16, 5/29/2015 1:50:00PM, Mike Van Den Enden/11083
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.6	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/03/15	06/04/15 01:19	ADC	MS-V2	1	BYF0308

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID: 1513251-14 Client Sample Name: KA-2-S-16, 5/29/2015 1:50:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

**BCL Sample ID:** 1513251-14      **Client Sample Name:** KA-2-S-16, 5/29/2015 1:50:00PM, Mike Van Den Eenden/11083

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1

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6201 S Street/P.O. Box 15830
Sacramento, CA 95852-0830

Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID: 1513251-14 Client Sample Name: KA-2-S-16, 5/29/2015 1:50:00PM, Mike Van Den Eenden/11083

Table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their detection results.

Table with 9 columns: Run #, Method, Prep Date, Run Date/Time, Analyst, Instrument, Dilution, QC Batch ID. Provides details for the first run.

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513251-14	<b>Client Sample Name:</b> KA-2-S-16, 5/29/2015 1:50:00PM, Mike Van Den Eenden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	47.4	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/04/15	06/06/15 12:12	MWB	GC-13	0.997	BYF0572

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513251-14	<b>Client Sample Name:</b> KA-2-S-16, 5/29/2015 1:50:00PM, Mike Van Den Eenden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/05/15	06/05/15 13:00	MAM	MAN-SV	0.996	BYF0725

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513251-14	<b>Client Sample Name:</b> KA-2-S-16, 5/29/2015 1:50:00PM, Mike Van Den Eenden/11083
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	3.0	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	78	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.24	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	36	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	7.0	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	14	mg/kg	1.0	0.050	EPA-6010B	0.35		1
Lead	4.1	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	35	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	42	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	38	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/08/15	06/09/15 14:16	ARD	PE-OP3	0.980	BYF0751
2	EPA-7471A	06/11/15	06/12/15 09:29	MEV	CETAC1	1.008	BYF1123

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0569</b>						
PCB-1016	BYF0569-BLK1	ND	mg/kg	0.010	0.0027	
PCB-1221	BYF0569-BLK1	ND	mg/kg	0.010	0.0038	
PCB-1232	BYF0569-BLK1	ND	mg/kg	0.010	0.0024	
PCB-1242	BYF0569-BLK1	ND	mg/kg	0.010	0.0040	
PCB-1248	BYF0569-BLK1	ND	mg/kg	0.010	0.0026	
PCB-1254	BYF0569-BLK1	ND	mg/kg	0.010	0.0032	
PCB-1260	BYF0569-BLK1	ND	mg/kg	0.010	0.0016	
Total PCB's (Summation)	BYF0569-BLK1	ND	mg/kg	0.010	0.0050	
<b>Decachlorobiphenyl (Surrogate)</b>	<b>BYF0569-BLK1</b>	<b>100</b>	<b>%</b>		<b>40 - 120 (LCL - UCL)</b>	

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0569</b>										
PCB-1016	BYF0569-BS1	LCS	0.091803	0.081967	mg/kg	112		60 - 120		
PCB-1260	BYF0569-BS1	LCS	0.090492	0.081967	mg/kg	110		60 - 120		
Decachlorobiphenyl (Surrogate)	BYF0569-BS1	LCS	0.019344	0.019672	mg/kg	98.3		40 - 120		

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent		Lab Quals	
								Recovery	RPD		Recovery
<b>QC Batch ID: BYF0569</b>		Used client sample: N									
PCB-1016	MS	1511019-51	ND	0.086230	0.081967	mg/kg		105		50 - 130	
	MSD	1511019-51	ND	0.096711	0.082237	mg/kg	11.5	118	30	50 - 130	
PCB-1260	MS	1511019-51	ND	0.089180	0.081967	mg/kg		109		50 - 120	
	MSD	1511019-51	ND	0.094737	0.082237	mg/kg	6.0	115	30	50 - 120	
Decachlorobiphenyl (Surrogate)	MS	1511019-51	ND	0.019344	0.019672	mg/kg		98.3		40 - 120	
	MSD	1511019-51	ND	0.020395	0.019737	mg/kg	5.3	103		40 - 120	

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Table with 7 columns: Constituent, QC Sample ID, MB Result, Units, PQL, MDL, Lab Quals. Includes a QC Batch ID: BYF0077 and a list of 30 chemical constituents with their respective results (all ND).

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Table with 7 columns: Constituent, QC Sample ID, MB Result, Units, PQL, MDL, Lab Quas. Includes a QC Batch ID: BYF0077 and a list of 35 constituents with their respective results and limits.

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0308</b>						
Benzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYF0308-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYF0308-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYF0308-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYF0308-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYF0308-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0012	

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0308</b>						
cis-1,3-Dichloropropene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYF0308-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYF0308-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYF0308-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,1,2-Tetrachloroethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYF0308-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYF0308-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYF0308-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYF0308-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYF0308-BLK1	ND	mg/kg	0.0050	0.0012	
Total Purgeable Petroleum Hydrocarbons	BYF0308-BLK1	ND	mg/kg	0.20	0.020	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYF0308-BLK1</b>	<b>110</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYF0308-BLK1</b>	<b>101</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYF0308-BLK1</b>	<b>100</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		

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SMUD  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0077</b>										
Benzene	BYF0077-BS1	LCS	0.12634	0.12500	mg/kg	101		70 - 130		
Bromodichloromethane	BYF0077-BS1	LCS	0.11937	0.12500	mg/kg	95.5		70 - 130		
Chlorobenzene	BYF0077-BS1	LCS	0.11959	0.12500	mg/kg	95.7		70 - 130		
Chloroethane	BYF0077-BS1	LCS	0.13064	0.12500	mg/kg	105		70 - 130		
1,4-Dichlorobenzene	BYF0077-BS1	LCS	0.12773	0.12500	mg/kg	102		70 - 130		
1,1-Dichloroethane	BYF0077-BS1	LCS	0.12498	0.12500	mg/kg	100		70 - 130		
1,1-Dichloroethene	BYF0077-BS1	LCS	0.11274	0.12500	mg/kg	90.2		70 - 130		
Toluene	BYF0077-BS1	LCS	0.12127	0.12500	mg/kg	97.0		70 - 130		
Trichloroethene	BYF0077-BS1	LCS	0.11892	0.12500	mg/kg	95.1		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYF0077-BS1	LCS	0.051640	0.050000	mg/kg	103		70 - 121		
Toluene-d8 (Surrogate)	BYF0077-BS1	LCS	0.050710	0.050000	mg/kg	101		81 - 117		
4-Bromofluorobenzene (Surrogate)	BYF0077-BS1	LCS	0.049350	0.050000	mg/kg	98.7		74 - 121		
<b>QC Batch ID: BYF0308</b>										
Benzene	BYF0308-BS1	LCS	0.12451	0.12500	mg/kg	99.6		70 - 130		
Bromodichloromethane	BYF0308-BS1	LCS	0.12105	0.12500	mg/kg	96.8		70 - 130		
Chlorobenzene	BYF0308-BS1	LCS	0.12006	0.12500	mg/kg	96.0		70 - 130		
Chloroethane	BYF0308-BS1	LCS	0.11390	0.12500	mg/kg	91.1		70 - 130		
1,4-Dichlorobenzene	BYF0308-BS1	LCS	0.12170	0.12500	mg/kg	97.4		70 - 130		
1,1-Dichloroethane	BYF0308-BS1	LCS	0.12425	0.12500	mg/kg	99.4		70 - 130		
1,1-Dichloroethene	BYF0308-BS1	LCS	0.10655	0.12500	mg/kg	85.2		70 - 130		
Toluene	BYF0308-BS1	LCS	0.12167	0.12500	mg/kg	97.3		70 - 130		
Trichloroethene	BYF0308-BS1	LCS	0.11907	0.12500	mg/kg	95.3		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYF0308-BS1	LCS	0.051770	0.050000	mg/kg	104		70 - 121		
Toluene-d8 (Surrogate)	BYF0308-BS1	LCS	0.050060	0.050000	mg/kg	100		81 - 117		
4-Bromofluorobenzene (Surrogate)	BYF0308-BS1	LCS	0.050650	0.050000	mg/kg	101		74 - 121		

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quails. Includes two sections for QC Batch IDs: BYF0077 and BYF0308.

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
									RPD	Percent Recovery	
<b>QC Batch ID: BYF0308</b>		Used client sample: N									
1,1-Dichloroethene	MS	1511019-78	ND	0.11106	0.12500	mg/kg		88.8		70 - 130	
	MSD	1511019-78	ND	0.10560	0.12500	mg/kg	5.0	84.5	20	70 - 130	
Toluene	MS	1511019-78	ND	0.11403	0.12500	mg/kg		91.2		70 - 130	
	MSD	1511019-78	ND	0.11098	0.12500	mg/kg	2.7	88.8	20	70 - 130	
Trichloroethene	MS	1511019-78	ND	0.11348	0.12500	mg/kg		90.8		70 - 130	
	MSD	1511019-78	ND	0.10897	0.12500	mg/kg	4.1	87.2	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-78	ND	0.055740	0.050000	mg/kg		111		70 - 121	
	MSD	1511019-78	ND	0.056080	0.050000	mg/kg	0.6	112		70 - 121	
Toluene-d8 (Surrogate)	MS	1511019-78	ND	0.049390	0.050000	mg/kg		98.8		81 - 117	
	MSD	1511019-78	ND	0.050020	0.050000	mg/kg	1.3	100		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1511019-78	ND	0.052720	0.050000	mg/kg		105		74 - 121	
	MSD	1511019-78	ND	0.050460	0.050000	mg/kg	4.4	101		74 - 121	

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0550</b>						
Acenaphthene	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
Acenaphthylene	BYF0550-BLK1	ND	mg/kg	0.10	0.019	
Aldrin	BYF0550-BLK1	ND	mg/kg	0.10	0.024	
Aniline	BYF0550-BLK1	ND	mg/kg	0.20	0.053	
Anthracene	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
Benzidine	BYF0550-BLK1	ND	mg/kg	3.0	0.22	
Benzo[a]anthracene	BYF0550-BLK1	ND	mg/kg	0.10	0.012	
Benzo[b]fluoranthene	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
Benzo[k]fluoranthene	BYF0550-BLK1	ND	mg/kg	0.10	0.019	
Benzo[a]pyrene	BYF0550-BLK1	ND	mg/kg	0.10	0.015	
Benzo[g,h,i]perylene	BYF0550-BLK1	ND	mg/kg	0.10	0.056	
Benzoic acid	BYF0550-BLK1	ND	mg/kg	0.50	0.067	
Benzyl alcohol	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
Benzyl butyl phthalate	BYF0550-BLK1	ND	mg/kg	0.10	0.021	
alpha-BHC	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
beta-BHC	BYF0550-BLK1	ND	mg/kg	0.10	0.021	
delta-BHC	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
gamma-BHC (Lindane)	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
bis(2-Chloroethoxy)methane	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
bis(2-Chloroethyl) ether	BYF0550-BLK1	ND	mg/kg	0.10	0.016	
bis(2-Chloroisopropyl)ether	BYF0550-BLK1	ND	mg/kg	0.10	0.021	
bis(2-Ethylhexyl)phthalate	BYF0550-BLK1	ND	mg/kg	0.20	0.043	
4-Bromophenyl phenyl ether	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
4-Chloroaniline	BYF0550-BLK1	ND	mg/kg	0.10	0.027	
2-Chloronaphthalene	BYF0550-BLK1	ND	mg/kg	0.10	0.020	
4-Chlorophenyl phenyl ether	BYF0550-BLK1	ND	mg/kg	0.10	0.015	
Chrysene	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
4,4'-DDD	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
4,4'-DDE	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
4,4'-DDT	BYF0550-BLK1	ND	mg/kg	0.10	0.019	
Dibenzo[a,h]anthracene	BYF0550-BLK1	ND	mg/kg	0.10	0.019	
Dibenzofuran	BYF0550-BLK1	ND	mg/kg	0.10	0.020	
1,2-Dichlorobenzene	BYF0550-BLK1	ND	mg/kg	0.10	0.020	
1,3-Dichlorobenzene	BYF0550-BLK1	ND	mg/kg	0.10	0.021	

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0550</b>						
1,4-Dichlorobenzene	BYF0550-BLK1	ND	mg/kg	0.10	0.019	
3,3-Dichlorobenzidine	BYF0550-BLK1	ND	mg/kg	0.20	0.0067	
Dieldrin	BYF0550-BLK1	ND	mg/kg	0.10	0.031	
Diethyl phthalate	BYF0550-BLK1	ND	mg/kg	0.10	0.019	
Dimethyl phthalate	BYF0550-BLK1	ND	mg/kg	0.10	0.020	
Di-n-butyl phthalate	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
2,4-Dinitrotoluene	BYF0550-BLK1	ND	mg/kg	0.10	0.022	
2,6-Dinitrotoluene	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
Di-n-octyl phthalate	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
1,2-Diphenylhydrazine	BYF0550-BLK1	ND	mg/kg	0.10	0.019	
Endosulfan I	BYF0550-BLK1	ND	mg/kg	0.20	0.020	
Endosulfan II	BYF0550-BLK1	ND	mg/kg	0.20	0.021	
Endosulfan sulfate	BYF0550-BLK1	ND	mg/kg	0.10	0.021	
Endrin	BYF0550-BLK1	ND	mg/kg	0.20	0.025	
Endrin aldehyde	BYF0550-BLK1	ND	mg/kg	0.50	0.022	
Fluoranthene	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
Fluorene	BYF0550-BLK1	ND	mg/kg	0.10	0.019	
Heptachlor	BYF0550-BLK1	ND	mg/kg	0.10	0.021	
Heptachlor epoxide	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
Hexachlorobenzene	BYF0550-BLK1	ND	mg/kg	0.10	0.016	
Hexachlorobutadiene	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
Hexachlorocyclopentadiene	BYF0550-BLK1	ND	mg/kg	0.10	0.019	
Hexachloroethane	BYF0550-BLK1	ND	mg/kg	0.10	0.020	
Indeno[1,2,3-cd]pyrene	BYF0550-BLK1	ND	mg/kg	0.10	0.072	
Isophorone	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
2-Methylnaphthalene	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
Naphthalene	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
2-Naphthylamine	BYF0550-BLK1	ND	mg/kg	3.0	0.16	
2-Nitroaniline	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
3-Nitroaniline	BYF0550-BLK1	ND	mg/kg	0.20	0.015	
4-Nitroaniline	BYF0550-BLK1	ND	mg/kg	0.20	0.025	
Nitrobenzene	BYF0550-BLK1	ND	mg/kg	0.10	0.015	
N-Nitrosodimethylamine	BYF0550-BLK1	ND	mg/kg	0.10	0.037	
N-Nitrosodi-N-propylamine	BYF0550-BLK1	ND	mg/kg	0.10	0.021	

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0550</b>						
N-Nitrosodiphenylamine	BYF0550-BLK1	ND	mg/kg	0.10	0.021	
Phenanthrene	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
Pyrene	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
1,2,4-Trichlorobenzene	BYF0550-BLK1	ND	mg/kg	0.10	0.018	
4-Chloro-3-methylphenol	BYF0550-BLK1	ND	mg/kg	0.20	0.022	
2-Chlorophenol	BYF0550-BLK1	ND	mg/kg	0.10	0.016	
2,4-Dichlorophenol	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
2,4-Dimethylphenol	BYF0550-BLK1	ND	mg/kg	0.10	0.035	
4,6-Dinitro-2-methylphenol	BYF0550-BLK1	ND	mg/kg	0.50	0.012	
2,4-Dinitrophenol	BYF0550-BLK1	ND	mg/kg	0.50	0.0077	
2-Methylphenol	BYF0550-BLK1	ND	mg/kg	0.10	0.017	
3- & 4-Methylphenol	BYF0550-BLK1	ND	mg/kg	0.20	0.033	
2-Nitrophenol	BYF0550-BLK1	ND	mg/kg	0.10	0.016	
4-Nitrophenol	BYF0550-BLK1	ND	mg/kg	0.20	0.018	
Pentachlorophenol	BYF0550-BLK1	ND	mg/kg	0.20	0.013	
Phenol	BYF0550-BLK1	ND	mg/kg	0.10	0.016	
2,4,5-Trichlorophenol	BYF0550-BLK1	ND	mg/kg	0.20	0.018	
2,4,6-Trichlorophenol	BYF0550-BLK1	ND	mg/kg	0.20	0.017	
<b>2-Fluorophenol (Surrogate)</b>	<b>BYF0550-BLK1</b>	<b>105</b>	<b>%</b>	<b>20 - 130 (LCL - UCL)</b>		
<b>Phenol-d5 (Surrogate)</b>	<b>BYF0550-BLK1</b>	<b>134</b>	<b>%</b>	<b>30 - 130 (LCL - UCL) S09</b>		
<b>Nitrobenzene-d5 (Surrogate)</b>	<b>BYF0550-BLK1</b>	<b>143</b>	<b>%</b>	<b>30 - 130 (LCL - UCL) S09</b>		
<b>2-Fluorobiphenyl (Surrogate)</b>	<b>BYF0550-BLK1</b>	<b>128</b>	<b>%</b>	<b>20 - 140 (LCL - UCL)</b>		
<b>2,4,6-Tribromophenol (Surrogate)</b>	<b>BYF0550-BLK1</b>	<b>150</b>	<b>%</b>	<b>20 - 150 (LCL - UCL)</b>		
<b>p-Terphenyl-d14 (Surrogate)</b>	<b>BYF0550-BLK1</b>	<b>116</b>	<b>%</b>	<b>30 - 150 (LCL - UCL)</b>		

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0550</b>										
Acenaphthene	BYF0550-BS1	LCS	1.5382	1.6502	mg/kg	93.2		50 - 140		
1,4-Dichlorobenzene	BYF0550-BS1	LCS	1.5001	1.6502	mg/kg	90.9		40 - 140		
2,4-Dinitrotoluene	BYF0550-BS1	LCS	1.8814	1.6502	mg/kg	114		40 - 140		
Hexachlorobenzene	BYF0550-BS1	LCS	0.81343	1.3201	mg/kg	61.6		40 - 130		
Hexachlorobutadiene	BYF0550-BS1	LCS	1.1006	1.6502	mg/kg	66.7		40 - 120		
Hexachloroethane	BYF0550-BS1	LCS	1.4202	1.6502	mg/kg	86.1		40 - 120		
Nitrobenzene	BYF0550-BS1	LCS	1.1230	1.6502	mg/kg	68.1		40 - 130		
N-Nitrosodi-N-propylamine	BYF0550-BS1	LCS	1.2025	1.6502	mg/kg	72.9		40 - 120		
Pyrene	BYF0550-BS1	LCS	1.7168	1.6502	mg/kg	104		40 - 150		
1,2,4-Trichlorobenzene	BYF0550-BS1	LCS	1.2213	1.6502	mg/kg	74.0		40 - 140		
4-Chloro-3-methylphenol	BYF0550-BS1	LCS	1.4655	1.6502	mg/kg	88.8		40 - 130		
2-Chlorophenol	BYF0550-BS1	LCS	1.2594	1.6502	mg/kg	76.3		40 - 130		
2-Methylphenol	BYF0550-BS1	LCS	1.2960	1.6502	mg/kg	78.5		40 - 140		
3- & 4-Methylphenol	BYF0550-BS1	LCS	2.8006	3.3003	mg/kg	84.9		40 - 120		
4-Nitrophenol	BYF0550-BS1	LCS	1.5431	1.6502	mg/kg	93.5		20 - 120		
Pentachlorophenol	BYF0550-BS1	LCS	1.1809	1.3201	mg/kg	89.4		20 - 130		
Phenol	BYF0550-BS1	LCS	1.2520	1.6502	mg/kg	75.9		40 - 120		
2,4,6-Trichlorophenol	BYF0550-BS1	LCS	1.1595	1.6502	mg/kg	70.3		40 - 130		
2-Fluorophenol (Surrogate)	BYF0550-BS1	LCS	1.6026	1.6502	mg/kg	97.1		20 - 130		
Phenol-d5 (Surrogate)	BYF0550-BS1	LCS	1.9387	1.6502	mg/kg	117		30 - 130		
Nitrobenzene-d5 (Surrogate)	BYF0550-BS1	LCS	1.9665	1.6502	mg/kg	119		30 - 130		
2-Fluorobiphenyl (Surrogate)	BYF0550-BS1	LCS	1.9209	1.6502	mg/kg	116		20 - 140		
2,4,6-Tribromophenol (Surrogate)	BYF0550-BS1	LCS	2.3119	1.6502	mg/kg	140		20 - 150		
p-Terphenyl-d14 (Surrogate)	BYF0550-BS1	LCS	0.96545	0.99010	mg/kg	97.5		30 - 150		

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quails. Includes a QC Batch ID: BYF0550 section and various chemical compounds like Acenaphthene, 1,4-Dichlorobenzene, etc.

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab Quals
								Percent Recovery	Percent Recovery	
<b>QC Batch ID: BYF0550</b>		Used client sample: N								
2-Fluorophenol (Surrogate)	MS	1511019-70	ND	1.2477	1.6835	mg/kg		74.1	20 - 130	
	MSD	1511019-70	ND	1.5742	1.6502	mg/kg	23.1	95.4	20 - 130	
Phenol-d5 (Surrogate)	MS	1511019-70	ND	0.91927	1.6835	mg/kg		54.6	30 - 130	
	MSD	1511019-70	ND	2.0003	1.6502	mg/kg	74.1	121	30 - 130	
<b>Nitrobenzene-d5 (Surrogate)</b>	MS	<b>1511019-70</b>	<b>ND</b>	<b>2.1973</b>	<b>1.6835</b>	<b>mg/kg</b>		<b>131</b>	<b>30 - 130</b>	
	MSD	<b>1511019-70</b>	<b>ND</b>	<b>2.1002</b>	<b>1.6502</b>	<b>mg/kg</b>	<b>4.5</b>	<b>127</b>	<b>30 - 130</b>	
2-Fluorobiphenyl (Surrogate)	MS	1511019-70	ND	2.0567	1.6835	mg/kg		122	20 - 140	
	MSD	1511019-70	ND	2.1195	1.6502	mg/kg	3.0	128	20 - 140	
<b>2,4,6-Tribromophenol (Surrogate)</b>	MS	<b>1511019-70</b>	<b>ND</b>	<b>2.7853</b>	<b>1.6835</b>	<b>mg/kg</b>		<b>165</b>	<b>20 - 150</b>	
	MSD	<b>1511019-70</b>	<b>ND</b>	<b>2.5047</b>	<b>1.6502</b>	<b>mg/kg</b>	<b>10.6</b>	<b>152</b>	<b>20 - 150</b>	
p-Terphenyl-d14 (Surrogate)	MS	1511019-70	ND	1.1223	1.0101	mg/kg		111	30 - 150	
	MSD	1511019-70	ND	1.1024	0.99010	mg/kg	1.8	111	30 - 150	

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SMUD  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

## Total Petroleum Hydrocarbons

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0572</b>						
TPH - Diesel (FFP)	BYF0572-BLK1	ND	mg/kg	10	1.2	
TPH - Motor Oil	BYF0572-BLK1	ND	mg/kg	20	6.5	
<b>Tetracosane (Surrogate)</b>	<b>BYF0572-BLK1</b>	<b>75.5</b>	<b>%</b>	<b>20 - 145 (LCL - UCL)</b>		

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Quals
								Percent Recovery	RPD		
<b>QC Batch ID: BYF0572</b>											
TPH - Diesel (FFP)	BYF0572-BS1	LCS	61.002	82.781	mg/kg	73.7		64	124		
Tetracosane (Surrogate)	BYF0572-BS1	LCS	2.4654	3.3113	mg/kg	74.5		20	145		

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent		Lab Quals
								Recovery	RPD	
<b>QC Batch ID: BYF0572</b>		Used client sample: N								
TPH - Diesel (FFP)	MS	1511019-71	ND	61.879	84.746	mg/kg		73.0		52 - 131
	MSD	1511019-71	ND	47.517	83.612	mg/kg	26.3	56.8	30	52 - 131
Tetracosane (Surrogate)	MS	1511019-71	ND	2.4854	3.3898	mg/kg		73.3		20 - 145
	MSD	1511019-71	ND	1.8140	3.3445	mg/kg	31.2	54.2		20 - 145

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0725</b>						
Oil and Grease	BYF0725-BLK1	ND	mg/kg	50	25	

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0725</b>										
Oil and Grease	BYF0725-BS1	LCS	689.62	860.28	mg/kg	80.2		59	117	

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
									RPD	Percent Recovery	
<b>QC Batch ID: BYF0725</b>		Used client sample: N									
Oil and Grease	DUP	1511019-42	ND	ND		mg/kg				30	
	MS	1511019-42	ND	683.00	862.00	mg/kg		79.2		56 - 111	
	MSD	1511019-42	ND	711.58	860.28	mg/kg	4.1	82.7	30	56 - 111	

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
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**QC Batch ID: BYF0730**

Antimony	BYF0730-BLK1	ND	mg/kg	5.0	0.33	
Arsenic	BYF0730-BLK1	ND	mg/kg	1.0	0.40	
Barium	BYF0730-BLK1	ND	mg/kg	0.50	0.18	
Beryllium	BYF0730-BLK1	ND	mg/kg	0.50	0.047	
Cadmium	BYF0730-BLK1	ND	mg/kg	0.50	0.052	
Chromium	BYF0730-BLK1	ND	mg/kg	0.50	0.050	
Cobalt	BYF0730-BLK1	ND	mg/kg	2.5	0.098	
<b>Copper</b>	<b>BYF0730-BLK1</b>	<b>0.098677</b>	<b>mg/kg</b>	<b>1.0</b>	<b>0.050</b>	<b>J</b>
Lead	BYF0730-BLK1	ND	mg/kg	2.5	0.28	
<b>Molybdenum</b>	<b>BYF0730-BLK1</b>	<b>0.065218</b>	<b>mg/kg</b>	<b>2.5</b>	<b>0.050</b>	<b>J</b>
Nickel	BYF0730-BLK1	ND	mg/kg	0.50	0.15	
Selenium	BYF0730-BLK1	ND	mg/kg	1.0	0.98	
Silver	BYF0730-BLK1	ND	mg/kg	0.50	0.067	
Thallium	BYF0730-BLK1	ND	mg/kg	5.0	0.64	
Vanadium	BYF0730-BLK1	ND	mg/kg	0.50	0.11	
<b>Zinc</b>	<b>BYF0730-BLK1</b>	<b>0.93480</b>	<b>mg/kg</b>	<b>2.5</b>	<b>0.087</b>	<b>J</b>

**QC Batch ID: BYF0751**

Antimony	BYF0751-BLK1	ND	mg/kg	5.0	0.33	
Arsenic	BYF0751-BLK1	ND	mg/kg	1.0	0.40	
Barium	BYF0751-BLK1	ND	mg/kg	0.50	0.18	
Beryllium	BYF0751-BLK1	ND	mg/kg	0.50	0.047	
Cadmium	BYF0751-BLK1	ND	mg/kg	0.50	0.052	
Chromium	BYF0751-BLK1	ND	mg/kg	0.50	0.050	
Cobalt	BYF0751-BLK1	ND	mg/kg	2.5	0.098	
<b>Copper</b>	<b>BYF0751-BLK1</b>	<b>0.33958</b>	<b>mg/kg</b>	<b>1.0</b>	<b>0.050</b>	<b>J</b>
Lead	BYF0751-BLK1	ND	mg/kg	2.5	0.28	
Molybdenum	BYF0751-BLK1	ND	mg/kg	2.5	0.050	
Nickel	BYF0751-BLK1	ND	mg/kg	0.50	0.15	
Selenium	BYF0751-BLK1	ND	mg/kg	1.0	0.98	
Silver	BYF0751-BLK1	ND	mg/kg	0.50	0.067	
Thallium	BYF0751-BLK1	ND	mg/kg	5.0	0.64	
Vanadium	BYF0751-BLK1	ND	mg/kg	0.50	0.11	
<b>Zinc</b>	<b>BYF0751-BLK1</b>	<b>0.97214</b>	<b>mg/kg</b>	<b>2.5</b>	<b>0.087</b>	<b>J</b>

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SMUD  
6201 S Street/P.O. Box 15830  
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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTL)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0874</b>						
Mercury	BYF0874-BLK1	ND	mg/kg	0.16	0.036	
<b>QC Batch ID: BYF1123</b>						
Mercury	BYF1123-BLK1	ND	mg/kg	0.16	0.036	

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0730</b>										
Antimony	BYF0730-BS1	LCS	102.18	100.00	mg/kg	102		75 - 125		
Arsenic	BYF0730-BS1	LCS	10.004	10.000	mg/kg	100		75 - 125		
Barium	BYF0730-BS1	LCS	106.25	100.00	mg/kg	106		75 - 125		
Beryllium	BYF0730-BS1	LCS	10.204	10.000	mg/kg	102		75 - 125		
Cadmium	BYF0730-BS1	LCS	10.408	10.000	mg/kg	104		75 - 125		
Chromium	BYF0730-BS1	LCS	106.05	100.00	mg/kg	106		75 - 125		
Cobalt	BYF0730-BS1	LCS	100.63	100.00	mg/kg	101		75 - 125		
Copper	BYF0730-BS1	LCS	96.335	100.00	mg/kg	96.3		75 - 125		
Lead	BYF0730-BS1	LCS	99.896	100.00	mg/kg	99.9		75 - 125		
Molybdenum	BYF0730-BS1	LCS	101.58	100.00	mg/kg	102		75 - 125		
Nickel	BYF0730-BS1	LCS	107.00	100.00	mg/kg	107		75 - 125		
Selenium	BYF0730-BS1	LCS	9.9902	10.000	mg/kg	99.9		75 - 125		
Silver	BYF0730-BS1	LCS	9.7869	10.000	mg/kg	97.9		75 - 125		
Thallium	BYF0730-BS1	LCS	116.29	100.00	mg/kg	116		75 - 125		
Vanadium	BYF0730-BS1	LCS	105.02	100.00	mg/kg	105		75 - 125		
Zinc	BYF0730-BS1	LCS	101.13	100.00	mg/kg	101		75 - 125		

<b>QC Batch ID: BYF0751</b>										
Antimony	BYF0751-BS1	LCS	98.309	94.340	mg/kg	104		75 - 125		
Arsenic	BYF0751-BS1	LCS	9.5570	9.4340	mg/kg	101		75 - 125		
Barium	BYF0751-BS1	LCS	104.67	94.340	mg/kg	111		75 - 125		
Beryllium	BYF0751-BS1	LCS	9.7488	9.4340	mg/kg	103		75 - 125		
Cadmium	BYF0751-BS1	LCS	10.136	9.4340	mg/kg	107		75 - 125		
Chromium	BYF0751-BS1	LCS	104.04	94.340	mg/kg	110		75 - 125		
Cobalt	BYF0751-BS1	LCS	98.717	94.340	mg/kg	105		75 - 125		
Copper	BYF0751-BS1	LCS	93.493	94.340	mg/kg	99.1		75 - 125		
Lead	BYF0751-BS1	LCS	98.965	94.340	mg/kg	105		75 - 125		
Molybdenum	BYF0751-BS1	LCS	100.30	94.340	mg/kg	106		75 - 125		
Nickel	BYF0751-BS1	LCS	105.44	94.340	mg/kg	112		75 - 125		
Selenium	BYF0751-BS1	LCS	9.6212	9.4340	mg/kg	102		75 - 125		
Silver	BYF0751-BS1	LCS	9.4996	9.4340	mg/kg	101		75 - 125		
Thallium	BYF0751-BS1	LCS	113.45	94.340	mg/kg	120		75 - 125		
Vanadium	BYF0751-BS1	LCS	99.899	94.340	mg/kg	106		75 - 125		
Zinc	BYF0751-BS1	LCS	101.48	94.340	mg/kg	108		75 - 125		

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**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0874</b>										
Mercury	BYF0874-BS1	LCS	0.82000	0.80000	mg/kg	102		80 - 120		
<b>QC Batch ID: BYF1123</b>										
Mercury	BYF1123-BS1	LCS	0.85088	0.80000	mg/kg	106		80 - 120		

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Total Concentrations (TTLIC)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quals. Includes QC Batch ID: BYF0730 and Used client sample: Y - Description: KA-5-D-36, 05/28/2015 10:55.

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Reported: 06/12/2015 15:28
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Total Concentrations (TTLIC)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Qualls. Includes QC Batch ID: BYF0730 and BYF0751.

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Reported: 06/12/2015 15:28  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	Percent Recovery	
<b>QC Batch ID: BYF0751</b>		Used client sample: Y - Description: KA-2-S-6, 05/29/2015 13:20								
Molybdenum	DUP	1513251-13	0.73510	0.55894		mg/kg	27.2		20	J,A02
	MS	1513251-13	0.73510	78.554	94.340	mg/kg		82.5	75 - 125	
	MSD	1513251-13	0.73510	75.334	94.340	mg/kg	4.2	79.1	20 75 - 125	
Nickel	DUP	1513251-13	47.104	46.959		mg/kg	0.3		20	
	MS	1513251-13	47.104	129.77	94.340	mg/kg		87.6	75 - 125	
	MSD	1513251-13	47.104	125.30	94.340	mg/kg	3.5	82.9	20 75 - 125	
Selenium	DUP	1513251-13	ND	ND		mg/kg			20	
	MS	1513251-13	ND	9.0984	9.4340	mg/kg		96.4	75 - 125	
	MSD	1513251-13	ND	8.9228	9.4340	mg/kg	1.9	94.6	20 75 - 125	
Silver	DUP	1513251-13	ND	ND		mg/kg			20	
	MS	1513251-13	ND	7.9654	9.4340	mg/kg		84.4	75 - 125	
	MSD	1513251-13	ND	7.7032	9.4340	mg/kg	3.3	81.7	20 75 - 125	
Thallium	DUP	1513251-13	ND	ND		mg/kg			20	
	MS	1513251-13	ND	87.982	94.340	mg/kg		93.3	75 - 125	
	MSD	1513251-13	ND	84.899	94.340	mg/kg	3.6	90.0	20 75 - 125	
Vanadium	DUP	1513251-13	48.473	47.750		mg/kg	1.5		20	
	MS	1513251-13	48.473	134.88	94.340	mg/kg		91.6	75 - 125	
	MSD	1513251-13	48.473	130.20	94.340	mg/kg	3.5	86.6	20 75 - 125	
Zinc	DUP	1513251-13	40.863	40.667		mg/kg	0.5		20	
	MS	1513251-13	40.863	119.14	94.340	mg/kg		83.0	75 - 125	
	MSD	1513251-13	40.863	115.92	94.340	mg/kg	2.7	79.6	20 75 - 125	
<b>QC Batch ID: BYF0874</b>		Used client sample: N								
Mercury	DUP	1513234-01	ND	ND		mg/kg			20	
	MS	1513234-01	ND	0.86302	0.79365	mg/kg		109	80 - 120	
	MSD	1513234-01	ND	0.84714	0.79365	mg/kg	1.9	107	20 80 - 120	
<b>QC Batch ID: BYF1123</b>		Used client sample: Y - Description: KA-2-S-6, 05/29/2015 13:20								
Mercury	DUP	1513251-13	ND	ND		mg/kg			20	
	MS	1513251-13	ND	0.84935	0.80645	mg/kg		105	80 - 120	
	MSD	1513251-13	ND	0.83048	0.80645	mg/kg	2.2	103	20 80 - 120	

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Sacramento, CA 95852-0830

**Reported:** 06/12/2015 15:28  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

**Notes And Definitions**

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A02 The difference between duplicate readings is less than the quantitation limit.
- A10 Detection and quantitation limits were raised due to matrix interference.
- A19 Surrogate is high due to matrix interference. Interferences verified through second extraction/analysis.
- Q02 Matrix spike precision is not within the control limits.
- Q03 Matrix spike recovery(s) is(are) not within the control limits.
- S09 The surrogate recovery on the sample for this compound was not within the control limits.
- Z1 Sample had low internal standards twice when analysed at 5.0g.



Date of Report: 06/23/2015

Sue Gardner

SMUD - Kleinfelder

6201 S Street/P.O. Box 15830

Sacramento, CA 95852-0830

Client Project: [none]  
 BCL Project: 138810  
 BCL Work Order: 1513756  
 Invoice ID: B206088

Enclosed are the results of analyses for samples received by the laboratory on 6/5/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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Table listing various analytical methods and their corresponding page numbers, including sections for Volatile Organic Analysis, PCB Analysis, and Total Concentrations (TTLIC).

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6-16-15

PROJECT NO. 138810 PROJECT NAME SMMW Ph.II  
 SAMP. NO. (Signature Number) C. RIDGUE #9099  
 DATE MM/DD/YYYY SAMPLE ID. MATRIX

DATE	SAMPLE ID.	MATRIX	NO. OF CON-TAINERS	TYPE OF CON-TAINERS	ANALYSIS	INSTRUCTIONS/REMARKS
06-01-15	0930	KA-13-S-6	1	Soil	X	
0940	KA-13-S-11				X	
1040	KA-25-S-6				X	
1100	KA-25-S-16				X	
1315	KA-1-S-21				X	
1350	KA-3-S-6				X	
1355	KA-3-S-11				X	
1445	KA-4-S-6				X	
1505	KA-4-S-16				X	
06-02-15	0745	KA-24-S-6			X	
0755	KA-24-S-11				X	
0845	KA-14-S-6				X	
0900	KA-14-S-16				X	
0940	KA-23-S-6				X	
0950	KA-23-S-11				X	
1050	KA-19-S-6				X	
1110	KA-19-S-16				X	
1225	KA-18-S-6				X	
1235	KA-18-S-11				X	

RECEIVING LAB: BC Lab  
 INSTRUCTIONS/REMARKS: Standard DAT  
 4098  
 CA-24-S-16  
 KA-24-S-16D  
 CHK BY: [Signature]  
 DISTRIBUTION: [Signature]  
 SUB OUT:

Send Results To: [Signature]  
 3577 Pitt Circle  
 Sacramento CA 95827  
 Attn: Sue Gendner

White - Sampler  
 Canary - Return Copy To Shipper  
 Pink - Lab Copy

ENV-02 REV 05/08

CHAIN OF CUSTODY

COC # 18741

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6-16-15

15-13756

PROJECT NO.	PROJECT NAME		DATE	SAMPLE ID	MATRIX	NO. OF CONTAINERS	TYPE OF CONTAINERS	RECEIVING LAB.	INSTRUCTIONS/REMARKS
	L.P. NO. (P.O. NO.)	SAMPLERS (Signature/Number)							
138810	SUMD PW-II	C. RIDGUE #9099	06-02-15	1320	KA-35-S-6	1	Soil	BC Lab	Standard TAST
			↓	1340	KA-35-S-10				
			06-03-15	0800	KA-37-S-6				
				0810	KA-37-S-11				
				0850	KA-36-S-6				
				0915	KA-36-S-10				
				1030	KA-38-S-6				
				1040	KA-38-S-11				
				1230	KA-40-S-6				
				1250	KA-40-S-10				
				1405	KA-8-S-2				

- SAME INSTRUCTIONS as pg 1

Sue Gardner  
4098

Send Results to:  
Kleinfelder  
2077 Pitt Circle  
Sebastopol CA 95827  
ATTN: Sue Gardner

Instructions/Remarks:  
send to:  
sgardner@kleinfelder.com

Received by: (Signature) [Signature] Date/Time 6/14/15 8:15  
Received by: (Signature) [Signature] Date/Time 6/5/15  
Received for Laboratory by: (Signature) [Signature] Date/Time 6/5/15

ENV02 REV 05/08 White - Sampler  
CHAIN OF CUSTODY  
Pink - Lab Copy  
Canary - Return Copy To Shipper  
COC No 18742

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15-13756



PROJECT NO.	PROJECT NAME		DATE	SAMPLE I.D.	MATRIX	NO. OF CON-TAINERS	TYPE OF CON-TAINERS	ANALYSIS	RECEIVING LAB.	INSTRUCTIONS/REMARKS
	L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number)								
138810	SMUD PUE	C. RUDNIE 9099							BC Lab	
			MM/DD/YY	HH-MM-SS						
-31	06-01-15	0945	KA-13-S-16	Soil	1	6.11				
-32		0955	KA-13-S-21							
-33		1050	KA-25-S-11							
-34		1110	KA-25-S-21							
-35		1255	KA-1-S-6							
-36		1305	KA-1-S-11							
-37		1310	KA-1-S-16							
-38		1405	KA-3-S-16							
-39		1415	KA-3-S-21							
-40		1455	KA-4-S-11							
-41		1515	KA-4-S-21							
-42	06-02-15	0800	KA-24-S-16							
-43		0810	KA-24-S-21							
-44		0855	KA-14-S-11							
-45		0910	KA-14-S-21							
-46		1000	KA-23-S-16							
-47		1010	KA-23-S-21							
-48		1100	KA-19-S-11							
-49		1125	KA-19-S-21							
-50	06-01-15									
Requisitioned by: (Signature)			Date/Time	Received by: (Signature)		Date/Time		Instructions/Remarks:		
[Signature]			6/4/15 815	[Signature]		6/5/15		Sgardner @ kleinfelder.com		
Requisitioned by: (Signature)			Date/Time	Received by: (Signature)		Date/Time		Send Results To:		
[Signature]			6/4/15 1345	[Signature]		6/5/15		Kleinfelder 3071 Gate Circle Sacramento CA 95827 Attn: Sue Gardner		
Requisitioned by: (Signature)			Date/Time	Received for Laboratory by: (Signature)		Date/Time				
[Signature]				[Signature]						

COC # 18743

Pink - Lab Copy

White - Sampler

Canary - Return Copy To Shipper

CHAIN OF CUSTODY

ENV-02 REV 05/08

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15-13756

PROJECT NO.		PROJECT NAME		RECEIVING LAB:	
138810		SUMD Pt. II		BC Labs	
DATE		SAMPLE ID.		INSTRUCTIONS/REMARKS	
MM/DD/YY	HH-MM-SS		MATRIX		
5-06-08-15	1245	KA-18-S-16	soil	1	<p>ANALYSIS</p> <p>FIELD</p> <p>→</p>
5-2	1255	KA-18-S-21			
5-2	1320	KA-35-S-11			
5-3	1355	KA-35-S-21			
5-4-06-03-15	0815	KA-37-S-16			
5-5	0825	KA-37-S-21			
5-6	0905	KA-36-S-11			
5-7	0925	KA-36-S-21			
5-8	1050	KA-38-S-16			
5-9	1100	KA-38-S-21			
5-10	1240	KA-40-S-11			
5-11	1300	KA-40-S-21			
5-12	1420	KA-8-S-5			
5-13					
5-14					
5-15					
5-16					
5-17					
5-18					
5-19					
5-20					

Sent Results To:  
 Kleinfelder  
 3571 Pitt Circle  
 Sacramento CA 95827  
 Attn: Sue Gardner

Instructions/Remarks:  
 Gardner@kleinfelder.com

Requested by (Signature)	Date/Time	Received by (Signature)	Date/Time
[Signature]	6/1/15 8:15	[Signature]	6/5/15
Requested by (Signature)	Date/Time	Received by (Signature)	Date/Time
[Signature]	4/15/12:05	[Signature]	3:50

COC # 18744

White - Sampler

Canary - Return Copy to Shipper

Pink - Lab Copy

ENV-02 REV 05/08

CHAIN OF CUSTODY

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BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 of 7

Submission #: 15-13756

<b>SHIPPING INFORMATION</b> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrak <input checked="" type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____	<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>
---	--	---	--

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_  
 Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO Emissivity: - Container: Soil Sleeve Thermometer ID: 228 Date/Time 6/5/15  
 Temperature: (A) 3.1 °C / (C) 3.3 °C Analyst Init NSC 750

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>4</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 8015M										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
Tedlar Bag										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_ Date/Time: 6/5/15 11:10  
 Sample Numbering Completed By: Joe  
 A = Actual / C = Corrected

Rev. No. 19 05/06/2015



BC LABORATORIES INC. COOLER RECEIPT FORM Page 6 of 7

Submission #: 15-13756

SHIPPING INFORMATION: Fed Ex  UPS  Ontrac  Hand Delivery  BC Lab Field Service  Other  (Specify) \_\_\_\_\_

SHIPPING CONTAINER: Ice Chest  None  Box  Other  (Specify) \_\_\_\_\_

FREE LIQUID: YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Comments: \_\_\_\_\_

Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received:  YES  NO

Emissivity: \_\_\_\_\_ Container: SilStar Thermometer ID: 228 Date/Time: 6/5/15

Temperature: (A) 3.1 °C / (C) 3.3 °C Analyst Init: NSC 750

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>4</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 8015M										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
Tedlar Bag										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_ Date/Time: 6/5/15 11:10 Rev. No. 19 05/06/2015

Sample Numbering Completed By: CA ISS:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\SAMREC Rev 19

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BC LABORATORIES INC. COOLER RECEIPT FORM Page 5 of 7

Submission #: 15-13756

SHIPPING INFORMATION: Fed Ex  UPS  Ontrac  Hand Delivery  BC Lab Field Service  Other  (Specify) \_\_\_\_\_

SHIPPING CONTAINER: Ice Chest  None  Box  Other  (Specify) \_\_\_\_\_

FREE LIQUID: YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Comments: \_\_\_\_\_

Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received: YES  NO

Emissivity: - Container: Salsar Thermometer ID: 228 Date/Time: 6/5/15

Temperature: (A) 3.1 °C / (C) 3.3 °C Analyst Init: NSC 750

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	21	22	23	24	25	26	27	28	29	30
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>6</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 8015M										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
Tedlar Bag										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_ Date/Time: 6/5/15 1110

Sample Numbering Completed By: CR

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Rev. No. 19 05/06/2015





BC LABORATORIES INC. COOLER RECEIPT FORM Page 4 Of 7

Submission #: 15-13756

SHIPPING INFORMATION: Fed Ex  UPS  Ontrac  Hand Delivery  BC Lab Field Service  Other  (Specify) \_\_\_\_\_

SHIPPING CONTAINER: Ice Chest  None  Box  Other  (Specify) \_\_\_\_\_

FREE LIQUID: YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Comments: \_\_\_\_\_

Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received:  YES  NO

Emissivity: - Container: Salsar Thermometer ID: 228 Date/Time: 6/5/15

Temperature: (A) 3.1 °C / (C) 3.3 °C Analyst Init: NSC 750

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	31	32	33	34	35	36	37	38	39	40
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>6</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 8015M										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
Tedlar Bag										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_ Date/Time: 6/5/15 110

Sample Numbering Completed By: [Signature]

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Rev. No. 19 05/06/2015



BC LABORATORIES INC. COOLER RECEIPT FORM Page 5 of 7

Submission #: 15-13756

SHIPPING INFORMATION		SHIPPING CONTAINER		FREE LIQUID
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input checked="" type="checkbox"/>	Hand Delivery <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
BC Lab Field Service <input type="checkbox"/>	Other <input type="checkbox"/> (Specify) _____	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/> Box <input type="checkbox"/>	
		Other <input type="checkbox"/> (Specify) _____		

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_

Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO

Emissivity: \_\_\_\_\_ Container: Soil Sleeve Thermometer ID: 228 Date/Time: 6/5/15

Temperature: (A) 3.1 °C / (C) 3.3 °C Analyst Init: NSC 750

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>3</sub>	Y <sub>4</sub>	Y <sub>5</sub>	Y <sub>6</sub>	Y <sub>7</sub>	Y <sub>8</sub>	Y <sub>9</sub>	Y <sub>10</sub>
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>6+</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 8015M										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
Tedlar Bag										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_ Date/Time: 6/5/15 1110 IS:WPDoc\WordPerfect\LAB\_DOCS\FORMS\SAMRECrev 19

Sample Numbering Completed By: On Rev. No. 19 05/06/2015

A = Actual / C = Corrected



BC LABORATORIES INC. COOLER RECEIPT FORM Page 6 of 7

Submission #: S-13756

SHIPPING INFORMATION Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input checked="" type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		SHIPPING CONTAINER Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/>
--	--	--	--	---

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Comments: \_\_\_\_\_  
Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO  
 Emissivity: \_\_\_\_\_ Container: Soil Sleeve Thermometer ID: 228 Date/Time: 6/5/15  
 Temperature: (A) 3.1 °C / (C) 3.3 °C Analyst Init: NSC 750

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	S <sub>1</sub>	S <sub>2</sub>	S <sub>3</sub>	S <sub>4</sub>	S <sub>5</sub>	S <sub>6</sub>	S <sub>7</sub>	S <sub>8</sub>	S <sub>9</sub>	S <sub>10</sub>
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>6+</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 8015M										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
Tedlar Bag										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_ Date/Time: 6/5/15 Rev. No. 19 05/06/2015  
 Sample Numbering Completed By: [Signature] (S:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\SAMRECrev 19)  
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BC LABORATORIES INC. COOLER RECEIPT FORM Page 7 of 7

Submission #: 15-13756

<b>SHIPPING INFORMATION</b> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrak <input checked="" type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>
---	--	---	--	--

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals: Ice Chest  Containers  None  Comments: \_\_\_\_\_  
 Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received YES  NO  Emissivity: \_\_\_\_\_ Container: Soil Sleeve Thermometer ID: 228 Date/Time 6/5/15  
 Temperature: (A) 3.1 °C (C) 3.3 °C Analyst Init NSC 750

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>6</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 8015M										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE	A	A								
PCB VIAL										
PLASTIC BAG										
Tedlar Bag										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_ Date/Time: 6/5/15 11:00  
 Sample Numbering Completed By: *[Signature]*  
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Rev. No. 19 05/06/2015  
 IS:\WPDoc\WordPerfect\LAB\_DOC\FORMS\SAMRECrev 191

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misty.orton@bclabs.com

15-13756

From: **Craig Riddle <CRiddle@kleinfelder.com>**  
 To: **"misty.orton@bclabs.com" <misty.orton@bclabs.com>, Mark <mark.ellis@bclabs.com>**  
 Copies to: **Sue Gardner <SGardner@kleinfelder.com>, Michael van den <MVanDenEnden@kleinfelder.com>, Julie Hernandez <CJH**  
 Subject: **COC 18741 SMUD Ph. II**  
 Date sent: **Thu, 4 Jun 2015 16:36:43 +0000**

Hi Mark and Misty-  
 On COC 18741 for the samples collected today we need CAM 17 metals run on sample KA-1-S-21, however it is not marked on the COC. Can you make the change for us?  
 Thanks,

Craig Riddle  
 Staff Geologist  
 3077 Fite Circle  
 Sacramento, CA 95827  
 o| 916.366.1701  
 d| 916.366.2364  
 c| 916.416.8913  
 f| 916.366.7013

[Description: Description: Description: Description: Description:  
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 cid:image001.jpg@01CB5419.73BA5CE0]<<http://www.kleinfelder.com/>>  
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 SocialMedialcons]<<https://www.facebook.com/KleinfelderInc>>[Description:  
 SocialMedialcons]<<https://twitter.com/KleinfelderHQ>> [Description:  
 SocialMedialcons] <<http://www.linkedin.com/company/kleinfelder>>  
 [Description: SocialMedialcons]  
 <<http://www.youtube.com/user/KleinfelderHQ/>>



SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1513756-01	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 09:30
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-13-S-6		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-02	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 09:40
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-13-S-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-03	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 10:40
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-25-S-6		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-04	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 11:00
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-25-S-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-05	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 13:15
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-1-S-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-06	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 13:50
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-3-S-6		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-07	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 13:55
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-3-S-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1513756-08	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/01/2015 14:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-4-S-6	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
	1513756-09	<b>COC Number:</b>	---
<b>Project Number:</b>		---	<b>Sampling Date:</b> 06/01/2015 15:05
<b>Sampling Location:</b>		---	<b>Sample Depth:</b> ---
<b>Sampling Point:</b>		KA-4-S-16	<b>Lab Matrix:</b> Solids
<b>Sampled By:</b>		Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-10		<b>COC Number:</b>	---
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/02/2015 07:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-24-S-6	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
	1513756-11	<b>COC Number:</b>	---
<b>Project Number:</b>		---	<b>Sampling Date:</b> 06/02/2015 07:55
<b>Sampling Location:</b>		---	<b>Sample Depth:</b> ---
<b>Sampling Point:</b>		KA-24-S-11	<b>Lab Matrix:</b> Solids
<b>Sampled By:</b>		Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-12		<b>COC Number:</b>	---
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/02/2015 08:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-14-S-6	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
	1513756-13	<b>COC Number:</b>	---
<b>Project Number:</b>		---	<b>Sampling Date:</b> 06/02/2015 09:00
<b>Sampling Location:</b>		---	<b>Sample Depth:</b> ---
<b>Sampling Point:</b>		KA-14-S-16	<b>Lab Matrix:</b> Solids
<b>Sampled By:</b>		Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-14		<b>COC Number:</b>	---
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/02/2015 09:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-23-S-6	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1513756-15	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 09:50
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-23-S-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-16	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 10:50
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-19-S-6		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-17	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 11:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-19-S-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-18	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 12:25
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-18-S-6		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-19	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 12:35
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-18-S-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-20	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 13:20
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-35-S-6		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-21	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 13:40
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-35-S-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1513756-22	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 08:00
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-37-S-6		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-23	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 08:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-37-S-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-24	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 08:50
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-36-S-6		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-25	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 09:15
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-36-S-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-26	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 10:30
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-38-S-6		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-27	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 10:40
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-38-S-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-28	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 12:30
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-40-S-6		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1513756-29	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/03/2015 12:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-40-S-16	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			
1513756-30	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/03/2015 14:05
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-8-S-2	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			
1513756-31	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/01/2015 09:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-13-S-16	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			
1513756-32	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/01/2015 09:55
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-13-S-21	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			
1513756-33	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/01/2015 10:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-25-S-11	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			
1513756-34	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/01/2015 11:10
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-25-S-21	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			
1513756-35	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/01/2015 12:55
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-1-S-6	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1513756-36	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 13:05
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-1-S-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-37	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 13:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-1-S-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-38	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 14:05
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-3-S-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-39	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 14:15
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-3-S-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-40	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 14:55
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-4-S-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-41	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/01/2015 15:15
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-4-S-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-42	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 08:00
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-24-S-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1513756-43	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 08:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-24-S-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-44	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 08:55
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-14-S-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-45	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 09:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-14-S-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-46	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 10:00
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-23-S-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-47	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 10:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-23-S-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-48	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 11:00
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-19-S-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-49	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 11:25
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-19-S-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1513756-50	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/02/2015 12:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-18-S-16	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-51	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/02/2015 12:55
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-18-S-21	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-52	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/02/2015 13:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-35-S-11	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-53	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/02/2015 13:55
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-35-S-21	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-54	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/03/2015 08:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-37-S-16	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-55	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/03/2015 08:25
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-37-S-21	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-56	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/03/2015 09:05
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-36-S-11	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1513756-57	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 09:25
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-36-S-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-58	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 10:50
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-38-S-16		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-59	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 11:00
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-38-S-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-60	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 12:40
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-40-S-11		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-61	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 13:00
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-40-S-21		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-62	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/03/2015 14:20
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-8-S-5		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-63	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 07:45
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-24-S-6 D		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1513756-64	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 07:55
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-24-S-11 D		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-65	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 08:45
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-14-S-6 D		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-66	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 09:00
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-14-S-16 D		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-67	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 09:40
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-23-S-6 D		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-68	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 09:50
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-23-S-11 D		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-69	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 10:50
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-19-S-6 D		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil
1513756-70	<b>COC Number:</b>	---		06/05/2015 07:50	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/02/2015 11:10
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-19-S-16 D		<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099		<b>Sample Type:</b>	Soil

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1513756-71	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/02/2015 12:25
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-18-S-6 D	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-72	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/02/2015 12:35
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-18-S-11 D	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-73	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/02/2015 13:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-35-S-6 D	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-74	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/02/2015 13:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-35-S-16 D	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-75	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/03/2015 08:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-37-S-6 D	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-76	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/03/2015 08:10
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-37-S-11 D	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil
1513756-77	<b>COC Number:</b>	---	<b>Receive Date:</b> 06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b> 06/03/2015 08:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b>	KA-36-S-6 D	<b>Lab Matrix:</b> Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b> Soil

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1513756-78	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/03/2015 09:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-36-S-16 D	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			
1513756-79	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/03/2015 10:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-38-S-6 D	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			
1513756-80	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/03/2015 10:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-38-S-11 D	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			
1513756-81	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/03/2015 12:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-40-S-6 D	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			
1513756-82	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/03/2015 12:50
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-40-S-16 D	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			
1513756-83	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/05/2015 07:50
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/03/2015 14:05
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-8-S-2 D	<b>Lab Matrix:</b>	Solids
	<b>Sampled By:</b>	Craig Riddle/9099	<b>Sample Type:</b>	Soil
	<hr/>			

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-01		Client Sample Name: KA-13-S-6, 6/1/2015 9:30:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	60.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 10:08	ZZZ	GC-15	0.987	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-01	<b>Client Sample Name:</b> KA-13-S-6, 6/1/2015 9:30:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-01		Client Sample Name: KA-13-S-6, 6/1/2015 9:30:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-01	<b>Client Sample Name:</b> KA-13-S-6, 6/1/2015 9:30:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 13:19	ADC	MS-V2	1	BYF0435

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-01	<b>Client Sample Name:</b> KA-13-S-6, 6/1/2015 9:30:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	39.0	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 17:39	MWB	GC-13	1.003	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-01	<b>Client Sample Name:</b> KA-13-S-6, 6/1/2015 9:30:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.998	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-01	<b>Client Sample Name:</b> KA-13-S-6, 6/1/2015 9:30:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.36		1
Arsenic	4.8	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	75	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.35	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	23	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	7.2	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	14	mg/kg	1.0	0.050	EPA-6010B	0.28		1
Lead	3.7	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	0.084	mg/kg	2.5	0.050	EPA-6010B	ND	J	1
Nickel	21	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.3	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	47	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	31	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/12/15	06/15/15 07:48	ARD	PE-OP3	1	BYF1269
2	EPA-7471A	06/12/15	06/12/15 16:06	MEV	CETAC1	1.008	BYF1227

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-02		Client Sample Name: KA-13-S-11, 6/1/2015 9:40:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	63.3	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 10:18	ZZZ	GC-15	1.007	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-02 Client Sample Name: KA-13-S-11, 6/1/2015 9:40:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-02		Client Sample Name: KA-13-S-11, 6/1/2015 9:40:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	118	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-02	<b>Client Sample Name:</b> KA-13-S-11, 6/1/2015 9:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.0	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/08/15 15:19	ADC	MS-V2	1	BYF0435

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-02	<b>Client Sample Name:</b> KA-13-S-11, 6/1/2015 9:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	41.5	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 18:02	MWB	GC-13	1.007	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-02	<b>Client Sample Name:</b> KA-13-S-11, 6/1/2015 9:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.992	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-02	<b>Client Sample Name:</b> KA-13-S-11, 6/1/2015 9:40:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.34		1
Arsenic	7.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	120	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.51	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	51	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	14	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	33	mg/kg	1.0	0.050	EPA-6010B	0.27		1
Lead	7.9	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	59	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.9	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	59	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	62	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/12/15	06/15/15 07:56	ARD	PE-OP3	0.952	BYF1269
2	EPA-7471A	06/12/15	06/12/15 16:08	MEV	CETAC1	0.992	BYF1227

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-03		Client Sample Name: KA-25-S-6, 6/1/2015 10:40:00AM, Craig Riddle/9099							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #	
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1	
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1	
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1	
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1	
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1	
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1	
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1	
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1	
Decachlorobiphenyl (Surrogate)	53.3	%	40 - 120 (LCL - UCL)		EPA-8082			1	

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 10:29	ZZZ	GC-15	1.010	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-03	<b>Client Sample Name:</b> KA-25-S-6, 6/1/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-03		Client Sample Name: KA-25-S-6, 6/1/2015 10:40:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-03	<b>Client Sample Name:</b> KA-25-S-6, 6/1/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	96.7	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 14:03	ADC	MS-V2	1	BYF0435

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-03	<b>Client Sample Name:</b> KA-25-S-6, 6/1/2015 10:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	74.5	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/12/15 21:39	MWB	GC-13	1.003	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-03	<b>Client Sample Name:</b> KA-25-S-6, 6/1/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.992	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-03	<b>Client Sample Name:</b> KA-25-S-6, 6/1/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.35		1
Arsenic	5.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	80	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.52	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	32	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	11	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	20	mg/kg	1.0	0.050	EPA-6010B	0.27		1
Lead	6.0	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	31	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.7	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	53	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	39	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/12/15	06/15/15 07:57	ARD	PE-OP3	0.980	BYF1269
2	EPA-7471A	06/12/15	06/12/15 16:10	MEV	CETAC1	1.008	BYF1227

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-04		Client Sample Name: KA-25-S-16, 6/1/2015 11:00:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	56.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 10:39	ZZZ	GC-15	0.990	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-04		Client Sample Name: KA-25-S-16, 6/1/2015 11:00:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-04		Client Sample Name: KA-25-S-16, 6/1/2015 11:00:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	119	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-04	<b>Client Sample Name:</b> KA-25-S-16, 6/1/2015 11:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	98.1	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 14:48	ADC	MS-V2	1	BYF0435

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-04	<b>Client Sample Name:</b> KA-25-S-16, 6/1/2015 11:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	63.3	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/12/15 22:02	MWB	GC-13	1.010	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-04	<b>Client Sample Name:</b> KA-25-S-16, 6/1/2015 11:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.994	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-04	<b>Client Sample Name:</b> KA-25-S-16, 6/1/2015 11:00:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.35		1
Arsenic	1.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	60	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.20	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	11	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	3.2	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	10	mg/kg	1.0	0.050	EPA-6010B	0.28		1
Lead	2.0	mg/kg	2.5	0.28	EPA-6010B	ND	J	1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	8.8	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.8	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	31	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	27	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/12/15	06/15/15 08:12	ARD	PE-OP3	0.990	BYF1269
2	EPA-7471A	06/15/15	06/17/15 13:29	MEV	CETAC1	1.025	BYF1299

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-05		Client Sample Name: KA-1-S-21, 6/1/2015 1:15:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	60.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 10:50	ZZZ	GC-15	1.014	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-05	<b>Client Sample Name:</b> KA-1-S-21, 6/1/2015 1:15:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-05		Client Sample Name: KA-1-S-21, 6/1/2015 1:15:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	116	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-05	<b>Client Sample Name:</b> KA-1-S-21, 6/1/2015 1:15:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.5	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 15:10	ADC	MS-V2	1	BYF0442

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-05	<b>Client Sample Name:</b> KA-1-S-21, 6/1/2015 1:15:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-05	<b>Client Sample Name:</b> KA-1-S-21, 6/1/2015 1:15:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID: 1513756-05 Client Sample Name: KA-1-S-21, 6/1/2015 1:15:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	mg/kg	0.10	0.037	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Phenanthrene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Pyrene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	mg/kg	0.20	0.022	EPA-8270C	ND		1
2-Chlorophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	mg/kg	0.10	0.035	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.50	0.012	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	mg/kg	0.50	0.0077	EPA-8270C	ND		1
2-Methylphenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	mg/kg	0.20	0.033	EPA-8270C	ND		1
2-Nitrophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
4-Nitrophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
Pentachlorophenol	ND	mg/kg	0.20	0.013	EPA-8270C	ND		1
Phenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	mg/kg	0.20	0.017	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	62.3	%	20 - 130 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	66.8	%	30 - 130 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	61.8	%	30 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	52.8	%	20 - 140 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	64.2	%	20 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	93.3	%	30 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/10/15	06/12/15 18:07	VH1	MS-B2	1.007	BYF1076

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-05	<b>Client Sample Name:</b> KA-1-S-21, 6/1/2015 1:15:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	64.1	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/12/15 22:24	MWB	GC-13	1	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-05	<b>Client Sample Name:</b> KA-1-S-21, 6/1/2015 1:15:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.990	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-05	<b>Client Sample Name:</b> KA-1-S-21, 6/1/2015 1:15:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.33		1
Arsenic	2.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	37	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.18	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	20	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	4.7	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	13	mg/kg	1.0	0.050	EPA-6010B	0.26		1
Lead	2.3	mg/kg	2.5	0.28	EPA-6010B	ND	J	1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	23	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.2	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	26	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	24	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/12/15	06/15/15 08:13	ARD	PE-OP3	0.935	BYF1269
2	EPA-7471A	06/15/15	06/17/15 13:39	MEV	CETAC1	0.992	BYF1299

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1513756-06      **Client Sample Name:** KA-3-S-6, 6/1/2015 1:50:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1a	1
Bromobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1a	1
Bromochloromethane	ND	mg/kg	0.025	0.0046	EPA-8260B	ND	A10,Z1a	1
Bromodichloromethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1a	1
Bromoform	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1a	1
Bromomethane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1a	1
n-Butylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1a	1
sec-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1a	1
tert-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1a	1
Carbon tetrachloride	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1a	1
Chlorobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1a	1
Chloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1a	1
Chloroform	ND	mg/kg	0.025	0.0032	EPA-8260B	ND	A10,Z1a	1
Chloromethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1a	1
2-Chlorotoluene	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1a	1
4-Chlorotoluene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1a	1
Dibromochloromethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1a	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1a	1
1,2-Dibromoethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1a	1
Dibromomethane	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1a	1
1,2-Dichlorobenzene	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1a	1
1,3-Dichlorobenzene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1a	1
1,4-Dichlorobenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1a	1
Dichlorodifluoromethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1a	1
1,1-Dichloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1a	1
1,2-Dichloroethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1a	1
1,1-Dichloroethene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1a	1
cis-1,2-Dichloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1a	1
trans-1,2-Dichloroethene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1a	1
Total 1,2-Dichloroethene	ND	mg/kg	0.050	0.013	EPA-8260B	ND	A10,Z1a	1
1,2-Dichloropropane	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1a	1
1,3-Dichloropropane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1a	1
2,2-Dichloropropane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1a	1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-06		Client Sample Name: KA-3-S-6, 6/1/2015 1:50:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1a	1
cis-1,3-Dichloropropene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1a	1
trans-1,3-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1a	1
Total 1,3-Dichloropropene	ND	mg/kg	0.050	0.010	EPA-8260B	ND	A10,Z1a	1
Ethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1a	1
Hexachlorobutadiene	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1a	1
Isopropylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1a	1
p-Isopropyltoluene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1a	1
Methylene chloride	ND	mg/kg	0.050	0.012	EPA-8260B	ND	A10,Z1a	1
Methyl t-butyl ether	ND	mg/kg	0.025	0.0025	EPA-8260B	ND	A10,Z1a	1
Naphthalene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1a	1
n-Propylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1a	1
Styrene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1a	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1a	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1a	1
Tetrachloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1a	1
Toluene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1a	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1a	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1a	1
1,1,1-Trichloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1a	1
1,1,2-Trichloroethane	ND	mg/kg	0.025	0.0038	EPA-8260B	ND	A10,Z1a	1
Trichloroethene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1a	1
Trichlorofluoromethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1a	1
1,2,3-Trichloropropane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1a	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1a	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1a	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1a	1
Vinyl chloride	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1a	1
Total Xylenes	ND	mg/kg	0.050	0.017	EPA-8260B	ND	A10,Z1a	1
p- & m-Xylenes	ND	mg/kg	0.025	0.011	EPA-8260B	ND	A10,Z1a	1
o-Xylene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1a	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	1.0	0.10	Luft-GC/MS	ND	A10,Z1a	1
1,2-Dichloroethane-d4 (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-06	<b>Client Sample Name:</b> KA-3-S-6, 6/1/2015 1:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	96.5	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.3	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/11/15 06:23	ADC	MS-V2	5	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-06	<b>Client Sample Name:</b> KA-3-S-6, 6/1/2015 1:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	58.9	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/12/15 22:46	MWB	GC-13	1.014	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-06	<b>Client Sample Name:</b> KA-3-S-6, 6/1/2015 1:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.994	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-06	<b>Client Sample Name:</b> KA-3-S-6, 6/1/2015 1:50:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.33		1
Arsenic	7.0	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	96	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.49	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	39	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	11	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	22	mg/kg	1.0	0.050	EPA-6010B	0.26		1
Lead	7.0	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	34	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	2.1	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	50	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	36	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/12/15	06/15/15	08:15	ARD	PE-OP3	0.935	BYF1269
2	EPA-7471A	06/15/15	06/17/15	13:42	MEV	CETAC1	1.008	BYF1299

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-07 Client Sample Name: KA-3-S-11, 6/1/2015 1:55:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-07		Client Sample Name: KA-3-S-11, 6/1/2015 1:55:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-07	<b>Client Sample Name:</b> KA-3-S-11, 6/1/2015 1:55:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.0	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/08/15 16:04	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-07	<b>Client Sample Name:</b> KA-3-S-11, 6/1/2015 1:55:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	68.7	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 00:40	MWB	GC-13	0.993	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-07	<b>Client Sample Name:</b> KA-3-S-11, 6/1/2015 1:55:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.992	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-07	<b>Client Sample Name:</b> KA-3-S-11, 6/1/2015 1:55:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.35		1
Arsenic	3.8	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	68	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.35	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	28	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	6.3	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	16	mg/kg	1.0	0.050	EPA-6010B	0.27		1
Lead	4.1	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	29	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	1.0	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.9	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	37	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	33	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/12/15	06/15/15 08:16	ARD	PE-OP3	0.980	BYF1269
2	EPA-7471A	06/15/15	06/17/15 13:44	MEV	CETAC1	1.008	BYF1299

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-08	<b>Client Sample Name:</b> KA-4-S-6, 6/1/2015 2:45:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-08	<b>Client Sample Name:</b> KA-4-S-6, 6/1/2015 2:45:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	117	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-08	<b>Client Sample Name:</b> KA-4-S-6, 6/1/2015 2:45:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	103	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/08/15 16:26	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-08	<b>Client Sample Name:</b> KA-4-S-6, 6/1/2015 2:45:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	57.0	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 01:02	MWB	GC-13	0.993	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-08	<b>Client Sample Name:</b> KA-4-S-6, 6/1/2015 2:45:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	1	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-08	<b>Client Sample Name:</b> KA-4-S-6, 6/1/2015 2:45:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.34		1
Arsenic	5.8	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	100	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.41	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	34	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.7	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	23	mg/kg	1.0	0.050	EPA-6010B	0.27		1
Lead	6.1	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	36	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.7	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	47	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	39	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/12/15	06/15/15 08:18	ARD	PE-OP3	0.962	BYF1269
2	EPA-7471A	06/15/15	06/17/15 13:50	MEV	CETAC1	0.992	BYF1299

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-09	<b>Client Sample Name:</b> KA-4-S-16, 6/1/2015 3:05:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-09	<b>Client Sample Name:</b> KA-4-S-16, 6/1/2015 3:05:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	119	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-09	<b>Client Sample Name:</b> KA-4-S-16, 6/1/2015 3:05:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	103	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.8	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 16:40	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-09	<b>Client Sample Name:</b> KA-4-S-16, 6/1/2015 3:05:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	63.1	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 01:25	MWB	GC-13	1	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-09	<b>Client Sample Name:</b> KA-4-S-16, 6/1/2015 3:05:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.994	BYF1193

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-09	<b>Client Sample Name:</b> KA-4-S-16, 6/1/2015 3:05:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.33		1
Arsenic	1.9	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	63	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.23	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	21	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	5.5	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	13	mg/kg	1.0	0.050	EPA-6010B	0.26		1
Lead	3.1	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	26	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.6	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	31	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	36	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/12/15	06/15/15 08:19	ARD	PE-OP3	0.935	BYF1269
2	EPA-7471A	06/15/15	06/17/15 13:52	MEV	CETAC1	1.008	BYF1299

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-10		Client Sample Name: KA-24-S-6, 6/2/2015 7:45:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	46.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 11:01	ZZZ	GC-15	1.007	BYF1225

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1513756-10      **Client Sample Name:** KA-24-S-6, 6/2/2015 7:45:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-10		Client Sample Name: KA-24-S-6, 6/2/2015 7:45:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	124	%	70 - 121 (LCL - UCL)		EPA-8260B		A19,S09	1
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-10	<b>Client Sample Name:</b> KA-24-S-6, 6/2/2015 7:45:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	101	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 17:02	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-10	<b>Client Sample Name:</b> KA-24-S-6, 6/2/2015 7:45:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	62.1	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 01:48	MWB	GC-13	0.993	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-10	<b>Client Sample Name:</b> KA-24-S-6, 6/2/2015 7:45:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.996	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-10	<b>Client Sample Name:</b> KA-24-S-6, 6/2/2015 7:45:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.33		1
Arsenic	2.5	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	67	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.35	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	20	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	5.2	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	13	mg/kg	1.0	0.050	EPA-6010B	0.26		1
Lead	3.7	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	16	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.7	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	37	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	27	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/12/15	06/15/15 08:21	ARD	PE-OP3	0.935	BYF1269
2	EPA-7471A	06/15/15	06/17/15 13:55	MEV	CETAC1	1.025	BYF1299

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-11		Client Sample Name: KA-24-S-11, 6/2/2015 7:55:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	50.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 11:43	ZZZ	GC-15	0.997	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-11 Client Sample Name: KA-24-S-11, 6/2/2015 7:55:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-11	<b>Client Sample Name:</b> KA-24-S-11, 6/2/2015 7:55:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	115	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-11	<b>Client Sample Name:</b> KA-24-S-11, 6/2/2015 7:55:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/08/15 16:49	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-11	<b>Client Sample Name:</b> KA-24-S-11, 6/2/2015 7:55:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	54.5	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 02:10	MWB	GC-13	1.003	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-11	<b>Client Sample Name:</b> KA-24-S-11, 6/2/2015 7:55:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.998	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1513756-11	<b>Client Sample Name:</b> KA-24-S-11, 6/2/2015 7:55:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.34		1
Arsenic	2.3	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	64	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.31	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	15	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	4.3	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	11	mg/kg	1.0	0.050	EPA-6010B	0.26		1
Lead	3.1	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	15	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.2	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	34	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	26	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/12/15	06/15/15	08:22	ARD	PE-OP3	0.943	BYF1269
2	EPA-7471A	06/15/15	06/17/15	13:57	MEV	CETAC1	1.008	BYF1299

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-12		Client Sample Name: KA-14-S-6, 6/2/2015 8:45:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	41.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 11:53	ZZZ	GC-15	0.987	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-12		Client Sample Name: KA-14-S-6, 6/2/2015 8:45:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-12		Client Sample Name: KA-14-S-6, 6/2/2015 8:45:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	142	%	70 - 121 (LCL - UCL)		EPA-8260B		A19,S09	1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-12	<b>Client Sample Name:</b> KA-14-S-6, 6/2/2015 8:45:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	104	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.6	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 17:47	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-12	<b>Client Sample Name:</b> KA-14-S-6, 6/2/2015 8:45:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	58.2	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 02:33	MWB	GC-13	0.997	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-12	<b>Client Sample Name:</b> KA-14-S-6, 6/2/2015 8:45:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.998	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-12	<b>Client Sample Name:</b> KA-14-S-6, 6/2/2015 8:45:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.34		1
Arsenic	3.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	78	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.36	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	22	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	5.6	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	14	mg/kg	1.0	0.050	EPA-6010B	0.27		1
Lead	4.3	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	19	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.4	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	39	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	30	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/12/15	06/15/15	08:24	ARD	PE-OP3	0.952	BYF1269
2	EPA-7471A	06/15/15	06/17/15	13:59	MEV	CETAC1	1.008	BYF1299

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513756-13	<b>Client Sample Name:</b> KA-14-S-16, 6/2/2015 9:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	70.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 12:04	ZZZ	GC-15	0.997	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-13	<b>Client Sample Name:</b> KA-14-S-16, 6/2/2015 9:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-13	<b>Client Sample Name:</b> KA-14-S-16, 6/2/2015 9:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	124	%	70 - 121 (LCL - UCL)		EPA-8260B		A19,S09	1

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-13	<b>Client Sample Name:</b> KA-14-S-16, 6/2/2015 9:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.5	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 18:10	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-13	<b>Client Sample Name:</b> KA-14-S-16, 6/2/2015 9:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	51.4	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 02:55	MWB	GC-13	0.997	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-13	<b>Client Sample Name:</b> KA-14-S-16, 6/2/2015 9:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.998	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-13	<b>Client Sample Name:</b> KA-14-S-16, 6/2/2015 9:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.35		1
Arsenic	2.5	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	55	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.21	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	13	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	3.5	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	9.2	mg/kg	1.0	0.050	EPA-6010B	0.27		1
Lead	2.8	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	11	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	2.0	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	29	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	27	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/12/15	06/15/15	08:25	ARD	PE-OP3	0.980	BYF1269
2	EPA-7471A	06/15/15	06/17/15	14:01	MEV	CETAC1	1.025	BYF1299

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513756-14	<b>Client Sample Name:</b> KA-23-S-6, 6/2/2015 9:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	45.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 12:14	ZZZ	GC-15	1.014	BYF1225

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-14	<b>Client Sample Name:</b> KA-23-S-6, 6/2/2015 9:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-14		Client Sample Name: KA-23-S-6, 6/2/2015 9:40:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	119	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.0	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-14	<b>Client Sample Name:</b> KA-23-S-6, 6/2/2015 9:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/08/15 17:11	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-14	<b>Client Sample Name:</b> KA-23-S-6, 6/2/2015 9:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	51.9	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 03:18	MWB	GC-13	0.993	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-14	<b>Client Sample Name:</b> KA-23-S-6, 6/2/2015 9:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.996	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-14	<b>Client Sample Name:</b> KA-23-S-6, 6/2/2015 9:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	0.33		1
Arsenic	1.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	120	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.54	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	30	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.2	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	19	mg/kg	1.0	0.050	EPA-6010B	0.26		1
Lead	6.0	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	26	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.9	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	49	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	37	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/12/15	06/15/15	08:46	ARD	PE-OP3	0.926	BYF1269
2	EPA-7471A	06/15/15	06/17/15	14:03	MEV	CETAC1	1.008	BYF1299

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-15		Client Sample Name: KA-23-S-11, 6/2/2015 9:50:00AM, Craig Riddle/9099							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #	
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1	
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1	
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1	
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1	
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1	
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1	
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1	
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1	
Decachlorobiphenyl (Surrogate)	53.3	%	40 - 120 (LCL - UCL)		EPA-8082			1	

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 12:25	ZZZ	GC-15	1.003	BYF1225

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1513756-15      **Client Sample Name:** KA-23-S-11, 6/2/2015 9:50:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-15	<b>Client Sample Name:</b> KA-23-S-11, 6/2/2015 9:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	129	%	70 - 121 (LCL - UCL)		EPA-8260B		A19,S09	1
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-15	<b>Client Sample Name:</b> KA-23-S-11, 6/2/2015 9:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	97.1	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 18:55	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-15	<b>Client Sample Name:</b> KA-23-S-11, 6/2/2015 9:50:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	55.7	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 03:41	MWB	GC-13	0.993	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-15	<b>Client Sample Name:</b> KA-23-S-11, 6/2/2015 9:50:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.994	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-15	<b>Client Sample Name:</b> KA-23-S-11, 6/2/2015 9:50:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	7.1	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	96	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.42	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	41	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	12	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	19	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	4.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	38	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	54	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	38	mg/kg	2.5	0.087	EPA-6010B	0.35		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/15/15	06/16/15	08:39	ARD	PE-OP3	0.990	BYF1334
2	EPA-7471A	06/15/15	06/17/15	14:05	MEV	CETAC1	1.008	BYF1299

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-16	<b>Client Sample Name:</b> KA-19-S-6, 6/2/2015 10:50:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-16		Client Sample Name: KA-19-S-6, 6/2/2015 10:50:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	120	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-16	<b>Client Sample Name:</b> KA-19-S-6, 6/2/2015 10:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.1	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.9	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 21:32	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-16	<b>Client Sample Name:</b> KA-19-S-6, 6/2/2015 10:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	48.4	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 04:04	MWB	GC-13	1	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-16	<b>Client Sample Name:</b> KA-19-S-6, 6/2/2015 10:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.996	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-16	<b>Client Sample Name:</b> KA-19-S-6, 6/2/2015 10:50:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	10	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	100	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.48	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	32	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	10	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	18	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	4.0	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	31	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	53	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	39	mg/kg	2.5	0.087	EPA-6010B	0.33		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/15/15	06/16/15	08:40	ARD	PE-OP3	0.926	BYF1334
2	EPA-7471A	06/15/15	06/17/15	14:07	MEV	CETAC1	0.992	BYF1299

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-17		Client Sample Name: KA-19-S-16, 6/2/2015 11:10:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-17	<b>Client Sample Name:</b> KA-19-S-16, 6/2/2015 11:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-17	<b>Client Sample Name:</b> KA-19-S-16, 6/2/2015 11:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 21:54	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-17	<b>Client Sample Name:</b> KA-19-S-16, 6/2/2015 11:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	34.5	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 05:57	MWB	GC-13	1.010	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-17	<b>Client Sample Name:</b> KA-19-S-16, 6/2/2015 11:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.994	BYF1193

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-17	<b>Client Sample Name:</b> KA-19-S-16, 6/2/2015 11:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	96	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.34	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	63	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	16	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	34	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	3.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	68	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	61	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	48	mg/kg	2.5	0.087	EPA-6010B	0.35		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/15/15	06/16/15	08:42	ARD	PE-OP3	0.971	BYF1334
2	EPA-7471A	06/15/15	06/17/15	14:10	MEV	CETAC1	1.025	BYF1299

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-18	<b>Client Sample Name:</b> KA-18-S-6, 6/2/2015 12:25:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-18		Client Sample Name: KA-18-S-6, 6/2/2015 12:25:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	122	%	70 - 121 (LCL - UCL)		EPA-8260B		A19,S09	1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-18	<b>Client Sample Name:</b> KA-18-S-6, 6/2/2015 12:25:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	100	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 22:17	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-18	<b>Client Sample Name:</b> KA-18-S-6, 6/2/2015 12:25:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	13	mg/kg	10	1.2	EPA-8015B/FFP	ND	A52	1
TPH - Motor Oil	47	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	61.7	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/12/15 14:07	MWB	GC-13	1.007	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-18	<b>Client Sample Name:</b> KA-18-S-6, 6/2/2015 12:25:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 10:30	MAM	MAN-SV	0.992	BYF1193

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1513756-18	<b>Client Sample Name:</b> KA-18-S-6, 6/2/2015 12:25:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	23	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	140	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.43	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	39	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	12	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	46	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	7.7	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	37	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	54	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	50	mg/kg	2.5	0.087	EPA-6010B	0.34		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/15/15	06/16/15	08:43	ARD	PE-OP3	0.952	BYF1334
2	EPA-7471A	06/15/15	06/17/15	14:16	MEV	CETAC1	1.025	BYF1299

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-19	<b>Client Sample Name:</b> KA-18-S-11, 6/2/2015 12:35:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Bromobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Bromochloromethane	ND	mg/kg	0.025	0.0046	EPA-8260B	ND	A10,Z1b	1
Bromodichloromethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1b	1
Bromoform	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Bromomethane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
n-Butylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
sec-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
tert-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Carbon tetrachloride	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Chlorobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Chloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Chloroform	ND	mg/kg	0.025	0.0032	EPA-8260B	ND	A10,Z1b	1
Chloromethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
2-Chlorotoluene	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1b	1
4-Chlorotoluene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Dibromochloromethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1b	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1b	1
1,2-Dibromoethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1b	1
Dibromomethane	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1b	1
1,2-Dichlorobenzene	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1b	1
1,3-Dichlorobenzene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,4-Dichlorobenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Dichlorodifluoromethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,1-Dichloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloroethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1b	1
1,1-Dichloroethene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
cis-1,2-Dichloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
trans-1,2-Dichloroethene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Total 1,2-Dichloroethene	ND	mg/kg	0.050	0.013	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloropropane	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1b	1
1,3-Dichloropropane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
2,2-Dichloropropane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-19		Client Sample Name: KA-18-S-11, 6/2/2015 12:35:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
cis-1,3-Dichloropropene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
trans-1,3-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Total 1,3-Dichloropropene	ND	mg/kg	0.050	0.010	EPA-8260B	ND	A10,Z1b	1
Ethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Hexachlorobutadiene	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1b	1
Isopropylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
p-Isopropyltoluene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Methylene chloride	ND	mg/kg	0.050	0.012	EPA-8260B	ND	A10,Z1b	1
Methyl t-butyl ether	ND	mg/kg	0.025	0.0025	EPA-8260B	ND	A10,Z1b	1
Naphthalene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
n-Propylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Styrene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Tetrachloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Toluene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1b	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1b	1
1,1,1-Trichloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,1,2-Trichloroethane	ND	mg/kg	0.025	0.0038	EPA-8260B	ND	A10,Z1b	1
Trichloroethene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Trichlorofluoromethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,2,3-Trichloropropane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Vinyl chloride	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
Total Xylenes	ND	mg/kg	0.050	0.017	EPA-8260B	ND	A10,Z1b	1
p- & m-Xylenes	ND	mg/kg	0.025	0.011	EPA-8260B	ND	A10,Z1b	1
o-Xylene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	1.0	0.10	Luft-GC/MS	ND	A10,Z1b	1
1,2-Dichloroethane-d4 (Surrogate)	116	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-19	<b>Client Sample Name:</b> KA-18-S-11, 6/2/2015 12:35:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.7	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/09/15 13:58	ADC	MS-V2	5	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-19	<b>Client Sample Name:</b> KA-18-S-11, 6/2/2015 12:35:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	52.5	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 06:20	MWB	GC-13	1.007	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-19	<b>Client Sample Name:</b> KA-18-S-11, 6/2/2015 12:35:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 12:00	MAM	MAN-SV	0.996	BYF1210

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-19	<b>Client Sample Name:</b> KA-18-S-11, 6/2/2015 12:35:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	7.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	150	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.46	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	41	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	16	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	29	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	6.7	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	47	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	56	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	55	mg/kg	2.5	0.087	EPA-6010B	0.33		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/15/15	06/16/15	08:44	ARD	PE-OP3	0.926	BYF1334
2	EPA-7471A	06/15/15	06/17/15	14:18	MEV	CETAC1	0.992	BYF1299

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513756-20	<b>Client Sample Name:</b> KA-35-S-6, 6/2/2015 1:20:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	51.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 12:35	ZZZ	GC-15	1.010	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-20	<b>Client Sample Name:</b> KA-35-S-6, 6/2/2015 1:20:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-20		Client Sample Name: KA-35-S-6, 6/2/2015 1:20:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	120	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-20	<b>Client Sample Name:</b> KA-35-S-6, 6/2/2015 1:20:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	103	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.3	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 23:02	ADC	MS-V2	1	BYF0442

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-20	<b>Client Sample Name:</b> KA-35-S-6, 6/2/2015 1:20:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	41.4	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 06:43	MWB	GC-13	0.990	BYF1073

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-20	<b>Client Sample Name:</b> KA-35-S-6, 6/2/2015 1:20:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 12:00	MAM	MAN-SV	0.994	BYF1210

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-20	<b>Client Sample Name:</b> KA-35-S-6, 6/2/2015 1:20:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	4.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	66	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.32	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	23	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	7.8	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	14	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	2.5	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	23	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	0.85	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	45	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	32	mg/kg	2.5	0.087	EPA-6010B	0.35		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/15/15	06/16/15	08:46	ARD	PE-OP3	0.990	BYF1334
2	EPA-7471A	06/15/15	06/17/15	14:20	MEV	CETAC1	1.008	BYF1299

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-21		Client Sample Name: KA-35-S-16, 6/2/2015 1:40:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	56.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 12:46	ZZZ	GC-15	1.007	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-21	<b>Client Sample Name:</b> KA-35-S-16, 6/2/2015 1:40:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1513756-21      **Client Sample Name:** KA-35-S-16, 6/2/2015 1:40:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-21	<b>Client Sample Name:</b> KA-35-S-16, 6/2/2015 1:40:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.9	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/08/15 17:56	ADC	MS-V2	1	BYF0688

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-21	<b>Client Sample Name:</b> KA-35-S-16, 6/2/2015 1:40:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	39.7	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 17:16	MWB	GC-13	1.010	BYF1075

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-21	<b>Client Sample Name:</b> KA-35-S-16, 6/2/2015 1:40:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 12:00	MAM	MAN-SV	0.990	BYF1210

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-21	<b>Client Sample Name:</b> KA-35-S-16, 6/2/2015 1:40:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	2.3	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	51	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.14	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	17	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	3.7	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	8.5	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	1.4	mg/kg	2.5	0.28	EPA-6010B	ND	J	1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	13	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.0	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	30	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	25	mg/kg	2.5	0.087	EPA-6010B	0.33		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/15/15	06/16/15	08:48	ARD	PE-OP3	0.926	BYF1334
2	EPA-7471A	06/15/15	06/17/15	14:23	MEV	CETAC1	1.008	BYF1299

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-22		Client Sample Name: KA-37-S-6, 6/3/2015 8:00:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	60.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 12:57	ZZZ	GC-15	1	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-22	<b>Client Sample Name:</b> KA-37-S-6, 6/3/2015 8:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-22		Client Sample Name: KA-37-S-6, 6/3/2015 8:00:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	127	%	70 - 121 (LCL - UCL)		EPA-8260B		A19,S09	1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-22	<b>Client Sample Name:</b> KA-37-S-6, 6/3/2015 8:00:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	98.3	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	100	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/05/15 23:47	ADC	MS-V2	1	BYF0688

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-22	<b>Client Sample Name:</b> KA-37-S-6, 6/3/2015 8:00:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	56.8	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/10/15 22:29	MWB	GC-13	0.993	BYF1075

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-22	<b>Client Sample Name:</b> KA-37-S-6, 6/3/2015 8:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 12:00	MAM	MAN-SV	0.996	BYF1210

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-22	<b>Client Sample Name:</b> KA-37-S-6, 6/3/2015 8:00:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	7.6	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	150	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.47	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	46	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	13	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	28	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	5.9	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	48	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	60	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	48	mg/kg	2.5	0.087	EPA-6010B	0.33		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/15/15	06/16/15	08:53	ARD	PE-OP3	0.935	BYF1334
2	EPA-7471A	06/15/15	06/17/15	14:25	MEV	CETAC1	1.025	BYF1299

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-23		Client Sample Name: KA-37-S-11, 6/3/2015 8:10:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	61.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 13:07	ZZZ	GC-15	0.993	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-23 Client Sample Name: KA-37-S-11, 6/3/2015 8:10:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1	1
Bromobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1	1
Bromochloromethane	ND	mg/kg	0.025	0.0046	EPA-8260B	ND	A10,Z1	1
Bromodichloromethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1	1
Bromoform	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1	1
Bromomethane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1	1
n-Butylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1	1
sec-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1	1
tert-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1	1
Carbon tetrachloride	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1	1
Chlorobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1	1
Chloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1	1
Chloroform	ND	mg/kg	0.025	0.0032	EPA-8260B	ND	A10,Z1	1
Chloromethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1	1
2-Chlorotoluene	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1	1
4-Chlorotoluene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1	1
Dibromochloromethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1	1
1,2-Dibromoethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1	1
Dibromomethane	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1	1
1,2-Dichlorobenzene	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1	1
1,3-Dichlorobenzene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1	1
1,4-Dichlorobenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1	1
Dichlorodifluoromethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1	1
1,1-Dichloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1	1
1,2-Dichloroethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1	1
1,1-Dichloroethene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1	1
cis-1,2-Dichloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1	1
trans-1,2-Dichloroethene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1	1
Total 1,2-Dichloroethene	ND	mg/kg	0.050	0.013	EPA-8260B	ND	A10,Z1	1
1,2-Dichloropropane	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1	1
1,3-Dichloropropane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1	1
2,2-Dichloropropane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1	1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-23		Client Sample Name: KA-37-S-11, 6/3/2015 8:10:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1	1
cis-1,3-Dichloropropene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1	1
Total 1,3-Dichloropropene	ND	mg/kg	0.050	0.010	EPA-8260B	ND	A10,Z1	1
Ethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1	1
Hexachlorobutadiene	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1	1
Isopropylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1	1
p-Isopropyltoluene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1	1
Methylene chloride	ND	mg/kg	0.050	0.012	EPA-8260B	ND	A10,Z1	1
Methyl t-butyl ether	ND	mg/kg	0.025	0.0025	EPA-8260B	ND	A10,Z1	1
Naphthalene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1	1
n-Propylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1	1
Styrene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1	1
Tetrachloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1	1
Toluene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.025	0.0038	EPA-8260B	ND	A10,Z1	1
Trichloroethene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1	1
Trichlorofluoromethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1	1
Vinyl chloride	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1	1
Total Xylenes	ND	mg/kg	0.050	0.017	EPA-8260B	ND	A10,Z1	1
p- & m-Xylenes	ND	mg/kg	0.025	0.011	EPA-8260B	ND	A10,Z1	1
o-Xylene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	1.0	0.10	Luft-GC/MS	ND	A10,Z1	1
1,2-Dichloroethane-d4 (Surrogate)	115	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-23	<b>Client Sample Name:</b> KA-37-S-11, 6/3/2015 8:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	98.3	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.5	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/11/15 08:14	ADC	MS-V2	5	BYF0688

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-23	<b>Client Sample Name:</b> KA-37-S-11, 6/3/2015 8:10:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	53.3	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 16:54	MWB	GC-13	0.987	BYF1075

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-23	<b>Client Sample Name:</b> KA-37-S-11, 6/3/2015 8:10:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 12:00	MAM	MAN-SV	0.996	BYF1210

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-23	<b>Client Sample Name:</b> KA-37-S-11, 6/3/2015 8:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.0	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	75	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.29	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	39	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	9.2	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	19	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	3.4	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	40	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	56	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	43	mg/kg	2.5	0.087	EPA-6010B	0.35		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/15/15	06/16/15	08:54	ARD	PE-OP3	0.971	BYF1334
2	EPA-7471A	06/15/15	06/17/15	14:27	MEV	CETAC1	1.025	BYF1299

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-24		Client Sample Name: KA-36-S-6, 6/3/2015 8:50:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	48.3	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 13:18	ZZZ	GC-15	1.007	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1513756-24      **Client Sample Name:** KA-36-S-6, 6/3/2015 8:50:00AM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Bromobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Bromochloromethane	ND	mg/kg	0.025	0.0046	EPA-8260B	ND	A10,Z1b	1
Bromodichloromethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1b	1
Bromoform	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Bromomethane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
n-Butylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
sec-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
tert-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Carbon tetrachloride	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Chlorobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Chloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Chloroform	ND	mg/kg	0.025	0.0032	EPA-8260B	ND	A10,Z1b	1
Chloromethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
2-Chlorotoluene	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1b	1
4-Chlorotoluene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Dibromochloromethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1b	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1b	1
1,2-Dibromoethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1b	1
Dibromomethane	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1b	1
1,2-Dichlorobenzene	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1b	1
1,3-Dichlorobenzene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,4-Dichlorobenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Dichlorodifluoromethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,1-Dichloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloroethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1b	1
1,1-Dichloroethene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
cis-1,2-Dichloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
trans-1,2-Dichloroethene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Total 1,2-Dichloroethene	ND	mg/kg	0.050	0.013	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloropropane	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1b	1
1,3-Dichloropropane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
2,2-Dichloropropane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-24		Client Sample Name: KA-36-S-6, 6/3/2015 8:50:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
cis-1,3-Dichloropropene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
trans-1,3-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Total 1,3-Dichloropropene	ND	mg/kg	0.050	0.010	EPA-8260B	ND	A10,Z1b	1
Ethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Hexachlorobutadiene	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1b	1
Isopropylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
p-Isopropyltoluene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Methylene chloride	ND	mg/kg	0.050	0.012	EPA-8260B	ND	A10,Z1b	1
Methyl t-butyl ether	ND	mg/kg	0.025	0.0025	EPA-8260B	ND	A10,Z1b	1
Naphthalene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
n-Propylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Styrene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Tetrachloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Toluene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1b	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1b	1
1,1,1-Trichloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,1,2-Trichloroethane	ND	mg/kg	0.025	0.0038	EPA-8260B	ND	A10,Z1b	1
Trichloroethene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Trichlorofluoromethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,2,3-Trichloropropane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Vinyl chloride	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
Total Xylenes	ND	mg/kg	0.050	0.017	EPA-8260B	ND	A10,Z1b	1
p- & m-Xylenes	ND	mg/kg	0.025	0.011	EPA-8260B	ND	A10,Z1b	1
o-Xylene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	1.0	0.10	Luft-GC/MS	ND	A10,Z1b	1
1,2-Dichloroethane-d4 (Surrogate)	116	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-24	<b>Client Sample Name:</b> KA-36-S-6, 6/3/2015 8:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	94.3	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/09/15 15:05	ADC	MS-V2	5	BYF0688

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-24	<b>Client Sample Name:</b> KA-36-S-6, 6/3/2015 8:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	44.2	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 16:31	MWB	GC-13	1.010	BYF1075

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-24	<b>Client Sample Name:</b> KA-36-S-6, 6/3/2015 8:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 12:00	MAM	MAN-SV	0.996	BYF1210

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

BCL Sample ID: 1513756-24		Client Sample Name: KA-36-S-6, 6/3/2015 8:50:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	7.9	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	130	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.51	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	46	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	13	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	25	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	4.9	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	47	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	64	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	43	mg/kg	2.5	0.087	EPA-6010B	0.35		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/15/15	06/16/15 08:55	ARD	PE-OP3	0.990	BYF1334
2	EPA-7471A	06/16/15	06/17/15 10:19	MEV	CETAC1	1.025	BYF1498

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-25		Client Sample Name: KA-36-S-16, 6/3/2015 9:15:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	60.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 14:26	ZZZ	GC-15	1.007	BYF1225

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-25	<b>Client Sample Name:</b> KA-36-S-16, 6/3/2015 9:15:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Bromobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Bromochloromethane	ND	mg/kg	0.025	0.0046	EPA-8260B	ND	A10,Z1b	1
Bromodichloromethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1b	1
Bromoform	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Bromomethane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
n-Butylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
sec-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
tert-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Carbon tetrachloride	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Chlorobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Chloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Chloroform	ND	mg/kg	0.025	0.0032	EPA-8260B	ND	A10,Z1b	1
Chloromethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
2-Chlorotoluene	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1b	1
4-Chlorotoluene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Dibromochloromethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1b	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1b	1
1,2-Dibromoethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1b	1
Dibromomethane	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1b	1
1,2-Dichlorobenzene	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1b	1
1,3-Dichlorobenzene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,4-Dichlorobenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Dichlorodifluoromethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,1-Dichloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloroethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1b	1
1,1-Dichloroethene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
cis-1,2-Dichloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
trans-1,2-Dichloroethene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Total 1,2-Dichloroethene	ND	mg/kg	0.050	0.013	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloropropane	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1b	1
1,3-Dichloropropane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
2,2-Dichloropropane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-25		Client Sample Name: KA-36-S-16, 6/3/2015 9:15:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
cis-1,3-Dichloropropene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
trans-1,3-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Total 1,3-Dichloropropene	ND	mg/kg	0.050	0.010	EPA-8260B	ND	A10,Z1b	1
Ethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Hexachlorobutadiene	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1b	1
Isopropylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
p-Isopropyltoluene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Methylene chloride	ND	mg/kg	0.050	0.012	EPA-8260B	ND	A10,Z1b	1
Methyl t-butyl ether	ND	mg/kg	0.025	0.0025	EPA-8260B	ND	A10,Z1b	1
Naphthalene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
n-Propylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Styrene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Tetrachloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Toluene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1b	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1b	1
1,1,1-Trichloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,1,2-Trichloroethane	ND	mg/kg	0.025	0.0038	EPA-8260B	ND	A10,Z1b	1
Trichloroethene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Trichlorofluoromethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,2,3-Trichloropropane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Vinyl chloride	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
Total Xylenes	ND	mg/kg	0.050	0.017	EPA-8260B	ND	A10,Z1b	1
p- & m-Xylenes	ND	mg/kg	0.025	0.011	EPA-8260B	ND	A10,Z1b	1
o-Xylene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	1.0	0.10	Luft-GC/MS	ND	A10,Z1b	1
1,2-Dichloroethane-d4 (Surrogate)	124	%	70 - 121 (LCL - UCL)		EPA-8260B		A19,S09	1

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-25	<b>Client Sample Name:</b> KA-36-S-16, 6/3/2015 9:15:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.3	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/09/15 15:28	ADC	MS-V2	5	BYF0688

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-25	<b>Client Sample Name:</b> KA-36-S-16, 6/3/2015 9:15:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	36.2	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 14:37	MWB	GC-13	0.987	BYF1075

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-25	<b>Client Sample Name:</b> KA-36-S-16, 6/3/2015 9:15:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 12:00	MAM	MAN-SV	0.990	BYF1210

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-25	<b>Client Sample Name:</b> KA-36-S-16, 6/3/2015 9:15:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.1	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	94	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.22	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	18	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	6.2	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	11	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	1.8	mg/kg	2.5	0.28	EPA-6010B	ND	J	1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	20	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	37	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	27	mg/kg	2.5	0.087	EPA-6010B	0.34		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/15/15	06/16/15 08:57	ARD	PE-OP3	0.952	BYF1334
2	EPA-7471A	06/16/15	06/17/15 10:21	MEV	CETAC1	1.008	BYF1498

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-26		Client Sample Name: KA-38-S-6, 6/3/2015 10:30:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	58.3	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 14:37	ZZZ	GC-15	1.014	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-26	<b>Client Sample Name:</b> KA-38-S-6, 6/3/2015 10:30:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-26	<b>Client Sample Name:</b> KA-38-S-6, 6/3/2015 10:30:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-26	<b>Client Sample Name:</b> KA-38-S-6, 6/3/2015 10:30:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.8	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/09/15 00:17	ADC	MS-V2	1	BYF0688

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-26	<b>Client Sample Name:</b> KA-38-S-6, 6/3/2015 10:30:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	35.4	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 14:15	MWB	GC-13	0.993	BYF1075

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-26	<b>Client Sample Name:</b> KA-38-S-6, 6/3/2015 10:30:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 12:00	MAM	MAN-SV	0.990	BYF1210

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-26	<b>Client Sample Name:</b> KA-38-S-6, 6/3/2015 10:30:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	6.0	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	100	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.46	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	30	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	10	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	17	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	3.9	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	30	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	49	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	37	mg/kg	2.5	0.087	EPA-6010B	0.35		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/15/15	06/16/15 08:59	ARD	PE-OP3	0.980	BYF1334
2	EPA-7471A	06/16/15	06/17/15 10:28	MEV	CETAC1	0.992	BYF1498

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-27		Client Sample Name: KA-38-S-11, 6/3/2015 10:40:00AM, Craig Riddle/9099							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #	
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1	
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1	
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1	
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1	
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1	
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1	
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1	
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1	
Decachlorobiphenyl (Surrogate)	56.7	%	40 - 120 (LCL - UCL)		EPA-8082			1	

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 14:47	ZZZ	GC-15	1	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-27	<b>Client Sample Name:</b> KA-38-S-11, 6/3/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Bromobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Bromochloromethane	ND	mg/kg	0.025	0.0046	EPA-8260B	ND	A10,Z1b	1
Bromodichloromethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1b	1
Bromoform	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Bromomethane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
n-Butylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
sec-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
tert-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Carbon tetrachloride	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Chlorobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Chloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Chloroform	ND	mg/kg	0.025	0.0032	EPA-8260B	ND	A10,Z1b	1
Chloromethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
2-Chlorotoluene	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1b	1
4-Chlorotoluene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Dibromochloromethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1b	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1b	1
1,2-Dibromoethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1b	1
Dibromomethane	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1b	1
1,2-Dichlorobenzene	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1b	1
1,3-Dichlorobenzene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,4-Dichlorobenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Dichlorodifluoromethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,1-Dichloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloroethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1b	1
1,1-Dichloroethene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
cis-1,2-Dichloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
trans-1,2-Dichloroethene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Total 1,2-Dichloroethene	ND	mg/kg	0.050	0.013	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloropropane	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1b	1
1,3-Dichloropropane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
2,2-Dichloropropane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-27		Client Sample Name: KA-38-S-11, 6/3/2015 10:40:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
cis-1,3-Dichloropropene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
trans-1,3-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Total 1,3-Dichloropropene	ND	mg/kg	0.050	0.010	EPA-8260B	ND	A10,Z1b	1
Ethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Hexachlorobutadiene	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1b	1
Isopropylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
p-Isopropyltoluene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Methylene chloride	ND	mg/kg	0.050	0.012	EPA-8260B	ND	A10,Z1b	1
Methyl t-butyl ether	ND	mg/kg	0.025	0.0025	EPA-8260B	ND	A10,Z1b	1
Naphthalene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
n-Propylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Styrene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Tetrachloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Toluene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1b	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1b	1
1,1,1-Trichloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,1,2-Trichloroethane	ND	mg/kg	0.025	0.0038	EPA-8260B	ND	A10,Z1b	1
Trichloroethene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Trichlorofluoromethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,2,3-Trichloropropane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Vinyl chloride	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
Total Xylenes	ND	mg/kg	0.050	0.017	EPA-8260B	ND	A10,Z1b	1
p- & m-Xylenes	ND	mg/kg	0.025	0.011	EPA-8260B	ND	A10,Z1b	1
o-Xylene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	1.0	0.10	Luft-GC/MS	ND	A10,Z1b	1
1,2-Dichloroethane-d4 (Surrogate)	122	%	70 - 121 (LCL - UCL)		EPA-8260B		A19	1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-27	<b>Client Sample Name:</b> KA-38-S-11, 6/3/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.9	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/09/15 15:50	ADC	MS-V2	5	BYF0688

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-27	<b>Client Sample Name:</b> KA-38-S-11, 6/3/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	39.9	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 13:52	MWB	GC-13	1.014	BYF1075

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-27	<b>Client Sample Name:</b> KA-38-S-11, 6/3/2015 10:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 12:00	MAM	MAN-SV	0.994	BYF1210

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-27	<b>Client Sample Name:</b> KA-38-S-11, 6/3/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	3.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	66	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.28	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	21	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	6.4	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	14	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	1.8	mg/kg	2.5	0.28	EPA-6010B	ND	J	1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	19	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	40	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	31	mg/kg	2.5	0.087	EPA-6010B	0.35		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/15/15	06/16/15	09:00	ARD	PE-OP3	0.980	BYF1334
2	EPA-7471A	06/16/15	06/17/15	10:30	MEV	CETAC1	0.992	BYF1498

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Organochlorine Pesticides (EPA Method 8081B)

<b>BCL Sample ID:</b> 1513756-28	<b>Client Sample Name:</b> KA-40-S-6, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081B	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081B	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081B	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081B	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081B	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081B	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081B	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081B	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081B	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081B	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081B	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081B	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081B	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081B	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081B	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081B	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081B	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081B	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081B	ND		1
TCMX (Surrogate)	35.3	%	20 - 130 (LCL - UCL)		EPA-8081B			1
Decachlorobiphenyl (Surrogate)	51.6	%	40 - 130 (LCL - UCL)		EPA-8081B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081B	06/10/15	06/13/15 06:22	KEP	GC-17	0.993	BYF1080

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-28		Client Sample Name: KA-40-S-6, 6/3/2015 12:30:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	51.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/12/15 14:58	ZZZ	GC-15	0.993	BYF1225

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-28	<b>Client Sample Name:</b> KA-40-S-6, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Bromobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Bromochloromethane	ND	mg/kg	0.025	0.0046	EPA-8260B	ND	A10,Z1b	1
Bromodichloromethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1b	1
Bromoform	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Bromomethane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
n-Butylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
sec-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
tert-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Carbon tetrachloride	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Chlorobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Chloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Chloroform	ND	mg/kg	0.025	0.0032	EPA-8260B	ND	A10,Z1b	1
Chloromethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
2-Chlorotoluene	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1b	1
4-Chlorotoluene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Dibromochloromethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1b	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1b	1
1,2-Dibromoethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1b	1
Dibromomethane	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1b	1
1,2-Dichlorobenzene	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1b	1
1,3-Dichlorobenzene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,4-Dichlorobenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Dichlorodifluoromethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,1-Dichloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloroethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1b	1
1,1-Dichloroethene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
cis-1,2-Dichloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
trans-1,2-Dichloroethene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Total 1,2-Dichloroethene	ND	mg/kg	0.050	0.013	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloropropane	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1b	1
1,3-Dichloropropane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
2,2-Dichloropropane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-28	<b>Client Sample Name:</b> KA-40-S-6, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
cis-1,3-Dichloropropene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
trans-1,3-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Total 1,3-Dichloropropene	ND	mg/kg	0.050	0.010	EPA-8260B	ND	A10,Z1b	1
Ethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Hexachlorobutadiene	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1b	1
Isopropylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
p-Isopropyltoluene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Methylene chloride	ND	mg/kg	0.050	0.012	EPA-8260B	ND	A10,Z1b	1
Methyl t-butyl ether	ND	mg/kg	0.025	0.0025	EPA-8260B	ND	A10,Z1b	1
Naphthalene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
n-Propylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Styrene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Tetrachloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Toluene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1b	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1b	1
1,1,1-Trichloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,1,2-Trichloroethane	ND	mg/kg	0.025	0.0038	EPA-8260B	ND	A10,Z1b	1
Trichloroethene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Trichlorofluoromethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,2,3-Trichloropropane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Vinyl chloride	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
Total Xylenes	ND	mg/kg	0.050	0.017	EPA-8260B	ND	A10,Z1b	1
p- & m-Xylenes	ND	mg/kg	0.025	0.011	EPA-8260B	ND	A10,Z1b	1
o-Xylene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloroethane-d4 (Surrogate)	123	%	70 - 121 (LCL - UCL)		EPA-8260B		A19,S09	1
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-28	<b>Client Sample Name:</b> KA-40-S-6, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	99.2	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/09/15 16:12	ADC	MS-V2	5	BYF0688

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-28	<b>Client Sample Name:</b> KA-40-S-6, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-28	<b>Client Sample Name:</b> KA-40-S-6, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-28	<b>Client Sample Name:</b> KA-40-S-6, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	mg/kg	0.10	0.037	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Phenanthrene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Pyrene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	mg/kg	0.20	0.022	EPA-8270C	ND		1
2-Chlorophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	mg/kg	0.10	0.035	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.50	0.012	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	mg/kg	0.50	0.0077	EPA-8270C	ND		1
2-Methylphenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	mg/kg	0.20	0.033	EPA-8270C	ND		1
2-Nitrophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
4-Nitrophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
Pentachlorophenol	ND	mg/kg	0.20	0.013	EPA-8270C	ND		1
Phenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	mg/kg	0.20	0.017	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	46.7	%	20 - 130 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	56.1	%	30 - 130 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	46.7	%	30 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	38.2	%	20 - 140 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	48.1	%	20 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	109	%	30 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/10/15	06/12/15 18:36	VH1	MS-B2	1.017	BYF1076

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-28	<b>Client Sample Name:</b> KA-40-S-6, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	7.0	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.51	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	37	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	12	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	21	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	4.9	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	38	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	55	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	41	mg/kg	2.5	0.087	EPA-6010B	0.36		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/15/15	06/16/15 09:01	ARD	PE-OP3	1	BYF1334
2	EPA-7471A	06/16/15	06/17/15 10:32	MEV	CETAC1	0.992	BYF1498

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Organochlorine Pesticides (EPA Method 8081B)

<b>BCL Sample ID:</b> 1513756-29	<b>Client Sample Name:</b> KA-40-S-16, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081B	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081B	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081B	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081B	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081B	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081B	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081B	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081B	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081B	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081B	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081B	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081B	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081B	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081B	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081B	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081B	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081B	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081B	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081B	ND		1
TCMX (Surrogate)	58.8	%	20 - 130 (LCL - UCL)		EPA-8081B			1
Decachlorobiphenyl (Surrogate)	72.2	%	40 - 130 (LCL - UCL)		EPA-8081B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081B	06/10/15	06/13/15 06:34	KEP	GC-17	1.003	BYF1080

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-29		Client Sample Name: KA-40-S-16, 6/3/2015 12:50:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	68.3	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/11/15 10:40	ZZZ	GC-15	1	BYF1068

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-29	<b>Client Sample Name:</b> KA-40-S-16, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-29	<b>Client Sample Name:</b> KA-40-S-16, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.2	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-29	<b>Client Sample Name:</b> KA-40-S-16, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	97.4	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/06/15 02:25	ADC	MS-V2	1	BYF0688

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-29	<b>Client Sample Name:</b> KA-40-S-16, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-29	<b>Client Sample Name:</b> KA-40-S-16, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-29	<b>Client Sample Name:</b> KA-40-S-16, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	mg/kg	0.10	0.037	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Phenanthrene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Pyrene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	mg/kg	0.20	0.022	EPA-8270C	ND		1
2-Chlorophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	mg/kg	0.10	0.035	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.50	0.012	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	mg/kg	0.50	0.0077	EPA-8270C	ND		1
2-Methylphenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	mg/kg	0.20	0.033	EPA-8270C	ND		1
2-Nitrophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
4-Nitrophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
Pentachlorophenol	ND	mg/kg	0.20	0.013	EPA-8270C	ND		1
Phenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	mg/kg	0.20	0.017	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	72.6	%	20 - 130 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	76.4	%	30 - 130 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	74.8	%	30 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	69.0	%	20 - 140 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	75.8	%	20 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	114	%	30 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/10/15	06/12/15 19:05	VH1	MS-B2	0.987	BYF1076

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-29	<b>Client Sample Name:</b> KA-40-S-16, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	2.0	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	45	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.11	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	14	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	3.7	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	7.0	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	1.1	mg/kg	2.5	0.28	EPA-6010B	ND	J	1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	12	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	1.0	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	0.69	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	24	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	21	mg/kg	2.5	0.087	EPA-6010B	0.34		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/15/15	06/16/15 09:03	ARD	PE-OP3	0.952	BYF1334
2	EPA-7471A	06/16/15	06/17/15 10:34	MEV	CETAC1	0.977	BYF1498

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-30		Client Sample Name: KA-8-S-2, 6/3/2015 2:05:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	31.7	%	40 - 120 (LCL - UCL)		EPA-8082		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/10/15	06/11/15 11:01	ZZZ	GC-15	1.003	BYF1068

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1513756-30      **Client Sample Name:** KA-8-S-2, 6/3/2015 2:05:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Bromobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Bromochloromethane	ND	mg/kg	0.025	0.0046	EPA-8260B	ND	A10,Z1b	1
Bromodichloromethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1b	1
Bromoform	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Bromomethane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
n-Butylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
sec-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
tert-Butylbenzene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Carbon tetrachloride	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Chlorobenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Chloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Chloroform	ND	mg/kg	0.025	0.0032	EPA-8260B	ND	A10,Z1b	1
Chloromethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
2-Chlorotoluene	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1b	1
4-Chlorotoluene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Dibromochloromethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1b	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1b	1
1,2-Dibromoethane	ND	mg/kg	0.025	0.0050	EPA-8260B	ND	A10,Z1b	1
Dibromomethane	ND	mg/kg	0.025	0.0090	EPA-8260B	ND	A10,Z1b	1
1,2-Dichlorobenzene	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1b	1
1,3-Dichlorobenzene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,4-Dichlorobenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Dichlorodifluoromethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,1-Dichloroethane	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloroethane	ND	mg/kg	0.025	0.0042	EPA-8260B	ND	A10,Z1b	1
1,1-Dichloroethene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
cis-1,2-Dichloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
trans-1,2-Dichloroethene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
Total 1,2-Dichloroethene	ND	mg/kg	0.050	0.013	EPA-8260B	ND	A10,Z1b	1
1,2-Dichloropropane	ND	mg/kg	0.025	0.0040	EPA-8260B	ND	A10,Z1b	1
1,3-Dichloropropane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
2,2-Dichloropropane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-30		Client Sample Name: KA-8-S-2, 6/3/2015 2:05:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
cis-1,3-Dichloropropene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
trans-1,3-Dichloropropene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Total 1,3-Dichloropropene	ND	mg/kg	0.050	0.010	EPA-8260B	ND	A10,Z1b	1
Ethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Hexachlorobutadiene	ND	mg/kg	0.025	0.0085	EPA-8260B	ND	A10,Z1b	1
Isopropylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
p-Isopropyltoluene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Methylene chloride	ND	mg/kg	0.050	0.012	EPA-8260B	ND	A10,Z1b	1
Methyl t-butyl ether	ND	mg/kg	0.025	0.0025	EPA-8260B	ND	A10,Z1b	1
Naphthalene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
n-Propylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Styrene	ND	mg/kg	0.025	0.0070	EPA-8260B	ND	A10,Z1b	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Tetrachloroethene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
Toluene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1b	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.025	0.010	EPA-8260B	ND	A10,Z1b	1
1,1,1-Trichloroethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,1,2-Trichloroethane	ND	mg/kg	0.025	0.0038	EPA-8260B	ND	A10,Z1b	1
Trichloroethene	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
Trichlorofluoromethane	ND	mg/kg	0.025	0.0055	EPA-8260B	ND	A10,Z1b	1
1,2,3-Trichloropropane	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.025	0.0065	EPA-8260B	ND	A10,Z1b	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.025	0.0075	EPA-8260B	ND	A10,Z1b	1
Vinyl chloride	ND	mg/kg	0.025	0.0080	EPA-8260B	ND	A10,Z1b	1
Total Xylenes	ND	mg/kg	0.050	0.017	EPA-8260B	ND	A10,Z1b	1
p- & m-Xylenes	ND	mg/kg	0.025	0.011	EPA-8260B	ND	A10,Z1b	1
o-Xylene	ND	mg/kg	0.025	0.0060	EPA-8260B	ND	A10,Z1b	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	1.0	0.10	Luft-GC/MS	ND	A10,Z1b	1
1,2-Dichloroethane-d4 (Surrogate)	124	%	70 - 121 (LCL - UCL)		EPA-8260B		A19,S09	1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-30	<b>Client Sample Name:</b> KA-8-S-2, 6/3/2015 2:05:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.9	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/05/15	06/09/15 16:35	ADC	MS-V2	5	BYF0688

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-30	<b>Client Sample Name:</b> KA-8-S-2, 6/3/2015 2:05:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	37.6	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/10/15	06/13/15 13:29	MWB	GC-13	1.003	BYF1075

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-30	<b>Client Sample Name:</b> KA-8-S-2, 6/3/2015 2:05:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/10/15	06/10/15 12:00	MAM	MAN-SV	0.994	BYF1210

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-30	<b>Client Sample Name:</b> KA-8-S-2, 6/3/2015 2:05:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	4.1	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	77	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.26	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	23	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	8.2	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	13	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead	8.7	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	ND		1
Nickel	15	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	0.074	mg/kg	0.50	0.067	EPA-6010B	ND	J	1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	40	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	27	mg/kg	2.5	0.087	EPA-6010B	0.36		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/15/15	06/16/15	08:12	ARD	PE-OP3	1	BYF1334
2	EPA-7471A	06/16/15	06/17/15	10:36	MEV	CETAC1	1.008	BYF1498

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-63		Client Sample Name: KA-24-S-6 D, 6/2/2015 7:45:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	35.0	%	40 - 120 (LCL - UCL)		EPA-8082		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 14:49	KEP	GC-14	0.987	BYF1738

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Reported: 06/23/2015 12:06
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Volatile Organic Analysis (EPA Method 8260B)

Table with 2 columns: BCL Sample ID (1513756-63) and Client Sample Name (KA-24-S-6 D, 6/2/2015 7:45:00AM, Craig Riddle/9099)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their analysis results.

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-63	<b>Client Sample Name:</b> KA-24-S-6 D, 6/2/2015 7:45:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	S05	1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S05	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	S05	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND	S05	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S05	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S05	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND	S05	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S05	1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S05	1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2-Dichloroethane-d4 (Surrogate)	115	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.4	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-63	<b>Client Sample Name:</b> KA-24-S-6 D, 6/2/2015 7:45:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	103	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 13:18	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-63	<b>Client Sample Name:</b> KA-24-S-6 D, 6/2/2015 7:45:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	49.0	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 15:03	MWB	GC-13	0.997	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-63	<b>Client Sample Name:</b> KA-24-S-6 D, 6/2/2015 7:45:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.990	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-63	<b>Client Sample Name:</b> KA-24-S-6 D, 6/2/2015 7:45:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	4.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	77	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.33	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	24	mg/kg	0.50	0.050	EPA-6010B	0.054		1
Cobalt	7.2	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	14	mg/kg	1.0	0.050	EPA-6010B	0.059		1
Lead	3.5	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.096		1
Nickel	22	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	1.3	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	0.86	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	44	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	32	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/17/15	06/18/15	11:13	ARD	PE-OP3	0.971	BYF1671
2	EPA-7471A	06/17/15	06/17/15	15:16	MEV	CETAC1	0.992	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-64		Client Sample Name: KA-24-S-11 D, 6/2/2015 7:55:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
<b>PCB-1260</b>	<b>0.017</b>	<b>mg/kg</b>	<b>0.010</b>	<b>0.0016</b>	<b>EPA-8082</b>	ND		1
<b>Total PCB's (Summation)</b>	<b>0.017</b>	<b>mg/kg</b>	<b>0.010</b>	<b>0.0050</b>	<b>EPA-8082</b>	ND		1
Decachlorobiphenyl (Surrogate)	55.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 15:00	KEP	GC-14	1.017	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-64		Client Sample Name: KA-24-S-11 D, 6/2/2015 7:55:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND	S05	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND	S05	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND	S05	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND	S05	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40,S05	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND	S05	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND	S05	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	S05	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-64	<b>Client Sample Name:</b> KA-24-S-11 D, 6/2/2015 7:55:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	S05	1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S05	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	S05	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND	S05	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S05	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S05	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND	S05	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S05	1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S05	1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2-Dichloroethane-d4 (Surrogate)	119	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.1	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-64	<b>Client Sample Name:</b> KA-24-S-11 D, 6/2/2015 7:55:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	103	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 13:40	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-64	<b>Client Sample Name:</b> KA-24-S-11 D, 6/2/2015 7:55:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	39.2	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 15:26	MWB	GC-13	0.990	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-64	<b>Client Sample Name:</b> KA-24-S-11 D, 6/2/2015 7:55:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	1	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-64	<b>Client Sample Name:</b> KA-24-S-11 D, 6/2/2015 7:55:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	4.8	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	65	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.33	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	20	mg/kg	0.50	0.050	EPA-6010B	0.056		1
Cobalt	6.6	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	14	mg/kg	1.0	0.050	EPA-6010B	0.061		1
Lead	2.8	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.099		1
Nickel	23	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	44	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	32	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/17/15	06/18/15	11:15	ARD	PE-OP3	1	BYF1671
2	EPA-7471A	06/17/15	06/17/15	15:18	MEV	CETAC1	1.025	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513756-65	<b>Client Sample Name:</b> KA-14-S-6 D, 6/2/2015 8:45:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	38.3	%	40 - 120 (LCL - UCL)		EPA-8082		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 15:10	KEP	GC-14	1.010	BYF1738

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-65	<b>Client Sample Name:</b> KA-14-S-6 D, 6/2/2015 8:45:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND	S05	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND	S05	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND	S05	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND	S05	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40,S05	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND	S05	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND	S05	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	S05	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-65	<b>Client Sample Name:</b> KA-14-S-6 D, 6/2/2015 8:45:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	S05	1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S05	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	S05	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND	S05	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S05	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S05	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND	S05	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S05	1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S05	1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND	S05	1
1,2-Dichloroethane-d4 (Surrogate)	118	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-65	<b>Client Sample Name:</b> KA-14-S-6 D, 6/2/2015 8:45:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.0	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.3	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 14:03	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-65	<b>Client Sample Name:</b> KA-14-S-6 D, 6/2/2015 8:45:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	42.7	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 15:48	MWB	GC-13	0.990	BYF1661

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-65	<b>Client Sample Name:</b> KA-14-S-6 D, 6/2/2015 8:45:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.998	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-65	<b>Client Sample Name:</b> KA-14-S-6 D, 6/2/2015 8:45:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	96	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.40	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	32	mg/kg	0.50	0.050	EPA-6010B	0.055		1
Cobalt	9.0	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	17	mg/kg	1.0	0.050	EPA-6010B	0.060		1
Lead	3.7	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	0.20	mg/kg	2.5	0.050	EPA-6010B	0.097	J	1
Nickel	27	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	0.89	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	51	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	34	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/17/15	06/18/15 11:24	ARD	PE-OP3	0.980	BYF1671
2	EPA-7471A	06/17/15	06/17/15 15:20	MEV	CETAC1	1.025	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513756-66	<b>Client Sample Name:</b> KA-14-S-16 D, 6/2/2015 9:00:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	58.3	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 15:21	KEP	GC-14	0.997	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-66	<b>Client Sample Name:</b> KA-14-S-16 D, 6/2/2015 9:00:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND	S05	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND	S05	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND	S05	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND	S05	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40,S05	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND	S05	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND	S05	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	S05	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-66	<b>Client Sample Name:</b> KA-14-S-16 D, 6/2/2015 9:00:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	S05	1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S05	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	S05	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND	S05	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S05	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S05	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND	S05	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S05	1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S05	1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>0.035</b>	<b>mg/kg</b>	<b>0.20</b>	<b>0.020</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>J,S05</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	120	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-66	<b>Client Sample Name:</b> KA-14-S-16 D, 6/2/2015 9:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 14:25	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-66	<b>Client Sample Name:</b> KA-14-S-16 D, 6/2/2015 9:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	43.4	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 16:11	MWB	GC-13	1	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-66	<b>Client Sample Name:</b> KA-14-S-16 D, 6/2/2015 9:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.996	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-66	<b>Client Sample Name:</b> KA-14-S-16 D, 6/2/2015 9:00:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	3.5	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	63	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.21	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	20	mg/kg	0.50	0.050	EPA-6010B	0.056		1
Cobalt	5.8	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	11	mg/kg	1.0	0.050	EPA-6010B	0.061		1
Lead	2.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.099		1
Nickel	17	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	0.98	mg/kg	1.0	0.98	EPA-6010B	ND	J	1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.8	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	38	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	31	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/17/15	06/18/15 11:03	ARD	PE-OP3	1	BYF1671
2	EPA-7471A	06/17/15	06/17/15 15:05	MEV	CETAC1	0.992	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513756-67	<b>Client Sample Name:</b> KA-23-S-6 D, 6/2/2015 9:40:00AM, Craig Riddle/9099							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	48.3	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 15:32	KEP	GC-14	1.014	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-67	<b>Client Sample Name:</b> KA-23-S-6 D, 6/2/2015 9:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND	S05	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND	S05	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND	S05	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND	S05	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40,S05	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND	S05	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND	S05	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	S05	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-67	<b>Client Sample Name:</b> KA-23-S-6 D, 6/2/2015 9:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	S05	1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S05	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	S05	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND	S05	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S05	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S05	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND	S05	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S05	1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S05	1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2-Dichloroethane-d4 (Surrogate)	123	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-67	<b>Client Sample Name:</b> KA-23-S-6 D, 6/2/2015 9:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	105	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/18/15 09:57	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-67	<b>Client Sample Name:</b> KA-23-S-6 D, 6/2/2015 9:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	39.7	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 16:34	MWB	GC-13	1.003	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-67	<b>Client Sample Name:</b> KA-23-S-6 D, 6/2/2015 9:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.998	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1513756-67	<b>Client Sample Name:</b> KA-23-S-6 D, 6/2/2015 9:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.4	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	120	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.45	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	36	mg/kg	0.50	0.050	EPA-6010B	0.054		1
Cobalt	11	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	21	mg/kg	1.0	0.050	EPA-6010B	0.059		1
Lead	4.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.096		1
Nickel	34	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	1.2	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	0.95	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	54	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	41	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/17/15	06/18/15	11:26	ARD	PE-OP3	0.971	BYF1671
2	EPA-7471A	06/17/15	06/17/15	15:27	MEV	CETAC1	1.008	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-68		Client Sample Name: KA-23-S-11 D, 6/2/2015 9:50:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	68.3	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 15:43	KEP	GC-14	1.007	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-68		Client Sample Name: KA-23-S-11 D, 6/2/2015 9:50:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND	S05	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND	S05	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND	S05	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND	S05	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40,S05	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND	S05	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND	S05	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	S05	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-68		Client Sample Name: KA-23-S-11 D, 6/2/2015 9:50:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	S05	1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S05	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	S05	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND	S05	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S05	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S05	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND	S05	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S05	1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S05	1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2-Dichloroethane-d4 (Surrogate)	118	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.9	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-68	<b>Client Sample Name:</b> KA-23-S-11 D, 6/2/2015 9:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	101	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 15:09	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-68	<b>Client Sample Name:</b> KA-23-S-11 D, 6/2/2015 9:50:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	54.5	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 18:04	MWB	GC-13	0.984	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-68	<b>Client Sample Name:</b> KA-23-S-11 D, 6/2/2015 9:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.990	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-68	<b>Client Sample Name:</b> KA-23-S-11 D, 6/2/2015 9:50:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	8.6	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.55	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	50	mg/kg	0.50	0.050	EPA-6010B	0.056		1
Cobalt	12	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	24	mg/kg	1.0	0.050	EPA-6010B	0.061		1
Lead	5.8	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.099		1
Nickel	47	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.3	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	66	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	44	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/17/15	06/18/15	11:27	ARD	PE-OP3	1	BYF1671
2	EPA-7471A	06/17/15	06/17/15	15:29	MEV	CETAC1	0.977	BYF1616

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-69	<b>Client Sample Name:</b> KA-19-S-6 D, 6/2/2015 10:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND	S05	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND	S05	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND	S05	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND	S05	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40,S05	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND	S05	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND	S05	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	S05	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-69		Client Sample Name: KA-19-S-6 D, 6/2/2015 10:50:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	S05	1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S05	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	S05	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND	S05	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S05	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S05	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND	S05	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S05	1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S05	1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>0.036</b>	<b>mg/kg</b>	<b>0.20</b>	<b>0.020</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>J,S05</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	126	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-69	<b>Client Sample Name:</b> KA-19-S-6 D, 6/2/2015 10:50:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.2	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 15:32	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-69	<b>Client Sample Name:</b> KA-19-S-6 D, 6/2/2015 10:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	34.0	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 18:27	MWB	GC-13	0.997	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-69	<b>Client Sample Name:</b> KA-19-S-6 D, 6/2/2015 10:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.998	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-69	<b>Client Sample Name:</b> KA-19-S-6 D, 6/2/2015 10:50:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	14	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	120	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.53	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	36	mg/kg	0.50	0.050	EPA-6010B	0.054		1
Cobalt	11	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	19	mg/kg	1.0	0.050	EPA-6010B	0.059		1
Lead	4.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.096		1
Nickel	37	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	57	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	42	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/17/15	06/18/15	11:29	ARD	PE-OP3	0.971	BYF1671
2	EPA-7471A	06/17/15	06/17/15	15:31	MEV	CETAC1	0.992	BYF1616

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-70	<b>Client Sample Name:</b> KA-19-S-16 D, 6/2/2015 11:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND	S05	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND	S05	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND	S05	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND	S05	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40,S05	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND	S05	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND	S05	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	S05	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-70	<b>Client Sample Name:</b> KA-19-S-16 D, 6/2/2015 11:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	S05	1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S05	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	S05	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND	S05	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S05	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S05	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND	S05	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S05	1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S05	1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>0.039</b>	<b>mg/kg</b>	<b>0.20</b>	<b>0.020</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>J,S05</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	120	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-70	<b>Client Sample Name:</b> KA-19-S-16 D, 6/2/2015 11:10:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	103	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/18/15 10:20	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-70	<b>Client Sample Name:</b> KA-19-S-16 D, 6/2/2015 11:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	55.2	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 18:49	MWB	GC-13	1.017	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-70	<b>Client Sample Name:</b> KA-19-S-16 D, 6/2/2015 11:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.994	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-70	<b>Client Sample Name:</b> KA-19-S-16 D, 6/2/2015 11:10:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.0	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	98	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.37	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	0.057	mg/kg	0.50	0.052	EPA-6010B	ND	J	1
Chromium	59	mg/kg	0.50	0.050	EPA-6010B	0.055		1
Cobalt	16	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	33	mg/kg	1.0	0.050	EPA-6010B	0.060		1
Lead	3.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.097		1
Nickel	70	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	0.82	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	59	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	48	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/17/15	06/18/15 11:30	ARD	PE-OP3	0.980	BYF1671
2	EPA-7471A	06/17/15	06/17/15 15:33	MEV	CETAC1	1.025	BYF1616

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-71	<b>Client Sample Name:</b> KA-18-S-6 D, 6/2/2015 12:25:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND	S05	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND	S05	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND	S05	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND	S05	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40,S05	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND	S05	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND	S05	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	S05	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-71		Client Sample Name: KA-18-S-6 D, 6/2/2015 12:25:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	S05	1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S05	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	S05	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND	S05	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S05	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S05	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND	S05	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S05	1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S05	1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND	S05	1
1,2-Dichloroethane-d4 (Surrogate)	125	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-71	<b>Client Sample Name:</b> KA-18-S-6 D, 6/2/2015 12:25:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	105	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 16:16	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-71	<b>Client Sample Name:</b> KA-18-S-6 D, 6/2/2015 12:25:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	17	mg/kg	20	6.5	EPA-8015B/FFP	ND	J	1
Tetracosane (Surrogate)	40.8	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 19:12	MWB	GC-13	1.007	BYF1661

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-71	<b>Client Sample Name:</b> KA-18-S-6 D, 6/2/2015 12:25:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.996	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-71	<b>Client Sample Name:</b> KA-18-S-6 D, 6/2/2015 12:25:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	22	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	140	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.46	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	41	mg/kg	0.50	0.050	EPA-6010B	0.052		1
Cobalt	13	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	32	mg/kg	1.0	0.050	EPA-6010B	0.057		1
Lead	7.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.093		1
Nickel	38	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	1.2	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	56	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	46	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/17/15	06/18/15 11:31	ARD	PE-OP3	0.935	BYF1671
2	EPA-7471A	06/17/15	06/17/15 15:35	MEV	CETAC1	1.025	BYF1616

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-72	<b>Client Sample Name:</b> KA-18-S-11 D, 6/2/2015 12:35:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND	S05	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND	S05	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND	S05	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND	S05	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40,S05	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND	S05	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND	S05	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	S05	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-72		Client Sample Name: KA-18-S-11 D, 6/2/2015 12:35:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	S05	1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S05	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	S05	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND	S05	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S05	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S05	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND	S05	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S05	1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S05	1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>0.033</b>	<b>mg/kg</b>	<b>0.20</b>	<b>0.020</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>J,S05</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	118	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-72	<b>Client Sample Name:</b> KA-18-S-11 D, 6/2/2015 12:35:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	95.8	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.7	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 16:39	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-72	<b>Client Sample Name:</b> KA-18-S-11 D, 6/2/2015 12:35:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	39.2	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 19:34	MWB	GC-13	1.017	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-72	<b>Client Sample Name:</b> KA-18-S-11 D, 6/2/2015 12:35:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.990	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-72	<b>Client Sample Name:</b> KA-18-S-11 D, 6/2/2015 12:35:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	6.5	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	150	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.49	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	46	mg/kg	0.50	0.050	EPA-6010B	0.051		1
Cobalt	14	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	28	mg/kg	1.0	0.050	EPA-6010B	0.056		1
Lead	6.4	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.091		1
Nickel	49	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	0.66	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	56	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	54	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/17/15	06/18/15	11:35	ARD	PE-OP3	0.917	BYF1671
2	EPA-7471A	06/17/15	06/17/15	15:38	MEV	CETAC1	0.977	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-73		Client Sample Name: KA-35-S-6 D, 6/2/2015 1:20:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	56.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/19/15 09:00	KEP	GC-14	0.993	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-73	<b>Client Sample Name:</b> KA-35-S-6 D, 6/2/2015 1:20:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND	S05	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND	S05	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND	S05	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND	S05	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40,S05	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND	S05	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND	S05	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	S05	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-73		Client Sample Name: KA-35-S-6 D, 6/2/2015 1:20:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	S05	1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S05	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	S05	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND	S05	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S05	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S05	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND	S05	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S05	1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S05	1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>0.035</b>	<b>mg/kg</b>	<b>0.20</b>	<b>0.020</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>J,S05</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	124	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-73	<b>Client Sample Name:</b> KA-35-S-6 D, 6/2/2015 1:20:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 17:01	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-73	<b>Client Sample Name:</b> KA-35-S-6 D, 6/2/2015 1:20:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	58.7	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 19:56	MWB	GC-13	1	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-73	<b>Client Sample Name:</b> KA-35-S-6 D, 6/2/2015 1:20:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.996	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-73	<b>Client Sample Name:</b> KA-35-S-6 D, 6/2/2015 1:20:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	69	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.34	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	25	mg/kg	0.50	0.050	EPA-6010B	0.055		1
Cobalt	8.0	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	14	mg/kg	1.0	0.050	EPA-6010B	0.060		1
Lead	2.7	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.097		1
Nickel	25	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.4	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	47	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	33	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/17/15	06/18/15	11:37	ARD	PE-OP3	0.980	BYF1671
2	EPA-7471A	06/17/15	06/17/15	15:40	MEV	CETAC1	0.977	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-74		Client Sample Name: KA-35-S-16 D, 6/2/2015 1:40:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	65.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/19/15 09:10	KEP	GC-14	1.003	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-74	<b>Client Sample Name:</b> KA-35-S-16 D, 6/2/2015 1:40:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND	S05	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND	S05	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND	S05	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND	S05	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40,S05	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND	S05	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S05	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND	S05	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND	S05	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND	S05	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-74	<b>Client Sample Name:</b> KA-35-S-16 D, 6/2/2015 1:40:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND	S05	1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S05	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND	S05	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND	S05	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S05	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S05	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S05	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND	S05	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND	S05	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND	S05	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND	S05	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S05	1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S05	1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S05	1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND	S05	1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND	S05	1
1,2-Dichloroethane-d4 (Surrogate)	126	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-74	<b>Client Sample Name:</b> KA-35-S-16 D, 6/2/2015 1:40:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 17:23	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-74	<b>Client Sample Name:</b> KA-35-S-16 D, 6/2/2015 1:40:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	56.7	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 20:19	MWB	GC-13	1.017	BYF1661

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-74	<b>Client Sample Name:</b> KA-35-S-16 D, 6/2/2015 1:40:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.998	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-74	<b>Client Sample Name:</b> KA-35-S-16 D, 6/2/2015 1:40:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	2.5	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	52	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.15	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	16	mg/kg	0.50	0.050	EPA-6010B	0.056		1
Cobalt	3.3	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	7.9	mg/kg	1.0	0.050	EPA-6010B	0.061		1
Lead	1.8	mg/kg	2.5	0.28	EPA-6010B	ND	J	1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	0.062	mg/kg	2.5	0.050	EPA-6010B	0.099	J	1
Nickel	12	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	1.3	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.1	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	29	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	22	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/17/15	06/18/15 11:38	ARD	PE-OP3	1	BYF1671
2	EPA-7471A	06/17/15	06/17/15 15:42	MEV	CETAC1	1.008	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-75		Client Sample Name: KA-37-S-6 D, 6/3/2015 8:00:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	65.0	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/19/15 09:21	KEP	GC-14	1.010	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-75	<b>Client Sample Name:</b> KA-37-S-6 D, 6/3/2015 8:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-75		Client Sample Name: KA-37-S-6 D, 6/3/2015 8:00:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>0.054</b>	<b>mg/kg</b>	<b>0.20</b>	<b>0.020</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>J</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-75	<b>Client Sample Name:</b> KA-37-S-6 D, 6/3/2015 8:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.7	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 09:35	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-75	<b>Client Sample Name:</b> KA-37-S-6 D, 6/3/2015 8:00:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	47.7	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 20:41	MWB	GC-13	0.987	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-75	<b>Client Sample Name:</b> KA-37-S-6 D, 6/3/2015 8:00:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.996	BYF2016

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-75	<b>Client Sample Name:</b> KA-37-S-6 D, 6/3/2015 8:00:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	7.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	130	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.51	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	48	mg/kg	0.50	0.050	EPA-6010B	0.051		1
Cobalt	14	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	29	mg/kg	1.0	0.050	EPA-6010B	0.056		1
Lead	5.6	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.091		1
Nickel	55	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	62	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	50	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/17/15	06/18/15 11:40	ARD	PE-OP3	0.917	BYF1671
2	EPA-7471A	06/17/15	06/17/15 15:44	MEV	CETAC1	1.025	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-76		Client Sample Name: KA-37-S-11 D, 6/3/2015 8:10:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	36.7	%	40 - 120 (LCL - UCL)		EPA-8082		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 16:58	KEP	GC-14	1	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-76	<b>Client Sample Name:</b> KA-37-S-11 D, 6/3/2015 8:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-76		Client Sample Name: KA-37-S-11 D, 6/3/2015 8:10:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>0.047</b>	<b>mg/kg</b>	<b>0.20</b>	<b>0.020</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>J</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	107	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-76	<b>Client Sample Name:</b> KA-37-S-11 D, 6/3/2015 8:10:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.7	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.7	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 09:57	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-76	<b>Client Sample Name:</b> KA-37-S-11 D, 6/3/2015 8:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	56.1	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 21:04	MWB	GC-13	1.014	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-76	<b>Client Sample Name:</b> KA-37-S-11 D, 6/3/2015 8:10:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.992	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-76	<b>Client Sample Name:</b> KA-37-S-11 D, 6/3/2015 8:10:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	5.6	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	81	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.32	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	0.086	mg/kg	0.50	0.052	EPA-6010B	ND	J	1
Chromium	38	mg/kg	0.50	0.050	EPA-6010B	0.056		1
Cobalt	9.3	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	20	mg/kg	1.0	0.050	EPA-6010B	0.061		1
Lead	3.7	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.099		1
Nickel	44	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	0.84	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	56	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	43	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/17/15	06/18/15	11:50	ARD	PE-OP3	1	BYF1671
2	EPA-7471A	06/17/15	06/17/15	15:46	MEV	CETAC1	1.008	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-77		Client Sample Name: KA-36-S-6 D, 6/3/2015 8:50:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	46.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 17:09	KEP	GC-14	1.017	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-77	<b>Client Sample Name:</b> KA-36-S-6 D, 6/3/2015 8:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-77		Client Sample Name: KA-36-S-6 D, 6/3/2015 8:50:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>0.044</b>	<b>mg/kg</b>	<b>0.20</b>	<b>0.020</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>J</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-77	<b>Client Sample Name:</b> KA-36-S-6 D, 6/3/2015 8:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	98.9	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 10:19	ADC	MS-V2	1	BYF1592

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-77	<b>Client Sample Name:</b> KA-36-S-6 D, 6/3/2015 8:50:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	50.0	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15	21:26	MWB	GC-13	1.003	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-77	<b>Client Sample Name:</b> KA-36-S-6 D, 6/3/2015 8:50:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.994	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-77	<b>Client Sample Name:</b> KA-36-S-6 D, 6/3/2015 8:50:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	8.3	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	140	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.58	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	52	mg/kg	0.50	0.050	EPA-6010B	0.056		1
Cobalt	14	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	27	mg/kg	1.0	0.050	EPA-6010B	0.061		1
Lead	5.9	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.099		1
Nickel	54	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	1.0	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	69	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	45	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/17/15	06/18/15 11:52	ARD	PE-OP3	1	BYF1671
2	EPA-7471A	06/17/15	06/17/15 15:53	MEV	CETAC1	1.008	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513756-78	<b>Client Sample Name:</b> KA-36-S-16 D, 6/3/2015 9:15:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	23.3	%	40 - 120 (LCL - UCL)		EPA-8082		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 17:20	KEP	GC-14	1	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-78	<b>Client Sample Name:</b> KA-36-S-16 D, 6/3/2015 9:15:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-78		Client Sample Name: KA-36-S-16 D, 6/3/2015 9:15:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
<b>Methylene chloride</b>	<b>0.088</b>	<b>mg/kg</b>	<b>0.010</b>	<b>0.0024</b>	<b>EPA-8260B</b>	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>0.049</b>	<b>mg/kg</b>	<b>0.20</b>	<b>0.020</b>	<b>Luft-GC/MS</b>	ND	<b>J</b>	1
1,2-Dichloroethane-d4 (Surrogate)	119	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-78	<b>Client Sample Name:</b> KA-36-S-16 D, 6/3/2015 9:15:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.1	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 12:56	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-78	<b>Client Sample Name:</b> KA-36-S-16 D, 6/3/2015 9:15:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	53.6	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 22:55	MWB	GC-13	0.984	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-78	<b>Client Sample Name:</b> KA-36-S-16 D, 6/3/2015 9:15:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.990	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1513756-78	<b>Client Sample Name:</b> KA-36-S-16 D, 6/3/2015 9:15:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	6.1	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	120	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.31	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	0.080	mg/kg	0.50	0.052	EPA-6010B	ND	J	1
Chromium	22	mg/kg	0.50	0.050	EPA-6010B	0.051		1
Cobalt	7.5	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	14	mg/kg	1.0	0.050	EPA-6010B	0.056		1
Lead	2.1	mg/kg	2.5	0.28	EPA-6010B	ND	J	1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.091		1
Nickel	27	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	47	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	33	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/17/15	06/18/15	11:53	ARD	PE-OP3	0.917	BYF1671
2	EPA-7471A	06/17/15	06/17/15	15:55	MEV	CETAC1	0.992	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513756-79	<b>Client Sample Name:</b> KA-38-S-6 D, 6/3/2015 10:30:00AM, Craig Riddle/9099							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	68.3	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 17:31	KEP	GC-14	0.990	BYF1738

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-79	<b>Client Sample Name:</b> KA-38-S-6 D, 6/3/2015 10:30:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-79		Client Sample Name: KA-38-S-6 D, 6/3/2015 10:30:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
<b>Methylene chloride</b>	<b>0.027</b>	<b>mg/kg</b>	<b>0.010</b>	<b>0.0024</b>	<b>EPA-8260B</b>	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>0.045</b>	<b>mg/kg</b>	<b>0.20</b>	<b>0.020</b>	<b>Luft-GC/MS</b>	ND	<b>J</b>	1
1,2-Dichloroethane-d4 (Surrogate)	114	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-79	<b>Client Sample Name:</b> KA-38-S-6 D, 6/3/2015 10:30:00AM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.0	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 11:04	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-79	<b>Client Sample Name:</b> KA-38-S-6 D, 6/3/2015 10:30:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	49.8	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 23:18	MWB	GC-13	1.003	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-79	<b>Client Sample Name:</b> KA-38-S-6 D, 6/3/2015 10:30:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.990	BYF2016

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-79	<b>Client Sample Name:</b> KA-38-S-6 D, 6/3/2015 10:30:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	6.2	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.54	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	32	mg/kg	0.50	0.050	EPA-6010B	0.055		1
Cobalt	11	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	19	mg/kg	1.0	0.050	EPA-6010B	0.060		1
Lead	4.4	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.098		1
Nickel	36	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	53	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	38	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/17/15	06/18/15	11:54	ARD	PE-OP3	0.990	BYF1671
2	EPA-7471A	06/17/15	06/17/15	15:57	MEV	CETAC1	1.025	BYF1616

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513756-80	<b>Client Sample Name:</b> KA-38-S-11 D, 6/3/2015 10:40:00AM, Craig Riddle/9099							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	41.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 17:41	KEP	GC-14	0.993	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-80	<b>Client Sample Name:</b> KA-38-S-11 D, 6/3/2015 10:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-80		Client Sample Name: KA-38-S-11 D, 6/3/2015 10:40:00AM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
<b>Methylene chloride</b>	<b>0.15</b>	<b>mg/kg</b>	<b>0.010</b>	<b>0.0024</b>	<b>EPA-8260B</b>	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>0.045</b>	<b>mg/kg</b>	<b>0.20</b>	<b>0.020</b>	<b>Luft-GC/MS</b>	ND	<b>J</b>	1
1,2-Dichloroethane-d4 (Surrogate)	112	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-80	<b>Client Sample Name:</b> KA-38-S-11 D, 6/3/2015 10:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.5	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	106	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 11:26	ADC	MS-V2	1	BYF1592

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-80	<b>Client Sample Name:</b> KA-38-S-11 D, 6/3/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	49.3	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/17/15 23:40	MWB	GC-13	1.010	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-80	<b>Client Sample Name:</b> KA-38-S-11 D, 6/3/2015 10:40:00AM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.994	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-80	<b>Client Sample Name:</b> KA-38-S-11 D, 6/3/2015 10:40:00AM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	3.7	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	71	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.30	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	23	mg/kg	0.50	0.050	EPA-6010B	0.055		1
Cobalt	6.5	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	14	mg/kg	1.0	0.050	EPA-6010B	0.060		1
Lead	2.2	mg/kg	2.5	0.28	EPA-6010B	ND	J	1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.098		1
Nickel	23	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	42	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	31	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	06/17/15	06/18/15	11:56	ARD	PE-OP3	0.990	BYF1671
2	EPA-7471A	06/17/15	06/17/15	15:59	MEV	CETAC1	1.025	BYF1616

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Organochlorine Pesticides (EPA Method 8081B)

<b>BCL Sample ID:</b> 1513756-81	<b>Client Sample Name:</b> KA-40-S-6 D, 6/3/2015 12:30:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0050	0.00026	EPA-8081B	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.0014	EPA-8081B	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.0038	EPA-8081B	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00076	EPA-8081B	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.0025	EPA-8081B	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.15	EPA-8081B	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00063	EPA-8081B	ND	A10	1
4,4'-DDE	ND	mg/kg	0.0050	0.00045	EPA-8081B	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0050	0.00031	EPA-8081B	ND	A10	1
Dieldrin	ND	mg/kg	0.0050	0.00032	EPA-8081B	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00086	EPA-8081B	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00066	EPA-8081B	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.0013	EPA-8081B	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00035	EPA-8081B	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00061	EPA-8081B	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.0026	EPA-8081B	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.0015	EPA-8081B	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.0013	EPA-8081B	ND	A10	1
Toxaphene	ND	mg/kg	0.50	0.074	EPA-8081B	ND	A10	1
TCMX (Surrogate)	36.5	%	20 - 130 (LCL - UCL)		EPA-8081B		A10	1
Decachlorobiphenyl (Surrogate)	55.3	%	40 - 130 (LCL - UCL)		EPA-8081B		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081B	06/16/15	06/22/15 16:39	KEP	GC-17	9.934	BYF2018

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-81		Client Sample Name: KA-40-S-6 D, 6/3/2015 12:30:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	53.3	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 17:52	KEP	GC-14	1	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-81	<b>Client Sample Name:</b> KA-40-S-6 D, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-81	<b>Client Sample Name:</b> KA-40-S-6 D, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
<b>Methylene chloride</b>	<b>0.082</b>	<b>mg/kg</b>	<b>0.010</b>	<b>0.0024</b>	<b>EPA-8260B</b>	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	112	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.5	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-81	<b>Client Sample Name:</b> KA-40-S-6 D, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	105	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 11:49	ADC	MS-V2	1	BYF1592

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-81	<b>Client Sample Name:</b> KA-40-S-6 D, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-81	<b>Client Sample Name:</b> KA-40-S-6 D, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

**BCL Sample ID:** 1513756-81      **Client Sample Name:** KA-40-S-6 D, 6/3/2015 12:30:00PM, Craig Riddle/9099

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	mg/kg	0.10	0.037	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Phenanthrene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Pyrene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	mg/kg	0.20	0.022	EPA-8270C	ND		1
2-Chlorophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	mg/kg	0.10	0.035	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.50	0.012	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	mg/kg	0.50	0.0077	EPA-8270C	ND		1
2-Methylphenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	mg/kg	0.20	0.033	EPA-8270C	ND		1
2-Nitrophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
4-Nitrophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
Pentachlorophenol	ND	mg/kg	0.20	0.013	EPA-8270C	ND		1
Phenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	mg/kg	0.20	0.017	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	43.4	%	20 - 130 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	40.0	%	30 - 130 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	36.8	%	30 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	36.0	%	20 - 140 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	44.6	%	20 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	48.2	%	30 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/16/15	06/17/15 23:27	VH1	MS-B2	0.963	BYF1707

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-81	<b>Client Sample Name:</b> KA-40-S-6 D, 6/3/2015 12:30:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	6.9	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	100	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.54	mg/kg	0.50	0.047	EPA-6010B	ND		1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	41	mg/kg	0.50	0.050	EPA-6010B	0.055		1
Cobalt	12	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	21	mg/kg	1.0	0.050	EPA-6010B	0.060		1
Lead	5.0	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.098		1
Nickel	40	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	56	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	39	mg/kg	2.5	0.087	EPA-6010B	1.1		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/17/15	06/18/15 11:58	ARD	PE-OP3	0.990	BYF1671
2	EPA-7471A	06/17/15	06/17/15 16:01	MEV	CETAC1	1.025	BYF1616

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Organochlorine Pesticides (EPA Method 8081B)

<b>BCL Sample ID:</b> 1513756-82	<b>Client Sample Name:</b> KA-40-S-16 D, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0050	0.00026	EPA-8081B	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.0014	EPA-8081B	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.0038	EPA-8081B	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00076	EPA-8081B	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.0025	EPA-8081B	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.15	EPA-8081B	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00063	EPA-8081B	ND	A10	1
4,4'-DDE	ND	mg/kg	0.0050	0.00045	EPA-8081B	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0050	0.00031	EPA-8081B	ND	A10	1
Dieldrin	ND	mg/kg	0.0050	0.00032	EPA-8081B	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00086	EPA-8081B	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00066	EPA-8081B	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.0013	EPA-8081B	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00035	EPA-8081B	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00061	EPA-8081B	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.0026	EPA-8081B	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.0015	EPA-8081B	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.0013	EPA-8081B	ND	A10	1
Toxaphene	ND	mg/kg	0.50	0.074	EPA-8081B	ND	A10	1
TCMX (Surrogate)	57.8	%	20 - 130 (LCL - UCL)		EPA-8081B		A10	1
Decachlorobiphenyl (Surrogate)	72.6	%	40 - 130 (LCL - UCL)		EPA-8081B		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081B	06/16/15	06/22/15 17:02	KEP	GC-17	10.101	BYF2018

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-82		Client Sample Name: KA-40-S-16 D, 6/3/2015 12:50:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	56.7	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 18:03	KEP	GC-14	1.014	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-82	<b>Client Sample Name:</b> KA-40-S-16 D, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-82	<b>Client Sample Name:</b> KA-40-S-16 D, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
<b>Methylene chloride</b>	<b>0.011</b>	<b>mg/kg</b>	<b>0.010</b>	<b>0.0024</b>	<b>EPA-8260B</b>	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	119	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260B			1

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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-82	<b>Client Sample Name:</b> KA-40-S-16 D, 6/3/2015 12:50:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	105	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 12:11	ADC	MS-V2	1	BYF1593

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-82	<b>Client Sample Name:</b> KA-40-S-16 D, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Acenaphthylene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Aldrin	ND	mg/kg	0.10	0.024	EPA-8270C	ND		1
Aniline	ND	mg/kg	0.20	0.053	EPA-8270C	ND		1
Anthracene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzidine	ND	mg/kg	3.0	0.22	EPA-8270C	ND		1
Benzo[a]anthracene	ND	mg/kg	0.10	0.012	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Benzo[a]pyrene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	mg/kg	0.10	0.056	EPA-8270C	ND		1
Benzoic acid	ND	mg/kg	0.50	0.067	EPA-8270C	ND		1
Benzyl alcohol	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
alpha-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
beta-BHC	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
delta-BHC	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
bis(2-Chloroisopropyl) ether	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.20	0.043	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4-Chloroaniline	ND	mg/kg	0.10	0.027	EPA-8270C	ND		1
2-Chloronaphthalene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Chrysene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDD	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDE	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
4,4'-DDT	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dibenzofuran	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-82	<b>Client Sample Name:</b> KA-40-S-16 D, 6/3/2015 12:50:00PM, Craig Riddle/9099
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin	ND	mg/kg	0.10	0.031	EPA-8270C	ND		1
Diethyl phthalate	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Dimethyl phthalate	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	mg/kg	0.10	0.022	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Endosulfan I	ND	mg/kg	0.20	0.020	EPA-8270C	ND		1
Endosulfan II	ND	mg/kg	0.20	0.021	EPA-8270C	ND		1
Endosulfan sulfate	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Endrin	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Endrin aldehyde	ND	mg/kg	0.50	0.022	EPA-8270C	ND		1
Fluoranthene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Fluorene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Heptachlor	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Heptachlor epoxide	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorobenzene	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
Hexachlorobutadiene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	mg/kg	0.10	0.019	EPA-8270C	ND		1
Hexachloroethane	ND	mg/kg	0.10	0.020	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.10	0.072	EPA-8270C	ND		1
Isophorone	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2-Methylnaphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Naphthalene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
2-Naphthylamine	ND	mg/kg	3.0	0.16	EPA-8270C	ND		1
2-Nitroaniline	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
3-Nitroaniline	ND	mg/kg	0.20	0.015	EPA-8270C	ND		1
4-Nitroaniline	ND	mg/kg	0.20	0.025	EPA-8270C	ND		1
Nitrobenzene	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

<b>BCL Sample ID:</b> 1513756-82	<b>Client Sample Name:</b> KA-40-S-16 D, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	mg/kg	0.10	0.037	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	mg/kg	0.10	0.021	EPA-8270C	ND		1
Phenanthrene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
Pyrene	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10	0.018	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	mg/kg	0.20	0.022	EPA-8270C	ND		1
2-Chlorophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	mg/kg	0.10	0.035	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.50	0.012	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	mg/kg	0.50	0.0077	EPA-8270C	ND		1
2-Methylphenol	ND	mg/kg	0.10	0.017	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	mg/kg	0.20	0.033	EPA-8270C	ND		1
2-Nitrophenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
4-Nitrophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
Pentachlorophenol	ND	mg/kg	0.20	0.013	EPA-8270C	ND		1
Phenol	ND	mg/kg	0.10	0.016	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	mg/kg	0.20	0.018	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	mg/kg	0.20	0.017	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	62.9	%	20 - 130 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	54.4	%	30 - 130 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	55.3	%	30 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	62.4	%	20 - 140 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	62.2	%	20 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	56.7	%	30 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/16/15	06/17/15 23:54	VH1	MS-B2	0.941	BYF1707

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

<b>BCL Sample ID:</b> 1513756-82	<b>Client Sample Name:</b> KA-40-S-16 D, 6/3/2015 12:50:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	1.9	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	46	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.15	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	19	mg/kg	0.50	0.050	EPA-6010B	0.052		1
Cobalt	4.5	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	8.3	mg/kg	1.0	0.050	EPA-6010B	0.057		1
Lead	1.1	mg/kg	2.5	0.28	EPA-6010B	ND	J	1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.093		1
Nickel	15	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	0.66	mg/kg	5.0	0.64	EPA-6010B	ND	J	1
Vanadium	28	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	26	mg/kg	2.5	0.087	EPA-6010B	1.0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/17/15	06/18/15 11:59	ARD	PE-OP3	0.935	BYF1671
2	EPA-7471A	06/18/15	06/18/15 12:02	MEV	CETAC1	1.008	BYF1706

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513756-83		Client Sample Name: KA-8-S-2 D, 6/3/2015 2:05:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	mg/kg	0.010	0.0027	EPA-8082	ND		1
PCB-1221	ND	mg/kg	0.010	0.0038	EPA-8082	ND		1
PCB-1232	ND	mg/kg	0.010	0.0024	EPA-8082	ND		1
PCB-1242	ND	mg/kg	0.010	0.0040	EPA-8082	ND		1
PCB-1248	ND	mg/kg	0.010	0.0026	EPA-8082	ND		1
PCB-1254	ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1260	ND	mg/kg	0.010	0.0016	EPA-8082	ND		1
Total PCB's (Summation)	ND	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	63.3	%	40 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/16/15	06/17/15 18:46	KEP	GC-14	1.017	BYF1738

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-83	<b>Client Sample Name:</b> KA-8-S-2 D, 6/3/2015 2:05:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	A40	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	mg/kg	0.010	0.0026	EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513756-83		Client Sample Name: KA-8-S-2 D, 6/3/2015 2:05:00PM, Craig Riddle/9099						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	mg/kg	0.010	0.0020	EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
<b>Methylene chloride</b>	<b>0.11</b>	<b>mg/kg</b>	<b>0.010</b>	<b>0.0024</b>	<b>EPA-8260B</b>	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	0.020	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	70 - 121 (LCL - UCL)		EPA-8260B			1

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1513756-83	<b>Client Sample Name:</b> KA-8-S-2 D, 6/3/2015 2:05:00PM, Craig Riddle/9099
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Toluene-d8 (Surrogate)	99.4	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	100	%	74 - 121 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/17/15	06/17/15 12:34	ADC	MS-V2	1	BYF1593

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513756-83	<b>Client Sample Name:</b> KA-8-S-2 D, 6/3/2015 2:05:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	57.3	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/16/15	06/18/15 00:02	MWB	GC-13	1	BYF1661

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

<b>BCL Sample ID:</b> 1513756-83	<b>Client Sample Name:</b> KA-8-S-2 D, 6/3/2015 2:05:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/kg	50	25	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/18/15	06/18/15 10:20	MAM	MAN-SV	0.998	BYF2016

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

<b>BCL Sample ID:</b> 1513756-83	<b>Client Sample Name:</b> KA-8-S-2 D, 6/3/2015 2:05:00PM, Craig Riddle/9099
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic	4.3	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium	87	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium	0.30	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium	ND	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium	24	mg/kg	0.50	0.050	EPA-6010B	ND		1
Cobalt	7.8	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper	15	mg/kg	1.0	0.050	EPA-6010B	0.098		1
Lead	9.1	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury	ND	mg/kg	0.16	0.036	EPA-7471A	ND		2
Molybdenum	ND	mg/kg	2.5	0.050	EPA-6010B	0.059		1
Nickel	18	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium	ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium	41	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc	31	mg/kg	2.5	0.087	EPA-6010B	0.14		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	06/18/15	06/19/15 14:07	ARD	PE-OP3	0.962	BYF1759
2	EPA-7471A	06/18/15	06/18/15 12:05	MEV	CETAC1	1.025	BYF1706

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Organochlorine Pesticides (EPA Method 8081B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
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**QC Batch ID: BYF1080**

Aldrin	BYF1080-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BYF1080-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BYF1080-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BYF1080-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BYF1080-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BYF1080-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BYF1080-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BYF1080-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BYF1080-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BYF1080-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BYF1080-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BYF1080-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BYF1080-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BYF1080-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BYF1080-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BYF1080-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BYF1080-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BYF1080-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BYF1080-BLK1	ND	mg/kg	0.050	0.0074	
<b>TCMX (Surrogate)</b>	<b>BYF1080-BLK1</b>	<b>78.6</b>	<b>%</b>	<b>20 - 130 (LCL - UCL)</b>		
<b>Decachlorobiphenyl (Surrogate)</b>	<b>BYF1080-BLK1</b>	<b>87.2</b>	<b>%</b>	<b>40 - 130 (LCL - UCL)</b>		

**QC Batch ID: BYF2018**

Aldrin	BYF2018-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BYF2018-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BYF2018-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BYF2018-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BYF2018-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BYF2018-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BYF2018-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BYF2018-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BYF2018-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BYF2018-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BYF2018-BLK1	ND	mg/kg	0.00050	0.000086	

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

## Organochlorine Pesticides (EPA Method 8081B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF2018</b>						
Endosulfan II	BYF2018-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BYF2018-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BYF2018-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BYF2018-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BYF2018-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BYF2018-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BYF2018-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BYF2018-BLK1	ND	mg/kg	0.050	0.0074	
<b>TCMX (Surrogate)</b>	<b>BYF2018-BLK1</b>	<b>62.7</b>	<b>%</b>	<b>20 - 130 (LCL - UCL)</b>		
<b>Decachlorobiphenyl (Surrogate)</b>	<b>BYF2018-BLK1</b>	<b>65.9</b>	<b>%</b>	<b>40 - 130 (LCL - UCL)</b>		

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Organochlorine Pesticides (EPA Method 8081B)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYF1080</b>										
Aldrin	BYF1080-BS1	LCS	0.0045013	0.0049180	mg/kg	91.5		70 - 130		
gamma-BHC (Lindane)	BYF1080-BS1	LCS	0.0046885	0.0049180	mg/kg	95.3		60 - 140		
4,4'-DDT	BYF1080-BS1	LCS	0.0040918	0.0049180	mg/kg	83.2		60 - 140		
Dieldrin	BYF1080-BS1	LCS	0.0047941	0.0049180	mg/kg	97.5		70 - 130		
Endrin	BYF1080-BS1	LCS	0.0041318	0.0049180	mg/kg	84.0		60 - 140		
Heptachlor	BYF1080-BS1	LCS	0.0043213	0.0049180	mg/kg	87.9		60 - 140		
TCMX (Surrogate)	BYF1080-BS1	LCS	0.0072203	0.0098361	mg/kg	73.4		20 - 130		
Decachlorobiphenyl (Surrogate)	BYF1080-BS1	LCS	0.016938	0.019672	mg/kg	86.1		40 - 130		
<b>QC Batch ID: BYF2018</b>										
Aldrin	BYF2018-BS1	LCS	0.0036711	0.0050336	mg/kg	72.9		70 - 130		
gamma-BHC (Lindane)	BYF2018-BS1	LCS	0.0037101	0.0050336	mg/kg	73.7		60 - 140		
4,4'-DDT	BYF2018-BS1	LCS	0.0041936	0.0050336	mg/kg	83.3		60 - 140		
Dieldrin	BYF2018-BS1	LCS	0.0037567	0.0050336	mg/kg	74.6		70 - 130		
Endrin	BYF2018-BS1	LCS	0.0043846	0.0050336	mg/kg	87.1		60 - 140		
Heptachlor	BYF2018-BS1	LCS	0.0037728	0.0050336	mg/kg	75.0		60 - 140		
TCMX (Surrogate)	BYF2018-BS1	LCS	0.0063792	0.010067	mg/kg	63.4		20 - 130		
Decachlorobiphenyl (Surrogate)	BYF2018-BS1	LCS	0.012913	0.020134	mg/kg	64.1		40 - 130		

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Organochlorine Pesticides (EPA Method 8081B)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF1080</b>		Used client sample: N								
Aldrin	MS	1513959-02	ND	0.0042530	0.0050000	mg/kg		85.1		50 - 140
	MSD	1513959-02	ND	0.0042027	0.0050676	mg/kg	1.2	82.9	30	50 - 140
gamma-BHC (Lindane)	MS	1513959-02	ND	0.0036437	0.0050000	mg/kg		72.9		50 - 140
	MSD	1513959-02	ND	0.0039834	0.0050676	mg/kg	8.9	78.6	30	50 - 140
4,4'-DDT	MS	1513959-02	ND	0.0036827	0.0050000	mg/kg		73.7		50 - 140
	MSD	1513959-02	ND	0.0037145	0.0050676	mg/kg	0.9	73.3	30	50 - 140
Dieldrin	MS	1513959-02	0.00051827	0.0050400	0.0050000	mg/kg		90.4		40 - 140
	MSD	1513959-02	0.00051827	0.0050486	0.0050676	mg/kg	0.2	89.4	30	40 - 140
Endrin	MS	1513959-02	ND	0.0041303	0.0050000	mg/kg		82.6		50 - 150
	MSD	1513959-02	ND	0.0041446	0.0050676	mg/kg	0.3	81.8	30	50 - 150
Heptachlor	MS	1513959-02	ND	0.0043160	0.0050000	mg/kg		86.3		60 - 140
	MSD	1513959-02	ND	0.0042409	0.0050676	mg/kg	1.8	83.7	30	60 - 140
TCMX (Surrogate)	MS	1513959-02	ND	0.0071620	0.010000	mg/kg		71.6		20 - 130
	MSD	1513959-02	ND	0.0070568	0.010135	mg/kg	1.5	69.6		20 - 130
Decachlorobiphenyl (Surrogate)	MS	1513959-02	ND	0.014633	0.020000	mg/kg		73.2		40 - 130
	MSD	1513959-02	ND	0.014931	0.020270	mg/kg	2.0	73.7		40 - 130
<b>QC Batch ID: BYF2018</b>		Used client sample: N								
Aldrin	MS	1513811-11	ND	0.0041135	0.0050676	mg/kg		81.2		50 - 140
	MSD	1513811-11	ND	0.0038487	0.0050000	mg/kg	6.7	77.0	30	50 - 140
gamma-BHC (Lindane)	MS	1513811-11	ND	0.0040986	0.0050676	mg/kg		80.9		50 - 140
	MSD	1513811-11	ND	0.0038150	0.0050000	mg/kg	7.2	76.3	30	50 - 140
4,4'-DDT	MS	1513811-11	ND	0.0045652	0.0050676	mg/kg		90.1		50 - 140
	MSD	1513811-11	ND	0.0044170	0.0050000	mg/kg	3.3	88.3	30	50 - 140
Dieldrin	MS	1513811-11	ND	0.0042527	0.0050676	mg/kg		83.9		40 - 140
	MSD	1513811-11	ND	0.0040180	0.0050000	mg/kg	5.7	80.4	30	40 - 140
Endrin	MS	1513811-11	ND	0.0048723	0.0050676	mg/kg		96.1		50 - 150
	MSD	1513811-11	ND	0.0046813	0.0050000	mg/kg	4.0	93.6	30	50 - 150
Heptachlor	MS	1513811-11	ND	0.0042253	0.0050676	mg/kg		83.4		60 - 140
	MSD	1513811-11	ND	0.0039110	0.0050000	mg/kg	7.7	78.2	30	60 - 140
TCMX (Surrogate)	MS	1513811-11	ND	0.0068669	0.010135	mg/kg		67.8		20 - 130
	MSD	1513811-11	ND	0.0064253	0.010000	mg/kg	6.6	64.3		20 - 130
Decachlorobiphenyl (Surrogate)	MS	1513811-11	ND	0.014273	0.020270	mg/kg		70.4		40 - 130
	MSD	1513811-11	ND	0.014114	0.020000	mg/kg	1.1	70.6		40 - 130

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1068</b>						
PCB-1016	BYF1068-BLK1	ND	mg/kg	0.010	0.0027	
PCB-1221	BYF1068-BLK1	ND	mg/kg	0.010	0.0038	
PCB-1232	BYF1068-BLK1	ND	mg/kg	0.010	0.0024	
PCB-1242	BYF1068-BLK1	ND	mg/kg	0.010	0.0040	
PCB-1248	BYF1068-BLK1	ND	mg/kg	0.010	0.0026	
PCB-1254	BYF1068-BLK1	ND	mg/kg	0.010	0.0032	
PCB-1260	BYF1068-BLK1	ND	mg/kg	0.010	0.0016	
Total PCB's (Summation)	BYF1068-BLK1	ND	mg/kg	0.010	0.0050	
<b>Decachlorobiphenyl (Surrogate)</b>	<b>BYF1068-BLK1</b>	<b>93.3</b>	<b>%</b>	<b>40 - 120 (LCL - UCL)</b>		
<b>QC Batch ID: BYF1225</b>						
PCB-1016	BYF1225-BLK1	ND	mg/kg	0.010	0.0027	
PCB-1221	BYF1225-BLK1	ND	mg/kg	0.010	0.0038	
PCB-1232	BYF1225-BLK1	ND	mg/kg	0.010	0.0024	
PCB-1242	BYF1225-BLK1	ND	mg/kg	0.010	0.0040	
PCB-1248	BYF1225-BLK1	ND	mg/kg	0.010	0.0026	
PCB-1254	BYF1225-BLK1	ND	mg/kg	0.010	0.0032	
PCB-1260	BYF1225-BLK1	ND	mg/kg	0.010	0.0016	
Total PCB's (Summation)	BYF1225-BLK1	ND	mg/kg	0.010	0.0050	
<b>Decachlorobiphenyl (Surrogate)</b>	<b>BYF1225-BLK1</b>	<b>75.0</b>	<b>%</b>	<b>40 - 120 (LCL - UCL)</b>		
<b>QC Batch ID: BYF1738</b>						
PCB-1016	BYF1738-BLK1	ND	mg/kg	0.010	0.0027	
PCB-1221	BYF1738-BLK1	ND	mg/kg	0.010	0.0038	
PCB-1232	BYF1738-BLK1	ND	mg/kg	0.010	0.0024	
PCB-1242	BYF1738-BLK1	ND	mg/kg	0.010	0.0040	
PCB-1248	BYF1738-BLK1	ND	mg/kg	0.010	0.0026	
PCB-1254	BYF1738-BLK1	ND	mg/kg	0.010	0.0032	
PCB-1260	BYF1738-BLK1	ND	mg/kg	0.010	0.0016	
Total PCB's (Summation)	BYF1738-BLK1	ND	mg/kg	0.010	0.0050	
<b>Decachlorobiphenyl (Surrogate)</b>	<b>BYF1738-BLK1</b>	<b>83.3</b>	<b>%</b>	<b>40 - 120 (LCL - UCL)</b>		

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYF1068</b>										
PCB-1016	BYF1068-BS1	LCS	0.094237	0.084746	mg/kg	111		60 - 120		
PCB-1260	BYF1068-BS1	LCS	0.084068	0.084746	mg/kg	99.2		60 - 120		
Decachlorobiphenyl (Surrogate)	BYF1068-BS1	LCS	0.018305	0.020339	mg/kg	90.0		40 - 120		
<b>QC Batch ID: BYF1225</b>										
PCB-1016	BYF1225-BS1	LCS	0.072185	0.082781	mg/kg	87.2		60 - 120		
PCB-1260	BYF1225-BS1	LCS	0.070199	0.082781	mg/kg	84.8		60 - 120		
Decachlorobiphenyl (Surrogate)	BYF1225-BS1	LCS	0.015232	0.019868	mg/kg	76.7		40 - 120		
<b>QC Batch ID: BYF1738</b>										
PCB-1016	BYF1738-BS1	LCS	0.087205	0.084175	mg/kg	104		60 - 120		
PCB-1260	BYF1738-BS1	LCS	0.088889	0.084175	mg/kg	106		60 - 120		
Decachlorobiphenyl (Surrogate)	BYF1738-BS1	LCS	0.019529	0.020202	mg/kg	96.7		40 - 120		

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF1068</b>		Used client sample: N								
PCB-1016	MS	1222450-30	ND	0.096393	0.081967	mg/kg		118		50 - 130
	MSD	1222450-30	ND	0.096667	0.083333	mg/kg	0.3	116	30	50 - 130
PCB-1260	MS	1222450-30	ND	0.080000	0.081967	mg/kg		97.6		50 - 120
	MSD	1222450-30	ND	0.080667	0.083333	mg/kg	0.8	96.8	30	50 - 120
Decachlorobiphenyl (Surrogate)	MS	1222450-30	ND	0.017705	0.019672	mg/kg		90.0		40 - 120
	MSD	1222450-30	ND	0.017667	0.020000	mg/kg	0.2	88.3		40 - 120
<b>QC Batch ID: BYF1225</b>		Used client sample: N								
PCB-1016	MS	1511019-72	ND	0.078188	0.083893	mg/kg		93.2		50 - 130
	MSD	1511019-72	ND	0.080263	0.082237	mg/kg	2.6	97.6	30	50 - 130
PCB-1260	MS	1511019-72	ND	0.074497	0.083893	mg/kg		88.8		50 - 120
	MSD	1511019-72	ND	0.076316	0.082237	mg/kg	2.4	92.8	30	50 - 120
Decachlorobiphenyl (Surrogate)	MS	1511019-72	ND	0.016107	0.020134	mg/kg		80.0		40 - 120
	MSD	1511019-72	ND	0.016447	0.019737	mg/kg	2.1	83.3		40 - 120
<b>QC Batch ID: BYF1738</b>		Used client sample: N								
PCB-1016	MS	1511019-79	ND	0.076974	0.082237	mg/kg		93.6		50 - 130
	MSD	1511019-79	ND	0.077181	0.083893	mg/kg	0.3	92.0	30	50 - 130
PCB-1260	MS	1511019-79	ND	0.076974	0.082237	mg/kg		93.6		50 - 120
	MSD	1511019-79	ND	0.080537	0.083893	mg/kg	4.5	96.0	30	50 - 120
Decachlorobiphenyl (Surrogate)	MS	1511019-79	ND	0.017434	0.019737	mg/kg		88.3		40 - 120
	MSD	1511019-79	ND	0.017785	0.020134	mg/kg	2.0	88.3		40 - 120

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0435</b>						
Benzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYF0435-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYF0435-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYF0435-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYF0435-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYF0435-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0012	

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0435</b>						
cis-1,3-Dichloropropene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYF0435-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYF0435-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYF0435-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYF0435-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYF0435-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYF0435-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYF0435-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYF0435-BLK1	ND	mg/kg	0.0050	0.0012	
Total Purgeable Petroleum Hydrocarbons	BYF0435-BLK1	ND	mg/kg	0.20	0.020	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYF0435-BLK1</b>	<b>92.4</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYF0435-BLK1</b>	<b>100</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYF0435-BLK1</b>	<b>95.9</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0442</b>						
Benzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYF0442-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYF0442-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYF0442-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYF0442-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYF0442-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0012	

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0442</b>						
cis-1,3-Dichloropropene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYF0442-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYF0442-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYF0442-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYF0442-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYF0442-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYF0442-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYF0442-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYF0442-BLK1	ND	mg/kg	0.0050	0.0012	
Total Purgeable Petroleum Hydrocarbons	BYF0442-BLK1	ND	mg/kg	0.20	0.020	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYF0442-BLK1</b>	<b>92.4</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYF0442-BLK1</b>	<b>99.6</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYF0442-BLK1</b>	<b>95.9</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0688</b>						
Benzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYF0688-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYF0688-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYF0688-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYF0688-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYF0688-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0012	

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0688</b>						
cis-1,3-Dichloropropene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYF0688-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYF0688-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYF0688-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYF0688-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYF0688-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYF0688-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYF0688-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYF0688-BLK1	ND	mg/kg	0.0050	0.0012	
Total Purgeable Petroleum Hydrocarbons	BYF0688-BLK1	ND	mg/kg	0.20	0.020	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYF0688-BLK1</b>	<b>111</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYF0688-BLK1</b>	<b>97.3</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYF0688-BLK1</b>	<b>99.5</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		

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6201 S Street/P.O. Box 15830  
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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1592</b>						
Benzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYF1592-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYF1592-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYF1592-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYF1592-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYF1592-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0012	

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1592</b>						
cis-1,3-Dichloropropene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYF1592-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYF1592-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYF1592-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,1,2-Tetrachloroethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYF1592-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYF1592-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYF1592-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYF1592-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYF1592-BLK1	ND	mg/kg	0.0050	0.0012	
Total Purgeable Petroleum Hydrocarbons	BYF1592-BLK1	ND	mg/kg	0.20	0.020	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYF1592-BLK1</b>	<b>119</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYF1592-BLK1</b>	<b>97.0</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYF1592-BLK1</b>	<b>102</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1593</b>						
Benzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BYF1593-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BYF1593-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BYF1593-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0014	
Total 1,2-Dichloroethene	BYF1593-BLK1	ND	mg/kg	0.010	0.0026	
1,2-Dichloropropane	BYF1593-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0012	

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1593</b>						
cis-1,3-Dichloropropene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0012	
Total 1,3-Dichloropropene	BYF1593-BLK1	ND	mg/kg	0.010	0.0020	
Ethylbenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BYF1593-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BYF1593-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,1,2-Tetrachloroethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYF1593-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BYF1593-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BYF1593-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BYF1593-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BYF1593-BLK1	ND	mg/kg	0.0050	0.0012	
Total Purgeable Petroleum Hydrocarbons	BYF1593-BLK1	ND	mg/kg	0.20	0.020	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYF1593-BLK1</b>	<b>116</b>	<b>%</b>	<b>70 - 121 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYF1593-BLK1</b>	<b>95.5</b>	<b>%</b>	<b>81 - 117 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYF1593-BLK1</b>	<b>102</b>	<b>%</b>	<b>74 - 121 (LCL - UCL)</b>		

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0435</b>										
Benzene	BYF0435-BS1	LCS	0.11786	0.12500	mg/kg	94.3		70 - 130		
Bromodichloromethane	BYF0435-BS1	LCS	0.11787	0.12500	mg/kg	94.3		70 - 130		
Chlorobenzene	BYF0435-BS1	LCS	0.11832	0.12500	mg/kg	94.7		70 - 130		
Chloroethane	BYF0435-BS1	LCS	0.10608	0.12500	mg/kg	84.9		70 - 130		
1,4-Dichlorobenzene	BYF0435-BS1	LCS	0.12823	0.12500	mg/kg	103		70 - 130		
1,1-Dichloroethane	BYF0435-BS1	LCS	0.11509	0.12500	mg/kg	92.1		70 - 130		
1,1-Dichloroethene	BYF0435-BS1	LCS	0.10475	0.12500	mg/kg	83.8		70 - 130		
Toluene	BYF0435-BS1	LCS	0.11987	0.12500	mg/kg	95.9		70 - 130		
Trichloroethene	BYF0435-BS1	LCS	0.11890	0.12500	mg/kg	95.1		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYF0435-BS1	LCS	0.047970	0.050000	mg/kg	95.9		70 - 121		
Toluene-d8 (Surrogate)	BYF0435-BS1	LCS	0.049740	0.050000	mg/kg	99.5		81 - 117		
4-Bromofluorobenzene (Surrogate)	BYF0435-BS1	LCS	0.049400	0.050000	mg/kg	98.8		74 - 121		
<b>QC Batch ID: BYF0442</b>										
Benzene	BYF0442-BS1	LCS	0.12729	0.12500	mg/kg	102		70 - 130		
Bromodichloromethane	BYF0442-BS1	LCS	0.12046	0.12500	mg/kg	96.4		70 - 130		
Chlorobenzene	BYF0442-BS1	LCS	0.12470	0.12500	mg/kg	99.8		70 - 130		
Chloroethane	BYF0442-BS1	LCS	0.13032	0.12500	mg/kg	104		70 - 130		
1,4-Dichlorobenzene	BYF0442-BS1	LCS	0.12612	0.12500	mg/kg	101		70 - 130		
1,1-Dichloroethane	BYF0442-BS1	LCS	0.12374	0.12500	mg/kg	99.0		70 - 130		
1,1-Dichloroethene	BYF0442-BS1	LCS	0.11508	0.12500	mg/kg	92.1		70 - 130		
Toluene	BYF0442-BS1	LCS	0.12716	0.12500	mg/kg	102		70 - 130		
Trichloroethene	BYF0442-BS1	LCS	0.12553	0.12500	mg/kg	100		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYF0442-BS1	LCS	0.050890	0.050000	mg/kg	102		70 - 121		
Toluene-d8 (Surrogate)	BYF0442-BS1	LCS	0.049000	0.050000	mg/kg	98.0		81 - 117		
4-Bromofluorobenzene (Surrogate)	BYF0442-BS1	LCS	0.049740	0.050000	mg/kg	99.5		74 - 121		
<b>QC Batch ID: BYF0688</b>										
Benzene	BYF0688-BS1	LCS	0.13021	0.12500	mg/kg	104		70 - 130		
Bromodichloromethane	BYF0688-BS1	LCS	0.12609	0.12500	mg/kg	101		70 - 130		
Chlorobenzene	BYF0688-BS1	LCS	0.13100	0.12500	mg/kg	105		70 - 130		
Chloroethane	BYF0688-BS1	LCS	0.12391	0.12500	mg/kg	99.1		70 - 130		
1,4-Dichlorobenzene	BYF0688-BS1	LCS	0.13063	0.12500	mg/kg	105		70 - 130		
1,1-Dichloroethane	BYF0688-BS1	LCS	0.13455	0.12500	mg/kg	108		70 - 130		
1,1-Dichloroethene	BYF0688-BS1	LCS	0.12308	0.12500	mg/kg	98.5		70 - 130		

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0688</b>										
Toluene	BYF0688-BS1	LCS	0.12972	0.12500	mg/kg	104		70 - 130		
Trichloroethene	BYF0688-BS1	LCS	0.13229	0.12500	mg/kg	106		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYF0688-BS1	LCS	0.052030	0.050000	mg/kg	104		70 - 121		
Toluene-d8 (Surrogate)	BYF0688-BS1	LCS	0.048860	0.050000	mg/kg	97.7		81 - 117		
4-Bromofluorobenzene (Surrogate)	BYF0688-BS1	LCS	0.050950	0.050000	mg/kg	102		74 - 121		
<b>QC Batch ID: BYF1592</b>										
Benzene	BYF1592-BS1	LCS	0.11230	0.12500	mg/kg	89.8		70 - 130		
Bromodichloromethane	BYF1592-BS1	LCS	0.13061	0.12500	mg/kg	104		70 - 130		
Chlorobenzene	BYF1592-BS1	LCS	0.11971	0.12500	mg/kg	95.8		70 - 130		
Chloroethane	BYF1592-BS1	LCS	0.13036	0.12500	mg/kg	104		70 - 130		
1,4-Dichlorobenzene	BYF1592-BS1	LCS	0.12186	0.12500	mg/kg	97.5		70 - 130		
1,1-Dichloroethane	BYF1592-BS1	LCS	0.12757	0.12500	mg/kg	102		70 - 130		
1,1-Dichloroethene	BYF1592-BS1	LCS	0.11774	0.12500	mg/kg	94.2		70 - 130		
Toluene	BYF1592-BS1	LCS	0.11469	0.12500	mg/kg	91.8		70 - 130		
Trichloroethene	BYF1592-BS1	LCS	0.11990	0.12500	mg/kg	95.9		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYF1592-BS1	LCS	0.058930	0.050000	mg/kg	118		70 - 121		
Toluene-d8 (Surrogate)	BYF1592-BS1	LCS	0.047140	0.050000	mg/kg	94.3		81 - 117		
4-Bromofluorobenzene (Surrogate)	BYF1592-BS1	LCS	0.052120	0.050000	mg/kg	104		74 - 121		
<b>QC Batch ID: BYF1593</b>										
Benzene	BYF1593-BS1	LCS	0.10872	0.12500	mg/kg	87.0		70 - 130		
Bromodichloromethane	BYF1593-BS1	LCS	0.12560	0.12500	mg/kg	100		70 - 130		
Chlorobenzene	BYF1593-BS1	LCS	0.11720	0.12500	mg/kg	93.8		70 - 130		
Chloroethane	BYF1593-BS1	LCS	0.12252	0.12500	mg/kg	98.0		70 - 130		
1,4-Dichlorobenzene	BYF1593-BS1	LCS	0.11531	0.12500	mg/kg	92.2		70 - 130		
1,1-Dichloroethane	BYF1593-BS1	LCS	0.12272	0.12500	mg/kg	98.2		70 - 130		
1,1-Dichloroethene	BYF1593-BS1	LCS	0.11663	0.12500	mg/kg	93.3		70 - 130		
Toluene	BYF1593-BS1	LCS	0.11003	0.12500	mg/kg	88.0		70 - 130		
Trichloroethene	BYF1593-BS1	LCS	0.11771	0.12500	mg/kg	94.2		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYF1593-BS1	LCS	0.055680	0.050000	mg/kg	111		70 - 121		
Toluene-d8 (Surrogate)	BYF1593-BS1	LCS	0.047460	0.050000	mg/kg	94.9		81 - 117		
4-Bromofluorobenzene (Surrogate)	BYF1593-BS1	LCS	0.050770	0.050000	mg/kg	102		74 - 121		

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0435</b>		Used client sample: N								
Benzene	MS	1511019-79	ND	0.11263	0.12500	mg/kg		90.1		70 - 130
	MSD	1511019-79	ND	0.11399	0.12500	mg/kg	1.2	91.2	20	70 - 130
Bromodichloromethane	MS	1511019-79	ND	0.11169	0.12500	mg/kg		89.4		70 - 130
	MSD	1511019-79	ND	0.11130	0.12500	mg/kg	0.3	89.0	20	70 - 130
Chlorobenzene	MS	1511019-79	ND	0.11112	0.12500	mg/kg		88.9		70 - 130
	MSD	1511019-79	ND	0.11265	0.12500	mg/kg	1.4	90.1	20	70 - 130
Chloroethane	MS	1511019-79	ND	0.10941	0.12500	mg/kg		87.5		70 - 130
	MSD	1511019-79	ND	0.11205	0.12500	mg/kg	2.4	89.6	20	70 - 130
1,4-Dichlorobenzene	MS	1511019-79	ND	0.11760	0.12500	mg/kg		94.1		70 - 130
	MSD	1511019-79	ND	0.12193	0.12500	mg/kg	3.6	97.5	20	70 - 130
1,1-Dichloroethane	MS	1511019-79	ND	0.11115	0.12500	mg/kg		88.9		70 - 130
	MSD	1511019-79	ND	0.10690	0.12500	mg/kg	3.9	85.5	20	70 - 130
1,1-Dichloroethene	MS	1511019-79	ND	0.10493	0.12500	mg/kg		83.9		70 - 130
	MSD	1511019-79	ND	0.10055	0.12500	mg/kg	4.3	80.4	20	70 - 130
Toluene	MS	1511019-79	ND	0.11389	0.12500	mg/kg		91.1		70 - 130
	MSD	1511019-79	ND	0.11397	0.12500	mg/kg	0.1	91.2	20	70 - 130
Trichloroethene	MS	1511019-79	ND	0.11432	0.12500	mg/kg		91.5		70 - 130
	MSD	1511019-79	ND	0.11355	0.12500	mg/kg	0.7	90.8	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-79	ND	0.049450	0.050000	mg/kg		98.9		70 - 121
	MSD	1511019-79	ND	0.047980	0.050000	mg/kg	3.0	96.0		70 - 121
Toluene-d8 (Surrogate)	MS	1511019-79	ND	0.050280	0.050000	mg/kg		101		81 - 117
	MSD	1511019-79	ND	0.050680	0.050000	mg/kg	0.8	101		81 - 117
4-Bromofluorobenzene (Surrogate)	MS	1511019-79	ND	0.048980	0.050000	mg/kg		98.0		74 - 121
	MSD	1511019-79	ND	0.050450	0.050000	mg/kg	3.0	101		74 - 121
<b>QC Batch ID: BYF0442</b>		Used client sample: N								
Benzene	MS	1511019-80	ND	0.11732	0.12500	mg/kg		93.9		70 - 130
	MSD	1511019-80	ND	0.11018	0.12500	mg/kg	6.3	88.1	20	70 - 130
Bromodichloromethane	MS	1511019-80	ND	0.11302	0.12500	mg/kg		90.4		70 - 130
	MSD	1511019-80	ND	0.10730	0.12500	mg/kg	5.2	85.8	20	70 - 130
Chlorobenzene	MS	1511019-80	ND	0.11218	0.12500	mg/kg		89.7		70 - 130
	MSD	1511019-80	ND	0.10754	0.12500	mg/kg	4.2	86.0	20	70 - 130
Chloroethane	MS	1511019-80	ND	0.11407	0.12500	mg/kg		91.3		70 - 130
	MSD	1511019-80	ND	0.10293	0.12500	mg/kg	10.3	82.3	20	70 - 130
1,4-Dichlorobenzene	MS	1511019-80	ND	0.11434	0.12500	mg/kg		91.5		70 - 130
	MSD	1511019-80	ND	0.11067	0.12500	mg/kg	3.3	88.5	20	70 - 130
1,1-Dichloroethane	MS	1511019-80	ND	0.11752	0.12500	mg/kg		94.0		70 - 130
	MSD	1511019-80	ND	0.10760	0.12500	mg/kg	8.8	86.1	20	70 - 130

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab Quals
								Percent Recovery	Percent Recovery	
<b>QC Batch ID: BYF0442</b>		Used client sample: N								
1,1-Dichloroethene	MS	1511019-80	ND	0.10788	0.12500	mg/kg		86.3		70 - 130
	MSD	1511019-80	ND	0.095830	0.12500	mg/kg	11.8	76.7	20	70 - 130
Toluene	MS	1511019-80	ND	0.11400	0.12500	mg/kg		91.2		70 - 130
	MSD	1511019-80	ND	0.10543	0.12500	mg/kg	7.8	84.3	20	70 - 130
Trichloroethene	MS	1511019-80	ND	0.11260	0.12500	mg/kg		90.1		70 - 130
	MSD	1511019-80	ND	0.10517	0.12500	mg/kg	6.8	84.1	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-80	ND	0.053120	0.050000	mg/kg		106		70 - 121
	MSD	1511019-80	ND	0.050900	0.050000	mg/kg	4.3	102		70 - 121
Toluene-d8 (Surrogate)	MS	1511019-80	ND	0.049920	0.050000	mg/kg		99.8		81 - 117
	MSD	1511019-80	ND	0.049330	0.050000	mg/kg	1.2	98.7		81 - 117
4-Bromofluorobenzene (Surrogate)	MS	1511019-80	ND	0.050480	0.050000	mg/kg		101		74 - 121
	MSD	1511019-80	ND	0.050270	0.050000	mg/kg	0.4	101		74 - 121
<b>QC Batch ID: BYF0688</b>		Used client sample: N								
Benzene	MS	1513811-10	ND	0.12306	0.12500	mg/kg		98.4		70 - 130
	MSD	1513811-10	ND	0.12595	0.12500	mg/kg	2.3	101	20	70 - 130
Bromodichloromethane	MS	1513811-10	ND	0.11351	0.12500	mg/kg		90.8		70 - 130
	MSD	1513811-10	ND	0.12065	0.12500	mg/kg	6.1	96.5	20	70 - 130
Chlorobenzene	MS	1513811-10	ND	0.10928	0.12500	mg/kg		87.4		70 - 130
	MSD	1513811-10	ND	0.11235	0.12500	mg/kg	2.8	89.9	20	70 - 130
Chloroethane	MS	1513811-10	ND	0.11909	0.12500	mg/kg		95.3		70 - 130
	MSD	1513811-10	ND	0.12178	0.12500	mg/kg	2.2	97.4	20	70 - 130
1,4-Dichlorobenzene	MS	1513811-10	ND	0.11149	0.12500	mg/kg		89.2		70 - 130
	MSD	1513811-10	ND	0.11626	0.12500	mg/kg	4.2	93.0	20	70 - 130
1,1-Dichloroethane	MS	1513811-10	ND	0.12591	0.12500	mg/kg		101		70 - 130
	MSD	1513811-10	ND	0.12842	0.12500	mg/kg	2.0	103	20	70 - 130
1,1-Dichloroethene	MS	1513811-10	ND	0.10877	0.12500	mg/kg		87.0		70 - 130
	MSD	1513811-10	ND	0.11176	0.12500	mg/kg	2.7	89.4	20	70 - 130
Toluene	MS	1513811-10	ND	0.11094	0.12500	mg/kg		88.8		70 - 130
	MSD	1513811-10	ND	0.11721	0.12500	mg/kg	5.5	93.8	20	70 - 130
Trichloroethene	MS	1513811-10	ND	0.11186	0.12500	mg/kg		89.5		70 - 130
	MSD	1513811-10	ND	0.11884	0.12500	mg/kg	6.1	95.1	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1513811-10	ND	0.060460	0.050000	mg/kg		121		70 - 121
	MSD	1513811-10	ND	0.050860	0.050000	mg/kg	17.2	102		70 - 121
Toluene-d8 (Surrogate)	MS	1513811-10	ND	0.051310	0.050000	mg/kg		103		81 - 117
	MSD	1513811-10	ND	0.051130	0.050000	mg/kg	0.4	102		81 - 117
4-Bromofluorobenzene (Surrogate)	MS	1513811-10	ND	0.052720	0.050000	mg/kg		105		74 - 121
	MSD	1513811-10	ND	0.051290	0.050000	mg/kg	2.7	103		74 - 121

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF1592</b>		Used client sample: N								
Benzene	MS	1513811-17	ND	0.10642	0.12500	mg/kg		85.1		70 - 130
	MSD	1513811-17	ND	0.11601	0.12500	mg/kg	8.6	92.8	20	70 - 130
Bromodichloromethane	MS	1513811-17	ND	0.12259	0.12500	mg/kg		98.1		70 - 130
	MSD	1513811-17	ND	0.12665	0.12500	mg/kg	3.3	101	20	70 - 130
Chlorobenzene	MS	1513811-17	ND	0.11685	0.12500	mg/kg		93.5		70 - 130
	MSD	1513811-17	ND	0.11755	0.12500	mg/kg	0.6	94.0	20	70 - 130
Chloroethane	MS	1513811-17	ND	0.12364	0.12500	mg/kg		98.9		70 - 130
	MSD	1513811-17	ND	0.12749	0.12500	mg/kg	3.1	102	20	70 - 130
1,4-Dichlorobenzene	MS	1513811-17	ND	0.11600	0.12500	mg/kg		92.8		70 - 130
	MSD	1513811-17	ND	0.11585	0.12500	mg/kg	0.1	92.7	20	70 - 130
1,1-Dichloroethane	MS	1513811-17	ND	0.12376	0.12500	mg/kg		99.0		70 - 130
	MSD	1513811-17	ND	0.12992	0.12500	mg/kg	4.9	104	20	70 - 130
1,1-Dichloroethene	MS	1513811-17	ND	0.11798	0.12500	mg/kg		94.4		70 - 130
	MSD	1513811-17	ND	0.12016	0.12500	mg/kg	1.8	96.1	20	70 - 130
Toluene	MS	1513811-17	ND	0.11747	0.12500	mg/kg		94.0		70 - 130
	MSD	1513811-17	ND	0.11264	0.12500	mg/kg	4.2	90.1	20	70 - 130
Trichloroethene	MS	1513811-17	ND	0.12272	0.12500	mg/kg		98.2		70 - 130
	MSD	1513811-17	ND	0.12108	0.12500	mg/kg	1.3	96.9	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1513811-17	ND	0.060160	0.050000	mg/kg		120		70 - 121
	MSD	1513811-17	ND	0.059860	0.050000	mg/kg	0.5	120		70 - 121
Toluene-d8 (Surrogate)	MS	1513811-17	ND	0.048350	0.050000	mg/kg		96.7		81 - 117
	MSD	1513811-17	ND	0.047690	0.050000	mg/kg	1.4	95.4		81 - 117
4-Bromofluorobenzene (Surrogate)	MS	1513811-17	ND	0.053850	0.050000	mg/kg		108		74 - 121
	MSD	1513811-17	ND	0.050820	0.050000	mg/kg	5.8	102		74 - 121
<b>QC Batch ID: BYF1593</b>		Used client sample: N								
Benzene	MS	1513811-18	ND	0.11962	0.12500	mg/kg		95.7		70 - 130
	MSD	1513811-18	ND	0.11173	0.12500	mg/kg	6.8	89.4	20	70 - 130
Bromodichloromethane	MS	1513811-18	ND	0.12771	0.12500	mg/kg		102		70 - 130
	MSD	1513811-18	ND	0.12589	0.12500	mg/kg	1.4	101	20	70 - 130
Chlorobenzene	MS	1513811-18	ND	0.12230	0.12500	mg/kg		97.8		70 - 130
	MSD	1513811-18	ND	0.12136	0.12500	mg/kg	0.8	97.1	20	70 - 130
Chloroethane	MS	1513811-18	ND	0.12892	0.12500	mg/kg		103		70 - 130
	MSD	1513811-18	ND	0.12583	0.12500	mg/kg	2.4	101	20	70 - 130
1,4-Dichlorobenzene	MS	1513811-18	ND	0.11805	0.12500	mg/kg		94.4		70 - 130
	MSD	1513811-18	ND	0.11782	0.12500	mg/kg	0.2	94.3	20	70 - 130
1,1-Dichloroethane	MS	1513811-18	ND	0.13084	0.12500	mg/kg		105		70 - 130
	MSD	1513811-18	ND	0.12337	0.12500	mg/kg	5.9	98.7	20	70 - 130

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
									RPD	Percent Recovery	
<b>QC Batch ID: BYF1593</b>		Used client sample: N									
1,1-Dichloroethene	MS	1513811-18	ND	0.12904	0.12500	mg/kg		103		70 - 130	
	MSD	1513811-18	ND	0.11772	0.12500	mg/kg	9.2	94.2	20	70 - 130	
Toluene	MS	1513811-18	ND	0.12070	0.12500	mg/kg		96.6		70 - 130	
	MSD	1513811-18	ND	0.11336	0.12500	mg/kg	6.3	90.7	20	70 - 130	
Trichloroethene	MS	1513811-18	ND	0.12990	0.12500	mg/kg		104		70 - 130	
	MSD	1513811-18	ND	0.12045	0.12500	mg/kg	7.5	96.4	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1513811-18	ND	0.057190	0.050000	mg/kg		114		70 - 121	
	MSD	1513811-18	ND	0.057320	0.050000	mg/kg	0.2	115		70 - 121	
Toluene-d8 (Surrogate)	MS	1513811-18	ND	0.047870	0.050000	mg/kg		95.7		81 - 117	
	MSD	1513811-18	ND	0.046820	0.050000	mg/kg	2.2	93.6		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1513811-18	ND	0.050500	0.050000	mg/kg		101		74 - 121	
	MSD	1513811-18	ND	0.051460	0.050000	mg/kg	1.9	103		74 - 121	

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1076</b>						
Acenaphthene	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
Acenaphthylene	BYF1076-BLK1	ND	mg/kg	0.10	0.019	
Aldrin	BYF1076-BLK1	ND	mg/kg	0.10	0.024	
Aniline	BYF1076-BLK1	ND	mg/kg	0.20	0.053	
Anthracene	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
Benzidine	BYF1076-BLK1	ND	mg/kg	3.0	0.22	
Benzo[a]anthracene	BYF1076-BLK1	ND	mg/kg	0.10	0.012	
Benzo[b]fluoranthene	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
Benzo[k]fluoranthene	BYF1076-BLK1	ND	mg/kg	0.10	0.019	
Benzo[a]pyrene	BYF1076-BLK1	ND	mg/kg	0.10	0.015	
Benzo[g,h,i]perylene	BYF1076-BLK1	ND	mg/kg	0.10	0.056	
Benzoic acid	BYF1076-BLK1	ND	mg/kg	0.50	0.067	
Benzyl alcohol	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
Benzyl butyl phthalate	BYF1076-BLK1	ND	mg/kg	0.10	0.021	
alpha-BHC	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
beta-BHC	BYF1076-BLK1	ND	mg/kg	0.10	0.021	
delta-BHC	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
gamma-BHC (Lindane)	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
bis(2-Chloroethoxy)methane	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
bis(2-Chloroethyl) ether	BYF1076-BLK1	ND	mg/kg	0.10	0.016	
bis(2-Chloroisopropyl)ether	BYF1076-BLK1	ND	mg/kg	0.10	0.021	
bis(2-Ethylhexyl)phthalate	BYF1076-BLK1	ND	mg/kg	0.20	0.043	
4-Bromophenyl phenyl ether	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
4-Chloroaniline	BYF1076-BLK1	ND	mg/kg	0.10	0.027	
2-Chloronaphthalene	BYF1076-BLK1	ND	mg/kg	0.10	0.020	
4-Chlorophenyl phenyl ether	BYF1076-BLK1	ND	mg/kg	0.10	0.015	
Chrysene	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
4,4'-DDD	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
4,4'-DDE	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
4,4'-DDT	BYF1076-BLK1	ND	mg/kg	0.10	0.019	
Dibenzo[a,h]anthracene	BYF1076-BLK1	ND	mg/kg	0.10	0.019	
Dibenzofuran	BYF1076-BLK1	ND	mg/kg	0.10	0.020	
1,2-Dichlorobenzene	BYF1076-BLK1	ND	mg/kg	0.10	0.020	
1,3-Dichlorobenzene	BYF1076-BLK1	ND	mg/kg	0.10	0.021	

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1076</b>						
1,4-Dichlorobenzene	BYF1076-BLK1	ND	mg/kg	0.10	0.019	
3,3-Dichlorobenzidine	BYF1076-BLK1	ND	mg/kg	0.20	0.0067	
Dieldrin	BYF1076-BLK1	ND	mg/kg	0.10	0.031	
Diethyl phthalate	BYF1076-BLK1	ND	mg/kg	0.10	0.019	
Dimethyl phthalate	BYF1076-BLK1	ND	mg/kg	0.10	0.020	
Di-n-butyl phthalate	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
2,4-Dinitrotoluene	BYF1076-BLK1	ND	mg/kg	0.10	0.022	
2,6-Dinitrotoluene	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
Di-n-octyl phthalate	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
1,2-Diphenylhydrazine	BYF1076-BLK1	ND	mg/kg	0.10	0.019	
Endosulfan I	BYF1076-BLK1	ND	mg/kg	0.20	0.020	
Endosulfan II	BYF1076-BLK1	ND	mg/kg	0.20	0.021	
Endosulfan sulfate	BYF1076-BLK1	ND	mg/kg	0.10	0.021	
Endrin	BYF1076-BLK1	ND	mg/kg	0.20	0.025	
Endrin aldehyde	BYF1076-BLK1	ND	mg/kg	0.50	0.022	
Fluoranthene	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
Fluorene	BYF1076-BLK1	ND	mg/kg	0.10	0.019	
Heptachlor	BYF1076-BLK1	ND	mg/kg	0.10	0.021	
Heptachlor epoxide	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
Hexachlorobenzene	BYF1076-BLK1	ND	mg/kg	0.10	0.016	
Hexachlorobutadiene	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
Hexachlorocyclopentadiene	BYF1076-BLK1	ND	mg/kg	0.10	0.019	
Hexachloroethane	BYF1076-BLK1	ND	mg/kg	0.10	0.020	
Indeno[1,2,3-cd]pyrene	BYF1076-BLK1	ND	mg/kg	0.10	0.072	
Isophorone	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
2-Methylnaphthalene	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
Naphthalene	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
2-Naphthylamine	BYF1076-BLK1	ND	mg/kg	3.0	0.16	
2-Nitroaniline	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
3-Nitroaniline	BYF1076-BLK1	ND	mg/kg	0.20	0.015	
4-Nitroaniline	BYF1076-BLK1	ND	mg/kg	0.20	0.025	
Nitrobenzene	BYF1076-BLK1	ND	mg/kg	0.10	0.015	
N-Nitrosodimethylamine	BYF1076-BLK1	ND	mg/kg	0.10	0.037	
N-Nitrosodi-N-propylamine	BYF1076-BLK1	ND	mg/kg	0.10	0.021	

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
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**QC Batch ID: BYF1076**

N-Nitrosodiphenylamine	BYF1076-BLK1	ND	mg/kg	0.10	0.021	
Phenanthrene	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
Pyrene	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
1,2,4-Trichlorobenzene	BYF1076-BLK1	ND	mg/kg	0.10	0.018	
4-Chloro-3-methylphenol	BYF1076-BLK1	ND	mg/kg	0.20	0.022	
2-Chlorophenol	BYF1076-BLK1	ND	mg/kg	0.10	0.016	
2,4-Dichlorophenol	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
2,4-Dimethylphenol	BYF1076-BLK1	ND	mg/kg	0.10	0.035	
4,6-Dinitro-2-methylphenol	BYF1076-BLK1	ND	mg/kg	0.50	0.012	
2,4-Dinitrophenol	BYF1076-BLK1	ND	mg/kg	0.50	0.0077	
2-Methylphenol	BYF1076-BLK1	ND	mg/kg	0.10	0.017	
3- & 4-Methylphenol	BYF1076-BLK1	ND	mg/kg	0.20	0.033	
2-Nitrophenol	BYF1076-BLK1	ND	mg/kg	0.10	0.016	
4-Nitrophenol	BYF1076-BLK1	ND	mg/kg	0.20	0.018	
Pentachlorophenol	BYF1076-BLK1	ND	mg/kg	0.20	0.013	
Phenol	BYF1076-BLK1	ND	mg/kg	0.10	0.016	
2,4,5-Trichlorophenol	BYF1076-BLK1	ND	mg/kg	0.20	0.018	
2,4,6-Trichlorophenol	BYF1076-BLK1	ND	mg/kg	0.20	0.017	
<b>2-Fluorophenol (Surrogate)</b>	<b>BYF1076-BLK1</b>	<b>72.2</b>	<b>%</b>	<b>20 - 130 (LCL - UCL)</b>		
<b>Phenol-d5 (Surrogate)</b>	<b>BYF1076-BLK1</b>	<b>77.0</b>	<b>%</b>	<b>30 - 130 (LCL - UCL)</b>		
<b>Nitrobenzene-d5 (Surrogate)</b>	<b>BYF1076-BLK1</b>	<b>86.3</b>	<b>%</b>	<b>30 - 130 (LCL - UCL)</b>		
<b>2-Fluorobiphenyl (Surrogate)</b>	<b>BYF1076-BLK1</b>	<b>83.4</b>	<b>%</b>	<b>20 - 140 (LCL - UCL)</b>		
<b>2,4,6-Tribromophenol (Surrogate)</b>	<b>BYF1076-BLK1</b>	<b>70.4</b>	<b>%</b>	<b>20 - 150 (LCL - UCL)</b>		
<b>p-Terphenyl-d14 (Surrogate)</b>	<b>BYF1076-BLK1</b>	<b>128</b>	<b>%</b>	<b>30 - 150 (LCL - UCL)</b>		

**QC Batch ID: BYF1707**

Acenaphthene	BYF1707-BLK1	ND	mg/kg	0.10	0.018	
Acenaphthylene	BYF1707-BLK1	ND	mg/kg	0.10	0.019	
Aldrin	BYF1707-BLK1	ND	mg/kg	0.10	0.024	
Aniline	BYF1707-BLK1	ND	mg/kg	0.20	0.053	
Anthracene	BYF1707-BLK1	ND	mg/kg	0.10	0.018	
Benzidine	BYF1707-BLK1	ND	mg/kg	3.0	0.22	
Benzo[a]anthracene	BYF1707-BLK1	ND	mg/kg	0.10	0.012	
Benzo[b]fluoranthene	BYF1707-BLK1	ND	mg/kg	0.10	0.018	

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1707</b>						
Benzo[k]fluoranthene	BYF1707-BLK1	ND	mg/kg	0.10	0.019	
Benzo[a]pyrene	BYF1707-BLK1	ND	mg/kg	0.10	0.015	
Benzo[g,h,i]perylene	BYF1707-BLK1	ND	mg/kg	0.10	0.056	
Benzoic acid	BYF1707-BLK1	ND	mg/kg	0.50	0.067	
Benzyl alcohol	BYF1707-BLK1	ND	mg/kg	0.10	0.018	
Benzyl butyl phthalate	BYF1707-BLK1	ND	mg/kg	0.10	0.021	
alpha-BHC	BYF1707-BLK1	ND	mg/kg	0.10	0.018	
beta-BHC	BYF1707-BLK1	ND	mg/kg	0.10	0.021	
delta-BHC	BYF1707-BLK1	ND	mg/kg	0.10	0.018	
gamma-BHC (Lindane)	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
bis(2-Chloroethoxy)methane	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
bis(2-Chloroethyl) ether	BYF1707-BLK1	ND	mg/kg	0.10	0.016	
bis(2-Chloroisopropyl)ether	BYF1707-BLK1	ND	mg/kg	0.10	0.021	
bis(2-Ethylhexyl)phthalate	BYF1707-BLK1	ND	mg/kg	0.20	0.043	
4-Bromophenyl phenyl ether	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
4-Chloroaniline	BYF1707-BLK1	ND	mg/kg	0.10	0.027	
2-Chloronaphthalene	BYF1707-BLK1	ND	mg/kg	0.10	0.020	
4-Chlorophenyl phenyl ether	BYF1707-BLK1	ND	mg/kg	0.10	0.015	
Chrysene	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
4,4'-DDD	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
4,4'-DDE	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
4,4'-DDT	BYF1707-BLK1	ND	mg/kg	0.10	0.019	
Dibenzo[a,h]anthracene	BYF1707-BLK1	ND	mg/kg	0.10	0.019	
Dibenzofuran	BYF1707-BLK1	ND	mg/kg	0.10	0.020	
1,2-Dichlorobenzene	BYF1707-BLK1	ND	mg/kg	0.10	0.020	
1,3-Dichlorobenzene	BYF1707-BLK1	ND	mg/kg	0.10	0.021	
1,4-Dichlorobenzene	BYF1707-BLK1	ND	mg/kg	0.10	0.019	
3,3-Dichlorobenzidine	BYF1707-BLK1	ND	mg/kg	0.20	0.0067	
Dieldrin	BYF1707-BLK1	ND	mg/kg	0.10	0.031	
Diethyl phthalate	BYF1707-BLK1	ND	mg/kg	0.10	0.019	
Dimethyl phthalate	BYF1707-BLK1	ND	mg/kg	0.10	0.020	
Di-n-butyl phthalate	BYF1707-BLK1	ND	mg/kg	0.10	0.018	
2,4-Dinitrotoluene	BYF1707-BLK1	ND	mg/kg	0.10	0.022	
2,6-Dinitrotoluene	BYF1707-BLK1	ND	mg/kg	0.10	0.018	

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1707</b>						
Di-n-octyl phthalate	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
1,2-Diphenylhydrazine	BYF1707-BLK1	ND	mg/kg	0.10	0.019	
Endosulfan I	BYF1707-BLK1	ND	mg/kg	0.20	0.020	
Endosulfan II	BYF1707-BLK1	ND	mg/kg	0.20	0.021	
Endosulfan sulfate	BYF1707-BLK1	ND	mg/kg	0.10	0.021	
Endrin	BYF1707-BLK1	ND	mg/kg	0.20	0.025	
Endrin aldehyde	BYF1707-BLK1	ND	mg/kg	0.50	0.022	
Fluoranthene	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
Fluorene	BYF1707-BLK1	ND	mg/kg	0.10	0.019	
Heptachlor	BYF1707-BLK1	ND	mg/kg	0.10	0.021	
Heptachlor epoxide	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
Hexachlorobenzene	BYF1707-BLK1	ND	mg/kg	0.10	0.016	
Hexachlorobutadiene	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
Hexachlorocyclopentadiene	BYF1707-BLK1	ND	mg/kg	0.10	0.019	
Hexachloroethane	BYF1707-BLK1	ND	mg/kg	0.10	0.020	
Indeno[1,2,3-cd]pyrene	BYF1707-BLK1	ND	mg/kg	0.10	0.072	
Isophorone	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
2-Methylnaphthalene	BYF1707-BLK1	ND	mg/kg	0.10	0.018	
Naphthalene	BYF1707-BLK1	ND	mg/kg	0.10	0.018	
2-Naphthylamine	BYF1707-BLK1	ND	mg/kg	3.0	0.16	
2-Nitroaniline	BYF1707-BLK1	ND	mg/kg	0.10	0.018	
3-Nitroaniline	BYF1707-BLK1	ND	mg/kg	0.20	0.015	
4-Nitroaniline	BYF1707-BLK1	ND	mg/kg	0.20	0.025	
Nitrobenzene	BYF1707-BLK1	ND	mg/kg	0.10	0.015	
N-Nitrosodimethylamine	BYF1707-BLK1	ND	mg/kg	0.10	0.037	
N-Nitrosodi-N-propylamine	BYF1707-BLK1	ND	mg/kg	0.10	0.021	
N-Nitrosodiphenylamine	BYF1707-BLK1	ND	mg/kg	0.10	0.021	
Phenanthrene	BYF1707-BLK1	ND	mg/kg	0.10	0.018	
Pyrene	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
1,2,4-Trichlorobenzene	BYF1707-BLK1	ND	mg/kg	0.10	0.018	
4-Chloro-3-methylphenol	BYF1707-BLK1	ND	mg/kg	0.20	0.022	
2-Chlorophenol	BYF1707-BLK1	ND	mg/kg	0.10	0.016	
2,4-Dichlorophenol	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
2,4-Dimethylphenol	BYF1707-BLK1	ND	mg/kg	0.10	0.035	

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1707</b>						
4,6-Dinitro-2-methylphenol	BYF1707-BLK1	ND	mg/kg	0.50	0.012	
2,4-Dinitrophenol	BYF1707-BLK1	ND	mg/kg	0.50	0.0077	
2-Methylphenol	BYF1707-BLK1	ND	mg/kg	0.10	0.017	
3- & 4-Methylphenol	BYF1707-BLK1	ND	mg/kg	0.20	0.033	
2-Nitrophenol	BYF1707-BLK1	ND	mg/kg	0.10	0.016	
4-Nitrophenol	BYF1707-BLK1	ND	mg/kg	0.20	0.018	
Pentachlorophenol	BYF1707-BLK1	ND	mg/kg	0.20	0.013	
Phenol	BYF1707-BLK1	ND	mg/kg	0.10	0.016	
2,4,5-Trichlorophenol	BYF1707-BLK1	ND	mg/kg	0.20	0.018	
2,4,6-Trichlorophenol	BYF1707-BLK1	ND	mg/kg	0.20	0.017	
<b>2-Fluorophenol (Surrogate)</b>	<b>BYF1707-BLK1</b>	<b>61.9</b>	<b>%</b>	<b>20 - 130 (LCL - UCL)</b>		
<b>Phenol-d5 (Surrogate)</b>	<b>BYF1707-BLK1</b>	<b>55.0</b>	<b>%</b>	<b>30 - 130 (LCL - UCL)</b>		
<b>Nitrobenzene-d5 (Surrogate)</b>	<b>BYF1707-BLK1</b>	<b>61.2</b>	<b>%</b>	<b>30 - 130 (LCL - UCL)</b>		
<b>2-Fluorobiphenyl (Surrogate)</b>	<b>BYF1707-BLK1</b>	<b>76.2</b>	<b>%</b>	<b>20 - 140 (LCL - UCL)</b>		
<b>2,4,6-Tribromophenol (Surrogate)</b>	<b>BYF1707-BLK1</b>	<b>66.7</b>	<b>%</b>	<b>20 - 150 (LCL - UCL)</b>		
<b>p-Terphenyl-d14 (Surrogate)</b>	<b>BYF1707-BLK1</b>	<b>65.0</b>	<b>%</b>	<b>30 - 150 (LCL - UCL)</b>		

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYF1076</b>										
Acenaphthene	BYF1076-BS1	LCS	1.5025	1.6393	mg/kg	91.6		50 - 140		
1,4-Dichlorobenzene	BYF1076-BS1	LCS	1.4931	1.6393	mg/kg	91.1		40 - 140		
2,4-Dinitrotoluene	BYF1076-BS1	LCS	1.8212	1.6393	mg/kg	111		40 - 140		
Hexachlorobenzene	BYF1076-BS1	LCS	0.89967	1.3115	mg/kg	68.6		40 - 130		
Hexachlorobutadiene	BYF1076-BS1	LCS	1.2258	1.6393	mg/kg	74.8		40 - 120		
Hexachloroethane	BYF1076-BS1	LCS	1.3431	1.6393	mg/kg	81.9		40 - 120		
Nitrobenzene	BYF1076-BS1	LCS	1.2994	1.6393	mg/kg	79.3		40 - 130		
N-Nitrosodi-N-propylamine	BYF1076-BS1	LCS	1.2534	1.6393	mg/kg	76.5		40 - 120		
Pyrene	BYF1076-BS1	LCS	1.8572	1.6393	mg/kg	113		40 - 150		
1,2,4-Trichlorobenzene	BYF1076-BS1	LCS	1.3495	1.6393	mg/kg	82.3		40 - 140		
4-Chloro-3-methylphenol	BYF1076-BS1	LCS	1.5336	1.6393	mg/kg	93.6		40 - 130		
2-Chlorophenol	BYF1076-BS1	LCS	1.3588	1.6393	mg/kg	82.9		40 - 130		
2-Methylphenol	BYF1076-BS1	LCS	1.4594	1.6393	mg/kg	89.0		40 - 140		
3- & 4-Methylphenol	BYF1076-BS1	LCS	2.9326	3.2787	mg/kg	89.4		40 - 120		
4-Nitrophenol	BYF1076-BS1	LCS	1.0777	1.6393	mg/kg	65.7		20 - 120		
Pentachlorophenol	BYF1076-BS1	LCS	1.0484	1.3115	mg/kg	79.9		20 - 130		
Phenol	BYF1076-BS1	LCS	1.4433	1.6393	mg/kg	88.0		40 - 120		
2,4,6-Trichlorophenol	BYF1076-BS1	LCS	1.3694	1.6393	mg/kg	83.5		40 - 130		
2-Fluorophenol (Surrogate)	BYF1076-BS1	LCS	1.9722	2.6230	mg/kg	75.2		20 - 130		
Phenol-d5 (Surrogate)	BYF1076-BS1	LCS	2.1644	2.6230	mg/kg	82.5		30 - 130		
Nitrobenzene-d5 (Surrogate)	BYF1076-BS1	LCS	2.2453	2.6230	mg/kg	85.6		30 - 130		
2-Fluorobiphenyl (Surrogate)	BYF1076-BS1	LCS	2.3144	2.6230	mg/kg	88.2		20 - 140		
2,4,6-Tribromophenol (Surrogate)	BYF1076-BS1	LCS	2.3395	2.6230	mg/kg	89.2		20 - 150		
p-Terphenyl-d14 (Surrogate)	BYF1076-BS1	LCS	1.3389	0.98361	mg/kg	136		30 - 150		
<b>QC Batch ID: BYF1707</b>										
Acenaphthene	BYF1707-BS1	LCS	1.0992	1.6949	mg/kg	64.9		50 - 140		
1,4-Dichlorobenzene	BYF1707-BS1	LCS	1.0887	1.6949	mg/kg	64.2		40 - 140		
2,4-Dinitrotoluene	BYF1707-BS1	LCS	1.3274	1.6949	mg/kg	78.3		40 - 140		
Hexachlorobenzene	BYF1707-BS1	LCS	0.63856	1.0169	mg/kg	62.8		40 - 130		
Hexachlorobutadiene	BYF1707-BS1	LCS	0.98841	1.6949	mg/kg	58.3		40 - 120		
Hexachloroethane	BYF1707-BS1	LCS	0.98184	1.6949	mg/kg	57.9		40 - 120		
Nitrobenzene	BYF1707-BS1	LCS	1.0739	1.6949	mg/kg	63.4		40 - 130		
N-Nitrosodi-N-propylamine	BYF1707-BS1	LCS	0.94501	1.6949	mg/kg	55.8		40 - 120		

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYF1707</b>										
Pyrene	BYF1707-BS1	LCS	1.1186	1.6949	mg/kg	66.0		40	150	
1,2,4-Trichlorobenzene	BYF1707-BS1	LCS	1.1222	1.6949	mg/kg	66.2		40	140	
4-Chloro-3-methylphenol	BYF1707-BS1	LCS	1.0913	1.6949	mg/kg	64.4		40	130	
2-Chlorophenol	BYF1707-BS1	LCS	0.92824	1.6949	mg/kg	54.8		40	130	
2-Methylphenol	BYF1707-BS1	LCS	1.0308	1.6949	mg/kg	60.8		40	140	
3- & 4-Methylphenol	BYF1707-BS1	LCS	1.8953	3.3898	mg/kg	55.9		40	120	
4-Nitrophenol	BYF1707-BS1	LCS	0.96375	1.6949	mg/kg	56.9		20	120	
Pentachlorophenol	BYF1707-BS1	LCS	0.85787	1.6949	mg/kg	50.6		20	130	
Phenol	BYF1707-BS1	LCS	1.0098	1.6949	mg/kg	59.6		40	120	
2,4,6-Trichlorophenol	BYF1707-BS1	LCS	1.0486	1.6949	mg/kg	61.9		40	130	
2-Fluorophenol (Surrogate)	BYF1707-BS1	LCS	1.4264	2.7119	mg/kg	52.6		20	130	
Phenol-d5 (Surrogate)	BYF1707-BS1	LCS	1.5083	3.3898	mg/kg	44.5		30	130	
Nitrobenzene-d5 (Surrogate)	BYF1707-BS1	LCS	1.6273	3.3898	mg/kg	48.0		30	130	
2-Fluorobiphenyl (Surrogate)	BYF1707-BS1	LCS	1.7529	2.7119	mg/kg	64.6		20	140	
2,4,6-Tribromophenol (Surrogate)	BYF1707-BS1	LCS	1.6365	2.7119	mg/kg	60.3		20	150	
p-Terphenyl-d14 (Surrogate)	BYF1707-BS1	LCS	0.70563	1.3559	mg/kg	52.0		30	150	

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab Quals
								Percent Recovery	Percent Recovery	
<b>QC Batch ID: BYF1076</b>		Used client sample: N								
Acenaphthene	MS	1511019-76	ND	1.3047	1.6667	mg/kg		78.3		40 - 140
	MSD	1511019-76	ND	1.5682	1.6779	mg/kg	18.3	93.5	30	40 - 140
1,4-Dichlorobenzene	MS	1511019-76	ND	1.3217	1.6667	mg/kg		79.3		30 - 150
	MSD	1511019-76	ND	1.5705	1.6779	mg/kg	17.2	93.6	30	30 - 150
2,4-Dinitrotoluene	MS	1511019-76	ND	1.5461	1.6667	mg/kg		92.8		30 - 140
	MSD	1511019-76	ND	1.8417	1.6779	mg/kg	17.5	110	30	30 - 140
Hexachlorobenzene	MS	1511019-76	ND	0.76309	1.3333	mg/kg		57.2		30 - 140
	MSD	1511019-76	ND	0.91458	1.3423	mg/kg	18.1	68.1	30	30 - 140
Hexachlorobutadiene	MS	1511019-76	ND	1.0829	1.6667	mg/kg		65.0		20 - 140
	MSD	1511019-76	ND	1.2844	1.6779	mg/kg	17.0	76.6	30	20 - 140
Hexachloroethane	MS	1511019-76	ND	1.1433	1.6667	mg/kg		68.6		30 - 140
	MSD	1511019-76	ND	1.3926	1.6779	mg/kg	19.7	83.0	30	30 - 140
Nitrobenzene	MS	1511019-76	ND	1.1535	1.6667	mg/kg		69.2		30 - 140
	MSD	1511019-76	ND	1.3830	1.6779	mg/kg	18.1	82.4	30	30 - 140
N-Nitrosodi-N-propylamine	MS	1511019-76	ND	1.0855	1.6667	mg/kg		65.1		30 - 120
	MSD	1511019-76	ND	1.3530	1.6779	mg/kg	21.9	80.6	30	30 - 120
Pyrene	MS	1511019-76	ND	1.5575	1.6667	mg/kg		93.5		40 - 150
	MSD	1511019-76	ND	1.8350	1.6779	mg/kg	16.4	109	30	40 - 150
1,2,4-Trichlorobenzene	MS	1511019-76	ND	1.2247	1.6667	mg/kg		73.5		30 - 150
	MSD	1511019-76	ND	1.4078	1.6779	mg/kg	13.9	83.9	30	30 - 150
4-Chloro-3-methylphenol	MS	1511019-76	ND	1.2796	1.6667	mg/kg		76.8		40 - 130
	MSD	1511019-76	ND	1.5714	1.6779	mg/kg	20.5	93.7	30	40 - 130
2-Chlorophenol	MS	1511019-76	ND	1.1567	1.6667	mg/kg		69.4		40 - 130
	MSD	1511019-76	ND	1.3637	1.6779	mg/kg	16.4	81.3	30	40 - 130
2-Methylphenol	MS	1511019-76	ND	1.2675	1.6667	mg/kg		76.0		30 - 140
	MSD	1511019-76	ND	1.5299	1.6779	mg/kg	18.8	91.2	30	30 - 140
3- & 4-Methylphenol	MS	1511019-76	ND	2.4778	3.3333	mg/kg		74.3		40 - 130
	MSD	1511019-76	ND	3.0437	3.3557	mg/kg	20.5	90.7	30	40 - 130
4-Nitrophenol	MS	1511019-76	ND	0.80360	1.6667	mg/kg		48.2		20 - 140
	MSD	1511019-76	ND	0.89847	1.6779	mg/kg	11.1	53.5	30	20 - 140
Pentachlorophenol	MS	1511019-76	ND	0.77649	1.3333	mg/kg		58.2		20 - 130
	MSD	1511019-76	ND	0.88301	1.3423	mg/kg	12.8	65.8	30	20 - 130
Phenol	MS	1511019-76	ND	1.2273	1.6667	mg/kg		73.6		30 - 130
	MSD	1511019-76	ND	1.5015	1.6779	mg/kg	20.1	89.5	30	30 - 130
2,4,6-Trichlorophenol	MS	1511019-76	ND	1.1087	1.6667	mg/kg		66.5		40 - 130
	MSD	1511019-76	ND	1.2712	1.6779	mg/kg	13.7	75.8	30	40 - 130

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab Quals
								Percent Recovery	Percent Recovery	
<b>QC Batch ID: BYF1076</b>		Used client sample: N								
2-Fluorophenol (Surrogate)	MS	1511019-76	ND	1.7542	2.6667	mg/kg		65.8		20 - 130
	MSD	1511019-76	ND	2.0266	2.6846	mg/kg	14.4	75.5		20 - 130
Phenol-d5 (Surrogate)	MS	1511019-76	ND	1.8672	2.6667	mg/kg		70.0		30 - 130
	MSD	1511019-76	ND	2.2583	2.6846	mg/kg	19.0	84.1		30 - 130
Nitrobenzene-d5 (Surrogate)	MS	1511019-76	ND	1.9182	2.6667	mg/kg		71.9		30 - 130
	MSD	1511019-76	ND	2.3816	2.6846	mg/kg	21.6	88.7		30 - 130
2-Fluorobiphenyl (Surrogate)	MS	1511019-76	ND	1.9891	2.6667	mg/kg		74.6		20 - 140
	MSD	1511019-76	ND	2.3433	2.6846	mg/kg	16.4	87.3		20 - 140
2,4,6-Tribromophenol (Surrogate)	MS	1511019-76	ND	1.9636	2.6667	mg/kg		73.6		20 - 150
	MSD	1511019-76	ND	2.2396	2.6846	mg/kg	13.1	83.4		20 - 150
p-Terphenyl-d14 (Surrogate)	MS	1511019-76	ND	1.1290	1.0000	mg/kg		113		30 - 150
	MSD	1511019-76	ND	1.4133	1.0067	mg/kg	22.4	140		30 - 150
<b>QC Batch ID: BYF1707</b>		Used client sample: N								
Acenaphthene	MS	1511019-74	ND	1.1731	1.6835	mg/kg		69.7		40 - 140
	MSD	1511019-74	ND	1.0944	1.6447	mg/kg	6.9	66.5	30	40 - 140
1,4-Dichlorobenzene	MS	1511019-74	ND	1.1512	1.6835	mg/kg		68.4		30 - 150
	MSD	1511019-74	ND	1.1422	1.6447	mg/kg	0.8	69.4	30	30 - 150
2,4-Dinitrotoluene	MS	1511019-74	ND	1.5061	1.6835	mg/kg		89.5		30 - 140
	MSD	1511019-74	ND	1.3001	1.6447	mg/kg	14.7	79.0	30	30 - 140
Hexachlorobenzene	MS	1511019-74	ND	0.65825	1.0101	mg/kg		65.2		30 - 140
	MSD	1511019-74	ND	0.63732	0.98684	mg/kg	3.2	64.6	30	30 - 140
Hexachlorobutadiene	MS	1511019-74	ND	1.0189	1.6835	mg/kg		60.5		20 - 140
	MSD	1511019-74	ND	1.0245	1.6447	mg/kg	0.6	62.3	30	20 - 140
Hexachloroethane	MS	1511019-74	ND	1.0209	1.6835	mg/kg		60.6		30 - 140
	MSD	1511019-74	ND	0.99999	1.6447	mg/kg	2.1	60.8	30	30 - 140
Nitrobenzene	MS	1511019-74	ND	1.1552	1.6835	mg/kg		68.6		30 - 140
	MSD	1511019-74	ND	1.1328	1.6447	mg/kg	2.0	68.9	30	30 - 140
N-Nitrosodi-N-propylamine	MS	1511019-74	ND	1.0630	1.6835	mg/kg		63.1		30 - 120
	MSD	1511019-74	ND	0.97162	1.6447	mg/kg	9.0	59.1	30	30 - 120
Pyrene	MS	1511019-74	ND	1.3253	1.6835	mg/kg		78.7		40 - 150
	MSD	1511019-74	ND	1.1618	1.6447	mg/kg	13.1	70.6	30	40 - 150
1,2,4-Trichlorobenzene	MS	1511019-74	ND	1.1896	1.6835	mg/kg		70.7		30 - 150
	MSD	1511019-74	ND	1.1953	1.6447	mg/kg	0.5	72.7	30	30 - 150
4-Chloro-3-methylphenol	MS	1511019-74	ND	1.1734	1.6835	mg/kg		69.7		40 - 130
	MSD	1511019-74	ND	1.1821	1.6447	mg/kg	0.7	71.9	30	40 - 130
2-Chlorophenol	MS	1511019-74	ND	1.0205	1.6835	mg/kg		60.6		40 - 130
	MSD	1511019-74	ND	0.92778	1.6447	mg/kg	9.5	56.4	30	40 - 130

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab Quals
								Percent Recovery	Percent Recovery	
<b>QC Batch ID: BYF1707</b>		Used client sample: N								
2-Methylphenol	MS	1511019-74	ND	1.1128	1.6835	mg/kg		66.1		30 - 140
	MSD	1511019-74	ND	1.0309	1.6447	mg/kg	7.6	62.7	30	30 - 140
3- & 4-Methylphenol	MS	1511019-74	ND	2.1202	3.3670	mg/kg		63.0		40 - 130
	MSD	1511019-74	ND	1.8971	3.2895	mg/kg	11.1	57.7	30	40 - 130
4-Nitrophenol	MS	1511019-74	ND	1.1084	1.6835	mg/kg		65.8		20 - 140
	MSD	1511019-74	ND	0.90650	1.6447	mg/kg	20.0	55.1	30	20 - 140
Pentachlorophenol	MS	1511019-74	ND	0.90000	1.6835	mg/kg		53.5		20 - 130
	MSD	1511019-74	ND	0.78529	1.6447	mg/kg	13.6	47.7	30	20 - 130
Phenol	MS	1511019-74	ND	1.0387	1.6835	mg/kg		61.7		30 - 130
	MSD	1511019-74	ND	1.0358	1.6447	mg/kg	0.3	63.0	30	30 - 130
2,4,6-Trichlorophenol	MS	1511019-74	ND	1.1771	1.6835	mg/kg		69.9		40 - 130
	MSD	1511019-74	ND	1.0338	1.6447	mg/kg	13.0	62.9	30	40 - 130
2-Fluorophenol (Surrogate)	MS	1511019-74	ND	1.5024	2.6936	mg/kg		55.8		20 - 130
	MSD	1511019-74	ND	1.3891	2.6316	mg/kg	7.8	52.8		20 - 130
Phenol-d5 (Surrogate)	MS	1511019-74	ND	1.5636	3.3670	mg/kg		46.4		30 - 130
	MSD	1511019-74	ND	1.5251	3.2895	mg/kg	2.5	46.4		30 - 130
Nitrobenzene-d5 (Surrogate)	MS	1511019-74	ND	1.7182	3.3670	mg/kg		51.0		30 - 130
	MSD	1511019-74	ND	1.6389	3.2895	mg/kg	4.7	49.8		30 - 130
2-Fluorobiphenyl (Surrogate)	MS	1511019-74	ND	1.8582	2.6936	mg/kg		69.0		20 - 140
	MSD	1511019-74	ND	1.7985	2.6316	mg/kg	3.3	68.3		20 - 140
2,4,6-Tribromophenol (Surrogate)	MS	1511019-74	ND	1.6744	2.6936	mg/kg		62.2		20 - 150
	MSD	1511019-74	ND	1.6070	2.6316	mg/kg	4.1	61.1		20 - 150
p-Terphenyl-d14 (Surrogate)	MS	1511019-74	ND	0.78721	1.3468	mg/kg		58.5		30 - 150
	MSD	1511019-74	ND	0.76337	1.3158	mg/kg	3.1	58.0		30 - 150

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1073</b>						
TPH - Diesel (FFP)	BYF1073-BLK1	ND	mg/kg	10	1.2	
TPH - Motor Oil	BYF1073-BLK1	ND	mg/kg	20	6.5	
<b>Tetracosane (Surrogate)</b>	<b>BYF1073-BLK1</b>	<b>73.8</b>	<b>%</b>	<b>20 - 145 (LCL - UCL)</b>		
<b>QC Batch ID: BYF1075</b>						
TPH - Diesel (FFP)	BYF1075-BLK1	ND	mg/kg	10	1.2	
TPH - Motor Oil	BYF1075-BLK1	ND	mg/kg	20	6.5	
<b>Tetracosane (Surrogate)</b>	<b>BYF1075-BLK1</b>	<b>54.8</b>	<b>%</b>	<b>20 - 145 (LCL - UCL)</b>		
<b>QC Batch ID: BYF1661</b>						
TPH - Diesel (FFP)	BYF1661-BLK1	ND	mg/kg	10	1.2	
TPH - Motor Oil	BYF1661-BLK1	ND	mg/kg	20	6.5	
<b>Tetracosane (Surrogate)</b>	<b>BYF1661-BLK1</b>	<b>45.7</b>	<b>%</b>	<b>20 - 145 (LCL - UCL)</b>		

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Quals
								Percent Recovery	RPD		
<b>QC Batch ID: BYF1073</b>											
TPH - Diesel (FFP)	BYF1073-BS1	LCS	59.441	83.612	mg/kg	71.1		64	124		
Tetracosane (Surrogate)	BYF1073-BS1	LCS	2.7895	3.3445	mg/kg	83.4		20	145		
<b>QC Batch ID: BYF1075</b>											
TPH - Diesel (FFP)	BYF1075-BS1	LCS	65.956	81.967	mg/kg	80.5		64	124		
Tetracosane (Surrogate)	BYF1075-BS1	LCS	2.5103	3.2787	mg/kg	76.6		20	145		
<b>QC Batch ID: BYF1661</b>											
TPH - Diesel (FFP)	BYF1661-BS1	LCS	59.457	84.175	mg/kg	70.6		64	124		
Tetracosane (Surrogate)	BYF1661-BS1	LCS	1.6310	3.3670	mg/kg	48.4		20	145		

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	Percent Recovery	
<b>QC Batch ID: BYF1073</b>		Used client sample: N								
TPH - Diesel (FFP)	MS	1511019-41	ND	59.465	83.612	mg/kg		71.1		52 - 131
	MSD	1511019-41	ND	65.366	83.612	mg/kg	9.5	78.2	30	52 - 131
Tetracosane (Surrogate)	MS	1511019-41	ND	2.2465	3.3445	mg/kg		67.2		20 - 145
	MSD	1511019-41	ND	2.4948	3.3445	mg/kg	10.5	74.6		20 - 145
<b>QC Batch ID: BYF1075</b>		Used client sample: Y - Description: KA-37-S-6, 06/03/2015 08:00								
TPH - Diesel (FFP)	MS	1513756-22	ND	59.274	84.746	mg/kg		69.9		52 - 131
	MSD	1513756-22	ND	48.257	82.508	mg/kg	20.5	58.5	30	52 - 131
Tetracosane (Surrogate)	MS	1513756-22	ND	2.1556	3.3898	mg/kg		63.6		20 - 145
	MSD	1513756-22	ND	1.7703	3.3003	mg/kg	19.6	53.6		20 - 145
<b>QC Batch ID: BYF1661</b>		Used client sample: N								
TPH - Diesel (FFP)	MS	1513811-16	ND	58.525	82.508	mg/kg		70.9		52 - 131
	MSD	1513811-16	ND	71.893	84.175	mg/kg	20.5	85.4	30	52 - 131
Tetracosane (Surrogate)	MS	1513811-16	ND	1.5596	3.3003	mg/kg		47.3		20 - 145
	MSD	1513811-16	ND	2.1727	3.3670	mg/kg	32.9	64.5		20 - 145

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### EPA Method 1664

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1193</b>						
Oil and Grease	BYF1193-BLK1	ND	mg/kg	50	25	
<b>QC Batch ID: BYF1210</b>						
Oil and Grease	BYF1210-BLK1	ND	mg/kg	50	25	
<b>QC Batch ID: BYF2016</b>						
Oil and Grease	BYF2016-BLK1	ND	mg/kg	50	25	

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**Reported:** 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF1193</b>										
Oil and Grease	BYF1193-BS1	LCS	726.10	802.79	mg/kg	90.4		59	117	
<b>QC Batch ID: BYF1210</b>										
Oil and Grease	BYF1210-BS1	LCS	699.80	769.38	mg/kg	91.0		59	117	
<b>QC Batch ID: BYF2016</b>										
Oil and Grease	BYF2016-BS1	LCS	751.49	776.24	mg/kg	96.8		59	117	

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
									RPD	Percent Recovery	
<b>QC Batch ID: BYF1193</b>		Used client sample: N									
Oil and Grease	DUP	1511019-43	ND	ND		mg/kg			30		
	MS	1511019-43	ND	740.59	798.02	mg/kg		92.8		56 - 111	
	MSD	1511019-43	ND	681.00	806.00	mg/kg	8.4	84.5	30	56 - 111	
<b>QC Batch ID: BYF1210</b>		Used client sample: N									
Oil and Grease	DUP	1511019-44	ND	ND		mg/kg			30		
	MS	1511019-44	ND	710.89	766.34	mg/kg		92.8		56 - 111	
	MSD	1511019-44	ND	712.72	769.38	mg/kg	0.3	92.6	30	56 - 111	
<b>QC Batch ID: BYF2016</b>		Used client sample: N									
Oil and Grease	DUP	1511019-78	ND	ND		mg/kg			30		
	MS	1511019-78	ND	727.18	777.78	mg/kg		93.5		56 - 111	
	MSD	1511019-78	ND	721.56	782.44	mg/kg	0.8	92.2	30	56 - 111	

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
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**QC Batch ID: BYF1227**

Mercury	BYF1227-BLK1	ND	mg/kg	0.16	0.036	
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**QC Batch ID: BYF1269**

<b>Antimony</b>	<b>BYF1269-BLK1</b>	<b>0.35657</b>	<b>mg/kg</b>	<b>5.0</b>	<b>0.33</b>	<b>J</b>
Arsenic	BYF1269-BLK1	ND	mg/kg	1.0	0.40	
Barium	BYF1269-BLK1	ND	mg/kg	0.50	0.18	
Beryllium	BYF1269-BLK1	ND	mg/kg	0.50	0.047	
Cadmium	BYF1269-BLK1	ND	mg/kg	0.50	0.052	
Chromium	BYF1269-BLK1	ND	mg/kg	0.50	0.050	
Cobalt	BYF1269-BLK1	ND	mg/kg	2.5	0.098	
<b>Copper</b>	<b>BYF1269-BLK1</b>	<b>0.27960</b>	<b>mg/kg</b>	<b>1.0</b>	<b>0.050</b>	<b>J</b>
Lead	BYF1269-BLK1	ND	mg/kg	2.5	0.28	
Molybdenum	BYF1269-BLK1	ND	mg/kg	2.5	0.050	
Nickel	BYF1269-BLK1	ND	mg/kg	0.50	0.15	
Selenium	BYF1269-BLK1	ND	mg/kg	1.0	0.98	
Silver	BYF1269-BLK1	ND	mg/kg	0.50	0.067	
Thallium	BYF1269-BLK1	ND	mg/kg	5.0	0.64	
Vanadium	BYF1269-BLK1	ND	mg/kg	0.50	0.11	
<b>Zinc</b>	<b>BYF1269-BLK1</b>	<b>1.0974</b>	<b>mg/kg</b>	<b>2.5</b>	<b>0.087</b>	<b>J</b>

**QC Batch ID: BYF1299**

Mercury	BYF1299-BLK1	ND	mg/kg	0.16	0.036	
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**QC Batch ID: BYF1334**

Antimony	BYF1334-BLK1	ND	mg/kg	5.0	0.33	
Arsenic	BYF1334-BLK1	ND	mg/kg	1.0	0.40	
Barium	BYF1334-BLK1	ND	mg/kg	0.50	0.18	
Beryllium	BYF1334-BLK1	ND	mg/kg	0.50	0.047	
Cadmium	BYF1334-BLK1	ND	mg/kg	0.50	0.052	
Chromium	BYF1334-BLK1	ND	mg/kg	0.50	0.050	
Cobalt	BYF1334-BLK1	ND	mg/kg	2.5	0.098	
Copper	BYF1334-BLK1	ND	mg/kg	1.0	0.050	
Lead	BYF1334-BLK1	ND	mg/kg	2.5	0.28	
Molybdenum	BYF1334-BLK1	ND	mg/kg	2.5	0.050	
Nickel	BYF1334-BLK1	ND	mg/kg	0.50	0.15	
Selenium	BYF1334-BLK1	ND	mg/kg	1.0	0.98	

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1334</b>						
Silver	BYF1334-BLK1	ND	mg/kg	0.50	0.067	
Thallium	BYF1334-BLK1	ND	mg/kg	5.0	0.64	
Vanadium	BYF1334-BLK1	ND	mg/kg	0.50	0.11	
<b>Zinc</b>	<b>BYF1334-BLK1</b>	<b>0.35567</b>	<b>mg/kg</b>	<b>2.5</b>	<b>0.087</b>	<b>J</b>
<b>QC Batch ID: BYF1498</b>						
Mercury	BYF1498-BLK1	ND	mg/kg	0.16	0.036	
<b>QC Batch ID: BYF1616</b>						
Mercury	BYF1616-BLK1	ND	mg/kg	0.16	0.036	
<b>QC Batch ID: BYF1671</b>						
Antimony	BYF1671-BLK1	ND	mg/kg	5.0	0.33	
Arsenic	BYF1671-BLK1	ND	mg/kg	1.0	0.40	
Barium	BYF1671-BLK1	ND	mg/kg	0.50	0.18	
Beryllium	BYF1671-BLK1	ND	mg/kg	0.50	0.047	
Cadmium	BYF1671-BLK1	ND	mg/kg	0.50	0.052	
<b>Chromium</b>	<b>BYF1671-BLK1</b>	<b>0.055592</b>	<b>mg/kg</b>	<b>0.50</b>	<b>0.050</b>	<b>J</b>
Cobalt	BYF1671-BLK1	ND	mg/kg	2.5	0.098	
<b>Copper</b>	<b>BYF1671-BLK1</b>	<b>0.060706</b>	<b>mg/kg</b>	<b>1.0</b>	<b>0.050</b>	<b>J</b>
Lead	BYF1671-BLK1	ND	mg/kg	2.5	0.28	
<b>Molybdenum</b>	<b>BYF1671-BLK1</b>	<b>0.099127</b>	<b>mg/kg</b>	<b>2.5</b>	<b>0.050</b>	<b>J</b>
Nickel	BYF1671-BLK1	ND	mg/kg	0.50	0.15	
Selenium	BYF1671-BLK1	ND	mg/kg	1.0	0.98	
Silver	BYF1671-BLK1	ND	mg/kg	0.50	0.067	
Thallium	BYF1671-BLK1	ND	mg/kg	5.0	0.64	
Vanadium	BYF1671-BLK1	ND	mg/kg	0.50	0.11	
<b>Zinc</b>	<b>BYF1671-BLK1</b>	<b>1.1205</b>	<b>mg/kg</b>	<b>2.5</b>	<b>0.087</b>	<b>J</b>
<b>QC Batch ID: BYF1706</b>						
Mercury	BYF1706-BLK1	ND	mg/kg	0.16	0.036	
<b>QC Batch ID: BYF1759</b>						
Antimony	BYF1759-BLK1	ND	mg/kg	5.0	0.33	
Arsenic	BYF1759-BLK1	ND	mg/kg	1.0	0.40	
Barium	BYF1759-BLK1	ND	mg/kg	0.50	0.18	
Beryllium	BYF1759-BLK1	ND	mg/kg	0.50	0.047	

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF1759</b>						
Cadmium	BYF1759-BLK1	ND	mg/kg	0.50	0.052	
Chromium	BYF1759-BLK1	ND	mg/kg	0.50	0.050	
Cobalt	BYF1759-BLK1	ND	mg/kg	2.5	0.098	
<b>Copper</b>	<b>BYF1759-BLK1</b>	<b>0.10218</b>	<b>mg/kg</b>	<b>1.0</b>	<b>0.050</b>	<b>J</b>
Lead	BYF1759-BLK1	ND	mg/kg	2.5	0.28	
<b>Molybdenum</b>	<b>BYF1759-BLK1</b>	<b>0.060889</b>	<b>mg/kg</b>	<b>2.5</b>	<b>0.050</b>	<b>J</b>
Nickel	BYF1759-BLK1	ND	mg/kg	0.50	0.15	
Selenium	BYF1759-BLK1	ND	mg/kg	1.0	0.98	
Silver	BYF1759-BLK1	ND	mg/kg	0.50	0.067	
Thallium	BYF1759-BLK1	ND	mg/kg	5.0	0.64	
Vanadium	BYF1759-BLK1	ND	mg/kg	0.50	0.11	
<b>Zinc</b>	<b>BYF1759-BLK1</b>	<b>0.14674</b>	<b>mg/kg</b>	<b>2.5</b>	<b>0.087</b>	<b>J</b>

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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYF1227</b>										
Mercury	BYF1227-BS1	LCS	0.84512	0.80000	mg/kg	106		80 - 120		
<b>QC Batch ID: BYF1269</b>										
Antimony	BYF1269-BS1	LCS	111.00	100.00	mg/kg	111		75 - 125		
Arsenic	BYF1269-BS1	LCS	10.846	10.000	mg/kg	108		75 - 125		
Barium	BYF1269-BS1	LCS	110.88	100.00	mg/kg	111		75 - 125		
Beryllium	BYF1269-BS1	LCS	10.786	10.000	mg/kg	108		75 - 125		
Cadmium	BYF1269-BS1	LCS	11.166	10.000	mg/kg	112		75 - 125		
Chromium	BYF1269-BS1	LCS	117.99	100.00	mg/kg	118		75 - 125		
Cobalt	BYF1269-BS1	LCS	117.10	100.00	mg/kg	117		75 - 125		
Copper	BYF1269-BS1	LCS	103.39	100.00	mg/kg	103		75 - 125		
Lead	BYF1269-BS1	LCS	111.24	100.00	mg/kg	111		75 - 125		
Molybdenum	BYF1269-BS1	LCS	112.61	100.00	mg/kg	113		75 - 125		
Nickel	BYF1269-BS1	LCS	120.63	100.00	mg/kg	121		75 - 125		
Selenium	BYF1269-BS1	LCS	11.159	10.000	mg/kg	112		75 - 125		
Silver	BYF1269-BS1	LCS	10.902	10.000	mg/kg	109		75 - 125		
Thallium	BYF1269-BS1	LCS	123.10	100.00	mg/kg	123		75 - 125		
Vanadium	BYF1269-BS1	LCS	112.26	100.00	mg/kg	112		75 - 125		
Zinc	BYF1269-BS1	LCS	113.07	100.00	mg/kg	113		75 - 125		
<b>QC Batch ID: BYF1299</b>										
Mercury	BYF1299-BS1	LCS	0.80688	0.80000	mg/kg	101		80 - 120		
<b>QC Batch ID: BYF1334</b>										
Antimony	BYF1334-BS1	LCS	96.631	100.00	mg/kg	96.6		75 - 125		
Arsenic	BYF1334-BS1	LCS	9.5710	10.000	mg/kg	95.7		75 - 125		
Barium	BYF1334-BS1	LCS	99.290	100.00	mg/kg	99.3		75 - 125		
Beryllium	BYF1334-BS1	LCS	9.1852	10.000	mg/kg	91.9		75 - 125		
Cadmium	BYF1334-BS1	LCS	9.5781	10.000	mg/kg	95.8		75 - 125		
Chromium	BYF1334-BS1	LCS	98.032	100.00	mg/kg	98.0		75 - 125		
Cobalt	BYF1334-BS1	LCS	95.726	100.00	mg/kg	95.7		75 - 125		
Copper	BYF1334-BS1	LCS	85.454	100.00	mg/kg	85.5		75 - 125		
Lead	BYF1334-BS1	LCS	98.035	100.00	mg/kg	98.0		75 - 125		
Molybdenum	BYF1334-BS1	LCS	93.856	100.00	mg/kg	93.9		75 - 125		
Nickel	BYF1334-BS1	LCS	95.914	100.00	mg/kg	95.9		75 - 125		
Selenium	BYF1334-BS1	LCS	9.8574	10.000	mg/kg	98.6		75 - 125		

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYF1334</b>										
Silver	BYF1334-BS1	LCS	8.9865	10.000	mg/kg	89.9		75 - 125		
Thallium	BYF1334-BS1	LCS	107.57	100.00	mg/kg	108		75 - 125		
Vanadium	BYF1334-BS1	LCS	94.579	100.00	mg/kg	94.6		75 - 125		
Zinc	BYF1334-BS1	LCS	95.271	100.00	mg/kg	95.3		75 - 125		
<b>QC Batch ID: BYF1498</b>										
Mercury	BYF1498-BS1	LCS	0.82192	0.80000	mg/kg	103		80 - 120		
<b>QC Batch ID: BYF1616</b>										
Mercury	BYF1616-BS1	LCS	0.81488	0.80000	mg/kg	102		80 - 120		
<b>QC Batch ID: BYF1671</b>										
Antimony	BYF1671-BS1	LCS	103.80	100.00	mg/kg	104		75 - 125		
Arsenic	BYF1671-BS1	LCS	10.209	10.000	mg/kg	102		75 - 125		
Barium	BYF1671-BS1	LCS	103.48	100.00	mg/kg	103		75 - 125		
Beryllium	BYF1671-BS1	LCS	9.9914	10.000	mg/kg	99.9		75 - 125		
Cadmium	BYF1671-BS1	LCS	10.855	10.000	mg/kg	109		75 - 125		
Chromium	BYF1671-BS1	LCS	111.71	100.00	mg/kg	112		75 - 125		
Cobalt	BYF1671-BS1	LCS	103.55	100.00	mg/kg	104		75 - 125		
Copper	BYF1671-BS1	LCS	96.924	100.00	mg/kg	96.9		75 - 125		
Lead	BYF1671-BS1	LCS	101.96	100.00	mg/kg	102		75 - 125		
Molybdenum	BYF1671-BS1	LCS	105.32	100.00	mg/kg	105		75 - 125		
Nickel	BYF1671-BS1	LCS	112.83	100.00	mg/kg	113		75 - 125		
Selenium	BYF1671-BS1	LCS	10.615	10.000	mg/kg	106		75 - 125		
Silver	BYF1671-BS1	LCS	10.215	10.000	mg/kg	102		75 - 125		
Thallium	BYF1671-BS1	LCS	114.29	100.00	mg/kg	114		75 - 125		
Vanadium	BYF1671-BS1	LCS	108.56	100.00	mg/kg	109		75 - 125		
Zinc	BYF1671-BS1	LCS	103.34	100.00	mg/kg	103		75 - 125		
<b>QC Batch ID: BYF1706</b>										
Mercury	BYF1706-BS1	LCS	0.85536	0.80000	mg/kg	107		80 - 120		
<b>QC Batch ID: BYF1759</b>										
Antimony	BYF1759-BS1	LCS	108.81	100.00	mg/kg	109		75 - 125		
Arsenic	BYF1759-BS1	LCS	10.502	10.000	mg/kg	105		75 - 125		
Barium	BYF1759-BS1	LCS	104.53	100.00	mg/kg	105		75 - 125		
Beryllium	BYF1759-BS1	LCS	10.449	10.000	mg/kg	104		75 - 125		
Cadmium	BYF1759-BS1	LCS	10.957	10.000	mg/kg	110		75 - 125		

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Quals
								Percent Recovery	RPD		
<b>QC Batch ID: BYF1759</b>											
Chromium	BYF1759-BS1	LCS	115.47	100.00	mg/kg	115		75 - 125			
Cobalt	BYF1759-BS1	LCS	106.43	100.00	mg/kg	106		75 - 125			
Copper	BYF1759-BS1	LCS	103.73	100.00	mg/kg	104		75 - 125			
Lead	BYF1759-BS1	LCS	110.59	100.00	mg/kg	111		75 - 125			
Molybdenum	BYF1759-BS1	LCS	111.91	100.00	mg/kg	112		75 - 125			
Nickel	BYF1759-BS1	LCS	115.36	100.00	mg/kg	115		75 - 125			
Selenium	BYF1759-BS1	LCS	10.887	10.000	mg/kg	109		75 - 125			
Silver	BYF1759-BS1	LCS	10.343	10.000	mg/kg	103		75 - 125			
Thallium	BYF1759-BS1	LCS	120.22	100.00	mg/kg	120		75 - 125			
Vanadium	BYF1759-BS1	LCS	110.06	100.00	mg/kg	110		75 - 125			
Zinc	BYF1759-BS1	LCS	110.58	100.00	mg/kg	111		75 - 125			

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF1227</b>		Used client sample: N								
Mercury	DUP	1514375-01	ND	ND		mg/kg			20	
	MS	1514375-01	ND	0.85885	0.81967	mg/kg		105		80 - 120
	MSD	1514375-01	ND	0.85541	0.81967	mg/kg	0.4	104	20	80 - 120
<b>QC Batch ID: BYF1269</b>		Used client sample: Y - Description: KA-13-S-6, 06/01/2015 09:30								
Antimony	DUP	1513756-01	ND	ND		mg/kg			20	
	MS	1513756-01	ND	43.836	100.00	mg/kg		43.8		16 - 119
	MSD	1513756-01	ND	45.332	100.00	mg/kg	3.4	45.3	20	16 - 119
Arsenic	DUP	1513756-01	4.8182	4.9116		mg/kg	1.9		20	
	MS	1513756-01	4.8182	13.922	10.000	mg/kg		91.0		75 - 125
	MSD	1513756-01	4.8182	15.041	10.000	mg/kg	7.7	102	20	75 - 125
Barium	DUP	1513756-01	75.166	72.745		mg/kg	3.3		20	
	MS	1513756-01	75.166	162.52	100.00	mg/kg		87.4		75 - 125
	MSD	1513756-01	75.166	164.77	100.00	mg/kg	1.4	89.6	20	75 - 125
Beryllium	DUP	1513756-01	0.35451	0.34743		mg/kg	2.0		20	J
	MS	1513756-01	0.35451	9.7254	10.000	mg/kg		93.7		75 - 125
	MSD	1513756-01	0.35451	9.9716	10.000	mg/kg	2.5	96.2	20	75 - 125
Cadmium	DUP	1513756-01	ND	ND		mg/kg			20	
	MS	1513756-01	ND	9.5037	10.000	mg/kg		95.0		75 - 125
	MSD	1513756-01	ND	9.7660	10.000	mg/kg	2.7	97.7	20	75 - 125
Chromium	DUP	1513756-01	23.170	22.962		mg/kg	0.9		20	
	MS	1513756-01	23.170	114.68	100.00	mg/kg		91.5		75 - 125
	MSD	1513756-01	23.170	117.65	100.00	mg/kg	2.6	94.5	20	75 - 125
Cobalt	DUP	1513756-01	7.2210	7.1667		mg/kg	0.8		20	
	MS	1513756-01	7.2210	107.34	100.00	mg/kg		100		75 - 125
	MSD	1513756-01	7.2210	110.02	100.00	mg/kg	2.5	103	20	75 - 125
Copper	DUP	1513756-01	14.106	13.742		mg/kg	2.6		20	
	MS	1513756-01	14.106	106.24	100.00	mg/kg		92.1		75 - 125
	MSD	1513756-01	14.106	109.12	100.00	mg/kg	2.7	95.0	20	75 - 125
Lead	DUP	1513756-01	3.7032	3.7840		mg/kg	2.2		20	
	MS	1513756-01	3.7032	100.49	100.00	mg/kg		96.8		75 - 125
	MSD	1513756-01	3.7032	102.46	100.00	mg/kg	1.9	98.8	20	75 - 125
Molybdenum	DUP	1513756-01	0.083654	ND		mg/kg			20	
	MS	1513756-01	0.083654	96.076	100.00	mg/kg		96.0		75 - 125
	MSD	1513756-01	0.083654	98.664	100.00	mg/kg	2.7	98.6	20	75 - 125
Nickel	DUP	1513756-01	20.798	20.602		mg/kg	0.9		20	
	MS	1513756-01	20.798	115.35	100.00	mg/kg		94.6		75 - 125
	MSD	1513756-01	20.798	117.93	100.00	mg/kg	2.2	97.1	20	75 - 125

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6201 S Street/P.O. Box 15830
Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Total Concentrations (TTLIC)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quails. Includes QC Batch IDs: BYF1269, BYF1299, BYF1334.

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Reported: 06/23/2015 12:06
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Total Concentrations (TTLIC)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quails. Includes QC Batch IDs: BYF1334, BYF1498, BYF1616.

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Sacramento, CA 95852-0830

Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLC)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF1671</b>		Used client sample: Y - Description: KA-14-S-16 D, 06/02/2015 09:00								
Antimony	DUP	1513756-66	ND	ND		mg/kg			20	
	MS	1513756-66	ND	22.225	100.00	mg/kg		22.2		16 - 119
	MSD	1513756-66	ND	21.962	100.00	mg/kg	1.2	22.0	20	16 - 119
Arsenic	DUP	1513756-66	3.5244	3.7698		mg/kg	6.7		20	
	MS	1513756-66	3.5244	13.300	10.000	mg/kg		97.8		75 - 125
	MSD	1513756-66	3.5244	12.999	10.000	mg/kg	2.3	94.7	20	75 - 125
Barium	DUP	1513756-66	62.812	64.920		mg/kg	3.3		20	
	MS	1513756-66	62.812	168.28	100.00	mg/kg		105		75 - 125
	MSD	1513756-66	62.812	162.12	100.00	mg/kg	3.7	99.3	20	75 - 125
Beryllium	DUP	1513756-66	0.20877	0.21003		mg/kg	0.6		20	J
	MS	1513756-66	0.20877	9.5359	10.000	mg/kg		93.3		75 - 125
	MSD	1513756-66	0.20877	9.3624	10.000	mg/kg	1.8	91.5	20	75 - 125
Cadmium	DUP	1513756-66	ND	ND		mg/kg			20	
	MS	1513756-66	ND	9.7554	10.000	mg/kg		97.6		75 - 125
	MSD	1513756-66	ND	9.7791	10.000	mg/kg	0.2	97.8	20	75 - 125
Chromium	DUP	1513756-66	19.687	20.325		mg/kg	3.2		20	
	MS	1513756-66	19.687	116.92	100.00	mg/kg		97.2		75 - 125
	MSD	1513756-66	19.687	113.56	100.00	mg/kg	2.9	93.9	20	75 - 125
Cobalt	DUP	1513756-66	5.7987	5.9836		mg/kg	3.1		20	
	MS	1513756-66	5.7987	98.215	100.00	mg/kg		92.4		75 - 125
	MSD	1513756-66	5.7987	97.290	100.00	mg/kg	0.9	91.5	20	75 - 125
Copper	DUP	1513756-66	10.931	10.938		mg/kg	0.1		20	
	MS	1513756-66	10.931	105.99	100.00	mg/kg		95.1		75 - 125
	MSD	1513756-66	10.931	104.57	100.00	mg/kg	1.3	93.6	20	75 - 125
Lead	DUP	1513756-66	2.5521	2.2930		mg/kg	10.7		20	J
	MS	1513756-66	2.5521	97.962	100.00	mg/kg		95.4		75 - 125
	MSD	1513756-66	2.5521	96.814	100.00	mg/kg	1.2	94.3	20	75 - 125
Molybdenum	DUP	1513756-66	ND	ND		mg/kg			20	
	MS	1513756-66	ND	93.948	100.00	mg/kg		93.9		75 - 125
	MSD	1513756-66	ND	92.082	100.00	mg/kg	2.0	92.1	20	75 - 125
Nickel	DUP	1513756-66	17.105	17.637		mg/kg	3.1		20	
	MS	1513756-66	17.105	116.30	100.00	mg/kg		99.2		75 - 125
	MSD	1513756-66	17.105	114.09	100.00	mg/kg	1.9	97.0	20	75 - 125
Selenium	DUP	<b>1513756-66</b>	<b>0.98016</b>	<b>1.3719</b>		<b>mg/kg</b>	<b>33.3</b>		<b>20</b>	<b>A02</b>
	MS	<b>1513756-66</b>	<b>0.98016</b>	<b>10.355</b>	<b>10.000</b>	<b>mg/kg</b>		<b>93.7</b>		<b>75 - 125</b>
	MSD	<b>1513756-66</b>	<b>0.98016</b>	<b>10.374</b>	<b>10.000</b>	<b>mg/kg</b>	<b>0.2</b>	<b>93.9</b>	<b>20</b>	<b>75 - 125</b>
Silver	DUP	1513756-66	ND	ND		mg/kg			20	
	MS	1513756-66	ND	9.3691	10.000	mg/kg		93.7		75 - 125
	MSD	1513756-66	ND	9.2179	10.000	mg/kg	1.6	92.2	20	75 - 125

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Reported: 06/23/2015 12:06
Project: 138810
Project Number: [none]
Project Manager: Sue Gardner

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Qualls. Includes sections for QC Batch ID: BYF1671, BYF1706, and BYF1759.

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Reported: 06/23/2015 12:06  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Total Concentrations (TTLIC)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	Percent Recovery	
<b>QC Batch ID: BYF1759</b>		Used client sample: N								
Lead	DUP	1514664-04	7.1830	7.4689		mg/kg	3.9		20	
	MS	1514664-04	7.1830	102.72	100.00	mg/kg		95.5		75 - 125
	MSD	1514664-04	7.1830	99.725	100.00	mg/kg	3.0	92.5	20	75 - 125
Molybdenum	DUP	1514664-04	ND	0.16738		mg/kg			20	J
	MS	1514664-04	ND	80.633	100.00	mg/kg		80.6		75 - 125
	MSD	1514664-04	ND	80.400	100.00	mg/kg	0.3	80.4	20	75 - 125
Nickel	DUP	1514664-04	15.904	15.830		mg/kg	0.5		20	
	MS	1514664-04	15.904	104.21	100.00	mg/kg		88.3		75 - 125
	MSD	1514664-04	15.904	103.64	100.00	mg/kg	0.5	87.7	20	75 - 125
Selenium	DUP	1514664-04	ND	1.0850		mg/kg			20	
	MS	1514664-04	ND	10.811	10.000	mg/kg		108		75 - 125
	MSD	1514664-04	ND	10.249	10.000	mg/kg	5.3	102	20	75 - 125
Silver	DUP	1514664-04	ND	ND		mg/kg			20	
	MS	1514664-04	ND	8.5540	10.000	mg/kg		85.5		75 - 125
	MSD	1514664-04	ND	8.6819	10.000	mg/kg	1.5	86.8	20	75 - 125
Thallium	DUP	<b>1514664-04</b>	<b>1.7219</b>	<b>2.2217</b>		<b>mg/kg</b>	<b>25.3</b>		<b>20</b>	<b>J,A02</b>
	MS	<b>1514664-04</b>	<b>1.7219</b>	<b>97.272</b>	<b>100.00</b>	<b>mg/kg</b>		<b>95.5</b>		<b>75 - 125</b>
	MSD	<b>1514664-04</b>	<b>1.7219</b>	<b>95.858</b>	<b>100.00</b>	<b>mg/kg</b>	<b>1.5</b>	<b>94.1</b>	<b>20</b>	<b>75 - 125</b>
Vanadium	DUP	1514664-04	57.277	55.812		mg/kg	2.6		20	
	MS	1514664-04	57.277	149.99	100.00	mg/kg		92.7		75 - 125
	MSD	1514664-04	57.277	149.52	100.00	mg/kg	0.3	92.2	20	75 - 125
Zinc	DUP	1514664-04	55.409	55.347		mg/kg	0.1		20	
	MS	1514664-04	55.409	140.98	100.00	mg/kg		85.6		75 - 125
	MSD	1514664-04	55.409	140.21	100.00	mg/kg	0.5	84.8	20	75 - 125

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**Reported:** 06/23/2015 12:06  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

**Notes And Definitions**

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A02 The difference between duplicate readings is less than the quantitation limit.
- A10 Detection and quantitation limits were raised due to matrix interference.
- A19 Surrogate is high due to matrix interference. Interferences verified through second extraction/analysis.
- A40 Initial calibration linearity criteria not met.
- A52 Chromatogram not typical of diesel.
- Q03 Matrix spike recovery(s) is(are) not within the control limits.
- S05 The sample holding time was exceeded.
- S09 The surrogate recovery on the sample for this compound was not within the control limits.
- Z1 Sample was analyzed five times with matrix interference of the internal standards.
- Z1a The sample was analyzed multiple times with matrix interference. The sample was analyzed at a dilution to obtain results.
- Z1b The samples were analyzed three times at various dilutions due to matrix interference of internal and surrogate standards.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



**BC Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 06/23/2015

Sue Gardner

SMUD - Kleinfelder

6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Client Project: [none]

BCL Project: 138810

BCL Work Order: 1513590

Invoice ID: B206478

Enclosed are the results of analyses for samples received by the laboratory on 6/3/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton

Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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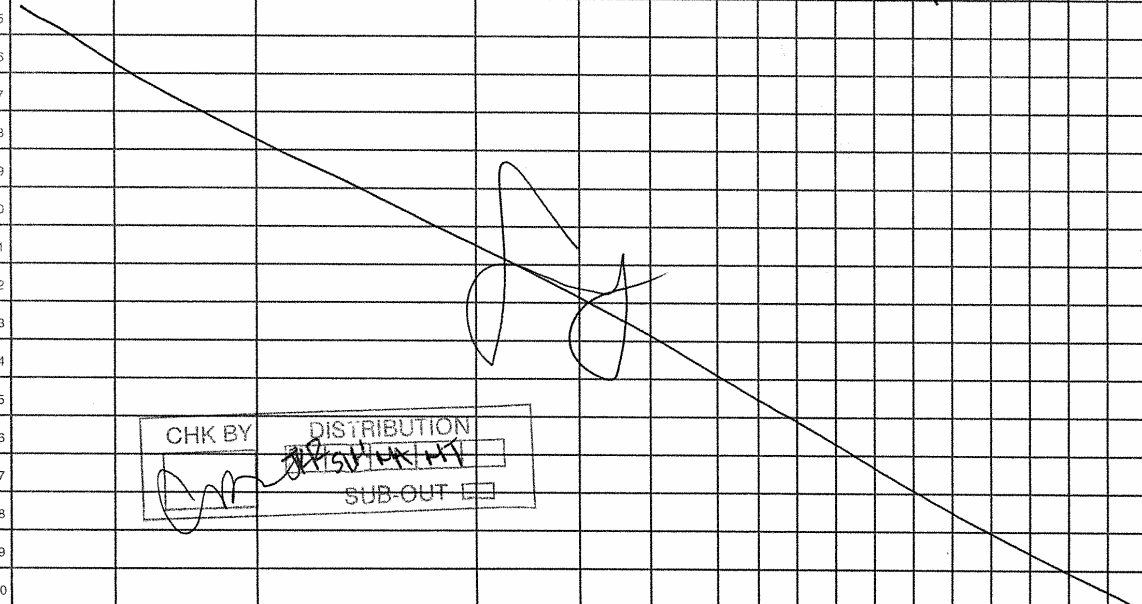
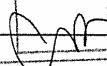


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Environmental Testing Laboratory Since 1949

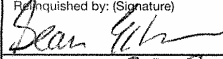
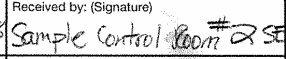
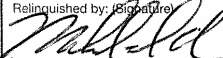
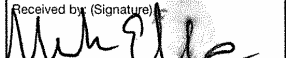
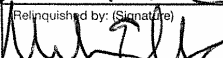
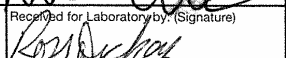
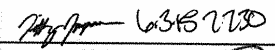
Chain of Custody and Cooler Receipt Form for 1513590 Page 1 of 9



15-13590

PROJECT NO.		PROJECT NAME		NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	RECEIVING LAB:	
138810		SMUD					BC Lab	
L.P. NO. (PO. NO.)		SAMPLERS: (Signature/Number)		DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX	INSTRUCTIONS/REMARKS
		Seng LO 11075						
1	6/1/15	0925	KA-5-D	Water	11	*	X X X X X X X X X X	* : 1 x 500 mL poly w/ preserv.
2	↓	1030	KA-7-D	↓	↓	↓	X X X X X X X X X X	1 x 1000mL amber w/ preserv.
3	↓	1115	KA-6-D	↓	↓	↓	X X X X X X X X X X	10 x 1000mL amber w/o preserv.
4	↓	1215	KA-27-D	↓	↓	↓	X X X X X X X X X X	3x 40 mL vials w/ preserv. per set
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17	CHK BY 		DISTRIBUTION <input checked="" type="checkbox"/> <input type="checkbox"/>		SUB-OUT <input type="checkbox"/>			

If you have any questions, please contact Sue Gardner. Send results to sgardner@kleinfelder.com and mvandutenden@kleinfelder.com

Relinquished by: (Signature) 	Date/Time 6/1/15 1528	Received by: (Signature) 	Instructions/Remarks: Standard T/A	Send Results To: Kleinfelder 3077 Fife Circle SAC, CA 95827 (b/c) 3146-1701
Relinquished by: (Signature) 	Date/Time 6/3/15 0820	Received by: (Signature) 		Attn: Sue Gardner
Relinquished by: (Signature) 	Date/Time 6/3/15 1100	Received for Laboratory by: (Signature) 	 6/3/15 2130	

ENV-02 REV 05/08 *Rel. by Ross Dickey 6/3/15 1840 REC*  **CHAIN OF CUSTODY** REL  6/3/15 2130 **COC No 18740**

Report ID: 1000366908  
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.  
4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bcclabs.com  
Page 4 of 107



Environmental Testing Laboratory Since 1949



15-13590

PROJECT NO. 138810		PROJECT NAME SMUD			NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS										RECEIVING LAB: BC Lab	
L.P. NO. (PO. NO.)	SAMPLERS: (Signature/Number) Seng Lo 11075						TPH-9 EPA 8210 TPH-10 EPA 8210 Oil & Grease EPA 8015 VOCs EPA 8210 SVOCs EPA 8210 PCBs EPA 8210 CHM 17-METALS EPA 8210 Lead, Cadmium, Copper, Nickel, Silver, Zinc										INSTRUCTIONS/REMARKS Standard T/A	
DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX															
-5	6/2/15	0900	KA-9-D	Water	11	*	X	X	X	X	X	X	X	X	X	X	X	* : 1 x 500 mL poly w/ preserv. 1 x 1000mL amber w/ preserv. 10 x 100mL amber w/o preserv. 3 x 40mL vials w/ preserv. per set.
-6		0945	KA-15-D				X	X	X	X	X	X	X	X	X	X	X	
-7		1030	KA-26-D				X	X	X	X	X	X	X	X	X	X	X	
-8		1115	KA-41-D				X	X	X	X	X	X	X	X	X	X	X	
-9		1240	KA-42-D				X	X	X	X	X	X	X	X	X	X	X	
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		

If you have any questions, please contact Sue Gardner. Send results to sgardner@kleinfelder and mvandenendlin@kleinfelder.com.

Relinquished by: (Signature) 	Date/Time 6/2/15 1500	Received by: (Signature) Lock File Room S.L	Instructions/Remarks: Standard T/A	Send Results To: Kleinfelder 2677 Fite Circle Sac, CA 95827 (916) 366-1701 Attn: Sue Gardner
Relinquished by: (Signature) 	Date/Time 6/3/15 0800	Received by: (Signature) 		
Relinquished by: (Signature) 	Date/Time 6/3/15 1100	Received for Laboratory by: (Signature) 		

ENV-02 REV 05/08 Rel. by Ross Dickey 6-3-15 7-890 REC-150  
 Canary - Return Copy To Shipper  
 CHAIN OF CUSTODY REL 6/3/15 0030  
 Pink - Lab Copy  
 COC No 18738

LABORATORIES INC.

COOLEN RECEIPT FORM

REV. NOV. 19

UNIVERSITY

Admission #: 15-13590

## SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery   
BC Lab Field Service  Other  (Specify) \_\_\_\_\_SHIPPING CONTAINER  
Ice Chest  None  Box   
Other  (Specify) \_\_\_\_\_FREE LIQUID  
YES  NO Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_  
Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_  
Intact? Yes  No  Intact? Yes  No All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No   
COC Received  YES  NO  Emissivity: 0.95 Container: Amber Thermometer ID: Z08 Date/Time: 6/3/15  
Temperature: (A) 14 °C / (C) 15 °C Analyst Init: KIB

	SAMPLE CONTAINERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE/NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOB										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
PERRIOUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
Sample Numbering Completed By: WV Date/Time: 6/3/15 1055 (S:\WPDoc\Work\PerfecLab\_DOC\FORMS\SAMREC)

A = Actual / C = Corrected



BC LABOKHA UHIES, INC.

C:\VOLLEN\BIBL\BIBL11.DOC

Submission #: 15-13590

## SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery   
BC Lab Field Service  Other  (Specify) \_\_\_\_\_

## SHIPPING CONTAINER

Ice Chest  None  Box   
Other  (Specify) \_\_\_\_\_FREE LIQUID  
YES  NO Refrigerant: Ice  Blue Ice  None  Other  Comments: 11

Custody Seals

Ice Chest   
Intact? Yes  No Containers   
Intact? Yes  No None  Comments:All samples received? Yes  No All samples containers intact? Yes  No Description(s) match COC? Yes  No COC Received  YES  NOEmissivity: 0.95 container: Kryopak Thermometer ID: Z08Date/Time: 6/3/15 YES  NOTemperature: (A) 0.9 °C (C) 1.0 °CAnalyst Init KLB 2035

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
OT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
OT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE /NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
OT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
OT EPA 508/608/8080										
OT EPA 515./8150										
OT EPA 525										
OT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
OT EPA 549										
OT EPA 549										
OT EPA 8015M										
OT EPA 8015M										
OT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERRROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_

Sample Numbering Completed By: VVDate/Time: 6/4/15 1055

IS:\WPDO\elw\ref\ref\LAB\_DOC\SIPORRIS\SAMREC

LABORATORIES INC.

COOLER RECEIPT FORM

REV. NO. 18 03/04/14

1.932

Admission #: 15-13590

SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery   
BC Lab Field Service  Other  (Specify) \_\_\_\_\_

SHIPPING CONTAINER

Ice Chest  None  Box   
Other  (Specify) \_\_\_\_\_

FREE LIQUID

YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_  
Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO

Emissivity: 0.95 Container: Amber Thermometer ID: 208  
Temperature: (A) 14 °C / (C) 15 °C

Date/Time: 6/3/15  
Analyst Init: KLB

	SAMPLE CONTAINERS					SAMPLE NUMBERS				
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORAMS										
PT TOTAL SULFIDE										
2oz. NITRATE /NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508.0/8180/80	18081									
QT EPA 515.1/8150	9882									
QT EPA 525	8271D									
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
8oz Amber EPA 548										
QT EPA 569	161A									
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCR VIAL										
PLASTIC BAG										
PERIHOUS IRON										
ENGORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
Sample Numbering Completed By: VVJ Date/Time: 6/4/15 1055 IS:\W\doe\wv\perf\lab.DOC\SPHONISS\AMECJ  
A = Actual / C = Corrected

BC LABORATORIES, INC.

COULEN RECEIPT FORM

REV. NO. 16

09/04/14

1 590 11 01 01

Submission #: 1513590

SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery   
BC Lab Field Service  Other  (Specify) \_\_\_\_\_

SHIPPING CONTAINER

Ice Chest  None  Box   
Other  (Specify) \_\_\_\_\_

FREE LIQUID

YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_  
Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  YES  NO

Emissivity: 0.95 Container: Amber Thermometer ID: 208

Date/Time 6/3/15

Temperature: (A) 04 °C (C) 0.5 °C Analyst Init KLB 8805

	SAMPLE CONTAINERS									
	1	2	3	4	5	6	7	8	9	10
OT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
OT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAYEL BLANK										
40ml VOA VIAL										
OT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
OT EPA 508/608/8080	8082									
OT EPA 515.1/8156	0210									
OT EPA 525										
OT EPA 525 TRAYEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
OT EPA 566	1664									
OT EPA 632										
OT EPA 8015M										
OT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOH. SLBEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
Sample Numbering Completed By: VVL Date/Time: 6/4/15 1055 (SIWPOCALVORPERFACLAB.DOCFROMMSISAMRECI)  
A = Actual / C = Corrected

BC LABORATORIES INC.

COOLER RECEIPT FORM

Rev. No. 18 09/04/14

Page 7 of 7

Submission #: 15-135590

SHIPPING INFORMATION  
 Federal Express  UPS  Hand Delivery   
 BC Lab Field Service  Other  (Specify) \_\_\_\_\_

SHIPPING CONTAINER  
 Ice Chest  None  Box   
 Other  (Specify) \_\_\_\_\_

FREE LIQUID  
 YES  NO

Refrigerant: Ice  Blue Ice  None  Other  Comments:

Custody Seals Ice Chest  Containers  None  Comments:  
 Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No   
**COC Received**  YES  NO  Emissivity: 0.95 Container: PE Thermometer ID: 208 Date/Time: 6/3/15  
 Temperature: (A) 2.8 °C (1(C)) 2.3 °C Analyst Init: KUB

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE/NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL				ABC	ABC	ABC	ABC			ABC
QT EPA 413.1, 413.2, 413.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 548										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
33 OZ. JAR										
SOIL STEVE										
PCB VIAL										
PLASTIC BAG										
PERRIOUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_  
 Sample Numbering Completed By: VVI Date/Time: 6/4/15 1055 IS:\WP\pc\wp\ref\ref\LAB\_Docs\FORMS\SAMREC1  
 A = Actual / C = Corrected

BC LABORATORIES INC.

COOLER RECEIPT FORM

Rev. No. 18 09/04/14

Page 4 of 7

Submission #: 15-13590

## SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery   
BC Lab Field Service  Other  (Specify) \_\_\_\_\_

## SHIPPING CONTAINER

Ice Chest  None  Box   
Other  (Specify) \_\_\_\_\_

## FREE LIQUID

YES  NO Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals

Ice Chest   
Intact? Yes  No Containers   
Intact? Yes  No None  Comments: \_\_\_\_\_All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No COC Received  YES  NO

Emissivity: 0.95 Container: Amber Thermometer ID: 208

Temperature: (A) 1.0 °C / (C) 34 °C

Date/Time 6/3/15

Analyst Init KLB DBB

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE /NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL-504										
QT EPA 508/608/808										
QT EPA 515 18750										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
PERRIOUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_

Sample Numbering Completed By: VVI Date/Time: 6/2/15 1055 (S:\WPDoc\Work\PerfectLab\_Docs\SI\0M51SAMREC)

A = Actual / C = Corrected

BC LABORATORIES INC.

COOLER RECEIPT FORM

Rev. No. 18 09/04/14

Page 7 of 7

Submission #: **1513590**

## SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery   
BC Lab Field Service  Other  (Specify) \_\_\_\_\_

## SHIPPING CONTAINER

Ice Chest  None  Box   
Other  (Specify) \_\_\_\_\_

## FREE LIQUID

YES  NO Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_  
Intact? Yes  No  Intact? Yes  No All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No COC Received  YES  NOEmissivity: **0.95** Container: **Amber** Thermometer ID: **208**Temperature: (A) **1.1** °C / (C) **1.2** °C Date/Time **6/3/15** Analyst Init **KIB**

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE /NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PT PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508.608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
PERRIOUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: \_\_\_\_\_

Sample Numbering Completed By: **WV** Date/Time: **6/4/15 10:55** [S:\WFDoc\WorkPerf\Lab\_Docs\FORMS\ISAMRECI

A = Actual / C = Corrected



SMUD - Kleinfelder  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

**Laboratory**

**Client Sample Information**

<b>1513590-01</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/03/2015 22:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/01/2015 09:25
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-5-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Seng Lo 11075	<b>Sample Type:</b>	Water

<b>1513590-02</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/03/2015 22:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/01/2015 10:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-7-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Seng Lo 11075	<b>Sample Type:</b>	Water

<b>1513590-03</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/03/2015 22:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/01/2015 11:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-6-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Seng Lo 11075	<b>Sample Type:</b>	Water

<b>1513590-04</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/03/2015 22:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/01/2015 12:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-27-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Seng Lo 11075	<b>Sample Type:</b>	Water

<b>1513590-05</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/03/2015 22:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/02/2015 09:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-9-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Seng Lo 11075	<b>Sample Type:</b>	Water

<b>1513590-06</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/03/2015 22:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/02/2015 09:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-15-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Seng Lo 11075	<b>Sample Type:</b>	Water

<b>1513590-07</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/03/2015 22:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/02/2015 10:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-26-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Seng Lo 11075	<b>Sample Type:</b>	Water



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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Laboratory / Client Sample Cross Reference

**Laboratory**

**Client Sample Information**

<b>1513590-08</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/03/2015 22:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/02/2015 11:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-41-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Seng Lo 11075	<b>Sample Type:</b>	Water

<b>1513590-09</b>	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/03/2015 22:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/02/2015 12:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-42-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Seng Lo 11075	<b>Sample Type:</b>	Water





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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513590-01 Client Sample Name: KA-5-D, 6/1/2015 9:25:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
<b>Chloroform</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-8260B</b>	ND		<b>1</b>
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260B	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	ug/L	1.0	0.23	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260B	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1



SMUD - Kleinfelder  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

Reported: 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1513590-01	Client Sample Name:	KA-5-D, 6/1/2015 9:25:00AM, Seng Lo 11075				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1	
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1	
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1	
Total 1,3-Dichloropropene	ND	ug/L	1.0	0.21	EPA-8260B	ND		1	
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1	
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260B	ND		1	
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1	
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1	
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1	
Methyl tbutyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1	
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1	
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1	
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1	
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1	
<b>Tetrachloroethene</b>	<b>0.35</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-8260B</b>	ND	<b>J</b>	<b>1</b>	
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1	
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260B	ND		1	
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260B	ND		1	
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1	
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1	
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1	
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1	
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	ug/L	0.50	0.15	EPA-8260B	ND		1	
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1	
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1	
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1	
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	7.2	Luft-GC/MS	ND		1	
1,2-Dichloroethane-d4 (Surrogate)	99.8	%	75 - 125 (LCL - UCL)		EPA-8260B			1	
Toluene-d8 (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1	
4-Bromofluorobenzene (Surrogate)	98.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1	



**BC Laboratories, Inc.**

Environmental Testing Laboratory Since 1949



SMUD - Kleinfelder  
6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513590-01 Client Sample Name: KA-5-D, 6/1/2015 9:25:00AM, Seng Lo 11075

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	Batch ID	QC
1	EPA-8260B	06/05/15	06/06/15 16:29	MGC	MS-V5	1	BYF0504	



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6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1513590-01	Client Sample Name:	KA-5-D, 6/1/2015 9:25:00AM, Seng Lo 11075				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
Acenaphthene	ND	ug/L	2.0	0.24	EPA-8270C	ND		1	
Acenaphthylene	ND	ug/L	2.0	0.28	EPA-8270C	ND		1	
Aldrin	ND	ug/L	2.0	0.35	EPA-8270C	ND		1	
Aniline	ND	ug/L	5.0	0.69	EPA-8270C	ND		1	
Anthracene	ND	ug/L	2.0	0.30	EPA-8270C	ND		1	
Benzidine	ND	ug/L	20	7.1	EPA-8270C	ND		1	
Benzofluranthracene	ND	ug/L	2.0	0.38	EPA-8270C	ND		1	
Benzofluoranthene	ND	ug/L	2.0	0.41	EPA-8270C	ND		1	
Benzoflpyrene	ND	ug/L	2.0	0.31	EPA-8270C	ND		1	
Benzoflpyrene	ND	ug/L	2.0	0.20	EPA-8270C	ND		1	
Benzoflgh.jlpyrene	ND	ug/L	2.0	0.22	EPA-8270C	ND		1	
Benzoic acid	ND	ug/L	10	5.8	EPA-8270C	ND		1	
Benzyl alcohol	ND	ug/L	2.0	0.34	EPA-8270C	ND		1	
Benzyl butyl phthalate	ND	ug/L	2.0	0.47	EPA-8270C	ND		1	
alpha-BHC	ND	ug/L	2.0	0.27	EPA-8270C	ND		1	
beta-BHC	ND	ug/L	2.0	0.27	EPA-8270C	ND		1	
delta-BHC	ND	ug/L	2.0	0.30	EPA-8270C	ND		1	
gamma-BHC (Lindane)	ND	ug/L	2.0	0.22	EPA-8270C	ND		1	
bis(2-Chloroethoxy)methane	ND	ug/L	2.0	0.27	EPA-8270C	ND		1	
bis(2-Chloroethyl) ether	ND	ug/L	2.0	0.68	EPA-8270C	ND		1	
bis(2-Chloroisopropyl)ether	ND	ug/L	2.0	0.30	EPA-8270C	ND		1	
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.0	3.0	EPA-8270C	ND		1	
4-Bromophenyl phenyl ether	ND	ug/L	2.0	0.23	EPA-8270C	ND		1	
4-Chloroaniline	ND	ug/L	2.0	0.69	EPA-8270C	ND		1	
2-Chloronaphthalene	ND	ug/L	2.0	0.34	EPA-8270C	ND		1	
4-Chlorophenyl phenyl ether	ND	ug/L	2.0	0.23	EPA-8270C	ND		1	
Chrysene	ND	ug/L	2.0	0.63	EPA-8270C	ND		1	
4,4'-DDD	ND	ug/L	2.0	0.48	EPA-8270C	ND		1	
4,4'-DDE	ND	ug/L	3.0	0.41	EPA-8270C	ND		1	
4,4'-DDT	ND	ug/L	2.0	0.43	EPA-8270C	ND		1	
Dibenzofl.a.hanthracene	ND	ug/L	3.0	0.26	EPA-8270C	ND		1	
Dibenzofluran	ND	ug/L	2.0	0.21	EPA-8270C	ND		1	
1,2-Dichlorobenzene	ND	ug/L	2.0	0.37	EPA-8270C	ND		1	



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6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1513590-01	Client Sample Name:	KA-5-D, 6/1/2015 9:25:00AM, Seng Lo 11075				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
1,3-Dichlorobenzene	ND	ug/L	2.0	0.35	EPA-8270C	ND		1	
1,4-Dichlorobenzene	ND	ug/L	2.0	0.31	EPA-8270C	ND		1	
3,3-Dichlorobenzidine	ND	ug/L	10	8.2	EPA-8270C	ND		1	
Dieldrin	ND	ug/L	3.0	0.41	EPA-8270C	ND		1	
Diethyl phthalate	ND	ug/L	2.0	0.33	EPA-8270C	ND		1	
Dimethyl phthalate	ND	ug/L	2.0	0.39	EPA-8270C	ND		1	
Di-n-butyl phthalate	ND	ug/L	2.0	0.39	EPA-8270C	ND		1	
2,4-Dinitrotoluene	ND	ug/L	2.0	0.26	EPA-8270C	ND		1	
2,6-Dinitrotoluene	ND	ug/L	2.0	0.41	EPA-8270C	ND		1	
Di-n-octyl phthalate	ND	ug/L	2.0	0.46	EPA-8270C	ND		1	
1,2-Diphenylhydrazine	ND	ug/L	2.0	0.34	EPA-8270C	ND		1	
Endosulfan I	ND	ug/L	10	1.7	EPA-8270C	ND		1	
Endosulfan II	ND	ug/L	10	1.2	EPA-8270C	ND		1	
Endosulfan sulfate	ND	ug/L	3.0	0.58	EPA-8270C	ND		1	
Endrin	ND	ug/L	2.0	1.1	EPA-8270C	ND		1	
Endrin aldehyde	ND	ug/L	10	0.52	EPA-8270C	ND		1	
Fluoranthene	ND	ug/L	2.0	0.20	EPA-8270C	ND		1	
Fluorene	ND	ug/L	2.0	0.28	EPA-8270C	ND		1	
Heptachlor	ND	ug/L	2.0	0.32	EPA-8270C	ND		1	
Heptachlor epoxide	ND	ug/L	2.0	0.27	EPA-8270C	ND		1	
Hexachlorobenzene	ND	ug/L	2.0	0.20	EPA-8270C	ND		1	
Hexachlorobutadiene	ND	ug/L	2.0	0.24	EPA-8270C	ND		1	
Hexachlorocyclopentadiene	ND	ug/L	2.0	0.30	EPA-8270C	ND		1	
Hexachloroethane	ND	ug/L	2.0	0.32	EPA-8270C	ND		1	
Indeno[1,2,3-cd]pyrene	ND	ug/L	2.0	0.26	EPA-8270C	ND		1	
Isophorone	ND	ug/L	2.0	0.31	EPA-8270C	ND		1	
2-Methylnaphthalene	ND	ug/L	2.0	0.28	EPA-8270C	ND		1	
Naphthalene	ND	ug/L	2.0	0.21	EPA-8270C	ND		1	
2-Naphthylamine	ND	ug/L	20	4.8	EPA-8270C	ND		1	
2-Nitroaniline	ND	ug/L	2.0	0.33	EPA-8270C	ND		1	
3-Nitroaniline	ND	ug/L	2.0	0.66	EPA-8270C	ND		1	
4-Nitroaniline	ND	ug/L	5.0	0.87	EPA-8270C	ND		1	
Nitrobenzene	ND	ug/L	2.0	0.26	EPA-8270C	ND		1	



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID: 1513590-01 Client Sample Name: KA-5-D, 6/1/2015 9:25:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	ug/L	2.0	0.61	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	ug/L	2.0	1.3	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	ug/L	2.0	0.44	EPA-8270C	ND		1
Phenanthrene	ND	ug/L	2.0	0.20	EPA-8270C	ND		1
Pyrene	ND	ug/L	2.0	0.26	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	2.0	0.27	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	ug/L	5.0	0.40	EPA-8270C	ND		1
2-Chlorophenol	ND	ug/L	2.0	0.37	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	ug/L	2.0	0.43	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	ug/L	2.0	0.20	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	ug/L	10	0.34	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	ug/L	10	0.20	EPA-8270C	ND		1
2-Methylphenol	ND	ug/L	2.0	1.0	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	ug/L	2.0	1.6	EPA-8270C	ND		1
2-Nitrophenol	ND	ug/L	2.0	0.28	EPA-8270C	ND		1
4-Nitrophenol	ND	ug/L	2.0	0.73	EPA-8270C	ND		1
Pentachlorophenol	ND	ug/L	10	0.79	EPA-8270C	ND		1
Phenol	ND	ug/L	2.0	0.20	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	ug/L	5.0	0.31	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	ug/L	5.0	0.60	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	47.9	%	30 - 120 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	48.4	%	12 - 110 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	105	%	50 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	72.4	%	55 - 125 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	84.6	%	40 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	115	%	40 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/08/15	06/10/15 18:02	VH1	MS-B1	1	BYF0846



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Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513590-01	<b>Client Sample Name:</b> KA-5-D, 6/1/2015 9:25:00AM, Seng Lo 11075
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    ug/L    200    34    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    ug/L    500    66    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	66.4    %    37 - 134 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/08/15	06/10/15 05:39	MWB	GC-13	1	BYF0754



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Project Manager: Sue Gardner

**EPA Method 1664**

BCL Sample ID: 1513590-01 Client Sample Name: KA-5-D, 6/1/2015 9:25:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/L	5.0	1.7	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/09/15	06/09/15 08:40	MAM	MAN-SV	1	BYF1187





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Project Manager: Sue Gardner

### Metals Analysis

BCL Sample ID: 1513590-01 Client Sample Name: KA-5-D, 6/1/2015 9:25:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Total Antimony	ND	ug/L	100	8.5	EPA-6010B	ND		1
Total Arsenic	37	ug/L	50	7.8	EPA-6010B	ND	J	1
Total Barium	1100	ug/L	10	3.5	EPA-6010B	ND		1
Total Beryllium	3.6	ug/L	10	0.50	EPA-6010B	ND	J	1
Total Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
Total Chromium	320	ug/L	10	1.1	EPA-6010B	ND		1
Total Cobalt	130	ug/L	50	1.3	EPA-6010B	ND		1
Total Copper	210	ug/L	10	1.1	EPA-6010B	2.8		1
Total Lead	50	ug/L	50	4.0	EPA-6010B	ND		1
Total Mercury	0.14	ug/L	0.20	0.033	EPA-7470A	ND	J	2
Total Molybdenum	5.2	ug/L	50	1.2	EPA-6010B	1.7	J	1
Total Nickel	640	ug/L	10	2.0	EPA-6010B	ND		1
Total Selenium	15	ug/L	100	15	EPA-6010B	ND	J	1
Total Silver	ND	ug/L	10	1.9	EPA-6010B	ND		1
Total Thallium	ND	ug/L	100	24	EPA-6010B	ND		1
Total Vanadium	420	ug/L	10	2.2	EPA-6010B	ND		1
Total Zinc	470	ug/L	50	2.3	EPA-6010B	3.2		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/16/15	06/17/15 09:08	ARD	PE-OP3	1	BYF1496
2	EPA-7470A	06/08/15	06/10/15 11:54	MEV	CETAC1	1	BYF0728



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Reported: 06/23/2015 13:50  
Project: 138810  
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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513590-02 Client Sample Name: KA-7-D, 6/1/2015 10:30:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
<b>Chloroform</b>	<b>0.51</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-8260B</b>	ND		<b>1</b>
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260B	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	ug/L	1.0	0.23	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260B	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1



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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1513590-02	Client Sample Name:	KA-7-D, 6/1/2015 10:30:00AM, Seng Lo 11075					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	ug/L	1.0	0.21	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Methyl tbutyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
<b>Tetrachloroethene</b>	<b>0.77</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-8260B</b>	ND		<b>1</b>
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Trichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>11</b>	<b>ug/L</b>	<b>50</b>	<b>7.2</b>	<b>Luft-GC/MS</b>	ND		<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	97.5	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	96.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1



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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1513590-02      **Client Sample Name:** KA-7-D, 6/1/2015 10:30:00AM, Seng Lo 11075

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	Batch ID	QC
1	EPA-8260B	06/05/15	06/06/15 16:52	MGC	MS-V5	1	BYF0504	



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1513590-02	Client Sample Name:	KA-7-D, 6/1/2015 10:30:00AM, Seng Lo 11075						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #	
Acenaphthene	ND	ug/L	2.0	0.24	EPA-8270C	ND		1	
Acenaphthylene	ND	ug/L	2.0	0.28	EPA-8270C	ND		1	
Aldrin	ND	ug/L	2.0	0.35	EPA-8270C	ND		1	
Aniline	ND	ug/L	5.0	0.69	EPA-8270C	ND		1	
Anthracene	ND	ug/L	2.0	0.30	EPA-8270C	ND		1	
Benzidine	ND	ug/L	20	7.1	EPA-8270C	ND		1	
Benzofluranthracene	ND	ug/L	2.0	0.38	EPA-8270C	ND		1	
Benzofluoranthene	ND	ug/L	2.0	0.41	EPA-8270C	ND		1	
Benzofluoranthene	ND	ug/L	2.0	0.31	EPA-8270C	ND		1	
Benzoflapyrene	ND	ug/L	2.0	0.20	EPA-8270C	ND		1	
Benzofluoranthene	ND	ug/L	2.0	0.22	EPA-8270C	ND		1	
Benzoic acid	ND	ug/L	10	5.8	EPA-8270C	ND		1	
Benzyl alcohol	ND	ug/L	2.0	0.34	EPA-8270C	ND		1	
Benzyl butyl phthalate	ND	ug/L	2.0	0.47	EPA-8270C	ND		1	
alpha-BHC	ND	ug/L	2.0	0.27	EPA-8270C	ND		1	
beta-BHC	ND	ug/L	2.0	0.27	EPA-8270C	ND		1	
delta-BHC	ND	ug/L	2.0	0.30	EPA-8270C	ND		1	
gamma-BHC (Lindane)	ND	ug/L	2.0	0.22	EPA-8270C	ND		1	
bis(2-Chloroethoxy)methane	ND	ug/L	2.0	0.27	EPA-8270C	ND		1	
bis(2-Chloroethyl) ether	ND	ug/L	2.0	0.68	EPA-8270C	ND		1	
bis(2-Chloroisopropyl)ether	ND	ug/L	2.0	0.30	EPA-8270C	ND		1	
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.0	3.0	EPA-8270C	ND		1	
4-Bromophenyl phenyl ether	ND	ug/L	2.0	0.23	EPA-8270C	ND		1	
4-Chloroaniline	ND	ug/L	2.0	0.69	EPA-8270C	ND		1	
2-Chloronaphthalene	ND	ug/L	2.0	0.34	EPA-8270C	ND		1	
4-Chlorophenyl phenyl ether	ND	ug/L	2.0	0.23	EPA-8270C	ND		1	
Chrysene	ND	ug/L	2.0	0.63	EPA-8270C	ND		1	
4,4'-DDD	ND	ug/L	2.0	0.48	EPA-8270C	ND		1	
4,4'-DDE	ND	ug/L	3.0	0.41	EPA-8270C	ND		1	
4,4'-DDT	ND	ug/L	2.0	0.43	EPA-8270C	ND		1	
Dibenzofluoranthracene	ND	ug/L	3.0	0.26	EPA-8270C	ND		1	
Dibenzofuran	ND	ug/L	2.0	0.21	EPA-8270C	ND		1	
1,2-Dichlorobenzene	ND	ug/L	2.0	0.37	EPA-8270C	ND		1	



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Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1513590-02	Client Sample Name:	KA-7-D, 6/1/2015 10:30:00AM, Seng Lo 11075				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
1,3-Dichlorobenzene	ND	ug/L	2.0	0.35	EPA-8270C	ND		1	
1,4-Dichlorobenzene	ND	ug/L	2.0	0.31	EPA-8270C	ND		1	
3,3-Dichlorobenzidine	ND	ug/L	10	8.2	EPA-8270C	ND		1	
Dieldrin	ND	ug/L	3.0	0.41	EPA-8270C	ND		1	
Diethyl phthalate	ND	ug/L	2.0	0.33	EPA-8270C	ND		1	
Dimethyl phthalate	ND	ug/L	2.0	0.39	EPA-8270C	ND		1	
Di-n-butyl phthalate	ND	ug/L	2.0	0.39	EPA-8270C	ND		1	
2,4-Dinitrotoluene	ND	ug/L	2.0	0.26	EPA-8270C	ND		1	
2,6-Dinitrotoluene	ND	ug/L	2.0	0.41	EPA-8270C	ND		1	
Di-n-octyl phthalate	ND	ug/L	2.0	0.46	EPA-8270C	ND		1	
1,2-Diphenylhydrazine	ND	ug/L	2.0	0.34	EPA-8270C	ND		1	
Endosulfan I	ND	ug/L	10	1.7	EPA-8270C	ND		1	
Endosulfan II	ND	ug/L	10	1.2	EPA-8270C	ND		1	
Endosulfan sulfate	ND	ug/L	3.0	0.58	EPA-8270C	ND		1	
Endrin	ND	ug/L	2.0	1.1	EPA-8270C	ND		1	
Endrin aldehyde	ND	ug/L	10	0.52	EPA-8270C	ND		1	
Fluoranthene	ND	ug/L	2.0	0.20	EPA-8270C	ND		1	
Fluorene	ND	ug/L	2.0	0.28	EPA-8270C	ND		1	
Heptachlor	ND	ug/L	2.0	0.32	EPA-8270C	ND		1	
Heptachlor epoxide	ND	ug/L	2.0	0.27	EPA-8270C	ND		1	
Hexachlorobenzene	ND	ug/L	2.0	0.20	EPA-8270C	ND		1	
Hexachlorobutadiene	ND	ug/L	2.0	0.24	EPA-8270C	ND		1	
Hexachlorocyclopentadiene	ND	ug/L	2.0	0.30	EPA-8270C	ND		1	
Hexachloroethane	ND	ug/L	2.0	0.32	EPA-8270C	ND		1	
Indeno[1,2,3-cd]pyrene	ND	ug/L	2.0	0.26	EPA-8270C	ND		1	
Isophorone	ND	ug/L	2.0	0.31	EPA-8270C	ND		1	
2-Methylnaphthalene	ND	ug/L	2.0	0.28	EPA-8270C	ND		1	
Naphthalene	ND	ug/L	2.0	0.21	EPA-8270C	ND		1	
2-Naphthylamine	ND	ug/L	20	4.8	EPA-8270C	ND		1	
2-Nitroaniline	ND	ug/L	2.0	0.33	EPA-8270C	ND		1	
3-Nitroaniline	ND	ug/L	2.0	0.66	EPA-8270C	ND		1	
4-Nitroaniline	ND	ug/L	5.0	0.87	EPA-8270C	ND		1	
Nitrobenzene	ND	ug/L	2.0	0.26	EPA-8270C	ND		1	



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1513590-02	Client Sample Name:	KA-7-D, 6/1/2015 10:30:00AM, Seng Lo 11075				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals	Run #	
N-Nitrosodimethylamine	ND	ug/L	2.0	0.61	EPA-8270C	ND		1	
N-Nitrosodi-N-propylamine	ND	ug/L	2.0	1.3	EPA-8270C	ND		1	
N-Nitrosodiphenylamine	ND	ug/L	2.0	0.44	EPA-8270C	ND		1	
Phenanthrene	ND	ug/L	2.0	0.20	EPA-8270C	ND		1	
Pyrene	ND	ug/L	2.0	0.26	EPA-8270C	ND		1	
1,2,4-Trichlorobenzene	ND	ug/L	2.0	0.27	EPA-8270C	ND		1	
4-Chloro-3-methylphenol	ND	ug/L	5.0	0.40	EPA-8270C	ND		1	
2-Chlorophenol	ND	ug/L	2.0	0.37	EPA-8270C	ND		1	
2,4-Dichlorophenol	ND	ug/L	2.0	0.43	EPA-8270C	ND		1	
2,4-Dimethylphenol	ND	ug/L	2.0	0.20	EPA-8270C	ND		1	
4,6-Dinitro-2-methylphenol	ND	ug/L	10	0.34	EPA-8270C	ND		1	
2,4-Dinitrophenol	ND	ug/L	10	0.20	EPA-8270C	ND		1	
2-Methylphenol	ND	ug/L	2.0	1.0	EPA-8270C	ND		1	
3- & 4-Methylphenol	ND	ug/L	2.0	1.6	EPA-8270C	ND		1	
2-Nitrophenol	ND	ug/L	2.0	0.28	EPA-8270C	ND		1	
4-Nitrophenol	ND	ug/L	2.0	0.73	EPA-8270C	ND		1	
Pentachlorophenol	ND	ug/L	10	0.79	EPA-8270C	ND		1	
Phenol	ND	ug/L	2.0	0.20	EPA-8270C	ND		1	
2,4,5-Trichlorophenol	ND	ug/L	5.0	0.31	EPA-8270C	ND		1	
2,4,6-Trichlorophenol	ND	ug/L	5.0	0.60	EPA-8270C	ND		1	
2-Fluorophenol (Surrogate)	53.4	%	30 - 120 (LCL - UCL)		EPA-8270C			1	
Phenol-d5 (Surrogate)	52.6	%	12 - 110 (LCL - UCL)		EPA-8270C			1	
Nitrobenzene-d5 (Surrogate)	102	%	50 - 130 (LCL - UCL)		EPA-8270C			1	
2-Fluorobiphenyl (Surrogate)	71.9	%	55 - 125 (LCL - UCL)		EPA-8270C			1	
2,4,6-Tribromophenol (Surrogate)	82.7	%	40 - 150 (LCL - UCL)		EPA-8270C			1	
p-Terphenyl-d14 (Surrogate)	108	%	40 - 150 (LCL - UCL)		EPA-8270C			1	

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/08/15	06/10/15 18:28	VH1	MS-B1	1	BYF0846



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Project: 138810  
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Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513590-02	<b>Client Sample Name:</b> KA-7-D, 6/1/2015 10:30:00AM, Seng Lo 11075
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
TPH - Diesel (FFP)	230    ug/L    200    34    EPA-8015B/FFP    ND    A52    1
TPH - Motor Oil	ND    ug/L    500    66    EPA-8015B/FFP    ND       1
Tetracosane (Surrogate)	79.0    %    37 - 134 (LCL - UCL)    EPA-8015B/FFP                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/08/15	06/10/15 06:01	MWB	GC-13	1	BYF0754





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Project: 138810  
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Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1513590-02      **Client Sample Name:** KA-7-D, 6/1/2015 10:30:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/L	5.0	1.7	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/09/15	06/09/15 08:40	MAM	MAN-SV	1	BYF1187



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Project Manager: Sue Gardner

### Metals Analysis

BCL Sample ID: 1513590-02 Client Sample Name: KA-7-D, 6/1/2015 10:30:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Antimony	ND	ug/L	100	8.5	EPA-6010B	ND		1
Total Arsenic	68	ug/L	50	7.8	EPA-6010B	ND		1
Total Barium	2300	ug/L	10	3.5	EPA-6010B	ND		1
Total Beryllium	6.9	ug/L	10	0.50	EPA-6010B	ND	J	1
Total Cadmium	1.9	ug/L	10	1.1	EPA-6010B	ND	J	1
Total Chromium	460	ug/L	10	1.1	EPA-6010B	ND		1
Total Cobalt	240	ug/L	50	1.3	EPA-6010B	ND		1
Total Copper	400	ug/L	10	1.1	EPA-6010B	2.8		1
Total Lead	110	ug/L	50	4.0	EPA-6010B	ND		1
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
Total Molybdenum	ND	ug/L	50	1.2	EPA-6010B	1.7		1
Total Nickel	1300	ug/L	10	2.0	EPA-6010B	ND		1
Total Selenium	24	ug/L	100	15	EPA-6010B	ND	J	1
Total Silver	ND	ug/L	10	1.9	EPA-6010B	ND		1
Total Thallium	ND	ug/L	100	24	EPA-6010B	ND		1
Total Vanadium	730	ug/L	10	2.2	EPA-6010B	ND		1
Total Zinc	890	ug/L	50	2.3	EPA-6010B	3.2		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/16/15	06/17/15 09:09	ARD	PE-OP3	1	BYF1496
2	EPA-7470A	06/08/15	06/10/15 12:05	MEV	CETAC1	1	BYF0728



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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1513590-03	Client Sample Name:	KA-6-D, 6/1/2015 11:15:00AM, Seng Lo 11075					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
<b>Chloroform</b>	<b>4.7</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-8260B</b>	ND		<b>1</b>
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260B	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethane	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	ug/L	1.0	0.23	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260B	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1



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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1513590-03	Client Sample Name:	KA-6-D, 6/1/2015 11:15:00AM, Seng Lo 11075					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	ug/L	1.0	0.21	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Methyl tbutyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
<b>Tetrachloroethene</b>	<b>0.85</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-8260B</b>	ND		<b>1</b>
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Trichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>9.4</b>	<b>ug/L</b>	<b>50</b>	<b>7.2</b>	<b>Luft-GC/MS</b>	ND		<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1513590-03      **Client Sample Name:** KA-6-D, 6/1/2015 11:15:00AM, Seng Lo 11075

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	Batch ID	QC
1	EPA-8260B	06/05/15	06/06/15 17:15	MGC	MS-V5	1	BYF0504	



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Project Number: [none]  
Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513590-03	<b>Client Sample Name:</b> KA-6-D, 6/1/2015 11:15:00AM, Seng Lo 11075
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	ND    ug/L    200    34    EPA-8015B/FFP    ND    ND    1
TPH - Motor Oil	ND    ug/L    500    66    EPA-8015B/FFP    ND    ND    1
Tetracosane (Surrogate)	73.4    %    37 - 134 (LCL - UCL)    EPA-8015B/FFP    ND    ND    1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/08/15	06/10/15 06:24	MWB	GC-13	1	BYF0754



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1513590-03      **Client Sample Name:** KA-6-D, 6/1/2015 11:15:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/L	5.0	1.7	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/09/15	06/09/15 08:40	MAM	MAN-SV	1	BYF1187



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Metals Analysis

BCL Sample ID: 1513590-03 Client Sample Name: KA-6-D, 6/1/2015 11:15:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quas	Run #
Total Antimony	ND	ug/L	100	8.5	EPA-6010B	ND		1
Total Arsenic	ND	ug/L	50	7.8	EPA-6010B	ND		1
<b>Total Barium</b>	<b>88</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		<b>1</b>
Total Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		1
Total Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
<b>Total Chromium</b>	<b>24</b>	<b>ug/L</b>	<b>10</b>	<b>1.1</b>	<b>EPA-6010B</b>	ND		<b>1</b>
<b>Total Cobalt</b>	<b>9.9</b>	<b>ug/L</b>	<b>50</b>	<b>1.3</b>	<b>EPA-6010B</b>	ND	<b>J</b>	<b>1</b>
<b>Total Copper</b>	<b>12</b>	<b>ug/L</b>	<b>10</b>	<b>1.1</b>	<b>EPA-6010B</b>	2.8		<b>1</b>
Total Lead	ND	ug/L	50	4.0	EPA-6010B	ND		1
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
<b>Total Molybdenum</b>	<b>6.3</b>	<b>ug/L</b>	<b>50</b>	<b>1.2</b>	<b>EPA-6010B</b>	1.7	<b>J</b>	<b>1</b>
<b>Total Nickel</b>	<b>59</b>	<b>ug/L</b>	<b>10</b>	<b>2.0</b>	<b>EPA-6010B</b>	ND		<b>1</b>
Total Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
Total Silver	ND	ug/L	10	1.9	EPA-6010B	ND		1
Total Thallium	ND	ug/L	100	24	EPA-6010B	ND		1
<b>Total Vanadium</b>	<b>24</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND		<b>1</b>
<b>Total Zinc</b>	<b>21</b>	<b>ug/L</b>	<b>50</b>	<b>2.3</b>	<b>EPA-6010B</b>	3.2	<b>J</b>	<b>1</b>

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/16/15	06/17/15 09:11	ARD	PE-OP3	1	BYF1496
2	EPA-7470A	06/08/15	06/10/15 12:07	MEV	CETAC1	1	BYF0728





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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513590-04	<b>Client Sample Name:</b> KA-27-D, 6/1/2015 12:15:00PM, Seng Lo 11075
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    ug/L    0.20    0.045    EPA-8082    ND          1
PCB-1221	ND    ug/L    0.20    0.070    EPA-8082    ND          1
PCB-1232	ND    ug/L    0.20    0.081    EPA-8082    ND          1
PCB-1242	ND    ug/L    0.20    0.065    EPA-8082    ND          1
PCB-1248	ND    ug/L    0.20    0.085    EPA-8082    ND          1
PCB-1254	ND    ug/L    0.20    0.077    EPA-8082    ND          1
PCB-1260	ND    ug/L    0.20    0.060    EPA-8082    ND          1
Total PCB's (Summation)	ND    ug/L    0.20    0.10    EPA-8082    ND          1
Decachlorobiphenyl (Surrogate)	58.3    %    30 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/08/15	06/10/15 13:53	ZZZ	GC-15	1	BYF0940



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1513590-04	Client Sample Name:	KA-27-D, 6/1/2015 12:15:00PM, Seng Lo 11075					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
<b>Chloroform</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-8260B</b>	ND		<b>1</b>
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260B	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	ug/L	1.0	0.23	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260B	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1



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Reported: 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513590-04 Client Sample Name: KA-27-D, 6/1/2015 12:15:00PM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	ug/L	1.0	0.21	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Methyl tbutyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
<b>Tetrachloroethene</b>	<b>1.8</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-8260B</b>	ND		<b>1</b>
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
1,2-Dichloroethane-4d (Surrogate)	100	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1513590-04      **Client Sample Name:** KA-27-D, 6/1/2015 12:15:00PM, Seng Lo 11075

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	Batch ID	QC
1	EPA-8260B	06/05/15	06/06/15 17:37	MGC	MS-V5	1	BYF0504	



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Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513590-04	<b>Client Sample Name:</b> KA-27-D, 6/1/2015 12:15:00PM, Seng Lo 11075
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quats</b> <b>Run #</b>
TPH - Diesel (FFP)	ND   ug/L   200   34   EPA-8015B/FFP   ND   ND   1
TPH - Motor Oil	ND   ug/L   500   66   EPA-8015B/FFP   ND   ND   1
Tetracosane (Surrogate)	75.5   %   37 - 134 (LCL - UCL)   EPA-8015B/FFP   ND   ND   1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/08/15	06/10/15 06:46	MWB	GC-13	1	BYF0754



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Project: 138810  
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Project Manager: Sue Gardner

### EPA Method 1664

BCL Sample ID: 1513590-04 Client Sample Name: KA-27-D, 6/1/2015 12:15:00PM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/L	5.0	1.7	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/09/15	06/09/15 08:40	MAM	MAN-SV	1	BYF1187



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Metals Analysis

BCL Sample ID: 1513590-04 Client Sample Name: KA-27-D, 6/1/2015 12:15:00PM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Antimony	ND	ug/L	100	8.5	EPA-6010B	ND		1
Total Arsenic	ND	ug/L	50	7.8	EPA-6010B	ND		1
<b>Total Barium</b>	<b>130</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		<b>1</b>
Total Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		1
Total Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
<b>Total Chromium</b>	<b>21</b>	<b>ug/L</b>	<b>10</b>	<b>1.1</b>	<b>EPA-6010B</b>	ND		<b>1</b>
<b>Total Cobalt</b>	<b>8.4</b>	<b>ug/L</b>	<b>50</b>	<b>1.3</b>	<b>EPA-6010B</b>	ND	<b>J</b>	<b>1</b>
<b>Total Copper</b>	<b>18</b>	<b>ug/L</b>	<b>10</b>	<b>1.1</b>	<b>EPA-6010B</b>	2.8		<b>1</b>
Total Lead	ND	ug/L	50	4.0	EPA-6010B	ND		1
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
<b>Total Molybdenum</b>	<b>8.2</b>	<b>ug/L</b>	<b>50</b>	<b>1.2</b>	<b>EPA-6010B</b>	1.7	<b>J</b>	<b>1</b>
<b>Total Nickel</b>	<b>47</b>	<b>ug/L</b>	<b>10</b>	<b>2.0</b>	<b>EPA-6010B</b>	ND		<b>1</b>
Total Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
Total Silver	ND	ug/L	10	1.9	EPA-6010B	ND		1
Total Thallium	ND	ug/L	100	24	EPA-6010B	ND		1
<b>Total Vanadium</b>	<b>36</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND		<b>1</b>
<b>Total Zinc</b>	<b>30</b>	<b>ug/L</b>	<b>50</b>	<b>2.3</b>	<b>EPA-6010B</b>	3.2	<b>J</b>	<b>1</b>

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/16/15	06/17/15 09:12	ARD	PE-OP3	1	BYF1496
2	EPA-7470A	06/08/15	06/10/15 12:09	MEV	CETAC1	1	BYF0728



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b>	1513590-05	<b>Client Sample Name:</b>	KA-9-D, 6/2/2015 9:00:00AM, Seng Lo 11075						
<b>Constituent</b>	<b>Result</b>	<b>Units</b>	<b>PQL</b>	<b>MDL</b>	<b>Method</b>	<b>MB Bias</b>	<b>Lab Quals</b>	<b>Run #</b>	
PCB-1016	ND	ug/L	0.20	0.045	EPA-8082	ND		1	
PCB-1221	ND	ug/L	0.20	0.070	EPA-8082	ND		1	
PCB-1232	ND	ug/L	0.20	0.081	EPA-8082	ND		1	
PCB-1242	ND	ug/L	0.20	0.065	EPA-8082	ND		1	
PCB-1248	ND	ug/L	0.20	0.085	EPA-8082	ND		1	
PCB-1254	ND	ug/L	0.20	0.077	EPA-8082	ND		1	
PCB-1260	ND	ug/L	0.20	0.060	EPA-8082	ND		1	
<b>Total PCB's (Summation)</b>	ND	ug/L	0.20	0.10	EPA-8082	ND		1	
<b>Decachlorobiphenyl (Surrogate)</b>	68.3	%	30 - 120 (LCL - UCL)		EPA-8082			1	

Run #	Method	Prep Date	Run			QC	
			Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8082	06/08/15	06/10/15 14:03	ZZZ	GC-15	1	BYF0940





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Reported: 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1513590-05	Client Sample Name:	KA-9-D, 6/2/2015 9:00:00AM, Seng Lo 11075					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
<b>Chloroform</b>	<b>3.9</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-8260B</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260B	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	ug/L	1.0	0.23	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260B	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1



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Reported: 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1513590-05	Client Sample Name:	KA-9-D, 6/2/2015 9:00:00AM, Seng Lo 11075					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	ug/L	1.0	0.21	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Methyl tbutyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
<b>Tetrachloroethene</b>	<b>2.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-8260B</b>	<b>ND</b>		<b>1</b>
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Trichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>9.6</b>	<b>ug/L</b>	<b>50</b>	<b>7.2</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>J</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	94.9	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1513590-05      **Client Sample Name:** KA-9-D, 6/2/2015 9:00:00AM, Seng Lo 11075

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	Batch ID	QC
1	EPA-8260B	06/05/15	06/08/15 11:26	MGC	MS-V5	1	BYF0504	



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Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b>	1513590-05	<b>Client Sample Name:</b>	KA-9-D, 6/2/2015 9:00:00AM, Seng Lo 11075					
<b>Constituent</b>	<b>Result</b>	<b>Units</b>	<b>PQL</b>	<b>MDL</b>	<b>Method</b>	<b>MB Bias</b>	<b>Lab Quats</b>	<b>Run #</b>
TPH - Diesel (FFP)	ND	ug/L	200	34	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	ug/L	500	66	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	74.1	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-8015B/FFP	06/08/15	06/10/15	07:09	MWB	GC-13	1	BYF0754	



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1513590-05      **Client Sample Name:** KA-9-D, 6/2/2015 9:00:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/L	5.0	1.7	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/09/15	06/09/15 08:40	MAM	MAN-SV	1	BYF-1187



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Metals Analysis

BCL Sample ID: 1513590-05 Client Sample Name: KA-9-D, 6/2/2015 9:00:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Antimony	ND	ug/L	100	8.5	EPA-6010B	ND		1
Total Arsenic	8.0	ug/L	50	7.8	EPA-6010B	ND	J	1
Total Barium	550	ug/L	10	3.5	EPA-6010B	ND		1
Total Beryllium	1.6	ug/L	10	0.50	EPA-6010B	ND	J	1
Total Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
Total Chromium	120	ug/L	10	1.1	EPA-6010B	ND		1
Total Cobalt	49	ug/L	50	1.3	EPA-6010B	ND	J	1
Total Copper	74	ug/L	10	1.1	EPA-6010B	2.8		1
Total Lead	16	ug/L	50	4.0	EPA-6010B	ND	J	1
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
Total Molybdenum	3.4	ug/L	50	1.2	EPA-6010B	1.7	J	1
Total Nickel	300	ug/L	10	2.0	EPA-6010B	ND		1
Total Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
Total Silver	ND	ug/L	10	1.9	EPA-6010B	ND		1
Total Thallium	ND	ug/L	100	24	EPA-6010B	ND		1
Total Vanadium	170	ug/L	10	2.2	EPA-6010B	ND		1
Total Zinc	190	ug/L	50	2.3	EPA-6010B	3.2		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/16/15	06/17/15 09:14	ARD	PE-OP3	1	BYF1496
2	EPA-7470A	06/08/15	06/10/15 12:16	MEV	CETAC1	1	BYF0728



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513590-06 Client Sample Name: KA-15-D, 6/2/2015 9:45:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	ug/L	0.20	0.045	EPA-8082	ND		1
PCB-1221	ND	ug/L	0.20	0.070	EPA-8082	ND		1
PCB-1232	ND	ug/L	0.20	0.081	EPA-8082	ND		1
PCB-1242	ND	ug/L	0.20	0.065	EPA-8082	ND		1
PCB-1248	ND	ug/L	0.20	0.085	EPA-8082	ND		1
PCB-1254	ND	ug/L	0.20	0.077	EPA-8082	ND		1
PCB-1260	ND	ug/L	0.20	0.060	EPA-8082	ND		1
Total PCB's (Summation)	ND	ug/L	0.20	0.10	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	71.7	%	30 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/08/15	06/10/15 14:14	ZZZ	GC-15	1	BYF0940



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Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513590-06 Client Sample Name: KA-15-D, 6/2/2015 9:45:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
<b>Chloroform</b>	<b>2.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-8260B</b>	ND		<b>1</b>
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260B	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	ug/L	1.0	0.23	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260B	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1





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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1513590-06	Client Sample Name:	KA-15-D, 6/2/2015 9:45:00AM, Seng Lo 11075				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1	
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1	
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1	
Total 1,3-Dichloropropene	ND	ug/L	1.0	0.21	EPA-8260B	ND		1	
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1	
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260B	ND		1	
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1	
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1	
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1	
Methyl tbutyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1	
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1	
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1	
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1	
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1	
<b>Tetrachloroethene</b>	<b>0.50</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-8260B</b>	ND		<b>1</b>	
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1	
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260B	ND		1	
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260B	ND		1	
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1	
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1	
Trichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1	
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1	
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	ug/L	0.50	0.15	EPA-8260B	ND		1	
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1	
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1	
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1	
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1	
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>7.8</b>	<b>ug/L</b>	<b>50</b>	<b>7.2</b>	<b>Luft-GC/MS</b>	ND		<b>1</b>	
1,2-Dichloroethane-d4 (Surrogate)	98.0	%	75 - 125 (LCL - UCL)		EPA-8260B			1	
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1	
4-Bromofluorobenzene (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1	



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513590-06 Client Sample Name: KA-15-D, 6/2/2015 9:45:00AM, Seng Lo 11075

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	Batch ID	QC
1	EPA-8260B	06/05/15	06/08/15 11:49	MGC	MS-V5	1	BYF0504	



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Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

**BCL Sample ID:** 1513590-06      **Client Sample Name:** KA-15-D, 6/2/2015 9:45:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel (FFP)	ND	ug/L	200	34	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	ug/L	500	66	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	70.4	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/08/15	06/10/15 07:32	MWB	GC-13	1	BYF0754



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

BCL Sample ID: 1513590-06 Client Sample Name: KA-15-D, 6/2/2015 9:45:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
Oil and Grease	ND	mg/L	5.0	1.7	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/09/15	06/09/15 08:40	MAM	MAN-SV	1	BYF-1187



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Metals Analysis

BCL Sample ID: 1513590-06 Client Sample Name: KA-15-D, 6/2/2015 9:45:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Antimony	ND	ug/L	100	8.5	EPA-6010B	ND		1
Total Arsenic	28	ug/L	50	7.8	EPA-6010B	ND	J	1
Total Barium	640	ug/L	10	3.5	EPA-6010B	ND		1
Total Beryllium	2.2	ug/L	10	0.50	EPA-6010B	ND	J	1
Total Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
Total Chromium	150	ug/L	10	1.1	EPA-6010B	ND		1
Total Cobalt	47	ug/L	50	1.3	EPA-6010B	ND	J	1
Total Copper	100	ug/L	10	1.1	EPA-6010B	2.8		1
Total Lead	25	ug/L	50	4.0	EPA-6010B	ND	J	1
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
Total Molybdenum	3.7	ug/L	50	1.2	EPA-6010B	1.7	J	1
Total Nickel	260	ug/L	10	2.0	EPA-6010B	ND		1
Total Selenium	21	ug/L	100	15	EPA-6010B	ND	J	1
Total Silver	ND	ug/L	10	1.9	EPA-6010B	ND		1
Total Thallium	ND	ug/L	100	24	EPA-6010B	ND		1
Total Vanadium	210	ug/L	10	2.2	EPA-6010B	ND		1
Total Zinc	230	ug/L	50	2.3	EPA-6010B	3.2		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/16/15	06/17/15 09:16	ARD	PE-OP3	1	BYF1496
2	EPA-7470A	06/08/15	06/10/15 12:18	MEV	CETAC1	1	BYF0728



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513590-07	<b>Client Sample Name:</b> KA-26-D, 6/2/2015 10:30:00AM, Seng Lo 11075
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    ug/L    0.20    0.045    EPA-8082    ND          1
PCB-1221	ND    ug/L    0.20    0.070    EPA-8082    ND          1
PCB-1232	ND    ug/L    0.20    0.081    EPA-8082    ND          1
PCB-1242	ND    ug/L    0.20    0.065    EPA-8082    ND          1
PCB-1248	ND    ug/L    0.20    0.085    EPA-8082    ND          1
PCB-1254	ND    ug/L    0.20    0.077    EPA-8082    ND          1
PCB-1260	ND    ug/L    0.20    0.060    EPA-8082    ND          1
Total PCB's (Summation)	ND    ug/L    0.20    0.10    EPA-8082    ND          1
Decachlorobiphenyl (Surrogate)	60.0    %    30 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run			QC	
			Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8082	06/08/15	06/10/15 14:24	ZZZ	GC-15	1	BYF0940



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1513590-07	Client Sample Name:	KA-26-D, 6/2/2015 10:30:00AM, Seng Lo 11075				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1	
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1	
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1	
<b>Bromodichloromethane</b>	<b>0.19</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.14</b>	<b>EPA-8260B</b>	ND	<b>J</b>	<b>1</b>	
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1	
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1	
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1	
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1	
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1	
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1	
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1	
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1	
<b>Chloroform</b>	<b>8.0</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-8260B</b>	ND		<b>1</b>	
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1	
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260B	ND		1	
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1	
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1	
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1	
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1	
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1	
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1	
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1	
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260B	ND		1	
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1	
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1	
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1	
cis-1,2-Dichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1	
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1	
Total 1,2-Dichloroethene	ND	ug/L	1.0	0.23	EPA-8260B	ND		1	
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1	
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260B	ND		1	
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1	



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513590-07 Client Sample Name: KA-26-D, 6/2/2015 10:30:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	ug/L	1.0	0.21	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Methyl tbutyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
1,2-Dichloroethane-4d (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1





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Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1513590-07      **Client Sample Name:** KA-26-D, 6/2/2015 10:30:00AM, Seng Lo 11075

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	Batch ID	QC
1	EPA-8260B	06/05/15	06/08/15 12:12	MGC	MS-V5	1	BYF0504	



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Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b> 1513590-07	<b>Client Sample Name:</b> KA-26-D, 6/2/2015 10:30:00AM, Seng Lo 11075							
<b>Constituent</b>	<b>Result</b>	<b>Units</b>	<b>PQL</b>	<b>MDL</b>	<b>Method</b>	<b>MB Bias</b>	<b>Lab Quats</b>	<b>Run #</b>
TPH - Diesel (FFP)	ND	ug/L	200	34	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	ug/L	500	66	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	63.1	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/08/15	06/10/15 09:03	MWB	GC-13	1	BYF0754



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Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1513590-07      **Client Sample Name:** KA-26-D, 6/2/2015 10:30:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/L	5.0	1.7	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/09/15	06/09/15 08:40	MAM	MAN-SV	1	BYF-1187



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Project Manager: Sue Gardner

### Metals Analysis

BCL Sample ID: 1513590-07 Client Sample Name: KA-26-D, 6/2/2015 10:30:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Antimony	ND	ug/L	100	8.5	EPA-6010B	ND		1
Total Arsenic	29	ug/L	50	7.8	EPA-6010B	ND	J	1
Total Barium	890	ug/L	10	3.5	EPA-6010B	ND		1
Total Beryllium	3.5	ug/L	10	0.50	EPA-6010B	ND	J	1
Total Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
Total Chromium	180	ug/L	10	1.1	EPA-6010B	ND		1
Total Cobalt	74	ug/L	50	1.3	EPA-6010B	ND		1
Total Copper	150	ug/L	10	1.1	EPA-6010B	2.8		1
Total Lead	23	ug/L	50	4.0	EPA-6010B	ND	J	1
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
Total Molybdenum	ND	ug/L	50	1.2	EPA-6010B	1.7		1
Total Nickel	290	ug/L	10	2.0	EPA-6010B	ND		1
Total Selenium	15	ug/L	100	15	EPA-6010B	ND	J	1
Total Silver	ND	ug/L	10	1.9	EPA-6010B	ND		1
Total Thallium	ND	ug/L	100	24	EPA-6010B	ND		1
Total Vanadium	340	ug/L	10	2.2	EPA-6010B	ND		1
Total Zinc	310	ug/L	50	2.3	EPA-6010B	3.2		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/16/15	06/17/15 09:17	ARD	PE-OP3	1	BYF1496
2	EPA-7470A	06/08/15	06/10/15 12:20	MEV	CETAC1	1	BYF0728



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Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

BCL Sample ID: 1513590-08 Client Sample Name: KA-41-D, 6/2/2015 11:15:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016	ND	ug/L	0.20	0.045	EPA-8082	ND		1
PCB-1221	ND	ug/L	0.20	0.070	EPA-8082	ND		1
PCB-1232	ND	ug/L	0.20	0.081	EPA-8082	ND		1
PCB-1242	ND	ug/L	0.20	0.065	EPA-8082	ND		1
PCB-1248	ND	ug/L	0.20	0.085	EPA-8082	ND		1
PCB-1254	ND	ug/L	0.20	0.077	EPA-8082	ND		1
PCB-1260	ND	ug/L	0.20	0.060	EPA-8082	ND		1
Total PCB's (Summation)	ND	ug/L	0.20	0.10	EPA-8082	ND		1
Decachlorobiphenyl (Surrogate)	65.0	%	30 - 120 (LCL - UCL)		EPA-8082			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/08/15	06/10/15 14:35	ZZZ	GC-15	1	BYF0940



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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1513590-08	Client Sample Name:	KA-41-D, 6/2/2015 11:15:00AM, Seng Lo 11075					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
<b>Bromodichloromethane</b>	<b>0.30</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.14</b>	<b>EPA-8260B</b>	ND	<b>J</b>	<b>1</b>
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
<b>Chloroform</b>	<b>4.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-8260B</b>	ND		<b>1</b>
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260B	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	ug/L	1.0	0.23	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260B	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1



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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513590-08		Client Sample Name: KA-41-D, 6/2/2015 11:15:00AM, Seng Lo 11075						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quats	Run #
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	ug/L	1.0	0.21	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Methyl tbutyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Trichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>10</b>	<b>ug/L</b>	<b>50</b>	<b>7.2</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>J</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	99.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1



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Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

**BCL Sample ID:** 1513590-08      **Client Sample Name:** KA-41-D, 6/2/2015 11:15:00AM, Seng Lo 11075

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8260B	06/05/15	06/08/15 12:35	MGC	MS-V5	1	BYF0504

QC





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Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1513590-08	Client Sample Name:	KA-41-D, 6/2/2015 11:15:00AM, Seng Lo 11075				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
Acenaphthene	ND	ug/L	2.0	0.24	EPA-8270C	ND		1	
Acenaphthylene	ND	ug/L	2.0	0.28	EPA-8270C	ND		1	
Aldrin	ND	ug/L	2.0	0.35	EPA-8270C	ND		1	
Aniline	ND	ug/L	5.0	0.69	EPA-8270C	ND		1	
Anthracene	ND	ug/L	2.0	0.30	EPA-8270C	ND		1	
Benzidine	ND	ug/L	20	7.1	EPA-8270C	ND		1	
Benzofluranthracene	ND	ug/L	2.0	0.38	EPA-8270C	ND		1	
Benzofluoranthene	ND	ug/L	2.0	0.41	EPA-8270C	ND		1	
Benzoflpyrene	ND	ug/L	2.0	0.31	EPA-8270C	ND		1	
Benzoflpyrene	ND	ug/L	2.0	0.20	EPA-8270C	ND		1	
Benzoflgh.jlpyrene	ND	ug/L	2.0	0.22	EPA-8270C	ND		1	
Benzoic acid	ND	ug/L	10	5.8	EPA-8270C	ND		1	
Benzyl alcohol	ND	ug/L	2.0	0.34	EPA-8270C	ND		1	
Benzyl butyl phthalate	ND	ug/L	2.0	0.47	EPA-8270C	ND		1	
alpha-BHC	ND	ug/L	2.0	0.27	EPA-8270C	ND		1	
beta-BHC	ND	ug/L	2.0	0.27	EPA-8270C	ND		1	
delta-BHC	ND	ug/L	2.0	0.30	EPA-8270C	ND		1	
gamma-BHC (Lindane)	ND	ug/L	2.0	0.22	EPA-8270C	ND		1	
bis(2-Chloroethoxy)methane	ND	ug/L	2.0	0.27	EPA-8270C	ND		1	
bis(2-Chloroethyl) ether	ND	ug/L	2.0	0.68	EPA-8270C	ND		1	
bis(2-Chloroisopropyl)ether	ND	ug/L	2.0	0.30	EPA-8270C	ND		1	
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.0	3.0	EPA-8270C	ND		1	
4-Bromophenyl phenyl ether	ND	ug/L	2.0	0.23	EPA-8270C	ND		1	
4-Chloroaniline	ND	ug/L	2.0	0.69	EPA-8270C	ND		1	
2-Chloronaphthalene	ND	ug/L	2.0	0.34	EPA-8270C	ND		1	
4-Chlorophenyl phenyl ether	ND	ug/L	2.0	0.23	EPA-8270C	ND		1	
Chrysene	ND	ug/L	2.0	0.63	EPA-8270C	ND		1	
4,4'-DDD	ND	ug/L	2.0	0.48	EPA-8270C	ND		1	
4,4'-DDE	ND	ug/L	3.0	0.41	EPA-8270C	ND		1	
4,4'-DDT	ND	ug/L	2.0	0.43	EPA-8270C	ND		1	
Dibenzofl.a.hanthracene	ND	ug/L	3.0	0.26	EPA-8270C	ND		1	
Dibenzofluran	ND	ug/L	2.0	0.21	EPA-8270C	ND		1	
1,2-Dichlorobenzene	ND	ug/L	2.0	0.37	EPA-8270C	ND		1	



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**Reported:** 06/23/2015 13:50  
**Project:** 138810  
**Project Number:** [none]  
**Project Manager:** Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1513590-08	Client Sample Name:	KA-41-D, 6/2/2015 11:15:00AM, Seng Lo 11075					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene	ND	ug/L	2.0	0.35	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	ug/L	2.0	0.31	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	ug/L	10	8.2	EPA-8270C	ND		1
Dieldrin	ND	ug/L	3.0	0.41	EPA-8270C	ND		1
Diethyl phthalate	ND	ug/L	2.0	0.33	EPA-8270C	ND		1
Dimethyl phthalate	ND	ug/L	2.0	0.39	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	ug/L	2.0	0.39	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	ug/L	2.0	0.26	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	ug/L	2.0	0.41	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	ug/L	2.0	0.46	EPA-8270C	ND		1
1,2-Diphenylhydrazine	ND	ug/L	2.0	0.34	EPA-8270C	ND		1
Endosulfan I	ND	ug/L	10	1.7	EPA-8270C	ND		1
Endosulfan II	ND	ug/L	10	1.2	EPA-8270C	ND		1
Endosulfan sulfate	ND	ug/L	3.0	0.58	EPA-8270C	ND		1
Endrin	ND	ug/L	2.0	1.1	EPA-8270C	ND		1
Endrin aldehyde	ND	ug/L	10	0.52	EPA-8270C	ND		1
Fluoranthene	ND	ug/L	2.0	0.20	EPA-8270C	ND		1
Fluorene	ND	ug/L	2.0	0.28	EPA-8270C	ND		1
Heptachlor	ND	ug/L	2.0	0.32	EPA-8270C	ND		1
Heptachlor epoxide	ND	ug/L	2.0	0.27	EPA-8270C	ND		1
Hexachlorobenzene	ND	ug/L	2.0	0.20	EPA-8270C	ND		1
Hexachlorobutadiene	ND	ug/L	2.0	0.24	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	ug/L	2.0	0.30	EPA-8270C	ND		1
Hexachloroethane	ND	ug/L	2.0	0.32	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	2.0	0.26	EPA-8270C	ND		1
Isophorone	ND	ug/L	2.0	0.31	EPA-8270C	ND		1
2-Methylnaphthalene	ND	ug/L	2.0	0.28	EPA-8270C	ND		1
Naphthalene	ND	ug/L	2.0	0.21	EPA-8270C	ND		1
2-Naphthylamine	ND	ug/L	20	4.8	EPA-8270C	ND		1
2-Nitroaniline	ND	ug/L	2.0	0.33	EPA-8270C	ND		1
3-Nitroaniline	ND	ug/L	2.0	0.66	EPA-8270C	ND		1
4-Nitroaniline	ND	ug/L	5.0	0.87	EPA-8270C	ND		1
Nitrobenzene	ND	ug/L	2.0	0.26	EPA-8270C	ND		1



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**Reported:** 06/23/2015 13:50  
Project: 138810  
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Project Manager: Sue Gardner

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1513590-08	Client Sample Name:	KA-41-D, 6/2/2015 11:15:00AM, Seng Lo 11075					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	ND	ug/L	2.0	0.61	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	ug/L	2.0	1.3	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	ug/L	2.0	0.44	EPA-8270C	ND		1
Phenanthrene	ND	ug/L	2.0	0.20	EPA-8270C	ND		1
Pyrene	ND	ug/L	2.0	0.26	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	2.0	0.27	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	ug/L	5.0	0.40	EPA-8270C	ND		1
2-Chlorophenol	ND	ug/L	2.0	0.37	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	ug/L	2.0	0.43	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	ug/L	2.0	0.20	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	ug/L	10	0.34	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	ug/L	10	0.20	EPA-8270C	ND		1
2-Methylphenol	ND	ug/L	2.0	1.0	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	ug/L	2.0	1.6	EPA-8270C	ND		1
2-Nitrophenol	ND	ug/L	2.0	0.28	EPA-8270C	ND		1
4-Nitrophenol	ND	ug/L	2.0	0.73	EPA-8270C	ND		1
Pentachlorophenol	ND	ug/L	10	0.79	EPA-8270C	ND		1
Phenol	ND	ug/L	2.0	0.20	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	ug/L	5.0	0.31	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	ug/L	5.0	0.60	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	39.4	%	30 - 120 (LCL - UCL)		EPA-8270C			1
Phenol-d5 (Surrogate)	40.9	%	12 - 110 (LCL - UCL)		EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	100	%	50 - 130 (LCL - UCL)		EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	68.5	%	55 - 125 (LCL - UCL)		EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	72.3	%	40 - 150 (LCL - UCL)		EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	108	%	40 - 150 (LCL - UCL)		EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	06/08/15	06/10/15 18:54	VH1	MS-B1	0.970	BYF0846



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Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b>	1513590-08	<b>Client Sample Name:</b>	KA-4-1-D, 6/2/2015 11:15:00AM, Seng Lo 11075						
<b>Constituent</b>		<b>Result</b>	<b>Units</b>	<b>PQL</b>	<b>MDL</b>	<b>Method</b>	<b>MB Bias</b>	<b>Lab Quals</b>	<b>Run #</b>
TPH - Diesel (FFP)		ND	ug/L	200	34	EPA-8015B/FFP	ND		1
TPH - Motor Oil		ND	ug/L	500	66	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)		42.6	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/08/15	06/10/15 09:26	MWB	GC-13	1	BYF0754



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Project Manager: Sue Gardner

### EPA Method 1664

**BCL Sample ID:** 1513590-08      **Client Sample Name:** KA-41-D, 6/2/2015 11:15:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/L	5.0	1.7	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/09/15	06/09/15 08:40	MAM	MAN-SV	1	BYF1187



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Metals Analysis

BCL Sample ID: 1513590-08 Client Sample Name: KA-41-D, 6/2/2015 11:15:00AM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Antimony	ND	ug/L	100	8.5	EPA-6010B	ND		1
Total Arsenic	52	ug/L	50	7.8	EPA-6010B	ND		1
Total Barium	2100	ug/L	10	3.5	EPA-6010B	ND		1
Total Beryllium	6.5	ug/L	10	0.50	EPA-6010B	ND	J	1
Total Cadmium	1.2	ug/L	10	1.1	EPA-6010B	ND	J	1
Total Chromium	280	ug/L	10	1.1	EPA-6010B	ND		1
Total Cobalt	100	ug/L	50	1.3	EPA-6010B	ND		1
Total Copper	200	ug/L	10	1.1	EPA-6010B	2.8		1
Total Lead	71	ug/L	50	4.0	EPA-6010B	ND		1
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
Total Molybdenum	8.6	ug/L	50	1.2	EPA-6010B	1.7	J	1
Total Nickel	450	ug/L	10	2.0	EPA-6010B	ND		1
Total Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
Total Silver	ND	ug/L	10	1.9	EPA-6010B	ND		1
Total Thallium	ND	ug/L	100	24	EPA-6010B	ND		1
Total Vanadium	420	ug/L	10	2.2	EPA-6010B	ND		1
Total Zinc	540	ug/L	50	2.3	EPA-6010B	3.2		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/16/15	06/17/15 09:26	ARD	PE-OP3	1	BYF1496
2	EPA-7470A	06/08/15	06/10/15 12:22	MEV	CETAC1	1	BYF0728



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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### PCB Analysis (EPA Method 8082)

<b>BCL Sample ID:</b> 1513590-09	<b>Client Sample Name:</b> KA-42-D, 6/2/2015 12:40:00PM, Seng Lo 11075
<b>Constituent</b>	<b>Result</b> <b>Units</b> <b>PQL</b> <b>MDL</b> <b>Method</b> <b>MB Bias</b> <b>Lab Quals</b> <b>Run #</b>
PCB-1016	ND    ug/L    0.20    0.045    EPA-8082    ND          1
PCB-1221	ND    ug/L    0.20    0.070    EPA-8082    ND          1
PCB-1232	ND    ug/L    0.20    0.081    EPA-8082    ND          1
PCB-1242	ND    ug/L    0.20    0.065    EPA-8082    ND          1
PCB-1248	ND    ug/L    0.20    0.085    EPA-8082    ND          1
PCB-1254	ND    ug/L    0.20    0.077    EPA-8082    ND          1
PCB-1260	ND    ug/L    0.20    0.060    EPA-8082    ND          1
Total PCB's (Summation)	ND    ug/L    0.20    0.10    EPA-8082    ND          1
Decachlorobiphenyl (Surrogate)	43.3    %    30 - 120 (LCL - UCL)    EPA-8082                1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8082	06/08/15	06/10/15 14:46	ZZZ	GC-15	1	BYF0940



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1513590-09	Client Sample Name:	KA-42-D, 6/2/2015 12:40:00PM, Seng Lo 11075					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
<b>Chloroform</b>	<b>0.63</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-8260B</b>	ND		<b>1</b>
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260B	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethane	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	ug/L	1.0	0.23	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260B	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1





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Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1513590-09	Client Sample Name:	KA-42-D, 6/2/2015 12:40:00PM, Seng Lo 11075				MB	Lab	Run #
Constituent	Result	Units	PQL	MDL	Method	Bias	Quals		
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1	
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1	
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1	
Total 1,3-Dichloropropene	ND	ug/L	1.0	0.21	EPA-8260B	ND		1	
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1	
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260B	ND		1	
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1	
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1	
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1	
Methyl tbutyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1	
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1	
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1	
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1	
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1	
<b>Tetrachloroethene</b>	<b>0.18</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-8260B</b>	ND	<b>J</b>	<b>1</b>	
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1	
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260B	ND		1	
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260B	ND		1	
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1	
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1	
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1	
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1	
1,1,2-Trichloro-1,2,2-tifluoroethane	ND	ug/L	0.50	0.15	EPA-8260B	ND		1	
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1	
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1	
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1	
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	7.2	Luft-GC/MS	ND		1	
1,2-Dichloroethane-d4 (Surrogate)	98.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1	
Toluene-d8 (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1	
4-Bromofluorobenzene (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1	



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Project Number: [none]  
Project Manager: Sue Gardner

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1513590-09 Client Sample Name: KA-42-D, 6/2/2015 12:40:00PM, Seng Lo 11075

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8260B	06/05/15	06/08/15 15:37	MGC	MS-V5	1	BYF0504

QC



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### Total Petroleum Hydrocarbons

<b>BCL Sample ID:</b>	1513590-09	<b>Client Sample Name:</b>	KA-42-D, 6/2/2015 12:40:00PM, Seng Lo 11075					
<b>Constituent</b>	<b>Result</b>	<b>Units</b>	<b>PQL</b>	<b>MDL</b>	<b>Method</b>	<b>MB Bias</b>	<b>Lab Quals</b>	<b>Run #</b>
TPH - Diesel (FFP)	330	ug/L	200	34	EPA-8015B/FFP	ND	A52	1
TPH - Motor Oil	470	ug/L	500	66	EPA-8015B/FFP	ND	JA57	1
Tetracosane (Surrogate)	62.9	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/08/15	06/10/15 09:49	MWB	GC-13	1	BYF0754



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### EPA Method 1664

**BCL Sample ID:** 1513590-09      **Client Sample Name:** KA-42-D, 6/2/2015 12:40:00PM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/L	5.0	1.7	EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	06/09/15	06/09/15 08:40	MAM	MAN-SV	1	BYF-1187



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**Project Manager:** Sue Gardner

### Metals Analysis

**BCL Sample ID:** 1513590-09 **Client Sample Name:** KA-42-D, 6/2/2015 12:40:00PM, Seng Lo 11075

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Antimony	ND	ug/L	100	8.5	EPA-6010B	ND		1
<b>Total Arsenic</b>	<b>130</b>	<b>ug/L</b>	<b>50</b>	<b>7.8</b>	<b>EPA-6010B</b>	<b>ND</b>		<b>1</b>
<b>Total Barium</b>	<b>3900</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	<b>ND</b>		<b>1</b>
<b>Total Beryllium</b>	<b>13</b>	<b>ug/L</b>	<b>10</b>	<b>0.50</b>	<b>EPA-6010B</b>	<b>ND</b>		<b>1</b>
Total Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
<b>Total Chromium</b>	<b>770</b>	<b>ug/L</b>	<b>10</b>	<b>1.1</b>	<b>EPA-6010B</b>	<b>ND</b>		<b>1</b>
<b>Total Cobalt</b>	<b>290</b>	<b>ug/L</b>	<b>50</b>	<b>1.3</b>	<b>EPA-6010B</b>	<b>ND</b>		<b>1</b>
<b>Total Copper</b>	<b>580</b>	<b>ug/L</b>	<b>10</b>	<b>1.1</b>	<b>EPA-6010B</b>	<b>2.8</b>		<b>1</b>
<b>Total Lead</b>	<b>150</b>	<b>ug/L</b>	<b>50</b>	<b>4.0</b>	<b>EPA-6010B</b>	<b>ND</b>		<b>1</b>
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
Total Molybdenum	ND	ug/L	50	1.2	EPA-6010B	1.7		1
<b>Total Nickel</b>	<b>1100</b>	<b>ug/L</b>	<b>10</b>	<b>2.0</b>	<b>EPA-6010B</b>	<b>ND</b>		<b>1</b>
Total Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
Total Silver	ND	ug/L	10	1.9	EPA-6010B	ND		1
Total Thallium	ND	ug/L	100	24	EPA-6010B	ND		1
<b>Total Vanadium</b>	<b>1200</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	<b>ND</b>		<b>1</b>
<b>Total Zinc</b>	<b>1300</b>	<b>ug/L</b>	<b>50</b>	<b>2.3</b>	<b>EPA-6010B</b>	<b>3.2</b>		<b>1</b>

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/16/15	06/17/15 09:27	ARD	PE-OP3	1	BYF1496
2	EPA-7470A	06/08/15	06/10/15 12:25	MEV	CETAC1	1	BYF0728



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### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0940</b>						
PCB-1016	BYF0940-BLK1	ND	ug/L	0.20	0.045	
PCB-1221	BYF0940-BLK1	ND	ug/L	0.20	0.070	
PCB-1232	BYF0940-BLK1	ND	ug/L	0.20	0.081	
PCB-1242	BYF0940-BLK1	ND	ug/L	0.20	0.065	
PCB-1248	BYF0940-BLK1	ND	ug/L	0.20	0.085	
PCB-1254	BYF0940-BLK1	ND	ug/L	0.20	0.077	
PCB-1260	BYF0940-BLK1	ND	ug/L	0.20	0.060	
Total PCBs (Summation)	BYF0940-BLK1	ND	ug/L	0.20	0.10	
Decachlorobiphenyl (Surrogate)	BYF0940-BLK1	58.3	%	30 - 120 (LCL - UCL)		



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### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	Percent Recovery	
<b>QC Batch ID: BYF0940</b>									
PCB-1016	BYF0940-BS1	LCS	2.0600	2.5000	ug/L	82.4		60 - 120	
PCB-1260	BYF0940-BS1	LCS	2.0000	2.5000	ug/L	80.0		60 - 130	
Decachlorobiphenyl (Surrogate)	BYF0940-BS1	LCS	0.37000	0.60000	ug/L	61.7		30 - 120	



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### PCB Analysis (EPA Method 8082)

#### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits	
								Percent Recovery	RPD
<b>QC Batch ID: BYF0940</b>									
PCB-1016	MS	1511019-90	ND	2.3100	2.5000	ug/L		92.4	60 - 120
	MSD	1511019-90	ND	2.1300	2.5000	ug/L	8.1	85.2	30 - 120
PCB-1260	MS	1511019-90	ND	2.3300	2.5000	ug/L		93.2	60 - 130
	MSD	1511019-90	ND	2.0600	2.5000	ug/L	12.3	82.4	30 - 130
Decachlorobiphenyl (Surrogate)	MS	1511019-90	ND	0.46000	0.60000	ug/L		76.7	30 - 120
	MSD	1511019-90	ND	0.39000	0.60000	ug/L	16.5	65.0	30 - 120





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## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0504</b>						
Benzene	BYF0504-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BYF0504-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BYF0504-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BYF0504-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BYF0504-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BYF0504-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BYF0504-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BYF0504-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BYF0504-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BYF0504-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BYF0504-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BYF0504-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BYF0504-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BYF0504-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BYF0504-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BYF0504-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BYF0504-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BYF0504-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BYF0504-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BYF0504-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BYF0504-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BYF0504-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BYF0504-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BYF0504-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BYF0504-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BYF0504-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BYF0504-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BYF0504-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BYF0504-BLK1	ND	ug/L	0.50	0.15	
Total 1,2-Dichloroethene	BYF0504-BLK1	ND	ug/L	1.0	0.23	
1,2-Dichloropropane	BYF0504-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BYF0504-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BYF0504-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BYF0504-BLK1	ND	ug/L	0.50	0.085	



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## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0504</b>						
cis-1,3-Dichloropropene	BYF0504-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BYF0504-BLK1	ND	ug/L	0.50	0.079	
Total 1,3-Dichloropropene	BYF0504-BLK1	ND	ug/L	1.0	0.21	
Ethylbenzene	BYF0504-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BYF0504-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BYF0504-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BYF0504-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BYF0504-BLK1	ND	ug/L	1.0	0.48	
Methyl t-butyl ether	BYF0504-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BYF0504-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BYF0504-BLK1	ND	ug/L	0.50	0.11	
Styrene	BYF0504-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BYF0504-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BYF0504-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BYF0504-BLK1	ND	ug/L	0.50	0.13	
Toluene	BYF0504-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BYF0504-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BYF0504-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BYF0504-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BYF0504-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BYF0504-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BYF0504-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BYF0504-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BYF0504-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BYF0504-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BYF0504-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BYF0504-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BYF0504-BLK1	ND	ug/L	1.0	0.36	
Total Purgeable Petroleum Hydrocarbons	BYF0504-BLK1	ND	ug/L	50	7.2	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYF0504-BLK1</b>	<b>93.5</b>	<b>%</b>	<b>75 - 125 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYF0504-BLK1</b>	<b>96.7</b>	<b>%</b>	<b>80 - 120 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYF0504-BLK1</b>	<b>97.5</b>	<b>%</b>	<b>80 - 120 (LCL - UCL)</b>		



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### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quats
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0504</b>										
Benzene	BYF0504-BS1	LCS	22.750	25,000	ug/L	91.0		70	- 130	
Bromodichloromethane	BYF0504-BS1	LCS	25.240	25,000	ug/L	101		70	- 130	
Chlorobenzene	BYF0504-BS1	LCS	24.110	25,000	ug/L	96.4		70	- 130	
Chloroethane	BYF0504-BS1	LCS	22.910	25,000	ug/L	91.6		70	- 130	
1,4-Dichlorobenzene	BYF0504-BS1	LCS	23.860	25,000	ug/L	95.4		70	- 130	
1,1-Dichloroethane	BYF0504-BS1	LCS	23.220	25,000	ug/L	92.9		70	- 130	
1,1-Dichloroethene	BYF0504-BS1	LCS	24.940	25,000	ug/L	99.8		70	- 130	
Toluene	BYF0504-BS1	LCS	25.590	25,000	ug/L	102		70	- 130	
Trichloroethene	BYF0504-BS1	LCS	29.860	25,000	ug/L	119		70	- 130	
1,2-Dichloroethane-d4 (Surrogate)	BYF0504-BS1	LCS	8.9600	10,000	ug/L	89.6		75	- 125	
Toluene-d8 (Surrogate)	BYF0504-BS1	LCS	10.180	10,000	ug/L	102		80	- 120	
4-Bromofluorobenzene (Surrogate)	BYF0504-BS1	LCS	9.2100	10,000	ug/L	92.1		80	- 120	



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## Volatile Organic Analysis (EPA Method 8260B)

### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYF0504</b>										
Used client sample: N										
Benzene	MS	1513316-02	ND	23.430	25.000	ug/L		93.7		70 - 130
	MSD	1513316-02	ND	23.740	25.000	ug/L	1.3	95.0	20	70 - 130
Bromodichloromethane	MS	1513316-02	ND	26.090	25.000	ug/L		104		70 - 130
	MSD	1513316-02	ND	25.220	25.000	ug/L	3.4	101	20	70 - 130
Chlorobenzene	MS	1513316-02	ND	25.110	25.000	ug/L		100		70 - 130
	MSD	1513316-02	ND	25.490	25.000	ug/L	1.5	102	20	70 - 130
Chloroethane	MS	1513316-02	ND	23.560	25.000	ug/L		94.2		70 - 130
	MSD	1513316-02	ND	23.800	25.000	ug/L	1.0	95.2	20	70 - 130
1,4-Dichlorobenzene	MS	1513316-02	ND	25.360	25.000	ug/L		101		70 - 130
	MSD	1513316-02	ND	25.310	25.000	ug/L	0.2	101	20	70 - 130
1,1-Dichloroethane	MS	1513316-02	ND	24.030	25.000	ug/L		96.1		70 - 130
	MSD	1513316-02	ND	24.310	25.000	ug/L	1.2	97.2	20	70 - 130
1,1-Dichloroethene	MS	1513316-02	ND	25.530	25.000	ug/L		102		70 - 130
	MSD	1513316-02	ND	25.660	25.000	ug/L	0.5	103	20	70 - 130
Toluene	MS	1513316-02	ND	25.240	25.000	ug/L		101		70 - 130
	MSD	1513316-02	ND	24.760	25.000	ug/L	1.9	99.0	20	70 - 130
Trichloroethene	MS	1513316-02	ND	26.280	25.000	ug/L		105		70 - 130
	MSD	1513316-02	ND	25.380	25.000	ug/L	3.5	102	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1513316-02	ND	9.0700	10.000	ug/L		90.7		75 - 125
	MSD	1513316-02	ND	9.1400	10.000	ug/L	0.8	91.4		75 - 125
Toluene-d8 (Surrogate)	MS	1513316-02	ND	9.9000	10.000	ug/L		99.0		80 - 120
	MSD	1513316-02	ND	9.8200	10.000	ug/L	0.8	98.2		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1513316-02	ND	9.8000	10.000	ug/L		98.0		80 - 120
	MSD	1513316-02	ND	9.9000	10.000	ug/L	1.0	99.0		80 - 120



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Project Manager: Sue Gardner

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0846</b>						
Acenaphthene	BYF0846-BLK1	ND	ug/L	2.0	0.24	
Acenaphthylene	BYF0846-BLK1	ND	ug/L	2.0	0.28	
Aldrin	BYF0846-BLK1	ND	ug/L	2.0	0.35	
Aniline	BYF0846-BLK1	ND	ug/L	5.0	0.69	
Anthracene	BYF0846-BLK1	ND	ug/L	2.0	0.30	
Benzidine	BYF0846-BLK1	ND	ug/L	20	7.1	
Benzol[a]anthracene	BYF0846-BLK1	ND	ug/L	2.0	0.38	
Benzol[b]fluoranthene	BYF0846-BLK1	ND	ug/L	2.0	0.41	
Benzol[k]fluoranthene	BYF0846-BLK1	ND	ug/L	2.0	0.31	
Benzol[a]pyrene	BYF0846-BLK1	ND	ug/L	2.0	0.20	
Benzol[g,h,i]perylene	BYF0846-BLK1	ND	ug/L	2.0	0.22	
Benzoic acid	BYF0846-BLK1	ND	ug/L	10	5.8	
Benzyl alcohol	BYF0846-BLK1	ND	ug/L	2.0	0.34	
Benzyl butyl phthalate	BYF0846-BLK1	ND	ug/L	2.0	0.47	
alpha-BHC	BYF0846-BLK1	ND	ug/L	2.0	0.27	
beta-BHC	BYF0846-BLK1	ND	ug/L	2.0	0.27	
delta-BHC	BYF0846-BLK1	ND	ug/L	2.0	0.30	
gamma-BHC (Lindane)	BYF0846-BLK1	ND	ug/L	2.0	0.22	
bis(2-Chloroethoxy)methane	BYF0846-BLK1	ND	ug/L	2.0	0.27	
bis(2-Chloroethyl) ether	BYF0846-BLK1	ND	ug/L	2.0	0.68	
bis(2-Chloroisopropyl) ether	BYF0846-BLK1	ND	ug/L	2.0	0.30	
bis(2-Ethylhexyl)phthalate	BYF0846-BLK1	ND	ug/L	5.0	3.0	
4-Bromophenyl phenyl ether	BYF0846-BLK1	ND	ug/L	2.0	0.23	
4-Chloroaniline	BYF0846-BLK1	ND	ug/L	2.0	0.69	
2-Chloronaphthalene	BYF0846-BLK1	ND	ug/L	2.0	0.34	
4-Chlorophenyl phenyl ether	BYF0846-BLK1	ND	ug/L	2.0	0.23	
Chrysene	BYF0846-BLK1	ND	ug/L	2.0	0.63	
4,4'-DDD	BYF0846-BLK1	ND	ug/L	2.0	0.48	
4,4'-DDE	BYF0846-BLK1	ND	ug/L	3.0	0.41	
4,4'-DDT	BYF0846-BLK1	ND	ug/L	2.0	0.43	
Dibenz[a,h]anthracene	BYF0846-BLK1	ND	ug/L	3.0	0.26	
Dibenzofuran	BYF0846-BLK1	ND	ug/L	2.0	0.21	
1,2-Dichlorobenzene	BYF0846-BLK1	ND	ug/L	2.0	0.37	
1,3-Dichlorobenzene	BYF0846-BLK1	ND	ug/L	2.0	0.35	



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0846</b>						
1,4-Dichlorobenzene	BYF0846-BLK1	ND	ug/L	2.0	0.31	
3,3-Dichlorobenzidine	BYF0846-BLK1	ND	ug/L	10	8.2	
Dieldrin	BYF0846-BLK1	ND	ug/L	3.0	0.41	
Diethyl phthalate	BYF0846-BLK1	ND	ug/L	2.0	0.33	
Dimethyl phthalate	BYF0846-BLK1	ND	ug/L	2.0	0.39	
Di-n-butyl phthalate	BYF0846-BLK1	ND	ug/L	2.0	0.39	
2,4-Dinitrotoluene	BYF0846-BLK1	ND	ug/L	2.0	0.26	
2,6-Dinitrotoluene	BYF0846-BLK1	ND	ug/L	2.0	0.41	
Di-n-octyl phthalate	BYF0846-BLK1	ND	ug/L	2.0	0.46	
1,2-Diphenylhydrazine	BYF0846-BLK1	ND	ug/L	2.0	0.34	
Endosulfan I	BYF0846-BLK1	ND	ug/L	10	1.7	
Endosulfan II	BYF0846-BLK1	ND	ug/L	10	1.2	
Endosulfan sulfate	BYF0846-BLK1	ND	ug/L	3.0	0.58	
Endrin	BYF0846-BLK1	ND	ug/L	2.0	1.1	
Endrin aldehyde	BYF0846-BLK1	ND	ug/L	10	0.52	
Fluoranthene	BYF0846-BLK1	ND	ug/L	2.0	0.20	
Fluorene	BYF0846-BLK1	ND	ug/L	2.0	0.28	
Heptachlor	BYF0846-BLK1	ND	ug/L	2.0	0.32	
Heptachlor epoxide	BYF0846-BLK1	ND	ug/L	2.0	0.27	
Hexachlorobenzene	BYF0846-BLK1	ND	ug/L	2.0	0.20	
Hexachlorobutadiene	BYF0846-BLK1	ND	ug/L	2.0	0.24	
Hexachlorocyclopentadiene	BYF0846-BLK1	ND	ug/L	2.0	0.30	
Hexachloroethane	BYF0846-BLK1	ND	ug/L	2.0	0.32	
Indeno[1,2,3-cd]pyrene	BYF0846-BLK1	ND	ug/L	2.0	0.26	
Isophorone	BYF0846-BLK1	ND	ug/L	2.0	0.31	
2-Methylnaphthalene	BYF0846-BLK1	ND	ug/L	2.0	0.28	
Naphthalene	BYF0846-BLK1	ND	ug/L	2.0	0.21	
2-Naphthylamine	BYF0846-BLK1	ND	ug/L	20	4.8	
2-Nitroaniline	BYF0846-BLK1	ND	ug/L	2.0	0.33	
3-Nitroaniline	BYF0846-BLK1	ND	ug/L	2.0	0.66	
4-Nitroaniline	BYF0846-BLK1	ND	ug/L	5.0	0.87	
Nitrobenzene	BYF0846-BLK1	ND	ug/L	2.0	0.26	
N-Nitrosodimethylamine	BYF0846-BLK1	ND	ug/L	2.0	0.61	
N-Nitrosodi-N-propylamine	BYF0846-BLK1	ND	ug/L	2.0	1.3	



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**Project Manager:** Sue Gardner

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0846</b>						
N-Nitrosodiphenylamine	BYF0846-BLK1	ND	ug/L	2.0	0.44	
Phenanthrene	BYF0846-BLK1	ND	ug/L	2.0	0.20	
Pyrene	BYF0846-BLK1	ND	ug/L	2.0	0.26	
1,2,4-Trichlorobenzene	BYF0846-BLK1	ND	ug/L	2.0	0.27	
4-Chloro-3-methylphenol	BYF0846-BLK1	ND	ug/L	5.0	0.40	
2-Chlorophenol	BYF0846-BLK1	ND	ug/L	2.0	0.37	
2,4-Dichlorophenol	BYF0846-BLK1	ND	ug/L	2.0	0.43	
2,4-Dimethylphenol	BYF0846-BLK1	ND	ug/L	2.0	0.20	
4,6-Dinitro-2-methylphenol	BYF0846-BLK1	ND	ug/L	10	0.34	
2,4-Dinitrophenol	BYF0846-BLK1	ND	ug/L	10	0.20	
2-Methylphenol	BYF0846-BLK1	ND	ug/L	2.0	1.0	
3- & 4-Methylphenol	BYF0846-BLK1	ND	ug/L	2.0	1.6	
2-Nitrophenol	BYF0846-BLK1	ND	ug/L	2.0	0.28	
4-Nitrophenol	BYF0846-BLK1	ND	ug/L	2.0	0.73	
Pentachlorophenol	BYF0846-BLK1	ND	ug/L	10	0.79	
Phenol	BYF0846-BLK1	ND	ug/L	2.0	0.20	
2,4,5-Trichlorophenol	BYF0846-BLK1	ND	ug/L	5.0	0.31	
2,4,6-Trichlorophenol	BYF0846-BLK1	ND	ug/L	5.0	0.60	
<b>2-Fluorophenol (Surrogate)</b>	<b>BYF0846-BLK1</b>	<b>62.5</b>	<b>%</b>	<b>30 - 120 (LCL - UCL)</b>		
<b>Phenol-d5 (Surrogate)</b>	<b>BYF0846-BLK1</b>	<b>49.0</b>	<b>%</b>	<b>12 - 110 (LCL - UCL)</b>		
<b>Nitrobenzene-d5 (Surrogate)</b>	<b>BYF0846-BLK1</b>	<b>101</b>	<b>%</b>	<b>50 - 130 (LCL - UCL)</b>		
<b>2-Fluorobiphenyl (Surrogate)</b>	<b>BYF0846-BLK1</b>	<b>67.9</b>	<b>%</b>	<b>55 - 125 (LCL - UCL)</b>		
<b>2,4,6-Tribromophenol (Surrogate)</b>	<b>BYF0846-BLK1</b>	<b>101</b>	<b>%</b>	<b>40 - 150 (LCL - UCL)</b>		
<b>p-Terphenyl-d14 (Surrogate)</b>	<b>BYF0846-BLK1</b>	<b>107</b>	<b>%</b>	<b>40 - 150 (LCL - UCL)</b>		



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**Project Manager:** Sue Gardner

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0846</b>										
Aceaphithene	BYF0846-BS1	LCS	39.670	50.000	ug/L	79.3		50 - 120		
1,4-Dichlorobenzene	BYF0846-BS1	LCS	39.060	50.000	ug/L	78.1		50 - 120		
2,4-Dinitrotoluene	BYF0846-BS1	LCS	41.460	50.000	ug/L	82.9		50 - 120		
Hexachlorobenzene	BYF0846-BS1	LCS	22.690	40.000	ug/L	56.7		60 - 120		L01
Hexachlorobutadiene	BYF0846-BS1	LCS	30.480	50.000	ug/L	61.0		40 - 110		
Hexachloroethane	BYF0846-BS1	LCS	39.600	50.000	ug/L	79.2		40 - 120		
Nitrobenzene	BYF0846-BS1	LCS	34.270	50.000	ug/L	68.5		50 - 120		
N-Nitrosodi-N-propylamine	BYF0846-BS1	LCS	36.270	50.000	ug/L	72.5		50 - 120		
Pyrene	BYF0846-BS1	LCS	52.940	50.000	ug/L	106		40 - 140		
1,2,4-Trichlorobenzene	BYF0846-BS1	LCS	34.560	50.000	ug/L	69.1		45 - 120		
4-Chloro-3-methylphenol	BYF0846-BS1	LCS	39.520	50.000	ug/L	79.0		50 - 120		
2-Chlorophenol	BYF0846-BS1	LCS	40.440	50.000	ug/L	80.9		50 - 120		
2-Methylphenol	BYF0846-BS1	LCS	38.240	50.000	ug/L	76.5		40 - 110		
3- & 4-Methylphenol	BYF0846-BS1	LCS	60.780	100.00	ug/L	60.8		40 - 110		
4-Nitrophenol	BYF0846-BS1	LCS	11.170	50.000	ug/L	22.3		10 - 110		
Pentachlorophenol	BYF0846-BS1	LCS	40.280	40.000	ug/L	101		30 - 120		
Phenol	BYF0846-BS1	LCS	17.480	50.000	ug/L	35.0		20 - 110		
2,4,6-Trichlorophenol	BYF0846-BS1	LCS	37.090	50.000	ug/L	74.2		54 - 120		
2-Fluorophenol (Surrogate)	BYF0846-BS1	LCS	38.880	80.000	ug/L	48.6		30 - 120		
Phenol-d5 (Surrogate)	BYF0846-BS1	LCS	29.770	80.000	ug/L	37.2		12 - 110		
Nitrobenzene-d5 (Surrogate)	BYF0846-BS1	LCS	62.520	80.000	ug/L	78.2		50 - 130		
2-Fluorobiphenyl (Surrogate)	BYF0846-BS1	LCS	53.550	80.000	ug/L	66.9		55 - 125		
2,4,6-Tribromophenol (Surrogate)	BYF0846-BS1	LCS	68.180	80.000	ug/L	85.2		40 - 150		
p-Terphenyl-d14 (Surrogate)	BYF0846-BS1	LCS	30.980	30.000	ug/L	103		40 - 150		





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### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quails
									RPD	Percent Recovery	
<b>QC Batch ID: BYF0846</b> Used client sample: N											
Acenaphthene	MS	1511019-65	ND	45.540	50.000	ug/L	18.9	91.1	50 - 120		
	MSD	1511019-65	ND	37.675	50.000	ug/L	18.9	75.3	30	50 - 120	
1,4-Dichlorobenzene	MS	1511019-65	ND	33.990	50.000	ug/L	4.1	68.0	47 - 120		
	MSD	1511019-65	ND	35.415	50.000	ug/L	4.1	70.8	30	47 - 120	
2,4-Dinitrotoluene	MS	1511019-65	ND	53.560	50.000	ug/L	18.8	107	50 - 130		
	MSD	1511019-65	ND	44.348	50.000	ug/L	18.8	88.7	30	50 - 130	
Hexachlorobenzene	MS	1511019-65	ND	27.690	40.000	ug/L	11.7	69.2	62 - 120		Q03
	MSD	1511019-65	ND	24.638	40.000	ug/L	11.7	61.6	30	62 - 120	Q03
Hexachlorobutadiene	MS	1511019-65	ND	18.540	50.000	ug/L	19.7	37.1	40 - 110		Q03
	MSD	1511019-65	ND	22.601	50.000	ug/L	19.7	45.2	30	40 - 110	
Hexachloroethane	MS	1511019-65	ND	26.830	50.000	ug/L	13.8	53.7	40 - 120		
	MSD	1511019-65	ND	30.798	50.000	ug/L	13.8	61.6	30	40 - 120	
Nitrobenzene	MS	1511019-65	ND	41.930	50.000	ug/L	12.7	83.9	50 - 120		
	MSD	1511019-65	ND	36.938	50.000	ug/L	12.7	73.9	30	50 - 120	
N-Nitrosodi-N-propylamine	MS	1511019-65	ND	28.680	50.000	ug/L	59.0	57.4	50 - 120		Q02, Q03
	MSD	1511019-65	ND	15.607	50.000	ug/L	59.0	31.2	30	50 - 120	Q03
Pyrene	MS	1511019-65	ND	56.850	50.000	ug/L	8.7	114	40 - 140		
	MSD	1511019-65	ND	52.108	50.000	ug/L	8.7	104	30	40 - 140	
1,2,4-Trichlorobenzene	MS	1511019-65	ND	28.930	50.000	ug/L	7.9	57.9	43 - 120		
	MSD	1511019-65	ND	31.321	50.000	ug/L	7.9	62.6	30	43 - 120	
4-Chloro-3-methylphenol	MS	1511019-65	ND	48.800	50.000	ug/L	15.1	97.6	50 - 120		
	MSD	1511019-65	ND	41.962	50.000	ug/L	15.1	83.9	30	50 - 120	
2-Chlorophenol	MS	1511019-65	ND	54.170	50.000	ug/L	15.9	108	50 - 120		
	MSD	1511019-65	ND	46.172	50.000	ug/L	15.9	92.3	30	50 - 120	
2-Methylphenol	MS	1511019-65	ND	52.070	50.000	ug/L	18.5	104	40 - 110		
	MSD	1511019-65	ND	43.262	50.000	ug/L	18.5	86.5	30	40 - 110	
3- & 4-Methylphenol	MS	1511019-65	ND	83.200	100.000	ug/L	16.4	83.2	40 - 110		
	MSD	1511019-65	ND	70.568	100.000	ug/L	16.4	70.6	30	40 - 110	
4-Nitrophenol	MS	1511019-65	ND	19.050	50.000	ug/L	15.1	38.1	10 - 110		
	MSD	1511019-65	ND	16.374	50.000	ug/L	15.1	32.7	30	10 - 110	
Pentachlorophenol	MS	1511019-65	ND	50.670	40.000	ug/L	11.4	127	30 - 120		Q03
	MSD	1511019-65	ND	45.212	40.000	ug/L	11.4	113	30	30 - 120	
Phenol	MS	1511019-65	ND	24.570	50.000	ug/L	20.8	49.1	20 - 110		
	MSD	1511019-65	ND	19.934	50.000	ug/L	20.8	39.9	30	20 - 110	
2,4,6-Trichlorophenol	MS	1511019-65	ND	45.890	50.000	ug/L	23.2	91.8	50 - 120		
	MSD	1511019-65	ND	36.336	50.000	ug/L	23.2	72.7	30	50 - 120	



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Project Manager: Sue Gardner

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYF0846</b>										
Used client sample: N										
2-Fluorophenol (Surrogate)	MS	1511019-65	ND	52.200	80.000	ug/L	16.5	65.2	30 - 120	
	MSD	1511019-65	ND	44.251	80.000	ug/L	16.5	55.3	30 - 120	
Phenol-d5 (Surrogate)	MS	1511019-65	ND	43.430	80.000	ug/L	19.7	54.3	12 - 110	
	MSD	1511019-65	ND	35.657	80.000	ug/L	19.7	44.6	12 - 110	
Nitrobenzene-d5 (Surrogate)	MS	1511019-65	ND	80.870	80.000	ug/L	18.2	101	50 - 130	
	MSD	1511019-65	ND	67.366	80.000	ug/L	18.2	84.2	50 - 130	
2-Fluorobiphenyl (Surrogate)	MS	1511019-65	ND	60.750	80.000	ug/L	20.0	75.9	55 - 125	
	MSD	1511019-65	ND	49.722	80.000	ug/L	20.0	62.2	55 - 125	
2,4,6-Tribromophenol (Surrogate)	MS	1511019-65	ND	84.060	80.000	ug/L	9.1	105	40 - 150	
	MSD	1511019-65	ND	76.717	80.000	ug/L	9.1	95.9	40 - 150	
p-Terphenyl-d14 (Surrogate)	MS	1511019-65	ND	35.170	30.000	ug/L	7.7	117	40 - 150	
	MSD	1511019-65	ND	32.563	30.000	ug/L	7.7	109	40 - 150	



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### Total Petroleum Hydrocarbons

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0754</b>						
TPH - Diesel (FFP)	BYF0754-BLK1	ND	ug/L	200	34	
TPH - Motor Oil	BYF0754-BLK1	ND	ug/L	500	66	
<b>Tetracosane (Surrogate)</b>	<b>BYF0754-BLK1</b>	<b>62.7</b>	<b>%</b>	<b>37 - 134 (LCL - UCL)</b>		



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### Total Petroleum Hydrocarbons

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	Percent Recovery	
<b>QC Batch ID: BYF0754</b>									
TPH - Diesel (FFP)	BYF0754-BS1	LCS	1790.4	2500.0	ug/L	71.6	52 - 128		
Tetracosane (Surrogate)	BYF0754-BS1	LCS	71.620	100.00	ug/L	71.6	37 - 134		



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### Total Petroleum Hydrocarbons

#### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits	
								Percent Recovery	RPD
<b>QC Batch ID: BYF0754</b>									
Used client sample: N									
TPH - Diesel (FFP)	MS	1511019-92	ND	2018.1	2500.0	ug/L	9.4	80.7	50 - 127
	MSD	1511019-92	ND	2218.2	2500.0	ug/L	9.4	88.7	24 - 50 - 127
Tetracosane (Surrogate)	MS	1511019-92	ND	77.415	100.00	ug/L	15.1	77.4	37 - 134
	MSD	1511019-92	ND	90.090	100.00	ug/L	15.1	90.1	37 - 134



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### EPA Method 1664

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Oil and Grease	BYF-1187-BLK1	ND	mg/L	5.0	1.7	



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### EPA Method 1664

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab
							RPD	RPD	
Oil and Grease	BYF1187-BS1	LCS	34.150	40.000	mg/L	85.4	78	114	

**QC Batch ID: BYF1187**



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6201 S Street/P. O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### EPA Method 1664

### Quality Control Report - Precision & Accuracy

Constituent	Source Type	Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits	
								Percent Recovery	RPD
<b>QC Batch ID: BYF1187</b>									
Used client sample: N									
Oil and Grease	DUP	1513836-03	ND	ND		mg/L		18	
	MS	1513836-03	ND	36.500	40.000	mg/L	91.2	78 - 114	
	MSD	1513836-03	ND	37.150	40.000	mg/L	1.8	92.9	18 78 - 114





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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Metals Analysis

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYF0728</b>						
Total Mercury	BYF0728-BLK1	ND	ug/L	0.20	0.033	
<b>QC Batch ID: BYF1496</b>						
Total Antimony	BYF1496-BLK1	ND	ug/L	100	8.5	
Total Arsenic	BYF1496-BLK1	ND	ug/L	50	7.8	
Total Barium	BYF1496-BLK1	ND	ug/L	10	3.5	
Total Beryllium	BYF1496-BLK1	ND	ug/L	10	0.50	
Total Cadmium	BYF1496-BLK1	ND	ug/L	10	1.1	
Total Chromium	BYF1496-BLK1	ND	ug/L	10	1.1	
Total Cobalt	BYF1496-BLK1	ND	ug/L	50	1.3	
<b>Total Copper</b>	<b>BYF1496-BLK1</b>	<b>2.7706</b>	<b>ug/L</b>	<b>10</b>	<b>1.1</b>	<b>J</b>
Total Lead	BYF1496-BLK1	ND	ug/L	50	4.0	
<b>Total Molybdenum</b>	<b>BYF1496-BLK1</b>	<b>1.7225</b>	<b>ug/L</b>	<b>50</b>	<b>1.2</b>	<b>J</b>
Total Nickel	BYF1496-BLK1	ND	ug/L	10	2.0	
Total Selenium	BYF1496-BLK1	ND	ug/L	100	15	
Total Silver	BYF1496-BLK1	ND	ug/L	10	1.9	
Total Thallium	BYF1496-BLK1	ND	ug/L	100	24	
Total Vanadium	BYF1496-BLK1	ND	ug/L	10	2.2	
<b>Total Zinc</b>	<b>BYF1496-BLK1</b>	<b>3.2362</b>	<b>ug/L</b>	<b>50</b>	<b>2.3</b>	<b>J</b>



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Metals Analysis

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYF0728</b>										
Total Mercury	BYF0728-BS1	LCS	0.89250	1.0000	ug/L	89.2		85	- 115	
<b>QC Batch ID: BYF1496</b>										
Total Antimony	BYF1496-BS1	LCS	392.59	400.00	ug/L	98.1		85	- 115	
Total Arsenic	BYF1496-BS1	LCS	187.92	200.00	ug/L	94.0		85	- 115	
Total Barium	BYF1496-BS1	LCS	395.97	400.00	ug/L	99.0		85	- 115	
Total Beryllium	BYF1496-BS1	LCS	191.45	200.00	ug/L	95.7		85	- 115	
Total Cadmium	BYF1496-BS1	LCS	203.19	200.00	ug/L	102		85	- 115	
Total Chromium	BYF1496-BS1	LCS	199.63	200.00	ug/L	99.8		85	- 115	
Total Cobalt	BYF1496-BS1	LCS	200.72	200.00	ug/L	100		85	- 115	
Total Copper	BYF1496-BS1	LCS	379.49	400.00	ug/L	94.9		85	- 115	
Total Lead	BYF1496-BS1	LCS	404.53	400.00	ug/L	101		85	- 115	
Total Molybdenum	BYF1496-BS1	LCS	202.71	200.00	ug/L	101		85	- 115	
Total Nickel	BYF1496-BS1	LCS	376.73	400.00	ug/L	94.2		85	- 115	
Total Selenium	BYF1496-BS1	LCS	197.98	200.00	ug/L	99.0		85	- 115	
Total Silver	BYF1496-BS1	LCS	97.642	100.00	ug/L	97.6		85	- 115	
Total Thallium	BYF1496-BS1	LCS	402.95	400.00	ug/L	101		85	- 115	
Total Vanadium	BYF1496-BS1	LCS	205.89	200.00	ug/L	103		85	- 115	
Total Zinc	BYF1496-BS1	LCS	487.11	500.00	ug/L	97.4		85	- 115	



### Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Source	Sample ID	Source Result	Result	Spike Added	Units	RPD	Recovery	Control Limits	
									RPD	Percent Recovery
QC Batch ID: BYF0728 Used client sample: Y - Description: KA-5-D, 06/01/2015 09:25										
Total Mercury	DUP	1513644-01	0.14500	ND		ug/L			20	
	MS	1513690-01	0.14500	0.99500	1.0000	ug/L			85.0	70 - 130
	MSD	1513690-01	0.14500	1.0025	1.0000	ug/L	0.8		85.8	20 70 - 130

QC Batch ID: BYF1496 Used client sample: N										
Total Antimony	DUP	1513644-01	ND	ND		ug/L			20	
	MS	1513644-01	ND	454.42	400.00	ug/L			114	75 - 125
	MSD	1513644-01	ND	436.99	400.00	ug/L	3.9		109	20 75 - 125
Total Arsenic	DUP	1513644-01	ND	ND		ug/L			20	
	MS	1513644-01	ND	208.25	200.00	ug/L			104	75 - 125
	MSD	1513644-01	ND	206.68	200.00	ug/L	0.8		103	20 75 - 125
Total Barium	DUP	1513644-01	75.129	75.467	400.00	ug/L	0.4		20	
	MS	1513644-01	75.129	496.28	400.00	ug/L			105	75 - 125
	MSD	1513644-01	75.129	491.55	400.00	ug/L	1.0		104	20 75 - 125
Total Beryllium	DUP	1513644-01	ND	ND		ug/L			20	
	MS	1513644-01	ND	215.71	200.00	ug/L			108	75 - 125
	MSD	1513644-01	ND	212.14	200.00	ug/L	1.7		106	20 75 - 125
Total Cadmium	DUP	1513644-01	ND	ND		ug/L			20	
	MS	1513644-01	ND	231.95	200.00	ug/L			116	75 - 125
	MSD	1513644-01	ND	227.90	200.00	ug/L	1.8		114	20 75 - 125
Total Chromium	DUP	1513644-01	5.2922	5.5746	200.00	ug/L	5.2		20	
	MS	1513644-01	5.2922	218.65	200.00	ug/L			107	75 - 125
	MSD	1513644-01	5.2922	221.49	200.00	ug/L	1.3		108	20 75 - 125
Total Cobalt	DUP	1513644-01	ND	ND		ug/L			20	
	MS	1513644-01	ND	222.19	200.00	ug/L			111	75 - 125
	MSD	1513644-01	ND	217.03	200.00	ug/L	2.4		109	20 75 - 125
Total Copper	DUP	1513644-01	4.6796	3.1223	400.00	ug/L	39.9		20	
	MS	1513644-01	4.6796	436.41	400.00	ug/L			108	75 - 125
	MSD	1513644-01	4.6796	437.79	400.00	ug/L	0.3		108	20 75 - 125
Total Lead	DUP	1513644-01	ND	ND		ug/L			20	
	MS	1513644-01	ND	439.46	400.00	ug/L			110	75 - 125
	MSD	1513644-01	ND	432.17	400.00	ug/L	1.7		108	20 75 - 125
Total Molybdenum	DUP	1513644-01	ND	ND		ug/L			20	
	MS	1513644-01	ND	224.68	200.00	ug/L			112	75 - 125
	MSD	1513644-01	ND	221.73	200.00	ug/L	1.3		111	20 75 - 125
Total Nickel	DUP	1513644-01	ND	ND		ug/L			20	
	MS	1513644-01	ND	400.71	400.00	ug/L			100	75 - 125
	MSD	1513644-01	ND	403.94	400.00	ug/L	0.8		101	20 75 - 125



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Sacramento, CA 95852-0830

**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

### Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Source	Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
									RPD	Percent Recovery
<b>QC Batch ID: BYF1496</b>										
Used client sample: N										
Total Selenium										
	DUP	1513644-01	ND	16.319		ug/L			20	J
	MS	1513644-01	ND	235.96	200.00	ug/L		118	75 - 125	
	MSD	1513644-01	ND	218.46	200.00	ug/L	7.7	109	20	75 - 125
Total Silver										
	DUP	1513644-01	ND	ND		ug/L			20	
	MS	1513644-01	ND	107.66	100.00	ug/L		108	75 - 125	
	MSD	1513644-01	ND	107.85	100.00	ug/L	0.2	108	20	75 - 125
Total Thallium										
	DUP	1513644-01	ND	ND		ug/L			20	
	MS	1513644-01	ND	436.59	400.00	ug/L		109	75 - 125	
	MSD	1513644-01	ND	438.82	400.00	ug/L	0.5	110	20	75 - 125
Total Vanadium										
	DUP	1513644-01	ND	3.1466		ug/L			20	J
	MS	1513644-01	ND	225.56	200.00	ug/L		113	75 - 125	
	MSD	1513644-01	ND	227.84	200.00	ug/L	1.0	114	20	75 - 125
Total Zinc										
	DUP	1513644-01	10.153	9.5520		ug/L	6.1		20	J
	MS	1513644-01	10.153	523.26	500.00	ug/L		103	75 - 125	
	MSD	1513644-01	10.153	535.79	500.00	ug/L	2.4	105	20	75 - 125



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**Reported:** 06/23/2015 13:50  
Project: 138810  
Project Number: [none]  
Project Manager: Sue Gardner

**Notes And Definitions**

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A02 The difference between duplicate readings is less than the quantitation limit.
- A52 Chromatogram not typical of diesel.
- A57 Chromatogram not typical of motor oil.
- L01 The Laboratory Control Sample Water (LGSW) recovery is not within laboratory established control limits.
- Q02 Matrix spike precision is not within the control limits.
- Q03 Matrix spike recovery(s) is(are) not within the control limits.



Date of Report: 08/04/2015

Sue Gardner

SMUD - Kleinfelder

6201 S Street/P.O. Box 15830

Sacramento, CA 95852-0830

Client Project: 59th Street Corp Yard

BCL Project: 138810

BCL Work Order: 1516085

Invoice ID: B207552

Enclosed are the results of analyses for samples received by the laboratory on 7/2/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 1

Submission #: 15-16085

SHIPPING INFORMATION
Fed Ex [ ] UPS [ ] Ontrack [x] Hand Delivery [ ]
BC Lab Field Service [ ] Other [ ] (Specify) \_\_\_\_\_

SHIPPING CONTAINER
Ice Chest [x] None [ ] Box [ ]
Other [ ] (Specify) \_\_\_\_\_

FREE LIQUID
YES [ ] NO [ ]

Refrigerant: Ice [x] Blue Ice [ ] None [ ] Other [ ] Comments:

Custody Seals Ice Chest [ ] Containers [ ] None [ ] Comments:
Intact? Yes [ ] No [ ] Intact? Yes [ ] No [ ]

All samples received? Yes [x] No [ ] All samples containers intact? Yes [x] No [ ] Description(s) match COC? Yes [x] No [ ]

COC Received
YES [x] NO [ ]

Emissivity: 0.95 Container: Glass Thermometer ID: 208 Date/Time: 7-2-15
Temperature: (A) 24.1 °C (C) 23.9 °C Analyst Init: JDS

Table with columns for Sample Containers and Sample Numbers (1-10). Rows include various sample types like QT PE UNPRES, PT CYANIDE, etc. Handwritten 'A' marks are present in the Sample Numbers column for the SOIL SLEEVE row.

Comments:
Sample Numbering Completed By: [Signature]
A = Actual / C = Corrected

Date/Time: 7/2/15 @ 08:45 Rev. No. 19 05/06/2015



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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 08/04/2015 13:04  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1516085-01	<b>COC Number:</b>	---		07/02/2015 08:10	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	07/01/2015 06:11
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-11-H-SV		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie H. & Sean E.		<b>Sample Type:</b>	Vapor or Air
1516085-02	<b>COC Number:</b>	---		07/02/2015 08:10	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	07/01/2015 06:36
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-17-H-SV		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie H. & Sean E.		<b>Sample Type:</b>	Vapor or Air
1516085-03	<b>COC Number:</b>	---		07/02/2015 08:10	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	07/01/2015 06:36
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-17-H-SVD		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie H. & Sean E.		<b>Sample Type:</b>	Vapor or Air
1516085-04	<b>COC Number:</b>	---		07/02/2015 08:10	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	07/01/2015 06:59
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-19-S-SV		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie H. & Sean E.		<b>Sample Type:</b>	Vapor or Air
1516085-05	<b>COC Number:</b>	---		07/02/2015 08:10	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	07/01/2015 07:21
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-2-S-SV		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie H. & Sean E.		<b>Sample Type:</b>	Vapor or Air
1516085-06	<b>COC Number:</b>	---		07/02/2015 08:10	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	07/01/2015 07:46
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-31-H-SV		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie H. & Sean E.		<b>Sample Type:</b>	Vapor or Air
1516085-07	<b>COC Number:</b>	---		07/02/2015 08:10	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	07/01/2015 08:16
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-8-S-SV		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie H. & Sean E.		<b>Sample Type:</b>	Vapor or Air

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**Reported:** 08/04/2015 13:04  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons as Diesel

<b>BCL Sample ID:</b> 1516085-01	<b>Client Sample Name:</b> KA-11-H-SV, 7/1/2015 6:11:00AM, Julie H. & Sean E.
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel	ND	ug/L	40	20	EPA-8015B	ND		1
Tetracosane (Surrogate)	53.1	%	40 - 140 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	07/02/15	07/06/15 18:34	MBS	GC-5	0.951	BYG0258

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**Reported:** 08/04/2015 13:04  
Project: 138810  
Project Number: 59th Street Corp Yard  
Project Manager: Sue Gardner

### Total Petroleum Hydrocarbons as Diesel

<b>BCL Sample ID:</b> 1516085-02	<b>Client Sample Name:</b> KA-17-H-SV, 7/1/2015 6:36:00AM, Julie H. & Sean E.
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel	ND	ug/L	40	20	EPA-8015B	ND		1
Tetracosane (Surrogate)	56.1	%	40 - 140 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	07/02/15	07/06/15 18:47	MBS	GC-5	0.980	BYG0258

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**Reported:** 08/04/2015 13:04  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons as Diesel

<b>BCL Sample ID:</b> 1516085-03	<b>Client Sample Name:</b> KA-17-H-SVD, 7/1/2015 6:36:00AM, Julie H. & Sean E.
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel	ND	ug/L	40	20	EPA-8015B	ND		1
Tetracosane (Surrogate)	48.2	%	40 - 140 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	07/02/15	07/06/15 18:59	MBS	GC-5	0.971	BYG0258

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**Reported:** 08/04/2015 13:04  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons as Diesel

<b>BCL Sample ID:</b> 1516085-04	<b>Client Sample Name:</b> KA-19-S-SV, 7/1/2015 6:59:00AM, Julie H. & Sean E.
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel	ND	ug/L	40	20	EPA-8015B	ND		1
Tetracosane (Surrogate)	57.7	%	40 - 140 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	07/02/15	07/06/15 19:12	MBS	GC-5	0.980	BYG0258

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**Reported:** 08/04/2015 13:04  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons as Diesel

<b>BCL Sample ID:</b> 1516085-05	<b>Client Sample Name:</b> KA-2-S-SV, 7/1/2015 7:21:00AM, Julie H. & Sean E.
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel	ND	ug/L	40	20	EPA-8015B	ND		1
Tetracosane (Surrogate)	43.7	%	40 - 140 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	07/02/15	07/06/15 19:50	MBS	GC-5	0.951	BYG0258

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 08/04/2015 13:04  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons as Diesel

<b>BCL Sample ID:</b> 1516085-06	<b>Client Sample Name:</b> KA-31-H-SV, 7/1/2015 7:46:00AM, Julie H. & Sean E.
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel	ND	ug/L	40	20	EPA-8015B	ND		1
Tetracosane (Surrogate)	48.5	%	40 - 140 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	07/02/15	07/06/15 20:02	MBS	GC-5	0.951	BYG0258

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 08/04/2015 13:04  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

### Total Petroleum Hydrocarbons as Diesel

<b>BCL Sample ID:</b> 1516085-07	<b>Client Sample Name:</b> KA-8-S-SV, 7/1/2015 8:16:00AM, Julie H. & Sean E.
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Diesel	ND	ug/L	40	20	EPA-8015B	ND		1
Tetracosane (Surrogate)	45.9	%	40 - 140 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	07/02/15	07/06/15 20:15	MBS	GC-5	0.961	BYG0258

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SMUD - Kleinfelder  
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Sacramento, CA 95852-0830

**Reported:** 08/04/2015 13:04  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

## Total Petroleum Hydrocarbons as Diesel

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYG0258</b>						
TPH - Diesel	BYG0258-BLK1	ND	ug/L	40	20	
Tetracosane (Surrogate)	BYG0258-BLK1	48.9	%	40 - 140 (LCL - UCL)		

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Sacramento, CA 95852-0830

**Reported:** 08/04/2015 13:04  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

## Total Petroleum Hydrocarbons as Diesel

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYG0258</b>										
TPH - Diesel	BYG0258-BS1	LCS	319.07	500.00	ug/L	63.8		60 - 140		
Tetracosane (Surrogate)	BYG0258-BS1	LCS	12.6	20.0	ug/L	63.2		40 - 140		

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Sacramento, CA 95852-0830

**Reported:** 08/04/2015 13:04  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

**Notes And Definitions**

- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit



Date of Report: 07/13/2015

Sue Gardner

SMUD - Kleinfelder

6201 S Street/P.O. Box 15830

Sacramento, CA 95852-0830

Client Project: 59th Street Corp Yard

BCL Project: 138810

BCL Work Order: 1515122

Invoice ID: B208013

Enclosed are the results of analyses for samples received by the laboratory on 6/19/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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15-15122

PROJECT NO.		PROJECT NAME		DATE MM/DD/YY	SAMPLE ID. HH-MM-SS	MATRIX	NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	RECEIVING LAB.	INSTRUCTIONS/REMARKS
138810		59th Street Carp Yard									
L.P. NO. (P.O. NO.)		SAMPLERS: (Signature/Number)									
		Julie H. & Sean E.									
1	6/18/15	1138	KA-2-S-SV	Air	1	UL	Summ	X	X	BC Labs	STAT
2		1307	KA-11-H-SV					X	X		
3		1503	KA-8-S-SV					X	X		
4		1312	AA-1					X	X		
5	6/19/15	0930	KA-17-H-SV					X	X		
6		0930	KA-17-H-SVD					X	X		
7		1156	KA-19-S-SV					X	X		
8		1324	KA-31-H-SV					X	X		
9		1345	AA-2					X	X		
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

VOCs by GC and MS  
 TPH as Gas by TO-15 SIM  
 BTEX by TO-3  
 Oxygenates by TO-3  
 TPH as Diced by TO-3  
 Helium by ASTM D-1741-1998

Email Results to:  
 Sgardner@kleinfelder.com  
 GJhermendez@kleinfelder.com

Reinquisitioned by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Julie Hernandez	6/19/15 1405	Julie Hernandez	
Reinquisitioned by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time
Reinquisitioned by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time

Send Results To:  
 Sue Gardner  
 Kleinfelder  
 3077 Fite Circle  
 SAC, CA 95827

INSTRUCTIONS/REMARKS: STAT  
 White - Sampler  
 Chain of Custody  
 Canary - Return Copy To Shipper  
 Pink - Lab Copy  
 COC # 18621  
 ENV-02 REV 05/06

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 07/13/2015 16:42  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
1515122-01	<b>COC Number:</b>	---		06/19/2015 14:05	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/18/2015 11:38
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-2-S-SV		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie Hernandez		<b>Sample Type:</b>	Vapor or Air
1515122-02	<b>COC Number:</b>	---		06/19/2015 14:05	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/18/2015 13:07
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-11-H-SV		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie Hernandez		<b>Sample Type:</b>	Vapor or Air
1515122-03	<b>COC Number:</b>	---		06/19/2015 14:05	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/18/2015 15:03
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-8-S-SV		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie Hernandez		<b>Sample Type:</b>	Vapor or Air
1515122-04	<b>COC Number:</b>	---		06/19/2015 14:05	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/18/2015 13:12
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	AA-1		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie Hernandez		<b>Sample Type:</b>	Vapor or Air
1515122-05	<b>COC Number:</b>	---		06/19/2015 14:05	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/19/2015 09:30
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-17-H-SV		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie Hernandez		<b>Sample Type:</b>	Vapor or Air
1515122-06	<b>COC Number:</b>	---		06/19/2015 14:05	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/19/2015 09:30
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-17-H-SVD		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie Hernandez		<b>Sample Type:</b>	Vapor or Air
1515122-07	<b>COC Number:</b>	---		06/19/2015 14:05	
	<b>Project Number:</b>	---		<b>Sampling Date:</b>	06/19/2015 11:56
	<b>Sampling Location:</b>	---		<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-19-S-SV		<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie Hernandez		<b>Sample Type:</b>	Vapor or Air

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 07/13/2015 16:42  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1515122-08	<b>COC Number:</b>	---	<b>Receive Date:</b>	06/19/2015 14:05
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	06/19/2015 13:24
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-31-H-SV	<b>Lab Matrix:</b>	Air
	<b>Sampled By:</b>	Julie Hernandez	<b>Sample Type:</b>	Vapor or Air
	<hr/>			
	1515122-09	<b>COC Number:</b>	---	<b>Receive Date:</b>
<b>Project Number:</b>		---	<b>Sampling Date:</b>	06/19/2015 13:45
<b>Sampling Location:</b>		---	<b>Sample Depth:</b>	---
<b>Sampling Point:</b>		AA-2	<b>Lab Matrix:</b>	Air
<b>Sampled By:</b>		Julie Hernandez	<b>Sample Type:</b>	Vapor or Air
<hr/>				

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7/7/2015  
Mr. Mark Ellis  
BC Laboratory  
4100 Atlas Court

Bakersfield CA 93308

Project Name: 15152122  
Project #:  
Workorder #: 1506388A

Dear Mr. Mark Ellis

The following report includes the data for the above referenced project for sample(s) received on 6/19/2015 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori  
Project Manager

**A Eurofins Lancaster Laboratories Company**

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B  
Folsom, CA 95630

T | 916-985-1000  
F | 916-985-1020  
[www.airtoxics.com](http://www.airtoxics.com)



Air Toxics

WORK ORDER #: 1506388A

Work Order Summary

CLIENT: Mr. Mark Ellis
BC Laboratory
4100 Atlas Court
Bakersfield, CA 93308

BILL TO: Mr. Mark Ellis
BC Laboratory
4100 Atlas Court
Bakersfield, CA 93308

PHONE: 661-327-4911

P.O. #

FAX:

PROJECT # 15152122

DATE RECEIVED: 06/19/2015

CONTACT: Kyle Vagadori

DATE COMPLETED: 07/06/2015

Table with 5 columns: FRACTION #, NAME, TEST, RECEIPT VAC./PRES., FINAL PRESSURE. Rows include samples 01A-12BB with various test results and pressures.

CERTIFIED BY: Heidi Hayes
Technical Director

DATE: 07/06/15

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9562
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020



Air Toxics

**LABORATORY NARRATIVE**

**EPA Method TO-15**

**BC Laboratory**

**Workorder# 1506388A**

Nine 6 Liter Summa Canister samples were received on June 19, 2015. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

**Receiving Notes**

The Chain of Custody (COC) information for samples 1515122-01, 1515122-02, 1515122-03, 1515122-04, 1515122-05, 1515122-06, 1515122-07, 1515122-08 and 1515122-09 did not match the entries on the sample tags with regard to sample identification. Therefore the information on the COC was used to process and report the samples.

**Analytical Notes**

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

Dilution was performed on samples 1515122-01, 1515122-03, 1515122-05, and 1515122-06 due to the presence of high level target species.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

**Definition of Data Qualifying Flags**

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified



b-File was quantified by a second column and detector  
r1-File was requantified for the purpose of reissue



**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS FULL SCAN**

**Client Sample ID: 1515122-01**

**Lab ID#: 1506388A-01A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	4.2	9.9	20	48
Benzene	4.2	8.7	13	28
Toluene	4.2	310	16	1200
Tetrachloroethene	4.2	33	28	220
Ethyl Benzene	4.2	200	18	860
m,p-Xylene	4.2	680	18	2900
o-Xylene	4.2	370	18	1600
1,3,5-Trimethylbenzene	4.2	190	21	920
1,2,4-Trimethylbenzene	4.2	400	21	1900
Heptane	4.2	4.3	17	18
Cumene	4.2	14	21	71
Propylbenzene	4.2	69	21	340
Acetone	42	150	100	350
4-Ethyltoluene	4.2	370	21	1800
2,2,4-Trimethylpentane	4.2	16	20	76
TPH ref. to Gasoline (MW=100)	420	6600	1700	27000

**Client Sample ID: 1515122-02**

**Lab ID#: 1506388A-02A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.88	1.1	4.4	5.4
Toluene	0.88	4.2	3.3	16
Tetrachloroethene	0.88	4.9	6.0	33
m,p-Xylene	0.88	1.2	3.8	5.1
o-Xylene	0.88	1.6	3.8	6.8
TPH ref. to Gasoline (MW=100)	88	96	360	390

**Client Sample ID: 1515122-03**

**Lab ID#: 1506388A-03A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	2.1	7.4	10	37

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 1515122-03

Lab ID#: 1506388A-03A

Table with 5 columns: Compound, Rpt. Limit (ppbv), Amount (ppbv), Rpt. Limit (ug/m3), Amount (ug/m3). Lists compounds like Chloroform, Benzene, Toluene, etc.

Client Sample ID: 1515122-04

Lab ID#: 1506388A-04A

No Detections Were Found.

Client Sample ID: 1515122-05

Lab ID#: 1506388A-05A

Table with 5 columns: Compound, Rpt. Limit (ppbv), Amount (ppbv), Rpt. Limit (ug/m3), Amount (ug/m3). Lists Trichloroethene and Tetrachloroethene.

Client Sample ID: 1515122-06

Lab ID#: 1506388A-06A

Table with 5 columns: Compound, Rpt. Limit (ppbv), Amount (ppbv), Rpt. Limit (ug/m3), Amount (ug/m3). Lists Trichloroethene and Tetrachloroethene.

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 1515122-07

Lab ID#: 1506388A-07A

Table with 5 columns: Compound, Rpt. Limit (ppbv), Amount (ppbv), Rpt. Limit (ug/m3), Amount (ug/m3). Lists compounds like Freon 11, Chloroform, Toluene, etc.

Client Sample ID: 1515122-08

Lab ID#: 1506388A-08A

Table with 5 columns: Compound, Rpt. Limit (ppbv), Amount (ppbv), Rpt. Limit (ug/m3), Amount (ug/m3). Lists Chloroform, Toluene, Tetrachloroethene.

Client Sample ID: 1515122-09

Lab ID#: 1506388A-09A

No Detections Were Found.





Air Toxics

Client Sample ID: 1515122-01

Lab ID#: 1506388A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062410	Date of Collection:	6/18/15 11:38:00 AM
Dil. Factor:	8.40	Date of Analysis:	6/24/15 02:39 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	4.2	Not Detected	21	Not Detected
Freon 114	4.2	Not Detected	29	Not Detected
Vinyl Chloride	4.2	Not Detected	11	Not Detected
Bromomethane	42	Not Detected	160	Not Detected
Chloroethane	17	Not Detected	44	Not Detected
Freon 11	4.2	Not Detected	24	Not Detected
1,1-Dichloroethene	4.2	Not Detected	17	Not Detected
Freon 113	4.2	Not Detected	32	Not Detected
Methylene Chloride	42	Not Detected	140	Not Detected
1,1-Dichloroethane	4.2	Not Detected	17	Not Detected
cis-1,2-Dichloroethene	4.2	Not Detected	17	Not Detected
Chloroform	4.2	9.9	20	48
1,1,1-Trichloroethane	4.2	Not Detected	23	Not Detected
Carbon Tetrachloride	4.2	Not Detected	26	Not Detected
Benzene	4.2	8.7	13	28
1,2-Dichloroethane	4.2	Not Detected	17	Not Detected
Trichloroethene	4.2	Not Detected	22	Not Detected
1,2-Dichloropropane	4.2	Not Detected	19	Not Detected
cis-1,3-Dichloropropene	4.2	Not Detected	19	Not Detected
Toluene	4.2	310	16	1200
trans-1,3-Dichloropropene	4.2	Not Detected	19	Not Detected
1,1,2-Trichloroethane	4.2	Not Detected	23	Not Detected
Tetrachloroethene	4.2	33	28	220
1,2-Dibromoethane (EDB)	4.2	Not Detected	32	Not Detected
Chlorobenzene	4.2	Not Detected	19	Not Detected
Ethyl Benzene	4.2	200	18	860
m,p-Xylene	4.2	680	18	2900
o-Xylene	4.2	370	18	1600
Styrene	4.2	Not Detected	18	Not Detected
1,1,2,2-Tetrachloroethane	4.2	Not Detected	29	Not Detected
1,3,5-Trimethylbenzene	4.2	190	21	920
1,2,4-Trimethylbenzene	4.2	400	21	1900
1,3-Dichlorobenzene	4.2	Not Detected	25	Not Detected
1,4-Dichlorobenzene	4.2	Not Detected	25	Not Detected
alpha-Chlorotoluene	4.2	Not Detected	22	Not Detected
1,2-Dichlorobenzene	4.2	Not Detected	25	Not Detected
1,3-Butadiene	4.2	Not Detected	9.3	Not Detected
Hexane	4.2	Not Detected	15	Not Detected
Cyclohexane	4.2	Not Detected	14	Not Detected
Heptane	4.2	4.3	17	18
Bromodichloromethane	4.2	Not Detected	28	Not Detected
Dibromochloromethane	4.2	Not Detected	36	Not Detected

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Client Sample ID: 1515122-01

Lab ID#: 1506388A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062410	Date of Collection:	6/18/15 11:38:00 AM
Dil. Factor:	8.40	Date of Analysis:	6/24/15 02:39 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Cumene	4.2	14	21	71
Propylbenzene	4.2	69	21	340
Chloromethane	42	Not Detected	87	Not Detected
1,2,4-Trichlorobenzene	17	Not Detected	120	Not Detected
Hexachlorobutadiene	17	Not Detected	180	Not Detected
Acetone	42	150	100	350
Carbon Disulfide	17	Not Detected	52	Not Detected
2-Propanol	17	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	4.2	Not Detected	17	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	Not Detected	50	Not Detected
Tetrahydrofuran	4.2	Not Detected	12	Not Detected
1,4-Dioxane	17	Not Detected	60	Not Detected
4-Methyl-2-pentanone	4.2	Not Detected	17	Not Detected
2-Hexanone	17	Not Detected	69	Not Detected
Bromoform	4.2	Not Detected	43	Not Detected
4-Ethyltoluene	4.2	370	21	1800
Ethanol	17	Not Detected	32	Not Detected
Methyl tert-butyl ether	4.2	Not Detected	15	Not Detected
tert-Butyl alcohol	17	Not Detected	51	Not Detected
Ethyl-tert-butyl ether	17	Not Detected	70	Not Detected
Isopropyl ether	17	Not Detected	70	Not Detected
tert-Amyl methyl ether	17	Not Detected	70	Not Detected
3-Chloropropene	17	Not Detected	52	Not Detected
2,2,4-Trimethylpentane	4.2	16	20	76
TPH ref. to Gasoline (MW=100)	420	6600	1700	27000

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	112	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	88	70-130



Air Toxics

Client Sample ID: 1515122-02

Lab ID#: 1506388A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062308	Date of Collection:	6/18/15 1:07:00 PM
Dil. Factor:	1.76	Date of Analysis:	6/23/15 03:23 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.88	1.1	4.4	5.4
Freon 114	0.88	Not Detected	6.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
Bromomethane	8.8	Not Detected	34	Not Detected
Chloroethane	3.5	Not Detected	9.3	Not Detected
Freon 11	0.88	Not Detected	4.9	Not Detected
1,1-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Freon 113	0.88	Not Detected	6.7	Not Detected
Methylene Chloride	8.8	Not Detected	30	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.6	Not Detected
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Chloroform	0.88	Not Detected	4.3	Not Detected
1,1,1-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Carbon Tetrachloride	0.88	Not Detected	5.5	Not Detected
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	Not Detected	4.7	Not Detected
1,2-Dichloropropane	0.88	Not Detected	4.1	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
Toluene	0.88	4.2	3.3	16
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	4.9	6.0	33
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.8	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected
m,p-Xylene	0.88	1.2	3.8	5.1
o-Xylene	0.88	1.6	3.8	6.8
Styrene	0.88	Not Detected	3.7	Not Detected
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene	0.88	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Heptane	0.88	Not Detected	3.6	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
Dibromochloromethane	0.88	Not Detected	7.5	Not Detected



Client Sample ID: 1515122-02

Lab ID#: 1506388A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062308	Date of Collection:	6/18/15 1:07:00 PM
Dil. Factor:	1.76	Date of Analysis:	6/23/15 03:23 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Cumene	0.88	Not Detected	4.3	Not Detected
Propylbenzene	0.88	Not Detected	4.3	Not Detected
Chloromethane	8.8	Not Detected	18	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	3.5	Not Detected	38	Not Detected
Acetone	8.8	Not Detected	21	Not Detected
Carbon Disulfide	3.5	Not Detected	11	Not Detected
2-Propanol	3.5	Not Detected	8.6	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.5	Not Detected	10	Not Detected
Tetrahydrofuran	0.88	Not Detected UJ	2.6	Not Detected UJ
1,4-Dioxane	3.5	Not Detected	13	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
2-Hexanone	3.5	Not Detected	14	Not Detected
Bromoform	0.88	Not Detected	9.1	Not Detected
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected
Ethanol	3.5	Not Detected	6.6	Not Detected
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
tert-Butyl alcohol	3.5	Not Detected	11	Not Detected
Ethyl-tert-butyl ether	3.5	Not Detected	15	Not Detected
Isopropyl ether	3.5	Not Detected	15	Not Detected
tert-Amyl methyl ether	3.5	Not Detected	15	Not Detected
3-Chloropropene	3.5	Not Detected	11	Not Detected
2,2,4-Trimethylpentane	0.88	Not Detected	4.1	Not Detected
TPH ref. to Gasoline (MW=100)	88	96	360	390

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	100	70-130



Air Toxics

Client Sample ID: 1515122-03

Lab ID#: 1506388A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062411	Date of Collection: 6/18/15 3:03:00 PM
Dil. Factor:	4.14	Date of Analysis: 6/24/15 03:03 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	2.1	7.4	10	37
Freon 114	2.1	Not Detected	14	Not Detected
Vinyl Chloride	2.1	Not Detected	5.3	Not Detected
Bromomethane	21	Not Detected	80	Not Detected
Chloroethane	8.3	Not Detected	22	Not Detected
Freon 11	2.1	Not Detected	12	Not Detected
1,1-Dichloroethene	2.1	Not Detected	8.2	Not Detected
Freon 113	2.1	Not Detected	16	Not Detected
Methylene Chloride	21	Not Detected	72	Not Detected
1,1-Dichloroethane	2.1	Not Detected	8.4	Not Detected
cis-1,2-Dichloroethene	2.1	Not Detected	8.2	Not Detected
Chloroform	2.1	6.0	10	30
1,1,1-Trichloroethane	2.1	Not Detected	11	Not Detected
Carbon Tetrachloride	2.1	Not Detected	13	Not Detected
Benzene	2.1	5.6	6.6	18
1,2-Dichloroethane	2.1	Not Detected	8.4	Not Detected
Trichloroethene	2.1	3.0	11	16
1,2-Dichloropropane	2.1	Not Detected	9.6	Not Detected
cis-1,3-Dichloropropene	2.1	Not Detected	9.4	Not Detected
Toluene	2.1	100	7.8	400
trans-1,3-Dichloropropene	2.1	Not Detected	9.4	Not Detected
1,1,2-Trichloroethane	2.1	Not Detected	11	Not Detected
Tetrachloroethene	2.1	6.9	14	47
1,2-Dibromoethane (EDB)	2.1	Not Detected	16	Not Detected
Chlorobenzene	2.1	Not Detected	9.5	Not Detected
Ethyl Benzene	2.1	31	9.0	130
m,p-Xylene	2.1	400	9.0	1700
o-Xylene	2.1	130	9.0	570
Styrene	2.1	Not Detected	8.8	Not Detected
1,1,2,2-Tetrachloroethane	2.1	Not Detected	14	Not Detected
1,3,5-Trimethylbenzene	2.1	130	10	620
1,2,4-Trimethylbenzene	2.1	350	10	1700
1,3-Dichlorobenzene	2.1	Not Detected	12	Not Detected
1,4-Dichlorobenzene	2.1	Not Detected	12	Not Detected
alpha-Chlorotoluene	2.1	Not Detected	11	Not Detected
1,2-Dichlorobenzene	2.1	Not Detected	12	Not Detected
1,3-Butadiene	2.1	Not Detected	4.6	Not Detected
Hexane	2.1	Not Detected	7.3	Not Detected
Cyclohexane	2.1	2.1	7.1	7.2
Heptane	2.1	Not Detected	8.5	Not Detected
Bromodichloromethane	2.1	Not Detected	14	Not Detected
Dibromochloromethane	2.1	Not Detected	18	Not Detected

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Client Sample ID: 1515122-03

Lab ID#: 1506388A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062411	Date of Collection:	6/18/15 3:03:00 PM
Dil. Factor:	4.14	Date of Analysis:	6/24/15 03:03 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Cumene	2.1	4.6	10	22
Propylbenzene	2.1	22	10	110
Chloromethane	21	Not Detected	43	Not Detected
1,2,4-Trichlorobenzene	8.3	Not Detected	61	Not Detected
Hexachlorobutadiene	8.3	Not Detected	88	Not Detected
Acetone	21	Not Detected	49	Not Detected
Carbon Disulfide	8.3	Not Detected	26	Not Detected
2-Propanol	8.3	Not Detected	20	Not Detected
trans-1,2-Dichloroethene	2.1	Not Detected	8.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	8.3	Not Detected	24	Not Detected
Tetrahydrofuran	2.1	Not Detected	6.1	Not Detected
1,4-Dioxane	8.3	Not Detected	30	Not Detected
4-Methyl-2-pentanone	2.1	Not Detected	8.5	Not Detected
2-Hexanone	8.3	Not Detected	34	Not Detected
Bromoform	2.1	Not Detected	21	Not Detected
4-Ethyltoluene	2.1	260	10	1300
Ethanol	8.3	Not Detected	16	Not Detected
Methyl tert-butyl ether	2.1	Not Detected	7.5	Not Detected
tert-Butyl alcohol	8.3	Not Detected	25	Not Detected
Ethyl-tert-butyl ether	8.3	Not Detected	35	Not Detected
Isopropyl ether	8.3	Not Detected	35	Not Detected
tert-Amyl methyl ether	8.3	Not Detected	35	Not Detected
3-Chloropropene	8.3	Not Detected	26	Not Detected
2,2,4-Trimethylpentane	2.1	10	9.7	49
TPH ref. to Gasoline (MW=100)	210	3600	850	15000

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	112	70-130
4-Bromofluorobenzene	89	70-130





Air Toxics

Client Sample ID: 1515122-04

Lab ID#: 1506388A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062309	Date of Collection:	6/18/15 1:12:00 PM
Dil. Factor:	1.80	Date of Analysis:	6/23/15 04:01 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.90	Not Detected	4.4	Not Detected
Freon 114	0.90	Not Detected	6.3	Not Detected
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
Bromomethane	9.0	Not Detected	35	Not Detected
Chloroethane	3.6	Not Detected	9.5	Not Detected
Freon 11	0.90	Not Detected	5.0	Not Detected
1,1-Dichloroethene	0.90	Not Detected	3.6	Not Detected
Freon 113	0.90	Not Detected	6.9	Not Detected
Methylene Chloride	9.0	Not Detected	31	Not Detected
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
cis-1,2-Dichloroethene	0.90	Not Detected	3.6	Not Detected
Chloroform	0.90	Not Detected	4.4	Not Detected
1,1,1-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Carbon Tetrachloride	0.90	Not Detected	5.7	Not Detected
Benzene	0.90	Not Detected	2.9	Not Detected
1,2-Dichloroethane	0.90	Not Detected	3.6	Not Detected
Trichloroethene	0.90	Not Detected	4.8	Not Detected
1,2-Dichloropropane	0.90	Not Detected	4.2	Not Detected
cis-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
Toluene	0.90	Not Detected	3.4	Not Detected
trans-1,3-Dichloropropene	0.90	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Tetrachloroethene	0.90	Not Detected	6.1	Not Detected
1,2-Dibromoethane (EDB)	0.90	Not Detected	6.9	Not Detected
Chlorobenzene	0.90	Not Detected	4.1	Not Detected
Ethyl Benzene	0.90	Not Detected	3.9	Not Detected
m,p-Xylene	0.90	Not Detected	3.9	Not Detected
o-Xylene	0.90	Not Detected	3.9	Not Detected
Styrene	0.90	Not Detected	3.8	Not Detected
1,1,2,2-Tetrachloroethane	0.90	Not Detected	6.2	Not Detected
1,3,5-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,2,4-Trimethylbenzene	0.90	Not Detected	4.4	Not Detected
1,3-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,4-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
alpha-Chlorotoluene	0.90	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.90	Not Detected	5.4	Not Detected
1,3-Butadiene	0.90	Not Detected	2.0	Not Detected
Hexane	0.90	Not Detected	3.2	Not Detected
Cyclohexane	0.90	Not Detected	3.1	Not Detected
Heptane	0.90	Not Detected	3.7	Not Detected
Bromodichloromethane	0.90	Not Detected	6.0	Not Detected
Dibromochloromethane	0.90	Not Detected	7.7	Not Detected



Client Sample ID: 1515122-04

Lab ID#: 1506388A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062309	Date of Collection:	6/18/15 1:12:00 PM
Dil. Factor:	1.80	Date of Analysis:	6/23/15 04:01 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Cumene	0.90	Not Detected	4.4	Not Detected
Propylbenzene	0.90	Not Detected	4.4	Not Detected
Chloromethane	9.0	Not Detected	18	Not Detected
1,2,4-Trichlorobenzene	3.6	Not Detected	27	Not Detected
Hexachlorobutadiene	3.6	Not Detected	38	Not Detected
Acetone	9.0	Not Detected	21	Not Detected
Carbon Disulfide	3.6	Not Detected	11	Not Detected
2-Propanol	3.6	Not Detected	8.8	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.6	Not Detected	11	Not Detected
Tetrahydrofuran	0.90	Not Detected UJ	2.6	Not Detected UJ
1,4-Dioxane	3.6	Not Detected	13	Not Detected
4-Methyl-2-pentanone	0.90	Not Detected	3.7	Not Detected
2-Hexanone	3.6	Not Detected	15	Not Detected
Bromoform	0.90	Not Detected	9.3	Not Detected
4-Ethyltoluene	0.90	Not Detected	4.4	Not Detected
Ethanol	3.6	Not Detected	6.8	Not Detected
Methyl tert-butyl ether	0.90	Not Detected	3.2	Not Detected
tert-Butyl alcohol	3.6	Not Detected	11	Not Detected
Ethyl-tert-butyl ether	3.6	Not Detected	15	Not Detected
Isopropyl ether	3.6	Not Detected	15	Not Detected
tert-Amyl methyl ether	3.6	Not Detected	15	Not Detected
3-Chloropropene	3.6	Not Detected	11	Not Detected
2,2,4-Trimethylpentane	0.90	Not Detected	4.2	Not Detected
TPH ref. to Gasoline (MW=100)	90	Not Detected	370	Not Detected

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	101	70-130





Air Toxics

Client Sample ID: 1515122-05

Lab ID#: 1506388A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062412	Date of Collection:	6/19/15 9:30:00 AM
Dil. Factor:	21.9	Date of Analysis:	6/24/15 03:27 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	11	Not Detected	54	Not Detected
Freon 114	11	Not Detected	76	Not Detected
Vinyl Chloride	11	Not Detected	28	Not Detected
Bromomethane	110	Not Detected	420	Not Detected
Chloroethane	44	Not Detected	120	Not Detected
Freon 11	11	Not Detected	62	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
Freon 113	11	Not Detected	84	Not Detected
Methylene Chloride	110	Not Detected	380	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	60	Not Detected
Carbon Tetrachloride	11	Not Detected	69	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	40	59	210
1,2-Dichloropropane	11	Not Detected	51	Not Detected
cis-1,3-Dichloropropene	11	Not Detected	50	Not Detected
Toluene	11	Not Detected	41	Not Detected
trans-1,3-Dichloropropene	11	Not Detected	50	Not Detected
1,1,2-Trichloroethane	11	Not Detected	60	Not Detected
Tetrachloroethene	11	2200	74	15000
1,2-Dibromoethane (EDB)	11	Not Detected	84	Not Detected
Chlorobenzene	11	Not Detected	50	Not Detected
Ethyl Benzene	11	Not Detected	48	Not Detected
m,p-Xylene	11	Not Detected	48	Not Detected
o-Xylene	11	Not Detected	48	Not Detected
Styrene	11	Not Detected	47	Not Detected
1,1,2,2-Tetrachloroethane	11	Not Detected	75	Not Detected
1,3,5-Trimethylbenzene	11	Not Detected	54	Not Detected
1,2,4-Trimethylbenzene	11	Not Detected	54	Not Detected
1,3-Dichlorobenzene	11	Not Detected	66	Not Detected
1,4-Dichlorobenzene	11	Not Detected	66	Not Detected
alpha-Chlorotoluene	11	Not Detected	57	Not Detected
1,2-Dichlorobenzene	11	Not Detected	66	Not Detected
1,3-Butadiene	11	Not Detected	24	Not Detected
Hexane	11	Not Detected	38	Not Detected
Cyclohexane	11	Not Detected	38	Not Detected
Heptane	11	Not Detected	45	Not Detected
Bromodichloromethane	11	Not Detected	73	Not Detected
Dibromochloromethane	11	Not Detected	93	Not Detected

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Client Sample ID: 1515122-05

Lab ID#: 1506388A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062412	Date of Collection:	6/19/15 9:30:00 AM
Dil. Factor:	21.9	Date of Analysis:	6/24/15 03:27 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Cumene	11	Not Detected	54	Not Detected
Propylbenzene	11	Not Detected	54	Not Detected
Chloromethane	110	Not Detected	230	Not Detected
1,2,4-Trichlorobenzene	44	Not Detected	320	Not Detected
Hexachlorobutadiene	44	Not Detected	470	Not Detected
Acetone	110	Not Detected	260	Not Detected
Carbon Disulfide	44	Not Detected	140	Not Detected
2-Propanol	44	Not Detected	110	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
2-Butanone (Methyl Ethyl Ketone)	44	Not Detected	130	Not Detected
Tetrahydrofuran	11	Not Detected	32	Not Detected
1,4-Dioxane	44	Not Detected	160	Not Detected
4-Methyl-2-pentanone	11	Not Detected	45	Not Detected
2-Hexanone	44	Not Detected	180	Not Detected
Bromoform	11	Not Detected	110	Not Detected
4-Ethyltoluene	11	Not Detected	54	Not Detected
Ethanol	44	Not Detected	82	Not Detected
Methyl tert-butyl ether	11	Not Detected	39	Not Detected
tert-Butyl alcohol	44	Not Detected	130	Not Detected
Ethyl-tert-butyl ether	44	Not Detected	180	Not Detected
Isopropyl ether	44	Not Detected	180	Not Detected
tert-Amyl methyl ether	44	Not Detected	180	Not Detected
3-Chloropropene	44	Not Detected	140	Not Detected
2,2,4-Trimethylpentane	11	Not Detected	51	Not Detected
TPH ref. to Gasoline (MW=100)	1100	Not Detected	4500	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	111	70-130
4-Bromofluorobenzene	80	70-130



Air Toxics

Client Sample ID: 1515122-06

Lab ID#: 1506388A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062414	Date of Collection:	6/19/15 9:30:00 AM
Dil. Factor:	16.7	Date of Analysis:	6/24/15 06:50 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	8.4	Not Detected	41	Not Detected
Freon 114	8.4	Not Detected	58	Not Detected
Vinyl Chloride	8.4	Not Detected	21	Not Detected
Bromomethane	84	Not Detected	320	Not Detected
Chloroethane	33	Not Detected	88	Not Detected
Freon 11	8.4	Not Detected	47	Not Detected
1,1-Dichloroethene	8.4	Not Detected	33	Not Detected
Freon 113	8.4	Not Detected	64	Not Detected
Methylene Chloride	84	Not Detected	290	Not Detected
1,1-Dichloroethane	8.4	Not Detected	34	Not Detected
cis-1,2-Dichloroethene	8.4	Not Detected	33	Not Detected
Chloroform	8.4	Not Detected	41	Not Detected
1,1,1-Trichloroethane	8.4	Not Detected	46	Not Detected
Carbon Tetrachloride	8.4	Not Detected	52	Not Detected
Benzene	8.4	Not Detected	27	Not Detected
1,2-Dichloroethane	8.4	Not Detected	34	Not Detected
Trichloroethene	8.4	36	45	200
1,2-Dichloropropane	8.4	Not Detected	38	Not Detected
cis-1,3-Dichloropropene	8.4	Not Detected	38	Not Detected
Toluene	8.4	Not Detected	31	Not Detected
trans-1,3-Dichloropropene	8.4	Not Detected	38	Not Detected
1,1,2-Trichloroethane	8.4	Not Detected	46	Not Detected
Tetrachloroethene	8.4	2100	57	14000
1,2-Dibromoethane (EDB)	8.4	Not Detected	64	Not Detected
Chlorobenzene	8.4	Not Detected	38	Not Detected
Ethyl Benzene	8.4	Not Detected	36	Not Detected
m,p-Xylene	8.4	Not Detected	36	Not Detected
o-Xylene	8.4	Not Detected	36	Not Detected
Styrene	8.4	Not Detected	36	Not Detected
1,1,2,2-Tetrachloroethane	8.4	Not Detected	57	Not Detected
1,3,5-Trimethylbenzene	8.4	Not Detected	41	Not Detected
1,2,4-Trimethylbenzene	8.4	Not Detected	41	Not Detected
1,3-Dichlorobenzene	8.4	Not Detected	50	Not Detected
1,4-Dichlorobenzene	8.4	Not Detected	50	Not Detected
alpha-Chlorotoluene	8.4	Not Detected	43	Not Detected
1,2-Dichlorobenzene	8.4	Not Detected	50	Not Detected
1,3-Butadiene	8.4	Not Detected	18	Not Detected
Hexane	8.4	Not Detected	29	Not Detected
Cyclohexane	8.4	Not Detected	29	Not Detected
Heptane	8.4	Not Detected	34	Not Detected
Bromodichloromethane	8.4	Not Detected	56	Not Detected
Dibromochloromethane	8.4	Not Detected	71	Not Detected

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Client Sample ID: 1515122-06

Lab ID#: 1506388A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062414	Date of Collection:	6/19/15 9:30:00 AM
Dil. Factor:	16.7	Date of Analysis:	6/24/15 06:50 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Cumene	8.4	Not Detected	41	Not Detected
Propylbenzene	8.4	Not Detected	41	Not Detected
Chloromethane	84	Not Detected	170	Not Detected
1,2,4-Trichlorobenzene	33	Not Detected	250	Not Detected
Hexachlorobutadiene	33	Not Detected	360	Not Detected
Acetone	84	Not Detected	200	Not Detected
Carbon Disulfide	33	Not Detected	100	Not Detected
2-Propanol	33	Not Detected	82	Not Detected
trans-1,2-Dichloroethene	8.4	Not Detected	33	Not Detected
2-Butanone (Methyl Ethyl Ketone)	33	Not Detected	98	Not Detected
Tetrahydrofuran	8.4	Not Detected	25	Not Detected
1,4-Dioxane	33	Not Detected	120	Not Detected
4-Methyl-2-pentanone	8.4	Not Detected	34	Not Detected
2-Hexanone	33	Not Detected	140	Not Detected
Bromoform	8.4	Not Detected	86	Not Detected
4-Ethyltoluene	8.4	Not Detected	41	Not Detected
Ethanol	33	Not Detected	63	Not Detected
Methyl tert-butyl ether	8.4	Not Detected	30	Not Detected
tert-Butyl alcohol	33	Not Detected	100	Not Detected
Ethyl-tert-butyl ether	33	Not Detected	140	Not Detected
Isopropyl ether	33	Not Detected	140	Not Detected
tert-Amyl methyl ether	33	Not Detected	140	Not Detected
3-Chloropropene	33	Not Detected	100	Not Detected
2,2,4-Trimethylpentane	8.4	Not Detected	39	Not Detected
TPH ref. to Gasoline (MW=100)	840	Not Detected	3400	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	78	70-130

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Air Toxics

Client Sample ID: 1515122-07

Lab ID#: 1506388A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062413	Date of Collection:	6/19/15 11:56:00 AM
Dil. Factor:	1.63	Date of Analysis:	6/24/15 06:14 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.82	Not Detected	4.0	Not Detected
Freon 114	0.82	Not Detected	5.7	Not Detected
Vinyl Chloride	0.82	Not Detected	2.1	Not Detected
Bromomethane	8.2	Not Detected	32	Not Detected
Chloroethane	3.3	Not Detected	8.6	Not Detected
Freon 11	0.82	0.93	4.6	5.2
1,1-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Freon 113	0.82	Not Detected	6.2	Not Detected
Methylene Chloride	8.2	Not Detected	28	Not Detected
1,1-Dichloroethane	0.82	Not Detected	3.3	Not Detected
cis-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Chloroform	0.82	1.8	4.0	8.8
1,1,1-Trichloroethane	0.82	7.6	4.4	41
Carbon Tetrachloride	0.82	Not Detected	5.1	Not Detected
Benzene	0.82	Not Detected	2.6	Not Detected
1,2-Dichloroethane	0.82	Not Detected	3.3	Not Detected
Trichloroethene	0.82	Not Detected	4.4	Not Detected
1,2-Dichloropropane	0.82	Not Detected	3.8	Not Detected
cis-1,3-Dichloropropene	0.82	Not Detected	3.7	Not Detected
Toluene	0.82	6.1	3.1	23
trans-1,3-Dichloropropene	0.82	Not Detected	3.7	Not Detected
1,1,2-Trichloroethane	0.82	Not Detected	4.4	Not Detected
Tetrachloroethene	0.82	35	5.5	240
1,2-Dibromoethane (EDB)	0.82	Not Detected	6.3	Not Detected
Chlorobenzene	0.82	Not Detected	3.8	Not Detected
Ethyl Benzene	0.82	2.1	3.5	9.3
m,p-Xylene	0.82	5.9	3.5	26
o-Xylene	0.82	1.8	3.5	7.8
Styrene	0.82	Not Detected	3.5	Not Detected
1,1,2,2-Tetrachloroethane	0.82	Not Detected	5.6	Not Detected
1,3,5-Trimethylbenzene	0.82	Not Detected	4.0	Not Detected
1,2,4-Trimethylbenzene	0.82	Not Detected	4.0	Not Detected
1,3-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
1,4-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
alpha-Chlorotoluene	0.82	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene	0.82	Not Detected	4.9	Not Detected
1,3-Butadiene	0.82	Not Detected	1.8	Not Detected
Hexane	0.82	0.99	2.9	3.5
Cyclohexane	0.82	0.86	2.8	3.0
Heptane	0.82	Not Detected	3.3	Not Detected
Bromodichloromethane	0.82	Not Detected	5.5	Not Detected
Dibromochloromethane	0.82	Not Detected	6.9	Not Detected

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Client Sample ID: 1515122-07

Lab ID#: 1506388A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062413	Date of Collection:	6/19/15 11:56:00 AM
Dil. Factor:	1.63	Date of Analysis:	6/24/15 06:14 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Cumene	0.82	Not Detected	4.0	Not Detected
Propylbenzene	0.82	Not Detected	4.0	Not Detected
Chloromethane	8.2	Not Detected	17	Not Detected
1,2,4-Trichlorobenzene	3.3	Not Detected	24	Not Detected
Hexachlorobutadiene	3.3	Not Detected	35	Not Detected
Acetone	8.2	12	19	29
Carbon Disulfide	3.3	18	10	55
2-Propanol	3.3	Not Detected	8.0	Not Detected
trans-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.3	Not Detected	9.6	Not Detected
Tetrahydrofuran	0.82	Not Detected	2.4	Not Detected
1,4-Dioxane	3.3	Not Detected	12	Not Detected
4-Methyl-2-pentanone	0.82	Not Detected	3.3	Not Detected
2-Hexanone	3.3	Not Detected	13	Not Detected
Bromoform	0.82	Not Detected	8.4	Not Detected
4-Ethyltoluene	0.82	1.9	4.0	9.2
Ethanol	3.3	Not Detected	6.1	Not Detected
Methyl tert-butyl ether	0.82	Not Detected	2.9	Not Detected
tert-Butyl alcohol	3.3	Not Detected	9.9	Not Detected
Ethyl-tert-butyl ether	3.3	Not Detected	14	Not Detected
Isopropyl ether	3.3	Not Detected	14	Not Detected
tert-Amyl methyl ether	3.3	Not Detected	14	Not Detected
3-Chloropropene	3.3	Not Detected	10	Not Detected
2,2,4-Trimethylpentane	0.82	Not Detected	3.8	Not Detected
TPH ref. to Gasoline (MW=100)	82	120	330	490

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	118	70-130
4-Bromofluorobenzene	86	70-130





Air Toxics

Client Sample ID: 1515122-08

Lab ID#: 1506388A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062311	Date of Collection:	6/19/15 1:24:00 PM
Dil. Factor:	1.72	Date of Analysis:	6/23/15 05:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.86	Not Detected	4.2	Not Detected
Freon 114	0.86	Not Detected	6.0	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
Bromomethane	8.6	Not Detected	33	Not Detected
Chloroethane	3.4	Not Detected	9.1	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
1,1-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Freon 113	0.86	Not Detected	6.6	Not Detected
Methylene Chloride	8.6	Not Detected	30	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
cis-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Chloroform	0.86	1.2	4.2	5.8
1,1,1-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Carbon Tetrachloride	0.86	Not Detected	5.4	Not Detected
Benzene	0.86	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	Not Detected	4.6	Not Detected
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
Toluene	0.86	1.4	3.2	5.2
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Tetrachloroethene	0.86	1.0	5.8	6.9
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	4.0	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
m,p-Xylene	0.86	Not Detected	3.7	Not Detected
o-Xylene	0.86	Not Detected	3.7	Not Detected
Styrene	0.86	Not Detected	3.7	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.86	Not Detected	5.2	Not Detected
1,4-Dichlorobenzene	0.86	Not Detected	5.2	Not Detected
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
Cyclohexane	0.86	Not Detected	3.0	Not Detected
Heptane	0.86	Not Detected	3.5	Not Detected
Bromodichloromethane	0.86	Not Detected	5.8	Not Detected
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected



Client Sample ID: 1515122-08

Lab ID#: 1506388A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062311	Date of Collection:	6/19/15 1:24:00 PM
Dil. Factor:	1.72	Date of Analysis:	6/23/15 05:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Cumene	0.86	Not Detected	4.2	Not Detected
Propylbenzene	0.86	Not Detected	4.2	Not Detected
Chloromethane	8.6	Not Detected	18	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	26	Not Detected
Hexachlorobutadiene	3.4	Not Detected	37	Not Detected
Acetone	8.6	Not Detected	20	Not Detected
Carbon Disulfide	3.4	Not Detected	11	Not Detected
2-Propanol	3.4	Not Detected	8.4	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.4	Not Detected	10	Not Detected
Tetrahydrofuran	0.86	Not Detected UJ	2.5	Not Detected UJ
1,4-Dioxane	3.4	Not Detected	12	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
2-Hexanone	3.4	Not Detected	14	Not Detected
Bromoform	0.86	Not Detected	8.9	Not Detected
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected
Ethanol	3.4	Not Detected	6.5	Not Detected
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
tert-Butyl alcohol	3.4	Not Detected	10	Not Detected
Ethyl-tert-butyl ether	3.4	Not Detected	14	Not Detected
Isopropyl ether	3.4	Not Detected	14	Not Detected
tert-Amyl methyl ether	3.4	Not Detected	14	Not Detected
3-Chloropropene	3.4	Not Detected	11	Not Detected
2,2,4-Trimethylpentane	0.86	Not Detected	4.0	Not Detected
TPH ref. to Gasoline (MW=100)	86	Not Detected	350	Not Detected

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	101	70-130





Air Toxics

Client Sample ID: 1515122-09

Lab ID#: 1506388A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062312	Date of Collection:	6/19/15 1:45:00 PM
Dil. Factor:	1.94	Date of Analysis:	6/23/15 06:11 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.97	Not Detected	4.8	Not Detected
Freon 114	0.97	Not Detected	6.8	Not Detected
Vinyl Chloride	0.97	Not Detected	2.5	Not Detected
Bromomethane	9.7	Not Detected	38	Not Detected
Chloroethane	3.9	Not Detected	10	Not Detected
Freon 11	0.97	Not Detected	5.4	Not Detected
1,1-Dichloroethene	0.97	Not Detected	3.8	Not Detected
Freon 113	0.97	Not Detected	7.4	Not Detected
Methylene Chloride	9.7	Not Detected	34	Not Detected
1,1-Dichloroethane	0.97	Not Detected	3.9	Not Detected
cis-1,2-Dichloroethene	0.97	Not Detected	3.8	Not Detected
Chloroform	0.97	Not Detected	4.7	Not Detected
1,1,1-Trichloroethane	0.97	Not Detected	5.3	Not Detected
Carbon Tetrachloride	0.97	Not Detected	6.1	Not Detected
Benzene	0.97	Not Detected	3.1	Not Detected
1,2-Dichloroethane	0.97	Not Detected	3.9	Not Detected
Trichloroethene	0.97	Not Detected	5.2	Not Detected
1,2-Dichloropropane	0.97	Not Detected	4.5	Not Detected
cis-1,3-Dichloropropene	0.97	Not Detected	4.4	Not Detected
Toluene	0.97	Not Detected	3.6	Not Detected
trans-1,3-Dichloropropene	0.97	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	0.97	Not Detected	5.3	Not Detected
Tetrachloroethene	0.97	Not Detected	6.6	Not Detected
1,2-Dibromoethane (EDB)	0.97	Not Detected	7.4	Not Detected
Chlorobenzene	0.97	Not Detected	4.5	Not Detected
Ethyl Benzene	0.97	Not Detected	4.2	Not Detected
m,p-Xylene	0.97	Not Detected	4.2	Not Detected
o-Xylene	0.97	Not Detected	4.2	Not Detected
Styrene	0.97	Not Detected	4.1	Not Detected
1,1,2,2-Tetrachloroethane	0.97	Not Detected	6.6	Not Detected
1,3,5-Trimethylbenzene	0.97	Not Detected	4.8	Not Detected
1,2,4-Trimethylbenzene	0.97	Not Detected	4.8	Not Detected
1,3-Dichlorobenzene	0.97	Not Detected	5.8	Not Detected
1,4-Dichlorobenzene	0.97	Not Detected	5.8	Not Detected
alpha-Chlorotoluene	0.97	Not Detected	5.0	Not Detected
1,2-Dichlorobenzene	0.97	Not Detected	5.8	Not Detected
1,3-Butadiene	0.97	Not Detected	2.1	Not Detected
Hexane	0.97	Not Detected	3.4	Not Detected
Cyclohexane	0.97	Not Detected	3.3	Not Detected
Heptane	0.97	Not Detected	4.0	Not Detected
Bromodichloromethane	0.97	Not Detected	6.5	Not Detected
Dibromochloromethane	0.97	Not Detected	8.3	Not Detected



Client Sample ID: 1515122-09

Lab ID#: 1506388A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062312	Date of Collection:	6/19/15 1:45:00 PM
Dil. Factor:	1.94	Date of Analysis:	6/23/15 06:11 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Cumene	0.97	Not Detected	4.8	Not Detected
Propylbenzene	0.97	Not Detected	4.8	Not Detected
Chloromethane	9.7	Not Detected	20	Not Detected
1,2,4-Trichlorobenzene	3.9	Not Detected	29	Not Detected
Hexachlorobutadiene	3.9	Not Detected	41	Not Detected
Acetone	9.7	Not Detected	23	Not Detected
Carbon Disulfide	3.9	Not Detected	12	Not Detected
2-Propanol	3.9	Not Detected	9.5	Not Detected
trans-1,2-Dichloroethene	0.97	Not Detected	3.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.9	Not Detected	11	Not Detected
Tetrahydrofuran	0.97	Not Detected UJ	2.9	Not Detected UJ
1,4-Dioxane	3.9	Not Detected	14	Not Detected
4-Methyl-2-pentanone	0.97	Not Detected	4.0	Not Detected
2-Hexanone	3.9	Not Detected	16	Not Detected
Bromoform	0.97	Not Detected	10	Not Detected
4-Ethyltoluene	0.97	Not Detected	4.8	Not Detected
Ethanol	3.9	Not Detected	7.3	Not Detected
Methyl tert-butyl ether	0.97	Not Detected	3.5	Not Detected
tert-Butyl alcohol	3.9	Not Detected	12	Not Detected
Ethyl-tert-butyl ether	3.9	Not Detected	16	Not Detected
Isopropyl ether	3.9	Not Detected	16	Not Detected
tert-Amyl methyl ether	3.9	Not Detected	16	Not Detected
3-Chloropropene	3.9	Not Detected	12	Not Detected
2,2,4-Trimethylpentane	0.97	Not Detected	4.5	Not Detected
TPH ref. to Gasoline (MW=100)	97	Not Detected	400	Not Detected

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	103	70-130



Client Sample ID: Lab Blank

Lab ID#: 1506388A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062307	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/23/15 02:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 1506388A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062307	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/23/15 02:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Cumene	0.50	Not Detected	2.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
Tetrahydrofuran	0.50	Not Detected UJ	1.5	Not Detected UJ
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	102	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1506388A-10B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062407	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/24/15 12:17 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected



Client Sample ID: Lab Blank

Lab ID#: 1506388A-10B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062407	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/24/15 12:17 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Cumene	0.50	Not Detected	2.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
Ethyl-tert-butyl ether	2.0	Not Detected	8.4	Not Detected
Isopropyl ether	2.0	Not Detected	8.4	Not Detected
tert-Amyl methyl ether	2.0	Not Detected	8.4	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	114	70-130
4-Bromofluorobenzene	80	70-130



Client Sample ID: CCV

Lab ID#: 1506388A-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062302	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/23/15 10:42 AM

Compound	%Recovery
Freon 12	72
Freon 114	84
Vinyl Chloride	79
Bromomethane	84
Chloroethane	85
Freon 11	78
1,1-Dichloroethene	90
Freon 113	89
Methylene Chloride	73
1,1-Dichloroethane	79
cis-1,2-Dichloroethene	85
Chloroform	75
1,1,1-Trichloroethane	73
Carbon Tetrachloride	77
Benzene	86
1,2-Dichloroethane	79
Trichloroethene	82
1,2-Dichloropropane	82
cis-1,3-Dichloropropene	80
Toluene	85
trans-1,3-Dichloropropene	81
1,1,2-Trichloroethane	85
Tetrachloroethene	94
1,2-Dibromoethane (EDB)	82
Chlorobenzene	85
Ethyl Benzene	84
m,p-Xylene	90
o-Xylene	89
Styrene	88
1,1,2,2-Tetrachloroethane	77
1,3,5-Trimethylbenzene	87
1,2,4-Trimethylbenzene	81
1,3-Dichlorobenzene	83
1,4-Dichlorobenzene	80
alpha-Chlorotoluene	78
1,2-Dichlorobenzene	82
1,3-Butadiene	74
Hexane	77
Cyclohexane	87
Heptane	89
Bromodichloromethane	79
Dibromochloromethane	87

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Client Sample ID: CCV

Lab ID#: 1506388A-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062302	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/23/15 10:42 AM

Compound	%Recovery
Cumene	88
Propylbenzene	82
Chloromethane	73
1,2,4-Trichlorobenzene	84
Hexachlorobutadiene	86
Acetone	77
Carbon Disulfide	81
2-Propanol	74
trans-1,2-Dichloroethene	96
2-Butanone (Methyl Ethyl Ketone)	81
Tetrahydrofuran	66 Q
1,4-Dioxane	87
4-Methyl-2-pentanone	79
2-Hexanone	88
Bromoform	89
4-Ethyltoluene	81
Ethanol	73
Methyl tert-butyl ether	79
tert-Butyl alcohol	76
Ethyl-tert-butyl ether	78
Isopropyl ether	73
tert-Amyl methyl ether	86
3-Chloropropene	86
2,2,4-Trimethylpentane	76
TPH ref. to Gasoline (MW=100)	100

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	82	70-130
4-Bromofluorobenzene	97	70-130





Client Sample ID: CCV

Lab ID#: 1506388A-11B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062402	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/24/15 09:33 AM

Compound	%Recovery
Freon 12	104
Freon 114	91
Vinyl Chloride	110
Bromomethane	101
Chloroethane	113
Freon 11	99
1,1-Dichloroethene	95
Freon 113	84
Methylene Chloride	118
1,1-Dichloroethane	110
cis-1,2-Dichloroethene	95
Chloroform	103
1,1,1-Trichloroethane	93
Carbon Tetrachloride	91
Benzene	103
1,2-Dichloroethane	107
Trichloroethene	94
1,2-Dichloropropane	114
cis-1,3-Dichloropropene	98
Toluene	97
trans-1,3-Dichloropropene	101
1,1,2-Trichloroethane	100
Tetrachloroethene	83
1,2-Dibromoethane (EDB)	94
Chlorobenzene	89
Ethyl Benzene	93
m,p-Xylene	92
o-Xylene	89
Styrene	95
1,1,2,2-Tetrachloroethane	105
1,3,5-Trimethylbenzene	91
1,2,4-Trimethylbenzene	87
1,3-Dichlorobenzene	84
1,4-Dichlorobenzene	86
alpha-Chlorotoluene	76
1,2-Dichlorobenzene	85
1,3-Butadiene	110
Hexane	101
Cyclohexane	95
Heptane	104
Bromodichloromethane	104
Dibromochloromethane	92

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Client Sample ID: CCV

Lab ID#: 1506388A-11B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062402	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/24/15 09:33 AM

Compound	%Recovery
Cumene	92
Propylbenzene	96
Chloromethane	106
1,2,4-Trichlorobenzene	74
Hexachlorobutadiene	82
Acetone	119
Carbon Disulfide	109
2-Propanol	104
trans-1,2-Dichloroethene	97
2-Butanone (Methyl Ethyl Ketone)	104
Tetrahydrofuran	107
1,4-Dioxane	91
4-Methyl-2-pentanone	103
2-Hexanone	96
Bromoform	86
4-Ethyltoluene	94
Ethanol	106
Methyl tert-butyl ether	93
tert-Butyl alcohol	98
Ethyl-tert-butyl ether	98
Isopropyl ether	111
tert-Amyl methyl ether	92
3-Chloropropene	101
2,2,4-Trimethylpentane	103
TPH ref. to Gasoline (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	112	70-130
1,2-Dichloroethane-d4	118	70-130
4-Bromofluorobenzene	88	70-130



Client Sample ID: LCS

Lab ID#: 1506388A-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062303	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/23/15 11:31 AM

Compound	%Recovery	Method Limits
Freon 12	78	70-130
Freon 114	88	70-130
Vinyl Chloride	88	70-130
Bromomethane	92	70-130
Chloroethane	93	70-130
Freon 11	83	70-130
1,1-Dichloroethene	90	70-130
Freon 113	87	70-130
Methylene Chloride	81	70-130
1,1-Dichloroethane	82	70-130
cis-1,2-Dichloroethene	98	70-130
Chloroform	79	70-130
1,1,1-Trichloroethane	76	70-130
Carbon Tetrachloride	79	70-130
Benzene	89	70-130
1,2-Dichloroethane	83	70-130
Trichloroethene	82	70-130
1,2-Dichloropropane	86	70-130
cis-1,3-Dichloropropene	78	70-130
Toluene	86	70-130
trans-1,3-Dichloropropene	84	70-130
1,1,2-Trichloroethane	82	70-130
Tetrachloroethene	90	70-130
1,2-Dibromoethane (EDB)	84	70-130
Chlorobenzene	84	70-130
Ethyl Benzene	84	70-130
m,p-Xylene	88	70-130
o-Xylene	91	70-130
Styrene	87	70-130
1,1,2,2-Tetrachloroethane	80	70-130
1,3,5-Trimethylbenzene	83	70-130
1,2,4-Trimethylbenzene	81	70-130
1,3-Dichlorobenzene	86	70-130
1,4-Dichlorobenzene	83	70-130
alpha-Chlorotoluene	88	70-130
1,2-Dichlorobenzene	85	70-130
1,3-Butadiene	82	70-130
Hexane	83	70-130
Cyclohexane	90	70-130
Heptane	94	70-130
Bromodichloromethane	84	70-130
Dibromochloromethane	85	70-130

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Client Sample ID: LCS

Lab ID#: 1506388A-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062303	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/23/15 11:31 AM

Compound	%Recovery	Method Limits
Cumene	88	70-130
Propylbenzene	86	70-130
Chloromethane	84	70-130
1,2,4-Trichlorobenzene	89	70-130
Hexachlorobutadiene	87	70-130
Acetone	87	70-130
Carbon Disulfide	75	70-130
2-Propanol	85	70-130
trans-1,2-Dichloroethene	80	70-130
2-Butanone (Methyl Ethyl Ketone)	84	70-130
Tetrahydrofuran	72	70-130
1,4-Dioxane	91	70-130
4-Methyl-2-pentanone	86	70-130
2-Hexanone	92	70-130
Bromoform	87	70-130
4-Ethyltoluene	87	70-130
Ethanol	87	70-130
Methyl tert-butyl ether	81	70-130
tert-Butyl alcohol	Not Spiked	
Ethyl-tert-butyl ether	Not Spiked	
Isopropyl ether	Not Spiked	
tert-Amyl methyl ether	Not Spiked	
3-Chloropropene	86	70-130
2,2,4-Trimethylpentane	84	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	97	70-130



Client Sample ID: LCSD  
Lab ID#: 1506388A-12AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062304	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/23/15 12:46 PM

Compound	%Recovery	Method Limits
Freon 12	78	70-130
Freon 114	92	70-130
Vinyl Chloride	84	70-130
Bromomethane	85	70-130
Chloroethane	93	70-130
Freon 11	85	70-130
1,1-Dichloroethene	91	70-130
Freon 113	92	70-130
Methylene Chloride	77	70-130
1,1-Dichloroethane	78	70-130
cis-1,2-Dichloroethene	97	70-130
Chloroform	78	70-130
1,1,1-Trichloroethane	75	70-130
Carbon Tetrachloride	80	70-130
Benzene	88	70-130
1,2-Dichloroethane	80	70-130
Trichloroethene	82	70-130
1,2-Dichloropropane	81	70-130
cis-1,3-Dichloropropene	77	70-130
Toluene	86	70-130
trans-1,3-Dichloropropene	79	70-130
1,1,2-Trichloroethane	81	70-130
Tetrachloroethene	91	70-130
1,2-Dibromoethane (EDB)	82	70-130
Chlorobenzene	81	70-130
Ethyl Benzene	82	70-130
m,p-Xylene	86	70-130
o-Xylene	85	70-130
Styrene	84	70-130
1,1,2,2-Tetrachloroethane	77	70-130
1,3,5-Trimethylbenzene	79	70-130
1,2,4-Trimethylbenzene	78	70-130
1,3-Dichlorobenzene	84	70-130
1,4-Dichlorobenzene	81	70-130
alpha-Chlorotoluene	83	70-130
1,2-Dichlorobenzene	84	70-130
1,3-Butadiene	81	70-130
Hexane	78	70-130
Cyclohexane	86	70-130
Heptane	88	70-130
Bromodichloromethane	81	70-130
Dibromochloromethane	84	70-130

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Client Sample ID: LCSD  
Lab ID#: 1506388A-12AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p062304	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/23/15 12:46 PM

Compound	%Recovery	Method Limits
Cumene	85	70-130
Propylbenzene	79	70-130
Chloromethane	82	70-130
1,2,4-Trichlorobenzene	91	70-130
Hexachlorobutadiene	89	70-130
Acetone	82	70-130
Carbon Disulfide	74	70-130
2-Propanol	82	70-130
trans-1,2-Dichloroethene	80	70-130
2-Butanone (Methyl Ethyl Ketone)	86	70-130
Tetrahydrofuran	67 Q	70-130
1,4-Dioxane	88	70-130
4-Methyl-2-pentanone	80	70-130
2-Hexanone	87	70-130
Bromoform	87	70-130
4-Ethyltoluene	83	70-130
Ethanol	84	70-130
Methyl tert-butyl ether	79	70-130
tert-Butyl alcohol	Not Spiked	
Ethyl-tert-butyl ether	Not Spiked	
Isopropyl ether	Not Spiked	
tert-Amyl methyl ether	Not Spiked	
3-Chloropropene	84	70-130
2,2,4-Trimethylpentane	80	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: LCS

Lab ID#: 1506388A-12B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062403	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/24/15 10:09 AM

Compound	%Recovery	Method Limits
Freon 12	116	70-130
Freon 114	105	70-130
Vinyl Chloride	126	70-130
Bromomethane	113	70-130
Chloroethane	127	70-130
Freon 11	110	70-130
1,1-Dichloroethene	104	70-130
Freon 113	91	70-130
Methylene Chloride	126	70-130
1,1-Dichloroethane	118	70-130
cis-1,2-Dichloroethene	108	70-130
Chloroform	109	70-130
1,1,1-Trichloroethane	100	70-130
Carbon Tetrachloride	97	70-130
Benzene	111	70-130
1,2-Dichloroethane	112	70-130
Trichloroethene	101	70-130
1,2-Dichloropropane	121	70-130
cis-1,3-Dichloropropene	100	70-130
Toluene	104	70-130
trans-1,3-Dichloropropene	109	70-130
1,1,2-Trichloroethane	104	70-130
Tetrachloroethene	87	70-130
1,2-Dibromoethane (EDB)	101	70-130
Chlorobenzene	94	70-130
Ethyl Benzene	99	70-130
m,p-Xylene	98	70-130
o-Xylene	98	70-130
Styrene	105	70-130
1,1,2,2-Tetrachloroethane	113	70-130
1,3,5-Trimethylbenzene	99	70-130
1,2,4-Trimethylbenzene	92	70-130
1,3-Dichlorobenzene	91	70-130
1,4-Dichlorobenzene	92	70-130
alpha-Chlorotoluene	110	70-130
1,2-Dichlorobenzene	94	70-130
1,3-Butadiene	119	70-130
Hexane	110	70-130
Cyclohexane	105	70-130
Heptane	109	70-130
Bromodichloromethane	112	70-130
Dibromochloromethane	97	70-130

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Client Sample ID: LCS

Lab ID#: 1506388A-12B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062403	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/24/15 10:09 AM

Compound	%Recovery	Method Limits
Cumene	98	70-130
Propylbenzene	104	70-130
Chloromethane	125	70-130
1,2,4-Trichlorobenzene	88	70-130
Hexachlorobutadiene	87	70-130
Acetone	127	70-130
Carbon Disulfide	105	70-130
2-Propanol	126	70-130
trans-1,2-Dichloroethene	90	70-130
2-Butanone (Methyl Ethyl Ketone)	110	70-130
Tetrahydrofuran	116	70-130
1,4-Dioxane	106	70-130
4-Methyl-2-pentanone	116	70-130
2-Hexanone	113	70-130
Bromoform	92	70-130
4-Ethyltoluene	97	70-130
Ethanol	128	70-130
Methyl tert-butyl ether	97	70-130
tert-Butyl alcohol	Not Spiked	
Ethyl-tert-butyl ether	Not Spiked	
Isopropyl ether	Not Spiked	
tert-Amyl methyl ether	Not Spiked	
3-Chloropropene	106	70-130
2,2,4-Trimethylpentane	115	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	111	70-130
1,2-Dichloroethane-d4	121	70-130
4-Bromofluorobenzene	88	70-130





Client Sample ID: LCSD

Lab ID#: 1506388A-12BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062404	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/24/15 10:33 AM

Compound	%Recovery	Method Limits
Freon 12	117	70-130
Freon 114	105	70-130
Vinyl Chloride	124	70-130
Bromomethane	113	70-130
Chloroethane	127	70-130
Freon 11	110	70-130
1,1-Dichloroethene	105	70-130
Freon 113	91	70-130
Methylene Chloride	127	70-130
1,1-Dichloroethane	119	70-130
cis-1,2-Dichloroethene	110	70-130
Chloroform	109	70-130
1,1,1-Trichloroethane	100	70-130
Carbon Tetrachloride	98	70-130
Benzene	108	70-130
1,2-Dichloroethane	110	70-130
Trichloroethene	98	70-130
1,2-Dichloropropane	116	70-130
cis-1,3-Dichloropropene	99	70-130
Toluene	102	70-130
trans-1,3-Dichloropropene	108	70-130
1,1,2-Trichloroethane	102	70-130
Tetrachloroethene	86	70-130
1,2-Dibromoethane (EDB)	99	70-130
Chlorobenzene	93	70-130
Ethyl Benzene	97	70-130
m,p-Xylene	98	70-130
o-Xylene	96	70-130
Styrene	103	70-130
1,1,2,2-Tetrachloroethane	112	70-130
1,3,5-Trimethylbenzene	96	70-130
1,2,4-Trimethylbenzene	96	70-130
1,3-Dichlorobenzene	91	70-130
1,4-Dichlorobenzene	93	70-130
alpha-Chlorotoluene	110	70-130
1,2-Dichlorobenzene	93	70-130
1,3-Butadiene	119	70-130
Hexane	113	70-130
Cyclohexane	105	70-130
Heptane	105	70-130
Bromodichloromethane	109	70-130
Dibromochloromethane	95	70-130

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Client Sample ID: LCSD  
Lab ID#: 1506388A-12BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17062404	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/24/15 10:33 AM

Compound	%Recovery	Method Limits
Cumene	98	70-130
Propylbenzene	104	70-130
Chloromethane	132 Q	70-130
1,2,4-Trichlorobenzene	93	70-130
Hexachlorobutadiene	92	70-130
Acetone	126	70-130
Carbon Disulfide	105	70-130
2-Propanol	127	70-130
trans-1,2-Dichloroethene	91	70-130
2-Butanone (Methyl Ethyl Ketone)	112	70-130
Tetrahydrofuran	118	70-130
1,4-Dioxane	103	70-130
4-Methyl-2-pentanone	114	70-130
2-Hexanone	115	70-130
Bromoform	91	70-130
4-Ethyltoluene	99	70-130
Ethanol	131 Q	70-130
Methyl tert-butyl ether	98	70-130
tert-Butyl alcohol	Not Spiked	
Ethyl-tert-butyl ether	Not Spiked	
Isopropyl ether	Not Spiked	
tert-Amyl methyl ether	Not Spiked	
3-Chloropropene	108	70-130
2,2,4-Trimethylpentane	116	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130
1,2-Dichloroethane-d4	120	70-130
4-Bromofluorobenzene	88	70-130



7/7/2015  
Mr. Mark Ellis  
BC Laboratory  
4100 Atlas Court

Bakersfield CA 93308

Project Name: 15152122  
Project #:  
Workorder #: 1506388B

Dear Mr. Mark Ellis

The following report includes the data for the above referenced project for sample(s) received on 6/19/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori  
Project Manager

**A Eurofins Lancaster Laboratories Company**

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B  
Folsom, CA 95630

T | 916-985-1000  
F | 916-985-1020  
www.airtoxics.com



Air Toxics

WORK ORDER #: 1506388B

Work Order Summary

CLIENT: Mr. Mark Ellis
BC Laboratory
4100 Atlas Court
Bakersfield, CA 93308

BILL TO: Mr. Mark Ellis
BC Laboratory
4100 Atlas Court
Bakersfield, CA 93308

PHONE: 661-327-4911

P.O. #

FAX:

PROJECT # 15152122

DATE RECEIVED: 06/19/2015

CONTACT: Kyle Vagadori

DATE COMPLETED: 07/02/2015

Table with 5 columns: FRACTION #, NAME, TEST, RECEIPT VAC./PRES., FINAL PRESSURE. Rows include 01A through 11AA with corresponding test results and pressures.

CERTIFIED BY: Heidi Hayes
Technical Director

DATE: 07/02/15

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.
Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.
180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9562
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020



**LABORATORY NARRATIVE  
Modified ASTM D-1946  
BC Laboratory  
Workorder# 1506388B**

Nine 6 Liter Summa Canister samples were received on June 19, 2015. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Since Nitrogen is used to pressurize samples, the reported Nitrogen values are calculated by adding all the sample components and subtracting from 100%.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

<i>Requirement</i>	<i>ASTM D-1946</i>	<i>ATL Modifications</i>
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A minimum of 5-point calibration curve is performed. Quantitation is based on average Response Factor.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a $\geq 95\%$ accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections $> 5$ X's the RL.



Air Toxics

**Receiving Notes**

The Chain of Custody (COC) information for samples 1515122-01, 1515122-02, 1515122-03, 1515122-04, 1515122-05, 1515122-06, 1515122-07, 1515122-08 and 1515122-09 did not match the entries on the sample tags with regard to sample identification. Therefore the information on the COC was used to process and report the samples.

**Analytical Notes**

There were no analytical discrepancies.

**Definition of Data Qualifying Flags**

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in laboratory blank greater than reporting limit.
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the detection limit.
- M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue



**Summary of Detected Compounds**  
**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

**Client Sample ID: 1515122-01**

**Lab ID#: 1506388B-01A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.17	21
Nitrogen	0.17	79
Methane	0.00017	0.00019
Helium	0.084	0.34

**Client Sample ID: 1515122-02**

**Lab ID#: 1506388B-02A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.18	17
Nitrogen	0.18	78
Carbon Dioxide	0.018	4.6

**Client Sample ID: 1515122-03**

**Lab ID#: 1506388B-03A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.17	20
Nitrogen	0.17	79
Methane	0.00017	0.00020
Carbon Dioxide	0.017	1.1

**Client Sample ID: 1515122-04**

**Lab ID#: 1506388B-04A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.18	21
Nitrogen	0.18	79
Methane	0.00018	0.00019
Carbon Dioxide	0.018	0.040



**Summary of Detected Compounds  
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

**Client Sample ID: 1515122-05**

**Lab ID#: 1506388B-05A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.16	16
Nitrogen	0.16	78
Methane	0.00016	0.00018
Carbon Dioxide	0.016	5.6

**Client Sample ID: 1515122-06**

**Lab ID#: 1506388B-06A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.17	16
Nitrogen	0.17	78
Methane	0.00017	0.00021
Carbon Dioxide	0.017	5.7

**Client Sample ID: 1515122-07**

**Lab ID#: 1506388B-07A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.16	17
Nitrogen	0.16	80
Carbon Dioxide	0.016	2.8

**Client Sample ID: 1515122-08**

**Lab ID#: 1506388B-08A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.17	3.1
Nitrogen	0.17	81
Carbon Dioxide	0.017	16

**Client Sample ID: 1515122-09**

**Lab ID#: 1506388B-09A**





**Summary of Detected Compounds**  
**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

**Client Sample ID: 1515122-09**

**Lab ID#: 1506388B-09A**

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.19	21
Nitrogen	0.19	79
Methane	0.00019	0.00021
Carbon Dioxide	0.019	0.041



Client Sample ID: 1515122-01

Lab ID#: 1506388B-01A

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>10062618</b>	<b>Date of Collection:</b> 6/18/15 11:38:00 AM
<b>Dil. Factor:</b>	<b>1.68</b>	<b>Date of Analysis:</b> 6/26/15 04:45 PM

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.17	21
Nitrogen	0.17	79
Carbon Monoxide	0.017	Not Detected
Methane	0.00017	0.00019
Carbon Dioxide	0.017	Not Detected
Ethane	0.0017	Not Detected
Ethene	0.0017	Not Detected
Helium	0.084	0.34

Container Type: 6 Liter Summa Canister



Client Sample ID: 1515122-02

Lab ID#: 1506388B-02A

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>10062619</b>	<b>Date of Collection:</b> 6/18/15 1:07:00 PM
<b>Dil. Factor:</b>	<b>1.76</b>	<b>Date of Analysis:</b> 6/26/15 05:15 PM

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.18	17
Nitrogen	0.18	78
Carbon Monoxide	0.018	Not Detected
Methane	0.00018	Not Detected
Carbon Dioxide	0.018	4.6
Ethane	0.0018	Not Detected
Ethene	0.0018	Not Detected
Helium	0.088	Not Detected

Container Type: 6 Liter Summa Canister



Client Sample ID: 1515122-03

Lab ID#: 1506388B-03A

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>10062620</b>	<b>Date of Collection:</b> 6/18/15 3:03:00 PM
<b>Dil. Factor:</b>	<b>1.66</b>	<b>Date of Analysis:</b> 6/26/15 05:39 PM

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.17	20
Nitrogen	0.17	79
Carbon Monoxide	0.017	Not Detected
Methane	0.00017	0.00020
Carbon Dioxide	0.017	1.1
Ethane	0.0017	Not Detected
Ethene	0.0017	Not Detected
Helium	0.083	Not Detected

Container Type: 6 Liter Summa Canister



Client Sample ID: 1515122-04

Lab ID#: 1506388B-04A

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>10062621</b>	<b>Date of Collection:</b> 6/18/15 1:12:00 PM
<b>Dil. Factor:</b>	<b>1.80</b>	<b>Date of Analysis:</b> 6/26/15 06:04 PM

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.18	21
Nitrogen	0.18	79
Carbon Monoxide	0.018	Not Detected
Methane	0.00018	0.00019
Carbon Dioxide	0.018	0.040
Ethane	0.0018	Not Detected
Ethene	0.0018	Not Detected
Helium	0.090	Not Detected

Container Type: 6 Liter Summa Canister



Client Sample ID: 1515122-05

Lab ID#: 1506388B-05A

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>10062622</b>	<b>Date of Collection:</b> 6/19/15 9:30:00 AM
<b>Dil. Factor:</b>	<b>1.64</b>	<b>Date of Analysis:</b> 6/26/15 06:30 PM

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.16	16
Nitrogen	0.16	78
Carbon Monoxide	0.016	Not Detected
Methane	0.00016	0.00018
Carbon Dioxide	0.016	5.6
Ethane	0.0016	Not Detected
Ethene	0.0016	Not Detected
Helium	0.082	Not Detected

Container Type: 6 Liter Summa Canister



Client Sample ID: 1515122-06

Lab ID#: 1506388B-06A

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>10062623</b>	<b>Date of Collection:</b> 6/19/15 9:30:00 AM
<b>Dil. Factor:</b>	<b>1.67</b>	<b>Date of Analysis:</b> 6/26/15 06:53 PM

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.17	16
Nitrogen	0.17	78
Carbon Monoxide	0.017	Not Detected
Methane	0.00017	0.00021
Carbon Dioxide	0.017	5.7
Ethane	0.0017	Not Detected
Ethene	0.0017	Not Detected
Helium	0.084	Not Detected

Container Type: 6 Liter Summa Canister



Client Sample ID: 1515122-07

Lab ID#: 1506388B-07A

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>10062624</b>	<b>Date of Collection:</b> 6/19/15 11:56:00 AM
<b>Dil. Factor:</b>	<b>1.63</b>	<b>Date of Analysis:</b> 6/26/15 07:29 PM

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.16	17
Nitrogen	0.16	80
Carbon Monoxide	0.016	Not Detected
Methane	0.00016	Not Detected
Carbon Dioxide	0.016	2.8
Ethane	0.0016	Not Detected
Ethene	0.0016	Not Detected
Helium	0.082	Not Detected

Container Type: 6 Liter Summa Canister





Client Sample ID: 1515122-08

Lab ID#: 1506388B-08A

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>10062625</b>	<b>Date of Collection:</b> 6/19/15 1:24:00 PM
<b>Dil. Factor:</b>	<b>1.72</b>	<b>Date of Analysis:</b> 6/26/15 07:52 PM

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.17	3.1
Nitrogen	0.17	81
Carbon Monoxide	0.017	Not Detected
Methane	0.00017	Not Detected
Carbon Dioxide	0.017	16
Ethane	0.0017	Not Detected
Ethene	0.0017	Not Detected
Helium	0.086	Not Detected

**Container Type: 6 Liter Summa Canister**



Client Sample ID: 1515122-09

Lab ID#: 1506388B-09A

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>10062626</b>	<b>Date of Collection:</b> 6/19/15 1:45:00 PM
<b>Dil. Factor:</b>	<b>1.94</b>	<b>Date of Analysis:</b> 6/26/15 08:19 PM

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.19	21
Nitrogen	0.19	79
Carbon Monoxide	0.019	Not Detected
Methane	0.00019	0.00021
Carbon Dioxide	0.019	0.041
Ethane	0.0019	Not Detected
Ethene	0.0019	Not Detected
Helium	0.097	Not Detected

Container Type: 6 Liter Summa Canister



Client Sample ID: Lab Blank

Lab ID#: 1506388B-10A

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>10062609</b>	<b>Date of Collection:</b>	<b>NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b>	<b>6/26/15 12:15 PM</b>

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Oxygen	0.10	Not Detected
Nitrogen	0.10	Not Detected
Carbon Monoxide	0.010	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected
Ethane	0.0010	Not Detected
Ethene	0.0010	Not Detected

Container Type: NA - Not Applicable



Client Sample ID: Lab Blank

Lab ID#: 1506388B-10B

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

File Name:	10062608c	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/26/15 11:45 AM

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.050	Not Detected

Container Type: NA - Not Applicable



Client Sample ID: LCS  
Lab ID#: 1506388B-11A

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>10062602</b>	<b>Date of Collection:</b>	<b>NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b>	<b>6/26/15 08:48 AM</b>

<b>Compound</b>	<b>%Recovery</b>	<b>Method Limits</b>
Oxygen	99	85-115
Nitrogen	91	85-115
Carbon Monoxide	93	85-115
Methane	104	85-115
Carbon Dioxide	97	85-115
Ethane	102	85-115
Ethene	103	85-115
Helium	102	85-115

Container Type: NA - Not Applicable



Client Sample ID: LCSD

Lab ID#: 1506388B-11AA

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>10062628</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 6/26/15 09:22 PM

<b>Compound</b>	<b>%Recovery</b>	<b>Method Limits</b>
Oxygen	98	85-115
Nitrogen	91	85-115
Carbon Monoxide	93	85-115
Methane	104	85-115
Carbon Dioxide	98	85-115
Ethane	103	85-115
Ethene	104	85-115
Helium	102	85-115

Container Type: NA - Not Applicable



SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 07/13/2015 16:42  
**Project:** 138810  
**Project Number:** 59th Street Corp Yard  
**Project Manager:** Sue Gardner

**Notes And Definitions**



Date of Report: 12/22/2015

Julie Hernandez

SMUD - Kleinfelder

6201 S Street/P.O. Box 15830

Sacramento, CA 95852-0830

Client Project: SMUD Site Wide Inv.

BCL Project: 138810

BCL Work Order: 1531778

Invoice ID: B222205

Enclosed are the results of analyses for samples received by the laboratory on 12/11/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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**KLEINFELDER**  
Right People. Right Solutions.

PROJECT NO. 138810  
L.P. NO. (PO. NO.)

PROJECT NAME: SMUD site Wide Inv.  
SAMPLERS: (Signature/Number) Julie Hernandez

RECEIVING LAB: BC Labs  
INSTRUCTIONS/REMARKS: STAT

ANALYSIS: OM 13 Metals by EPA Method 8210 for As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, Zn

DATE MM/DD/YY	SAMPLE ID. TIME HH-MM-SS	SAMPLE ID.	MATRIX	NO. OF CON-TAINERS	TYPE OF CON-TAINERS	ANALYSIS	INSTRUCTIONS/REMARKS
12/19/15	1540	KA-41-D	Water	1	500mL Poly	X	Email results to: sgardner@kleinfelder.com mandenenden@kleinfelder.com cjmendez@kleinfelder.com * Please dispose of HNO <sub>3</sub> preserved sample for KA-26-D
→	1445	KA-42-D		1		X	
→	1715	KA-15-D		1		X	
12/10/15	0900	KA-26-D		1		X	
→	1120	KA-7-D		1		X	
→	1335	KA-5-D		1		X	
<p>Relinquished by: (Signature) Julie Hernandez</p> <p>Received by: (Signature) Julie Hernandez</p> <p>Relinquished by: (Signature) Julie Hernandez</p> <p>Received by: (Signature) Julie Hernandez</p> <p>Relinquished by: (Signature) Julie Hernandez</p> <p>Received by: (Signature) Julie Hernandez</p>							<p>STAT</p> <p>Send Results To: Kleinfelder 2882 Prospect Park Dr. Rancho Cordova, CA 95670 Attn: Sive Gardner</p>

CHICK BY: [Signature] DISTRIBUTION: [Signature] SURVIVIST: [Signature]

ENVI-02 REV 05/08

White - Sampler

Canary - Return Copy To Shipper

Pink - Lab Copy

CHAIN OF CUSTODY

COC # 18471

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BC LABORATORIES INC.		COOLER RECEIPT FORM		Page <u>1</u> Of <u>1</u>						
Submission #: <u>15-31778</u>										
<b>SHIPPING INFORMATION</b> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input checked="" type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>					
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____										
Custody Seals: Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Comments: _____										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input type="checkbox"/> No <input type="checkbox"/>										
<b>COC Received</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u> Container: <u>PE</u> Thermometer ID: <u>208</u> Temperature: (A) <u>1.5</u> °C / (C) <u>1.0</u> °C		Date/Time: <u>12-11-15</u> Analyst Init: <u>AD 9:05</u>						
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES	A	A	A	A	A	A	A	JUL 12/15		
2oz Cr <sup>6</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
3oz / 16oz / 32oz AMBER										
3oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										
Comments: <u>No sample date on the bottles</u> Sample Numbering Completed By: <u>[Signature]</u> Date/Time: <u>12-11-15 1020</u> = Actual / C = Corrected										



SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 12/22/2015 16:13  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv.  
**Project Manager:** Julie Hernandez

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1531778-01	<b>COC Number:</b>	---	<b>Receive Date:</b>	12/11/2015 09:05
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	12/09/2015 15:40
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-41-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Julie Hernandez	<b>Sample Type:</b>	Water
			<b>Metal Analysis:</b>	3-Field Filtered and Lab Acidified
1531778-02	<b>COC Number:</b>	---	<b>Receive Date:</b>	12/11/2015 09:05
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	12/09/2015 14:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-42-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Julie Hernandez	<b>Sample Type:</b>	Water
			<b>Metal Analysis:</b>	3-Field Filtered and Lab Acidified
1531778-03	<b>COC Number:</b>	---	<b>Receive Date:</b>	12/11/2015 09:05
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	12/09/2015 17:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-15-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Julie Hernandez	<b>Sample Type:</b>	Water
			<b>Metal Analysis:</b>	3-Field Filtered and Lab Acidified
1531778-04	<b>COC Number:</b>	---	<b>Receive Date:</b>	12/11/2015 09:05
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	12/10/2015 09:00
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-26-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Julie Hernandez	<b>Sample Type:</b>	Water
			<b>Metal Analysis:</b>	3-Field Filtered and Lab Acidified
1531778-05	<b>COC Number:</b>	---	<b>Receive Date:</b>	12/11/2015 09:05
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	12/10/2015 11:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-7-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Julie Hernandez	<b>Sample Type:</b>	Water
			<b>Metal Analysis:</b>	3-Field Filtered and Lab Acidified

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 12/22/2015 16:13  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv.  
**Project Manager:** Julie Hernandez

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1531778-06	<b>COC Number:</b>	---	<b>Receive Date:</b>	12/11/2015 09:05
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	12/10/2015 13:35
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-5-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Julie Hernandez	<b>Sample Type:</b>	Water
			<b>Metal Analysis:</b>	3-Field Filtered and Lab Acidified

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Sacramento, CA 95852-0830

**Reported:** 12/22/2015 16:13  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv.  
**Project Manager:** Julie Hernandez

### Metals Analysis

<b>BCL Sample ID:</b> 1531778-01	<b>Client Sample Name:</b> KA-41-D, 12/9/2015 3:40:00PM, Julie Hernandez
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	4.9	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		1
<b>Dissolved Barium</b>	<b>270</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		1
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
<b>Dissolved Chromium</b>	<b>6.6</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Cobalt</b>	<b>3.2</b>	<b>ug/L</b>	<b>50</b>	<b>1.1</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Copper</b>	<b>4.9</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
<b>Dissolved Molybdenum</b>	<b>12</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Nickel</b>	<b>13</b>	<b>ug/L</b>	<b>10</b>	<b>2.4</b>	<b>EPA-6010B</b>	ND		1
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
<b>Dissolved Silver</b>	<b>1.2</b>	<b>ug/L</b>	<b>10</b>	<b>1.2</b>	<b>EPA-6010B</b>	1.9	J	1
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		1
<b>Dissolved Vanadium</b>	<b>18</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND		1
<b>Dissolved Zinc</b>	<b>15</b>	<b>ug/L</b>	<b>10</b>	<b>5.0</b>	<b>EPA-6010B</b>	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/17/15	12/17/15 17:53	JCC	PE-OP3	1	BYL1719
2	EPA-7470A	12/18/15	12/21/15 16:20	MEV	CETAC1	1	BYL1802

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 12/22/2015 16:13  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv.  
**Project Manager:** Julie Hernandez

### Metals Analysis

<b>BCL Sample ID:</b> 1531778-02	<b>Client Sample Name:</b> KA-42-D, 12/9/2015 2:45:00PM, Julie Hernandez
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	4.9	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		1
<b>Dissolved Barium</b>	<b>93</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		1
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
<b>Dissolved Chromium</b>	<b>2.4</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Cobalt</b>	<b>2.0</b>	<b>ug/L</b>	<b>50</b>	<b>1.1</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Copper</b>	<b>1.3</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
<b>Dissolved Molybdenum</b>	<b>3.9</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Nickel</b>	<b>5.3</b>	<b>ug/L</b>	<b>10</b>	<b>2.4</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	1.2	EPA-6010B	1.9		1
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		1
<b>Dissolved Vanadium</b>	<b>9.0</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Zinc</b>	<b>42</b>	<b>ug/L</b>	<b>10</b>	<b>5.0</b>	<b>EPA-6010B</b>	ND		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-6010B	12/17/15	12/17/15 17:55	JCC	PE-OP3	1	BYL1719
2	EPA-7470A	12/18/15	12/21/15 16:31	MEV	CETAC1	1	BYL1802

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 12/22/2015 16:13  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv.  
**Project Manager:** Julie Hernandez

### Metals Analysis

<b>BCL Sample ID:</b> 1531778-03	<b>Client Sample Name:</b> KA-15-D, 12/9/2015 5:15:00PM, Julie Hernandez
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	4.9	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		1
<b>Dissolved Barium</b>	<b>120</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		1
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
<b>Dissolved Chromium</b>	<b>12</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND		1
<b>Dissolved Cobalt</b>	<b>5.2</b>	<b>ug/L</b>	<b>50</b>	<b>1.1</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Copper</b>	<b>7.3</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	J	2
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		3
<b>Dissolved Molybdenum</b>	<b>2.9</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Nickel</b>	<b>30</b>	<b>ug/L</b>	<b>10</b>	<b>2.4</b>	<b>EPA-6010B</b>	ND		1
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	1.2	EPA-6010B	1.9		1
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		1
<b>Dissolved Vanadium</b>	<b>19</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND		1
<b>Dissolved Zinc</b>	<b>18</b>	<b>ug/L</b>	<b>10</b>	<b>5.0</b>	<b>EPA-6010B</b>	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/17/15	12/17/15 18:03	JCC	PE-OP3	1	BYL1719
2	EPA-6010B	12/17/15	12/18/15 19:42	JCC	PE-OP3	1	BYL1719
3	EPA-7470A	12/18/15	12/21/15 16:33	MEV	CETAC1	1	BYL1802

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 12/22/2015 16:13  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv.  
**Project Manager:** Julie Hernandez

### Metals Analysis

<b>BCL Sample ID:</b> 1531778-04	<b>Client Sample Name:</b> KA-26-D, 12/10/2015 9:00:00AM, Julie Hernandez
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	4.9	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		1
<b>Dissolved Barium</b>	<b>74</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		1
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
<b>Dissolved Chromium</b>	<b>4.7</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Cobalt</b>	<b>7.8</b>	<b>ug/L</b>	<b>50</b>	<b>1.1</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Copper</b>	<b>2.0</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	J	2
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		3
<b>Dissolved Molybdenum</b>	<b>12</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Nickel</b>	<b>24</b>	<b>ug/L</b>	<b>10</b>	<b>2.4</b>	<b>EPA-6010B</b>	ND		1
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	1.2	EPA-6010B	1.9		1
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		1
<b>Dissolved Vanadium</b>	<b>8.5</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Zinc</b>	<b>6.0</b>	<b>ug/L</b>	<b>10</b>	<b>5.0</b>	<b>EPA-6010B</b>	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/17/15	12/17/15 18:05	JCC	PE-OP3	1	BYL1719
2	EPA-6010B	12/17/15	12/18/15 19:44	JCC	PE-OP3	1	BYL1719
3	EPA-7470A	12/18/15	12/21/15 16:36	MEV	CETAC1	1	BYL1802

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**Reported:** 12/22/2015 16:13  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv.  
**Project Manager:** Julie Hernandez

### Metals Analysis

<b>BCL Sample ID:</b> 1531778-05	<b>Client Sample Name:</b> KA-7-D, 12/10/2015 11:20:00AM, Julie Hernandez
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	4.9	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		1
<b>Dissolved Barium</b>	<b>75</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		1
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10	1.0	EPA-6010B	ND		1
<b>Dissolved Cobalt</b>	<b>1.2</b>	<b>ug/L</b>	<b>50</b>	<b>1.1</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Copper	ND	ug/L	10	1.0	EPA-6010B	ND		2
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		3
<b>Dissolved Molybdenum</b>	<b>7.1</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Nickel</b>	<b>9.0</b>	<b>ug/L</b>	<b>10</b>	<b>2.4</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	1.2	EPA-6010B	1.9		1
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		1
<b>Dissolved Vanadium</b>	<b>4.3</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Zinc	ND	ug/L	10	5.0	EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/17/15	12/17/15 18:06	JCC	PE-OP3	1	BYL1719
2	EPA-6010B	12/17/15	12/18/15 19:46	JCC	PE-OP3	1	BYL1719
3	EPA-7470A	12/18/15	12/21/15 16:42	MEV	CETAC1	1	BYL1802

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**Reported:** 12/22/2015 16:13  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv.  
**Project Manager:** Julie Hernandez

### Metals Analysis

<b>BCL Sample ID:</b> 1531778-06	<b>Client Sample Name:</b> KA-5-D, 12/10/2015 1:35:00PM, Julie Hernandez
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	4.9	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		1
<b>Dissolved Barium</b>	<b>110</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		1
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
<b>Dissolved Chromium</b>	<b>2.2</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Cobalt	ND	ug/L	50	1.1	EPA-6010B	ND		1
Dissolved Copper	ND	ug/L	10	1.0	EPA-6010B	ND		2
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		3
<b>Dissolved Molybdenum</b>	<b>3.3</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Nickel</b>	<b>4.5</b>	<b>ug/L</b>	<b>10</b>	<b>2.4</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	1.2	EPA-6010B	1.9		1
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		1
<b>Dissolved Vanadium</b>	<b>6.2</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Zinc	ND	ug/L	10	5.0	EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/17/15	12/17/15 18:08	JCC	PE-OP3	1	BYL1719
2	EPA-6010B	12/17/15	12/18/15 19:47	JCC	PE-OP3	1	BYL1719
3	EPA-7470A	12/18/15	12/21/15 16:44	MEV	CETAC1	1	BYL1802

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**Reported:** 12/22/2015 16:13  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv.  
**Project Manager:** Julie Hernandez

### Metals Analysis

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYL1719</b>						
Dissolved Antimony	BYL1719-BLK1	ND	ug/L	100	4.9	
Dissolved Arsenic	BYL1719-BLK1	ND	ug/L	50	9.2	
Dissolved Barium	BYL1719-BLK1	ND	ug/L	10	3.5	
Dissolved Beryllium	BYL1719-BLK1	ND	ug/L	10	0.50	
Dissolved Cadmium	BYL1719-BLK1	ND	ug/L	10	1.1	
Dissolved Chromium	BYL1719-BLK1	ND	ug/L	10	1.0	
Dissolved Cobalt	BYL1719-BLK1	ND	ug/L	50	1.1	
Dissolved Copper	BYL1719-BLK1	ND	ug/L	10	1.0	
Dissolved Lead	BYL1719-BLK1	ND	ug/L	50	3.5	
Dissolved Molybdenum	BYL1719-BLK1	ND	ug/L	50	1.4	
Dissolved Nickel	BYL1719-BLK1	ND	ug/L	10	2.4	
Dissolved Selenium	BYL1719-BLK1	ND	ug/L	100	15	
<b>Dissolved Silver</b>	<b>BYL1719-BLK1</b>	<b>1.8813</b>	<b>ug/L</b>	<b>10</b>	<b>1.2</b>	<b>J</b>
Dissolved Thallium	BYL1719-BLK1	ND	ug/L	100	10	
Dissolved Vanadium	BYL1719-BLK1	ND	ug/L	10	2.2	
Dissolved Zinc	BYL1719-BLK1	ND	ug/L	10	5.0	
<b>QC Batch ID: BYL1802</b>						
Dissolved Mercury	BYL1802-BLK1	ND	ug/L	0.20	0.033	

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Reported: 12/22/2015 16:13  
Project: 138810  
Project Number: SMUD Site Wide Inv.  
Project Manager: Julie Hernandez

### Metals Analysis

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYL1719</b>										
Dissolved Antimony	BYL1719-BS1	LCS	378.75	400.00	ug/L	94.7		85	115	
Dissolved Arsenic	BYL1719-BS1	LCS	179.05	200.00	ug/L	89.5		85	115	
Dissolved Barium	BYL1719-BS1	LCS	380.29	400.00	ug/L	95.1		85	115	
Dissolved Beryllium	BYL1719-BS1	LCS	174.99	200.00	ug/L	87.5		85	115	
Dissolved Cadmium	BYL1719-BS1	LCS	185.88	200.00	ug/L	92.9		85	115	
Dissolved Chromium	BYL1719-BS1	LCS	188.88	200.00	ug/L	94.4		85	115	
Dissolved Cobalt	BYL1719-BS1	LCS	190.71	200.00	ug/L	95.4		85	115	
Dissolved Copper	BYL1719-BS1	LCS	356.69	400.00	ug/L	89.2		85	115	
Dissolved Lead	BYL1719-BS1	LCS	380.15	400.00	ug/L	95.0		85	115	
Dissolved Molybdenum	BYL1719-BS1	LCS	190.20	200.00	ug/L	95.1		85	115	
Dissolved Nickel	BYL1719-BS1	LCS	376.14	400.00	ug/L	94.0		85	115	
Dissolved Selenium	BYL1719-BS1	LCS	176.65	200.00	ug/L	88.3		85	115	
Dissolved Silver	BYL1719-BS1	LCS	90.239	100.00	ug/L	90.2		85	115	
Dissolved Thallium	BYL1719-BS1	LCS	399.34	400.00	ug/L	99.8		85	115	
Dissolved Vanadium	BYL1719-BS1	LCS	190.08	200.00	ug/L	95.0		85	115	
Dissolved Zinc	BYL1719-BS1	LCS	450.28	500.00	ug/L	90.1		85	115	
<b>QC Batch ID: BYL1802</b>										
Dissolved Mercury	BYL1802-BS1	LCS	0.96250	1.0000	ug/L	96.2		85	115	

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Sacramento, CA 95852-0830

Reported: 12/22/2015 16:13  
Project: 138810  
Project Number: SMUD Site Wide Inv.  
Project Manager: Julie Hernandez

### Metals Analysis

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYL1719</b>		Used client sample: N								
Dissolved Antimony	DUP	1531811-01	ND	ND		ug/L			20	
	MS	1531811-01	ND	399.74	400.00	ug/L		99.9		75 - 125
	MSD	1531811-01	ND	395.28	400.00	ug/L	1.1	98.8	20	75 - 125
Dissolved Arsenic	DUP	1531811-01	57.774	54.204		ug/L	6.4		20	
	MS	1531811-01	57.774	251.50	200.00	ug/L		96.9		75 - 125
	MSD	1531811-01	57.774	252.31	200.00	ug/L	0.3	97.3	20	75 - 125
Dissolved Barium	DUP	1531811-01	232.38	239.82		ug/L	3.2		20	
	MS	1531811-01	232.38	636.13	400.00	ug/L		101		75 - 125
	MSD	1531811-01	232.38	634.17	400.00	ug/L	0.3	100	20	75 - 125
Dissolved Beryllium	DUP	1531811-01	ND	ND		ug/L			20	
	MS	1531811-01	ND	180.00	200.00	ug/L		90.0		75 - 125
	MSD	1531811-01	ND	181.16	200.00	ug/L	0.6	90.6	20	75 - 125
Dissolved Cadmium	DUP	1531811-01	ND	ND		ug/L			20	
	MS	1531811-01	ND	191.64	200.00	ug/L		95.8		75 - 125
	MSD	1531811-01	ND	188.67	200.00	ug/L	1.6	94.3	20	75 - 125
Dissolved Chromium	DUP	1531811-01	ND	1.1782		ug/L			20	J
	MS	1531811-01	ND	208.01	200.00	ug/L		104		75 - 125
	MSD	1531811-01	ND	206.32	200.00	ug/L	0.8	103	20	75 - 125
Dissolved Cobalt	DUP	1531811-01	10.319	11.500		ug/L	10.8		20	J
	MS	1531811-01	10.319	201.22	200.00	ug/L		95.5		75 - 125
	MSD	1531811-01	10.319	197.79	200.00	ug/L	1.7	93.7	20	75 - 125
Dissolved Copper	DUP	1531811-01	ND	ND		ug/L			20	
	MS	1531811-01	ND	368.26	400.00	ug/L		92.1		75 - 125
	MSD	1531811-01	ND	365.51	400.00	ug/L	0.7	91.4	20	75 - 125
Dissolved Lead	DUP	1531811-01	3.6497	ND		ug/L			20	
	MS	1531811-01	3.6497	381.78	400.00	ug/L		94.5		75 - 125
	MSD	1531811-01	3.6497	373.54	400.00	ug/L	2.2	92.5	20	75 - 125
Dissolved Molybdenum	DUP	1531811-01	4.4682	4.8765		ug/L	8.7		20	J
	MS	1531811-01	4.4682	204.09	200.00	ug/L		99.8		75 - 125
	MSD	1531811-01	4.4682	200.85	200.00	ug/L	1.6	98.2	20	75 - 125
Dissolved Nickel	DUP	1531811-01	10.456	10.925		ug/L	4.4		20	
	MS	1531811-01	10.456	409.41	400.00	ug/L		99.7		75 - 125
	MSD	1531811-01	10.456	402.14	400.00	ug/L	1.8	97.9	20	75 - 125
Dissolved Selenium	DUP	1531811-01	ND	ND		ug/L			20	
	MS	1531811-01	ND	203.68	200.00	ug/L		102		75 - 125
	MSD	1531811-01	ND	201.98	200.00	ug/L	0.8	101	20	75 - 125
Dissolved Silver	DUP	1531811-01	ND	2.1337		ug/L			20	J
	MS	1531811-01	ND	103.82	100.00	ug/L		104		75 - 125
	MSD	1531811-01	ND	102.94	100.00	ug/L	0.8	103	20	75 - 125

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Sacramento, CA 95852-0830

Reported: 12/22/2015 16:13  
Project: 138810  
Project Number: SMUD Site Wide Inv.  
Project Manager: Julie Hernandez

### Metals Analysis

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYL1719</b>		Used client sample: N								
Dissolved Thallium	DUP	1531811-01	ND	ND		ug/L			20	
	MS	1531811-01	ND	386.05	400.00	ug/L		96.5		75 - 125
	MSD	1531811-01	ND	382.15	400.00	ug/L	1.0	95.5	20	75 - 125
Dissolved Vanadium	DUP	1531811-01	ND	ND		ug/L			20	
	MS	1531811-01	ND	206.23	200.00	ug/L		103		75 - 125
	MSD	1531811-01	ND	203.40	200.00	ug/L	1.4	102	20	75 - 125
Dissolved Zinc	DUP	1531811-01	ND	ND		ug/L			20	
	MS	1531811-01	ND	465.23	500.00	ug/L		93.0		75 - 125
	MSD	1531811-01	ND	456.47	500.00	ug/L	1.9	91.3	20	75 - 125
<b>QC Batch ID: BYL1802</b>		Used client sample: Y - Description: KA-41-D, 12/09/2015 15:40								
Dissolved Mercury	DUP	1531778-01	ND	ND		ug/L			20	
	MS	1531778-01	ND	0.97500	1.0000	ug/L		97.5		70 - 130
	MSD	1531778-01	ND	0.97750	1.0000	ug/L	0.3	97.8	20	70 - 130

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**Reported:** 12/22/2015 16:13  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv.  
**Project Manager:** Julie Hernandez

**Notes And Definitions**

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit





Date of Report: 12/28/2015

Sue Gardner

SMUD - Kleinfelder

6201 S Street/P.O. Box 15830

Sacramento, CA 95852-0830

Client Project: SMUD Site Wide Inv

BCL Project: 138810

BCL Work Order: 1531871

Invoice ID: B222567

Enclosed are the results of analyses for samples received by the laboratory on 12/12/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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15-31871

PROJECT NO.		PROJECT NAME		RECEIVING LAB:		
138810		SMUD Site Wide Inv		BC Labs		
L.P. NO. (P.O. NO.)		SAMPLERS: (Signature/Number)		INSTRUCTIONS/REMARKS		
		Julie Hernandez		STAT		
DATE	SAMPLE I.D.	TIME	MATRIX	NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS
12/11/15	0915		Water	1	500 mL NP Poly	X
↓	0945		↓	↓	↓	X
↓	1230		↓	↓	↓	X
<p style="text-align: center;"><i>Julie Hernandez</i></p> <p style="text-align: center;">Email results to: sgardner@kleinfelder.com mvandenenden@kleinfelder.com cjhernandez@kleinfelder.com</p>						
<p style="text-align: center;"><i>STAT</i></p>						
<p style="text-align: center;">Send Results To: Kleinfelder 2962 Prospect Park Dr, Suite 200 Rancho Cordova, CA 95670 Attn: Sue Gardner</p>						

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME	RECEIVED FOR
<i>Julie Hernandez</i>	12/11/15 1255	<i>[Signature]</i>	12/11/15 1330	LABORATORY
<i>[Signature]</i>		<i>[Signature]</i>		LABORATORY
<i>[Signature]</i>		<i>[Signature]</i>		LABORATORY

**CHAIN OF CUSTODY**

White - Sample      Canary - Return Copy To Shipper      Pink - Lab Copy

COC # 18472

ENV-02 REV 05/06

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BC LABORATORIES INC.		COOLER RECEIPT FORM		Page <u>1</u> Of <u>1</u>
Submission #: <u>15-31871</u>				
<b>SHIPPING INFORMATION</b> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input checked="" type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>FREE LIQUID</b> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

Refrigerant: Ice  Blue Ice  None  Other  Comments: \_\_\_\_\_

Custody Seals Ice Chest  Containers  None  Comments: \_\_\_\_\_  
 Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

**COC Received**  
 YES  NO

Emissivity: 0.97 Container: pl Thermometer ID: 208 Date/Time 12/21/15 945  
 Temperature: (A) 1.7 °C / (C) 1.2 °C Analyst Init MTB

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES <u>X4U</u>	<u>A</u>	<u>A</u>	<u>A</u>							
2oz Cr <sup>6</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: \_\_\_\_\_  
 Sample Numbering Completed By: JKS Date/Time: 12-21-15 840 Rev 20 07/24/2015  
 A = Actual / C = Corrected (S:\WPDoc\WordPerfect\LAB\_Docs\FORMS\SAMRECrev 20)



SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 12/28/2015 13:56  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv  
**Project Manager:** Sue Gardner

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1531871-01	<b>COC Number:</b>	---	<b>Receive Date:</b>	12/12/2015 09:45
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	12/11/2015 08:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-27-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Julie Hernandez	<b>Sample Type:</b>	Water
			Metal Analysis: 3-Field Filtered and Lab Acidified	
1531871-02	<b>COC Number:</b>	---	<b>Receive Date:</b>	12/12/2015 09:45
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	12/11/2015 09:45
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-9-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Julie Hernandez	<b>Sample Type:</b>	Water
			Metal Analysis: 3-Field Filtered and Lab Acidified	
1531871-03	<b>COC Number:</b>	---	<b>Receive Date:</b>	12/12/2015 09:45
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	12/11/2015 12:30
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	KA-6-D	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Julie Hernandez	<b>Sample Type:</b>	Water
			Metal Analysis: 3-Field Filtered and Lab Acidified	

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 12/28/2015 13:56  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv  
**Project Manager:** Sue Gardner

### Metals Analysis

<b>BCL Sample ID:</b> 1531871-01	<b>Client Sample Name:</b> KA-27-D, 12/11/2015 8:15:00AM, Julie Hernandez
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	4.9	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		1
<b>Dissolved Barium</b>	<b>86</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		1
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
<b>Dissolved Chromium</b>	<b>5.0</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Cobalt	ND	ug/L	50	1.1	EPA-6010B	ND		1
<b>Dissolved Copper</b>	<b>1.6</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	1.4	J	1
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
<b>Dissolved Molybdenum</b>	<b>5.3</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Nickel</b>	<b>4.2</b>	<b>ug/L</b>	<b>10</b>	<b>2.4</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
<b>Dissolved Silver</b>	<b>1.2</b>	<b>ug/L</b>	<b>10</b>	<b>1.2</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		1
<b>Dissolved Vanadium</b>	<b>10</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND		1
Dissolved Zinc	ND	ug/L	10	5.0	EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/11/15	12/22/15 11:11	JCC	PE-OP3	1	BYL2044
2	EPA-7470A	12/23/15	12/24/15 08:34	MEV	CETAC1	1	BYL2261

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6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 12/28/2015 13:56  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv  
**Project Manager:** Sue Gardner

### Metals Analysis

<b>BCL Sample ID:</b> 1531871-02	<b>Client Sample Name:</b> KA-9-D, 12/11/2015 9:45:00AM, Julie Hernandez
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	4.9	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		1
<b>Dissolved Barium</b>	<b>66</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		1
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10	1.0	EPA-6010B	ND		1
<b>Dissolved Cobalt</b>	<b>1.3</b>	<b>ug/L</b>	<b>50</b>	<b>1.1</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Copper	ND	ug/L	10	1.0	EPA-6010B	1.4		1
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
<b>Dissolved Molybdenum</b>	<b>7.4</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Nickel</b>	<b>7.0</b>	<b>ug/L</b>	<b>10</b>	<b>2.4</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
<b>Dissolved Silver</b>	<b>1.3</b>	<b>ug/L</b>	<b>10</b>	<b>1.2</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		1
<b>Dissolved Vanadium</b>	<b>5.0</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Zinc	ND	ug/L	10	5.0	EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/11/15	12/22/15 11:12	JCC	PE-OP3	1	BYL2044
2	EPA-7470A	12/23/15	12/24/15 08:36	MEV	CETAC1	1	BYL2261

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Sacramento, CA 95852-0830

**Reported:** 12/28/2015 13:56  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv  
**Project Manager:** Sue Gardner

### Metals Analysis

<b>BCL Sample ID:</b> 1531871-03	<b>Client Sample Name:</b> KA-6-D, 12/11/2015 12:30:00PM, Julie Hernandez
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	4.9	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		1
<b>Dissolved Barium</b>	<b>130</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		1
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		1
<b>Dissolved Chromium</b>	<b>4.9</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Cobalt	ND	ug/L	50	1.1	EPA-6010B	ND		1
<b>Dissolved Copper</b>	<b>2.1</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	1.4	J	1
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	0.033	EPA-7470A	ND		2
<b>Dissolved Molybdenum</b>	<b>4.9</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	J	1
<b>Dissolved Nickel</b>	<b>4.8</b>	<b>ug/L</b>	<b>10</b>	<b>2.4</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	1.2	EPA-6010B	ND		1
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		1
<b>Dissolved Vanadium</b>	<b>8.9</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND	J	1
Dissolved Zinc	ND	ug/L	10	5.0	EPA-6010B	ND		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-6010B	12/11/15	12/22/15	11:14	JCC	PE-OP3	1	BYL2044
2	EPA-7470A	12/23/15	12/24/15	08:51	MEV	CETAC1	1	BYL2263

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**Reported:** 12/28/2015 13:56  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv  
**Project Manager:** Sue Gardner

### Metals Analysis

#### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BYL2044</b>						
Dissolved Antimony	BYL2044-BLK1	ND	ug/L	100	4.9	
Dissolved Arsenic	BYL2044-BLK1	ND	ug/L	50	9.2	
Dissolved Barium	BYL2044-BLK1	ND	ug/L	10	3.5	
Dissolved Beryllium	BYL2044-BLK1	ND	ug/L	10	0.50	
Dissolved Cadmium	BYL2044-BLK1	ND	ug/L	10	1.1	
Dissolved Chromium	BYL2044-BLK1	ND	ug/L	10	1.0	
Dissolved Cobalt	BYL2044-BLK1	ND	ug/L	50	1.1	
<b>Dissolved Copper</b>	<b>BYL2044-BLK1</b>	<b>1.4277</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>J</b>
Dissolved Lead	BYL2044-BLK1	ND	ug/L	50	3.5	
Dissolved Molybdenum	BYL2044-BLK1	ND	ug/L	50	1.4	
Dissolved Nickel	BYL2044-BLK1	ND	ug/L	10	2.4	
Dissolved Selenium	BYL2044-BLK1	ND	ug/L	100	15	
Dissolved Silver	BYL2044-BLK1	ND	ug/L	10	1.2	
Dissolved Thallium	BYL2044-BLK1	ND	ug/L	100	10	
Dissolved Vanadium	BYL2044-BLK1	ND	ug/L	10	2.2	
Dissolved Zinc	BYL2044-BLK1	ND	ug/L	10	5.0	
<b>QC Batch ID: BYL2261</b>						
Dissolved Mercury	BYL2261-BLK1	ND	ug/L	0.20	0.033	
<b>QC Batch ID: BYL2263</b>						
Dissolved Mercury	BYL2263-BLK1	ND	ug/L	0.20	0.033	

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6201 S Street/P.O. Box 15830  
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Reported: 12/28/2015 13:56  
Project: 138810  
Project Number: SMUD Site Wide Inv  
Project Manager: Sue Gardner

### Metals Analysis

#### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
<b>QC Batch ID: BYL2044</b>										
Dissolved Antimony	BYL2044-BS1	LCS	393.40	400.00	ug/L	98.3		85 - 115		
Dissolved Arsenic	BYL2044-BS1	LCS	195.90	200.00	ug/L	98.0		85 - 115		
Dissolved Barium	BYL2044-BS1	LCS	362.94	400.00	ug/L	90.7		85 - 115		
Dissolved Beryllium	BYL2044-BS1	LCS	179.37	200.00	ug/L	89.7		85 - 115		
Dissolved Cadmium	BYL2044-BS1	LCS	187.94	200.00	ug/L	94.0		85 - 115		
Dissolved Chromium	BYL2044-BS1	LCS	191.21	200.00	ug/L	95.6		85 - 115		
Dissolved Cobalt	BYL2044-BS1	LCS	196.91	200.00	ug/L	98.5		85 - 115		
Dissolved Copper	BYL2044-BS1	LCS	346.88	400.00	ug/L	86.7		85 - 115		
Dissolved Lead	BYL2044-BS1	LCS	383.82	400.00	ug/L	96.0		85 - 115		
Dissolved Molybdenum	BYL2044-BS1	LCS	194.51	200.00	ug/L	97.3		85 - 115		
Dissolved Nickel	BYL2044-BS1	LCS	391.01	400.00	ug/L	97.8		85 - 115		
Dissolved Selenium	BYL2044-BS1	LCS	184.94	200.00	ug/L	92.5		85 - 115		
Dissolved Silver	BYL2044-BS1	LCS	94.230	100.00	ug/L	94.2		85 - 115		
Dissolved Thallium	BYL2044-BS1	LCS	405.46	400.00	ug/L	101		85 - 115		
Dissolved Vanadium	BYL2044-BS1	LCS	195.11	200.00	ug/L	97.6		85 - 115		
Dissolved Zinc	BYL2044-BS1	LCS	446.55	500.00	ug/L	89.3		85 - 115		
<b>QC Batch ID: BYL2261</b>										
Dissolved Mercury	BYL2261-BS1	LCS	1.0200	1.0000	ug/L	102		85 - 115		
<b>QC Batch ID: BYL2263</b>										
Dissolved Mercury	BYL2263-BS1	LCS	1.0100	1.0000	ug/L	101		85 - 115		

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 12/28/2015 13:56  
Project: 138810  
Project Number: SMUD Site Wide Inv  
Project Manager: Sue Gardner

### Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
<b>QC Batch ID: BYL2044</b>		Used client sample: N								
Dissolved Antimony	DUP	1532305-01	ND	ND		ug/L			20	
	MS	1532305-01	ND	325.51	408.16	ug/L		79.8		75 - 125
	MSD	1532305-01	ND	326.16	408.16	ug/L	0.2	79.9	20	75 - 125
Dissolved Arsenic	DUP	1532305-01	ND	ND		ug/L			20	
	MS	1532305-01	ND	189.82	204.08	ug/L		93.0		75 - 125
	MSD	1532305-01	ND	191.70	204.08	ug/L	1.0	93.9	20	75 - 125
Dissolved Barium	DUP	1532305-01	21.925	20.647		ug/L	6.0		20	
	MS	1532305-01	21.925	415.01	408.16	ug/L		96.3		75 - 125
	MSD	1532305-01	21.925	417.34	408.16	ug/L	0.6	96.9	20	75 - 125
Dissolved Beryllium	DUP	1532305-01	ND	ND		ug/L			20	
	MS	1532305-01	ND	200.54	204.08	ug/L		98.3		75 - 125
	MSD	1532305-01	ND	198.18	204.08	ug/L	1.2	97.1	20	75 - 125
Dissolved Cadmium	DUP	1532305-01	ND	ND		ug/L			20	
	MS	1532305-01	ND	204.01	204.08	ug/L		100		75 - 125
	MSD	1532305-01	ND	205.11	204.08	ug/L	0.5	101	20	75 - 125
Dissolved Chromium	DUP	1532305-01	ND	ND		ug/L			20	
	MS	1532305-01	ND	216.85	204.08	ug/L		106		75 - 125
	MSD	1532305-01	ND	217.11	204.08	ug/L	0.1	106	20	75 - 125
Dissolved Cobalt	DUP	1532305-01	ND	ND		ug/L			20	
	MS	1532305-01	ND	192.27	204.08	ug/L		94.2		75 - 125
	MSD	1532305-01	ND	194.04	204.08	ug/L	0.9	95.1	20	75 - 125
Dissolved Copper	DUP	1532305-01	ND	ND		ug/L			20	
	MS	1532305-01	ND	380.48	408.16	ug/L		93.2		75 - 125
	MSD	1532305-01	ND	378.81	408.16	ug/L	0.4	92.8	20	75 - 125
Dissolved Lead	DUP	1532305-01	3.9507	ND		ug/L			20	
	MS	1532305-01	3.9507	377.64	408.16	ug/L		91.6		75 - 125
	MSD	1532305-01	3.9507	382.76	408.16	ug/L	1.3	92.8	20	75 - 125
Dissolved Molybdenum	DUP	1532305-01	30.002	31.283		ug/L	4.2		20	J
	MS	1532305-01	30.002	219.39	204.08	ug/L		92.8		75 - 125
	MSD	1532305-01	30.002	226.77	204.08	ug/L	3.3	96.4	20	75 - 125
Dissolved Nickel	DUP	1532305-01	22.572	23.454		ug/L	3.8		20	
	MS	1532305-01	22.572	426.96	408.16	ug/L		99.1		75 - 125
	MSD	1532305-01	22.572	426.28	408.16	ug/L	0.2	98.9	20	75 - 125
Dissolved Selenium	DUP	1532305-01	20.039	ND		ug/L			20	
	MS	1532305-01	20.039	233.25	204.08	ug/L		104		75 - 125
	MSD	1532305-01	20.039	260.67	204.08	ug/L	11.1	118	20	75 - 125
Dissolved Silver	DUP	1532305-01	2.8511	1.3300		ug/L	72.8		20	J,A02
	MS	1532305-01	2.8511	99.944	102.04	ug/L		95.2		75 - 125
	MSD	1532305-01	2.8511	102.36	102.04	ug/L	2.4	97.5	20	75 - 125

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

Reported: 12/28/2015 13:56  
Project: 138810  
Project Number: SMUD Site Wide Inv  
Project Manager: Sue Gardner

### Metals Analysis

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab Quals
								Percent Recovery	Percent Recovery	
<b>QC Batch ID: BYL2044</b>		Used client sample: N								
Dissolved Thallium	DUP	1532305-01	ND	ND		ug/L			20	
	MS	1532305-01	ND	385.96	408.16	ug/L		94.6		75 - 125
	MSD	1532305-01	ND	388.03	408.16	ug/L	0.5	95.1	20	75 - 125
Dissolved Vanadium	DUP	1532305-01	ND	ND		ug/L			20	
	MS	1532305-01	ND	219.80	204.08	ug/L		108		75 - 125
	MSD	1532305-01	ND	215.98	204.08	ug/L	1.8	106	20	75 - 125
Dissolved Zinc	DUP	1532305-01	ND	ND		ug/L			20	
	MS	1532305-01	ND	478.45	510.20	ug/L		93.8		75 - 125
	MSD	1532305-01	ND	483.81	510.20	ug/L	1.1	94.8	20	75 - 125
<b>QC Batch ID: BYL2261</b>		Used client sample: N								
Dissolved Mercury	DUP	1532487-01	ND	ND		ug/L			20	
	MS	1532487-01	ND	1.0625	1.0000	ug/L		106		70 - 130
	MSD	1532487-01	ND	1.0625	1.0000	ug/L	0	106	20	70 - 130
<b>QC Batch ID: BYL2263</b>		Used client sample: Y - Description: KA-6-D, 12/11/2015 12:30								
Dissolved Mercury	DUP	1531871-03	ND	ND		ug/L			20	
	MS	1531871-03	ND	0.91750	1.0000	ug/L		91.8		70 - 130
	MSD	1531871-03	ND	0.93000	1.0000	ug/L	1.4	93.0	20	70 - 130

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SMUD - Kleinfelder  
6201 S Street/P.O. Box 15830  
Sacramento, CA 95852-0830

**Reported:** 12/28/2015 13:56  
**Project:** 138810  
**Project Number:** SMUD Site Wide Inv  
**Project Manager:** Sue Gardner

**Notes And Definitions**

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A02 The difference between duplicate readings is less than the quantitation limit.

**APPENDIX F**  
**PASSIVE SOIL GAS SURVEY REPORT AND MAPS**

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AMPLIFIED  
GEOCHEMICAL  
IMAGING, LLC

# Laboratory Report

Site: SMUD Phase II ESA

Prepared for:

Kleinfelder Associates, Inc.  
3077 Fite Circle  
Sacramento, CA  
UNITED STATES

Prepared on:  
April 28, 2015

## Project Summary and Objective

Amplified Geochemical Imaging, LLC. (AGI) provided the AGI Environmental Survey used at:

### **SMUD Phase II ESA**

The service provided by AGI included delivery of the required quantity of AGI Universal Samplers, analysis by the method described below for the requested organic compounds, reporting of the data, and contour mapping (as needed).

This report includes results for only the samples noted under the Laboratory Sample Report section. If contour maps are part of the project deliverable, the maps will be prepared and issued under a separate report cover, upon receipt of a usable sitemap (electronic) and compound choices for contouring.

Written/submitted by:

**Jim E Whetzel**

Project Manager

Reviewed/approved by:

**Don D'Apolito**

Project Manager

Analytical data approved by:

**Fatima Niazi**

Chemist



## Quality Assurance Statement

The AGI Laboratory, at Amplified Geochemical Imaging's facility in Elkton, MD USA, operates under the guidelines of its ISO Standard 17025 DoD ELAP accreditation, and its Quality Assurance Manual, Operating Procedures, and Methods (SPG-SOP-0462).

For this project, the analytical method, results, and observations reported do [ ] do not [ √ ] fall within the scope of AGI's ISO 17025 accreditation.

### Screening/Concentration Method

The AGI Universal Samplers are analyzed at AGI's fixed laboratory using thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) instrumentation following U.S. EPA Method 8260 (SPG-WI-0292) which includes the following:

- **BFB Tuning Frequency:** A BFB tune is analyzed at the start of each analytical run and after every 30 samples.
- **Initial Calibration:** A minimum of a five point calibration curve is analyzed prior to the analysis of samples .
- **Linearity of Target Compounds:** If the RSD of any target analyte is less than or equal to 25% then average response factor can be used for quantitation. If the RSD exceeds 25% for a target compound a regression equation can be used for quantitation.
- **Continuing Calibration Verification:** After every 10 samples, and at the end of each analytical batch, and a second-source Reference Standard is analyzed near the mid point of the calibration curve. The acceptance criteria for all target analytes in the reference standards are +/- 50% of the true value.
- **Method Blank:** Analyzed prior to the analysis of field samples and every 30 samples.

**Note:** Analyte levels reported for the field-deployed AGI Universal Samplers that exceed trip and method blank levels, and/or the reporting limit, are more likely to have originated from on-site sources.

Media Sampled:	SOIL GAS
Chemist - sample analysis:	Kelly J Stringham
Chemist - data processor:	Kelly J Stringham
Chemist - data review:	Fatima Niazi

Method deviations: None.

Please note that data file names ending with R are rerun samples using the second pair of sorbers, in which the original results were not reported. Data file names ending in D are duplicate analysis results for the second set of sorbers from the same sampler, and are reported.

### Additional Report Information

- Comments
- Laboratory Sample Report
- Chain of Custody
- Installation and Retrieval Log
- Analytical Results and Key
- Concentration Calculation Method Summary
- Total Ion Chromatograms

### Project Specific Comments

Polychlorinated biphenyls were reported as mass values only. Quantification of these compounds were based on a single level calibration standard. All other target compounds were quantified using a five level calibration.

#### Survey period <sup>1</sup>

Samplers were installed on April 8 and 9, 2015 and retrieved on April 13 and 14, 2015 for an exposure period of five days.

Tamper seal intact:

Yes

Date received:

4/20/2015 10:40 PM

By: Scott Kirlin

COC returned:

Yes

#### Comments:

Sampler 757264 was not returned and noted as lost in the field.

The installation retrieval login indicated that sample was retrieved on April 17, 2015. However, according to Kelifelder, the actual retrieval date was April 13, 2015.

<sup>1</sup> - Installation start to end of retrieval, as reported. See installation and retrieval log for individual deployment and retrieval dates and times (i.e., sampler exposure time).

## General Comments

### Analytical QA/QC

Laboratory instrumentation consists of gas chromatographs equipped with mass selective detectors, coupled with automated thermal desorption units. Sample preparation involves cutting the tip off the bottom of the AGI Universal Sampler, and transferring one or more "sorbents" to a thermal desorption tube for analysis. The insertion/retrieval cord prevents soil, water and other interferences from coming in contact with the adsorbent. No further sample preparation is required. Any replicate sorbents not consumed in the initial analysis will be discarded fifteen (15) days from the date of the laboratory report.

Data are archived and stored in a secure manner as per AGI's Quality Assurance program (SPG-SOP-0462).

Total petroleum hydrocarbons (TPH), gasoline-range petroleum hydrocarbons (GRPH), and/or diesel range petroleum hydrocarbons (DRPH), when reported, are calculated using the area under the peaks observed in m/z 55 and 57 selected ion chromatograms. Quantitation of the mass values was performed using the response factor for a specific alkane (present in the calibration standards). TPH values include the entire chromatogram and provide estimates for aliphatic hydrocarbon ranges of C4 to C20. GRPH and DRPH include only the relevant regions of the chromatograms and provide estimates for C4 to C10 and C10 to C20 aliphatic hydrocarbons, respectively.

Trip blanks were provided to document potential exposures that were not part of the signal of interest (e.g., impact during sampler shipment, installation and/or retrieval, and storage). The trip blanks are identically manufactured and packaged AGI Universal Samplers to those samplers deployed in the field. The trip blanks remain unopened during all phases of the project. Levels reported on the trip blanks may indicate potential impact to the samplers other than the contaminant source of interest.

Unresolved peak envelopes (UPEs) are represented as a series of compound peaks clustered together around a central gas chromatograph elution time in the total ion chromatogram. UPEs may be indicative of complex fluid mixtures. UPEs observed early in the chromatograms are considered to indicate presence of more volatile fluids, while UPEs observed later in the chromatogram may indicate the presence of less volatile fluids. Multiple UPEs may indicate the presence of multiple complex fluids.

Total ion chromatograms (TICs) are included in the Attachments. The eight-digit serial number of each sampler is incorporated in the TIC identification (e.g., 12345678.D represents AGI Universal Sampler 12345678).

## Soil Gas Sampling

For soil gas sampling, the AGI Environmental Survey reports mass levels migrating through the open pore spaces of the soil and diffusing through the sampler membrane for sorption by the engineered, hydrophobic adsorbents, housed within the membrane tube. During the migration of the soil gas away from the source to the AGI Universal Sampler, the vapors are subject to a variety of attenuation factors. The soil gas masses reported on the samplers compare favorably with the concentrations reported in the soil or groundwater (e.g., where soil gas levels are reported at greater levels to other sampled locations on the site, the matrix data should reveal the same pattern, and vice versa). However, due to a variety of factors, a perfect comparison between matrix data and soil gas levels can rarely be achieved.

Soil gas concentrations ( $\mu\text{g}/\text{m}^3$ ) are calculated following the method described in the Additional Report Information section.

Soil gas signals reported by this method cannot be correlated specifically to soil adsorbed, groundwater, and /or free-phase contamination. The soil gas signal reported from each AGI Universal Sampler can evolve from all of these sources. Differentiation between soil and groundwater contamination can only be achieved with prior knowledge of the site history (i.e., the site is known to have groundwater contamination only).

## Air Sampling

For indoor, outdoor, and crawlspace air sampling, the AGI Environmental Survey reports mass levels present in the air and diffusing through the sampler membrane for sorption by the engineered adsorbents housed within the membrane tube.

Air concentrations ( $\mu\text{g}/\text{m}^3$ ) are calculated following the method described in the Additional Report Information section.

## Groundwater and Sediment Porewater Sampling

For groundwater and sediment porewater sampling, the AGI Environmental Survey reports the mass levels of compounds present in the water which, when coming in contact with the sampler membrane, partitions out of solution, and diffuses through the sampler membrane for sorption by the engineered adsorbents.

Water concentrations ( $\mu\text{g}/\text{L}$ ) are calculated using the quantified mass, exposure period and the compound specific uptake rate. The rates were measured under controlled experimental conditions. The uptake rates are corrected for water pressure (depth of the AGI Universal Sampler below the water table), water temperature and the aquifer flow rate. For sediment porewater, the uptake rate is corrected for the reduced volume of water in the sediment, by multiplying the uptake rate by the pore water fraction.

# LABORATORY SAMPLE REPORT

Project: ENV 01345

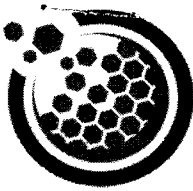
Site Name: SMUD Phase II ESA

Module Type: SPG0008

Module ID	Sample Type	Field ID
00757263	FIELD_SAMPLE	PSG-02
00757264	LOST	discarded
00757265	FIELD_SAMPLE	PSG-01
00757266	FIELD_SAMPLE	PSG-04
00757267	FIELD_SAMPLE	PSG-06
00757268	FIELD_SAMPLE	PSG-08
00757269	FIELD_SAMPLE	PSG-07
00757270	FIELD_SAMPLE	PSG-05
00757271	FIELD_SAMPLE	PSG-03
00757272	FIELD_SAMPLE	PSG-10
00757273	FIELD_SAMPLE	PSG-12
00757274	FIELD_SAMPLE	PSG-14
00757275	FIELD_SAMPLE	PSG-11
00757276	FIELD_SAMPLE	PSG-09
00757277	FIELD_SAMPLE	PSG-18
00757278	FIELD_SAMPLE	PSG-17
00757279	FIELD_SAMPLE	PSG-25
00757280	FIELD_SAMPLE	PSG-26
00757281	FIELD_SAMPLE	PSG-27
00757288	FIELD_SAMPLE	PSG-15
00757289	FIELD_SAMPLE	PSG-28
00757290	FIELD_SAMPLE	PSG-13
00757291	FIELD_SAMPLE	PSG-20
00757292	FIELD_SAMPLE	PSG-22
00757293	FIELD_SAMPLE	PSG-24
00757294	FIELD_SAMPLE	PSG-19
00757295	FIELD_SAMPLE	PSG-23
00757296	FIELD_SAMPLE	PSG-21
00757297	FIELD_SAMPLE	PSG-30
00757298	FIELD_SAMPLE	PSG-32
00757299	FIELD_SAMPLE	PSG-29
00757300	FIELD_SAMPLE	PSG-31
00757301	FIELD_SAMPLE	PSG-33
00757302	FIELD_SAMPLE	PSG-34
00757303	FIELD_SAMPLE	PSG-38
00757304	FIELD_SAMPLE	PSG-37
00757305	FIELD_SAMPLE	PSG-36
00757306	FIELD_SAMPLE	PSG-35
00757307	TRIP_BLANK	Not Provided
00757308	TRIP_BLANK	Not Provided

Total # "FIELD SAMPLES"	Total # "TRIP BLANKS"	Total # "UNUSED"	Total # "LOST"
37	2	0	1

Duplicate samples: 0



**AMPLIFIED  
GEOCHEMICAL  
IMAGING LLC**

210 Executive Drive  
Newark, Delaware 19702 USA  
ph: +1-302-266-2428  
www.agisurveys.net

**AGI Universal Passive Sampler Chain of Custody  
Soil gas and/or Air Sampling**

Production Order #: 01345

Customer Name: KLEINFELDER ASSOCIATES INC

Site Name: SMUD Phase 11 ESA

Address: 3077 Fite Circle

Site Address:

Sacramento., CA 95827  
USA

Project Manager:

Serial # of Samplers Shipped	# of Samplers for Installation	38.00	# of Trip Blanks	2
00757263 - 00757281	Total Samplers Shipped	40.00	Pieces	
00757288 - 00757308	Total Samplers Received		Pieces	
	Total Samplers Installed	<u>37</u>	Pieces	

Serial # of Trip Blanks (Client Decides)

**Insertion Rods**

# Tips Shipped: 1

# Rod Bodies Shipped: 3

00757307		
00757308		

Prepared By: Marlene Yellowdy

Verified By: Clearence W. Hylton

**Installation Method: (Circle those that apply)**

Slide Hammer  Hammer Drill  Auger

Other

Installation Performed By:

Name: Mark Lee, Seng Lo

Company: Kleinfelder

Retrieval Performed By:

Name: Mark Lee, Seng Lo

Company: Kleinfelder

Installation Start Date / Time: 4-8-15 / 0935

Installation Complete Date / Time: 4-9-15 / 1533

Retrieval Start Date / Time: 4-13-15 / 1102

Retrieval Complete Date / Time: 4-14-15 / 0948

Total Samplers Retrieved: 37

Total Samplers Lost In Field: 1

Total Unused Samplers Returned: 0

Insertion Rod Sections Returned: 4

Relinquished By: Marlene Yellowdy Date/Time: 3/23/15

Company: AGI 10:00 AM

Received By: Mark Lee Date/Time: 3-25-15

Company: Kleinfelder 10:30

Relinquished By: Mark Lee Date/Time: 4-15-15

Company: Kleinfelder 15:30

Received By: AGI Date/Time: 4-20-15

Company: AGI 10:40 AM



210 Executive Drive, Suite 1  
Newark, DE USA 19702-3335  
ph: 302-266-2428

AGI Project No.  
Site Name:  
Site Location:

ENV 01345  
SMUD Phase 11 ESA

Company Name: KLEINFELDER ASSOCIATES INC  
Location:  
Samples collected by:

AGI Soil Gas Sampling  
Installation & Retrieval Log

\* Optional or as needed

SAMPLER SERIAL NO.	FIELD ID* (e.g., arbitrary, US EPA)	SAMPLE TYPE (Field Sample, Trip Blank, Field Blank, etc.)	INSTALLATION DATE & TIME MM/DD/YYYY HH:MM (24 Hour) ex. 12/27/2000 13:00	RETRIEVAL DATE & TIME MM/DD/YYYY HH:MM (24 Hour) ex. 12/30/2000 13:00	OBSERVATIONS/COMMENTS* (e.g., sample depth, location description, missing, pulled from hole, etc. - as needed)	SAMPLE ENVIRONMENT* (e.g., grass, bare soil, through slab)	YES / NO			AT MINIMUM PROVIDE SOIL	
							EVIDENCE OF LIQUID PETROLEUM HYDROCARBONS?	ODOR ?	WATER IN INSTALLATION HOLE?	SOIL TYPE AT MODULE DEPTH (clay, loamy sand etc.)	TOTAL SOIL POROSITY AT MODULE DEPTH* (total volume of pores/total volume)
00757263	PSG-02	FIELD SAMPLE	4/8/15 9:35	4/13/15 11:02	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILT	
00757264	discarded	FIELD SAMPLE	discarded	discarded	discarded		No	No	No	SILT	
00757265	PSG-01	FIELD SAMPLE	4/8/15 10:05	4/13/15 11:10	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILT	
00757266	PSG-04	FIELD SAMPLE	4/8/15 10:25	4/13/15 11:15	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILT	
00757267	PSG-06	FIELD SAMPLE	4/8/15 10:45	4/13/15 11:20	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILT	
00757268	PSG-08	FIELD SAMPLE	4/8/15 10:58	4/13/15 11:26	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILT	
00757269	PSG-07	FIELD SAMPLE	4/8/15 11:15	4/13/15 11:32	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILTY CLAY LOAM	
00757270	PSG-05	FIELD SAMPLE	4/8/15 11:43	4/13/15 11:43	Concrete 6", TD 24", hole caved	Concrete over silt	No	No	No	SILT	
00757271	PSG-03	FIELD SAMPLE	4/8/15 12:05	4/13/15 11:49	Concrete 6", TD 31"	Concrete over silt	No	No	No	SILT	
00757272	PSG-10	FIELD SAMPLE	4/8/15 12:27	4/13/15 11:55	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILT	
00757273	PSG-12	FIELD SAMPLE	4/8/15 12:40	4/13/15 11:58	Concrete 6", TD 31"	Concrete over silt	No	No	No	SILT	
00757274	PSG-14	FIELD SAMPLE	4/8/15 12:55	4/13/15 12:03	Concrete 6", TD 31"	Concrete over silt	No	No	No	SILT	
00757275	PSG-11	FIELD SAMPLE	4/8/15 13:10	4/13/15 12:08	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILT	
00757276	PSG-09	FIELD SAMPLE	4/8/15 13:20	4/17/15 16:12	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILT	
00757277	PSG-18	FIELD SAMPLE	4/8/15 13:53	4/13/15 12:16	Concrete 6", TD 31"	Concrete over silt	No	No	No	SILTY CLAY LOAM	
00757278	PSG-17	FIELD SAMPLE	4/8/15 14:08	4/13/15 12:20	AT 6" TD 31", Wet sample	Asphalt slab over silt	No	No	Yes	SILT	
00757279	PSG-25	FIELD SAMPLE	4/8/15 14:22	4/13/15 12:25	Concrete 6", TD 31"	Concrete over silt	No	No	No	SILT	
00757280	PSG-26	FIELD SAMPLE	4/8/15 14:40	4/13/15 12:28	Concrete 6", TD 31"	Concrete over silt	No	No	No	SILT	
00757281	PSG-27	FIELD SAMPLE	4/8/15 15:05	4/13/15 12:32	Concrete 6", TD 31", Wet sample	Concrete over silt	No	No	Yes	SILT	
00757288	PSG-15	FIELD SAMPLE	4/8/15 15:22	4/13/15 12:35	Concrete 6", TD 31"	Concrete over silt	No	No	No	SILT	
00757289	PSG-28	FIELD SAMPLE	4/8/15 15:34	4/13/15 12:39	Concrete 6", TD 31", Wet sample	Concrete over silt	No	No	Yes	SILTY CLAY LOAM	
00757290	PSG-13	FIELD SAMPLE	4/8/15 15:56	4/13/15 12:41	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILT	
00757291	PSG-20	FIELD SAMPLE	4/9/15 8:29	4/14/15 8:19	Concrete 6", TD 31", hole caved	Concrete over silt	No	No	No	SILT	
00757292	PSG-22	FIELD SAMPLE	4/9/15 8:52	4/14/15 8:28	Concrete 12", TD 31"	Concrete over silt	No	No	No	SILT	
00757293	PSG-24	FIELD SAMPLE	4/9/15 9:09	4/14/15 8:34	Concrete 12", TD 31"	Concrete over silt	No	No	No	SILT	
00757294	PSG-19	FIELD SAMPLE	4/9/15 9:25	4/14/15 8:42	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILT	



210 Executive Drive, Suite 1  
Newark, DE USA 19702-3335  
ph: 302-266-2428

AGI Project No.  
Site Name:  
Site Location:

ENV 01345  
SMUD Phase 11 ESA

**AGI Soil Gas Sampling  
Installation & Retrieval Log**

Company Name: KLEINFELDER ASSOCIATES INC  
Location:  
Samples collected by:

\* Optional or as needed

SAMPLER SERIAL NO.	FIELD ID* (e.g., arbitrary, US EPA)	SAMPLE TYPE (Field Sample, Trip Blank, Field Blank, etc.)	INSTALLATION DATE & TIME MM/DD/YYYY HH:MM (24 Hour) ex. 12/27/2000 13:00	RETRIEVAL DATE & TIME MM/DD/YYYY HH:MM (24 Hour) ex. 12/30/2000 13:00	OBSERVATIONS/COMMENTS* (e.g., sample depth, location description, missing, pulled from hole, etc. - as needed)	SAMPLE ENVIRONMENT* (e.g., grass, bare soil, through slab)	YES / NO			AT MINIMUM PROVIDE SOIL*	
							EVIDENCE OF LIQUID PETROLEUM HYDROCARBONS?	ODOR ?	WATER IN INSTALLATION HOLE?	SOIL TYPE AT MODULE DEPTH (clay, loamy sand etc.)	TOTAL SOIL POROSITY AT MODULE DEPTH* (total volume of pores/total volume)
00757295	PSG-23	FIELD SAMPLE	4/9/15 9:45	4/14/15 8:49	Concrete 12", TD 31"	Concrete over silt	No	No	No	SILT	
00757296	PSG-21	FIELD SAMPLE	4/9/15 10:10	4/14/15 8:52	Concrete 23", TD 31"	Concrete over silt	No	No	No	SILT	
00757297	PSG-30	FIELD SAMPLE	4/9/15 10:31	4/14/15 8:58	Concrete 23", TD 31"	Concrete over silt	No	No	No	SILT	
00757298	PSG-32	FIELD SAMPLE	4/9/15 10:45	4/14/15 9:04	Concrete 12", TD 31"	Concrete over silt	No	No	No	SILT	
00757299	PSG-29	FIELD SAMPLE	4/9/15 10:53	4/14/15 9:09	Concrete 12", TD 31", muddy sample	Concrete over silt	No	No	Yes	SILT	
00757300	PSG-31	FIELD SAMPLE	4/9/15 11:05	4/14/15 9:12	Concrete 12", TD 31"	Concrete over silt	No	No	No	SILT	
00757301	PSG-33	FIELD SAMPLE	4/9/15 11:17	4/14/15 9:17	Concrete 12", TD 31"	Concrete over silt	No	No	No	SILT	
00757302	PSG-34	FIELD SAMPLE	4/9/15 12:10	4/14/15 9:33	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILT	
00757303	PSG-38	FIELD SAMPLE	4/9/15 15:03	4/14/15 9:38	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILTY CLAY LOAM	
00757304	PSG-37	FIELD SAMPLE	4/9/15 15:11	4/14/15 9:41	AT 6" TD 31"	Asphalt slab over silt	No	No	No	SILTY CLAY LOAM	
00757305	PSG-36	FIELD SAMPLE	4/9/15 15:20	4/14/15 9:45	AT 6" TD 31", Wet sample	Asphalt slab over silt	No	No	Yes	SILTY CLAY LOAM	
00757306	PSG-35	FIELD SAMPLE	4/9/15 15:33	4/14/15 9:48	AT 6" TD 31", Wet sample	Asphalt slab over silt	No	No	Yes	SILTY CLAY LOAM	
00757307		TRIP_BLANK									
00757308		TRIP_BLANK									





**AGI Soil Gas Systems  
Installation & R**

\* Optional or as

SAMPLER SERIAL NO.	TYPE				
	WATER FILLED SOIL POROSITY AT MODULE DEPTH* (volume of water/volume of pores)	PROJECTED COORDINATES X (EASTING)	PROJECTED COORDINATES Y (NORTHING)	COORDINATE SYSTEM* (e.g., UTM Zone, Stateplane, etc.)	COORDINATE DATUM* (e.g., WGS 84)
00757263					
00757264					
00757265					
00757266					
00757267					
00757268					
00757269					
00757270					
00757271					
00757272					
00757273					
00757274					
00757275					
00757276					
00757277					
00757278					
00757279					
00757280					
00757281					
00757288					
00757289					
00757290					
00757291					
00757292					
00757293					
00757294					



**AGI Soil Gas Systems  
Installation & R**

\* Optional or as

SAMPLER SERIAL NO.	TYPE	PROJECTED COORDINATES X (EASTING)	PROJECTED COORDINATES Y (NORTHING)	COORDINATE SYSTEM* (e.g., UTM Zone, Stateplane, etc.)	COORDINATE DATUM* (e.g., WGS 84)
	WATER FILLED SOIL POROSITY AT MODULE DEPTH* (volume of water/volume of pores)				
00757295					
00757296					
00757297					
00757298					
00757299					
00757300					
00757301					
00757302					
00757303					
00757304					
00757305					
00757306					
00757307					
00757308					



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757263 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-02

Installation Date: 4/8/2015 9:35:00AM

Retrieval Date: 4/13/2015 11:02:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 12:53:00PM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.05</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.06</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.03</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.08</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.03</b>	<b>0.02</b>
o-Xylene	95-47-6	<0.02	0.02
1,1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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Newark, DE 19702-3335 USA  
ph: +1-302-266-2428  
www.agisurveys.net

**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757263 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-02

Installation Date: 4/8/2015 9:35:00AM

Retrieval Date: 4/13/2015 11:02:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/22/2015 12:53:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>21.12</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.14</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757265 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-01

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 10:05:00AM

Retrieval Date: 4/13/2015 11:10:00AM

Date Analyzed: 4/22/2015 4:01:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
Benzene	71-43-2	<0.02	0.02
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.02</b>	<b>0.02</b>
Octane	111-65-9	<0.02	0.02
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.47</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757265 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-01

Installation Date: 4/8/2015 10:05:00AM

Retrieval Date: 4/13/2015 11:10:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/22/2015 4:01:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>14.06</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.02</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757266 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-04

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 10:25:00AM

Retrieval Date: 4/13/2015 11:15:00AM

Date Analyzed: 4/21/2015 5:51:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.12</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.18</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.08</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.33</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>0.06</b>	<b>0.02</b>
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.09</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.05</b>	<b>0.02</b>
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
<b>1,2,4-Trimethylbenzene</b>	<b>95-63-6</b>	<b>0.03</b>	<b>0.02</b>
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
<b>Tridecane</b>	<b>629-50-5</b>	<b>0.06</b>	<b>0.05</b>
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757266 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-04

Installation Date: 4/8/2015 10:25:00AM

Retrieval Date: 4/13/2015 11:15:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/21/2015 5:51:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>19.35</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.50</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05





**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757267 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-06

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 10:45:00AM

Retrieval Date: 4/13/2015 11:20:00AM

Date Analyzed: 4/22/2015 3:00:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.07</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.18</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.04</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.20</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>0.04</b>	<b>0.02</b>
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.07</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.03</b>	<b>0.02</b>
1,1,1,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
<b>1,2,4-Trimethylbenzene</b>	<b>95-63-6</b>	<b>0.03</b>	<b>0.02</b>
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
<b>Tridecane</b>	<b>629-50-5</b>	<b>0.13</b>	<b>0.05</b>
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
<b>Pentadecane</b>	<b>629-62-9</b>	<b>0.06</b>	<b>0.05</b>



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757267 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-06

Installation Date: 4/8/2015 10:45:00AM

Retrieval Date: 4/13/2015 11:20:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/22/2015 3:00:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>14.48</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.39</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757268 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-08

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 10:58:00AM

Retrieval Date: 4/13/2015 11:26:00AM

Date Analyzed: 4/22/2015 3:23:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.03</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.14</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.05</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.53</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>0.04</b>	<b>0.02</b>
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.08</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.04</b>	<b>0.02</b>
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
<b>1,2,4-Trimethylbenzene</b>	<b>95-63-6</b>	<b>0.05</b>	<b>0.02</b>
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.12</b>	<b>0.05</b>
Naphthalene	91-20-3	<0.05	0.05
<b>Tridecane</b>	<b>629-50-5</b>	<b>0.15</b>	<b>0.05</b>
<b>2-Methylnaphthalene</b>	<b>91-57-6</b>	<b>0.05</b>	<b>0.05</b>
Acenaphthylene	208-96-8	<0.05	0.05
<b>Pentadecane</b>	<b>629-62-9</b>	<b>0.10</b>	<b>0.05</b>



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757268 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-08

Installation Date: 4/8/2015 10:58:00AM

Retrieval Date: 4/13/2015 11:26:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 3:23:00AM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>13.99</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.32</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757269 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-07

Matrix: SOIL GAS

Porosity: 0.48

Product: SPG0008

Water Filled Voids: 0.44

Installation Date: 4/8/2015 11:15:00AM

Retrieval Date: 4/13/2015 11:32:00AM

Date Analyzed: 4/22/2015 3:30:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
Benzene	71-43-2	<0.02	0.02
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.07</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.05</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>1.24</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>0.03</b>	<b>0.02</b>
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.05</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.03</b>	<b>0.02</b>
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
<b>1,2,4-Trimethylbenzene</b>	<b>95-63-6</b>	<b>0.03</b>	<b>0.02</b>
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.13</b>	<b>0.05</b>
<b>Naphthalene</b>	<b>91-20-3</b>	<b>0.05</b>	<b>0.05</b>
<b>Tridecane</b>	<b>629-50-5</b>	<b>0.16</b>	<b>0.05</b>
<b>2-Methylnaphthalene</b>	<b>91-57-6</b>	<b>0.12</b>	<b>0.05</b>
Acenaphthylene	208-96-8	<0.05	0.05
<b>Pentadecane</b>	<b>629-62-9</b>	<b>0.11</b>	<b>0.05</b>



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757269 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-07

Installation Date: 4/8/2015 11:15:00AM

Retrieval Date: 4/13/2015 11:32:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.48

Product: SPG0008

Water Filled Voids: 0.44

Date Analyzed: 4/22/2015 3:30:00PM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>17.88</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.18</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757270 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-05

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 11:43:00AM

Retrieval Date: 4/13/2015 11:43:00AM

Date Analyzed: 4/22/2015 9:24:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.11</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
<b>Trichloroethene</b>	<b>79-01-6</b>	<b>0.03</b>	<b>0.02</b>
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.29</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.29</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.40</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>0.07</b>	<b>0.02</b>
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.18</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.12</b>	<b>0.02</b>
1,1,1,2-Tetrachloroethane	79-34-5	<0.02	0.02
<b>1,3,5-Trimethylbenzene</b>	<b>108-67-8</b>	<b>0.12</b>	<b>0.02</b>
<b>1,2,4-Trimethylbenzene</b>	<b>95-63-6</b>	<b>0.17</b>	<b>0.02</b>
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.40</b>	<b>0.05</b>
Naphthalene	91-20-3	<0.05	0.05
<b>Tridecane</b>	<b>629-50-5</b>	<b>0.11</b>	<b>0.05</b>
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05





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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757270 FIELD\_SAMPLE**

Dilution Factor: 1                      Field ID: PSG-05

Installation Date: 4/8/2015 11:43:00AM

Retrieval Date: 4/13/2015 11:43:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/22/2015 9:24:00AM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>90.10</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.77</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05





**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757271 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-03

Installation Date: 4/8/2015 12:05:00PM

Retrieval Date: 4/13/2015 11:49:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/21/2015 8:52:00PM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.04</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.04</b>	<b>0.02</b>
Octane	111-65-9	<0.02	0.02
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.33</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757271 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-03

Installation Date: 4/8/2015 12:05:00PM

Retrieval Date: 4/13/2015 11:49:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/21/2015 8:52:00PM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>10.68</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.08</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757272 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-10

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 12:27:00PM

Retrieval Date: 4/13/2015 11:55:00AM

Date Analyzed: 4/22/2015 4:31:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
Benzene	71-43-2	<0.02	0.02
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
Toluene	108-88-3	<0.02	0.02
<b>Octane</b>	<b>111-65-9</b>	<b>0.03</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.26</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
<b>Naphthalene</b>	<b>91-20-3</b>	<b>0.12</b>	<b>0.05</b>
Tridecane	629-50-5	<0.05	0.05
<b>2-Methylnaphthalene</b>	<b>91-57-6</b>	<b>0.91</b>	<b>0.05</b>
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757272 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-10

Installation Date: 4/8/2015 12:27:00PM

Retrieval Date: 4/13/2015 11:55:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 4:31:00PM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>11.75</b>	<b>0.50</b>
BTEX		<0.02	0.02
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757273 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-12

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 12:40:00PM

Retrieval Date: 4/13/2015 11:58:00AM

Date Analyzed: 4/22/2015 8:54:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
<b>1,1,1-Trichloroethane</b>	<b>71-55-6</b>	<b>0.08</b>	<b>0.02</b>
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.07</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.08</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.03</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.13</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>0.02</b>	<b>0.02</b>
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.05</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.02</b>	<b>0.02</b>
1,1,1,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.26</b>	<b>0.05</b>
Naphthalene	91-20-3	<0.05	0.05
<b>Tridecane</b>	<b>629-50-5</b>	<b>0.10</b>	<b>0.05</b>
<b>2-Methylnaphthalene</b>	<b>91-57-6</b>	<b>0.07</b>	<b>0.05</b>
Acenaphthylene	208-96-8	<0.05	0.05
<b>Pentadecane</b>	<b>629-62-9</b>	<b>0.18</b>	<b>0.05</b>



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757273 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-12

Installation Date: 4/8/2015 12:40:00PM

Retrieval Date: 4/13/2015 11:58:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 8:54:00AM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>252.98</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.25</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757274 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-14

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 12:55:00PM

Retrieval Date: 4/13/2015 12:03:00PM

Date Analyzed: 4/22/2015 7:54:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
Benzene	71-43-2	<0.02	0.02
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.02</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.13</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.03</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05





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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757274 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-14

Installation Date: 4/8/2015 12:55:00PM

Retrieval Date: 4/13/2015 12:03:00PM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/22/2015 7:54:00AM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>22.50</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.02</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05





**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757275 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-11

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 1:10:00PM

Retrieval Date: 4/13/2015 12:08:00PM

Date Analyzed: 4/22/2015 7:24:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.04</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.04</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.08</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.02</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.03</b>	<b>0.02</b>
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
<b>Pentadecane</b>	<b>629-62-9</b>	<b>0.15</b>	<b>0.05</b>



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757275 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-11

Installation Date: 4/8/2015 1:10:00PM

Retrieval Date: 4/13/2015 12:08:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 7:24:00AM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>19.54</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.11</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757276 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-09

Installation Date: 4/8/2015 1:20:00PM

Retrieval Date: 4/13/2015 12:12:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 2:00:00PM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.17</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.24</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.09</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>0.05</b>	<b>0.02</b>
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.11</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.05</b>	<b>0.02</b>
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
<b>1,2,4-Trimethylbenzene</b>	<b>95-63-6</b>	<b>0.02</b>	<b>0.02</b>
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757276 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-09

Installation Date: 4/8/2015 1:20:00PM

Retrieval Date: 4/13/2015 12:12:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 2:00:00PM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>15.16</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.62</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757277 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-18

Matrix: SOIL GAS

Porosity: 0.48

Product: SPG0008

Water Filled Voids: 0.44

Installation Date: 4/8/2015 1:53:00PM

Retrieval Date: 4/13/2015 12:16:00PM

Date Analyzed: 4/22/2015 5:31:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.02</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
Toluene	108-88-3	<0.02	0.02
<b>Octane</b>	<b>111-65-9</b>	<b>0.04</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757277 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-18

Installation Date: 4/8/2015 1:53:00PM

Retrieval Date: 4/13/2015 12:16:00PM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.48

Date Analyzed: 4/22/2015 5:31:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.44

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>3.01</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.02</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757278 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-17

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 2:08:00PM

Retrieval Date: 4/13/2015 12:20:00PM

Date Analyzed: 4/22/2015 10:29:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.08</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.09</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.05</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	0.02	0.02
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.03</b>	<b>0.02</b>
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05





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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757278 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-17

Installation Date: 4/8/2015 2:08:00PM

Retrieval Date: 4/13/2015 12:20:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 10:29:00AM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>6.10</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.23</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05





**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757279 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-25

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 2:22:00PM

Retrieval Date: 4/13/2015 12:25:00PM

Date Analyzed: 4/22/2015 2:23:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.03</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.04</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.14</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
<b>Tridecane</b>	<b>629-50-5</b>	<b>0.08</b>	<b>0.05</b>
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757279 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-25

Installation Date: 4/8/2015 2:22:00PM

Retrieval Date: 4/13/2015 12:25:00PM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/22/2015 2:23:00AM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>50.73</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.07</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757280 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-26

Installation Date: 4/8/2015 2:40:00PM

Retrieval Date: 4/13/2015 12:28:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/21/2015 11:53:00PM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.03</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.03</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.12</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.20</b>	<b>0.05</b>
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757280 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-26

Installation Date: 4/8/2015 2:40:00PM

Retrieval Date: 4/13/2015 12:28:00PM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/21/2015 11:53:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>30.23</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.06</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757281 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-27

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 3:05:00PM

Retrieval Date: 4/13/2015 12:32:00PM

Date Analyzed: 4/22/2015 3:53:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.04</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.03</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.03</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.07</b>	<b>0.05</b>
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757281 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-27

Installation Date: 4/8/2015 3:05:00PM

Retrieval Date: 4/13/2015 12:32:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 3:53:00AM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>6.31</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.07</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757288 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-15

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 3:22:00PM

Retrieval Date: 4/13/2015 12:35:00PM

Date Analyzed: 4/22/2015 12:23:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
Benzene	71-43-2	<0.02	0.02
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
Toluene	108-88-3	0.02	0.02
Octane	111-65-9	<0.02	0.02
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.20</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05





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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757288 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-15

Installation Date: 4/8/2015 3:22:00PM

Retrieval Date: 4/13/2015 12:35:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 12:23:00PM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>5.14</b>	<b>0.50</b>
BTEX		0.02	0.02
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05





**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757289 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-28

Matrix: SOIL GAS

Porosity: 0.48

Product: SPG0008

Water Filled Voids: 0.44

Installation Date: 4/8/2015 3:34:00PM

Retrieval Date: 4/13/2015 12:39:00PM

Date Analyzed: 4/22/2015 2:53:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.05</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.03</b>	<b>0.02</b>
Octane	111-65-9	<0.02	0.02
Tetrachloroethene	127-18-4	<0.02	0.02
<b>Chlorobenzene</b>	<b>108-90-7</b>	<b>0.70</b>	<b>0.02</b>
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
<b>1,3-Dichlorobenzene</b>	<b>541-73-1</b>	<b>2.47</b>	<b>0.02</b>
<b>1,4-Dichlorobenzene</b>	<b>106-46-7</b>	<b>3.66</b>	<b>0.02</b>
<b>1,2-Dichlorobenzene</b>	<b>95-50-1</b>	<b>0.22</b>	<b>0.02</b>
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757289 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-28

Installation Date: 4/8/2015 3:34:00PM

Retrieval Date: 4/13/2015 12:39:00PM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.48

Date Analyzed: 4/22/2015 2:53:00AM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.44

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
<b>Acenaphthene</b>	<b>83-32-9</b>	<b>0.05</b>	<b>0.05</b>
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>7.23</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.08</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757290 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-13

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/8/2015 3:56:00PM

Retrieval Date: 4/13/2015 12:41:00PM

Date Analyzed: 4/21/2015 7:21:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.08</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.10</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.17</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.03</b>	<b>0.02</b>
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	0.02	0.02
<b>1,2,4-Trimethylbenzene</b>	<b>95-63-6</b>	<b>0.04</b>	<b>0.02</b>
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.14</b>	<b>0.05</b>
Naphthalene	91-20-3	<0.05	0.05
<b>Tridecane</b>	<b>629-50-5</b>	<b>0.05</b>	<b>0.05</b>
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757290 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-13

Installation Date: 4/8/2015 3:56:00PM

Retrieval Date: 4/13/2015 12:41:00PM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/21/2015 7:21:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>14.96</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.21</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757291 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-20

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/9/2015 8:29:00AM

Retrieval Date: 4/14/2015 8:19:00AM

Date Analyzed: 4/22/2015 9:54:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.04</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.04</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.04</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.06</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.06</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.03</b>	<b>0.02</b>
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
<b>1,2,4-Trimethylbenzene</b>	<b>95-63-6</b>	<b>0.03</b>	<b>0.02</b>
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757291 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-20

Installation Date: 4/9/2015 8:29:00AM

Retrieval Date: 4/14/2015 8:19:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 9:54:00AM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>8.34</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.17</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757292 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-22

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/9/2015 8:52:00AM

Retrieval Date: 4/14/2015 8:28:00AM

Date Analyzed: 4/21/2015 8:22:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
<b>cis-1,2-Dichloroethene</b>	<b>156-59-2</b>	<b>0.53</b>	<b>0.02</b>
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.07</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
<b>Trichloroethene</b>	<b>79-01-6</b>	<b>7.78</b>	<b>0.02</b>
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.06</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.10</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>83.75</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.03</b>	<b>0.02</b>
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
<b>1,4-Dichlorobenzene</b>	<b>106-46-7</b>	<b>0.08</b>	<b>0.02</b>
<b>1,2-Dichlorobenzene</b>	<b>95-50-1</b>	<b>0.15</b>	<b>0.02</b>
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.65</b>	<b>0.05</b>
Naphthalene	91-20-3	<0.05	0.05
<b>Tridecane</b>	<b>629-50-5</b>	<b>3.23</b>	<b>0.05</b>
<b>2-Methylnaphthalene</b>	<b>91-57-6</b>	<b>0.06</b>	<b>0.05</b>
Acenaphthylene	208-96-8	<0.05	0.05
<b>Pentadecane</b>	<b>629-62-9</b>	<b>1.13</b>	<b>0.05</b>





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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757292 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-22

Installation Date: 4/9/2015 8:52:00AM

Retrieval Date: 4/14/2015 8:28:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/21/2015 8:22:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>95.70</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.16</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05





**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757293 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-24

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/9/2015 9:09:00AM

Retrieval Date: 4/14/2015 8:34:00AM

Date Analyzed: 4/21/2015 9:52:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
<b>1,1,1-Trichloroethane</b>	<b>71-55-6</b>	<b>0.06</b>	<b>0.02</b>
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.04</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.60</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.04</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.81</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>0.11</b>	<b>0.02</b>
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.46</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.30</b>	<b>0.02</b>
1,1,1,2-Tetrachloroethane	79-34-5	<0.02	0.02
<b>1,3,5-Trimethylbenzene</b>	<b>108-67-8</b>	<b>0.47</b>	<b>0.02</b>
<b>1,2,4-Trimethylbenzene</b>	<b>95-63-6</b>	<b>0.50</b>	<b>0.02</b>
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.06</b>	<b>0.05</b>
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757293 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-24

Installation Date: 4/9/2015 9:09:00AM

Retrieval Date: 4/14/2015 8:34:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/21/2015 9:52:00PM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>18.66</b>	<b>0.50</b>
<b>BTEX</b>		<b>1.51</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757294 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-19

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/9/2015 9:25:00AM

Retrieval Date: 4/14/2015 8:42:00AM

Date Analyzed: 4/22/2015 1:53:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.04</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.05</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.06</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.03</b>	<b>0.02</b>
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757294 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-19

Installation Date: 4/9/2015 9:25:00AM

Retrieval Date: 4/14/2015 8:42:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/22/2015 1:53:00AM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>4.99</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.12</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757295 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-23

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/9/2015 9:45:00AM

Retrieval Date: 4/14/2015 8:49:00AM

Date Analyzed: 4/22/2015 6:01:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
Benzene	71-43-2	<0.02	0.02
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
Toluene	108-88-3	<0.02	0.02
<b>Octane</b>	<b>111-65-9</b>	<b>0.02</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.76</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.08</b>	<b>0.05</b>
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757295 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-23

Installation Date: 4/9/2015 9:45:00AM

Retrieval Date: 4/14/2015 8:49:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/22/2015 6:01:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>9.13</b>	<b>0.50</b>
BTEX		<0.02	0.02
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757296 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-21

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/9/2015 10:10:00AM

Retrieval Date: 4/14/2015 8:52:00AM

Date Analyzed: 4/22/2015 2:30:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
<b>1,1,1-Trichloroethane</b>	<b>71-55-6</b>	<b>0.02</b>	<b>0.02</b>
1,2-Dichloroethane	107-06-2	<0.02	0.02
Benzene	71-43-2	<0.02	0.02
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
Toluene	108-88-3	<0.02	0.02
Octane	111-65-9	<0.02	0.02
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>1.48</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
<b>Tridecane</b>	<b>629-50-5</b>	<b>0.06</b>	<b>0.05</b>
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05





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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757296 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-21

Installation Date: 4/9/2015 10:10:00AM

Retrieval Date: 4/14/2015 8:52:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 2:30:00PM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>12.34</b>	<b>0.50</b>
BTEX		<0.02	0.02
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
<b>Tetrachlorobiphenyls</b>	<b>33284-54-7</b>	<b>0.17</b>	<b>0.05</b>
<b>Pentachlorobiphenyls</b>	<b>38379-99-6</b>	<b>0.09</b>	<b>0.05</b>





**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757297 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-30

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/9/2015 10:31:00AM

Retrieval Date: 4/14/2015 8:58:00AM

Date Analyzed: 4/21/2015 9:22:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
<b>1,1,1-Trichloroethane</b>	<b>71-55-6</b>	<b>0.11</b>	<b>0.02</b>
1,2-Dichloroethane	107-06-2	<0.02	0.02
Benzene	71-43-2	<0.02	0.02
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.03</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.07</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>7.02</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,1,2-Tetrachloroethane	79-34-5	<0.02	0.02
<b>1,3,5-Trimethylbenzene</b>	<b>108-67-8</b>	<b>0.03</b>	<b>0.02</b>
<b>1,2,4-Trimethylbenzene</b>	<b>95-63-6</b>	<b>0.06</b>	<b>0.02</b>
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
<b>Naphthalene</b>	<b>91-20-3</b>	<b>0.07</b>	<b>0.05</b>
Tridecane	629-50-5	<0.05	0.05
<b>2-Methylnaphthalene</b>	<b>91-57-6</b>	<b>0.09</b>	<b>0.05</b>
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757297 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-30

Installation Date: 4/9/2015 10:31:00AM

Retrieval Date: 4/14/2015 8:58:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/21/2015 9:22:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>14.23</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.05</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757298 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-32

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/9/2015 10:45:00AM

Retrieval Date: 4/14/2015 9:04:00AM

Date Analyzed: 4/21/2015 6:21:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.02</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.03</b>	<b>0.02</b>
Octane	111-65-9	<0.02	0.02
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>2.64</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757298 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-32

Installation Date: 4/9/2015 10:45:00AM

Retrieval Date: 4/14/2015 9:04:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/21/2015 6:21:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>6.64</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.05</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757299 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-29

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/9/2015 10:53:00AM

Retrieval Date: 4/14/2015 9:09:00AM

Date Analyzed: 4/21/2015 6:51:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.03</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.02</b>	<b>0.02</b>
Octane	111-65-9	<0.02	0.02
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.03</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757299 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-29

Installation Date: 4/9/2015 10:53:00AM

Retrieval Date: 4/14/2015 9:09:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/21/2015 6:51:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>2.37</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.05</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757300 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-31

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/9/2015 11:05:00AM

Retrieval Date: 4/14/2015 9:12:00AM

Date Analyzed: 4/21/2015 5:21:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.06</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.08</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.03</b>	<b>0.02</b>
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>1.86</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>0.02</b>	<b>0.02</b>
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.05</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.02</b>	<b>0.02</b>
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05





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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757300 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-31

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/9/2015 11:05:00AM

Retrieval Date: 4/14/2015 9:12:00AM

Date Analyzed: 4/21/2015 5:21:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>7.82</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.23</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05





**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757301 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-33

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Installation Date: 4/9/2015 11:17:00AM

Retrieval Date: 4/14/2015 9:17:00AM

Date Analyzed: 4/22/2015 6:54:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.05</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.05</b>	<b>0.02</b>
Octane	111-65-9	<0.02	0.02
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>0.25</b>	<b>0.02</b>
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757301 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-33

Installation Date: 4/9/2015 11:17:00AM

Retrieval Date: 4/14/2015 9:17:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 6:54:00AM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>4.38</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.10</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757302 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-34

Installation Date: 4/9/2015 12:10:00PM

Retrieval Date: 4/14/2015 9:33:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Product: SPG0008

Water Filled Voids: 0.34

Date Analyzed: 4/22/2015 6:24:00AM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.03</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.03</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.13</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.05</b>	<b>0.05</b>
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757302 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-34

Installation Date: 4/9/2015 12:10:00PM

Retrieval Date: 4/14/2015 9:33:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.49

Date Analyzed: 4/22/2015 6:24:00AM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.34

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>5.19</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.06</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757303 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-38

Matrix: SOIL GAS

Porosity: 0.48

Product: SPG0008

Water Filled Voids: 0.44

Installation Date: 4/9/2015 3:03:00PM

Retrieval Date: 4/14/2015 9:38:00AM

Date Analyzed: 4/22/2015 11:00:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.09</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.10</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.06</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>0.07</b>	<b>0.02</b>
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.23</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.08</b>	<b>0.02</b>
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757303 FIELD\_SAMPLE**

Dilution Factor: 1                      Field ID: PSG-38

Installation Date: 4/9/2015 3:03:00PM

Retrieval Date: 4/14/2015 9:38:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Reviewer: Fatima Niazi**

Matrix: SOIL GAS

Porosity: 0.48

Product: SPG0008

Water Filled Voids: 0.44

Date Analyzed: 4/22/2015 11:00:00AM

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>19.84</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.57</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757304 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-37

Matrix: SOIL GAS

Porosity: 0.48

Product: SPG0008

Water Filled Voids: 0.44

Installation Date: 4/9/2015 3:11:00PM

Retrieval Date: 4/14/2015 9:41:00AM

Date Analyzed: 4/22/2015 4:23:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.09</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.08</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.10</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.04</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.02</b>	<b>0.02</b>
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
<b>1,2,4-Trimethylbenzene</b>	<b>95-63-6</b>	<b>0.03</b>	<b>0.02</b>
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.08</b>	<b>0.05</b>
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05





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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757304 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-37

Installation Date: 4/9/2015 3:11:00PM

Retrieval Date: 4/14/2015 9:41:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.48

Date Analyzed: 4/22/2015 4:23:00AM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.44

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>9.23</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.24</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05





**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757305 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-36

Matrix: SOIL GAS

Porosity: 0.48

Product: SPG0008

Water Filled Voids: 0.44

Installation Date: 4/9/2015 3:20:00PM

Retrieval Date: 4/14/2015 9:45:00AM

Date Analyzed: 4/22/2015 8:24:00AM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.07</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.08</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.05</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>0.05</b>	<b>0.02</b>
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.17</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.07</b>	<b>0.02</b>
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757305 FIELD\_SAMPLE**

Dilution Factor: 1 Field ID: PSG-36

Installation Date: 4/9/2015 3:20:00PM

Retrieval Date: 4/14/2015 9:45:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.48

Date Analyzed: 4/22/2015 8:24:00AM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.44

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>6.17</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.44</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757306 FIELD\_SAMPLE**

Dilution Factor: 1

Field ID: PSG-35

Matrix: SOIL GAS

Porosity: 0.48

Product: SPG0008

Water Filled Voids: 0.44

Installation Date: 4/9/2015 3:33:00PM

Retrieval Date: 4/14/2015 9:48:00AM

Date Analyzed: 4/21/2015 7:52:00PM

**Analyst: Kelly J Stringham**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

**Reviewer: Fatima Niazi**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
<b>Benzene</b>	<b>71-43-2</b>	<b>0.11</b>	<b>0.02</b>
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
<b>Toluene</b>	<b>108-88-3</b>	<b>0.11</b>	<b>0.02</b>
<b>Octane</b>	<b>111-65-9</b>	<b>0.07</b>	<b>0.02</b>
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>0.03</b>	<b>0.02</b>
<b>m,p-Xylene</b>	<b>108-38-3/106-42-3</b>	<b>0.05</b>	<b>0.02</b>
<b>o-Xylene</b>	<b>95-47-6</b>	<b>0.03</b>	<b>0.02</b>
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
<b>Undecane</b>	<b>1120-21-4</b>	<b>0.06</b>	<b>0.05</b>
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757306 FIELD\_SAMPLE**

Dilution Factor: 1                      Field ID: PSG-35

Installation Date: 4/9/2015 3:33:00PM

Retrieval Date: 4/14/2015 9:48:00AM

**Analyst: Kelly J Stringham**

**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

Matrix: SOIL GAS

Porosity: 0.48

Date Analyzed: 4/21/2015 7:52:00PM

**Batch: ENV-150421-1**

Product: SPG0008

Water Filled Voids: 0.44

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
<b>TPH</b>		<b>42.14</b>	<b>0.50</b>
<b>BTEX</b>		<b>0.33</b>	<b>0.02</b>
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757307 TRIP\_BLANK**  
Dilution Factor: 1

Matrix: SOIL GAS  
Porosity:

Product: SPG0008  
Water Filled Voids:

Date Analyzed: 4/22/2015 5:01:00PM

**Analyst: Kelly J Stringham**  
**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
Benzene	71-43-2	<0.02	0.02
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
Toluene	108-88-3	<0.02	0.02
Octane	111-65-9	<0.02	0.02
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05



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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757307 TRIP\_BLANK**  
Dilution Factor: 1

Matrix: SOIL GAS  
Porosity:

Product: SPG0008  
Water Filled Voids:

Date Analyzed: 4/22/2015 5:01:00PM

**Analyst: Kelly J Stringham**  
**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
TPH		<0.50	0.50
BTEX		<0.02	0.02
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757308 TRIP\_BLANK**  
Dilution Factor: 1

Matrix: SOIL GAS  
Porosity:

Product: SPG0008  
Water Filled Voids:

Date Analyzed: 4/22/2015 1:23:00AM

**Analyst: Kelly J Stringham**  
**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Methyl tert-butyl ether	1634-04-4	<0.02	0.02
trans-1,2-Dichloroethene	156-60-5	<0.02	0.02
1,1-Dichloroethane	75-34-3	<0.02	0.02
cis-1,2-Dichloroethene	156-59-2	<0.02	0.02
Chloroform	67-66-3	<0.02	0.02
1,1,1-Trichloroethane	71-55-6	<0.02	0.02
1,2-Dichloroethane	107-06-2	<0.02	0.02
Benzene	71-43-2	<0.02	0.02
Carbon Tetrachloride	56-23-5	<0.02	0.02
Trichloroethene	79-01-6	<0.02	0.02
1,1,2-Trichloroethane	79-00-5	<0.02	0.02
Toluene	108-88-3	<0.02	0.02
Octane	111-65-9	<0.02	0.02
Tetrachloroethene	127-18-4	<0.02	0.02
Chlorobenzene	108-90-7	<0.02	0.02
1,1,1,2-Tetrachloroethane	630-20-6	<0.02	0.02
Ethylbenzene	100-41-4	<0.02	0.02
m,p-Xylene	108-38-3/106-42-3	<0.02	0.02
o-Xylene	95-47-6	<0.02	0.02
1,1,2,2-Tetrachloroethane	79-34-5	<0.02	0.02
1,3,5-Trimethylbenzene	108-67-8	<0.02	0.02
1,2,4-Trimethylbenzene	95-63-6	<0.02	0.02
1,3-Dichlorobenzene	541-73-1	<0.02	0.02
1,4-Dichlorobenzene	106-46-7	<0.02	0.02
1,2-Dichlorobenzene	95-50-1	<0.02	0.02
Undecane	1120-21-4	<0.05	0.05
Naphthalene	91-20-3	<0.05	0.05
Tridecane	629-50-5	<0.05	0.05
2-Methylnaphthalene	91-57-6	<0.05	0.05
Acenaphthylene	208-96-8	<0.05	0.05
Pentadecane	629-62-9	<0.05	0.05





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**PROJECT NUMBER: ENV 01345**  
**SITE NAME: SMUD Phase II ESA**  
**SITE ADDRESS:**

**FOR: Kleinfelder Associates, Inc.**  
**Sacramento, CA 95827**  
**USA**

**SAMPLER ID: 00757308 TRIP\_BLANK**  
Dilution Factor: 1

Matrix: SOIL GAS  
Porosity:

Product: SPG0008  
Water Filled Voids:

Date Analyzed: 4/22/2015 1:23:00AM

**Analyst: Kelly J Stringham**  
**Reviewer: Fatima Niazi**

**Method: SPG-WI-0292**

**Batch: ENV-150421-1**

<b>Compound</b>	<b>CAS #</b>	<b>Result (ug)</b>	<b>RL (ug)</b>
Acenaphthene	83-32-9	<0.05	0.05
Fluorene	86-73-7	<0.05	0.05
TPH		<0.50	0.50
BTEX		<0.02	0.02
Monochlorobiphenyls	2051-60-7	<0.05	0.05
Dichlorobiphenyls	16605-91-7	<0.05	0.05
Trichlorobiphenyls	38444-81-4	<0.05	0.05
Tetrachlorobiphenyls	33284-54-7	<0.05	0.05
Pentachlorobiphenyls	38379-99-6	<0.05	0.05



AMPLIFIED GEOCHEMICAL IMAGING, LLC  
 210 EXECUTIVE DRIVE, SUITE 1, NEWARK, DE 19702  
 KLEINFELDER ASSOCIATES, INC., SACRAMENTO, CA  
 STANDARD TARGET VOCs/SVOCs  
 ESTIMATED SOIL GAS CONCENTRATIONS  
 SMUD PHASE II ESA  
 ORDER # 01345

DATAFILE	FIELD	DATE/ TIME	DATE/ TIME	DATE/ TIME		DATE/ TIME			estimated	
NAME	ID	INSTALLED	RETRIEVED	RECEIVED		ANALYZED		DF	TPH, ug/m <sup>3</sup>	MTBE, ug/m <sup>3</sup>
Average RL =									18.3	120
00757263	PSG-02	4/8/15 9:35	4/13/15 11:02	4/20/15 10:40	ET	4/22/15 12:53	ET	1	593 E	<108
00757265	PSG-01	4/8/15 10:05	4/13/15 11:10	4/20/15 10:40	ET	4/22/15 16:01	ET	1	402	<108
00757266	PSG-04	4/8/15 10:25	4/13/15 11:15	4/20/15 10:40	ET	4/21/15 17:51	ET	1	548	<108
00757267	PSG-06	4/8/15 10:45	4/13/15 11:20	4/20/15 10:40	ET	4/22/15 15:00	ET	1	415	<108
00757268	PSG-08	4/8/15 10:58	4/13/15 11:26	4/20/15 10:40	ET	4/22/15 3:23	ET	1	402	<108
00757269	PSG-07	4/8/15 11:15	4/13/15 11:32	4/20/15 10:40	ET	4/22/15 15:30	ET	1	895	<190
00757270	PSG-05	4/8/15 11:43	4/13/15 11:43	4/20/15 10:40	ET	4/22/15 9:24	ET	1	2420 E	<109
00757271	PSG-03	4/8/15 12:05	4/13/15 11:49	4/20/15 10:40	ET	4/21/15 20:52	ET	1	312	<109
00757272	PSG-10	4/8/15 12:27	4/13/15 11:55	4/20/15 10:40	ET	4/22/15 16:31	ET	1	342	<109
00757273	PSG-12	4/8/15 12:40	4/13/15 11:58	4/20/15 10:40	ET	4/22/15 8:54	ET	1	6570 E	<109
00757274	PSG-14	4/8/15 12:55	4/13/15 12:03	4/20/15 10:40	ET	4/22/15 7:54	ET	1	641 E	<109
00757275	PSG-11	4/8/15 13:10	4/13/15 12:08	4/20/15 10:40	ET	4/22/15 7:24	ET	1	561	<109
00757276	PSG-09	4/8/15 13:20	4/13/15 12:16	4/20/15 10:40	ET	4/22/15 14:00	ET	1	439	<109
00757277	PSG-18	4/8/15 13:53	4/13/15 12:16	4/20/15 10:40	ET	4/22/15 17:31	ET	1	164	<191
00757278	PSG-17	4/8/15 14:08	4/13/15 12:20	4/20/15 10:40	ET	4/22/15 10:29	ET	1	184	<109
00757279	PSG-25	4/8/15 14:22	4/13/15 12:25	4/20/15 10:40	ET	4/22/15 2:23	ET	1	1410 E	<109
00757280	PSG-26	4/8/15 14:40	4/13/15 12:28	4/20/15 10:40	ET	4/21/15 23:53	ET	1	861 E	<109
00757281	PSG-27	4/8/15 15:05	4/13/15 12:32	4/20/15 10:40	ET	4/22/15 3:53	ET	1	191	<109
00757288	PSG-15	4/8/15 15:22	4/13/15 12:35	4/20/15 10:40	ET	4/22/15 12:23	ET	1	157	<109
00757289	PSG-28	4/8/15 15:34	4/13/15 12:39	4/20/15 10:40	ET	4/22/15 2:53	ET	1	384	<192
00757290	PSG-13	4/8/15 15:56	4/13/15 12:41	4/20/15 10:40	ET	4/21/15 19:21	ET	1	441	<109
00757291	PSG-20	4/9/15 8:29	4/14/15 8:19	4/20/15 10:40	ET	4/22/15 9:54	ET	1	246	<109
00757292	PSG-22	4/9/15 8:52	4/14/15 8:28	4/20/15 10:40	ET	4/21/15 20:22	ET	1	2570 E	<109
00757293	PSG-24	4/9/15 9:09	4/14/15 8:34	4/20/15 10:40	ET	4/21/15 21:52	ET	1	535	<109
00757294	PSG-19	4/9/15 9:25	4/14/15 8:42	4/20/15 10:40	ET	4/22/15 1:53	ET	1	151	<109
00757295	PSG-23	4/9/15 9:45	4/14/15 8:49	4/20/15 10:40	ET	4/22/15 18:01	ET	1	270	<109
00757296	PSG-21	4/9/15 10:10	4/14/15 8:52	4/20/15 10:40	ET	4/22/15 14:30	ET	1	361	<109
00757297	PSG-30	4/9/15 10:31	4/14/15 8:58	4/20/15 10:40	ET	4/21/15 21:22	ET	1	415	<109

AMPLIFIED GEOCHEMICAL IMAGING, LLC  
 210 EXECUTIVE DRIVE, SUITE 1, NEWARK, DE 19702  
 KLEINFELDER ASSOCIATES, INC., SACRAMENTO, CA  
 STANDARD TARGET VOCs/SVOCs  
 ESTIMATED SOIL GAS CONCENTRATIONS  
 SMUD PHASE II ESA  
 ORDER # 01345

DATAFILE	FIELD	DATE/ TIME	DATE/ TIME	DATE/ TIME		DATE/ TIME			estimated	
NAME	ID	INSTALLED	RETRIEVED	RECEIVED		ANALYZED		DF	TPH, ug/m <sup>3</sup>	MTBE, ug/m <sup>3</sup>
Average RL =									18.3	120
00757298	PSG-32	4/9/15 10:45	4/14/15 9:04	4/20/15 10:40	ET	4/21/15 18:21	ET	1	200	<109
00757299	PSG-29	4/9/15 10:53	4/14/15 9:09	4/20/15 10:40	ET	4/21/15 18:51	ET	1	74.0	<109
00757300	PSG-31	4/9/15 11:05	4/14/15 9:12	4/20/15 10:40	ET	4/21/15 17:21	ET	1	234	<109
00757301	PSG-33	4/9/15 11:17	4/14/15 9:17	4/20/15 10:40	ET	4/22/15 6:54	ET	1	134	<109
00757302	PSG-34	4/9/15 12:10	4/14/15 9:33	4/20/15 10:40	ET	4/22/15 6:24	ET	1	158	<109
00757303	PSG-38	4/9/15 15:03	4/14/15 9:38	4/20/15 10:40	ET	4/22/15 11:00	ET	1	1030	<193
00757304	PSG-37	4/9/15 15:11	4/14/15 9:41	4/20/15 10:40	ET	4/22/15 4:23	ET	1	495	<193
00757305	PSG-36	4/9/15 15:20	4/14/15 9:45	4/20/15 10:40	ET	4/22/15 8:24	ET	1	336	<193
00757306	PSG-35	4/9/15 15:33	4/14/15 9:48	4/20/15 10:40	ET	4/21/15 19:52	ET	1	2140 E	<193
00757307	Trip blank			4/20/15 10:40	ET	4/22/15 17:01	ET	1	<18.3	<120
00757308	Trip blank			4/20/15 10:40	ET	4/22/15 1:23	ET	1	<18.3	<120
BLK_ENV-252700	Method Blank					4/21/15 16:51	ET	1	<18.3	<120
BLK_ENV-252708	Method Blank					4/22/15 12:00	ET	1	<18.3	<120

AMPLIFIED GEOCHEMICAL IMAGING, LLC  
 210 EXECUTIVE DRIVE, SUITE 1, NEWARK, DE 19702  
 KLEINFELDER ASSOCIATES, INC., SACRAMENTO, CA  
 STANDARD TARGET VOCs/SVOCs  
 ESTIMATED SOIL GAS CONCENTRATIONS  
 SMUD PHASE II ESA  
 ORDER # 01345

DATAFILE	FIELD						
NAME	ID	t12DCE, ug/m <sup>3</sup>	11DCA, ug/m <sup>3</sup>	c12DCE, ug/m <sup>3</sup>	CHCl3, ug/m <sup>3</sup>	111TCA, ug/m <sup>3</sup>	12DCA, ug/m <sup>3</sup>
Average RL =		253	86.6	82.1	44.3	26.2	21.3
00757263	PSG-02	<228	<77.9	<73.8	<39.7	<23.4	<19.0
00757265	PSG-01	<228	<78.0	<73.8	<39.8	<23.5	<19.1
00757266	PSG-04	<228	<78.0	<73.9	<39.8	<23.5	<19.1
00757267	PSG-06	<228	<78.1	<73.9	<39.8	<23.5	<19.1
00757268	PSG-08	<228	<78.1	<73.9	<39.9	<23.5	<19.1
00757269	PSG-07	<401	<137	<130	<70.0	<41.3	<33.6
00757270	PSG-05	<228	<78.2	<74.0	<39.9	<23.6	<19.1
00757271	PSG-03	<229	<78.2	<74.1	<39.9	<23.6	<19.2
00757272	PSG-10	<229	<78.3	<74.1	<40.0	<23.6	<19.2
00757273	PSG-12	<229	<78.3	<74.1	<40.0	86.3	<19.2
00757274	PSG-14	<229	<78.3	<74.2	<40.0	<23.7	<19.2
00757275	PSG-11	<229	<78.3	<74.2	<40.0	<23.7	<19.2
00757276	PSG-09	<229	<78.3	<74.2	<40.0	<23.7	<19.2
00757277	PSG-18	<402	<138	<130	<70.4	<41.7	<33.8
00757278	PSG-17	<229	<78.5	<74.3	<40.1	<23.8	<19.3
00757279	PSG-25	<229	<78.5	<74.3	<40.1	<23.8	<19.3
00757280	PSG-26	<229	<78.5	<74.4	<40.2	<23.8	<19.3
00757281	PSG-27	<229	<78.6	<74.5	<40.2	<23.8	<19.3
00757288	PSG-15	<229	<78.6	<74.5	<40.2	<23.9	<19.3
00757289	PSG-28	<402	<138	<131	<70.6	<41.9	<34.0
00757290	PSG-13	<229	<78.7	<74.6	<40.3	<23.9	<19.4
00757291	PSG-20	<228	<78.2	<74.0	<39.9	<23.6	<19.2
00757292	PSG-22	<229	<78.2	794	<40.0	<23.6	<19.2
00757293	PSG-24	<229	<78.3	<74.1	<40.0	64.8	<19.2
00757294	PSG-19	<229	<78.3	<74.1	<40.0	<23.6	<19.2
00757295	PSG-23	<229	<78.3	<74.2	<40.0	<23.7	<19.2
00757296	PSG-21	<229	<78.4	<74.2	<40.1	27.0	<19.2
00757297	PSG-30	<229	<78.4	<74.3	<40.1	113	<19.3

AMPLIFIED GEOCHEMICAL IMAGING, LLC  
 210 EXECUTIVE DRIVE, SUITE 1, NEWARK, DE 19702  
 KLEINFELDER ASSOCIATES, INC., SACRAMENTO, CA  
 STANDARD TARGET VOCs/SVOCs  
 ESTIMATED SOIL GAS CONCENTRATIONS  
 SMUD PHASE II ESA  
 ORDER # 01345

DATAFILE	FIELD						
NAME	ID	t12DCE, ug/m <sup>3</sup>	11DCA, ug/m <sup>3</sup>	c12DCE, ug/m <sup>3</sup>	CHCl3, ug/m <sup>3</sup>	111TCA, ug/m <sup>3</sup>	12DCA, ug/m <sup>3</sup>
Average RL =		253	86.6	82.1	44.3	26.2	21.3
00757298	PSG-32	<229	<78.5	<74.3	<40.1	<23.7	<19.3
00757299	PSG-29	<229	<78.5	<74.3	<40.1	<23.8	<19.3
00757300	PSG-31	<229	<78.5	<74.3	<40.1	<23.8	<19.3
00757301	PSG-33	<229	<78.5	<74.4	<40.1	<23.8	<19.3
00757302	PSG-34	<229	<78.6	<74.5	<40.2	<23.8	<19.3
00757303	PSG-38	<404	<139	<132	<71.2	<42.4	<34.3
00757304	PSG-37	<404	<139	<132	<71.2	<42.4	<34.3
00757305	PSG-36	<404	<139	<132	<71.2	<42.4	<34.3
00757306	PSG-35	<404	<139	<132	<71.2	<42.4	<34.3
00757307	Trip blank	<253	<86.6	<82.1	<44.3	<26.2	<21.3
00757308	Trip blank	<253	<86.6	<82.1	<44.3	<26.2	<21.3
BLK_ENV-252700	Method Blank	<253	<86.6	<82.1	<44.3	<26.2	<21.3
BLK_ENV-252708	Method Blank	<253	<86.6	<82.1	<44.3	<26.2	<21.3

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 KLEINFELDER ASSOCIATES, INC., SACRAMENTO, CA  
 STANDARD TARGET VOCs/SVOCs  
 ESTIMATED SOIL GAS CONCENTRATIONS  
 SMUD PHASE II ESA  
 ORDER # 01345

DATAFILE	FIELD						estimated	
NAME	ID	BENZ, ug/m <sup>3</sup>	CCl4, ug/m <sup>3</sup>	TCE, ug/m <sup>3</sup>	112TCA, ug/m <sup>3</sup>	TOL, ug/m <sup>3</sup>	OCT, ug/m <sup>3</sup>	PCE, ug/m <sup>3</sup>
Average RL =		21.0	23.5	8.89	1.52	2.22	2.28	1.69
00757263	PSG-02	37.8	<21.0	<7.93	<1.34	5.56	3.07	6.13
00757265	PSG-01	<18.8	<21.0	<7.95	<1.35	2.25	<2.03	33.9
00757266	PSG-04	78.3	<21.1	<7.95	<1.35	16.0	7.32	24.5
00757267	PSG-06	52.5	<21.1	<7.96	<1.35	15.6	4.31	14.7
00757268	PSG-08	26.8	<21.1	<7.97	<1.35	12.3	4.96	39.1
00757269	PSG-07	<33.1	<37.1	<14.0	<2.38	11.7	7.74	158
00757270	PSG-05	73.3	<21.1	10.7	<1.36	25.1	26.1	29.7
00757271	PSG-03	32.9	<21.2	<8.00	<1.36	4.01	<2.05	24.1
00757272	PSG-10	<18.9	<21.2	<8.01	<1.36	<1.99	2.83	19.1
00757273	PSG-12	49.2	<21.2	<8.01	<1.36	7.75	2.93	9.86
00757274	PSG-14	<19.0	<21.2	<8.02	<1.37	2.37	12.4	2.57
00757275	PSG-11	29.7	<21.2	<8.03	<1.37	4.21	7.69	1.60
00757276	PSG-09	106	<21.2	<8.03	<1.37	21.2	8.15	<1.52
00757277	PSG-18	37.3	<37.4	<14.1	<2.41	<3.53	6.51	<2.68
00757278	PSG-17	59.9	<21.3	<8.06	<1.38	8.33	4.66	<1.53
00757279	PSG-25	28.4	<21.3	<8.06	<1.38	3.78	12.7	<1.53
00757280	PSG-26	24.9	<21.3	<8.07	<1.38	2.86	11.2	<1.53
00757281	PSG-27	33.9	<21.4	<8.09	<1.38	3.15	2.57	<1.54
00757288	PSG-15	<19.1	<21.4	<8.10	<1.39	2.02	<2.08	14.9
00757289	PSG-28	67.5	<37.6	<14.2	<2.43	5.54	<3.66	<2.71
00757290	PSG-13	56.8	<21.4	<8.12	<1.39	8.94	15.9	<1.55
00757291	PSG-20	32.9	<21.2	<7.99	<1.36	3.92	3.86	4.20
00757292	PSG-22	50.3	<21.2	1530	<1.36	5.54	9.37	5900 E
00757293	PSG-24	29.6	<21.2	<8.01	<1.36	49.7	3.87	59.3
00757294	PSG-19	33.6	<21.2	<8.02	<1.36	5.01	5.37	<1.52
00757295	PSG-23	<19.0	<21.2	<8.02	<1.37	<2.00	2.16	56.1
00757296	PSG-21	<19.0	<21.3	<8.04	<1.37	<2.00	<2.06	109
00757297	PSG-30	<19.0	<21.3	<8.05	<1.37	2.57	6.43	509

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 ESTIMATED SOIL GAS CONCENTRATIONS  
 SMUD PHASE II ESA  
 ORDER # 01345

DATAFILE	FIELD						estimated	
NAME	ID	BENZ, ug/m <sup>3</sup>	CCl <sub>4</sub> , ug/m <sup>3</sup>	TCE, ug/m <sup>3</sup>	112TCA, ug/m <sup>3</sup>	TOL, ug/m <sup>3</sup>	OCT, ug/m <sup>3</sup>	PCE, ug/m <sup>3</sup>
Average RL =		21.0	23.5	8.89	1.52	2.22	2.28	1.69
00757298	PSG-32	21.3	<21.3	<8.05	<1.37	2.85	<2.07	193
00757299	PSG-29	25.6	<21.3	<8.06	<1.37	2.20	<2.07	1.91
00757300	PSG-31	46.4	<21.3	<8.06	<1.38	7.54	2.95	137
00757301	PSG-33	37.1	<21.3	<8.07	<1.38	4.69	<2.07	18.7
00757302	PSG-34	26.4	<21.4	<8.09	<1.38	3.06	12.0	<1.54
00757303	PSG-38	112	<38.0	<14.4	<2.48	16.6	10.7	<2.76
00757304	PSG-37	115	<38.0	<14.4	<2.48	13.9	16.7	<2.76
00757305	PSG-36	92.3	<38.0	<14.4	<2.48	12.9	8.06	<2.76
00757306	PSG-35	131	<38.1	<14.4	<2.48	18.3	12.1	<2.76
00757307	Trip blank	<21.0	<23.5	<8.89	<1.52	<2.22	<2.28	<1.69
00757308	Trip blank	<21.0	<23.5	<8.89	<1.52	<2.22	<2.28	<1.69
BLK_ENV-252700	Method Blank	<21.0	<23.5	<8.89	<1.52	<2.22	<2.28	<1.69
BLK_ENV-252708	Method Blank	<21.0	<23.5	<8.89	<1.52	<2.22	<2.28	<1.69

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 ESTIMATED SOIL GAS CONCENTRATIONS  
 SMUD PHASE II ESA  
 ORDER # 01345

DATAFILE	FIELD	estimated					
NAME	ID	CIBENZ, ug/m <sup>3</sup>	1112TetCA, ug/m <sup>3</sup>	ETBENZ, ug/m <sup>3</sup>	mpXYL, ug/m <sup>3</sup>	oXYL, ug/m <sup>3</sup>	1122TetCA, ug/m <sup>3</sup>
Average RL =		1.09	0.81	1.04	0.95	1.32	0.81
00757263	PSG-02	<0.97	<0.72	<0.92	1.17	<1.17	<0.72
00757265	PSG-01	<0.97	<0.72	<0.93	<0.84	<1.17	<0.72
00757266	PSG-04	<0.97	<0.72	2.78	3.65	2.54	<0.72
00757267	PSG-06	<0.97	<0.73	1.73	2.71	1.84	<0.73
00757268	PSG-08	<0.97	<0.73	1.73	3.13	2.22	<0.73
00757269	PSG-07	<1.71	<1.28	2.35	3.47	2.85	<1.28
00757270	PSG-05	<0.98	<0.73	2.97	7.58	6.33	<0.73
00757271	PSG-03	<0.98	<0.73	<0.94	<0.85	<1.19	<0.73
00757272	PSG-10	<0.98	<0.73	<0.94	<0.85	<1.19	<0.73
00757273	PSG-12	<0.98	<0.73	1.12	2.03	1.41	<0.73
00757274	PSG-14	<0.98	<0.73	<0.94	<0.86	<1.19	<0.73
00757275	PSG-11	<0.98	<0.74	<0.94	1.20	<1.19	<0.74
00757276	PSG-09	<0.98	<0.74	2.29	4.46	2.57	<0.74
00757277	PSG-18	<1.73	<1.30	<1.66	<1.51	<2.10	<1.30
00757278	PSG-17	<0.99	<0.74	0.95	1.46	<1.20	<0.74
00757279	PSG-25	<0.99	<0.74	<0.95	<0.86	<1.20	<0.74
00757280	PSG-26	<0.99	<0.74	<0.95	<0.86	<1.20	<0.74
00757281	PSG-27	<0.99	<0.74	<0.95	<0.87	<1.21	<0.74
00757288	PSG-15	<1.00	<0.75	<0.95	<0.87	<1.21	<0.75
00757289	PSG-28	57.8	<1.31	<1.68	<1.53	<2.12	<1.31
00757290	PSG-13	<1.00	<0.75	<0.96	1.34	<1.21	<0.75
00757291	PSG-20	<0.98	<0.73	<0.94	2.44	1.63	<0.73
00757292	PSG-22	<0.98	<0.73	<0.94	1.36	<1.19	<0.73
00757293	PSG-24	<0.98	<0.73	4.77	19.1	15.5	<0.73
00757294	PSG-19	<0.98	<0.73	<0.94	1.23	<1.19	<0.73
00757295	PSG-23	<0.98	<0.73	<0.94	<0.86	<1.19	<0.73
00757296	PSG-21	<0.99	<0.74	<0.94	<0.86	<1.19	<0.74
00757297	PSG-30	<0.99	<0.74	<0.95	0.86	<1.20	<0.74

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DATAFILE	FIELD	estimated					
NAME	ID	CIBENZ, ug/m <sup>3</sup>	1112TetCA, ug/m <sup>3</sup>	ETBENZ, ug/m <sup>3</sup>	mpXYL, ug/m <sup>3</sup>	oXYL, ug/m <sup>3</sup>	1122TetCA, ug/m <sup>3</sup>
Average RL =		1.09	0.81	1.04	0.95	1.32	0.81
00757298	PSG-32	<0.99	<0.74	<0.95	<0.86	<1.20	<0.74
00757299	PSG-29	<0.99	<0.74	<0.95	<0.86	<1.20	<0.74
00757300	PSG-31	<0.99	<0.74	1.13	1.92	1.37	<0.74
00757301	PSG-33	<0.99	<0.74	<0.95	<0.86	<1.20	<0.74
00757302	PSG-34	<0.99	<0.74	<0.95	<0.87	<1.21	<0.74
00757303	PSG-38	<1.78	<1.34	5.68	17.1	8.16	<1.34
00757304	PSG-37	<1.79	<1.34	<1.71	3.01	2.27	<1.34
00757305	PSG-36	<1.79	<1.34	4.16	12.9	7.21	<1.34
00757306	PSG-35	<1.79	<1.34	2.71	4.09	3.08	<1.34
00757307	Trip blank	<1.09	<0.81	<1.04	<0.95	<1.32	<0.81
00757308	Trip blank	<1.09	<0.81	<1.04	<0.95	<1.32	<0.81
BLK_ENV-252700	Method Blank	<1.09	<0.81	<1.04	<0.95	<1.32	<0.81
BLK_ENV-252708	Method Blank	<1.09	<0.81	<1.04	<0.95	<1.32	<0.81



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ORDER # 01345

DATAFILE	FIELD						estimated
NAME	ID	135TMB, ug/m <sup>3</sup>	124TMB, ug/m <sup>3</sup>	13DCB, ug/m <sup>3</sup>	14DCB, ug/m <sup>3</sup>	12DCB, ug/m <sup>3</sup>	UNDEC, ug/m <sup>3</sup>
Average RL =		1.42	1.07	0.86	0.87	0.83	1.99
00757263	PSG-02	<1.26	<0.95	<0.77	<0.77	<0.73	<1.77
00757265	PSG-01	<1.27	<0.95	<0.77	<0.78	<0.73	<1.77
00757266	PSG-04	<1.27	1.59	<0.77	<0.78	<0.74	<1.77
00757267	PSG-06	<1.27	1.32	<0.77	<0.78	<0.74	<1.78
00757268	PSG-08	<1.27	2.26	<0.77	<0.78	<0.74	4.07
00757269	PSG-07	<2.23	2.48	<1.36	<1.37	<1.30	7.67
00757270	PSG-05	7.00	7.39	<0.77	<0.78	<0.74	13.1
00757271	PSG-03	<1.28	<0.96	<0.78	<0.78	<0.74	<1.79
00757272	PSG-10	<1.28	<0.96	<0.78	<0.78	<0.74	<1.79
00757273	PSG-12	<1.28	0.97	<0.78	<0.79	<0.74	8.64
00757274	PSG-14	<1.28	<0.97	<0.78	<0.79	<0.74	<1.80
00757275	PSG-11	<1.28	<0.97	<0.78	<0.79	<0.75	<1.80
00757276	PSG-09	<1.29	1.01	<0.78	<0.79	<0.75	<1.80
00757277	PSG-18	<2.27	<1.71	<1.38	<1.39	<1.31	<3.17
00757278	PSG-17	<1.29	<0.97	<0.78	<0.79	<0.75	<1.81
00757279	PSG-25	<1.29	<0.97	<0.79	<0.79	<0.75	<1.81
00757280	PSG-26	<1.30	<0.98	<0.79	<0.79	<0.75	6.89
00757281	PSG-27	<1.30	<0.98	<0.79	<0.80	<0.75	2.45
00757288	PSG-15	<1.30	<0.98	<0.79	<0.80	<0.76	<1.82
00757289	PSG-28	<2.29	<1.72	144	204	13.0	<3.21
00757290	PSG-13	1.31	1.87	<0.79	<0.80	<0.76	4.76
00757291	PSG-20	<1.28	1.42	<0.77	<0.78	<0.74	<1.79
00757292	PSG-22	<1.28	<0.96	<0.78	2.81	5.25	21.2
00757293	PSG-24	24.7	21.2	<0.78	<0.79	<0.74	2.14
00757294	PSG-19	<1.28	<0.97	<0.78	<0.79	<0.74	<1.80
00757295	PSG-23	<1.28	<0.97	<0.78	<0.79	<0.74	2.93
00757296	PSG-21	<1.29	<0.97	<0.78	<0.79	<0.75	<1.80
00757297	PSG-30	2.00	2.88	<0.78	<0.79	<0.75	<1.81

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 ESTIMATED SOIL GAS CONCENTRATIONS  
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 ORDER # 01345

DATAFILE	FIELD						estimated
NAME	ID	135TMB, ug/m <sup>3</sup>	124TMB, ug/m <sup>3</sup>	13DCB, ug/m <sup>3</sup>	14DCB, ug/m <sup>3</sup>	12DCB, ug/m <sup>3</sup>	UNDEC, ug/m <sup>3</sup>
Average RL =		1.42	1.07	0.86	0.87	0.83	1.99
00757298	PSG-32	<1.29	<0.97	<0.78	<0.79	<0.75	<1.81
00757299	PSG-29	<1.29	<0.97	<0.78	<0.79	<0.75	<1.81
00757300	PSG-31	<1.29	<0.97	<0.78	<0.79	<0.75	<1.81
00757301	PSG-33	<1.29	<0.97	<0.79	<0.79	<0.75	<1.81
00757302	PSG-34	<1.30	<0.98	<0.79	<0.80	<0.75	1.93
00757303	PSG-38	<2.33	<1.76	<1.42	<1.43	<1.35	<3.27
00757304	PSG-37	<2.33	2.34	<1.42	<1.43	<1.35	5.02
00757305	PSG-36	<2.33	<1.76	<1.42	<1.43	<1.36	<3.27
00757306	PSG-35	<2.33	1.76	<1.42	<1.43	<1.36	4.09
00757307	Trip blank	<1.42	<1.07	<0.86	<0.87	<0.83	<1.99
00757308	Trip blank	<1.42	<1.07	<0.86	<0.87	<0.83	<1.99
BLK_ENV-252700	Method Blank	<1.42	<1.07	<0.86	<0.87	<0.83	<1.99
BLK_ENV-252708	Method Blank	<1.42	<1.07	<0.86	<0.87	<0.83	<1.99

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DATAFILE	FIELD	estimated	estimated	estimated	estimated	estimated
NAME	ID	NAPH, ug/m <sup>3</sup>	TRIDEC, ug/m <sup>3</sup>	2MeNAPH, ug/m <sup>3</sup>	Acenaphthylene, ug/m <sup>3</sup>	PENTADEC, ug/m <sup>3</sup>
Average RL =		1.99	1.99	1.99	1.99	1.99
00757263	PSG-02	<1.77	<1.77	<1.77	<1.77	<1.77
00757265	PSG-01	<1.77	<1.77	<1.77	<1.77	<1.77
00757266	PSG-04	<1.77	1.95	<1.77	<1.77	<1.77
00757267	PSG-06	<1.78	4.33	<1.78	<1.78	2.09
00757268	PSG-08	<1.78	5.25	1.85	<1.78	3.37
00757269	PSG-07	3.25	9.64	7.32	<3.13	6.45
00757270	PSG-05	<1.79	3.65	<1.79	<1.79	<1.79
00757271	PSG-03	<1.79	<1.79	<1.79	<1.79	<1.79
00757272	PSG-10	4.00	<1.79	29.4	<1.79	<1.79
00757273	PSG-12	<1.80	3.46	2.31	<1.80	6.09
00757274	PSG-14	<1.80	<1.80	<1.80	<1.80	<1.80
00757275	PSG-11	<1.80	<1.80	<1.80	<1.80	5.01
00757276	PSG-09	<1.80	<1.80	<1.80	<1.80	<1.80
00757277	PSG-18	<3.17	<3.17	<3.17	<3.17	<3.17
00757278	PSG-17	<1.81	<1.81	<1.81	<1.81	<1.81
00757279	PSG-25	<1.81	2.68	<1.81	<1.81	<1.81
00757280	PSG-26	<1.82	<1.82	<1.82	<1.82	<1.82
00757281	PSG-27	<1.82	<1.82	<1.82	<1.82	<1.82
00757288	PSG-15	<1.82	<1.82	<1.82	<1.82	<1.82
00757289	PSG-28	<3.21	<3.21	<3.21	<3.21	<3.21
00757290	PSG-13	<1.83	1.94	<1.83	<1.83	<1.83
00757291	PSG-20	<1.79	<1.79	<1.79	<1.79	<1.79
00757292	PSG-22	<1.79	98.7	2.17	<1.79	36.0
00757293	PSG-24	<1.79	<1.79	<1.79	<1.79	<1.79
00757294	PSG-19	<1.80	<1.80	<1.80	<1.80	<1.80
00757295	PSG-23	<1.80	<1.80	<1.80	<1.80	<1.80
00757296	PSG-21	<1.80	1.98	<1.80	<1.80	<1.80
00757297	PSG-30	2.36	<1.81	3.32	<1.81	<1.81

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 KLEINFELDER ASSOCIATES, INC., SACRAMENTO, CA  
 STANDARD TARGET VOCs/SVOCs  
 ESTIMATED SOIL GAS CONCENTRATIONS  
 SMUD PHASE II ESA  
 ORDER # 01345

DATAFILE	FIELD	estimated	estimated	estimated	estimated	estimated
NAME	ID	NAPH, ug/m <sup>3</sup>	TRIDEC, ug/m <sup>3</sup>	2MeNAPH, ug/m <sup>3</sup>	Acenaphthylene, ug/m <sup>3</sup>	PENTADEC, ug/m <sup>3</sup>
Average RL =		1.99	1.99	1.99	1.99	1.99
00757298	PSG-32	<1.81	<1.81	<1.81	<1.81	<1.81
00757299	PSG-29	<1.81	<1.81	<1.81	<1.81	<1.81
00757300	PSG-31	<1.81	<1.81	<1.81	<1.81	<1.81
00757301	PSG-33	<1.81	<1.81	<1.81	<1.81	<1.81
00757302	PSG-34	<1.82	<1.82	<1.82	<1.82	<1.82
00757303	PSG-38	<3.27	<3.27	<3.27	<3.27	<3.27
00757304	PSG-37	<3.27	<3.27	<3.27	<3.27	<3.27
00757305	PSG-36	<3.27	<3.27	<3.27	<3.27	<3.27
00757306	PSG-35	<3.28	<3.28	<3.28	<3.28	<3.28
00757307	Trip blank	<1.99	<1.99	<1.99	<1.99	<1.99
00757308	Trip blank	<1.99	<1.99	<1.99	<1.99	<1.99
BLK_ENV-252700	Method Blank	<1.99	<1.99	<1.99	<1.99	<1.99
BLK_ENV-252708	Method Blank	<1.99	<1.99	<1.99	<1.99	<1.99

AMPLIFIED GEOCHEMICAL IMAGING, LLC  
 210 EXECUTIVE DRIVE, SUITE 1, NEWARK, DE 19702  
 KLEINFELDER ASSOCIATES, INC., SACRAMENTO, CA  
 STANDARD TARGET VOCs/SVOCs  
 ESTIMATED SOIL GAS CONCENTRATIONS  
 SMUD PHASE II ESA  
 ORDER # 01345

DATAFILE	FIELD	estimated	estimated
NAME	ID	Acenaphthene, ug/m <sup>3</sup>	Fluorene, ug/m <sup>3</sup>
Average RL =		1.99	1.99
00757263	PSG-02	<1.77	<1.77
00757265	PSG-01	<1.77	<1.77
00757266	PSG-04	<1.77	<1.77
00757267	PSG-06	<1.78	<1.78
00757268	PSG-08	<1.78	<1.78
00757269	PSG-07	<3.13	<3.13
00757270	PSG-05	<1.79	<1.79
00757271	PSG-03	<1.79	<1.79
00757272	PSG-10	<1.79	<1.79
00757273	PSG-12	<1.80	<1.80
00757274	PSG-14	<1.80	<1.80
00757275	PSG-11	<1.80	<1.80
00757276	PSG-09	<1.80	<1.80
00757277	PSG-18	<3.17	<3.17
00757278	PSG-17	<1.81	<1.81
00757279	PSG-25	<1.81	<1.81
00757280	PSG-26	<1.82	<1.82
00757281	PSG-27	<1.82	<1.82
00757288	PSG-15	<1.82	<1.82
00757289	PSG-28	3.27	<3.21
00757290	PSG-13	<1.83	<1.83
00757291	PSG-20	<1.79	<1.79
00757292	PSG-22	<1.79	<1.79
00757293	PSG-24	<1.79	<1.79
00757294	PSG-19	<1.80	<1.80
00757295	PSG-23	<1.80	<1.80
00757296	PSG-21	<1.80	<1.80
00757297	PSG-30	<1.81	<1.81

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 SMUD PHASE II ESA  
 ORDER # 01345

DATAFILE	FIELD	estimated	estimated
NAME	ID	Acenaphthene, ug/m <sup>3</sup>	Fluorene, ug/m <sup>3</sup>
Average RL =		1.99	1.99
00757298	PSG-32	<1.81	<1.81
00757299	PSG-29	<1.81	<1.81
00757300	PSG-31	<1.81	<1.81
00757301	PSG-33	<1.81	<1.81
00757302	PSG-34	<1.82	<1.82
00757303	PSG-38	<3.27	<3.27
00757304	PSG-37	<3.27	<3.27
00757305	PSG-36	<3.27	<3.27
00757306	PSG-35	<3.28	<3.28
00757307	Trip blank	<1.99	<1.99
00757308	Trip blank	<1.99	<1.99
BLK_ENV-252700	Method Blank	<1.99	<1.99
BLK_ENV-252708	Method Blank	<1.99	<1.99

## KEY TO DATA TABLE

### UNITS

µg	micrograms, relative mass value
µg/m <sup>3</sup>	micrograms per cubic meter; estimated soil gas concentration
µg/L	micrograms per Liter; calculated water concentration

### DATA QUALIFIERS

>	greater than; value exceeds calibration range, estimated value
<	less than; compound value is below the LOD and RL
J	mass value below LOQ or RL, but above LOD, estimated mass value
E	mass value exceeds upper calibration level, estimated mass value
Q	one or more quality control parameters failed for the compound

### ABBREVIATIONS

AVG RL	average reporting limit; calculated based on individual field sample RLs
LOD	limit of detection
LOQ	limit of quantification
MDL	method detection limit
RL	reporting limit

1112TetCA	1,1,1,2-tetrachloroethane	CIBENZ	chlorobenzene
111TCA	1,1,1-trichloroethane	ct12DCE	cis- & trans-1,2-dichloroethene
1122TetCA	1,1,2,2-tetrachloroethane	EtBENZ	ethylbenzene
112TCA	1,1,2-trichloroethane	mpXYL	m-, p-xylene
11DCA	1,1-dichloroethane	MTBE	methyl t-butyl ether
11DCE	1,1-dichloroethene	NAPH	naphthalene
124TMB	1,2,4-trimethylbenzene	OCT	octane
12DCA	1,2-dichloroethane	oXYL	o-xylene
12DCB	1,2-dichlorobenzene	PCE	tetrachloroethene
135TMB	1,3,5-trimethylbenzene	PENTADEC	pentadecane
13DCB	1,3-dichlorobenzene	PHEN	phenanthrene
14DCB	1,4-dichlorobenzene	t12DCE	trans-1,2-dichloroethene
2MeNAPH	2-methyl naphthalene	TCE	trichloroethene
BENZ	benzene	TMBs	combined masses of 1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene
BTEX	combined masses of benzene, toluene, ethylbenzene, and total xylenes (Gasoline Range Aromatics)	TOL	toluene
C11,C13&C15	combined masses of undecane, tridecane, and pentadecane (C11+C13+C15) (Diesel Range Alkanes)	TPH	total petroleum hydrocarbons
c12DCE	cis-1,2-dichloroethene	TRIDEC	tridecane
CCl4	carbon tetrachloride	UNDEC	undecane
CHC13	chloroform	VC	vinyl chloride

# SUMMARY OF SAMPLING RATE CALIBRATION FOR AGI SPG-0008 SAMPLER IN A GAS PHASE

## PURPOSE:

The purpose of this document is to:

1. Summarize the test protocol,
2. Summarize the methodology for analysis of data,
3. Present general results for generating concentration calibration

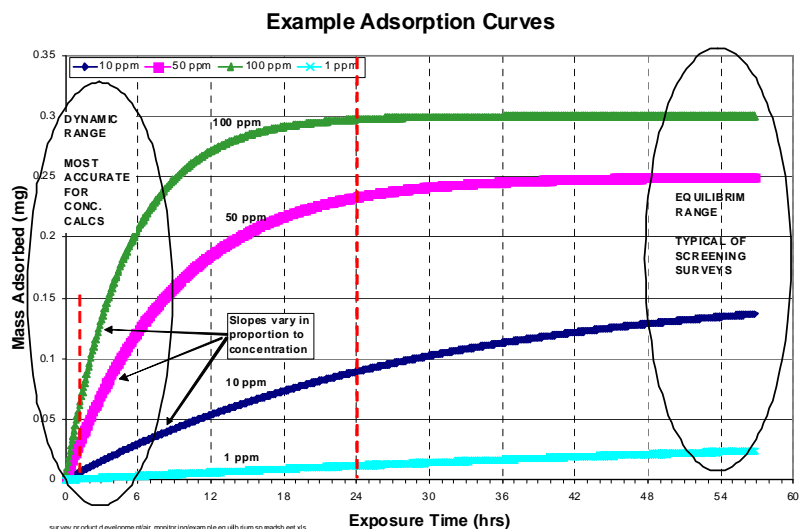
of the AGI Sampler, SPG-0008, in a gas phase (air or soil gas) following AGI's "Standard practice for determining the sampling rate of passive diffusion samplers in various environmental media," SPG-SOP-0493. The work will be summarized in two parts: Part 1: air, Part 2: soil gas.

## Principle of Operation of the AGI Sampler

The AGI Sampler is designed with solid adsorbents enclosed inside a tubular microporous PTFE membrane. When placed in soil or saturated soil, the pores and hydrophobic nature of the PTFE keep liquid water from entering the membrane. The membrane will not keep water vapor from entering but the adsorbents are very hydrophobic and testing of the SPG-0008 sampler has validated it to be unaffected by this moisture vapor. Compounds in air with vapor pressures above about 1 millionth of a mm of Hg will diffuse through the microporous membrane and be immediately captured on the solid adsorbent housed inside. The membrane porosity and dimensions are well controlled as is the mass of the adsorbent contained inside the sampler. The average pore diameter of the membrane is 1000 times larger than that of the compounds of interest, meaning the membrane offers a minimal resistance. On the other hand, the membrane pore size is small enough that colloidal particles and microbes can not pass through the membrane. This keeps the adsorbent from getting contaminated and eliminates any need to add preservative or chill during storage or transportation.

When a sampler is exposed to compounds in air, mass from the volatile compound are collected on the solid adsorbent inside the microporous PTFE membrane. To the right is a generalized example of mass uptake with time for this sampler.

Notice the initial slope and ultimate equilibrium mass both increase with increasing concentrations. For shorter time the increase is virtually





linear but as the mass increases toward the steady state, mass uptake slows and mass eventually reaches an asymptote. The initial range is referred to as the dynamic linear range while the later stage is referred to as the equilibrium range.

The sampling rate calibration for this passive sampler will apply to the linear and near-linear dynamic range, where accuracy and precision are best.

Temperature can affect both the diffusivity in air, which is part of the sampling rate but also the binding energy of the compound to the adsorbent. In general passive sampling devices are not highly affected by temperature although the effect will be more important for lower MW compounds. It is not uncommon to have an Arrhenius factor,  $-E_a/R$  of  $<1000$ , which means a  $5^\circ\text{C}$  temperature change will make less than a 5% change in sampling rate.

In soil, the matrix of particles and water creates a resistance to soil gas diffusion. Millington (Millington 1959) has modeled this resistance and developed a model to correct the diffusion for this added resistance based upon the porosity of the soil and the fraction of pores filled with water. This “Soil Effectiveness Factor” can lower the sampling rate in soil to 40% to 10% of that in free air. This will be discussed further in Part 2.

## **PART 1: Calibration in Air**

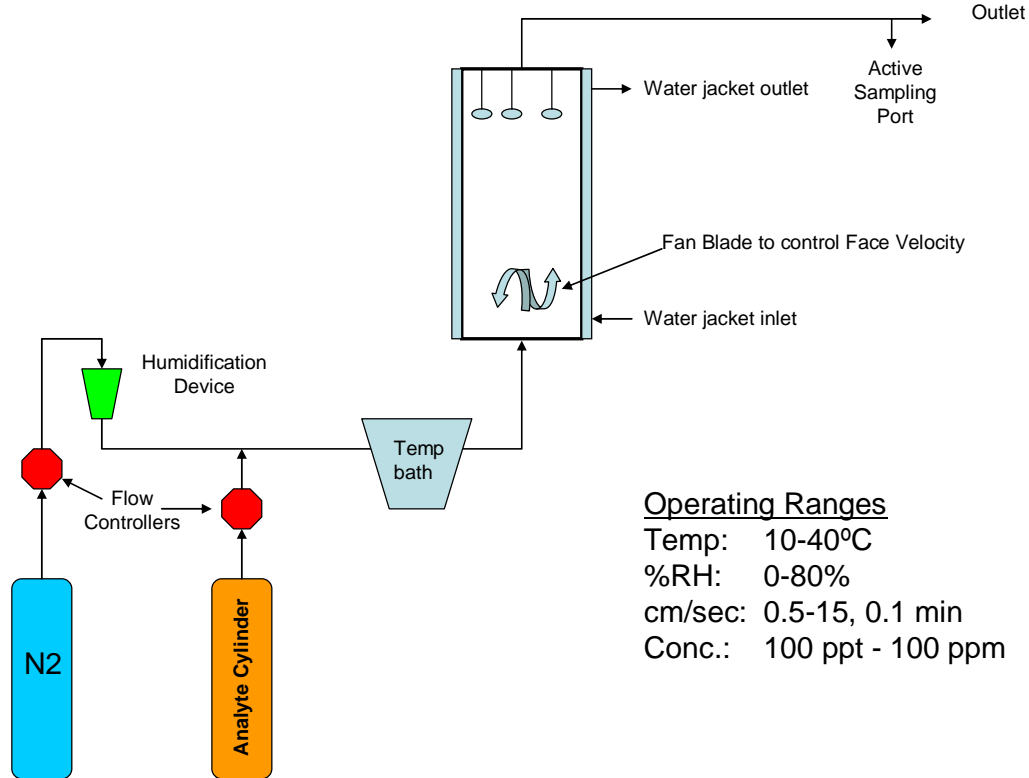
Part 1 summarizes the work in free air generating calibration data, evaluating the physical and chemical factors affecting the sampling rate, and measurement of the actual sampling rates or regression calibration equations needed to determine concentrations.

### **Sample Generation in Air**

In this calibration work, gaseous mixtures of analytes at known concentrations were generated inside a 3 liter glass vessel by mixing flow from gaseous standard cylinders with nitrogen using electronic flow controllers. A diagram of the set up is shown below. Total flow through the vessel ranged from 2 to 50 liters/min with an aim, where possible, of using a flow 20 or more times the combined sampling rate of AGI® Sampler being tested.

This gas mixture was temperature controlled by running it through a coil in a temperature controlled chiller. Similarly, the glass vessel was also temperature controlled by circulating the chiller fluid through the vessel jacket. A mercury thermometer in the vessel was used to determine the experiment temperature. The humidity level of the mixed gas was modified by passing the nitrogen portion of the gas mixture through a bubbler. Different humidity levels could be achieved by using water or saturated salt solutions in the bubbler that generate different relative humidities.

## Passive Diffusion Sampling Rate Measurement Apparatus



Internal wind velocity was controlled using a propeller blade attached to a shaft and motor. RPM was measured to calculate air velocity based on propeller pitch and rpm.

Before each experiment, the system was run for minutes to hours to allow temperature, humidity, and compound density on the vessel walls to stabilize. When changing concentrations, a stabilization time, typically, 2-10 hours, was provided to allow the vessel walls to reach a new equilibrium with the analyte concentrations and wall temperature.

AGI samplers were hung inside the vessel at time zero. They were removed at various intervals to generate samples along with duplicates that showed mass increasing with exposure time. The sampler exposure time was selected to span minutes to hours and was generally reduced for high concentration tests to maintain uptake with time, in roughly the linear dynamic range. Samplers were removed and placed back into their original jars for analysis. They were analyzed by AGI's 8260C method (SPG-WI-0318 or SPG-WI-10028) in duplicate, which is based on EPA SW846 Method 8260C.

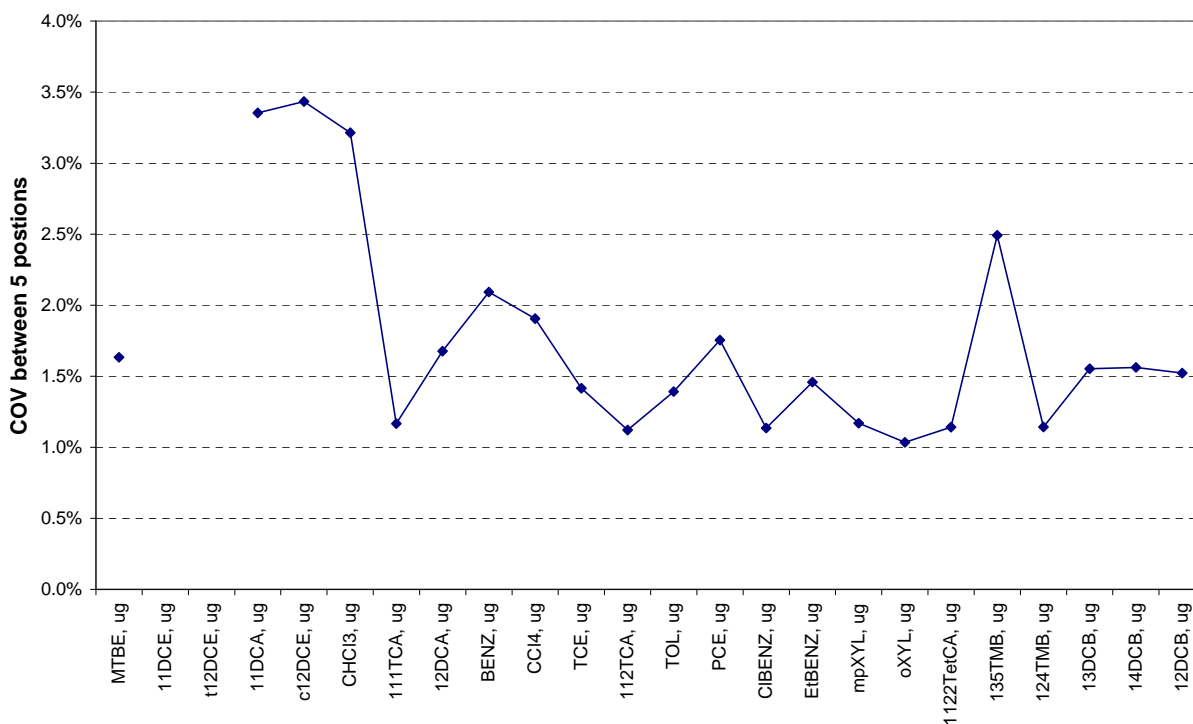
Vessel concentration was also measured during the tests using a TO-17 type of method. A MSA pump pulled about 1.5 L/hr of atmosphere from the chamber through two thermal desorption tubes in series, the first packed with Tenax-TA, and the second packed with a strong adsorbent carbon molecular sieve. Flow rate through the series of tubes was measured at the start and end of the pumping. Analysis of the thermal desorption tubes were performed by appropriate

analytical methods. Each Tenax-TA tube was analyzed by AGI's 8260C method (SPG-WI-0319 or SPG-WI-10028) and each carbonaceous tube by AGI's screening method (SPG-WI-0292). Typically only a small portion of the lower molecular weight compounds, such as DCA & DCE passed through the Tenax-TA tube to be captured on the carbon tube. Concentration was determined by

$$(\text{sum of mass on both tubes}) / (\text{avg flow rate} \times \text{hours}) = \text{ug/L}$$

Up to five sampler can be placed simultaneously in the chamber. Testing confirmed good sample uniformity among the locations as shown by coefficients of variation generally below 3% in the chart below.

### Good Sample Uniformity between 5 Positions



Most of the runs were performed using a TO-15 mix of compounds in a cylinder made up at nominally 1 ppm. Using nitrogen dilution, sampling rate measurements were done at concentrations from about 1 ppb to 50 ppb. Higher concentration cylinders can be used to generate concentrations in the ppm range if desired.

Sampling rate calibrations were run using multiple concentrations, typically 5-50 ppb and temperatures, typically 5°C to 35°C. Samples were run in duplicate. A total of 94 data points were generated using 23 compounds from AGI's standard compounds list. In addition, another 23 compounds were tested from those in the TO-15 mix. This is a living calibration and as additional data are generated, they may be qualified and added to this data set to improve the precision of the sampling rate calibration and broaden the compound list.

## Key Variable Effects

Based on theory, at short to moderate exposure times mass will increase roughly linearly proportional to exposure time, as well as, proportional to concentration. For passive samplers in air, temperature generally does not have a major effect on sampling rate. Even so, this work examined the impact of temperature because it could have a small effect on diffusivity in air and potentially adsorption strength for low MW compounds.

Except in indoor environments, air velocity is expected to be low and of inconsequential importance. The passive adsorbent is protected by wind stopping AGI membrane. Even so, we looked at velocity effects. Based on the hydrophobic nature of the adsorbents in SPG-0008 sampler, humidity is not expected to impact sampling rate.

Sampling rate has been found to be generally independent of concentration and time at mass values significantly below saturation. In the following sections we have characterized the sampling rate for each compound as affected by temperature and also developed calibrations using regression which account for the minor impact of time, and mass.

## Concentration using Simple Sampling Rate Determination

A simple way to determine concentration is to measure mass on the AGI sampler, divide by exposure time, and divide by sampling rate, SR.

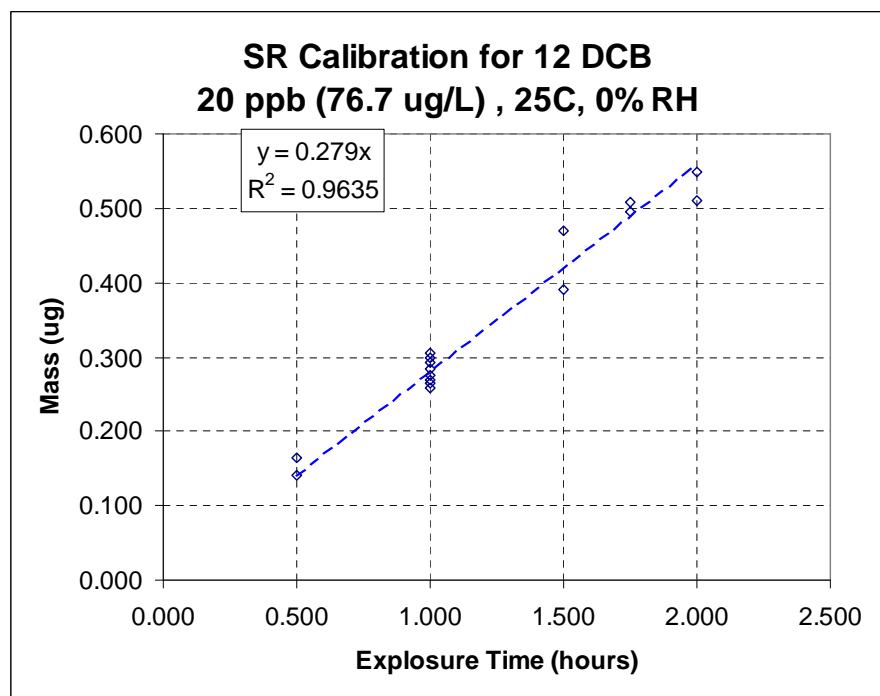
$$\text{Conc [ug/L]} = \text{mass/time/SR} \quad (1)$$

The sampling rate can be determined via measurements of mass versus time at a known concentration and temperature according to the following modification of equation (1).

$$\text{SR} = \text{mass/time/concentration} \quad (2)$$

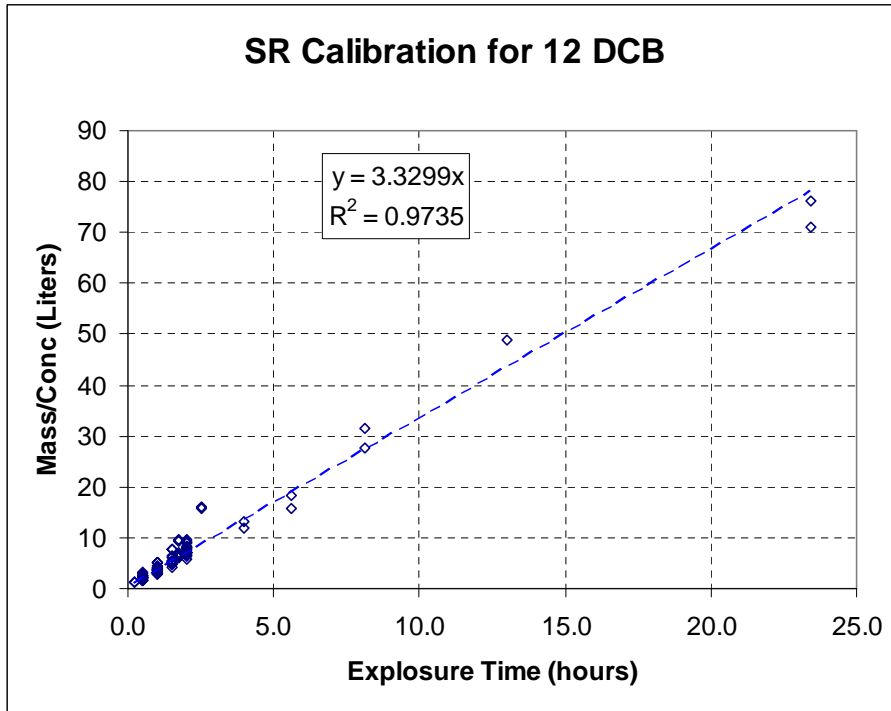
Sampling rates in L/hr were determined by measuring the trend or regression mass uptake versus time and dividing by the concentration. Such a sampling rate can be measured at any concentration and temperature.

The chart to the right shows a plot of mass versus time at 12DCB in nitrogen at nominally 20 ppb or 76.7 ug/cu m and



297K. This is actual data for one test run. The slope of 0.279 ug/hr divided by the concentration of 0.0767 ug/L yields a sampling rate, SR, of 3.64 L/hr.

The data could also be plotted as mass/Conc vs. time in which case the slope is the sampling rate directly as shown in the chart below. This allows the use of a larger data set incorporating multiple concentration tests.



### Rigorous Concentration using Regression

A preferred method for determining concentration that will yield improved accuracy over a wide range of concentrations, exposure times, and temperatures is to use all data in a regression analysis. This allows adjustments for the minor non-linear influences of mass and time as well as the effects of temperature. This is done by regressing equation (1) or a universal version of equation (1)

$$\text{Conc} = (\text{mass})^b / (\text{time})^{-d} / [\text{SRo} * \exp(-Ea/R/T)] \quad (3)$$

The subtle non-linear effects of mass and time will be evident in the deviation of coefficients b and d from 1.0. This regression generates four constants b, d, SRo, and  $-Ea/R$  by regressing  $\ln(\text{conc})$  versus  $\ln(\text{mass})$ ,  $\ln(\text{time})$ ,  $1/\text{temp}$ . These four constants can be used to determine concentration via the equation:

$$\text{Conc} = (\text{mass})^b / (\text{time})^{-d} / [\text{SRo} \times \exp(-Ea/R(1/T))] \quad (4)$$

Where conc is in ug/L, mass is in ug, time in hours, T in degrees Kelvin.

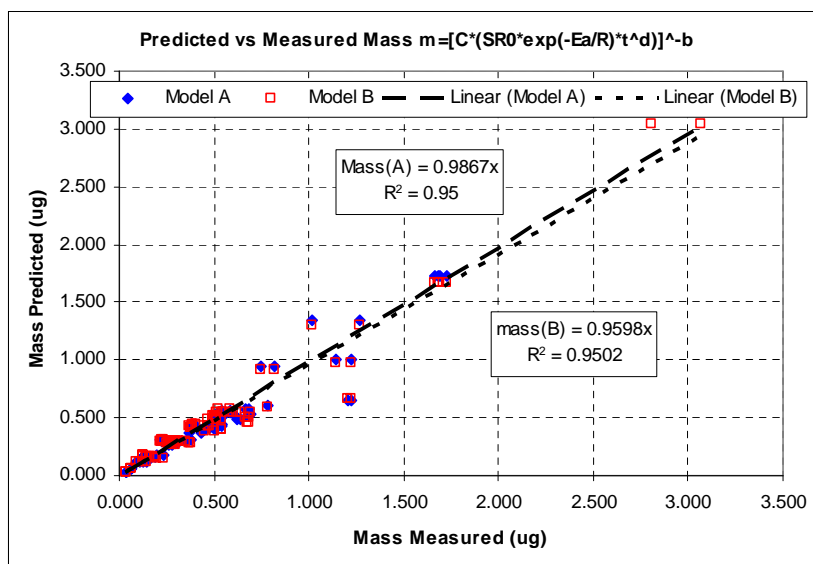
Equation (4) can also be expressed at a reference temperature,  $T_r$ , such as 15°C by

$$\text{Conc} = (\text{mass})^b / (\text{time})^{-d} / [\text{SRr} \times \exp(-E_a/R(1/T_r - 1/T))] \quad (5)$$

This allows sampling rates,  $\text{SRr}$ , at any reference temperature,  $T_r$ , and for any analyte to easily be compared. These values of  $\text{SRr}$  at 25°C 298.14°K can be found in Table A.

The chart to the right is a plot of the 12DCB predicted mass from the 4 constant regression compared to the measured mass. Agreement is excellent for the 95 data points.

Model A or the blue points are the 4 constant model, while Model B or the red squares are a 3 constant model ignoring temperature. Error for 12DCB is slightly lower for Model A and for lower MW compounds it is much better.



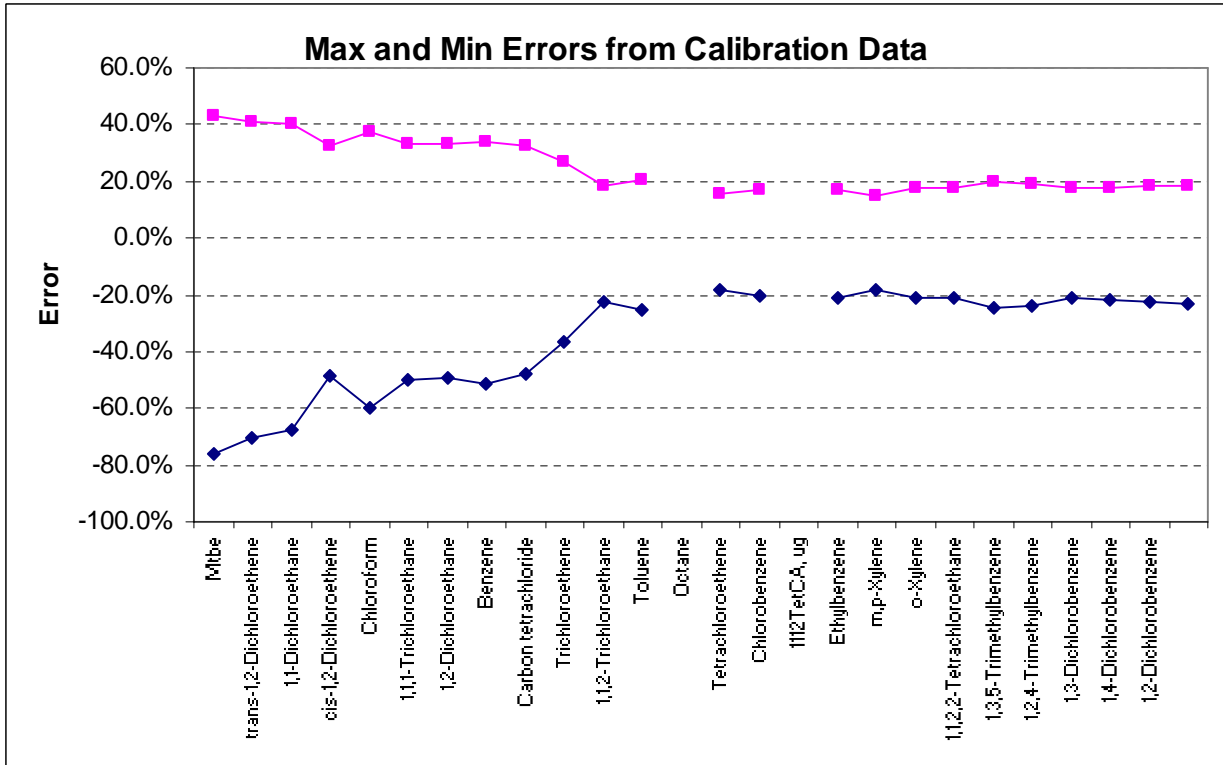
The 4 constant equation has been adopted for determining concentration in the gas phase.

Table B shows the tabulated summary of the 4 constants regression with  $R_{sq}$  values and error estimates for the 4 constants for each analyte. With the exception of MTBE and t12DCE the regression  $R_{sq}$  values are 0.9 or greater for each analyte. In general, temperature is more important for early eluting compounds where  $-E_a/R$  ranges from 2000 to 4000 while later eluting compounds (112TCA and above) are in the range of 500 to 1000 meaning they are less affected by temperature. Similarly, early eluting compounds have mass and time coefficients,  $b$  and  $d$  respectively, that deviate from 1.0.

### Error Estimates

Table C shows the error in the mass values from the 8260C low sensitivity method (SPG-WI-318), which at a 95% confidence level is typically 10% - 15%. The error between the primary sample and the duplicate in the sampler is generally about 5% and shown in table D.

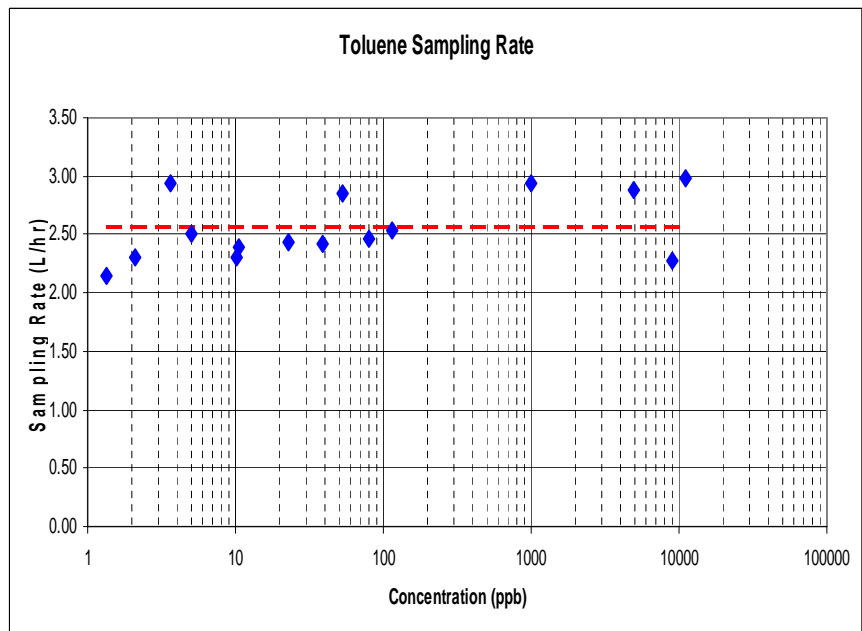
The standard error of the regression and standard errors of the constants can be found in table B. For each compound we have measured the error between the derived concentration and the actual concentration. This is tabulated in table D and shown below by compounds.



The maximum total error range is +/-20% for 112TCA and later eluting compounds. The maximum error range increases for compounds that elute earlier than 112TCA.

### Effect of Concentration

The measurement of sampling rate, SR, is effectively independent of concentration. The chart below shows statistically consistent sampling rate over four decades of concentration change for toluene. This has also been observed for other tested compounds.



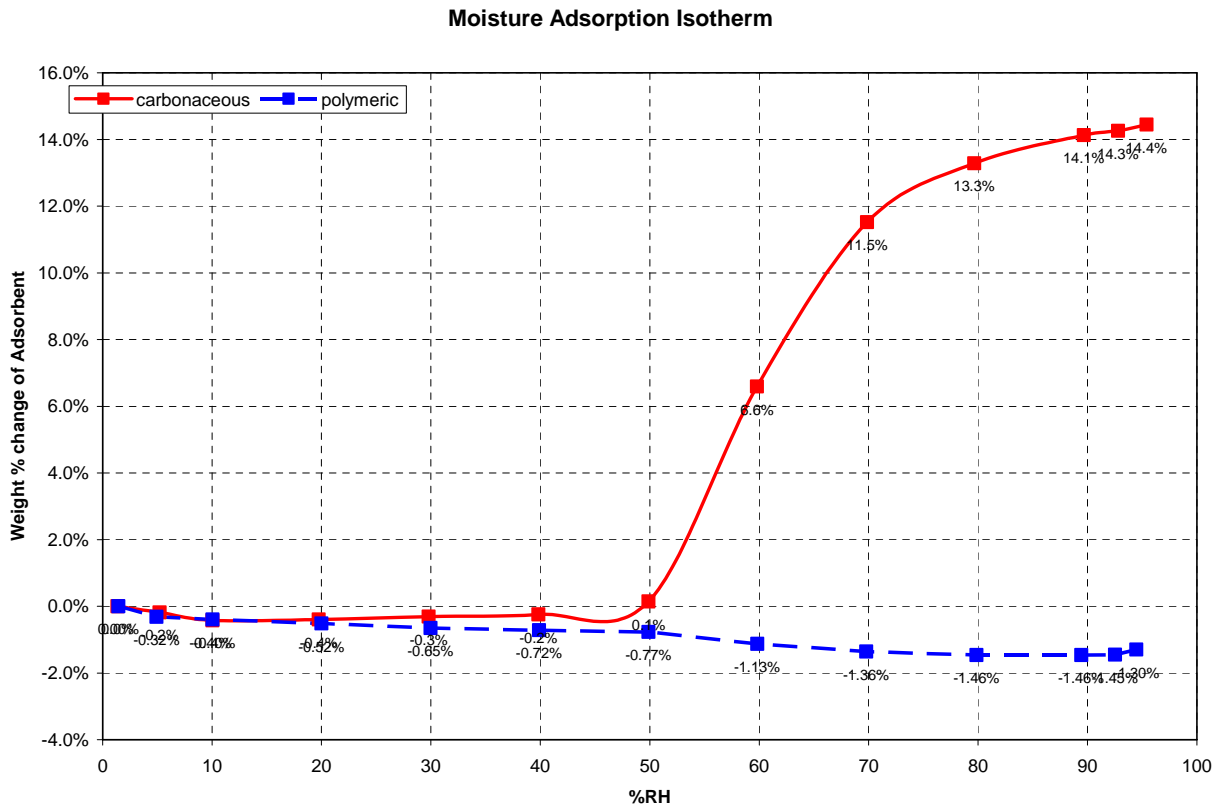
## Sorbent Saturation

As mass increases on a solid sorbent and approaches saturation, reverse diffusion can occur causing the sampling rate to drop. Eventually the mass level will reach a maximum steady state value at any concentration. A rate of mass uptake with time that deviates significantly from linear, indicates that sorbent saturation could be an issue. When using equation (1), staying in the linear range to avoid the effects of adsorbent saturation is important. We recommend keeping the total mass on the sampler below 50 ug or flagging when this is exceeded.

The 4 constant regression accounts for some of the non linearity allowing good accuracy at higher mass levels. From the experimental data we have found this safe range can be extended potentially up to 100 ug.

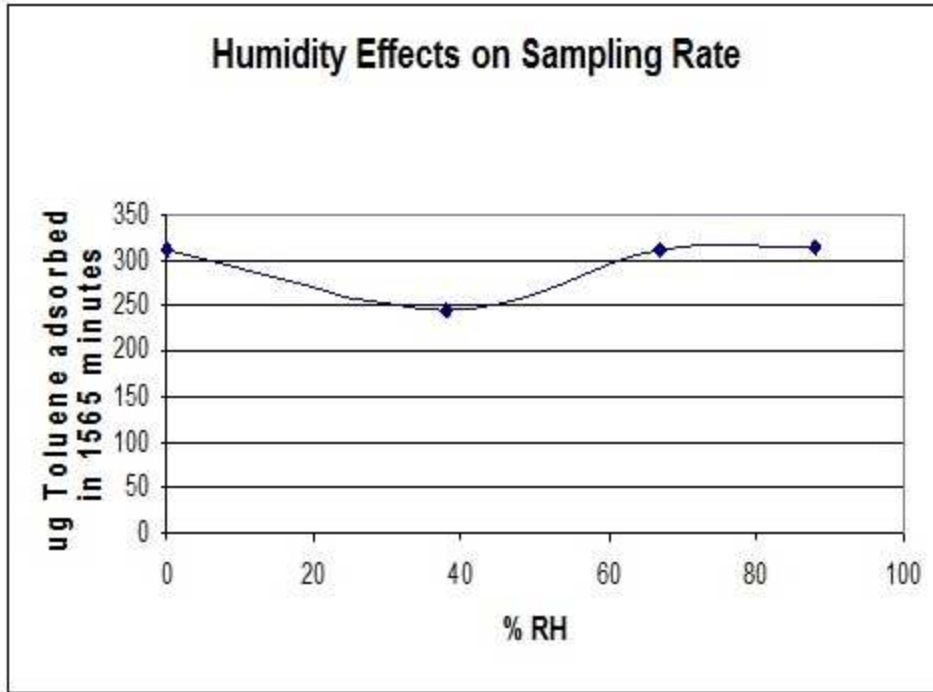
## Effect of Relative Humidity

The adsorbent system used in the SPG-0008 sampler is a proprietary multi-polymer system. It was tested compared to a carbon adsorbent in a RH chamber for weight gain and found to be effectively unaffected by moisture.



Additionally, mass adsorption was relatively constant at relative humidity ranging from 0% to 95%.

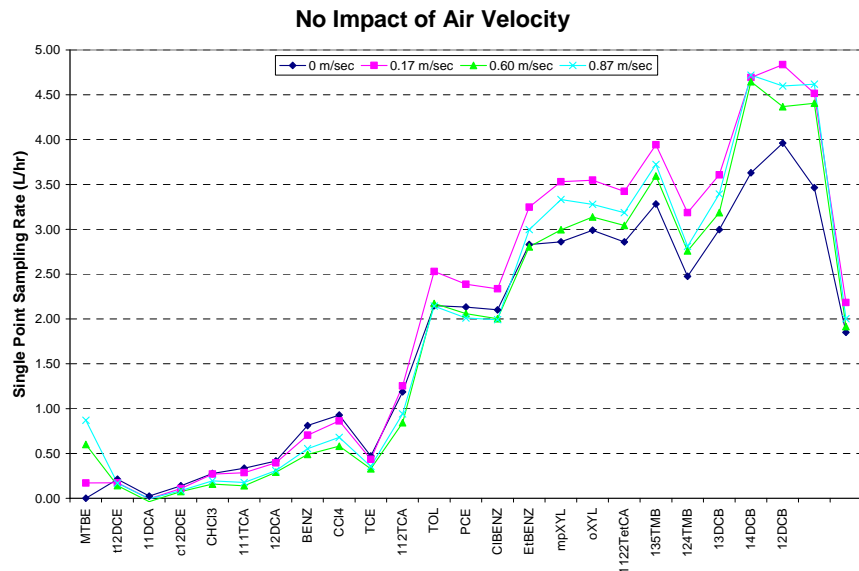




### Impact of Air Velocity

To examine the potential impact of air velocity on sampling rate, five samplers were exposed for varying times up to 2 hours at 20 ppb of TO-15 mixture.

The chart to the right shows the calculated sampling rates from zero to 0.87 m/sec velocity. There is no structured impact of velocity on sampling rate.

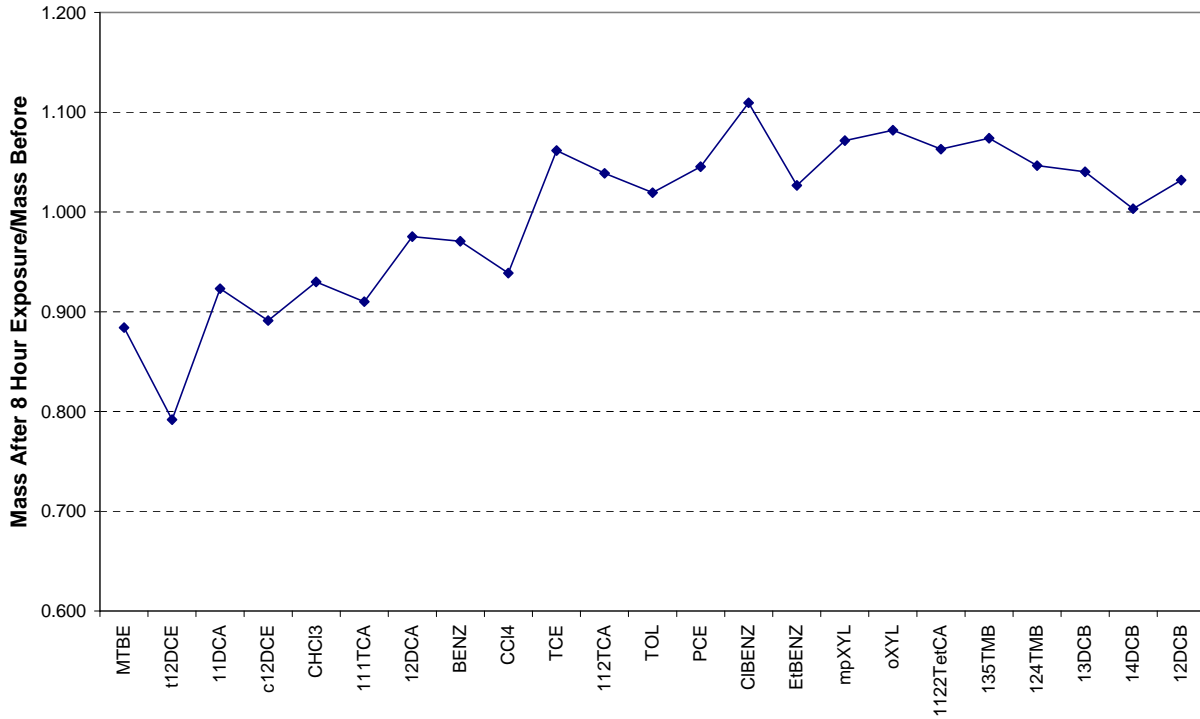


### Impact of Open Sampler Jar

Typically returning the exposed sampler to its jar and tightening the lid will maintain the mass. A test was run to look at the unexpected consequence of leaving the sampler in fresh air for 7.5 hours after exposure to 20 ppm of TO-15 mixture for 1 hour. Three samplers were tested without ambient air exposure and two with exposure and their mass levels measured. The chart below shows most compounds masses after the 7.5 hour exposure to fresh air are within 10%. One compound, t12DCE, is more affected losing 20% in this time.

Ambient air exposure post sampling would typically be expected to be < 5 minutes, so based on this we do not expect this will cause significant errors in reported mass or concentration. Care should be taken not to pinch the sampler between the jar and lid, which could allow contamination into the sample or loss of lower molecular weight compounds.

### Impact of 8 hour bench exposure



## Part 2: Calibration in Soil

Part 2 describes the effect of soil on the sampling rate and concentration measurement.

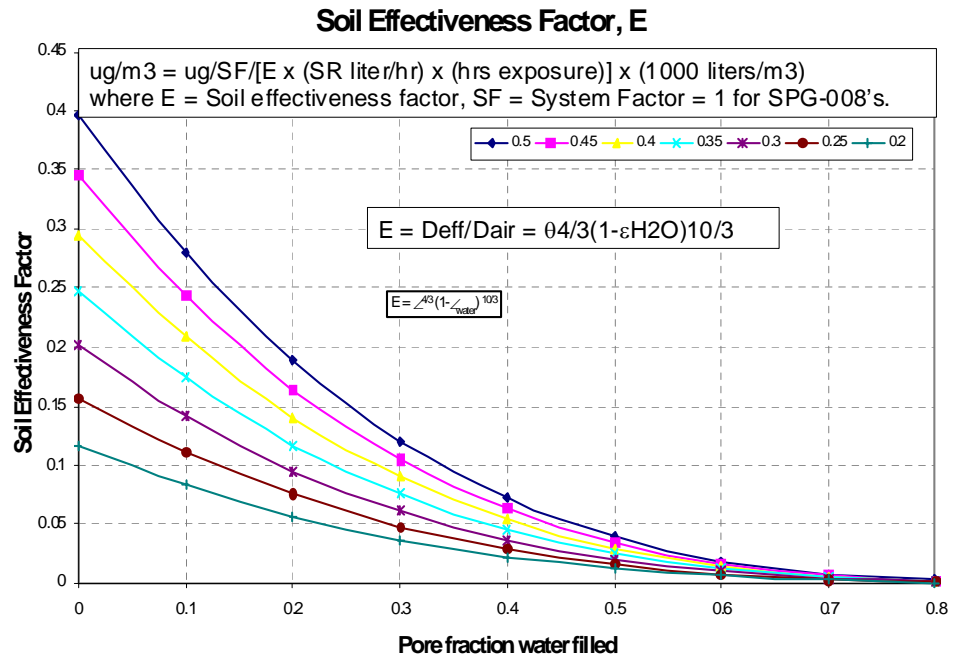
In a porous media, such as soil, diffusion of the analyte in the soil gas to the sampler is restricted. More porous soils have less restriction. This restriction has been experimentally modeled by Millington (Millington, R. J., "Gas Diffusion in Porous Media", Science, (1959), Vol. 130, 100-102) and found to be represented by the equation below:

$$SR_{soil} = E(SR_{air}) \quad (6)$$

where  $E$  is the "Soil Effectiveness Factor" expressed a function of total soil porosity ( $\theta$ ) and water filled porosity ( $\varepsilon$ , volume of water/volume of pores) as:

$$E = \theta^{(4/3)}(1 - \varepsilon)^{(10/3)} \quad (7)$$

The chart to the right shows how  $E$  varies with soil porosity and fraction of pores filled with water.



## Summary

The AGI Sampler can be used to determine the concentration of volatile and semi-volatile compounds in a gas phase. This requires knowing the exposure time and temperature and if in soil also requires values or estimates for soil porosity and the fraction of pores filled with water. Regressions of large amounts of data were used to generate a four constant equation to generate concentration values in air. Potential error in the concentration values is excellent typically less than 20% when used in gas phase sampling within the following conditions:

<b>Condition</b>	<b>Acceptable Range</b>
Temperature	0°C to 35°C
Velocity	0 to 0.9 m/sec
Relative Humidity	0 – 95%
Mass Level	0.01 – 50 ug

**TABLE A**  
**AIR SAMPLING RATES STANDARD LIST**

	SR @ 298.94
<b>MTBE</b>	1.10
<b>t12DCE</b>	1.08
<b>11DCA</b>	0.96
<b>c12DCE</b>	1.51
<b>CHCl3</b>	1.18
<b>111TCA</b>	0.75
<b>12DCA</b>	1.87
<b>BENZ</b>	1.91
<b>CCl4</b>	0.93
<b>TCE</b>	1.83
<b>112TCA</b>	2.40
<b>TOL</b>	2.54
<b>OCT</b>	
<b>PCE</b>	2.33
<b>CIBENZ</b>	3.05
<b>1112TetCA</b>	
<b>EtBENZ</b>	3.02
<b>mpXYL</b>	3.02
<b>oXYL</b>	3.10
<b>1122TetCA</b>	3.35
<b>135TMB</b>	3.19
<b>124TMB</b>	3.35
<b>13DCB</b>	3.97
<b>14DCB</b>	4.09
<b>12DCB</b>	3.93
<b>Total mass</b>	1.80

Values in L/hr, Total mass does not include Oct, 1112TetCA (23 compounds)

**TABLE B****4 CONSTANT REGRESSION OUTPUT**

	Adjusted Rs <sup>2</sup>	Standard Error	ln(SR0)	b	- Ea/R	d	Std Error ln(SR0)	Std Error b	Std Error - Ea/R	Std Error d
MTBE	0.77	0.2684	6.1531	0.7137	-1862	-0.2973	1.1215	0.0421	309	0.0346
t12DCE	0.80	0.2498	14.2118	0.6315	-4261	-0.1411	1.2463	0.0358	343	0.0323
11DCA	0.91	0.2016	13.7734	0.8038	-4094	-0.2544	0.8973	0.0294	251	0.0258
c12DCE	0.89	0.2092	9.4567	0.7241	-2941	-0.2710	0.8774	0.0286	248	0.0267
CHCl3	0.91	0.2048	12.2405	0.8364	-3699	-0.3365	0.8737	0.0294	246	0.0261
111TCA	0.94	0.1701	8.3160	0.9176	-2393	-0.5136	0.6652	0.0257	189	0.0222
12DCA	0.92	0.1921	9.0559	0.8093	-2886	-0.4404	0.7728	0.0275	220	0.0248
BENZ	0.89	0.2178	7.6871	0.7990	-2485	-0.4583	0.8687	0.0326	247	0.0286
CCl4	0.91	0.2219	7.0239	0.8972	-2071	-0.5182	0.8597	0.0324	246	0.0289
TCE	0.94	0.1680	7.0333	0.8809	-2276	-0.5871	0.6541	0.0244	188	0.0224
112TCA	0.97	0.1401	3.0297	0.9933	-1165	-0.8405	0.5251	0.0205	153	0.0202
TOL	0.96	0.1468	2.9135	0.9448	-1147	-0.7896	0.5506	0.0220	160	0.0213
OCT										
PCE	0.97	0.1229	2.2557	0.9912	-925	-0.8337	0.4611	0.0183	134	0.0178
CIBENZ	0.97	0.1410	1.2078	0.9832	-693	-0.8819	0.5267	0.0210	153	0.0211
1112TetCA										
EtBENZ	0.96	0.1521	0.4685	0.9696	-469	-0.9107	0.5663	0.0226	165	0.0231
mpXYL	0.96	0.1505	0.7733	0.9883	-560	-0.9123	0.5594	0.0227	163	0.0229
oXYL	0.96	0.1554	0.5660	0.9495	-506	-0.8713	0.5776	0.0233	169	0.0234
1122TetCA	0.95	0.1715	0.5319	0.9793	-519	-0.9313	0.6375	0.0252	186	0.0262
135TMB	0.94	0.1783	1.1480	0.9370	-688	-0.8545	0.6646	0.0266	194	0.0266
124TMB	0.95	0.1702	1.4973	0.9590	-807	-0.8819	0.6368	0.0255	185	0.0257
13DCB	0.95	0.1641	0.9194	0.9644	-685	-0.8908	0.6115	0.0245	178	0.0250
14DCB	0.95	0.1619	1.4086	0.9556	-840	-0.8854	0.6030	0.0242	176	0.0246
12DCB	0.95	0.1713	0.9920	0.9620	-704	-0.9037	0.6388	0.0254	186	0.0261
Total mass	0.966	0.1302	3.4894	0.9213	-1215	-0.7716	0.4835	0.0195	142	0.0190

**TABLE C**  
**8260C MASS UNCERTAINTY**

**AGI 8260C Method for Mass using SPG-0008 Sampler**

	99% Uncertainty Range +/-	95% Uncertainty Range +/-
MTBE	20%	14%
t12DCE	22%	15%
11DCA	18%	12%
c12DCE	18%	12%
CHCl3	16%	11%
111TCA	18%	12%
12DCA	20%	13%
BENZ	16%	10%
CCl4	19%	12%
TCE	15%	10%
112TCA	18%	12%
TOL	15%	10%
OCT	20%	13%
PCE	16%	11%
CIBENZ	18%	12%
1112TetCA	19%	13%
EtBENZ	18%	12%
mpXYL	18%	12%
oXYL	18%	12%
1122TetCA	23%	15%
135TMB	21%	14%
124TMB	20%	14%
13DCB	19%	13%
14DCB	19%	13%
12DCB	20%	14%
NAPH	21%	14%
2MeNAPH	25%	17%

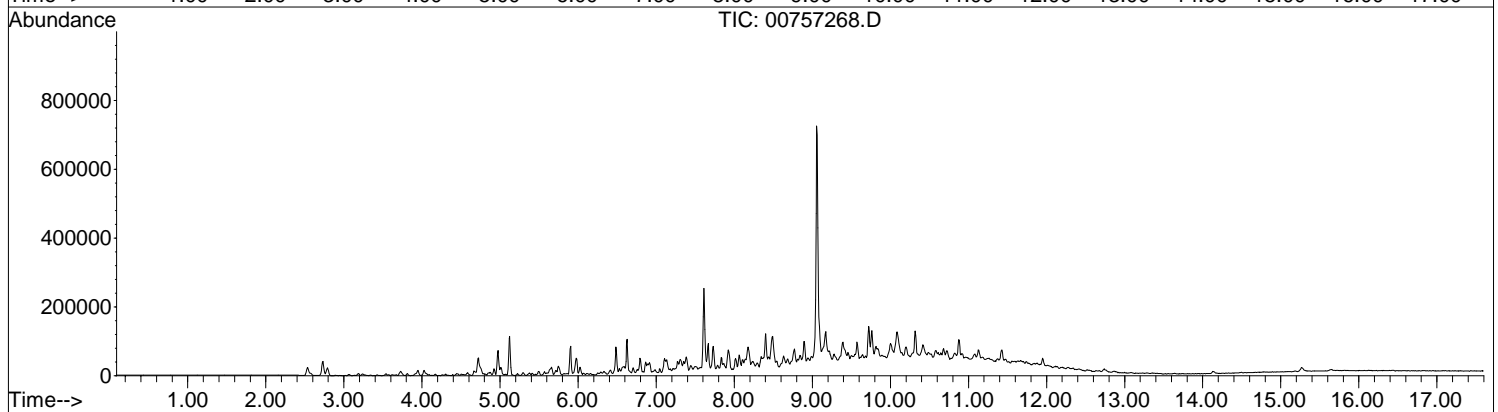
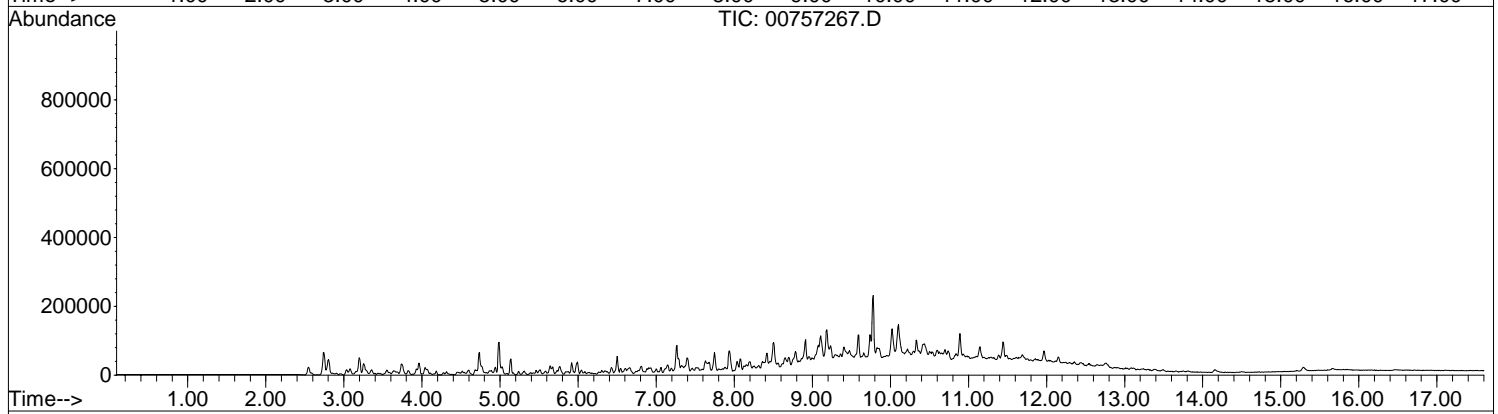
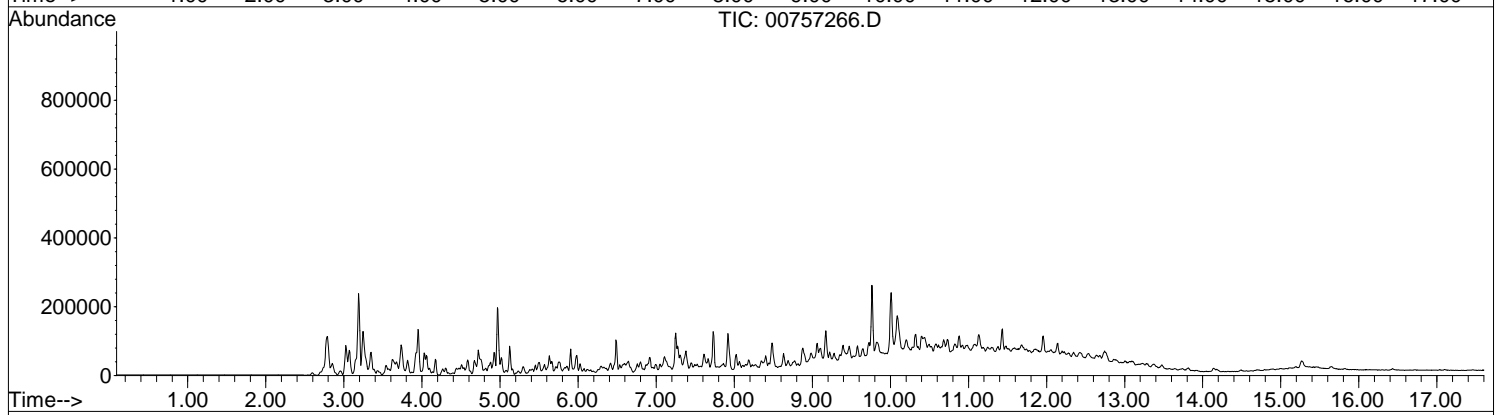
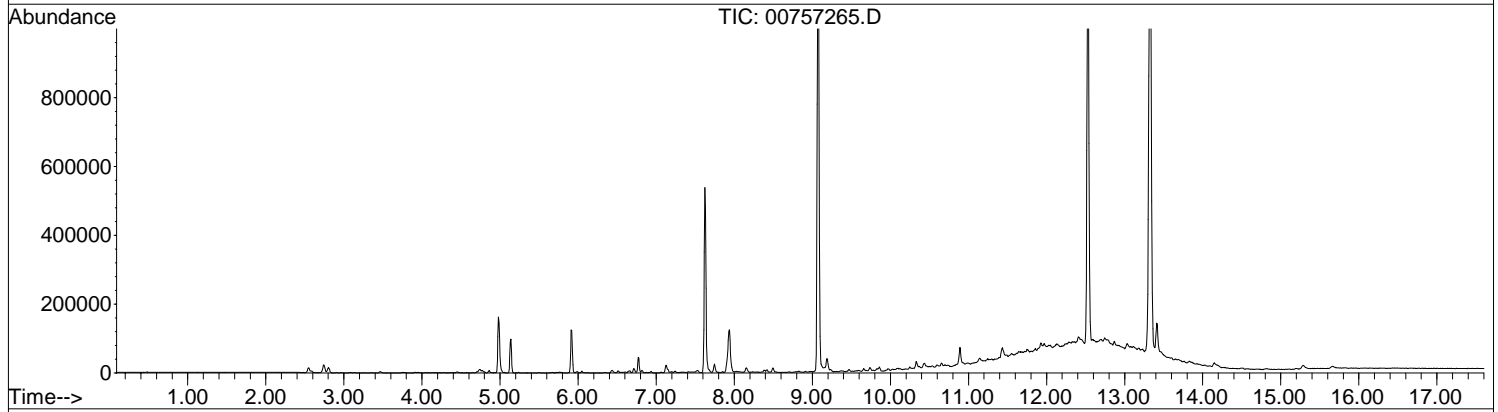
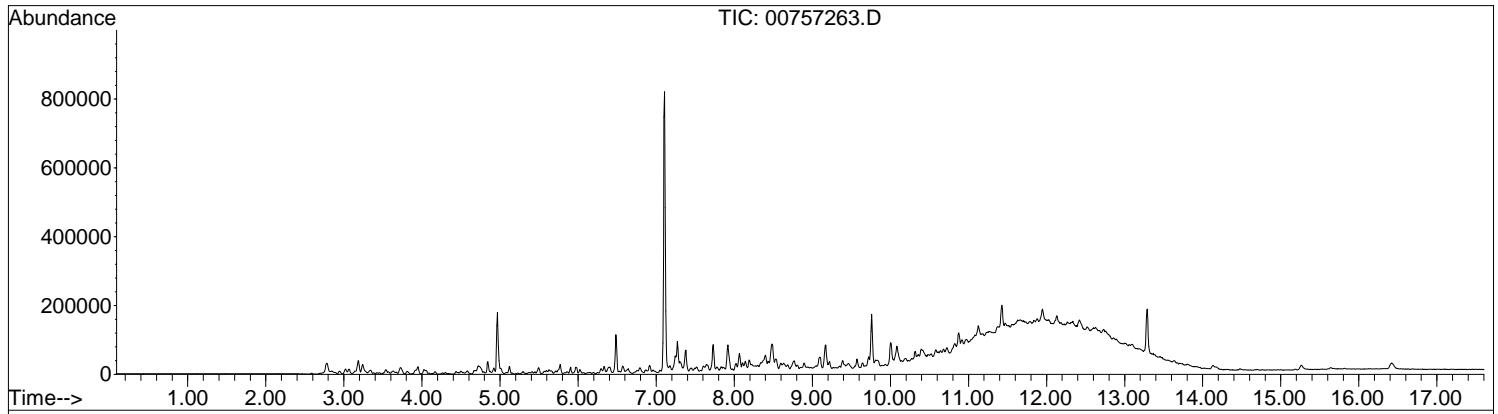
**TABLE D**  
**4 CONSTANT AIR CONCENTRATION UNCERTAINTY**

**ERROR IN CONCENTRATION REPORTING (1)**

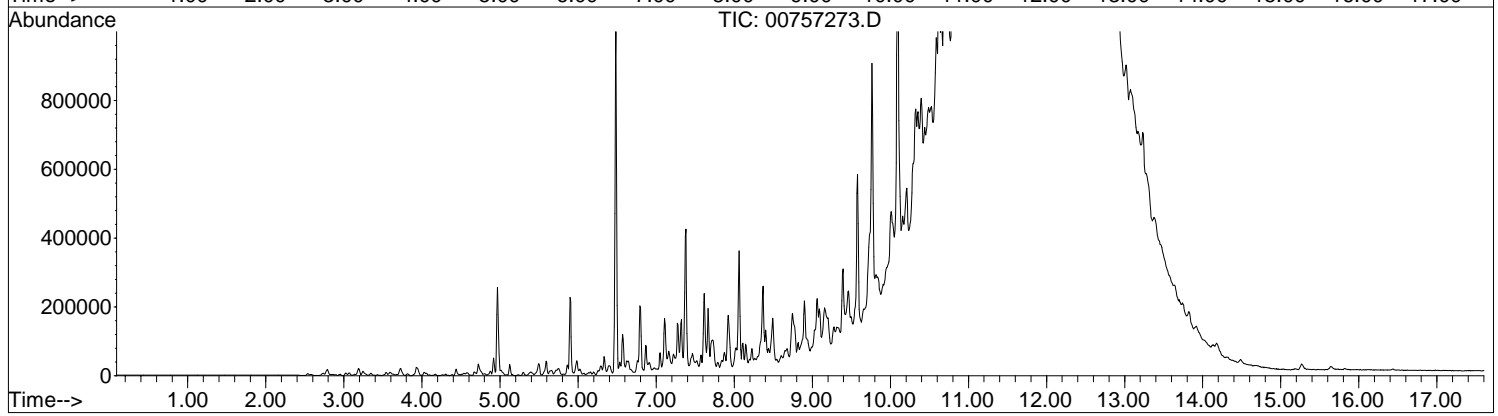
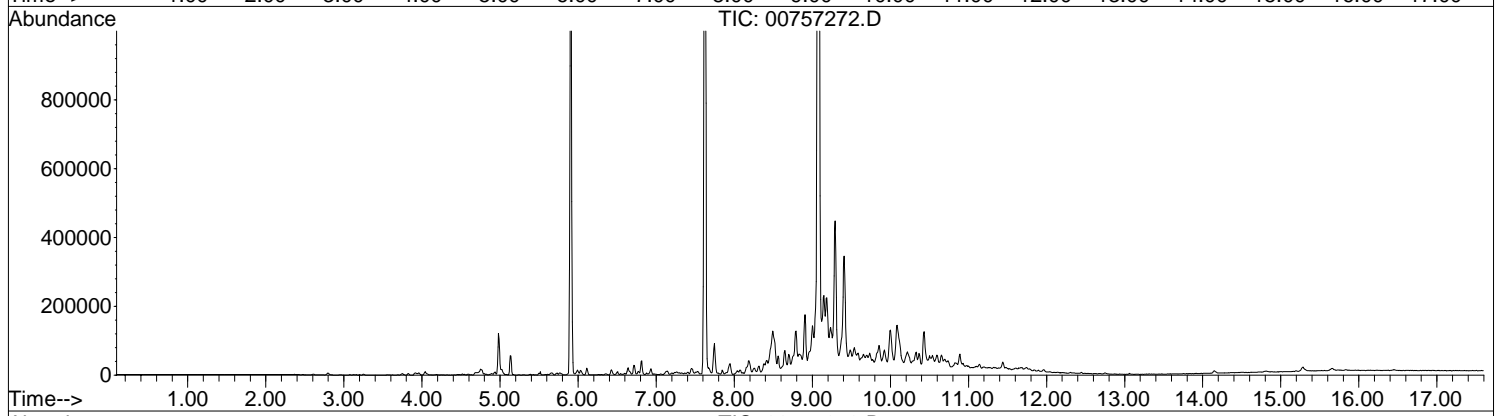
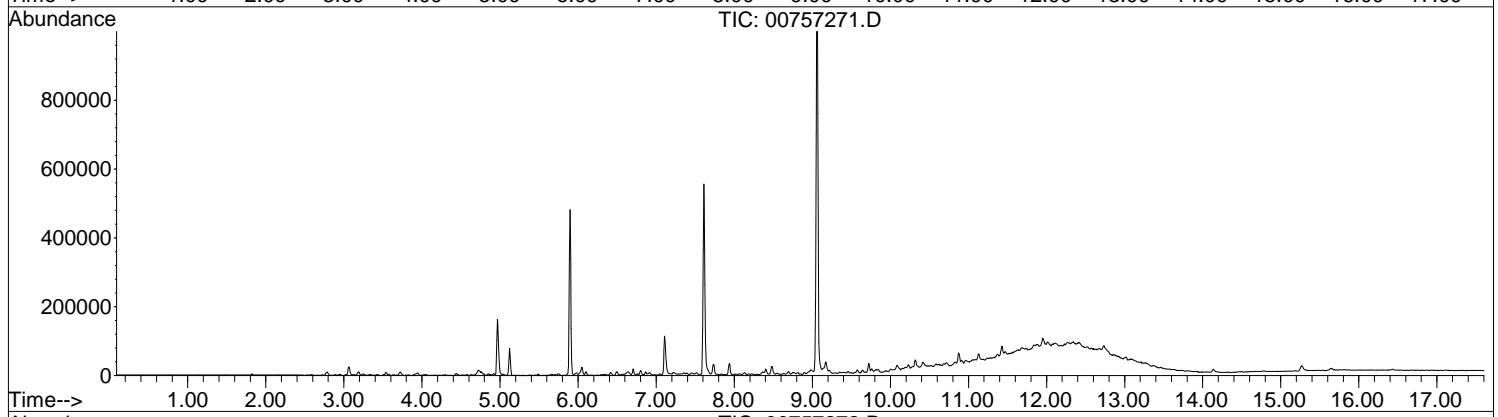
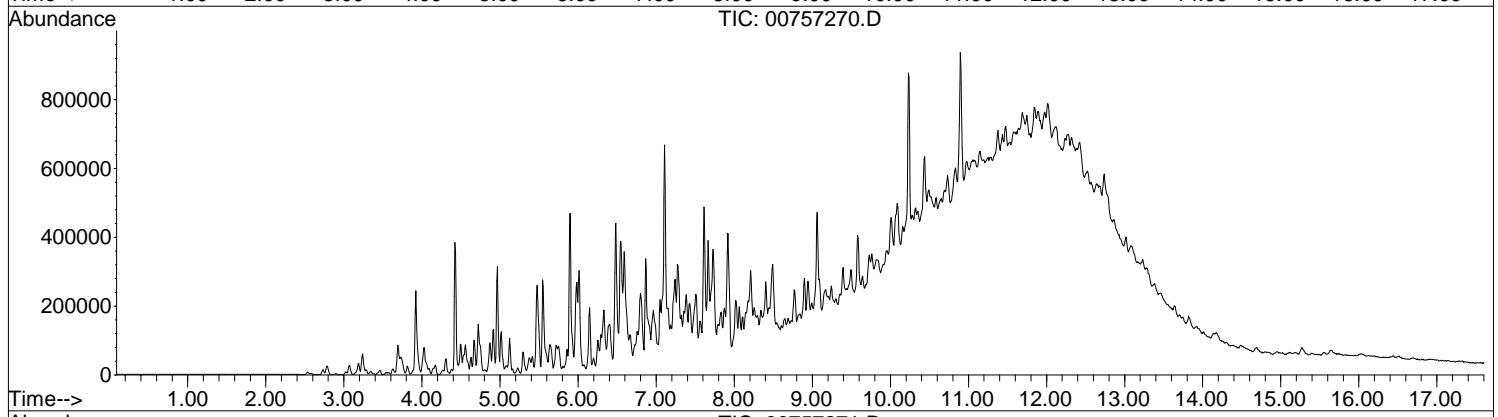
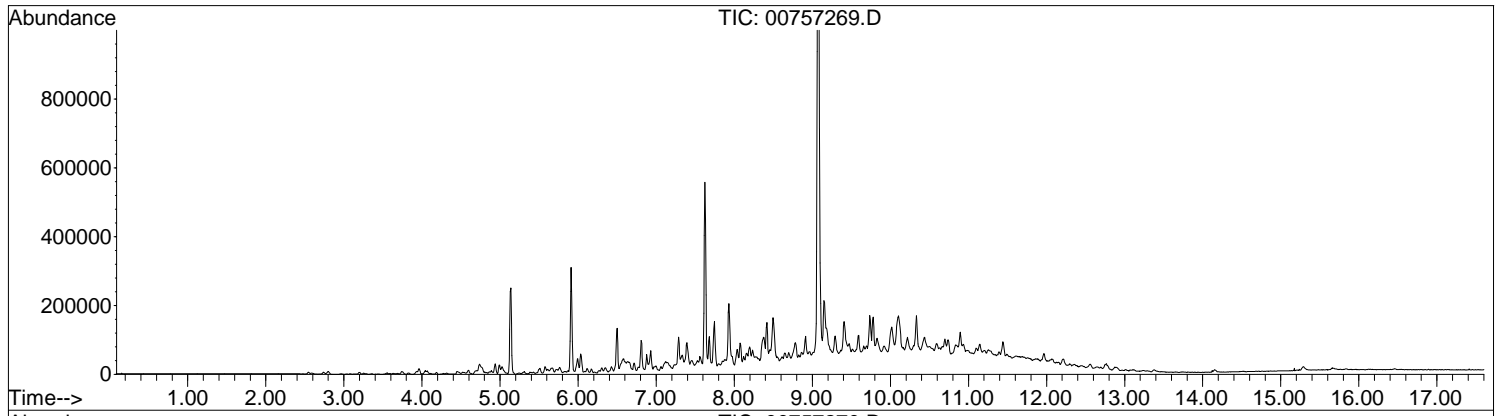
	<b>Primary-Duplicate Error</b>	<b>Minimum Error</b>	<b>Maximum Error</b>
MTBE	4.3%	-76%	43%
t12DCE	10.4%	-70%	41%
11DCA	5.2%	-68%	40%
c12DCE	6.0%	-49%	33%
CHCl3	4.8%	-60%	37%
111TCA	5.4%	-50%	33%
12DCA	5.4%	-49%	33%
BENZ	4.4%	-52%	34%
CCl4	5.3%	-48%	32%
TCE	5.7%	-37%	27%
112TCA	5.9%	-23%	18%
TOL	5.3%	-26%	20%
OCT			
PCE	5.7%	-18%	15%
CIBENZ	3.9%	-20%	17%
1112TetCA			
EtBENZ	5.1%	-21%	17%
mpXYL	4.5%	-18%	15%
oXYL	4.7%	-21%	17%
1122TetCA	5.2%	-21%	18%
135TMB	8.0%	-25%	20%
124TMB	7.0%	-24%	19%
13DCB	6.7%	-21%	18%
14DCB	6.1%	-22%	18%
12DCB	7.4%	-22%	18%
Total Mass	4.3%	-23%	18%



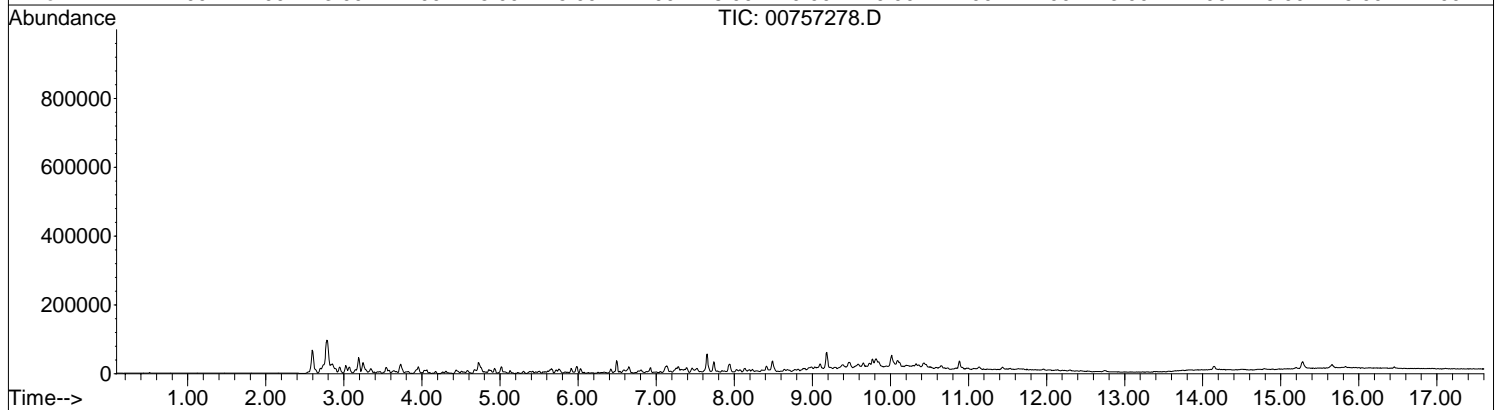
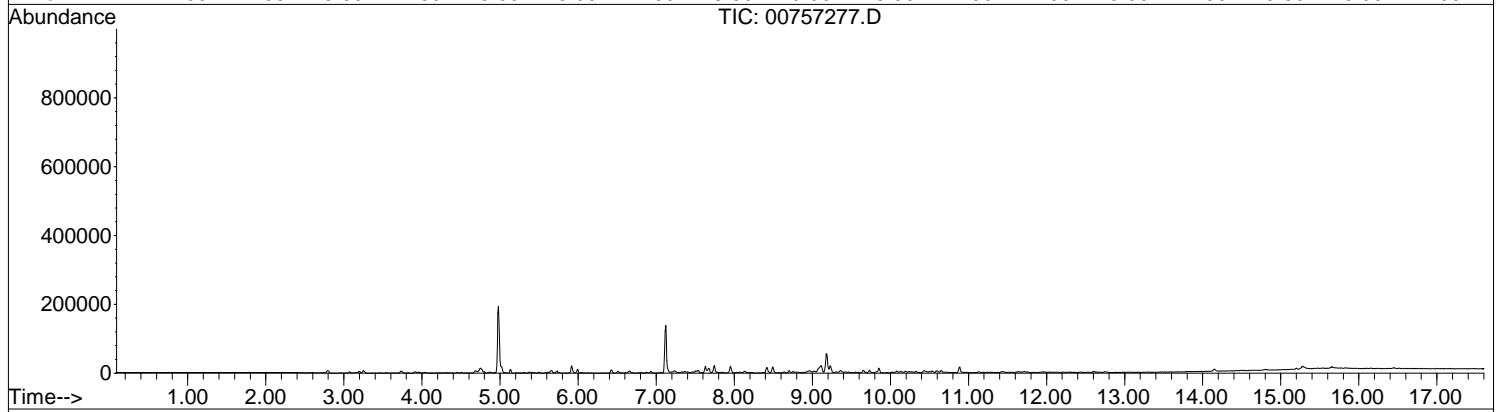
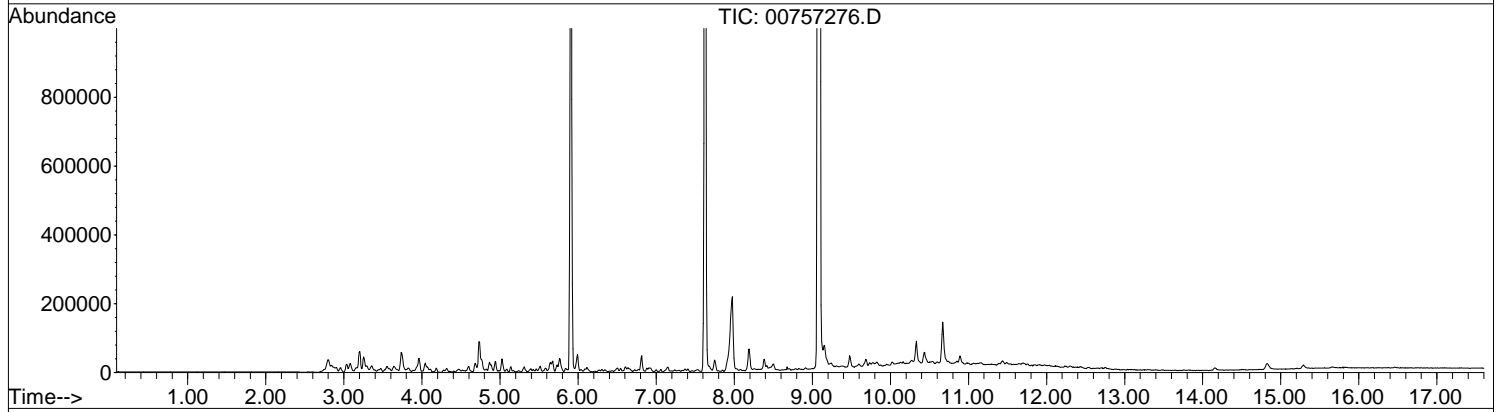
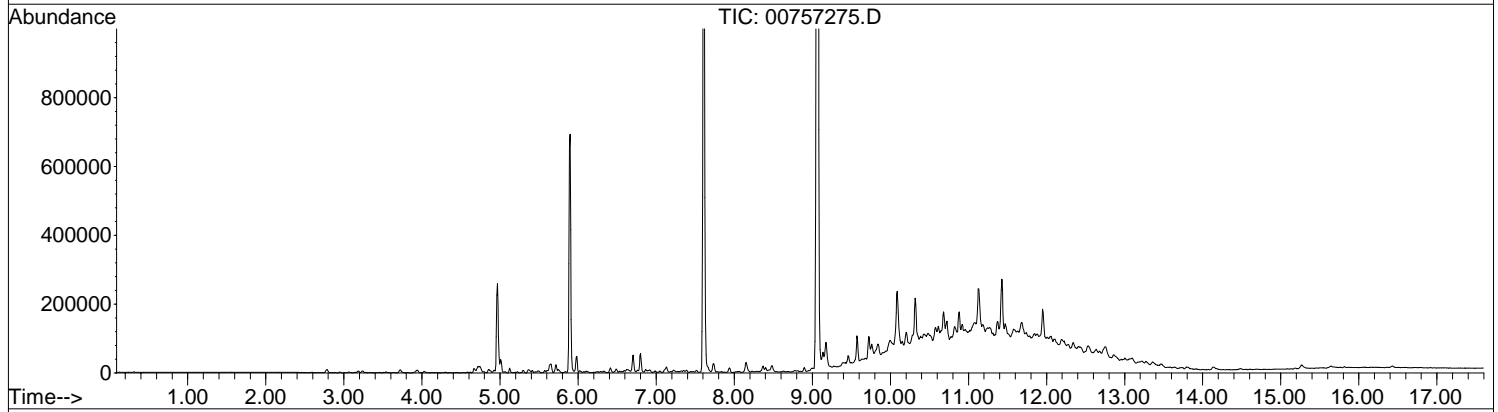
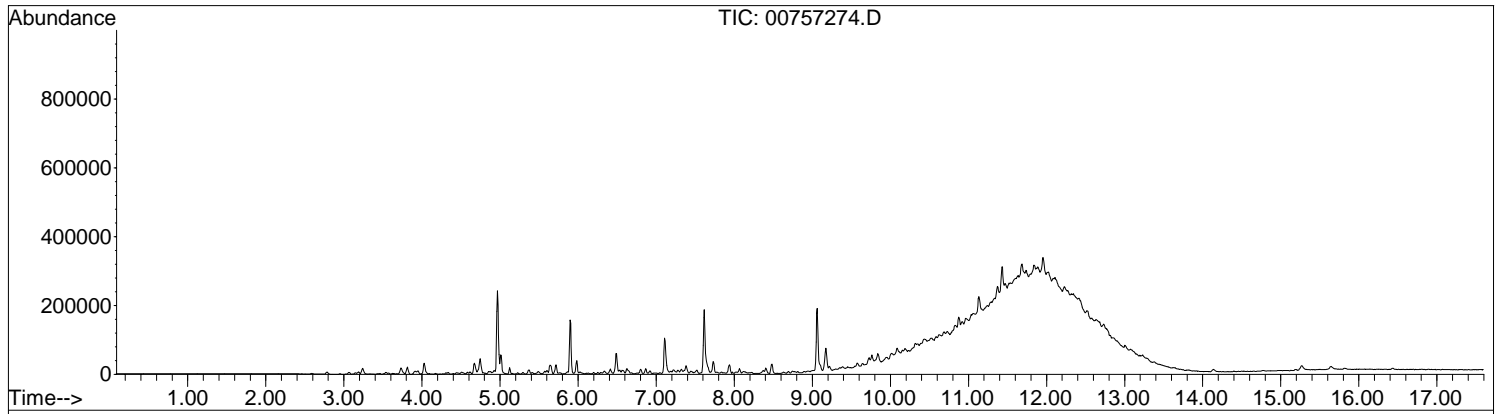
TICS - 01345  
In Numerical Order



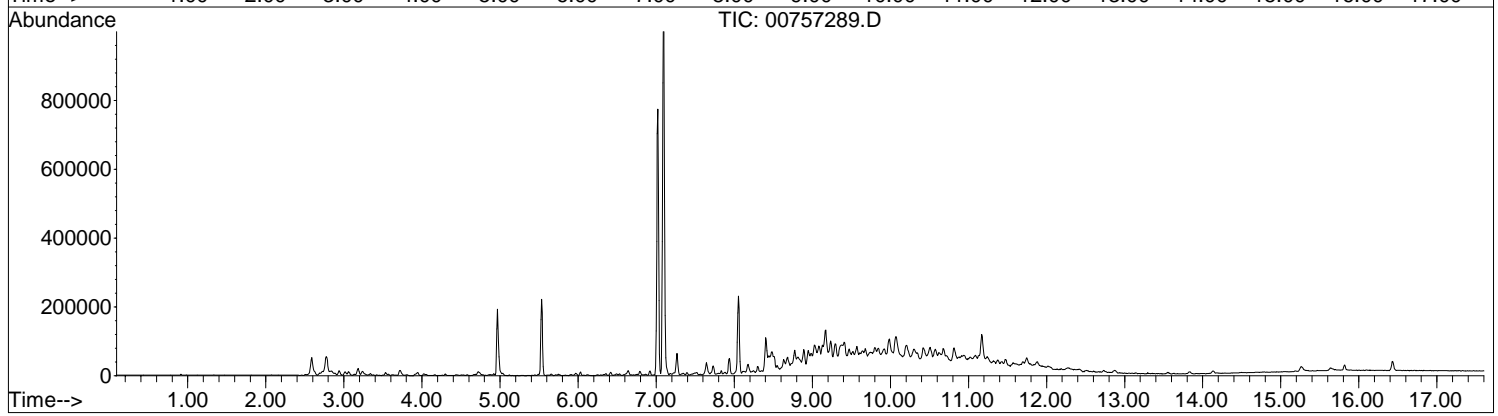
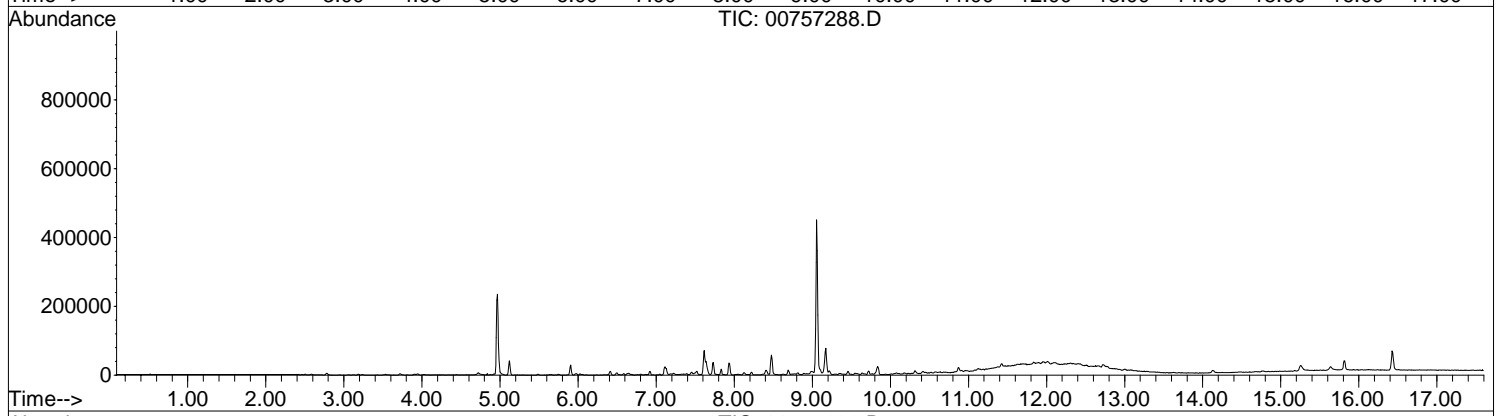
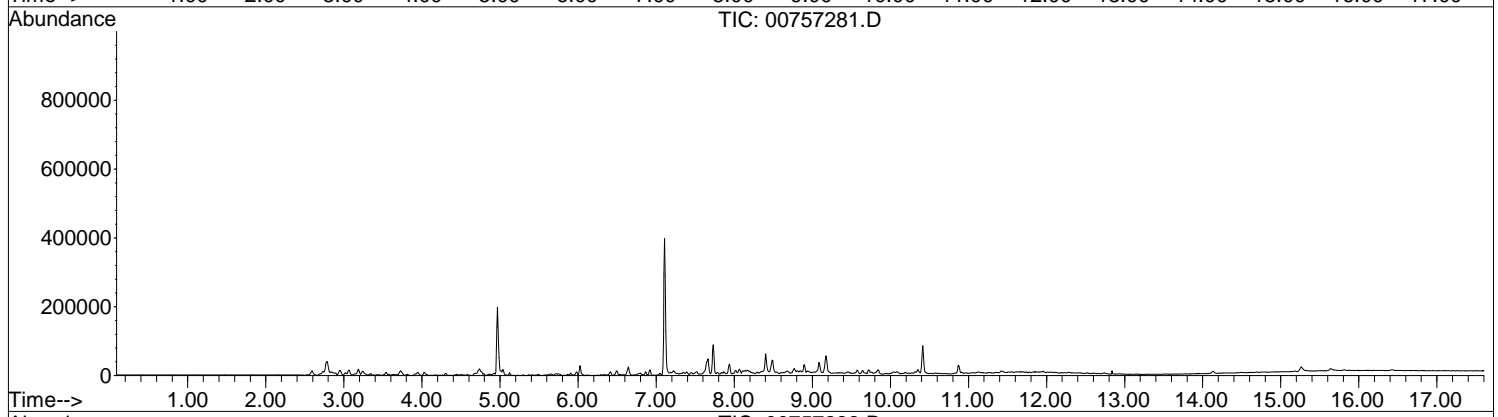
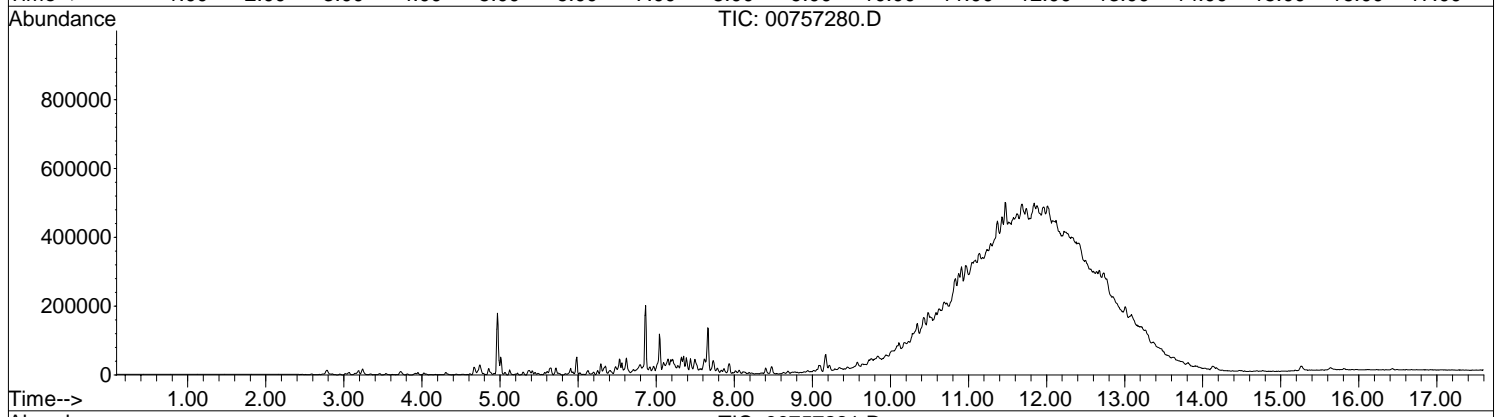
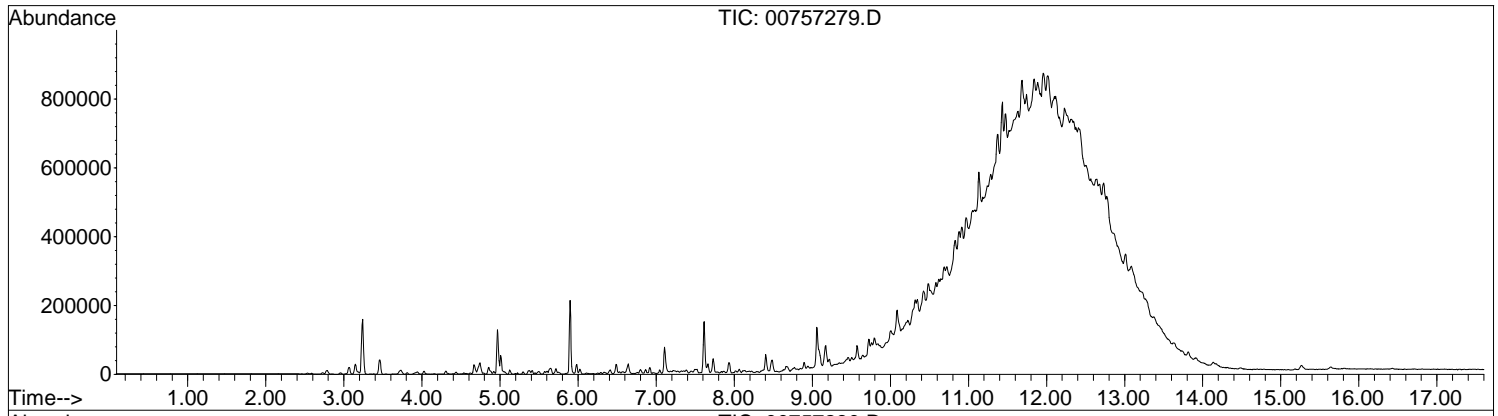
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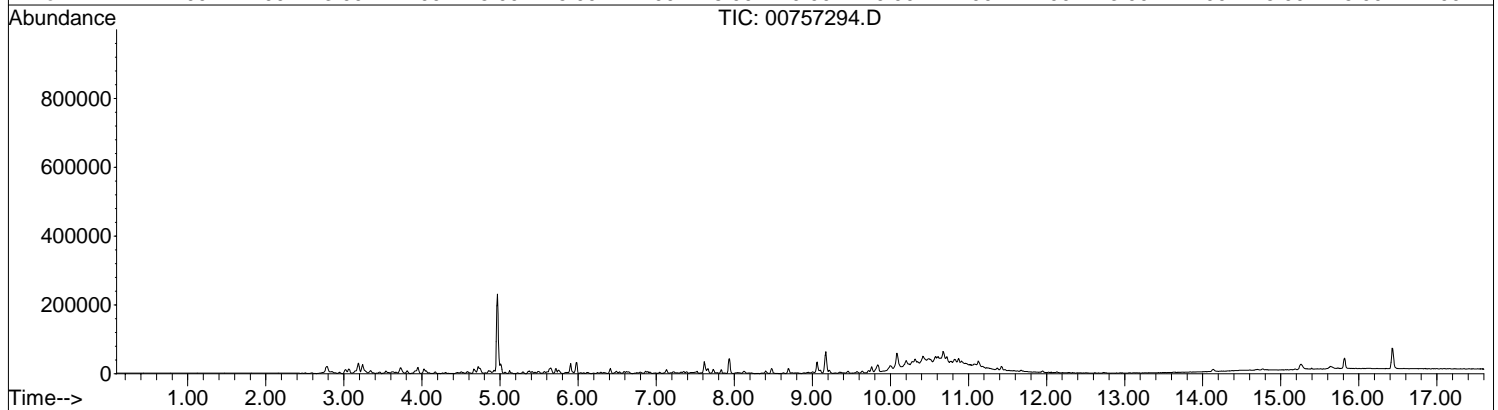
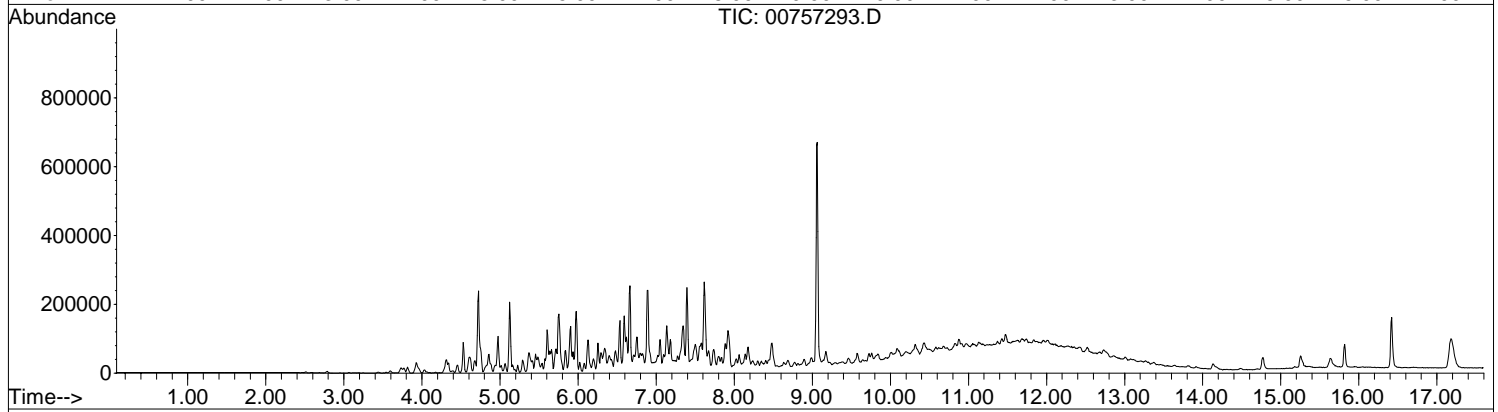
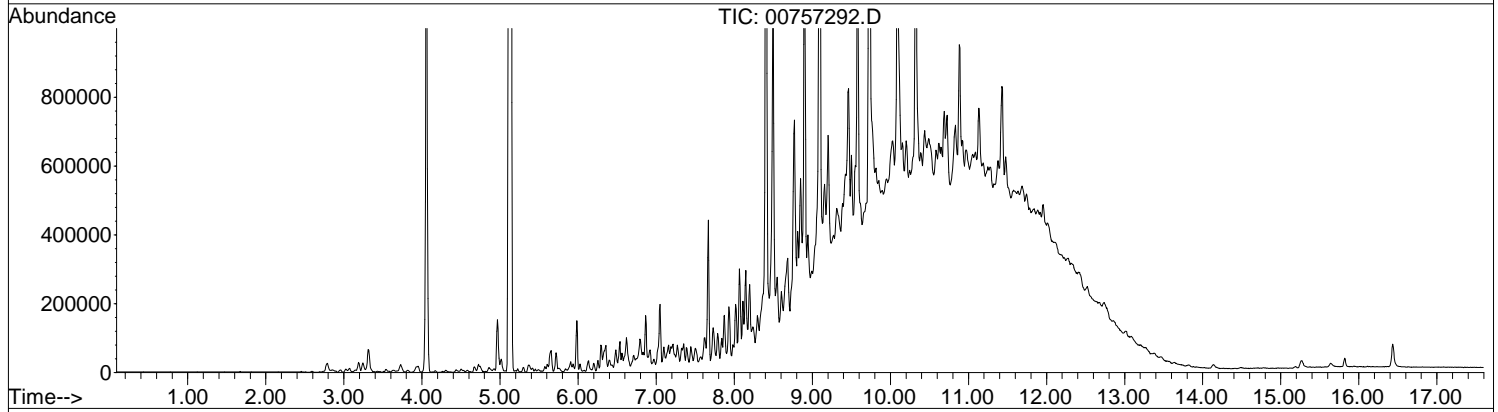
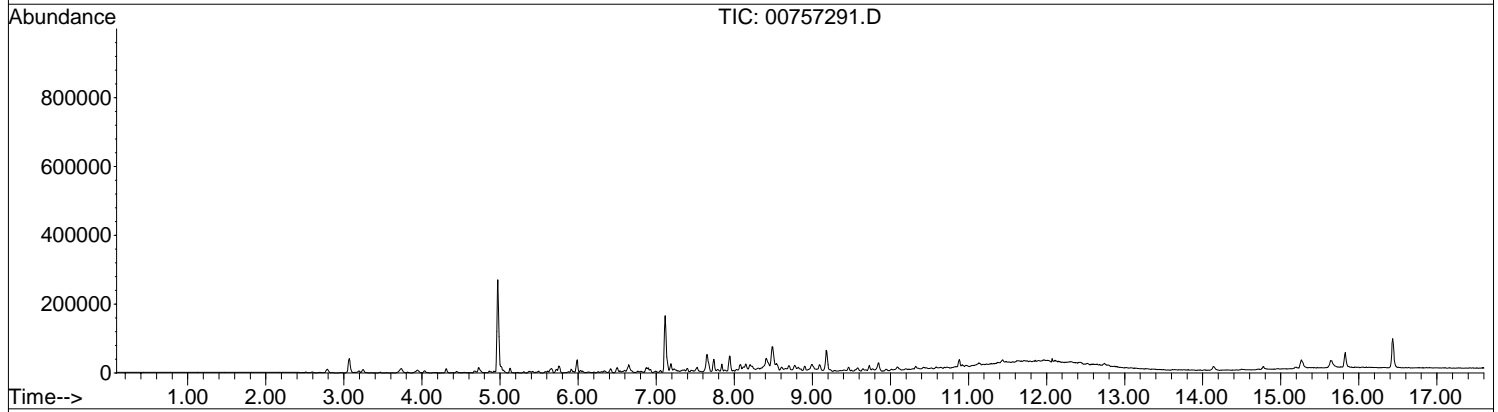
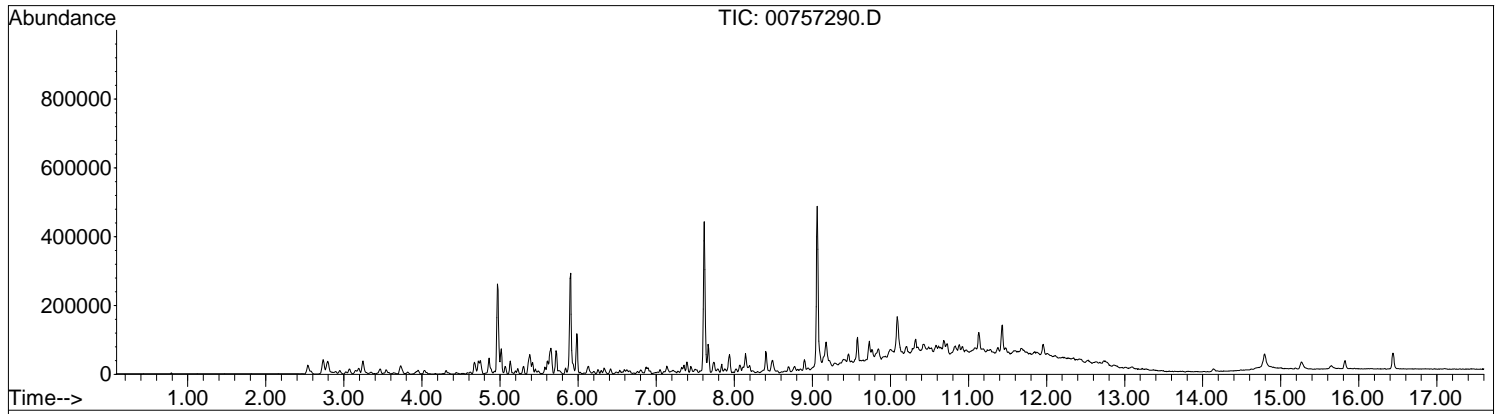
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In Numerical Order



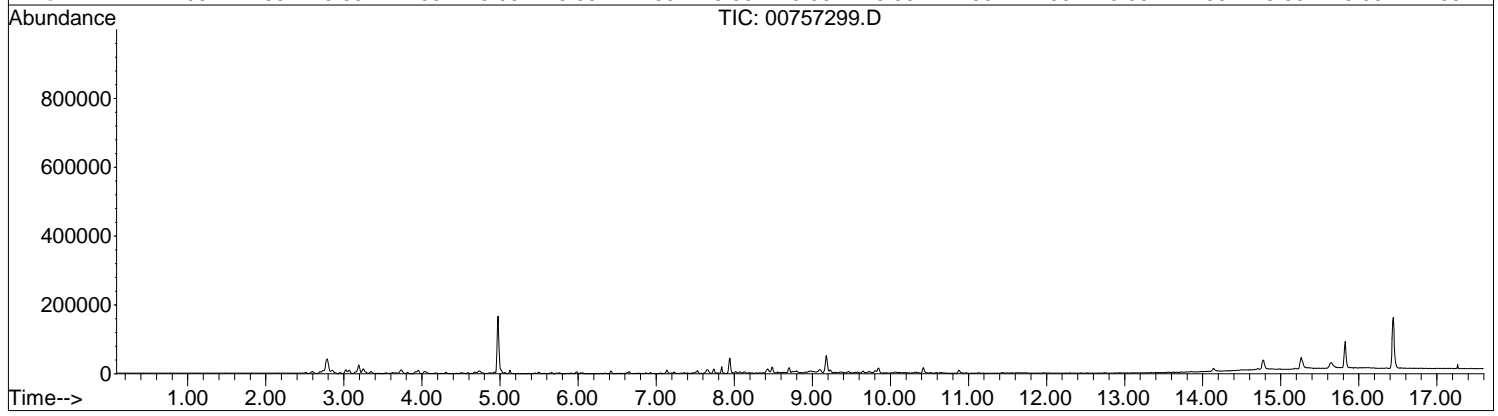
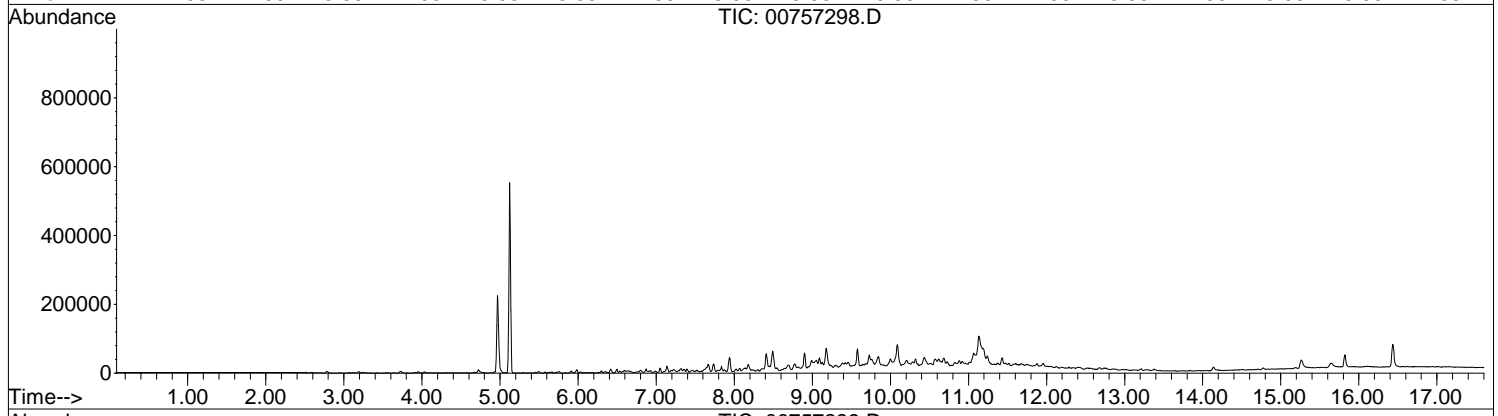
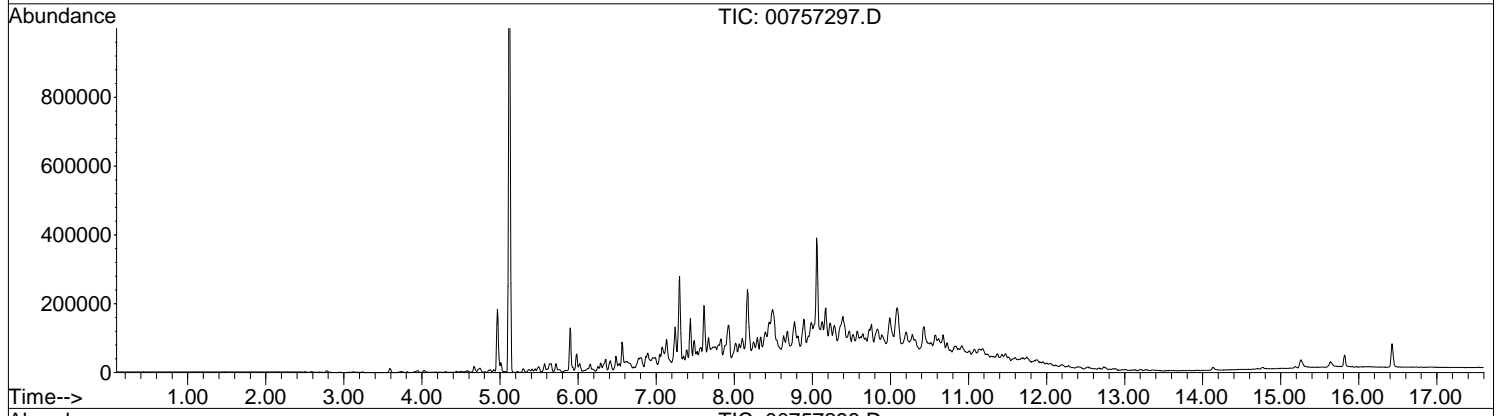
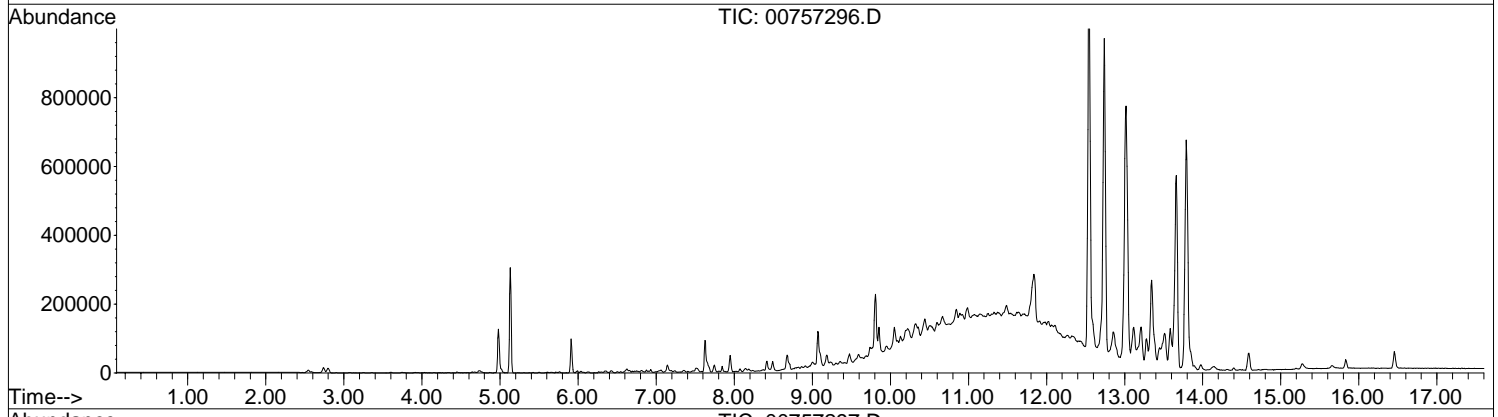
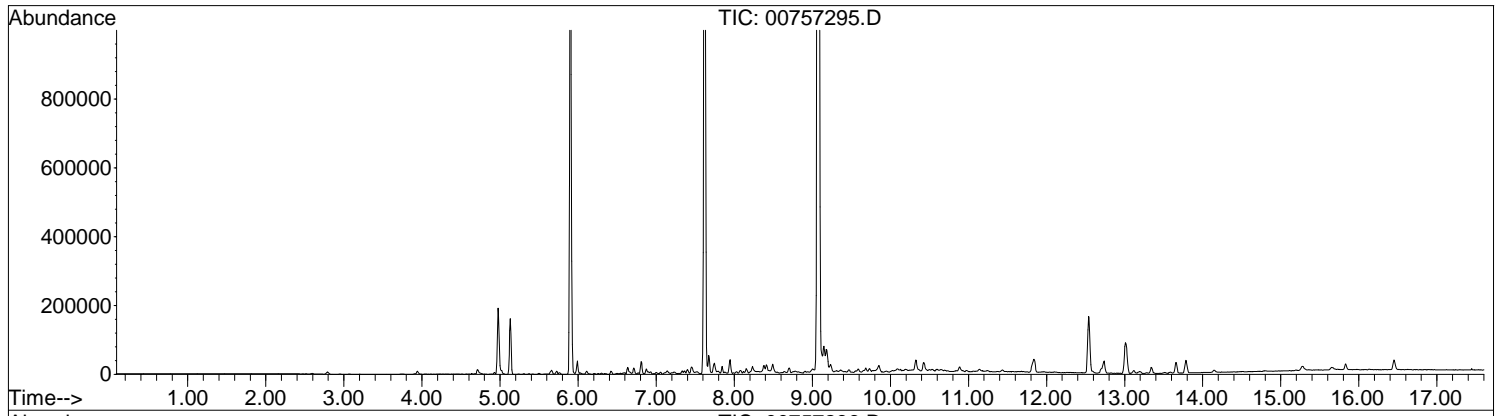
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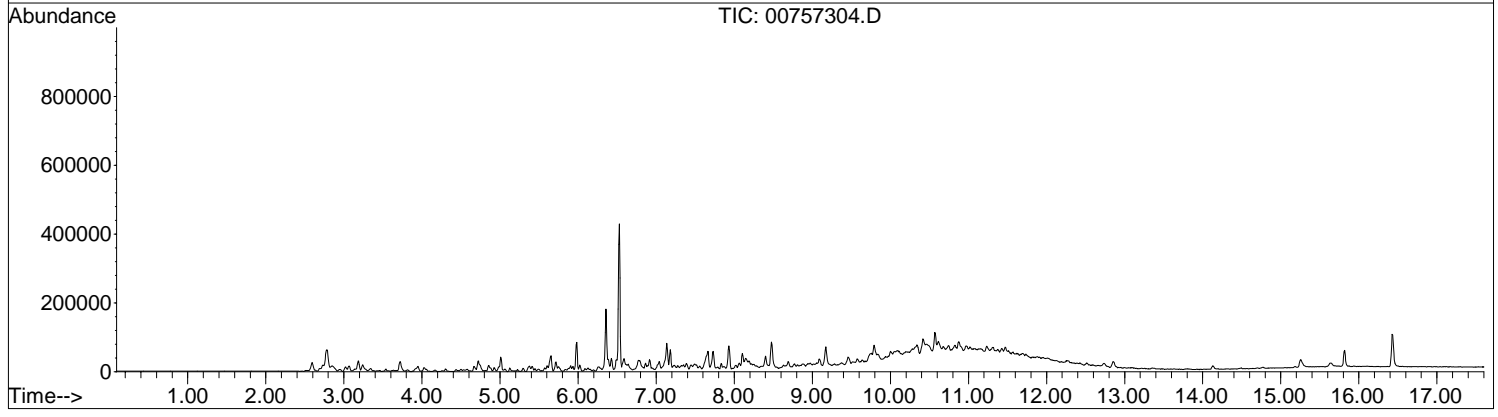
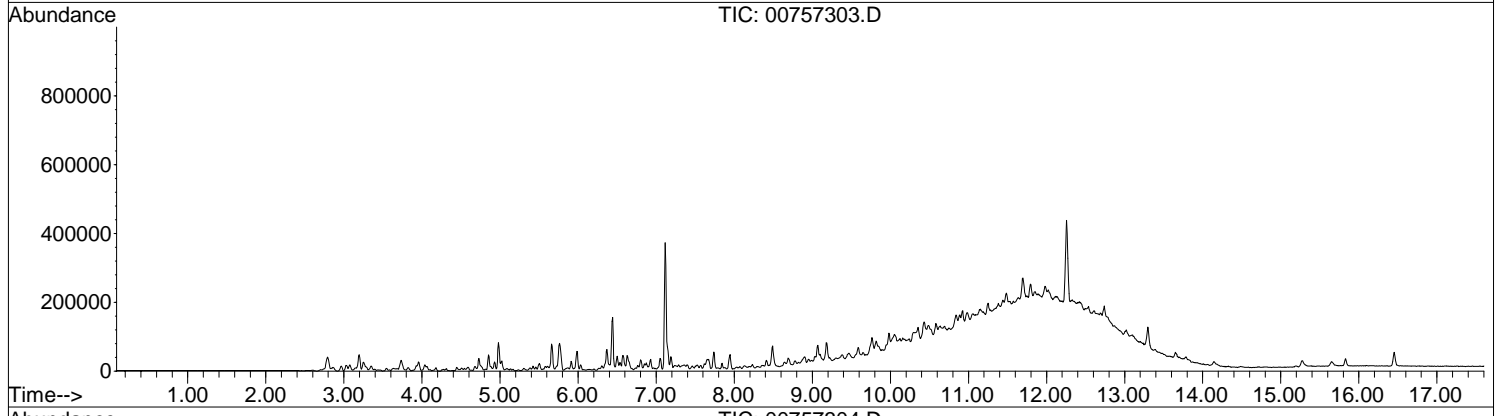
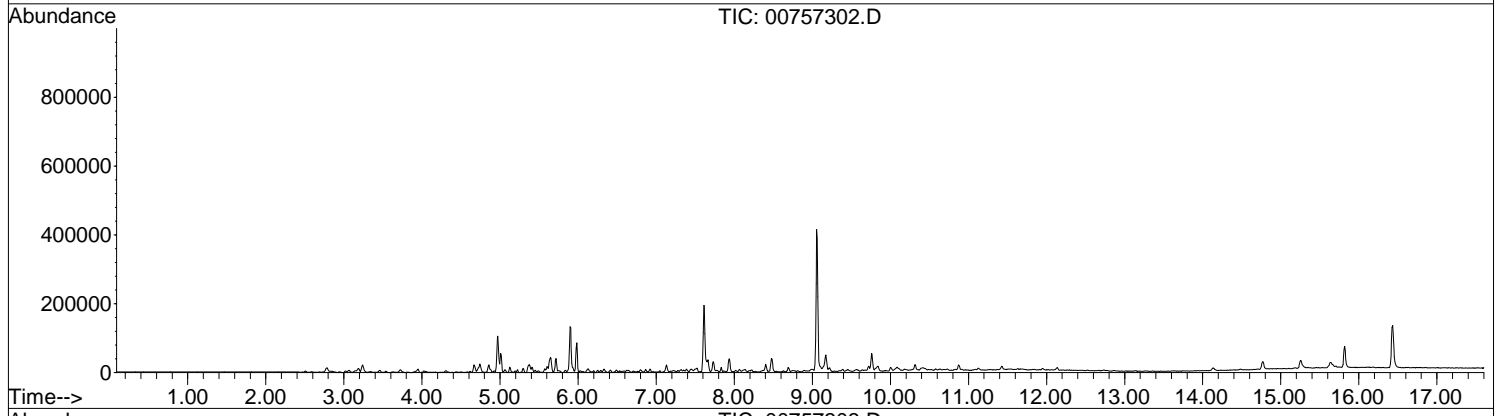
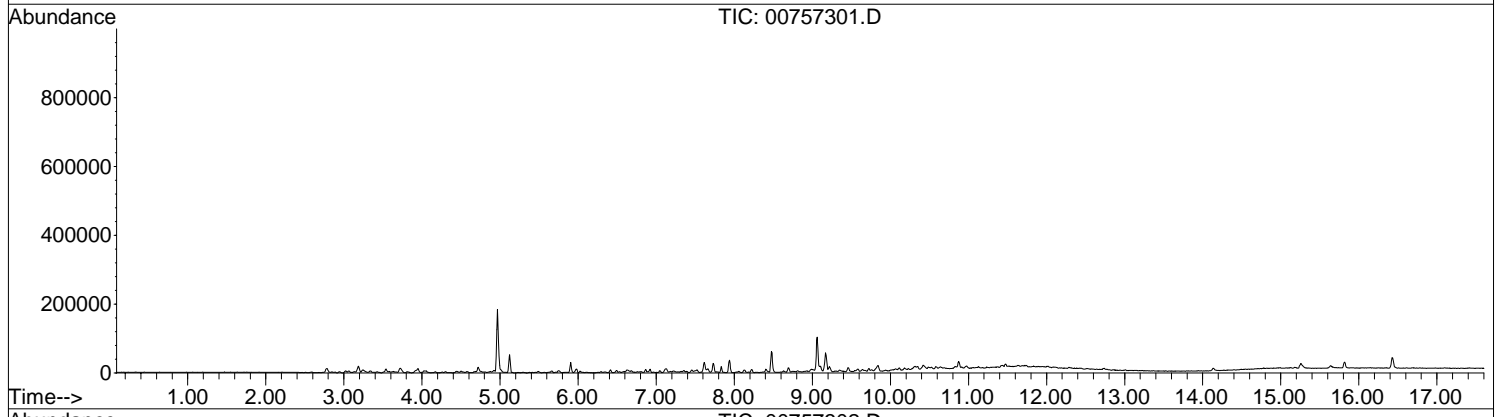
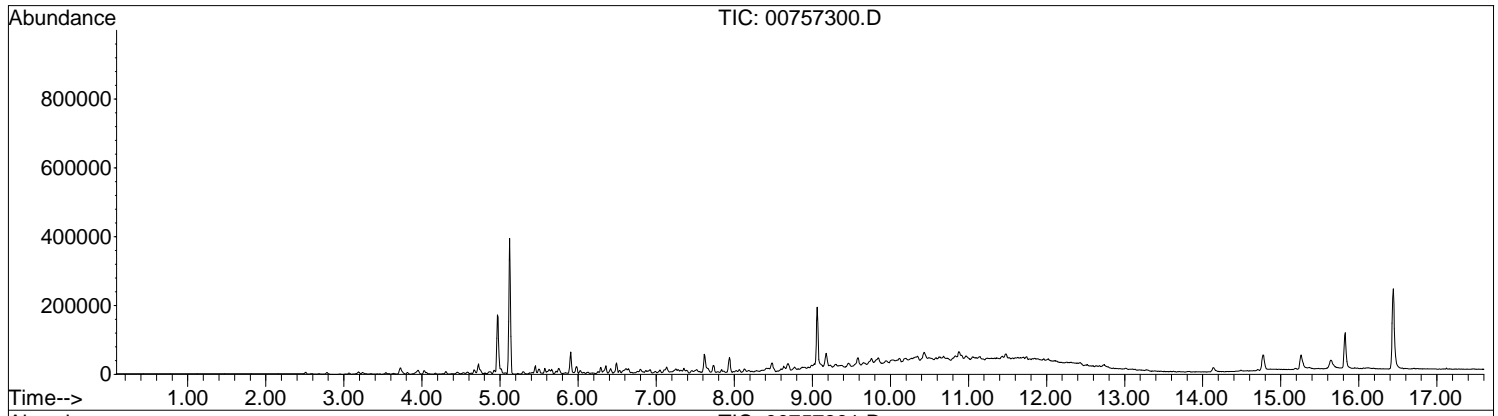
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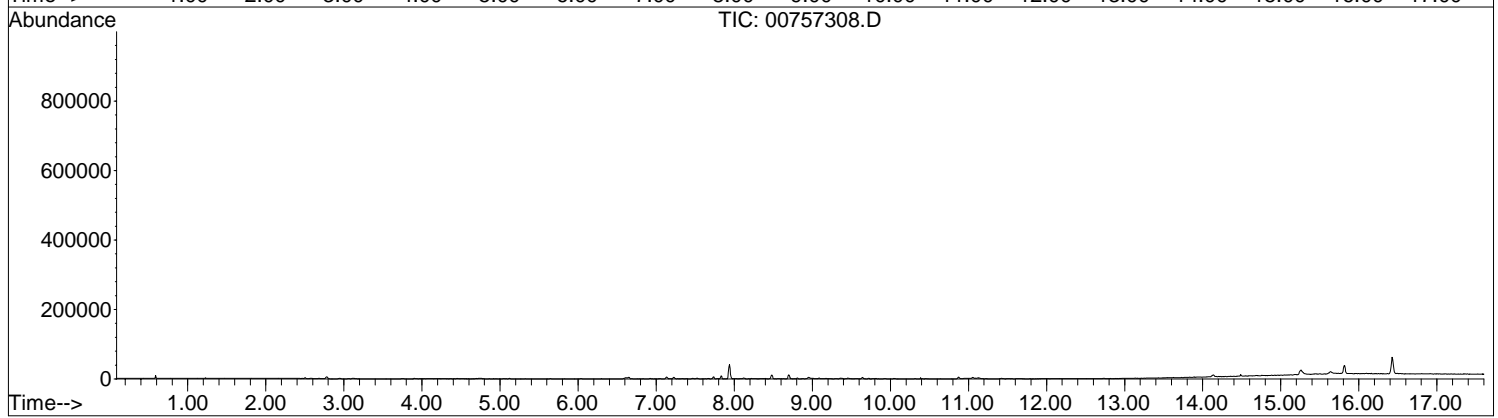
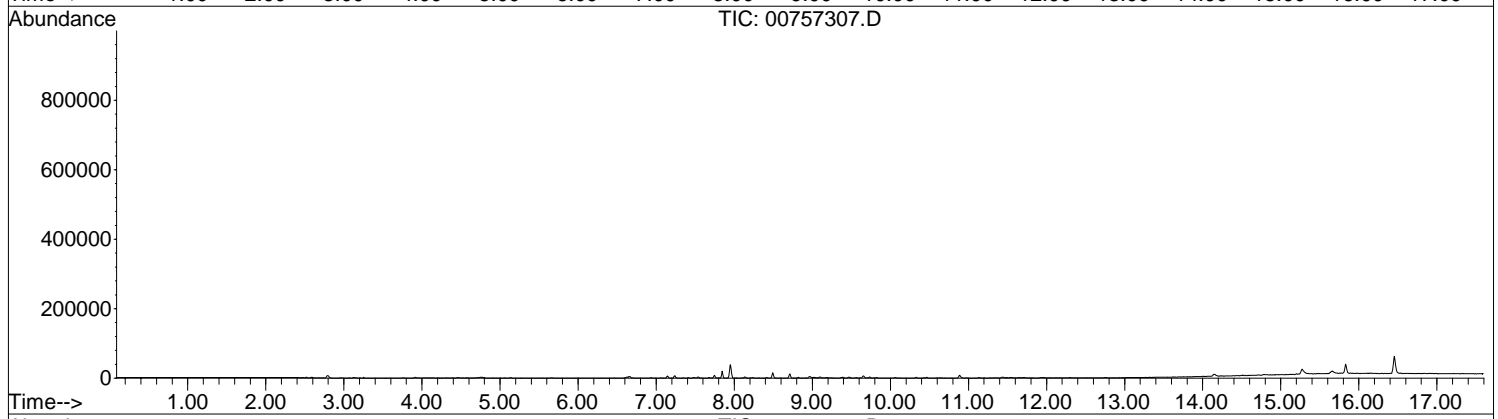
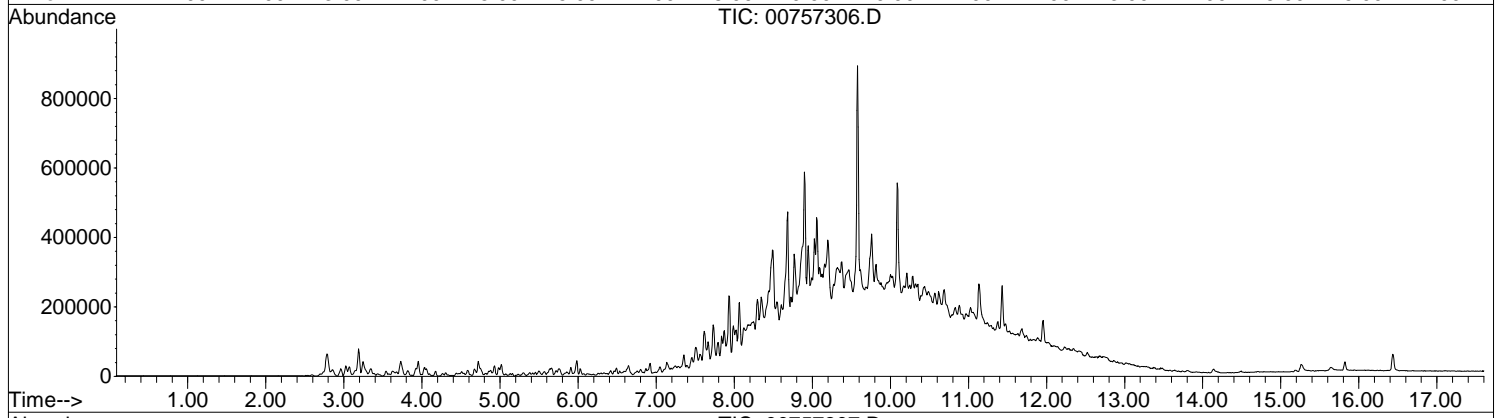
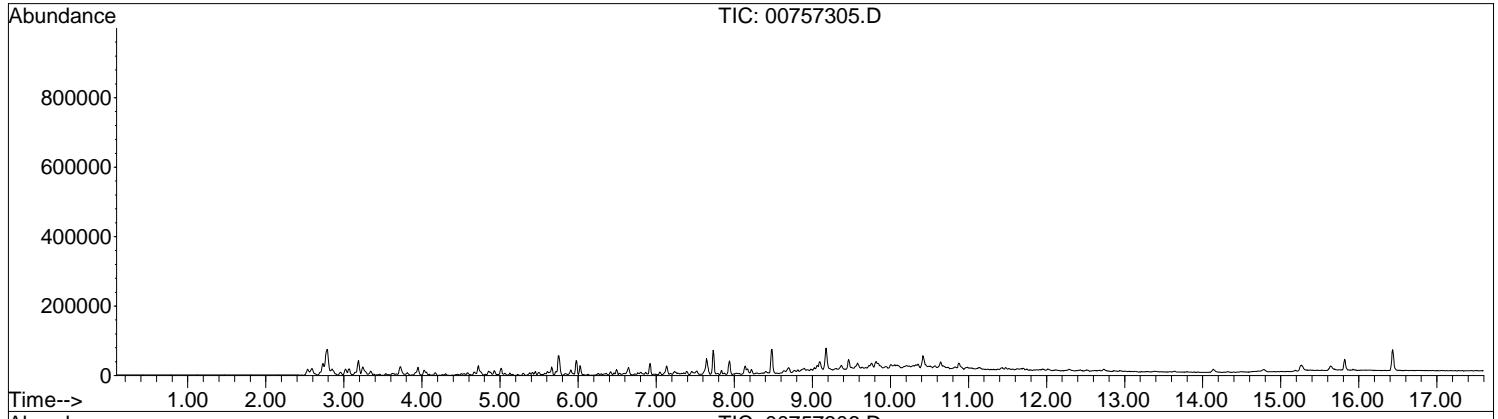
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TICS - 01345  
In Numerical Order



TICS - 01345  
In Numerical Order







***Delaware Office and AGI Laboratory:***

210 Executive Drive, Suite 1  
Newark, Delaware 19702-3335 USA  
Phone: +1-302-266-2428  
Fax: +1-302-266-2429

***German Sales Office:***

Amplified Geochemical Imaging GmbH  
Alte Landstraße 25,  
D-85521 Ottobrunn GERMANY  
Phone: +49 89 6387927-12  
Fax: +49 89 6387927-10

***Corporate Office:***

8369 SouthPark Lane, Suite B  
Littleton, CO 80120 USA  
Phone: +1-303-988-1968  
Fax: +1-303-986-2898

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**APPENDIX G**  
**DATA VALIDATION CHECKLISTS**

---



**DATA VALIDATION WORKSHEET  
LEVEL II**

<b>Quals?</b>	<b>No</b>
Initials	Date

Peer reviewer: khs 7-31-2015

Reviewer: Renee Cohen  
 Date: 30-Jul-15  
 Lab: BC Laboratories, Inc.

Project Name: SMUD  
 Project Number: 138810/17  
 WO/SDG Number: 1512479  
 Matrix: Soil

**1.0 Data Deliverable Completeness Check**

- 1.1 Is Chain of Custody form(s) (COCs) present?
- 1.2 Is Case Narrative present with QC outliers noted?
- 1.3 Is the Data Deliverable signed by Laboratory Director or authorized personnel?
- 1.4 Is Sample Receipt Form present and complete?
- 1.5 Temperature of samples recorded by lab upon arrival?
- 1.6 Are all components (COCs, sample results, QC results, etc) for the required quality deliverable present?
- 1.7 Are all pages present with pre-pagination?

Finding
Yes
Yes
Yes
Yes
3.3, 3.5 °C
Yes
Yes

*Describe any missing components below in "Notes"*

**2.0 Chain of Custody/Sample Condition**

- 2.1 Do COC forms list all samples analyzed?
- 2.2 Are the sampling IDs, dates, times, and preservatives complete, correct, and compliant?
- 2.3 Are all COC forms signed, indicating sample chain-of-custody was maintained?
- 2.4 Do the COC forms, Sample Receipt Forms, and/or lab case narrative indicate any issues with sample receipt, sample integrity, analytical outliers or special circumstances affecting the data quality?
- 2.5 Do sample preservation, collection and storage condition meet method requirement?  
*If samples were not stored on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler*
- 2.6 Are the correct analyses performed/reported as requested on COC?
- 2.7 For **air samples**, are the canister IDs, flow controllers, initial and final pressure recorded?
- 2.8 If yes to 2.7, are all the final pressures less than 10 inches of mercury?
- 2.9 If no to 2.8, make note of those samples with final pressure greater than 10 inches of mercury.  
 Does the **leak compound** concentration exceed the state regulatory criteria (Default for helium = 10,000 ppmv or other leak compound is greater than 5%)  
*If helium or other leak compound exceeds the 5% (10,000ppmv for He) criteria, then ALL method target analytes/compounds are qualified as estimated (J-detects, UJ-nondetects)*
- 2.10

Finding
Yes
Yes
Yes
No
Yes
Yes
NA
NA
NA
NA
NA
Qualifications applied? No

**Notes:** *9 soil samples were analyzed per the COC documents that accompanied the samples to the laboratory.*

**3.0 Verification Completion Statement**

I confirm that verification was completed per instructions by the project team (PM), and that all verified data are complete, correct, and compliant with the contract or project objectives.

Renee Cohen  7/30/2015  
 Printed Name Signature Date



**DATA VALIDATION WORKSHEET**  
**METALS ANALYSIS: ICP, ICP/MS, CVAA, GFAA, etc.**  
**LEVEL II**

Quals?  No

Initials Date

Peer reviewer: khs 7-31-2015

Reviewer: Renee Cohen  
 Date: 30-Jul-15  
 Lab: BC Laboratories, Inc.  
 Method: EPA Method 6010B/7471A

Project Name: SMUD  
 Project Number: 138810/17  
 WO/SDG Number: 1512479  
 Matrix: Soil

QC Batch(es): (ICP) BYE2488, BYE2572, BYF1269 (As only)

(Hg) BYE2245

**3.0 Holding Time**

**Sampled:** 5/18/15 **Extracted:** 5/28/15, 5/29, 6/12/15 (ICP), 5/27/15 (Hg) **Analyzed:** 5/29/15, 6/1/15, 6/15 (ICP), 5/27/15 (Hg)

**Finding**

3.1	Have any technical holding times, determined from date of collection to date of analysis, been exceeded? <i>If yes, apply J - detects/UJ - NDs. Metals (aqueous, solid) 180 days, Organic Lead (aqueous) 7 days, Hg - 28 days</i>	No
3.2	If yes, are any of the holding times grossly exceeded (twice the holding time criteria)? <i>Apply J - detects or R - nondetects</i>	NA
<b>Qualifications applied?</b>		No

Notes:

**4.0 Blanks**

QC Batch(es): See Above

**Finding**

4.1	Was method blank (MB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?	Yes
4.2	Do any of the MBs or preparation blanks have reportable concentrations of target analytes?	Yes
4.3	Are there samples with concentrations less than 10 times the highest level in associated blanks (see grey box below)?	No
4.4	Do any field blanks (equipment, source, etc) have reportable concentrations of target analytes (see grey box below)?	NA
<b>IF <math>\geq</math> MDL but <math>\leq</math> RL/QL, then "U" qualify at RL/QL</b>		<b>IF <math>\geq</math> RL/QL but <math>&lt;</math> 5x blank conc, then "R" or "J+" result</b>
4.5	Have field blanks been collected and submitted at the proper frequency? <b>Types of field QC blanks: None</b>	No
<b>Qualifications applied?</b>		No

Notes: BYE2488-Cu (0.20 J mg/kg) and Zn (0.41 J mg/kg) were detected in the method blank sample. Cu and Zn concentrations in associated samples were higher than that attributed to method blank contamination. No action taken.

BYE2572-Cu (0.11 J mg/kg) and Zn (0.51 J mg/kg) were detected in the method blank sample. Cu and Zn concentrations in associated samples were higher than that attributed to method blank contamination. No action taken.

**5.0 Matrix Spike Sample Analysis: Pre and Post-Digestion**

QC Batches: See Above

**Finding**

5.1	Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch)?	Yes																
5.2	Was a project sample used for the MS analysis? If yes, what sample?	<b>KA-31-H-1 (ICP), KA-47-H-1.5 (Hg), KA-13-S-6 (As only)</b>																
5.3	Are all MS/MSD %Rs and RPDs within acceptance criteria? <i>(No control limit applies to analyte concentrations &gt; 4X spike concentration)</i> <i>Record the acceptable control limits (LCL &amp; UCL): Hg 70-13%, ICP 16-119% (Sb), all others 75-125% R; RPD: _0-20</i>	Yes																
<table border="1"> <tr> <td>DEFAULT</td> <td>%R &gt; 125%</td> <td>30% &lt; %R &lt; 74%</td> <td>%R &lt; 30% <i>(Note: these may change per project rqmts)</i></td> </tr> <tr> <td>Positive</td> <td>J</td> <td>J</td> <td>J</td> </tr> <tr> <td>Non-detect</td> <td>None</td> <td>UJ</td> <td>R</td> </tr> <tr> <td>&gt; 4x</td> <td>None</td> <td>None</td> <td>None</td> </tr> </table>		DEFAULT	%R > 125%	30% < %R < 74%	%R < 30% <i>(Note: these may change per project rqmts)</i>	Positive	J	J	J	Non-detect	None	UJ	R	> 4x	None	None	None	
DEFAULT	%R > 125%	30% < %R < 74%	%R < 30% <i>(Note: these may change per project rqmts)</i>															
Positive	J	J	J															
Non-detect	None	UJ	R															
> 4x	None	None	None															
5.4	If post-digestion spikes were reported, were the recoveries acceptable? <i>If no, J - detects, UJ - NDs</i> <i>No action is taken on MS/MSD data alone. However, using informed professional judgment the data reviewer may use the MS and MSD results in conjunction with other QC criteria and determine the need for some qualification of the data.</i>	NA																
<b>Qualifications applied?</b>		No																

Notes: In addition, Batch QC was reported with this data set. Sample data have not been qualified based on the results of Batch QC MS/MSD analysis.

Project #: 138810/17

SDG: 1512479

**6.0 Laboratory Control Sample (LCS)**

QC Batches: See Above

Finding

6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+)	any	Yes
6.2	Are any LCS recoveries outside the control limits? (Default limits: 80% - 120% - except Ag and Sb)		No
6.3	Are all LCS %Rs within acceptance criteria? Record the acceptable control limits (LCL & UCL): JCP 85-115%, Hg 85-115 %R		Yes
6.4	If an LCSD present, were the RPD recoveries within the control limits? RPD: ICP 0-20, Hg 0-20%		Yes

	> UCL	< LCL
Positive	J	J/UJ
Non-detect	None	R

Qualifications applied? No

Notes:

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**7.0 Field or Lab Duplicate Samples**

QC Batches: See Above

Finding

7.1	Were any field or laboratory duplicates included for analysis?	No
7.2	Was a field sample used for the duplicate? If so, what sample?	No
7.3	Were there any positive results detected in both samples? (If Yes, calculate RPD for both results greater than RL)	NA
7.4	Were all RPD or absolute difference values within the control limits? (Default for Aqueous = 35%, Solid = 50%)	NA

If No to 7.4, then "J" qualify all detected concentrations in duplicate pair.

Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.

Qualifications applied? No

Notes:

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**8.0 Sample Results**

Finding

8.1	Were results reported appropriately (correct units, dry/wet weight, etc)?	Yes
8.2	Any qualifiers applied (besides "U" qualifier for non-detects)? If yes, why?	Yes
8.3	Were dilutions required for the samples (if yes, explain below)?	No

Qualifications applied? No

Notes: *The "J" qualifier has been applied to results reported between the MDL and PQL.*

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**DATA VALIDATION WORKSHEET**  
**ORGANIC ANALYSIS: GC, GC/MS, HPLC, etc**  
**LEVEL II**

Quals?  Yes  No

Initials Date

Peer reviewer: khs 7-31-2015

Reviewer: Renee Cohen  
 Date: 30-Jul-15  
 Lab: BC Laboratories, Inc.  
 Method: USEPA Method 8260B, LUFT-GCMS

Project Name: SMUD  
 Project Number: 138810/17  
 WO/SDG Number: 1512479  
 Matrix: Soil

**3.0 Holding Time** QC Batch(es):BYE2342, BYE1396

Sampled: 5/18/15 Extracted: 5/22/15, 5/28/15 Analyzed: 5/22/15, 5/29/15

- |     |   | Finding |
|-----|---|---------|
| 3.1 | Have any technical holding times (below), determined from sampling to date of analysis, been exceeded? <i>If yes, apply J/UJ</i>    | No      |
| 3.2 | If yes, are any of the holding times grossly exceeded (twice the holding time criteria)? <i>Apply J - detects or R - nondetects</i> | NA      |

Matrix	Extraction	Analysis
Aqueous	7 days	40 days (14 days for volatiles [preserved] / 7 days [unpreserved])
Soil/Sediment	14 days	40 days
Air/Soil Vapor	--	30 day: (Tedlar - 72 hours)

Qualifications applied?  No  Yes

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**4.0 Blanks (Method Blanks and Field Blanks)** QC Batch(es):BYE2342, BYE1396

- |  |   | Finding   |   |  |
|--|---|---|---|--|
| 4.1  | Have method blank (MB) results been reported for each matrix, each instrument used to analyze samples and each extraction batch?  | Yes   |   |  |
| 4.2  | Do any of the MBs or preparation blanks have reportable concentrations of target analytes above the RL/QL ( <i>except methylene chloride, acetone, and 2-butanone</i> )?            | No  |   |  |
| 4.3  | For volatile analyses, was a trip blank submitted along with these samples?   | No  |   |  |
| 4.4  | Do any field blanks (trip, equipment, source, etc) have reportable concentrations of target analytes above the RL/QL ( <i>except methylene chloride, acetone, and 2-butanone</i> )? | NA  |   |  |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"><i>IF &lt; RL/QL (and &lt; 5x or 10x blank conc for the 3 noted analytes above), then Qualify at the RL/QL with "U" qualifier</i></td> <td style="width: 50%;"><i>IF ≥ RL/QL (and &gt; 5x or 10x blank conc. for the 3 noted analytes above), then: Qualify at sample or blank result (greater) with "U" qualifier</i></td> </tr> </table> |   | <i>IF &lt; RL/QL (and &lt; 5x or 10x blank conc for the 3 noted analytes above), then Qualify at the RL/QL with "U" qualifier</i> | <i>IF ≥ RL/QL (and &gt; 5x or 10x blank conc. for the 3 noted analytes above), then: Qualify at sample or blank result (greater) with "U" qualifier</i> |  |
| <i>IF &lt; RL/QL (and &lt; 5x or 10x blank conc for the 3 noted analytes above), then Qualify at the RL/QL with "U" qualifier</i>  | <i>IF ≥ RL/QL (and &gt; 5x or 10x blank conc. for the 3 noted analytes above), then: Qualify at sample or blank result (greater) with "U" qualifier</i>                             |   |   |  |
| 4.5  | Have proper field blanks been collected and submitted at the proper frequency?  | No  |   |  |
| Types of field QC blanks: None   |   | Qualifications applied? <input type="checkbox"/> No <input type="checkbox"/> Yes  |   |  |

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

*Note: The "5x/10 rule" will be used as the default for blank contamination evaluation; however, the new USEPA Organic NFGs use "1x/2x rule". So, be sure to verify that using the "5x/10x rule" is acceptable and per project QAPPs/SAPs.*

**5.0 Surrogate Recovery** QC Batch(es):BYE2342, BYE1396

- |            |  | Finding  |       |            |       |        |   |      |      |            |      |    |   |  |
|------------|--|--|-------|------------|-------|--------|---|------|------|------------|------|----|---|--|
| 5.1        | Are surrogate recoveries reported for all samples on appropriate form(s)?  | Yes  |       |            |       |        |   |      |      |            |      |    |   |  |
| 5.2        | Are surrogate recoveries within acceptance criteria for all samples and MBs?<br><i>Record the acceptable control limits (LCL &amp; UCL):see notes_%R</i>   | Yes  |       |            |       |        |   |      |      |            |      |    |   |  |
| 5.3        | If No in Section 5.2, are these sample(s) or MB(s) reanalyzed?   | NA   |       |            |       |        |   |      |      |            |      |    |   |  |
| 5.4        | If No in Section 5.2, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)<br><i>Note: If surrogate recoveries do not meet acceptable criteria in samples chosen for the MS/MSD and diluted samples, then no reanalysis is required.</i>  | NA   |       |            |       |        |   |      |      |            |      |    |   |  |
|            | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">&gt; UCL</td> <td style="text-align: center;">10% to LCL</td> <td style="text-align: center;">&lt; 10%</td> </tr> <tr> <td>Detect</td> <td style="text-align: center;">J</td> <td style="text-align: center;">J/UJ</td> <td style="text-align: center;">J/UJ</td> </tr> <tr> <td>Non-detect</td> <td style="text-align: center;">None</td> <td style="text-align: center;">UJ</td> <td style="text-align: center;">R</td> </tr> </table> |  | > UCL | 10% to LCL | < 10% | Detect | J | J/UJ | J/UJ | Non-detect | None | UJ | R |  |
|            | > UCL  | 10% to LCL   | < 10% |            |       |        |   |      |      |            |      |    |   |  |
| Detect     | J  | J/UJ   | J/UJ  |            |       |        |   |      |      |            |      |    |   |  |
| Non-detect | None   | UJ   | R     |            |       |        |   |      |      |            |      |    |   |  |
|            |  | Qualifications applied? <input type="checkbox"/> No <input type="checkbox"/> Yes |       |            |       |        |   |      |      |            |      |    |   |  |

Notes: Surrogate compound: 1,2-Dichloroethane-d4 70-121%, Toluene-d8 81-117%, 4-Bromofluorobenzene 74-121%  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Project #: 138810/17

SDG: 1512479

**6.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD)**

QC Batch(es):BYE2342, BYE1396

**Finding**

6.1	Are MS/MSD recoveries reported on the appropriate form(s)?	Yes
6.2	Are MS/MSD analyzed at the appropriate frequency?	Yes
6.3	Was a project sample used for MS/MSD? If so, what sample?	No
6.4	Are all MS/MSD %Rs and RPDs within acceptance criteria?	Yes

Record the acceptable control limits (LCL & UCL):\_70-130 % R; RPD:\_0-20

No action is taken on MS/MSD data alone. However, using informed professional judgment the data reviewer may use the MS and MSD results in conjunction with other QC criteria and determine the need for some qualification of the data.

Qualifications applied? **No**

Notes: *Batch QC MS/MSD was reported with this data set. Sample data were not qualified based on the results of Batch QC analysis.*

**7.0 Laboratory Control Sample (LCS)**

QC Batch(es):BYE2342, BYE1396

**Finding**

7.1	Are LCS recoveries reported on the appropriate form(s)?	Yes
7.2	Is LCS analyzed at the required frequency for each matrix?	Yes
7.3	Are all LCS %Rs within acceptance criteria? Record the acceptable control limits (LCL & UCL):_70-130_%R	Yes
7.4	If an LCSD present, were the RPD recoveries within the control limits? RPD:_0-20	Yes

	>UCL	<LCL
Detect	J	J/U.
Non-detect	None	F

Qualifications applied? **No**

Notes:

**8.0 Field or Lab Duplicate Samples**

**Finding**

8.1	Were any field or laboratory duplicates included for analysis?	No
8.2	Was a field sample used for the duplicate? If so, what sample?	No
8.3	Were there any positive results detected in <b>both</b> samples? If Yes, calculate RPD for both results greater than RL	NA
8.4	Were all RPD or absolute difference values within the control limits? Default for Aqueous = 35%, Solid = 50%	NA

If No to 8.4, then "J" qualify all detected concentrations in both duplicate pair samples.

Qualifications applied? **No**

Notes:

**9.0 Sample Results**

**Finding**

9.1	Were results reported appropriately (correct units, dry/wet weight, etc)?	Yes
9.2	Any qualifiers applied (besides "U" qualifier for non-detects)? If yes, why?	Yes
9.3	Were dilutions required for the samples (if yes, explain below)	Yes

Qualifications applied? **Yes**

Notes: *"J" was used to report sample results between the MDL and PQL.*

*Bromomethane did not meet QC criteria in the initial calibration analysis. Bromomethane has been estimated "J/UJ" with reason code 05 in samples KA-43-H-1 and KA-44-H-1.5*



**DATA VALIDATION WORKSHEET**  
**ORGANIC ANALYSIS: GC, GC/MS, HPLC, etc**  
**LEVEL II**

Quals?  Yes

Initials Date

Peer reviewer: khs 7-31-2015

Reviewer: Renee Cohen  
 Date: 30-Jul-15  
 Lab: BC Laboratories, Inc.  
 Method: EPA Method 8082

Project Name: SMUD  
 Project Number: 138810/17  
 WO/SDG Number: 1512479  
 Matrix: Soil

**3.0 Holding Time**

QC Batch(es): BYF1304

Sampled: 5/18/15 Extracted: 6/12/15 Analyzed: 6/12/15

Finding

3.1	Have any technical holding times (below), determined from sampling to date of analysis, been exceeded? <i>If yes, apply J/UJ</i>			Yes
3.2	If yes, are any of the holding times grossly exceeded (twice the holding time criteria)? <i>Apply J - detects or R - nondetects</i>			No
	<b>Matrix</b>	<b>Extraction</b>	<b>Analysis</b>	
	Aqueous	7 days	40 days (14 days for volatiles [preserved] / 7 days [unpreserved])	
	Soil/Sediment	14 days	40 days	
	Air/Soil Vapor	--	30 days (Tedlar - 72 hours)	

Qualifications applied?  Yes

Notes: *KA-17-H-5 was prepared outside the method hold time. Reported Aroclors have been estimated "UJ" with reason code 01.*

**4.0 Blanks (Method Blanks and Field Blanks)**

QC Batch(es): BYF1304

Finding

4.1	Have method blank (MB) results been reported for each matrix, each instrument used to analyze samples and each extraction batch?			Yes
4.2	Do any of the MBs or preparation blanks have reportable concentrations of target analytes above the RL/QL ( <i>except bis(2-ethylhexyl) phthalate</i> )?			No
4.3	For volatile analyses, was a trip blank submitted along with these samples?			No
4.4	Do any field blanks (trip, equipment, source, etc) have reportable concentrations of target analytes above the RL/QL ( <i>except bis(2-ethylhexyl) phthalate</i> )?			NA
	<i>IF &lt; RL/QL (and &lt; 5x or 10x blank conc for the noted analyte above), then</i>		<i>IF ≥ RL/QL (and &gt; 5x or 10x blank conc. for the noted analyte above), then:</i>	
	<b>Quality at the RL/QL with "U" qualifier</b>		<b>Qualify at sample or blank result (greater) with "U" qualifier</b>	
4.5	Have proper field blanks been collected and submitted at the proper frequency?			No
	<b>Types of field QC blanks: None</b>			Qualifications applied? <input type="checkbox"/> No

Notes:

*Note: The "5x/10 rule" will be used as the default for blank contamination evaluation; however, the new USEPA 2008 Organic NFGs uses "1x/2x rule" - refer to 2008 NFGs for guidance if required to follow. Be sure to verify that using the "5x/10x rule" is acceptable and per project QAPPs/SAPs.*

**5.0 Surrogate Recovery**

QC Batch(es): BYF1304

Finding

5.1	Are surrogate recoveries reported for all samples on appropriate form(s)?			Yes
5.2	Are surrogate recoveries within acceptance criteria for all samples and MBs? <i>Record the acceptable control limits (LCL &amp; UCL): see notes %R</i>			Yes
5.3	If No in Section 5.2, are these sample(s) or MB(s) reanalyzed?			NA
5.4	If No in Section 5.2, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			NA

*Note: If surrogate recoveries do not meet acceptable criteria in samples chosen for the MS/MSD and diluted samples, then no reanalysis is required.*

	> UCL	10% to LCL	< 10%	
Detect	J	J/UJ	J/UJ	
Non-detect	None	UJ	R	

Qualifications applied?  No

Notes: *Surrogate Compound: Decachlorobiphenyl - 40-120%*



Project #: 138810/17

SDG: 1512479

6.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

QC Batch(es):BYF1304

Finding

6.1	Are MS/MSD recoveries reported on the appropriate form(s)?	Yes
6.2	Are MS/MSD analyzed at the appropriate frequency?	Yes
6.3	Was a project sample used for MS/MSD? If so, what sample?	No
6.4	Are all MS/MSD %Rs and RPDs within acceptance criteria?	Yes

Record the acceptable control limits (LCL & UCL):\_50-127\_% R; RPD:\_0-24

No action is taken on MS/MSD data alone. However, using informed professional judgment the data reviewer may use the MS and MSD results in conjunction with other QC criteria and determine the need for some qualification of the data.

Qualifications applied? No

Notes: Batch QC was reported with this data set. Sample data were not qualified based on the results of Batch QC MS/MSD analysis.

7.0 Laboratory Control Sample (LCS)

QC Batch(es):BYF1304

Finding

7.1	Are LCS recoveries reported on the appropriate form(s)?	Yes
7.2	Is LCS analyzed at the required frequency for each matrix?	Yes
7.3	Are all LCS %Rs within acceptance criteria? Record the acceptable control limits (LCL & UCL):Diesel (FFP) 64-124_%R	Yes
7.4	If an LCSD present, were the RPD recoveries within the control limits? RPD:_0-30	NA

	>UCL	<LCL
Detect	J	J/UJ
Non-detect	None	R

Qualifications applied? No

Notes:

8.0 Field or Lab Duplicate Samples

Finding

8.1	Were any field or laboratory duplicates included for analysis?	No
8.2	Was a field sample used for the duplicate? If so, what sample? _____	No
8.3	Were there any positive results detected in both samples? If Yes, calculate RPD for both results greater than RL	NA
8.4	Were all RPD or absolute difference values within the control limits?	NA

If No to 8.4, then "J" qualify all detected concentrations in both duplicate pair samples.

Qualifications applied? No

Notes:

9.0 Sample Results

Finding

9.1	Were results reported appropriately (correct units, dry/wet weight, etc)?	Yes
9.2	Any qualifiers applied (besides "U" qualifier for non-detects)? If yes, why?	No
9.3	Were dilutions required for the samples (if yes, explain below)	No

Qualifications applied? No

Notes: "J" was used to report sample results between the MDL and PQL.



**DATA VALIDATION WORKSHEET**  
**ORGANIC ANALYSIS: GC, GC/MS, HPLC, etc**  
**LEVEL II**

Quals?  No

Initials Date

Peer reviewer: khs 7-31-2015

Reviewer: Renee Cohen  
 Date: 30-Jul-15  
 Lab: BC Laboratories, Inc.  
 Method: EPA Method 8015 (Diesel/Fuel Fingerprint (FFP), Motor Oil)

Project Name: SMUD  
 Project Number: 138810/17  
 WO/SDG Number: 1512479  
 Matrix: Soil

**3.0 Holding Time**

QC Batch(es): BYE2580

Sampled: 5/18/15 Extracted: 5/28/15 Analyzed: 6/1/15

Finding

3.1	Have any technical holding times (below), determined from sampling to date of analysis, been exceeded? <i>If yes, apply J/UJ</i>			No
3.2	If yes, are any of the holding times grossly exceeded (twice the holding time criteria)? <i>Apply J - detects or R - nondetects</i>			NA
	<b>Matrix</b>	<b>Extraction</b>	<b>Analysis</b>	
	Aqueous	7 days	40 days (14 days for volatiles [preserved] / 7 days [unpreserved])	
	Soil/Sediment	14 days	40 days	
	Air/Soil Vapor	--	30 days (Tedlar - 72 hours)	

Qualifications applied?  No

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**4.0 Blanks (Method Blanks and Field Blanks)**

QC Batch(es): BYE2580

Finding

4.1	Have method blank (MB) results been reported for each matrix, each instrument used to analyze samples and each extraction batch?			Yes
4.2	Do any of the MBs or preparation blanks have reportable concentrations of target analytes above the RL/QL ( <i>except bis(2-ethylhexyl) phthalate</i> )?			No
4.3	For volatile analyses, was a trip blank submitted along with these samples?			No
4.4	Do any field blanks (trip, equipment, source, etc) have reportable concentrations of target analytes above the RL/QL ( <i>except bis(2-ethylhexyl) phthalate</i> )?			NA
	<b>IF &lt; RL/QL (and &lt; 5x or 10x blank conc for the noted analyte above), then <i>Quality at the RL/QL with "U" qualifier</i></b>		<b>IF ≥ RL/QL (and &gt; 5x or 10x blank conc. for the noted analyte above), then: <i>Qualify at sample or blank result (greater) with "U" qualifier</i></b>	
4.5	Have proper field blanks been collected and submitted at the proper frequency? <i>Types of field QC blanks: None</i>			No

Qualifications applied?  No

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

*Note: The "5x/10 rule" will be used as the default for blank contamination evaluation; however, the new USEPA 2008 Organic NFGs uses "1x/2x rule" - refer to 2008 NFGs for guidance if required to follow. Be sure to verify that using the "5x/10x rule" is acceptable and per project QAPPs/SAPs.*

**5.0 Surrogate Recovery**

QC Batch(es): BYE2580

Finding

5.1	Are surrogate recoveries reported for all samples on appropriate form(s)?			Yes
5.2	Are surrogate recoveries within acceptance criteria for all samples and MBs? <i>Record the acceptable control limits (LCL &amp; UCL): see notes %R</i>			Yes
5.3	If No in Section 5.2, are these sample(s) or MB(s) reanalyzed?			NA
5.4	If No in Section 5.2, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			NA

*Note: If surrogate recoveries do not meet acceptable criteria in samples chosen for the MS/MSD and diluted samples, then no reanalysis is required.*

	> UCL	10% to LCL	< 10%
Detect	J	J/UJ	J/UJ
Non-detect	None	UJ	R

Qualifications applied?  No

Notes: Surrogate Compound: Tetracosane 20-145%  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Project #: 138810/17

SDG: 1512479

6.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

QC Batch(es):BYE2580

Finding

6.1	Are MS/MSD recoveries reported on the appropriate form(s)?	Yes
6.2	Are MS/MSD analyzed at the appropriate frequency?	Yes
6.3	Was a project sample used for MS/MSD? If so, what sample?	No
6.4	Are all MS/MSD %Rs and RPDs within acceptance criteria?	Yes

Record the acceptable control limits (LCL & UCL):\_50-127\_% R; RPD:\_0-24

No action is taken on MS/MSD data alone. However, using informed professional judgment the data reviewer may use the MS and MSD results in conjunction with other QC criteria and determine the need for some qualification of the data.

Qualifications applied? No

Notes: Batch QC was reported with this data set. Sample data were not qualified based on the results of Batch QC MS/MSD analysis.

7.0 Laboratory Control Sample (LCS)

QC Batch(es):BYE2580

Finding

7.1	Are LCS recoveries reported on the appropriate form(s)?	Yes
7.2	Is LCS analyzed at the required frequency for each matrix?	Yes
7.3	Are all LCS %Rs within acceptance criteria? Record the acceptable control limits (LCL & UCL):Diesel (FFP) 64-124_%R	Yes
7.4	If an LCSD present, were the RPD recoveries within the control limits? RPD:_0-30	NA

	>UCL	<LCL
Detect	J	J/UJ
Non-detect	None	R

Qualifications applied? No

Notes:

8.0 Field or Lab Duplicate Samples

Finding

8.1	Were any field or laboratory duplicates included for analysis?	No
8.2	Was a field sample used for the duplicate? If so, what sample? _____	No
8.3	Were there any positive results detected in both samples? If Yes, calculate RPD for both results greater than RL	NA
8.4	Were all RPD or absolute difference values within the control limits?	NA

If No to 8.4, then "J" qualify all detected concentrations in both duplicate pair samples.

Qualifications applied? No

Notes:

9.0 Sample Results

Finding

9.1	Were results reported appropriately (correct units, dry/wet weight, etc)?	Yes
9.2	Any qualifiers applied (besides "U" qualifier for non-detects)? If yes, why?	Yes
9.3	Were dilutions required for the samples (if yes, explain below)	No

Qualifications applied? No

Notes: "J" was used to report sample results between the MDL and PQL.



DATA VALIDATION WORKSHEET  
WET CHEMISTRY ANALYSIS  
LEVEL II

Quals?  No

Initials Date

Peer reviewer: khs 7-31-2015

Reviewer: Renee Cohen  
Date: 30-Jul-15  
Lab: BC Laboratories, Inc.  
Method: EPA Method 1664A - Oil and Grease - HEM

Project Name: SMUD  
Project Number: 138810/17  
WO/SDG Number: 1512479  
Matrix: Soil

QC Batch(es):BYF0399

3.0 Holding Time

Sampled: 5/18/15    Extracted: 6/2/15    Analyzed: 6/2/15    Finding

3.1 Have any technical holding times, determined from date of collection to date of analysis, been exceeded?  
*If yes, apply J - detects /JJ - NDs    BOD, nitrate/nitrite, o-phosphate, MBAS(solids/aqueous) - 48 hrs.  
Hexavalent Chrom, Ferrous Iron, Redox (aqueous) - 24 hrs    Settleable Solids, turbidity(aqueous) - 48 hrs*

3.2 If yes, have the holding times grossly exceeded (twice the holding time criteria), Apply J - detects or R - nondetects

Qualifications applied?  No

Notes:

4.0 Blanks (Field and Laboratory)

QC Batch(es):BYF0399

4.1 Was method blank (MB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?    Finding

4.2 Do any of the MBs or preparation blanks have reportable concentrations of target analytes?  
*Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.*

4.3 Are there samples with concentrations less than five times the highest level in associated blanks?    Finding

4.4 Do any field blanks (equipment, source, etc) have reportable concentrations of target analytes?    Finding

4.5 Have proper field blanks been collected and submitted at the proper frequency?  
*Types of field QC blanks: None*

Qualifications applied?  No

Notes:

6.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

QC Batch(es):BYF0399

5.1 Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch)?    Finding

5.2 Was a project sample used for the MS analysis? If yes, what sample?    Finding

5.3 Are all MS/MD %Rs and RPDs within acceptance criteria?    Finding

Record the acceptable control limits (LCL & UCL): \_\_\_\_\_ % R; RPD: \_\_\_\_\_

DEFAULT    %R > 125%    30% < %R < 74%    %R < 30% (Note: these may change per project reqmts)

Positive	J	J	J
Non-detect	None	UU	R

*No action is taken on MS/MD data alone. However, using informed professional judgment the data reviewer may use the MS and MSD results in conjunction with other QC criteria and determine the need for some qualification of the data.*

Qualifications applied?  No

Notes: *Batch QC MS/MSD was reported with this data set.*

6.0 Laboratory Control Sample (LCS)

QC Batch(es):BYF0399

6.1 Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)?    Finding

*Action: If no, J(+) any sample not associated with LCS results.*

6.2 Are any LCS recoveries outside the control limits? (Default limits: 80% - 120%) Record the acceptable control limits (LCL & UCL): 59-117\_%R    Finding

6.4 If an LCSD present, were the RPD recoveries within the control limits? RPD: \_\_\_\_\_ %    Finding

	> UCL	< LCL
Positive	J	J/UJ
Non-detect	None	R

Qualifications applied?  No

Notes:

7.0 Field or Lab Duplicate Samples

QC Batch(es):BYF0399

7.1 Were any field or laboratory duplicates included for analysis?    Finding

7.2 Was a field sample used for the duplicate? If so, what sample?    Finding

7.3 Were there any positive results detected in both samples? (If Yes, calculate RPD for both results greater than RL)    Finding

7.4 Were all RPD or absolute difference values within the control limits? (Default for Aqueous = 35%, Solid = 50%)    Finding

*If No to 7.4, then "J" qualify all detected concentrations in duplicate pair.*

*Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.*

Qualifications applied?  No

Notes:

8.0 Sample Results

8.1 Were results reported appropriately (correct units, dry/wet weight, etc)?    Finding

8.2 Any qualifiers applied (besides "U" qualifier for non-detects)? If yes, why?    Finding

8.3 Were dilutions required for the samples (if yes, explain below)?    Finding

Qualifications applied?  No

Notes: *"J" was used to report sample results between the MDL and PQL.*

$$\text{RPD} = \frac{|R_1 - R_2|}{R_1 + R_2 / 2} \times 100$$

$$\%R = \frac{\text{actual conc}}{\text{spike/known conc.}} \times 100$$

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 Reviewer: Renee Cohen  
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 SDG: 1512479

*Optional, if providing "marked up"  
 Sample Results (Form Is) pages*



Analytical Method	Compound	Initial Concentration	Affected Samples	Final Concentration	DV Qualifier	Qual Reason
EPA Method 8260B	Bromomethane	–	KA-43-H-1 KA-44-H-1.5	–	J - Detect UJ - Non Detect	05 - Calibration criteria was not met in the initial calibration analysis
EPA Method 8082	Reported Aroclors	–	KA-17-H-5	–	UJ - Non Detect	01 - Outside holding time

**Possible Validation Codes:**

- |   |  |
|---|--|
| 1 Holding Times   | 13 Surrogates                                      |
| 2 Sample Preservation (Cooler Temp, pH)                 | 14 Field Duplicate RPDs                            |
| 3 Sample Custody  | 15 Furnace QC                                      |
| 4 Missing Deliverables                                  | 16 ICP Serial Dilution                             |
| 5 Calibration   | 17 Chemical Recoveries                             |
| 6 Field Blanks  | 18 Trip Blanks                                     |
| 7 Laboratory Blanks                                     | 19 Internal Standards                              |
| 8 Matrix Spike Recoveries                               | 20 Linear Range Exceeded                           |
| 9 Matrix Spike Duplicate RPDs or Duplicate Samples RPDs | 21 Potential False Positives                       |
| 10 Laboratory Control Sample Recoveries                 | 22 Do not use, other result more technically sound |
| 11 ICP Interference Check                               | 23 Other   |
| 12 RPD Between Two GC Columns                           |  |