



GROUNDWATER ASSESSMENT REPORT

**ARCELORMITTAL GEORGETOWN, INC.
419 SOUTH FRASER STREET
GEORGETOWN, GEORGETOWN COUNTY, SOUTH CAROLINA
SC DHEC SITE #04798**

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1.0 INTRODUCTION

On behalf of ArcelorMittal Georgetown, Inc. (“ArcelorMittal”), this report provides the results of a preliminary evaluation of groundwater beneath the southern portion of the ArcelorMittal plant located at 419 South Fraser Street in Georgetown, South Carolina. The evaluation was performed in response to a letter dated June 9, 2011 from the South Carolina Department of Health and Environmental Control (SC DHEC) to ArcelorMittal USA LLC indicating that contamination from an adjacent, upgradient property (known as the Napa Auto Parts, formerly known as Easy Pickup #8 gas station site located at 422 South Fraser Street) extended onto the ArcelorMittal property.

Following a letter submitted by ArcelorMittal on July 14, 2011 and a meeting between ArcelorMittal and SC DHEC on August 17, 2011, ArcelorMittal submitted a Work Plan to SC DHEC in October 2011 to preliminarily assess hydrocarbons in soil and groundwater beneath the southern portion of the ArcelorMittal plant, which is also known as the Compactor Area. On November 1, 2011, SC DHEC approved the Work Plan and requested submittal of the results of ArcelorMittal’s investigation by June 1, 2012. Civil & Environmental Consultants, Inc. (CEC) prepared this report on behalf of ArcelorMittal pursuant to the approved Work Plan. The information provided in this report includes historical information concerning the ArcelorMittal plant, methods employed in the field to collect soil and groundwater quality data, results of laboratory analyses performed on soil and groundwater samples, and conclusions based on the information collected in the field.

1.1 BACKGROUND

In its June 9, 2011 letter, SC DHEC provided a copy of a report prepared by Assessment & Remedial Services (ARM) for an environmental investigation conducted at the former Easy Pickup #8 located at 422 South Fraser Street in Georgetown, South Carolina. The former Easy Pickup #8 is directly across Fraser Street and upgradient from the Compactor Area on the ArcelorMittal property. ARM’s report indicates that petroleum hydrocarbons consistent with a release of gasoline are present in groundwater monitoring wells at the former Easy Pickup #8 as well as another former gasoline station immediately to the south across Butts Street indicating that there was a release at both of these sites. Those same gasoline constituents were detected in downgradient wells on the ArcelorMittal property indicating that the off-site releases have migrated onto the ArcelorMittal property. ARM also reported that free product was present in one of the monitoring wells (MW-23) on the ArcelorMittal property. The free product was



reported as a light non-aqueous phase liquid (“LNAPL”) measured at the top of the water table. Based on groundwater flow direction presented in ARM’s report, the area where the wells were drilled on ArcelorMittal property is directly downgradient of the former gasoline station(s) across Fraser Street.

There has been no known gasoline fuel storage in the Compactor Area portion of the facility. Based upon the nature of the compounds reported in ARM’s investigation (primarily benzene, toluene, ethylbenzene, xylenes (BTEX), and naphthalene), the constituents detected on the ArcelorMittal property appear to have emanated from the upgradient former gas station(s). Hydraulic fluids are used in the operation of certain machinery in the Compactor Area. This groundwater assessment was designed to evaluate groundwater quality in the Compactor Area, further assess the free product identified in MW-23 and assess the extent of petroleum hydrocarbons that have migrated from off-site sources onto the ArcelorMittal property.

1.2 PURPOSE AND OBJECTIVES

The purpose of this investigation is to respond to SC DHEC’s June 2011 letter and conduct a preliminary evaluation of groundwater in the southern portion of the ArcelorMittal plant, as described above. The objectives of this groundwater assessment are to: 1) identify the composition of the free product identified in MW-23 and to compare it with current hydraulic fluid usage, 2) further evaluate potential distribution of gasoline constituents or other volatile organic compounds (VOCs) in the southern portion of the ArcelorMittal plant, 3) further evaluate groundwater flow conditions in the area, and 4) monitor groundwater quality during two quarterly events. During the August 17, 2011 meeting, SC DHEC required that laboratory analyses include the full list of priority pollutant VOCs, which includes chlorinated VOCs (CVOCs) in addition to petroleum hydrocarbons (PVOCs).

1.3 REPORT ORGANIZATION

Section 2.0 of this report provides general background information regarding history and local geology in the area of the ArcelorMittal property. Section 3.0 describes the methods employed during the field investigation. Section 4.0 provides the results of laboratory analyses on soil and groundwater samples as well as fingerprinting analysis of the free product identified in MW-23. Section 5.0 provides an evaluation of the data and conclusions based on the information from the field investigation.



2.0 GENERAL SITE INFORMATION

2.1 FACILITY OPERATION

ArcelorMittal is an electric arc furnace (EAF) steelmaking plant that produces wire rod in coils for the construction, automotive, and industrial markets. The wire rod coils are then used by ArcelorMittal's customers to make low-carbon fine wire drawing, wire ropes, tire cord, high-carbon machinery, and upholstery springs. The location of the ArcelorMittal plant with respect to principal roadways and surface features is depicted on Figure 1.

The facility operates on a total of approximately 65 acres of land and includes an idled Direct-Reduced Iron (DRI) ore processing plant, the EAF Melt Shop at the north end of the plant, a Scrap Yard (feedstock for the melt shop) along the east side of the main plant building, a Slag Processing Area along the northeast side of the plant between the Scrap Yard and the DRI plant, and a Deepwater Dock on the Sampit River along the east side of the property. The Refractory and Rolling Mill extend south from the Melt Shop and the plant operations culminate at the Coil Compactor (Compactor Area) at the south end of the plant. Steel coils are stored prior to distribution at the far south end of the property. Principal site features are shown on Figure 2.

2.2 HISTORICAL SUMMARY

The first documented use of the property was as part of the 300+ acre Serenity Rice Plantation, which dates to 1710. The rice plantation continued operation until after the Civil War when industrial development and further residential subdivision occurred along the west side of Georgetown (Linder and Thacker, 2001). During the time from 1899 to 1932, the Atlantic Coast Lumber (ACL) Company operated a sawmill along the north bend of Georgetown Harbor on the Sampit River. The mill was expanded through the years, and included three separate sawmills, two shipping wharves, several warehouses, and numerous other buildings, including workers' houses, stores, a hotel, and a church (Circa, Inc., 2002). From 1932 until approximately 1969, the former ACL site remained partially or completely vacant.

The steel plant was constructed on a large portion of the former ACL property from 1967 to 1969, opening as the Georgetown Steel Corporation (TRC, 2010). Georgetown Steel Corporation filed for Chapter 11 bankruptcy protection in 2003 and ceased operation. The assets of Georgetown Steel were purchased out of bankruptcy by International Steel Group (ISG) in 2004 and operations resumed. In 2005, Mittal Steel purchased the assets of ISG, making the



Georgetown Mill part of its United States operations. Mittal Steel subsequently merged with Arcelor Steel in 2006 to form ArcelorMittal. Due to the 2008 economic downturn, the plant was idled in early 2009 for a period of 18 months because of market conditions. The ArcelorMittal Georgetown plant recommenced operation in January 2011, and is currently in operation.

The original construction of Georgetown Steel included the DRI ore processing plant plus the main melt shop/refractory/rolling mill building. The former ACL administrative offices building at the south end of the property served as the main office building for the Georgetown Steel plant. A former ACL machine shop also existed at the south end of the property, just south of the current Compactor Area, and was maintained after the construction of the original steel mill. In 1984, the southern end of the Georgetown Steel rolling mill building was extended for the construction of the Coil Compactor, which is a mechanical device used to form, bind and label coils of steel rod. Both the administrative office building and the former machine shop were demolished at that time.

2.3 REGIONAL PHYSIOGRAPHY AND LOCAL GEOLOGY

Georgetown lies at the far eastern extent of the Lower Coastal Plain of the Sea Island Section of the Coastal Plain Physiographic Province. Sediments of the Lower Coastal Plain were principally deposited in marine shelf environments during the last sea-level regression approximately 147,000 to 86,000 years before present (B.P.). A series of regressive beach ridges were deposited as the coastline regressed, extending from the area surrounding Georgetown toward the northeast. As sea levels rose at the end of the Wisconsinan Glacial Stage, roughly 12,000 to 4000 years B.P., the relict beach ridges between Debidue Island/North Island and Georgetown were gradually flooded, then partially eroded by meandering tidal creeks, and buried by mud to form the present salt marsh environment (Patchineelam, et.al., 1999).

The facility sits on the lower portion of the Sampit River at its confluence with Winyah Bay. Winyah Bay is the coastal receiving body for a number of rivers, which have a combined drainage basin area of 18,200 square miles. The Yadkin–Pee Dee River drains northeastern South Carolina, central North Carolina, and a portion of southwestern Virginia. The Waccamaw River, which drains from the north, and the Sampit River, which drains from the west, combine with the Pee Dee River and discharge into Winyah Bay at Georgetown (ibid).



Local geology is influenced by mud deposited in meandering tidal creeks, sand from Pleistocene beach ridges, and from anthropogenic influence due to agricultural and industrial development. Borehole logs from the ARM subsurface investigation show the upper 15 to 20 feet of subsurface material to be comprised of fairly uniform fine to medium-grained sand deposits. The sands are underlain by alternating sequences of black clays and fine-grained sands to a depth of at least 30 feet below ground. Information from plant personnel indicate that pilings installed for the Compactor Area construction encountered refusal at approximately 33 feet below ground, which indicates the presence of consolidated material or bedrock at this depth.

In general, groundwater is present at a depth of approximately six (6) to eight (8) feet below ground surface. Groundwater flow direction generally mirrors topography, flowing to the east toward Georgetown Harbor. Aquifer testing (slug tests) performed during ARM's investigation estimated the hydraulic conductivity of the shallow water table aquifer at 7.44×10^{-4} centimeters per second (cm/sec) and the deeper water bearing units at 1.15×10^{-4} cm/sec. These values are consistent with published hydraulic conductivities for fine sand and silty sand aquifers (Fetter, 2001; Freeze and Cherry, 1974).



3.0 METHODOLOGY

3.1 GENERAL SCOPE OF WORK

The overall scope of the investigation consisted of drilling, installing and sampling four monitoring wells, analyzing soil samples from each new boring, analyzing groundwater samples from seven monitoring wells, gauging water levels in 24 existing monitoring wells (at the ArcelorMittal plant and also off-site on the adjacent, upgradient sites), plus the four newly-installed monitoring wells, and collecting and analyzing free product from MW-23 plus virgin hydraulic oil used in the plant operation. The scope of the investigation and methods that were used are provided in the following sections.

3.2 APPLICABLE REGULATORY GUIDANCE

SC DHEC regulation R. 61-71 establishes minimum standards for the construction, maintenance, and operation of individual residential wells, irrigation wells, monitoring wells (including non-standard installations), and boreholes. These regulations require SC DHEC approval prior to monitoring well installation or abandonment. In addition, the regulations require submittal of a Water Well Record Form 1903 within 30 days after completion or abandonment of the wells. This regulation, coupled with industry standards, guided the installation and sampling of the monitoring wells. This regulation also mandates that a South Carolina certified well driller (pursuant to SC Code 40-23-10 et seq.) performs the work to drill and install monitoring wells.

SC DHEC regulation R. 61-68 establishes a system and rules for managing and protecting the quality of South Carolina's surface and ground water. Official classified water uses for all waters of the State are described (including groundwater), general rules and specific numeric and narrative criteria for protecting classified and existing water uses are established, and procedures for classifying waters of the State are provided in this regulation.

SC DHEC regulation R. 61-81 gives the Office of Environmental Laboratory Certification authority to issue certification to laboratories analyzing regulatory compliance samples for reporting to SC DHEC. Regulation 61-81 applies to any laboratory performing analyses to determine the quality of air, drinking water, hazardous waste, solid waste, or wastewater; performing bioassays; or performing any other analyses related to environmental quality evaluations submitted to SC DHEC. This regulation guided selection of the environmental laboratory used for analysis of soil and groundwater samples.



The U.S. EPA has developed risk-based screening levels that were calculated using the latest toxicity values, default exposure assumptions and physical and chemical properties (available at http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm)

The purpose of the screening levels is to provide a tool to assist risk assessors, remedial project managers, and others with evaluating whether levels of contamination at a site may warrant further investigation or cleanup, or whether no further investigation or action is necessary. Concentrations of constituents detected during this investigation were compared with screening levels provided in the screening tables.

3.3 MONITORING WELL INSTALLATION AND SAMPLING

3.3.1 Soil Boring and Sampling Methods

Borings were drilled through the Compactor Building concrete floor and in the paved area south of the Compactor Area. Prior to beginning the drilling, the concrete floor and asphalt pavement were cored to allow access to the subsurface soils. A nominal 8-inch diameter, diamond bit was used to core through the concrete or asphalt at each drilling location. The diamond core bit was decontaminated prior to use at each borehole location.

Soil boring and sampling activities were completed on December 13 and 14, 2011. American Environmental Drilling, Inc., a South Carolina certified well driller, drilled boreholes at four locations (designated as MW-CA-1 through MW-CA-4 on Figures 3 through 6) utilizing a Geoprobe[®] drill rig. All drilling was performed under the direct supervision of a qualified CEC geologist. The drilling rig was equipped with 4.25-inch inner diameter hollow-stem augers to allow sufficient annular space pursuant to South Carolina Well Standards (SC DHEC R. 61-71). During drilling, soil samples were collected continuously through the depth of the borehole at five-foot intervals by hydraulically driving a five-foot long hollow sampling tool (direct-push sampler) equipped with a new, single use acetate inner sleeve. After the direct-push sampler was advanced into the undisturbed stratum, the borehole was overdrilled using the hollow-stem augers in five-foot increments to allow for installation of the monitoring wells. Soil recovered from each interval was observed by cutting open a strip along the vertical length of the acetate liner. All soil samples were described in the field by the CEC geologist using a combination of the Unified Soil Classification System and ASTM Method D-2488 and recorded on CEC boring logs that are presented in Appendix A – Boring Logs and Field Forms.



Representative aliquots of soil were collected every two feet within the five-foot intervals. Sampling was biased toward areas representing visual and/or olfactory indications of such impacts. For each soil sample interval, representative aliquots of soil were immediately transferred into a re-sealable plastic bag for headspace analysis and a sample jar for potential laboratory analysis. The samples collected for potential laboratory analysis were labeled and placed into a cooler, whereas the bagged portion was allowed to equilibrate with the ambient air temperature before headspace screening.

Sample jar and bagged sample labels included the following information:

- CEC project number;
- Well number; and
- Sample number.

The jarred portion of the soil sample was placed on ice in a cooler. The bagged portion was allowed to equilibrate with the ambient air temperature before headspace screening. A portable photoionization detector (PID) calibrated with a 100 ppm isobutylene standard and equipped with a 10.2 electron-volt (eV) lamp was used to conduct headspace screening. The maximum (or peak) PID reading for each sample interval was recorded on the borehole logs.

One unsaturated soil sample within 2 feet of the water table, or the soil sample that exhibited the highest PID headspace reading in the unsaturated zone, was selected for laboratory analysis and submitted to Shealy Environmental Services, Inc. (Shealy Labs), a South Carolina certified laboratory (pursuant to SC DHEC Rule R. 61-81). Samples were analyzed for the following parameters, as directed by SC DHEC:

- Volatile Organic Compounds (VOCs) by US EPA SW-846 Method 8260;
- Polynuclear Aromatic Hydrocarbons (PAHs) by US EPA SW-846 Method 8270; and,
- Total Petroleum Hydrocarbons (TPH)-diesel range organics (DRO) by US EPA SW-846 Method 8015M.

Soil samples collected for VOC analysis were collected using the Terra CoreTM sampling method (Method 5035) to collect an approximately five gram aliquot of soil. The five-gram soil samples were then transferred to pre-weighed 40-mL vials that contain the appropriate preservatives required for analysis. Four (4) ounce unpreserved glass jars were filled for the soil samples that



were to be analyzed for PAHs and total petroleum hydrocarbons (TPH). The sample portions placed in glassware were then sealed with Teflon-lined lids, labeled, logged on a chain-of-custody record and placed on ice for preservation and laboratory analysis.

In order to prevent potential cross-contamination, all down-hole drilling and sampling equipment was decontaminated between boring locations. Decontamination consisted of a high pressure steam rinse using potable water. The drilling rig was steam cleaned before the start of drilling and prior to the equipment leaving the site. Rinseate was directed to the facility waste water sewer system. Sampling tools were washed in laboratory-grade detergent and rinsed with distilled water before and between sampling intervals. Disposable sampling materials were used while handling soil samples.

The Work Plan called for analyzing soil samples for two TPH fractions: the TPH C₁₀-C₂₀ fraction¹ and the TPH C₂₁-C₃₄ fraction². The laboratory parameters during the assessment deviated from the Work Plan such that only TPH-DRO was performed on the soil samples. The selected South Carolina certified laboratory was not equipped to analyze for the C₂₁-C₃₄ fraction hydrocarbon ranges. The TPH-DRO analysis provides information to evaluate the distribution of middle-distillate hydrocarbons (for example diesel fuel or kerosene) in the subsurface; however, a differentiation with heavier oils (such as lubricating or hydraulic oils) cannot be made.

3.3.2 Monitoring Well Construction

Monitoring wells were constructed using materials consistent with SC DHEC Rule R. 61-71. After the direct-push samplers were advanced into the undisturbed stratum, each soil boring was overdrilled using a 4.25-inch inner diameter hollow-stem auger (HSA) to allow for sufficient annular space for the installation of the monitoring wells. Monitoring wells were installed within the HSAs and constructed of new, factory wrapped 2-inch inside diameter (I.D.), Schedule 40 PVC, flush-joint riser and 0.010-inch slotted (10 slot) well screen. Each monitoring well was installed to span the water table with a 10-foot well screen. A threaded PVC end cap was attached to the bottom of the screened section, and a two-inch nylon expandable pressure cap (J-Plug) was placed on top of the well casing. Each casing riser was cut approximately four-inches below ground surface to accommodate flush-mount protective casings

¹ TPH C₁₀-C₂₀ fraction analysis corresponds with TPH-diesel range organics, or TPH-DRO

² TPH C₂₁-C₃₄ fraction analysis is also known as TPH-heavy oils



A sand filter pack consisting of clean silica sand was installed in each borehole annular space extending approximately one foot above the screened interval. The filter pack material was placed through the HSAs as the augers were slowly retrieved from the borehole. Bentonite pellets were added above the filter pack and hydrated in order to seal the annular space. The bentonite seal extends to approximately one foot below grade.

A flush-mount 8-inch diameter thin-wall steel protective casing is placed over the PVC well casing. The protective casing and the remaining annulus of the borehole are concreted in place. The inside clearance is approximately three (3) to four (4) inches between the top of the well casing and top of the protective casing. High-strength, fiber-reinforced concrete was used to repair the concrete floor or pavement at each monitoring well location. Each monitoring well is labeled on the inside of the protective casing with an identification plate constructed of durable, weatherproof, and rustproof material as required by SC DHEC Rule R. 61-71.

Water Well Record Forms 1903 were prepared for each of the new monitoring wells. CEC boring logs also provide a graphic depiction of each new monitoring well installed for this project. Copies of these forms are provided in Appendix A – Boring Logs and Field Forms.

3.3.3 Monitoring Well Development

The completed monitoring wells were developed after installation on December 14, 2011. Development was completed by surging and pumping in order to restore the natural hydraulic conductivity of the formation and remove fine-grained sediment from the filter pack. A combination of surging and pumping was accomplished with a Grundfos® submersible pump. Well development equipment was decontaminated prior to its use in each well. Well development activities continued until the pH, temperature, and specific conductivity measurements stabilized or a minimum of ten well volumes were removed. All reasonable attempts were made to reduce visible sediment and lower the turbidity during development. The development data from each monitoring well was recorded on designated well development forms which are provided in Appendix A – Boring Logs and Field Forms.

3.3.4 Surveying

Upon completion of the monitoring wells, the top of each well casing riser was marked with a survey datum point with an indelible ink marker. The newly-installed monitoring wells, plus the six (6) previously-installed monitoring wells (MW-18 through MW-23) were surveyed by



Powers Land Surveying of Georgetown, South Carolina, a South Carolina Registered Surveyor. The elevation of the marked datum was surveyed to the nearest one hundredth (0.01) of a foot relative to mean sea level.

3.3.5 Groundwater Sampling

Groundwater sampling was performed on the four (4) newly-installed monitoring wells (MW-CA-1 through MW-CA-4) and three (3) existing monitoring wells (MW-20, MW-21 and MW-23) for two (2) consecutive quarterly events on December 15, 2011 and March 26, 2012. CEC personnel collected the December 2011 groundwater samples and Shealy Environmental Services, Inc. (Shealy Labs) of Charlotte, North Carolina collected the March 2012 groundwater samples. The groundwater samples were analyzed in two quarterly events in order to provide temporal information on the groundwater quality associated with the shallow aquifer beneath the Compactor Area. The locations of the seven (7) monitoring wells are indicated on Figures 3 through 6.

Groundwater sampling was conducted by first purging each well of at least three (3) well volumes prior to sample collection. Measured water levels and recorded well depths were utilized to calculate the volume of water in the well. Volumes were calculated using the following formula:

$$V = (r^2\pi h) \times 3$$

Where: V = Purge volume
r = Radius of monitoring well (0.85 inches)
 π = pi (3.1415926)
h = height of water column in the well
3 = multiplier

Each monitoring well was purged and sampled using clean, disposable polyethylene bailers, until a minimum of three well volumes have been removed and field parameter readings (pH, temperature, and specific conductance) have stabilized. During purging and sampling, bailers were gently lowered and removed from the water table to minimize aeration and agitation of the sample. Turbidity measurements were also collected with each set of field parameter readings. Purging data was documented on field sampling forms which are included in Appendix A – Boring Logs and Field Forms.



At the conclusion of purging, groundwater samples were collected using laboratory-supplied bottles, appropriately preserved, and placed into an iced cooler. All groundwater samples were submitted to Shealy Labs for analysis of the following parameters:

- VOCs by US EPA SW-846 Method 8260B;
- PAHs by US EPA SW-846 Method 8270D; and,
- TPH by US EPA SW-846 Method 8015C.

The specific constituents analyzed by the laboratory are discussed in Section 4.3.

3.3.6 Quality Assurance/Quality Control

One duplicate groundwater sample was collected during each quarterly sampling event. A duplicate (MW-CA-0) sample was collected from monitoring well MW-21 during the December 2011 event. Likewise, one duplicate (DUP-1) sample was collected from MW-21 during the March 2012 event. Both duplicate groundwater samples were analyzed for VOCs Method 8260B and TPH Method 8015C during their respective events. For each quarterly event, a review of the duplicate data was completed and all analyzed parameters closely resembled the results of MW-21 from which each duplicate was collected.

The laboratory data was also reviewed by CEC to verify that proper procedures were followed and to verify that analytical/reporting errors did not occur. It was concluded from this review that the laboratory employed the appropriate and correct analytical methods and the samples were analyzed within their holding time.

3.3.7 Investigation Derived Waste Disposal

Drill cuttings and excess soil samples from each soil boring were containerized separately in appropriately labeled 55 gallon drums. ArcelorMittal coordinated the off-site disposal of the collected drill cuttings and excess soil. Development and purge water was drummed and staged on-site for subsequent treatment using the facility water treatment system.

3.4 GROUNDWATER MEASUREMENTS

In order to preliminarily evaluate groundwater flow conditions in the Compactor Area as well as the surrounding area, groundwater level measurements were collected from the newly-installed



monitoring wells plus the existing monitoring wells installed on ArcelorMittal property, and the adjacent upgradient sites -- the former Easy Pickup #8, and the Money Man Pawn Shop as shown on Figures 3 and 4. During the December 2011 sampling event, groundwater levels were collected following post-development water level stabilization and within 24 hours of groundwater sampling activities. An electronic water level/optical oil-water interface probe was utilized in order to identify free product and to measure static water levels in the wells. Static water levels and free product, if observed, was measured from each well to the nearest hundredth (0.01) of a foot from the well datum point. The interface probe was decontaminated between measurement locations using an isopropanol rinse followed by a two-step AlconoxTM wash, and a distilled water rinse. The same methods for collecting groundwater level measurements were applied to the March 2012 sampling event. However, a standard water level probe was utilized throughout the duration of the March 2012 event and therefore free product could not be accurately measured in the applicable monitoring wells. Water level measurements recorded from both quarterly events are included in Table 1 - Groundwater Elevations – December 16, 2011 and Table 2 – Groundwater Elevations – March 26, 2012. Recorded groundwater level measurements are used to generate potentiometric surface contour maps for the water table aquifer (Figures 3 and 4, respectively). The potentiometric surface maps illustrate groundwater flow directions and hydraulic gradients at the Site and are discussed in Section 4.1.

3.5 HYDROCARBON FINGERPRINTING ANALYSES

Forensic analysis was performed on a sample of free product from MW-23 and a sample of virgin hydraulic oil, which is currently in use in the Compactor Area. These analyses were performed to compare the current hydraulic fluid (Shell TellusTM hydraulic oil) with the free product in MW-23. A sample of groundwater from MW-21 was also submitted, but this sample was not analyzed because of insufficient product volume. Samples were collected using methods consistent with those described in Section 3.3.5 above except that the free product from MW-23 was decanted from the top of the water column in the bailer and poured directly into 40 ml laboratory bottles, appropriately preserved, and placed into an iced cooler. Each sample was submitted to Friedman & Bruya, Inc. (Friedman & Bruya) of Seattle, Washington and analyzed using a Gas Chromatograph/Mass Spectrometer (GC/MS) fitted with a flame ionization detector (FID). The laboratory method was a modification of ASTM Standard D 5739 as GC/MS fingerprint with selective ion scans. The resultant output provides information on the boiling range and general composition of the hydrocarbon product in the sample. A qualified chemist at Friedman & Bruya reviewed the GC/MS traces and compared results from the virgin hydraulic



oil with results of the free product in MW-23. Results of the forensic analysis are described in Section 4.4.



4.0 RESULTS

Site-specific investigative data have been used to characterize groundwater flow directions and impact to shallow soils and groundwater beneath the ArcelorMittal plant. The results of field measurements and laboratory analyses are described below. Soil and groundwater samples were analyzed for VOCs, PAHs, and TPH-DRO, as directed by SC DHEC. For purposes of this report, VOC compounds were segregated into Petroleum VOCs (PVOCs) and Chlorinated VOCs (CVOCs).

4.1 GROUNDWATER FLOW DIRECTION

Static water level measurements were collected during two sampling events from 27 existing and newly installed groundwater monitoring wells located at the Napa Auto Parts (former Easy Pickup #8), the Money Man Pawn Shop (former gas station) and the ArcelorMittal Georgetown plant. Water levels collected in December 2011 and March 2012 are presented in Tables 1 and 2, respectively as shown in Figures 5 and 6, free product was detected at MW-11 at the Money Man Pawn Shop site. Figures 3 and 4 present water table potentiometric contours which are very similar and characterized by a predominant groundwater flow direction toward the east-northeast during both sampling events.

4.2 SOIL ANALYTICAL RESULTS

Soil analyses were completed by Shealy Environmental Services, Inc. of Charlotte, North Carolina. The laboratory analytical report is included in Appendix B – Shealy Laboratory Reports.

The following soil samples were analyzed in the laboratory:

- MW-CA-1/S-2 (2 to 4 feet below grade, PID reading of 50.3)
- MW-CA-2/S-1 (1 to 2 feet below grade, PID reading of 4.0)
- MW-CA-3/S-3 (6 to 8 feet below grade, PID reading of 4,363)
- MW-CA-4/S-3 (4 to 6 feet below grade, PID reading of 5.3)

Soil analytical results for VOCs, PAHs, and TPH are provided in Table 3. All results are reported in micrograms per kilogram (ug/kg), which is roughly equivalent to parts per billion (ppb).



VOCs: PVOCs were detected in three of the four soil samples:

- MW-CA-1/S-2: 2-butanone (Methyl Ethyl Ketone (MEK)), and acetone at 23 ug/kg and 130 ug/kg, respectively;
- MW-CA-2/S-1: acetone at 24 ug/kg;
- MW-CA-3/S-3: cyclohexane and xylenes at 69 ug/kg and 10000 ug/kg, respectively and
- MW-CA-4/S-3: acetone at 54 ug/kg.

Acetone and MEK are considered to be potential artifacts from the laboratory analyses and are not interpreted as an indicator of gasoline-related contamination of the soils at these sampling locations. Furthermore, acetone and MEK are not typically associated with refined petroleum products such as gasoline; however, for convenience and simplicity with reporting, these compounds were grouped along with other, non-chlorinated compounds as PVOC. Cyclohexane and xylenes are indicators of gasoline-related contamination of the soil at MW-CA-3 and are believed to have migrated from a release from the Easy Pickup # 8 site.

CVOCs were detected in each of the four soil samples analyzed, including:

- MW-CA-1/S-2: tetrachloroethene (PCE) at 10 ug/kg;
- MW-CA-2/S-1: cis-1,2-dichloroethene (cis-1,2-DCE) and PCE at 10 ug/kg and 7.6 ug/kg, respectively;
- MW-CA-3/S-3: 1,1-dichloroethene (1,1-DCE), cis-1,2-DCE, PCE, trichloroethene (TCE), and vinyl chloride at concentrations ranging from 1,000 ug/kg to 1.80×10^6 ug/kg; and
- MW-CA-4/S-3: cis-1,2-DCE and PCE at 34 ug/kg and 8.8 ug/kg, respectively.

PAH: PAHs were detected in only three of the four soil samples including:

- MW-CA-1/S-2: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, fluoranthene and pyrene at concentrations between 490 ug/kg and 800 ug/kg;
- MW-CA-3/S-3: naphthalene at 450 ug/kg; and
- MW-CA-4/S-3: fluoranthene, and pyrene at 110 ug/kg each.

TPH: TPH was detected in all four soil samples analyzed as follows:

- MW-CA-1/S-2: 370,000 ug/kg
- MW-CA-2/S-1: 26,000 ug/kg



- MW-CA-3/S-3: 5,200,000 ug/kg
- MW-CA-4/S-3: 66,000 ug/kg

MW-CA-1, MW-CA-2 and MW-CA-4 soils do not appear to be significantly impacted as detected concentrations were in the low ppb range. Minor concentrations of TPH, VOCs, PAHs, and TPH constituents are well below US EPA screening levels for soils at industrial sites (Industrial Screening Levels). A comparison of the laboratory analytical results with the US EPA screening levels is provided in Table 3.

4.3 GROUNDWATER ANALYTICAL RESULTS

Groundwater analyses were also completed by Shealy Environmental Services, Inc. of Charlotte, North Carolina. The laboratory analytical report is included in Appendix B – Shealy Laboratory Reports.

Groundwater analytical results from two sampling events in December 2011 and March 2012 are presented in Table 4 and Table 5, respectively and are inconclusive at this time. Seven wells were sampled, including the four new MW-CA-series wells and the existing wells MW-20, MW-21 and MW-23. Figure 5 and Figure 6 provide plan view depictions of the areal distribution of the detected analytes for both sampling events. VOC detections have been segregated into CVOCs and PVOCs in Figures 5 and 6. All results are presented in micrograms per liter (ug/L), which is roughly equivalent to ppb.

PVOCs were detected in four of the seven monitoring wells sampled in December 2011, including:

- MW-CA-2: benzene and toluene at 1.7 ug/L and 1.0 ug/L, respectively;
- MW-CA-3: benzene, ethylbenzene, isopropylbenzene, toluene and xylenes at concentrations ranging from 2.8 ug/L to 32 ug/L;
- MW-20: MTBE at 1.3 ug/L; and
- MW-23: benzene, ethylbenzene, isopropylbenzene, toluene and xylenes at concentrations ranging from 1.1 ug/L to 57 ug/L.

PVOCs were detected in three of the seven monitoring wells sampled in March 2012, including:

- MW-CA-2: benzene and toluene at 2.0 ug/L and 1.3 ug/L, respectively;



- MW-CA-3: benzene, ethylbenzene, isopropylbenzene, styrene, toluene and xylenes at concentrations ranging from 1.4 ug/L to 85 ug/L; and
- MW-23: benzene, ethylbenzene, isopropylbenzene, styrene, toluene and xylenes at concentrations ranging from 1.9 ug/L to 130 ug/L.

CVOCs were detected in four of the seven monitoring wells sampled in December 2011, including:

- MW-CA-1: cis-1,2-dichloroethene (DCE) and tetrachloroethene (PCE) at 1.7 ug/L and 3.8 ug/L, respectively;
- MW-CA-2: cis-1,2-DCE, trans-1,2-DCE, trichloroethene (TCE), and PCE at concentrations ranging from 1.7 ug/L to 11 ug/L;
- MW-CA-3: 1,1-dichloroethane, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, TCE, PCE, and vinyl chloride at concentrations ranging from 16 ug/L to 7,100 ug/L; and
- MW-23: 1,1-dichloroethane, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, TCE, PCE and vinyl chloride at concentrations ranging from 11 ug/L to 6,800 ug/L.

CVOCs were detected in three of the seven monitoring wells sampled in March 2012, including:

- MW-CA-2: cis-1,2-DCE, trans-1,2-DCE, TCE, and PCE at concentrations ranging from 1.7 ug/L to 9.9 ug/L;
- MW-CA-3: 1,1,2,2-tetrachloroethane, 1,1-dichloroethane, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, TCE, PCE, and vinyl chloride at concentrations ranging from 7.3 ug/L to 27,000 ug/L; and
- MW-23: 1,1-dichloroethane, 1,1-DCE, 1,1,2-trichloroethane, chloroethane, cis-1,2-DCE, trans-1,2-DCE, dibromochloromethane, TCE, PCE, and vinyl chloride at concentrations ranging from 2.1 ug/L to 9,200 ug/L.

PAH: PAHs were detected in three of the seven monitoring wells sampled in December 2011, including:

- MW-CA-2: acenaphthene, fluorene and naphthalene at 3.3 ug/L , 1.0 ug/L, and 9.8 ug/L, respectively;
- MW-CA-3: naphthalene at 1.1 ug/L;



- MW-21: 2-methylnaphthalene, acenaphthene, fluorene, naphthalene, and phenanthrene at concentrations ranging from 3.0 ug/L to 79 ug/L.

PAHs were detected in three of the seven monitoring well sampled in March 2012, including:

- MW-CA-2: acenaphthene, fluorene and naphthalene at 4.8 ug/L , 1.1 ug/L, and 8.4 ug/L, respectively;
- MW-CA-3: naphthalene at 17 ug/L;
- MW-21: 2-methylnaphthalene, acenaphthene, fluorene, naphthalene, and phenanthrene at concentrations ranging from 1.80 ug/L to 36 ug/L.

TPH: TPH was detected in all seven monitoring wells sampled in December 2011 as follows:

- MW-CA-1: 450 ug/L;
- MW-CA-2: 780 ug/L;
- MW-CA-3: 4,000 ug/L;
- MW-CA-4: 1,000 ug/L;
- MW-20: 420 ug/L;
- MW-21: 3,100 ug/L; and
- MW-23: 310,000 ug/L.

TPH was detected in all seven monitoring wells sampled in March 2012 as follows:

- MW-CA-1: 370 ug/L;
- MW-CA-2: 740 ug/L;
- MW-CA-3: 180,000 ug/L;
- MW-CA-4: 380 ug/L;
- MW-20: 370 ug/L;
- MW-21: 2,500 ug/L; and
- MW-23: 2,700,000 ug/L.

4.4 HYDROCARBON FINGERPRINTING ANALYSES

The following additional hydrocarbon fingerprinting analyses were completed by Friedman & Bruya as described in Section 3.5. The GC/MS trace of the sample from MW-23 indicates that



the free product is comprised of two components: 1) a low boiling-point material such as weathered gasoline and/or solvents; and, 2) a high boiling-point material such as hydraulic oil. Further analysis of the samples using a selective ion scan (with the virgin hydraulic oil as a reference sample) shows that the oil, or the high boiling-point fraction, from the product in MW-23 may be similar to the reference sample. This information, coupled with the PVOC and CVOC analyses described in Section 4.3, indicates that the free product in MW-23 may consist of hydraulic oil that has commingled with constituents of weathered gasoline and chlorinated solvents from at least two additional sources other than the hydraulic system in the Compactor Area. A copy of the forensic analytical report is provided in Appendix C – Friedman & Bruya Laboratory Report.



5.0 CONCLUSIONS

Based on the data generated during this assessment of subsurface conditions along the south end of the ArcelorMittal Georgetown plant, following is a list of key findings from the investigation:

- The property has a history of industrial activity that dates back to at least 1899. From 1899 to 1932, Atlantic Coast Lumber operated a sawmill on the Site. Prior to that, the property was part of a rice plantation. The current steel plant began operation in 1969.
- Two former gasoline stations existed on properties immediately across Fraser Street adjacent and upgradient from the ArcelorMittal property. Petroleum hydrocarbons consistent with a release of gasoline are present in groundwater monitoring wells at both locations indicating a gasoline release from these properties. Those same gasoline constituents were detected in wells immediately downgradient on the ArcelorMittal property indicating that the off-site releases have migrated onto ArcelorMittal's property. The use and presence of chlorinated solvents on both of these former gasoline station sites does not appear to have been investigated to date. Sampling for PVOCs, CVOCs or TPH was not identified by ARM in its April 29, 2011 report for the Easy Pickup #8 site. As shown in Figures 5 and 6, free product was detected at MW-11 at the Money Man Pawn Shop site.
- Based on a review of available records and interviews conducted with long-time Georgetown employees, there has never been any fuel or chlorinated solvent storage or use in the Compactor Area of the ArcelorMittal facility.
- Local geology is influenced by mud deposited in meandering tidal creeks, sand from Pleistocene beach ridges, and anthropogenic influence from agricultural and industrial development. Borehole logs indicate the upper 15 to 20 feet of subsurface material is comprised of fairly uniform fine to medium-grained sand deposits.
- Groundwater flow direction is toward the east-northeast beneath the facility.
- Laboratory analyses of soil samples indicate the presence of PVOCs, CVOCs, and TPH at elevated concentrations in the sample from MW-CA-3. Concentrations of PCE, TCE and vinyl chloride exceeded US EPA Industrial Screening Levels in this sample. Concentrations of PVOCs were markedly lower than CVOC concentrations.
- Low concentrations of PAHs (less than 1,000 ppb) were detected in three of the soil borings. Industrial Screening Levels were not listed for the detected compounds.



- PVOCs, CVOCs and TPH were detected in MW-CA-3 and MW-23 during both the December 2011 and March 2012 sampling events. Concentrations of cis-1,2-DCE, TCE, PCE, and vinyl chloride exceeded US EPA Maximum Contaminant Levels (MCLs) in these two wells. Concentrations of PVOCs were markedly lower than CVOC concentrations indicating the source for these compounds is at some distance from the wells.
- Evaluation of results from the preliminary fingerprinting analyses indicates that the source of the free product in MW-23 may consist of hydraulic oil that has commingled with constituents of weathered gasoline and chlorinated solvents from at least two additional sources other than the hydraulic system in the Compactor Area.

The field procedures, laboratory analyses and results provided in this Groundwater Assessment Report are consistent with the scope of work specified in the Groundwater Assessment Work Plan that was approved by SC DHEC on November 1, 2011. TPH analyses deviated slightly from the approved Work Plan specification as discussed in Section 3.3.1; however, this deviation did not affect the conclusions provided above.



6.0 RECOMMENDATIONS

With respect to the free product identified in MW-23 and MW-CA-3, ArcelorMittal plans to commence the following activities:

- The hydraulic oil storage tank will be replaced by the end of June 2012.
- The sumps underneath the Compactor area will be cleaned and inspected to verify structural integrity. If cracks are identified, they will be repaired. The cleaning, inspection and any necessary repairs will be completed by the end of July 2012.
- Oil absorbent materials will be installed in wells MW-CA-3 and MW-23 and changed out monthly as necessary.

With respect to chlorinated solvents and other petroleum hydrocarbon contamination detected in MW-CA-3 and MW-23, there does not appear to have been any fuel or chlorinated solvent storage or use in the Compactor Area that would suggest the ArcelorMittal facility is a source of those constituents. The use and presence of chlorinated solvents at both of these former adjacent upgradient gasoline station sites does not appear to have been investigated to date. Sampling for PVOCs and CVOCs was not identified by ARM in its April 29, 2011 report for the Easy Pickup #8 site. CEC recommends that sampling and evaluation of PVOCs and CVOCs at these adjacent should be conducted by those facilities.

Groundwater elevations and samples will continue to be obtained from the well network at the ArcelorMittal plant on a semi-annual basis upon further discussion with SC DHEC.



7.0 REFERENCES

CEC, 2011. *Groundwater Assessment Work Plan, ArcelorMittal Georgetown, Inc., 419 South Fraser Street, Georgetown, Georgetown County, South Carolina, SC DHEC Site #04798.*

Circa, Inc., 2002. *City of Georgetown Historic Resources Survey, Final Report.* Prepared for the City of Georgetown and the South Carolina Department of Archives and History.

Fetter, C. W., 2001. *Applied Hydrogeology.* Fourth Edition. Prentice Hall, publisher.

Freeze, R. Allan, John A. Cherry, 1974. *Groundwater.* Prentice Hall, publisher.

Linder, S. C. and Marta Leslie Thacker, 2001. *Historical Atlas of the Rice Plantations of Georgetown County and the Santee River.* South Carolina Department of Archives and History.

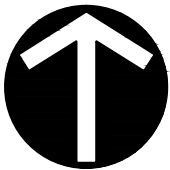
Patchineelam, S. M., Bjorn Kjerfve, L. Robert Gardner, 1999. *A Preliminary Sediment Budget for the Winyah Bay Estuary, South Carolina, USA.* In *Marine Geology*, v. 162, pp. 133-144.

TRC, 2010. *Georgetown Historic District Survey, Georgetown, South Carolina.* Prepared for the City of Georgetown Building and Planning Department

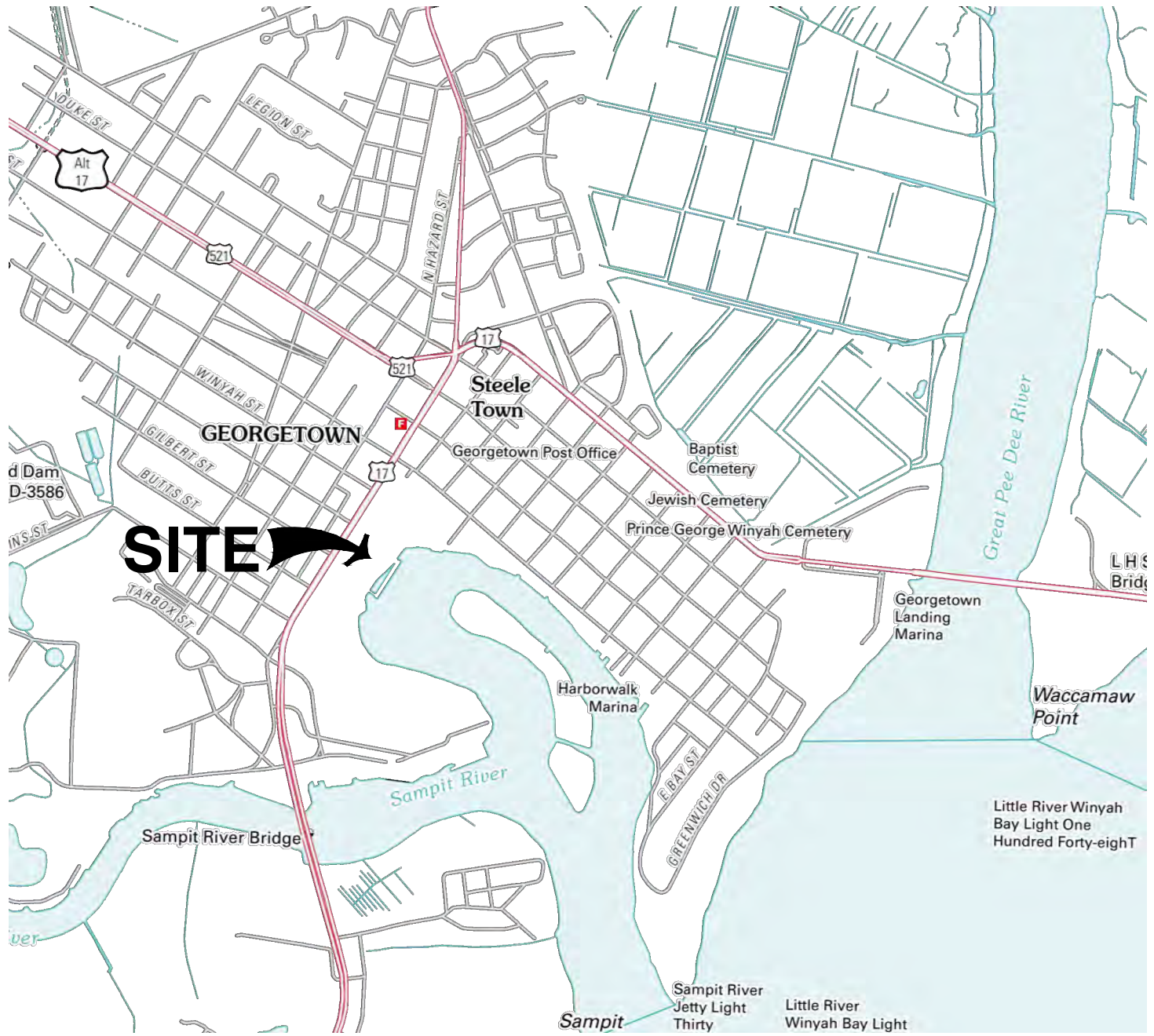


FIGURES

P:\2011\111-036\CADD\DWG\exhibits\Groundwater Assessment Report\111036 - Fig 1 - Site Location.dwg\FIGURE 1 - SITE LOCATION MAP\LS\31/05/2012 - jkoester) - LP: 5/31/2012 8:27 AM

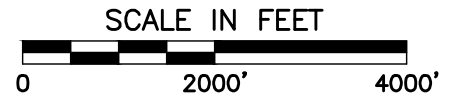


NORTH



REFERENCE

1. U.S.G.S. 7.5' TOPOGRAPHIC MAP, GEORGETOWN SOUTH QUADRANGLE, SOUTH CAROLINA DATED: 2011.



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GROUNDWATER ASSESSMENT REPORT
GEORGETOWN, SOUTH CAROLINA

SITE LOCATION MAP

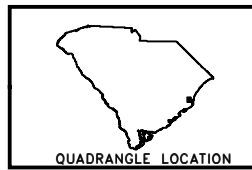
DRAWN BY:	BB	CHECKED BY:	AM	APPROVED BY:	*RAS	FIGURE NO.:	1
DATE:	SEPT. 2011	DWG SCALE:	1" = 200'	PROJECT NO:	111-036		



NORTH



SOURCE: PORTION OF THE USGS 7.5-MINUTE SERIES TOPOGRAPHIC QUADRANGLE MAP - GEORGETOWN SOUTH, SOUTH CAROLINA - 1977.



QUADRANGLE LOCATION



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GEORGETOWN, SOUTH CAROLINA

SITE VICINITY MAP

DRAWN BY: MJB CHECKED BY: RJS
DATE: APRIL 30, 2012 DWG SCALE: 1" = 200'

APPROVED BY: RJS*
PROJECT NO: 111-036

FIGURE NO: **2**

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Signature on File *

P:\2011\111-036\CADD\DWG\EXHIBITS\GROUNDWATER ASSESSMENT REPORT\111036 - FIG 3 - POTENTIOMETRIC CONTOUR MAP - DECEMBER 2011.DWG(1) LSKOESTER - 5/31/2012 8:43:54 AM - LP: 5/31/2012 11:19:41 AM

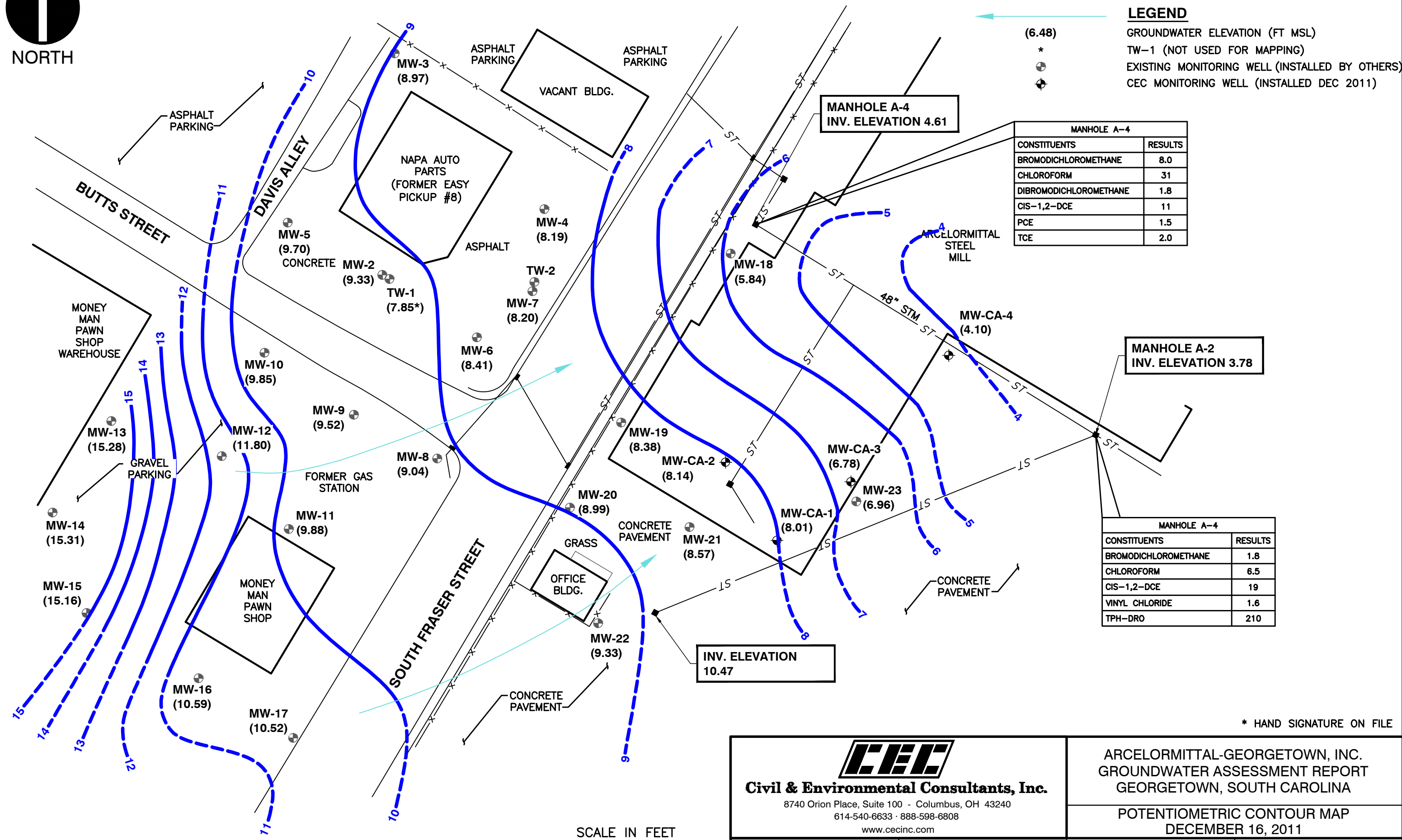


LEGEND

- (6.48) ←
- *
- ⊕
- ⊙
- GROUNDWATER ELEVATION (FT MSL)
- TW-1 (NOT USED FOR MAPPING)
- EXISTING MONITORING WELL (INSTALLED BY OTHERS)
- CEC MONITORING WELL (INSTALLED DEC 2011)

MANHOLE A-4	
CONSTITUENTS	RESULTS
BROMODICHLOROMETHANE	8.0
CHLOROFORM	31
DIBROMODICHLOROMETHANE	1.8
CIS-1,2-DCE	11
PCE	1.5
TCE	2.0

MANHOLE A-4	
CONSTITUENTS	RESULTS
BROMODICHLOROMETHANE	1.8
CHLOROFORM	6.5
CIS-1,2-DCE	19
VINYL CHLORIDE	1.6
TPH-DRO	210



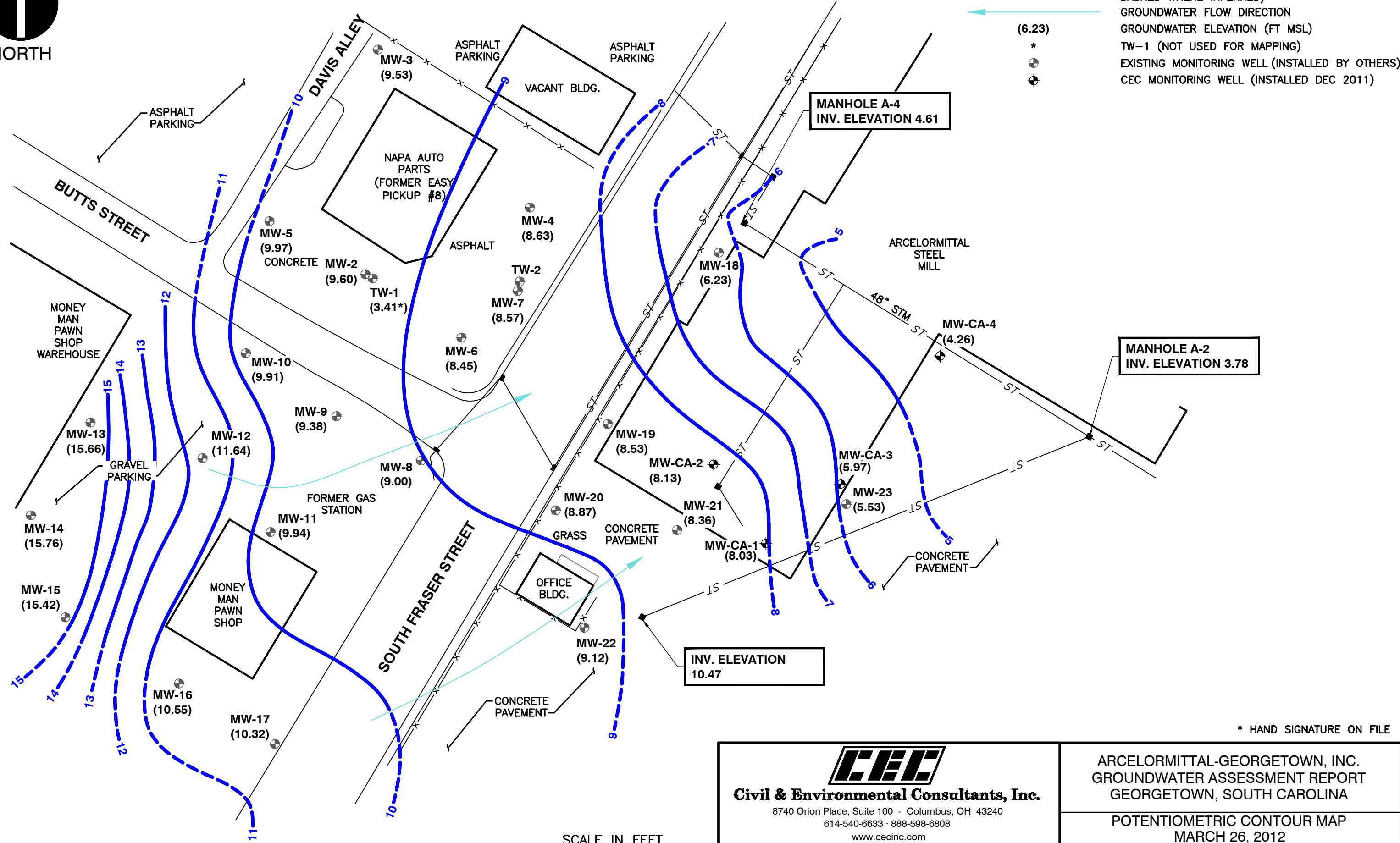
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DRAWN BY: BTW DATE: FEB 2011	CHECKED BY: BRB DWG SCALE: 1" = 60'	APPROVED BY: *RAS PROJECT NO: 111-036	FIGURE NO.: 3

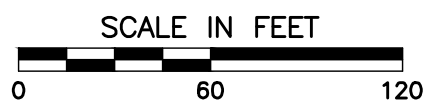
F:\2011\11-036\CADD\DWG\EXHIBITS\GROUNDWATER ASSESSMENT REPORT\111036 - FIG 4 - POTENTIOMETRIC CONTOUR MAP - MARCH 2012.DWG(1) LS:(KOEESTER - 5/31/2012 8:45:20 AM) - LP: 5/31/2012 8:45:34 AM



- LEGEND**
- 4 GROUNDWATER CONTOUR (FT MSL)
 - - - - - DASHED WHERE INFERRED
 - ← GROUNDWATER FLOW DIRECTION
 - (6.23) GROUNDWATER ELEVATION (FT MSL)
 - * TW-1 (NOT USED FOR MAPPING)
 - ⊕ EXISTING MONITORING WELL (INSTALLED BY OTHERS)
 - ⊕ CEC MONITORING WELL (INSTALLED DEC 2011)

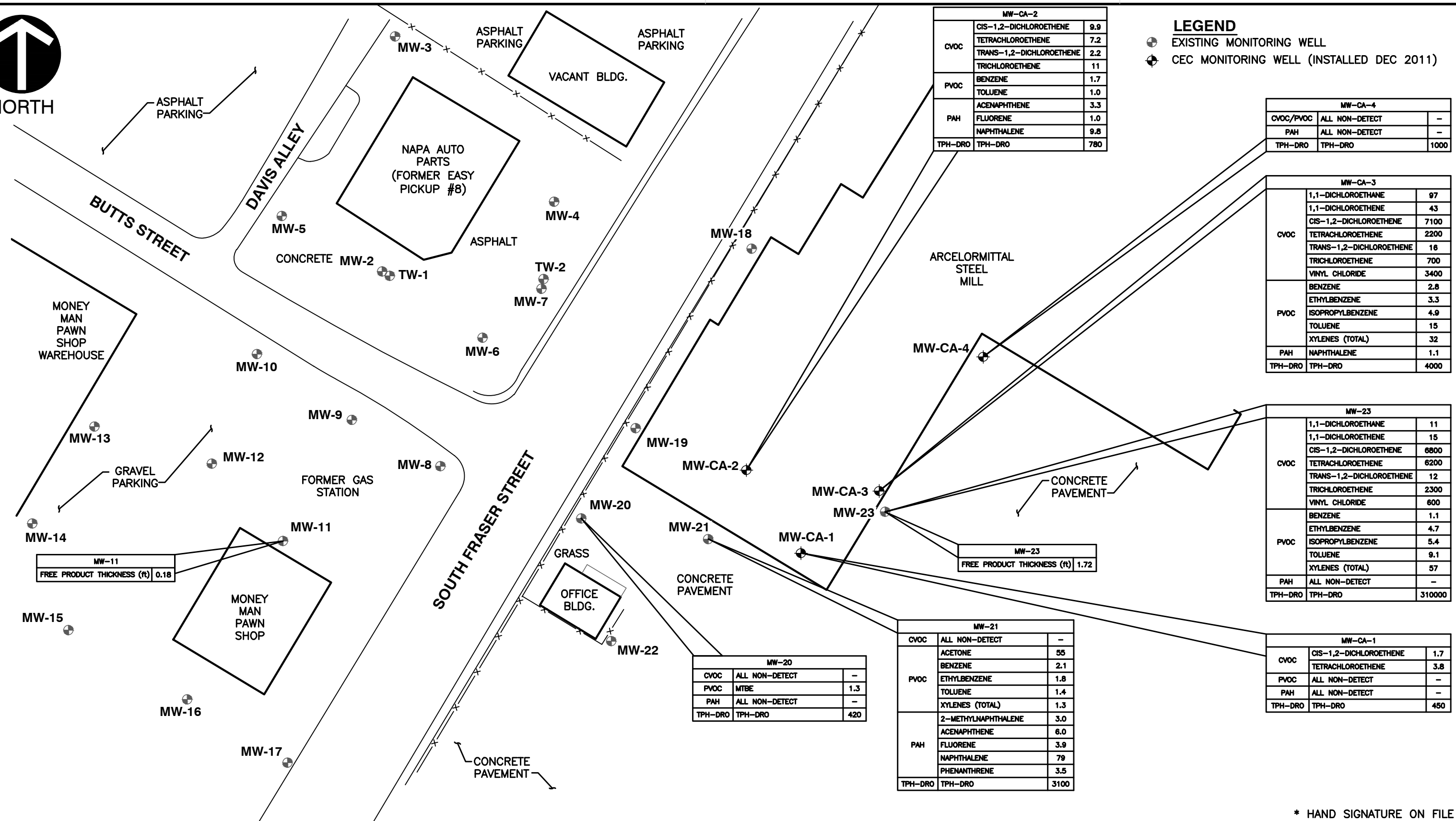


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DRAWN BY: BTW DATE: APR 2012	CHECKED BY: BRB DWG SCALE: 1" = 60'	APPROVED BY: *RAS PROJECT NO: 111-036	FIGURE NO.: 4

P:\2011\11-036-CADD\DWG\EXHIBITS\GROUNDWATER ASSESSMENT REPORT\11036 - FIG 5 - DETECTED CONSTITUENTS IN GROUNDWATER - DECEMBER 2011.DWG LS:JKOESTER - 5/31/2012 8:31:57 AM - LP: 5/31/2012 8:32:10 AM



LEGEND
 ⊕ EXISTING MONITORING WELL
 ⊕ CEC MONITORING WELL (INSTALLED DEC 2011)

MW-CA-2		
CVOC	CIS-1,2-DICHLOROETHENE	9.9
	TETRACHLOROETHENE	7.2
	TRANS-1,2-DICHLOROETHENE	2.2
	TRICHLOROETHENE	11
PVOC	BENZENE	1.7
	TOLUENE	1.0
PAH	ACENAPHTHENE	3.3
	FLUORENE	1.0
	NAPHTHALENE	9.8
TPH-DRO	TPH-DRO	780

MW-CA-4		
CVOC/PVOC	ALL NON-DETECT	-
PAH	ALL NON-DETECT	-
TPH-DRO	TPH-DRO	1000

MW-CA-3		
CVOC	1,1-DICHLOROETHANE	97
	1,1-DICHLOROETHENE	43
	CIS-1,2-DICHLOROETHENE	7100
	TETRACHLOROETHENE	2200
	TRANS-1,2-DICHLOROETHENE	16
PVOC	TRICHLOROETHENE	700
	VINYL CHLORIDE	3400
	BENZENE	2.8
	ETHYLBENZENE	3.3
	ISOPROPYLBENZENE	4.9
PAH	TOLUENE	15
	XYLENES (TOTAL)	32
TPH-DRO	NAPHTHALENE	1.1
TPH-DRO	TPH-DRO	4000

MW-23		
CVOC	1,1-DICHLOROETHANE	11
	1,1-DICHLOROETHENE	15
	CIS-1,2-DICHLOROETHENE	6800
	TETRACHLOROETHENE	6200
	TRANS-1,2-DICHLOROETHENE	12
PVOC	TRICHLOROETHENE	2300
	VINYL CHLORIDE	600
	BENZENE	1.1
	ETHYLBENZENE	4.7
	ISOPROPYLBENZENE	5.4
PAH	TOLUENE	9.1
	XYLENES (TOTAL)	57
TPH-DRO	ALL NON-DETECT	-
TPH-DRO	TPH-DRO	310000

MW-23	
FREE PRODUCT THICKNESS (ft)	1.72

MW-21		
CVOC	ALL NON-DETECT	-
PVOC	ACETONE	55
	BENZENE	2.1
	ETHYLBENZENE	1.8
	TOLUENE	1.4
PAH	XYLENES (TOTAL)	1.3
	2-METHYLNAPHTHALENE	3.0
	ACENAPHTHENE	6.0
	FLUORENE	3.9
	NAPHTHALENE	79
TPH-DRO	PHENANTHRENE	3.5
TPH-DRO	TPH-DRO	3100

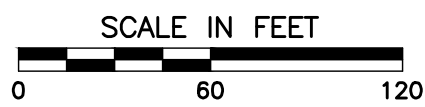
MW-20		
CVOC	ALL NON-DETECT	-
PVOC	MTBE	1.3
PAH	ALL NON-DETECT	-
TPH-DRO	TPH-DRO	420

MW-11	
FREE PRODUCT THICKNESS (ft)	0.18

MW-CA-1		
CVOC	CIS-1,2-DICHLOROETHENE	1.7
CVOC	TETRACHLOROETHENE	3.8
PVOC	ALL NON-DETECT	-
PAH	ALL NON-DETECT	-
TPH-DRO	TPH-DRO	450

NOTE: ALL DETECTED CONSTITUENTS REPORTED AS ug/L

CVOC = CHLORINATED VOLATILE ORGANIC COMPOUNDS
 PVOC = PETROLEUM VOLATILE ORGANIC COMPOUNDS
 PAH = POLYCYCLIC AROMATIC HYDROCARBONS
 TPH-DRO = TOTAL PETROLEUM HYDROCARBONS - DIESEL RANGE ORGANICS




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 DATE: MAY 2011 DWG SCALE: 1" = 60' PROJECT NO: 111-036

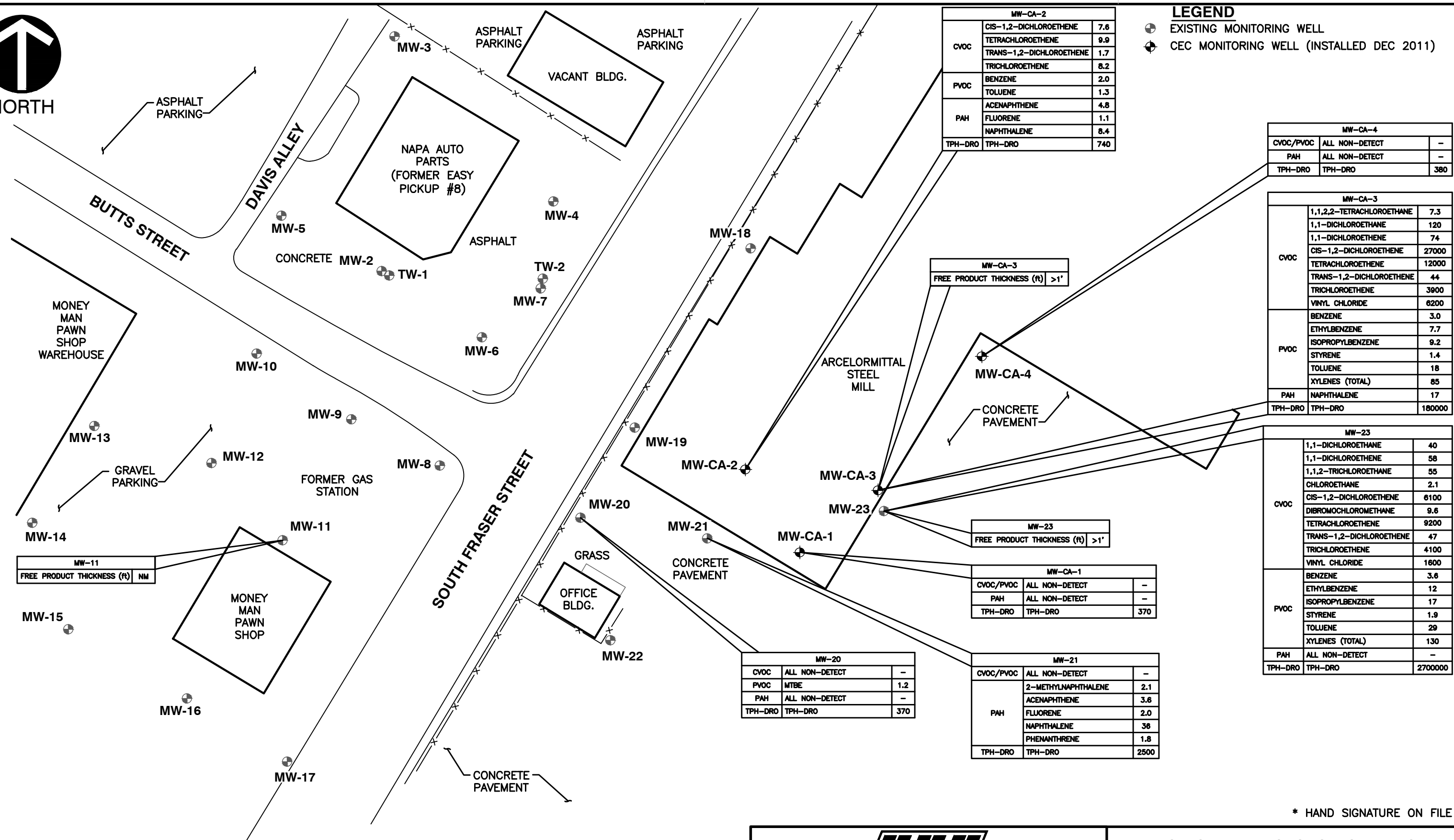
ARCELORMITTAL-GEORGETOWN, INC.
 GROUNDWATER ASSESSMENT REPORT
 GEORGETOWN, SOUTH CAROLINA

DETECTED CONSTITUENTS IN GROUNDWATER
 DECEMBER 16, 2011

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* HAND SIGNATURE ON FILE

P:\2011\11-036\CADD\DWG\EXHIBITS\GROUNDWATER ASSESSMENT REPORT\111036 - FIG 6 - DETECTED CONSTITUENTS IN GROUNDWATER - MARCH 2012.DWG[1].LS:(KROESTER - 5/31/2012 8:36:45 AM) - LP: 5/31/2012 8:37:05 AM



LEGEND
 ● EXISTING MONITORING WELL
 ⊕ CEC MONITORING WELL (INSTALLED DEC 2011)

MW-CA-2		
CVOC	CIS-1,2-DICHLOROETHENE	7.6
	TETRACHLOROETHENE	9.9
	TRANS-1,2-DICHLOROETHENE	1.7
PVOC	TRICHLOROETHENE	8.2
	BENZENE	2.0
PAH	TOLUENE	1.3
	ACENAPHTHENE	4.8
	FLUORENE	1.1
TPH-DRO	NAPHTHALENE	8.4
	TPH-DRO	740

MW-CA-4		
CVOC/PVOC	ALL NON-DETECT	-
PAH	ALL NON-DETECT	-
TPH-DRO	TPH-DRO	380

MW-CA-3		
CVOC	1,1,2,2-TETRACHLOROETHANE	7.3
	1,1-DICHLOROETHANE	120
	1,1-DICHLOROETHENE	74
	CIS-1,2-DICHLOROETHENE	27000
	TETRACHLOROETHENE	12000
	TRANS-1,2-DICHLOROETHENE	44
PVOC	TRICHLOROETHENE	3900
	VINYL CHLORIDE	6200
	BENZENE	3.0
	ETHYLBENZENE	7.7
	ISOPROPYLBENZENE	9.2
	STYRENE	1.4
PAH	TOLUENE	18
	XYLENES (TOTAL)	85
	NAPHTHALENE	17
TPH-DRO	TPH-DRO	180000

MW-23		
CVOC	1,1-DICHLOROETHANE	40
	1,1-DICHLOROETHENE	58
	1,1,2-TRICHLOROETHANE	55
	CHLOROETHANE	2.1
	CIS-1,2-DICHLOROETHENE	6100
	DIBROMOCHLOROMETHANE	9.6
	TETRACHLOROETHENE	9200
	TRANS-1,2-DICHLOROETHENE	47
	TRICHLOROETHENE	4100
PVOC	VINYL CHLORIDE	1600
	BENZENE	3.6
	ETHYLBENZENE	12
	ISOPROPYLBENZENE	17
	STYRENE	1.9
	TOLUENE	29
PAH	XYLENES (TOTAL)	130
	ALL NON-DETECT	-
TPH-DRO	TPH-DRO	2700000

MW-11	
FREE PRODUCT THICKNESS (ft)	NM

MW-CA-3	
FREE PRODUCT THICKNESS (ft)	>1'

MW-23	
FREE PRODUCT THICKNESS (ft)	>1'

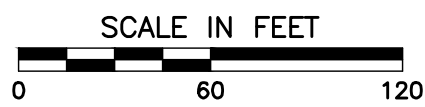
MW-CA-1		
CVOC/PVOC	ALL NON-DETECT	-
PAH	ALL NON-DETECT	-
TPH-DRO	TPH-DRO	370

MW-20		
CVOC	ALL NON-DETECT	-
PVOC	MTBE	1.2
PAH	ALL NON-DETECT	-
TPH-DRO	TPH-DRO	370

MW-21		
CVOC/PVOC	ALL NON-DETECT	-
PAH	2-METHYLNAPHTHALENE	2.1
	ACENAPHTHENE	3.6
	FLUORENE	2.0
	NAPHTHALENE	36
TPH-DRO	PHENANTHRENE	1.8
	TPH-DRO	2500

NOTE: ALL DETECTED CONSTITUENTS REPORTED AS ug/L

CVOC = CHLORINATED VOLATILE ORGANIC COMPOUNDS
 PVOC = PETROLEUM VOLATILE ORGANIC COMPOUNDS
 PAH = POLYCYCLIC AROMATIC HYDROCARBONS
 TPH-DRO = TOTAL PETROLEUM HYDROCARBONS - DIESEL RANGE ORGANICS
 NM = NOT MEASURED




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DRAWN BY: BTW CHECKED BY: BRB APPROVED BY: *RAS
 DATE: MAY 2012 DWG SCALE: 1" = 60' PROJECT NO: 111-036

ARCELORMITTAL-GEORGETOWN, INC.
 GROUNDWATER ASSESSMENT REPORT
 GEORGETOWN, SOUTH CAROLINA
 DETECTED CONSTITUENTS IN GROUNDWATER
 MARCH 26, 2012

* HAND SIGNATURE ON FILE
 DRAWING NO.: **6**



TABLES

TABLE 1 - GROUNDWATER ELEVATIONS - DECEMBER 16, 2011

ArcelorMittal Georgetown Groundwater Assessment

CEC Project No. 111-036

Well I.D.	Top of PVC Elevation (feet above mean seal level)	Depth to Free Product (feet)	Depth to Water (feet)	Amount of Free Product (feet)	Groundwater Elevation (ft.) (feet above mean seal level)	Time	Comments
TW-1	14.46	-----	6.61	-----	7.85	658	Standing Mud in Protective Casing Above PVC Riser/ Well Labeled "PW-1"
TW-2	Unable to Locate / Possibly Abandoned						
MW-2	14.56	-----	5.23	-----	9.33	700	Standing Mud in Protective Casing Above PVC Riser
MW-3	16.56	-----	7.59	-----	8.97	712	-----
MW-4	13.75	-----	5.56	-----	8.19	642	-----
MW-5	16.19	-----	6.49	-----	9.70	708	-----
MW-6	13.81	-----	5.40	-----	8.41	653	Standing Water in Protective Casing Below PVC Riser
MW-7	13.29	-----	5.09	-----	8.20	646	Standing Water in Protective Casing Above PVC Riser/ Removed Prior to Collecting WL
MW-8	13.95	-----	4.91	-----	9.04	810	-----
MW-9	14.96	-----	5.44	-----	9.52	816	-----
MW-10	15.44	-----	5.59	-----	9.85	748	Standing Water in Protective Casing Below PVC Riser
MW-11	15.42	5.36	5.54	0.18	9.88	738	Standing Water in Protective Casing Below PVC Riser
MW-12	16.44	-----	4.64	-----	11.80	744	-----
MW-13	16.76	-----	1.48	-----	15.28	751	Standing Water in Protective Casing Below PVC Riser
MW-14	17.08	-----	1.77	-----	15.31	755	-----
MW-15	16.92	-----	1.76	-----	15.16	759	-----
MW-16	15.80	-----	5.21	-----	10.59	802	Standing Water in Protective Casing Below PVC Riser
MW-17	15.22	-----	4.70	-----	10.52	805	Standing Water in Protective Casing Below PVC Riser
MW-18	12.03	-----	6.19	-----	5.84	904	-----
MW-19	13.95	-----	5.57	-----	8.38	908	-----
MW-20	14.62	-----	5.63	-----	8.99	936	Standing Water in Protective Casing Below PVC Riser
MW-21	13.86	-----	5.29	-----	8.57	930	Standing Water in Protective Casing Below PVC Riser
MW-22	13.94	-----	4.61	-----	9.33	940	-----
MW-23	13.15	6.08	6.19	0.11	6.96	954	Standing Water in Protective Casing Below PVC Riser
MW-CA-1	13.52	-----	5.51	-----	8.01	918	-----
MW-CA-2	13.35	-----	5.21	-----	8.14	927	-----
MW-CA-3	13.49	-----	6.71	-----	6.78	950	-----
MW-CA-4	12.20	-----	8.10	-----	4.10	945	-----

Notes:

Elevation in feet above Mean Sea Level.

Off-site well elevations adjusted to on-site well elevation datum.

TABLE 2 - GROUNDWATER ELEVATIONS - MARCH 26, 2012**ArcelorMittal Georgetown Groundwater Assessment****CEC Project No. 111-036**

Well I.D.	Top of PVC Elevation (ft.)	Depth to Free Product (ft.)	Depth to Water (ft.)	Amount of Free Product (ft.)	Groundwater Elevation (ft.)
TW-1	14.46	-----	10.98	-----	3.48
TW-2	Unable to Locate / Possibly Abandoned				
MW-2	14.56	-----	4.96	-----	9.60
MW-3	16.56	-----	7.03	-----	9.53
MW-4	13.75	-----	5.12	-----	8.63
MW-5	16.19	-----	6.22	-----	9.97
MW-6	13.81	-----	5.36	-----	8.45
MW-7	13.29	-----	4.72	-----	8.57
MW-8	13.95	-----	4.95	-----	9.00
MW-9	14.96	-----	5.58	-----	9.38
MW-10	15.44	-----	5.53	-----	9.91
MW-11	15.42	NM	5.48	NM	9.94
MW-12	16.44	-----	4.80	-----	11.64
MW-13	16.76	-----	1.10	-----	15.66
MW-14	17.08	-----	1.32	-----	15.76
MW-15	16.92	-----	1.50	-----	15.42
MW-16	15.80	-----	5.25	-----	10.55
MW-17	15.22	-----	4.90	-----	10.32
MW-18	12.03	-----	5.80	-----	6.23
MW-19	13.95	-----	5.42	-----	8.53
MW-20	14.62	-----	5.75	-----	8.87
MW-21	13.86	-----	5.50	-----	8.36
MW-22	13.94	-----	4.82	-----	9.12
MW-23	13.15	NM	7.62	NM	5.53
MW-CA-1	13.52	-----	5.49	-----	8.03
MW-CA-2	13.35	-----	5.22	-----	8.13
MW-CA-3	13.49	NM	7.52	NM (>1')	5.97
MW-CA-4	12.20	-----	7.94	-----	4.26

Notes:

Elevation in feet above Mean Sea Level.

Off-site well elevations adjusted to on-site well elevation datum.

NM = Not Measured

NM (>1') - Field logs from the sampling indicate greater than 1 foot of free product was present in the well

TABLE 3 - SOILS ANALYTICAL RESULTS
Samples Collected December 13 and 14, 2011
ArcelorMittal Georgetown Groundwater Assessment
CEC Project No. 111-036

Parameter	Units	EPA Soil Screening Levels		MW-CA-1 / S-2	MW-CA-2 / S-1	MW-CA-3 / S-3	MW-CA-4 / S-3
		Industrial Soil	Protection of GW Risk-Based	12/14/2011	12/13/2011	12/13/2011	12/13/2011
Volatile Organic Compounds							
1,1,1-Trichloroethane	ug/kg	38,000,000	2,600	<4.8	<4.9	<5,200	<6.1
1,1,2,2-Tetrachloroethane	ug/kg	2,800	0.026	<4.8	<4.9	<5,200	<6.1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/kg	NA	NA	<4.8	<4.9	<5,200	<6.1
1,1,2-Trichloroethane	ug/kg	5,300	0.077	<4.8	<4.9	<5,200	<6.1
1,1-Dichloroethane	ug/kg	170	0.68	<4.8	<4.9	<5,200	<6.1
1,1-Dichloroethene	ug/kg	1,100,000	93	<4.8	<4.9	1,000	<6.1
1,2,4-Trichlorobenzene	ug/kg	99,000	2.9	<4.8	<4.9	<5,200	<6.1
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	69	0.00014	<4.8	<4.9	<5,200	<6.1
1,2-Dibromoethane (EDB)	ug/kg	170	0.0018	<4.8	<4.9	<5,200	<6.1
1,2-Dichlorobenzene	ug/kg	10	271	<4.8	<4.9	<5,200	<6.1
1,2-Dichloroethane	ug/kg	2,200	0.042	<4.8	<4.9	<5,200	<6.1
1,2-Dichloropropane	ug/kg	4,700	0.13	<4.8	<4.9	<5,200	<6.1
1,3-Dichlorobenzene	ug/kg	NA	NA	<4.8	<4.9	<5,200	<6.1
1,4-Dichlorobenzene	ug/kg	12,000	0.40	<4.8	<4.9	<5,200	<6.1
2-Butanone (MEK)	ug/kg	200,000,000	1,000	23	<9.7	<10,000	<12
2-Hexanone	ug/kg	1,400,000	7.9	<9.6	<9.7	<10,000	<12
4-Methyl-2-pentanone	ug/kg	NA	NA	<9.6	<9.7	<10,000	<12
Acetone	ug/kg	630,000,000	2,400	130	24	<21,000	54
Benzene	ug/kg	5,400	0.20	<4.8	<4.9	<5,200	<6.1
Bromodichloromethane	ug/kg	1,400	0.032	<4.8	<4.9	<5,200	<6.1
Bromoform	ug/kg	220,000	2.1	<4.8	<4.9	<5,200	<6.1
Bromomethane (Methyl bromide)	ug/kg	32,000	1.8	<4.8	<4.9	<5.1	<6.1
Carbon disulfide	ug/kg	3,700,000	210	<4.8	<4.9	<5.1	<6.1
Carbon tetrachloride	ug/kg	3,000	0.15	<4.8	<4.9	<5,200	<6.1
Chlorobenzene	ug/kg	1,400,000	49	<4.8	<4.9	<5,200	<6.1
Chloroethane	ug/kg	NA	NA	<4.8	<4.9	<5.1	<6.1
Chloroform	ug/kg	1,500	0.053	<4.8	<4.9	<5,200	<6.1
Chloromethane (Methyl chloride)	ug/kg	500,000	49	<4.8	<4.9	<5,200	<6.1
cis-1,2-Dichloroethene	ug/kg	2,000,000	8.2	<4.8	10	260,000	34
cis-1,3-Dichloropropene	ug/kg	NA	NA	<4.8	<4.9	<5,200	<6.1
Cyclohexane	ug/kg	29,000,000	13,000	<4.8	<4.9	69	<6.1
Dibromochloromethane	ug/kg	3,300	0.039	<4.8	<4.9	<5,200	<6.1
Dichlorodifluoromethane	ug/kg	400,000	300	<4.8	<4.9	<5,200	<6.1
Ethylbenzene	ug/kg	27,000	1.5	<4.8	<4.9	<5,200	<6.1
Isopropylbenzene	ug/kg	NA	NA	<4.8	<4.9	<5,200	<6.1
Methyl acetate	ug/kg	1,000,000,000	3,200	<4.8	<4.9	<5,200	<6.1
Methyl tertiary butyl ether (MTBE)	ug/kg	220,000	3	<4.8	<4.9	<5,200	<6.1
Methylcyclohexane	ug/kg	NA	NA	<4.8	<4.9	<5,200	<6.1
Methylene chloride	ug/kg	53,000	1	<4.8	<4.9	<5.1	<6.1
Styrene	ug/kg	5,000,000	1,200	<4.8	<4.9	<5,200	<6.1
Tetrachloroethene	ug/kg	2,600	0.033	10	7.6	1,800,000	8.8
Toluene	ug/kg	45,000,000	1	<4.8	<4.9	<5,200	<6.1
trans-1,2-Dichloroethene	ug/kg	690,000	25	<4.8	<4.9	<5,200	<6.1
trans-1,3-Dichloropropene	ug/kg	NA	NA	<4.8	<4.9	<5,200	<6.1
Trichloroethene	ug/kg	6,400	0.16	<4.8	<4.9	280,000	<6.1
Trichlorofluoromethane	ug/kg	3,400,000	690	<4.8	<4.9	<5,200	<6.1
Vinyl chloride	ug/kg	1,700	0.0053	<4.8	<4.9	6,000	<6.1
Xylenes (total)	ug/kg	2,700,000	190	<4.8	<4.9	10,000	<6.1
Polycyclic Aromatic Hydrocarbons							
2-Methylnaphthalene	ug/kg	4,100,000	140	<380	<76	<160	<100
Acenaphthene	ug/kg	NA	NA	<380	<76	<160	<100
Anthracene	ug/kg	NA	NA	<380	<76	<160	<100
Benzo(a)anthracene	ug/kg	NA	NA	580	<76	<160	<100
Benzo(a)pyrene	ug/kg	NA	NA	490	<76	<160	<100
Benzo(b)fluoranthene	ug/kg	NA	NA	580	<76	<160	<100
Benzo(g,h,i)perylene	ug/kg	NA	NA	<380	<76	<160	<100
Benzo(k)fluoranthene	ug/kg	NA	NA	<380	<76	<160	<100
Chrysene	ug/kg	NA	NA	520	<76	<160	<100
Dibenzo(a,h)anthracene	ug/kg	NA	NA	<380	<76	<160	<100
Fluoranthene	ug/kg	NA	NA	800	<76	<160	110
Fluorene	ug/kg	NA	NA	<380	<76	<160	<100
Indeno(1,2,3-c,d)pyrene	ug/kg	NA	NA	<380	<76	<160	<100
Naphthalene	ug/kg	NA	NA	<380	<76	450	<100
Phenanthrene	ug/kg	NA	NA	<380	<76	<160	<100
Pyrene	ug/kg	NA	NA	680	<76	<160	110
Total Petroleum Hydrocarbons - Diesel Range Organics							
TPH-DRO	ug/kg	NA	NA	370,000	26,000	5,200,000	66,000

Notes:

Bold values represent detections above their PQL.
The PAH's for sample MW-CA-3 were rerun at a 2x dilution. The results from both runs are included in the report.
Highlighted results indicate exceedance of EPA Industrial Soil Regional Screening Level

TABLE 4 - GROUNDWATER ANALYTICAL RESULTS - DECEMBER 16, 2011
ArcelorMittal Georgetown Groundwater Assessment
CEC Project No. 111-036

Parameter	Unit	MCL	MW-20	MW-21	MW-CA-0 (MW-21 Dup)	MW-23	MW-CA-1	MW-CA-2	MW-CA-3	MW-CA-4
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L		<1.0	<1.0	<1.0	11	<1.0	<1.0	97	<1.0
1,1-Dichloroethene	ug/L	7.0	<1.0	<1.0	<1.0	15	<1.0	<1.0	43	<1.0
1,2,4-Trichlorobenzene	ug/L	70	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane (DBCP)	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane (EDB)	ug/L	0.05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/L	600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/L	5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/L	5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/L	75	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	ug/L		<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	ug/L		<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone	ug/L		<10	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L		<20	55	34	<20	<20	<20	<20	<20
Benzene	ug/L	5.0	<1.0	2.1	2	1.1	<1.0	1.7	2.8	<1.0
Bromodichloromethane	ug/L	80*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	ug/L	80*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane (Methyl bromide)	ug/L		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon disulfide	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	ug/L	5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/L	100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroform	ug/L	80*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane (Methyl chloride)	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	ug/L	70	<1.0	<1.0	<1.0	6,800	1.7	9.9	7,100	<1.0
cis-1,3-Dichloropropene	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	ug/L	80*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	ug/L		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	ug/L	700	<1.0	1.8	1.6	4.7	<1.0	<1.0	3.3	<1.0
Isopropylbenzene	ug/L		<1.0	<1.0	<1.0	5.4	<1.0	<1.0	4.9	<1.0
Methyl acetate	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tertiary butyl ether (MTBE)	ug/L		1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylcyclohexane	ug/L		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride	ug/L	5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	ug/L	100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	ug/L	5.0	<1.0	<1.0	<1.0	6,200	3.8	7.2	2,200	<1.0
Toluene	ug/L	1,000	<1.0	1.4	1.3	9.1	<1.0	1.0	15	<1.0
trans-1,2-Dichloroethene	ug/L	100	<1.0	<1.0	<1.0	12	<1.0	2.2	16	<1.0
trans-1,3-Dichloropropene	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	ug/L	5.0	<1.0	<1.0	<1.0	2,300	<1.0	11	700	<1.0
Trichlorofluoromethane	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	2.0	<1.0	<1.0	<1.0	600	<1.0	<1.0	3,400	<1.0
Xylenes (total)	ug/L	10,000	<1.0	1.3	1.3	57	<1.0	<1.0	32	<1.0
Polycyclic Aromatic Hydrocarbons										
2-Methylnaphthalene	ug/L		<1.1	3.0	--	<110	<1.1	<1.0	<1.1	<1.1
Acenaphthene	ug/L		<1.1	6.0	--	<110	<1.1	3.3	<1.1	<1.1
Anthracene	ug/L		<1.1	<1.1	--	<110	<1.1	<1.0	<1.1	<1.1
Benzo(a)anthracene	ug/L		<1.1	<1.1	--	<110	<1.1	<1.0	<1.1	<1.1
Benzo(a)pyrene	ug/L	0.2	<1.1	<1.1	--	<110	<1.1	<1.0	<1.1	<1.1
Benzo(b)fluoranthene	ug/L		<1.1	<1.1	--	<110	<1.1	<1.0	<1.1	<1.1
Benzo(g,h,i)perylene	ug/L		<1.1	<1.1	--	<110	<1.1	<1.0	<1.1	<1.1
Benzo(k)fluoranthene	ug/L		<1.1	<1.1	--	<110	<1.1	<1.0	<1.1	<1.1
Chrysene	ug/L		<1.1	<1.1	--	<110	<1.1	<1.0	<1.1	<1.1
Dibenzo(a,h)anthracene	ug/L		<1.1	<1.1	--	<110	<1.1	<1.0	<1.1	<1.1
Fluoranthene	ug/L		<1.1	<1.1	--	<110	<1.1	<1.0	<1.1	<1.1
Fluorene	ug/L		<1.1	3.9	--	<110	<1.1	1.0	<1.1	<1.1
Indeno(1,2,3-c,d)pyrene	ug/L		<1.1	<1.1	--	<110	<1.1	<1.0	<1.1	<1.1
Naphthalene	ug/L		<1.1	79	--	<110	<1.1	9.8	1.1	<1.1
Phenanthrene	ug/L		<1.1	3.5	--	<110	<1.1	<1.0	<1.1	<1.1
Pyrene	ug/L		<1.1	<1.1	--	<110	<1.1	<1.0	<1.1	<1.1
Total Petroleum Hydrocarbons - Diesel Range Organics										
TPH-DRO	ug/L		420	3,100	3,100	310,000	450	780	4,000	1,000

Notes:

* 80 ug/L is the MCL of Total Trihalomethanes (bromodichloromethane; bromoform; dibromochloromethane and chloroform).

-- = Not Analyzed

Bold values represent detections above their PQL.

Field Duplicate (MW-CA-0) collected at MW-21.

TPH-DRO samples for MW-CA-2 and MW-23 had the surrogate, o-Terphenyl, recovered outside the acceptance limit. The samples were re-extracted outside the holding time. The results from both runs are included in the report.

TABLE 5 - LABORATORY ANALYTICAL RESULTS - MARCH 26, 2012

ArcelorMittal Georgetown Groundwater Assessment
CEC Project No. 111-036

Parameter	Unit	MCL	MW-20	MW-21	DUP-1 (MW-21 Dup)	MW-23	MW-CA-1	MW-CA-2	MW-CA-3	MW-CA-4
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	7.3	<1.0
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	5.0	<1.0	<1.0	<1.0	55	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L		<1.0	<1.0	<1.0	40	<1.0	<1.0	120	<1.0
1,1-Dichloroethene	ug/L	7.0	<1.0	<1.0	<1.0	58	<1.0	<1.0	74	<1.0
1,2,4-Trichlorobenzene	ug/L	70	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane (DBCP)	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane (EDB)	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/L	600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/L	5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/L	5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/L	75	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	ug/L		<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	ug/L		<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone	ug/L		<10	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L		<20	<20	<20	<20	<20	<20	<20	<20
Benzene	ug/L	5.0	<1.0	<1.0	<1.0	3.6	<1.0	2.0	3.0	<1.0
Bromodichloromethane	ug/L	80	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	ug/L	80	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane (Methyl bromide)	ug/L		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon disulfide	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	ug/L	5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/L	100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L		<2.0	<2.0	<2.0	2.1	<2.0	<2.0	<2.0	<2.0
Chloroform	ug/L	80	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane (Methyl chloride)	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	ug/L	70	<1.0	<1.0	<1.0	6,100	<1.0	7.6	27,000	<1.0
cis-1,3-Dichloropropene	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	ug/L	80	<1.0	<1.0	<1.0	9.6	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	ug/L		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	ug/L	700	<1.0	<1.0	<1.0	12	<1.0	<1.0	7.7	<1.0
Isopropylbenzene	ug/L		<1.0	<1.0	<1.0	17	<1.0	<1.0	9.2	<1.0
Methyl acetate	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tertiary butyl ether (MTBE)	ug/L		1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylcyclohexane	ug/L		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride	ug/L	5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	ug/L		<1.0	<1.0	<1.0	1.9	<1.0	<1.0	1.4	<1.0
Tetrachloroethene	ug/L	5.0	<1.0	<1.0	<1.0	9,200	<1.0	9.9	12,000	<1.0
Toluene	ug/L	1,000	<1.0	<1.0	<1.0	29	<1.0	1.3	18	<1.0
trans-1,2-Dichloroethene	ug/L	100	<1.0	<1.0	<1.0	47	<1.0	1.7	44	<1.0
trans-1,3-Dichloropropene	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	ug/L	5.0	<1.0	<1.0	<1.0	4,100	<1.0	8.2	3,900	<1.0
Trichlorofluoromethane	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	2.0	<1.0	<1.0	<1.0	1,600	<1.0	<1.0	6,200	<1.0
Xylenes (total)	ug/L	10,000	<1.0	<1.0	<1.0	130	<1.0	<1.0	85	<1.0
Polycyclic Aromatic Hydrocarbons										
2-Methylnaphthalene	ug/L		<1.0	2.1	--	<51	<1.0	<1.0	<2.0	<1.0
Acenaphthene	ug/L		<1.0	3.6	--	<51	<1.0	4.8	<2.0	<1.0
Anthracene	ug/L		<1.0	<1.0	--	<51	<1.0	<1.0	<2.0	<1.0
Benzo(a)anthracene	ug/L		<1.0	<1.0	--	<51	<1.0	<1.0	<2.0	<1.0
Benzo(a)pyrene	ug/L	0.2	<1.0	<1.0	--	<51	<1.0	<1.0	<2.0	<1.0
Benzo(b)fluoranthene	ug/L		<1.0	<1.0	--	<51	<1.0	<1.0	<2.0	<1.0
Benzo(g,h,i)perylene	ug/L		<1.0	<1.0	--	<51	<1.0	<1.0	<2.0	<1.0
Benzo(k)fluoranthene	ug/L		<1.0	<1.0	--	<51	<1.0	<1.0	<2.0	<1.0
Chrysene	ug/L		<1.0	<1.0	--	<51	<1.0	<1.0	<2.0	<1.0
Dibenzo(a,h)anthracene	ug/L		<1.0	<1.0	--	<51	<1.0	<1.0	<2.0	<1.0
Fluoranthene	ug/L		<1.0	<1.0	--	<51	<1.0	<1.0	<2.0	<1.0
Fluorene	ug/L		<1.0	2	--	<51	<1.0	1.1	<2.0	<1.0
Indeno(1,2,3-c,d)pyrene	ug/L		<1.0	<1.0	--	<51	<1.0	<1.0	<2.0	<1.0
Naphthalene	ug/L		<1.0	36	--	<51	<1.0	8.4	17	<1.0
Phenanthrene	ug/L		<1.0	1.8	--	<51	<1.0	<1.0	<2.0	<1.0
Pyrene	ug/L		<1.0	<1.0	--	<51	<1.0	<1.0	<2.0	<1.0
Total Petroleum Hydrocarbons - Diesel Range Organics										
TPH-DRO	ug/L		370	2,500	2,600	2,700,000	370	740	180,000	380

Notes:

-- = Not Analyzed

Bold values represent detections above their PQL.

Field Duplicate (DUP-1) collected at MW-21.

cis-1,2-Dichloroethene, Trichloroethene, Tetrachloroethene, and Vinyl Chloride parameters for MW-CA-3 were diluted and extracted outside the hold time.



APPENDIX A



CLIENT ArcelorMittal Georgetown **PROJECT NAME** Groundwater Assessment
CEC PROJECT NUMBER 111-036 **PROJECT LOCATION** Georgetown, SC
DATE STARTED 12/14/11 **COMPLETED** 12/14/11 **GROUND ELEVATION** Not Available **HOLE SIZE** 8"
DRILLING CONTRACTOR American Environmental Drilling, Inc. **TOP OF PVC ELEVATION** 13.52
DRILLING METHOD Geoprobe / Hollow Stem Auger **GROUND WATER LEVELS:**
LOGGED BY BRB **CHECKED BY** AM **▼ AT END OF DRILLING** 5.9 ft / Elev 0.0 ft
LOCATION Northing: 562050.7 Easting: 2520928.3

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	ORGANIC VAPOR READING (ppm)	SAMPLE INTERVAL	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0							
	CC	100				Concrete	
				6.1 S-1		Dark gray to black SAND; trace concrete, trace wood fragments, fine to medium grained, medium-dense, dry (FILL)	
				1.7			
				2.0		Light gray SANDSTONE; few marine fossils, hard (FILL)	
				2.4			
				50.3 S-2		Black to brown SAND; some gravel, fine to coarse grained, loose, dry to moist (FILL) No Recovery; Assuming black to brown SAND (FILL) Note: submitted sample interval S-2 to laboratory for analysis	
	DP 1	35					
				3.9 S-3		Black to brown SAND; fine to medium grained, loose, moist (FILL)	
5							
				6.1		Gray SAND; fine to medium grained, loose, wet (FILL)	
				3.6 S-4		No Recovery; Assuming gray SAND (FILL)	
	DP 2	48					
				NA S-5		Dark gray SAND; few sandstone fragments, some silt, fine grained, loose, wet (FILL)	
				10.0			
				5.5 S-6		Gray SAND; fine to medium grained, loose, wet (NATIVE)	
				10.8			
				3.2 S-7		Black LEAN CLAY; medium plasticity, medium-stiff, dry (NATIVE)	
	DP 3	100					
				14.1 S-8		Gray to dark gray FAT CLAY; high plasticity, stiff, dry (NATIVE)	
				15.0			
15						Bottom of hole at 15.0 feet	

ARCELORMITTAL GEORGETOWN (SC) ARCELORMITTAL GEORGETOWN GINT LOGS.GPJ GOOD TEMPLATE.GDT 4/30/12



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 Columbus, Ohio 43240

BORING NUMBER MW-CA-2

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CLIENT ArcelorMittal Georgetown	PROJECT NAME Groundwater Assessment
CEC PROJECT NUMBER 111-036	PROJECT LOCATION Georgetown, SC
DATE STARTED 12/13/11 COMPLETED 12/14/11	GROUND ELEVATION Not Available HOLE SIZE 8"
DRILLING CONTRACTOR American Environmental Drilling, Inc.	TOP OF PVC ELEVATION 13.35
DRILLING METHOD Geoprobe / Hollow Stem Auger	GROUND WATER LEVELS:
LOGGED BY BRB CHECKED BY AM	▼ AT END OF DRILLING 5.5 ft / Elev 0.0 ft
LOCATION Northing: 562103.3 Easting: 2520893.3	

ARCELORMITTAL GEORGETOWN (SC) ARCELORMITTAL GEORGETOWN GINT LOGS.GPJ GOOD TEMPLATE.GDT 4/30/12

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	ORGANIC VAPOR READING (ppm)	SAMPLE INTERVAL	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0							
	CC	100				Concrete	
				S-1		Light tan to dark gray SAND; trace concrete fragments, trace cardboard, fine to medium grained, loose, dry (FILL) Note: submitted sample interval S-1 to laboratory for analysis	
	DP 1	80		S-2		Brown to orange-brown SAND; some sandy clay, trace mica, fine grained, medium-dense, moist (FILL)	
5				S-3		Orange-brown to dark gray SAND; micaceous, fine to medium grained, loose, moist to dry (FILL)	
	DP 2	80		S-4		Orange-brown SAND; trace mica, fine to medium grained, loose, moist (FILL) Note: wet @ 7.7'	
				S-5		Gray to orange-brown SAND; fine to medium grained, loose, wet (NATIVE)	
10	DP 3	100		S-6		Gray to orange-brown SAND; fine to medium grained, loose, wet (NATIVE)	
				S-7			
				S-8		Black sandy LEAN CLAY; muddy, medium plasticity, stiff, dry (NATIVE)	
15						Bottom of hole at 15.0 feet	



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BORING NUMBER MW-CA-3

CLIENT ArcelorMittal Georgetown **PROJECT NAME** Groundwater Assessment
CEC PROJECT NUMBER 111-036 **PROJECT LOCATION** Georgetown, SC
DATE STARTED 12/13/11 **COMPLETED** 12/13/11 **GROUND ELEVATION** Not Available **HOLE SIZE** 8"
DRILLING CONTRACTOR American Environmental Drilling, Inc. **TOP OF PVC ELEVATION** 13.49
DRILLING METHOD Geoprobe / Hollow Stem Auger **GROUND WATER LEVELS:**
LOGGED BY BRB **CHECKED BY** AM **▼ AT END OF DRILLING** 7.2 ft / Elev 0.0 ft
LOCATION Northing: 562089.8 Easting: 2520980.0

ARCELORMITTAL GEORGETOWN (SC) ARCELORMITTAL GEORGETOWN GINT LOGS.GPJ GOOD TEMPLATE.GDT 4/30/12

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	ORGANIC VAPOR READING (ppm)	SAMPLE INTERVAL	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0						Concrete	<p>Concrete</p> <p>Bentonite</p> <p>2-Inch Solid PVC Riser</p> <p>2-Inch Slotted Screen</p> <p>Filter Pack</p>
2.1	CC	100					
12.2	DP 1	83	12.2	S-1	Dark gray to black SAND; trace brick fragments, trace wood fragments, trace mica, fine grained, medium-dense, moist to dry (FILL)		
4.0						Dark gray to black SAND; trace wood fragments, fine grained, loose to medium-dense, moist to dry (FILL)	
5.0				S-2	Tan to dark grayish-brown SAND; fine to medium grained, loose, moist to dry (NATIVE)		
6.0						Tan to grayish-black SAND; fine to medium grained, loose, moist (NATIVE)	
6.0	DP 2	66	4363	S-3	▼ Note: submitted sample interval S-3 to laboratory for analysis		
8.0						Note: wet @ 8.0'	
8.0				S-4	Tan to grayish-black SAND; fine to medium grained, loose, wet (NATIVE)		
10.0						Dark brown to dark gray SAND; fine to medium grained, loose, wet (NATIVE)	
11.1				S-5	Orange-brown SAND; fine to medium grained, loose, wet to moist (NATIVE)		
13.2	DP 3	84	58.9	S-6	Gray FAT CLAY; high plasticity, stiff, dry (NATIVE)		
15.0						Bottom of hole at 15.0 feet	



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BORING NUMBER MW-CA-4

PAGE 1 OF 1

CLIENT ArcelorMittal Georgetown	PROJECT NAME Groundwater Assessment
CEC PROJECT NUMBER 111-036	PROJECT LOCATION Georgetown, SC
DATE STARTED 12/13/11 COMPLETED 12/13/11	GROUND ELEVATION Not Available HOLE SIZE 8"
DRILLING CONTRACTOR American Environmental Drilling, Inc.	TOP OF PVC ELEVATION 12.20
DRILLING METHOD Geoprobe / Hollow Stem Auger	GROUND WATER LEVELS:
LOGGED BY BRB CHECKED BY AM	▼ AT END OF DRILLING 8.1 ft / Elev 0.0 ft
LOCATION Northing: 562179.6 Easting: 2521048.4	

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	ORGANIC VAPOR READING (ppm)	SAMPLE INTERVAL	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0						Asphalt	
	CC	100				1.0	
				S-1		Light gray SAND; trace gravel pieces, trace asphalt, fine grained, loose, moist to dry (FILL)	Concrete
			3.6			2.0	Bentonite
	DP 1	68		S-2		Dark brown to black SAND; trace gravel pieces, trace plastic shreds, trace calcite, fine grained, medium-dense to loose, moist to dry (FILL)	2-Inch Solid PVC Riser
			3.8			3.7	
						No Recovery; Assuming dark brown to black SAND (FILL)	
5				S-3		Note: Note: submitted sample interval S-3 to laboratory for analysis	
			5.3			5.0	
	DP 2	54		S-4		Brown to tan SAND; trace gravel fragments, trace wood fragments, fine to medium grained, loose to medium-dense, moist (FILL)	
			5.0			Note: wet @ 7.7'	2-Inch Slotted Screen
						7.7	
				S-5		No Recovery; Assuming brown to tan SAND (FILL)	
			NA			10.0	
10				S-6		Dark brown to dark grayish-brown SAND; trace wood fragments, trace mica, fine to medium grained, loose, wet (FILL)	
			1.8			Note: black sand from 11.1' - 11.3'	
	DP 3	70		S-7		13.5	
			1.1			No Recovery; Assuming dark brown to dark grayish-brown SAND (FILL)	Filter Pack
						15.0	
15						Bottom of hole at 15.0 feet	

ARCELORMITTAL GEORGETOWN (SC) ARCELORMITTAL GEORGETOWN GINT LOGS.GPJ GOOD TEMPLATE.GDT 4/30/12



Water Well Record

Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
 Name: ARCELOR MITTAL
 (last) (first)
 Address: 419 SOUTH FRASER STREET
 City: GEORGETOWN State: SC Zip: _____
 Telephone: Work: _____ Home: _____

7. PERMIT NUMBER: _____
8. USE:
 Residential Public Supply Process
 Irrigation Air conditioning Emergency
 Test Well Monitor Well Replacement

2. LOCATION OF WELL: COUNTY: GEORGETOWN
 Name: ARCELOR MITTAL
 Street Address: 419 SOUTH FRASER STREET
 City: GEORGETOWN Zip: _____
 Latitude: _____ Longitude: _____

9. Well Depth (completed) _____ **Date Started (MM/DD/YYYY):** 12-14-11
12 ft. **Date Completed (MM/DD/YYYY):** 12-14-11
10. CASING: Threaded Welded
 Diam: 2 inches Height Above/Below _____ ft.
 Type: PVC Galvanized Surface -.6 ft.
 Steel Other Weight _____ lb./ft.
0 in. to 2 ft. depth Drive Shoe? Yes No
 _____ in. to _____ ft. depth

3. PUBLIC SYSTEM NAME _____ **PUBLIC SYSTEM NUMBER** _____

4. ABANDONMENT: Yes No
 Grouted Depth: from _____ ft. to _____ ft.

11. SCREEN:
 Type: PVC Diam.: 2 in.
 Slot/Gauge: .010 Length: 10 ft.
 Set Between: 2 ft. and 10 ft. NOTE: MULTIPLE SCREENS
 _____ ft. and _____ ft. USE SECOND SHEET
 Sieve Analysis Yes (please enclose) No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
BLACK CLAYEY SAND	4	4
GRAY TAN SAND	4	8
GRAY SAND	4	12

12. STATIC WATER LEVEL: _____ ft. below land surface after 24 hours

13. PUMPING LEVEL: Below surface.
 _____ ft. after _____ hrs. Pumping _____ G.P.M.
 Pumping Test: Yes (please enclose) No
 Yield: _____

14. WATER QUALITY:
 Chemical Analysis: Yes No Bacterial Analysis: Yes No
 Please enclose lab results

15. ARTIFICIAL FILTER (filter pack) Yes No
 Installed from 1 ft. to 12 ft.
 Effective size #3 Uniformity Coefficient _____

16. WELL GROUDED? Yes No
 Neat Cement Bentonite Bentonite/Cement Other _____
 Depth: From 0 ft. to 1 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
 Type: _____
 Well Disinfected: Yes No Type: _____ Amount _____

18. PUMP: Date installed (mm/dd/yyyy): _____ Not installed
 Mfr. Name: _____ Model No. _____
 H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
 Type: Submersible Jet (shallow) Turbine
 Jet (deep) Reciprocating Centrifugal

*Indicate Water Bearing Zones
 (Use a 2nd sheet if needed)

19. WELL DRILLER: CERT. NO.: 01568
 Name: Kelly Grant Level: A B C D
 (check one)
 Address: 324 Fields Drive, Suite C City: Aberdeen
 State: North Carolina Zip: 28315
 Telephone No.: 910-944-3140 Fax: 910-944-3150

5. REMARKS:
 MWCA-1

20. WATER DRILLER'S CERTIFICATION: This well was drilled under
 my direction and this report is true to the best of my knowledge and belief.
 Signed: Kelly Grant Date: 12-14-11
 Well Driller (MM/DD/YYYY)

6. TYPE: Mud Rotary Jetted Bored
 Dug Air Rotary Driven
 Cable tool Other



Water Well Record

Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: ARCELOR MITTAL
(last) (first)
Address: 419 SOUTH FRASER STREET
City: GEORGETOWN State: SC Zip: _____
Telephone: Work: _____ Home: _____

2. LOCATION OF WELL: COUNTY: GEORGETOWN
Name: ARCELOR MITTAL
Street Address: 419 SOUTH FRASER STREET
City: GEORGETOWN Zip: _____
Latitude: 33*22'02.72" Longitude: 79*17'28.39"

3. PUBLIC SYSTEM NAME PUBLIC SYSTEM NUMBER

4. ABANDONMENT: Yes No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
BLACK CLAYEY SAND	5	5
GRAY TAN SAND	2	7
GRAY SAND	6	13

*Indicate Water Bearing Zones
(Use a 2nd sheet if needed)

5. REMARKS:
MWCA-4

6. TYPE: Mud Rotary Jetted Bored
 Dug Air Rotary Driven
 Cable tool Other

7. PERMIT NUMBER: _____
8. USE:
 Residential Public Supply Process
 Irrigation Air conditioning Emergency
 Test Well Monitor Well Replacement

9. Well Depth (completed) _____ Date Started (MM/DD/YYYY): 12-13-11
13 ft. Date Completed (MM/DD/YYYY): 12-13-11

10. CASING: Threaded Welded
Diam: 2 inches Height Above/Below
Type: PVC Galvanized Surface -.6 ft.
 Steel Other Weight _____ lb./ft.
0 in. to 3 ft. depth Drive Shoe? Yes No
_____ in. to _____ ft. depth

11. SCREEN
Type: PVC Diam.: 2 in.
Slot/Gauge: .010 Length: 10 ft.
Set Between: 3 ft. and 13 ft. NOTE: MULTIPLE SCREENS
____ ft. and ____ ft. USE SECOND SHEET
Sieve Analysis Yes (please enclose) No

12. STATIC WATER LEVEL: _____ ft. below land surface after 24 hours

13. PUMPING LEVEL: Below surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: Yes (please enclose) No
Yield: _____

14. WATER QUALITY:
Chemical Analysis: Yes No Bacterial Analysis: Yes No
Please enclose lab results

15. ARTIFICIAL FILTER (filter pack) Yes No
Installed from 2 ft. to 13 ft.
Effective size #3 Uniformity Coefficient _____

16. WELL GROUDED? Yes No
 Neat Cement Bentonite Bentonite/Cement Other
Depth: From 0 ft. to 2 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type: _____
Well Disinfected: Yes No Type: _____ Amount _____

18. PUMP: Date installed (mm/dd/yyyy): _____ Not installed
Mfr. Name: _____ Model No. _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
Type: Submersible Jet (shallow) Turbine
 Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: CERT. NO.: 01568
Name: Kelly Grant Level: A B C D
 (check one)
Address: 324 Fields Drive, Suite C City: Aberdeen
State: North Carolina Zip: 28315
Telephone No.: 910-944-3140 Fax: 910-944-3150

20. WATER DRILLER'S CERTIFICATION: This well was drilled under
my direction and this report is true to the best of my knowledge and belief.
Signed: Kelly Grant Date: 12-13-11
Well Driller (MM/DD/YYYY)



GROUND WATER MONITORING WELL SAMPLING FIELD DATA SHEET

Client: ARCELORMITTAL GEORGETOWN
Date: 12/15/11

CEC Project Number: 111-036
Weather Observations: 72° SUNNY

WELL ID: MW-CA-1

Casing Diameter: 2 (inches) Water Height in Well: 6.04 0.00 (feet)
Total Depth: 11.60 (feet) Water Volume in Well: 0.98 0.00 (gallons)
Depth to Water: 5.56 (feet) Purge Volume: 2.95 0.00 gal.(calculated)
Depth to Top of Screen: 1.60 (feet) 4.00 gal. (removed)

Water Volume Factors	
Diameter	Gallons/Foot
1 inches	0.04
1.5 inches	0.092
2 inches	0.17
3 inches	0.38
4 inches	0.66

Measured using: ELECTRIC INTERFACE PROBE
Minimum Purge Volume (drawdown)(gal./ft.) + (well screen length)(gal./ft.) = _____

Purged using: Dedicated Bailer/Polypro Rope Grundfos pump/poly tubing Other: DISPOSABLE BAITER
Sampled using: Dedicated Bailer/Polypro Rope Grundfos pump/poly tubing Other: DISPOSABLE BAITER

Field Measurements						
Temperature (degrees C)	pH (s.u.)	Conductivity (umhos/cm)	Turbidity (NTU)	Volume (gallons)	Water Level During Purging (feet)	Time
23.9	5.06	343	33.1	Initial	5.56	1258
23.5	4.88	450	>1000	1.0	—	1303
24.1	4.91	497	>1000	2.0	—	1305
24.0	4.93	501	>1000	3.0	—	1308
24.2	4.94	512	>1000	4.0	7.46	1311

Field Measurements at Time of Sampling						
Temperature (degrees C)	pH (s.u.)	Conductivity (umhos/cm)	Turbidity (NTU)	Volume (gallons)	Water Level During Sampling (feet)	Time
24.2	4.94	512	>1000	4.0	7.46	1311

Instrument Calibration			
Turbidity	Meter Type _____	1.0 NTU std = _____	5.42 NTU std = _____
		10.0 NTU std = _____	51.8 NTU std = _____
			499 NTU std = _____
pH/Conductivity	Meter Type _____	4.01 std = _____	1413 umhos/cm = _____
		7.0 std = _____	
		10.1 std = _____	

Physical Properties
Odor: NONE
Color: GRAY-BROWN
Turbidity: HIGH
Analysis Required: VOC 8260 PAH 8270 DRo 8015
Sample time/date: 1311/12-15-11

Comments: _____

Deviations from SAP: _____

Sampler: BRAD BASHORE Signature: _____



GROUND WATER MONITORING WELL SAMPLING FIELD DATA SHEET

Client: ARCELORMITTAL GEORGETOWN CEC Project Number: 111-036
 Date: 12/15/11 Weather Observations: 70° SUNNY, BREEZY

WELL ID: MW-CA-2

Casing Diameter: 2 (inches) Water Height in Well: 7.7 0.00 (feet)
 Total Depth: 12.90 (feet) Water Volume in Well: 1.26 0.00 (gallons)
 Depth to Water: 5.20 (feet) Purge Volume: 3.77 0.00 gal.(calculated)
 Depth to Top of Screen: 3 (feet) 4.50 gal. (removed)

Water Volume Factors	
Diameter	Gallons/Foot
1 inches	0.04
1.5 inches	0.092
2 inches	0.17
3 inches	0.38
4 inches	0.66

Measured using: ELECTRIC INTERFACE PROBE
 Minimum Purge Volume (drawdown)(gal./ft.) + (well screen length)(gal./ft.) =

Purged using: Dedicated Bailer/Polypro Rope Grundfos pump/poly tubing Other: DISPOSABLE BAILER
 Sampled using: Dedicated Bailer/Polypro Rope Grundfos pump/poly tubing Other: DISPOSABLE BAILER

Field Measurements						
Temperature (degrees C)	pH (s.u.)	Conductivity (umhos/cm)	Turbidity (NTU)	Volume (gallons)	Water Level During Purging (feet)	Time
22.5	5.07	354	251	Initial	5.20	1210
22.3	4.91	337	>1000	1.5	—	1213
22.4	4.83	323	>1000	3.0	—	1216
22.5	4.88	313	>1000	4.5	6.48	1219

Field Measurements at Time of Sampling						
Temperature (degrees C)	pH (s.u.)	Conductivity (umhos/cm)	Turbidity (NTU)	Volume (gallons)	Water Level During Sampling (feet)	Time
22.5	4.88	313	>1000	4.5	6.48	1219

Instrument Calibration			
Turbidity	Meter Type	1.0 NTU std =	5.42 NTU std =
		10.0 NTU std =	51.8 NTU std =
pH/Conductivity	Meter Type	4.01 std =	499 NTU std =
		7.0 std =	1413 umhos/cm =
		10.1 std =	

Physical Properties
 Odor: SLIGHT PETROLEUM Analysis Required: VOC 8260 PAH 8270 PRO 8015
 Color: YELLOW-BROWN
 Turbidity: 1204 Sample time/date: 1219/12-15-11

Comments: SAMPLE OF VIRGIN HYDRAULIC OIL COLLECTED AT 1200 (BEFORE

Deviations from SAP: START OF MW-CA-2)

Sampler: BRAD BASHORE Signature: [Signature]



GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Client: ARCELORMITTAL GEORGETOWN
 Date: 12/15/11

CEC Project Number: 111-036
 Weather Observations: 71° SUNNY

WELL ID: MW-CA-3

Casing Diameter: 2 (inches) Water Height in Well: 6.54 (feet)
 Total Depth: 17.19 (feet) Water Volume in Well: 1.07 (gallons)
 Depth to Water: 6.65 (feet) Purge Volume: 3.20 gal (calculated)
 Depth to Top of Screen: 3.19 (feet) 3.75 gal (removed)

Water Volume Factors	
Diameter	Gallons/Foot
1 inches	0.04
1.5 inches	0.092
2 inches	0.17
3 inches	0.38
4 inches	0.66

Min. Purge Vol for Passive Sampling ((tubing)(ml/ft)+(pump Vol)) =

Measured using: Electric water level tape
 Purged using: Bailer/Polypro Rope Dedicated Bladder pump/poly tubing Other DISPOSABLE BAILER
 Sampled using: Bailer/Polypro Rope Dedicated Bladder pump/poly tubing Other DISPOSABLE BAILER

Field Measurements						
Temperature (degrees C)	pH (s.u.)	Conductivity (umhos/cm)	Turbidity (NTU)	Volume (gallons)	Water Level During Purging (feet)	Time
23.9	5.30	1814	42.5	Initial	6.65	1532
23.9	5.39	1953	71000	1.25	—	1536
23.9	5.42	1968	71000	2.50	—	1539
24.4	5.43	1914	71000	3.75	8.64	1542

Field Measurements at Time of Sampling						
Temperature (degrees C)	pH (s.u.)	Conductivity (umhos/cm)	Turbidity (NTU)	Volume (gallons)	Water Level During Sampling (feet)	Time
24.4	5.43	1914	> 1000	3.75	8.64	1542

Instrument Calibration		
Turbidity	Meter Type	1.0 NTU std = <u> </u> 5.94 NTU std = <u> </u>
		10.0 NTU std = <u> </u> 49.6 NTU std = <u> </u>
		505 NTU std = <u> </u>
pH/Conductivity	Meter Type	4.01 std = <u> </u>
		7.0 std = <u> </u> 1413 umhos/cm = <u> </u>
		10.1 std = <u> </u>

Physical Properties
 Odor: MILD PETROLEUM
 Color: DARK BROWN
 Turbidity: HIGH
 Analysis Required: VOC 8260 PAH 8270 DRD 8015
 Sample time/date: 1542/12-15-11

Description of Hump: SOME SHEEN PRESENT ON SURFACE OF WATER SAMPLES

Deviations from SAP:

Sampler: BRAD BASHORE Signature:



GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Client: ARCELORMITTAL GEORGETOWN
 Date: 12/15/11

CEC Project Number: 111-036
 Weather Observations: 74° SUNNY

WELL ID: MW-CA-4

Casing Diameter: 2 (inches)
 Total Depth: 13.24 (feet)
 Depth to Water: 8.07 (feet)
 Depth to Top of Screen: 3.24 (feet)

Water Height in Well: 5.17 (feet)
 Water Volume in Well: 0.84 (gallons)
 Purge Volume: 2.53 gal (calculated)
3.00 gal (removed)

Water Volume Factors	
Diameter	Gallons/Foot
1 inches	0.04
1.5 inches	0.092
2 inches	0.17
3 inches	0.38
4 inches	0.66

Min. Purge Vol for Passive Sampling ((tubing)(ml/l)+(pump Vol.)) =

Measured using: Electric water level tape.

Purged using: Bailer/Polypro Rope Dedicated Bladder pump/poly tubing

Other DISPOSABLE BAITER

Sampled using: Bailer/Polypro Rope Dedicated Bladder pump/poly tubing

Other DISPOSABLE BAITER

Field Measurements

Temperature (degrees C)	pH (s.u.)	Conductivity (umhos/cm)	Turbidity (NTU)	Volume (gallons)	Water Level During Purging (feet)	Time
<u>23.3</u>	<u>4.86</u>	<u>1005</u>	<u>70.0</u>	<u>Initial</u>	<u>8.07</u>	<u>1457</u>
<u>23.0</u>	<u>4.90</u>	<u>1126</u>	<u>71000</u>	<u>1.0</u>	<u> </u>	<u>1459</u>
<u>22.8</u>	<u>4.90</u>	<u>1162</u>	<u>71000</u>	<u>2.0</u>	<u> </u>	<u>1502</u>
<u>22.9</u>	<u>4.91</u>	<u>1213</u>	<u>71000</u>	<u>3.0</u>	<u>9.18</u>	<u>1504</u>

Field Measurements at Time of Sampling

Temperature (degrees C)	pH (s.u.)	Conductivity (umhos/cm)	Turbidity (NTU)	Volume (gallons)	Water Level During Sampling (feet)	Time
<u>22.9</u>	<u>4.91</u>	<u>1213</u>	<u>71000</u>	<u>3.0</u>	<u>9.18</u>	<u>1504</u>

Instrument Calibration

		SEE MW-20			
Turbidity	Meter Type	1.0 NTU std =	5.94 NTU std =		
		10.0 NTU std =	49.6 NTU std =		
pH/Conductivity	Meter Type	4.01 std =			
		7.0 std =	1413 umhos/cm =		
		10.1 std =			

Physical Properties

Odor: NONE
 Color: DARK BROWN
 Turbidity: HIGH

VOC 8260
 Analysis Required: PAH 8270 DR0 8015
 Sample time/date: 1504/12-15-11

Description of Flow: TRACES OF SHEEN IN SAMPLE WATER

Deviations from SAP: _____

Sampler: BRAD BASHORE

Signature: [Signature]



GROUND WATER MONITORING WELL SAMPLING FIELD DATA SHEET

Client: ARCELORMITTAL GEORGETOWN

CEC Project Number: 111-036

Date: 12/15/11

Weather Observations: 70° SUNNY

WELL ID: MW-20

Casing Diameter: 2 (inches)

Water Height in Well: 6.54 (feet)

Total Depth: 12.18 (feet)

Water Volume in Well: 1.07 (gallons)

Depth to Water: 5.64 (feet)

Purge Volume: 3.20 gal. (calculated)
5.00 gal. (removed)

Depth to Top of Screen: 2 (feet)

Minimum Purge Volume (drawdown)(gal./ft.) + (well screen length)(gal./ft.) =

Measured using: ELECTRIC INTERFACE PROBE

Purged using: Dedicated Bailer/Polypro Rope Grundfos pump/poly tubing Other DISPOSABLE BAZLER

Sampled using: Dedicated Bailer/Polypro Rope Grundfos pump/poly tubing Other DISPOSABLE BAZLER

Water Volume Factors	
Diameter	Gallons/Foot
1 inches	0.04
1.5 inches	0.092
2 inches	0.17
3 inches	0.38
4 inches	0.66

P: Administrative Document Family: Form: Field Form - Revised 10/14/08

Field Measurements						
Temperature (degrees C)	pH (s.u.)	Conductivity (umhos/cm)	Turbidity (NTU)	Volume (gallons)	Water Level During Purging (feet)	Time
21.1	5.26	300	35.9	Initial	5.64	1123
21.0	5.28	286	71000	1.25	—	1125
21.4	5.13	273	71000	2.50	—	1129
21.2	5.04	288	71000	3.75	—	1134
21.6	5.08	289	881	5.00	6.15	1136

Field Measurements at Time of Sampling						
Temperature (degrees C)	pH (s.u.)	Conductivity (umhos/cm)	Turbidity (NTU)	Volume (gallons)	Water Level During Sampling (feet)	Time
21.6	5.08	289	881	5.00	6.15	1136

Instrument Calibration		12/15/11	
Turbidity	Meter Type	<u>HACH</u>	
	1.0 NTU std =	<u>—</u>	51.3 NTU std = <u>4.62</u>
	10.0 NTU std =	<u>—</u>	51.3 NTU std = <u>51.7</u>
pH/Conductivity	Meter Type	<u>OAKTON</u>	4.01 std = <u>3.98</u>
			7.0 std = <u>6.92</u>
			10.1 std = <u>10.08</u>
			1413 umhos/cm = <u>1414</u>

Physical Properties
 Odor: NONE
 Color: LIGHT BROWN
 Turbidity: HIGH

Analysis Required: VOC 8260 PAH 8270 DRB 8015
 Sample time/date: 1136/12-15-11

Comments: _____
 Deviations from SAP: _____

Sampler: BRAD BASHORE Signature: [Signature]



GROUND WATER MONITORING WELL SAMPLING FIELD DATA SHEET

Client: ARIEUR MITTAL GEORGETOWN

CEC Project Number: 111-036

Date: 12/15/11

Weather Observations: 74° SUNNY

WELL ID: MW-21

Water Volume Factors	
Diameter	Gallons/Foot
1 inches	0.04
1.5 inches	0.092
2 inches	0.17
3 inches	0.38
4 inches	0.66

Casing Diameter: 2 (inches)

Water Height in Well: 6.85 (feet)

Total Depth: 12.15 (feet)

Water Volume in Well: 1.12 (gallons)

Depth to Water: 5.30 (feet)

Purge Volume: 3.35 gal. (calculated)

5.00 gal. (removed)

Depth to Top of Screen: 2.15 (feet)

Minimum Purge Volume (drawdown)(gal./ft.) + (well screen length)(gal./ft.) =

Measured using: ELECTRIC WL METER

Purged using: Dedicated Bailer/Polypro Rope

Grundfos pump/poly tubing

Other: DISPOSABLE BAILET

Sampled using: Dedicated Bailer/Polypro Rope

Grundfos pump/poly tubing

Other: DISPOSABLE BAILET

Field Measurements

Temperature (degrees C)	pH (s.u.)	Conductivity (umhos/cm)	Turbidity (NTU)	Volume (gallons)	Water Level During Purging (feet)	Time
<u>25.3</u>	<u>5.35</u>	<u>4460</u>	<u>27.0</u>	<u>Initial</u>	<u>5.30</u>	<u>1345</u>
<u>25.5</u>	<u>5.29</u>	<u>4530</u>	<u>47.2</u>	<u>1.25</u>	<u> </u>	<u>1350</u>
<u>25.7</u>	<u>5.80</u>	<u>4500</u>	<u>205</u>	<u>2.50</u>	<u> </u>	<u>1353</u>
<u>25.6</u>	<u>5.15</u>	<u>4470</u>	<u>238</u>	<u>3.75</u>	<u> </u>	<u>1357</u>
<u>25.7</u>	<u>5.11</u>	<u>4410</u>	<u>63.8</u>	<u>5.00</u>	<u>8.41</u>	<u>1404</u>

Field Measurements at Time of Sampling

Temperature (degrees C)	pH (s.u.)	Conductivity (umhos/cm)	Turbidity (NTU)	Volume (gallons)	Water Level During Sampling (feet)	Time
<u>25.7</u>	<u>5.11</u>	<u>4410</u>	<u>63.8</u>	<u>5.00</u>	<u>8.41</u>	<u>1404</u>

Instrument Calibration

Turbidity	Meter Type	1.0 NTU std =	5.42 NTU std =
		10.0 NTU std =	51.8 NTU std =
pH/Conductivity	Meter Type	4.01 std =	499 NTU std =
		7.0 std =	1413 umhos/cm =
		10.1 std =	

Physical Properties

Odor: FADING PETROLEUM
Color: CLEAR
Turbidity: MEDZUM

Analysis Required: VOC 8260
PAH 8270 DRO 8015
Sample time/date: 1404/12-15-11

Comments:

Deviations from SAP: DUP-1 COLLECTED HERE (w/o PAH or "SVOC" BOTTLES COLLECTED)
HYDROCARBON FINGERPRINT BOTTLE COLLECTED HERE.
DUP-1 = "MW-CA-0"

Sampler: BRAD BASHORE

Signature: [Signature]



GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Client: ARCELORMITTAL GEORGETOWN
Date: 12/15/11

CEC Project Number: 111-036
Weather Observations: 76° SUNNY

WELL ID: MW-23

Table with 2 columns: Diameter, Gallons/Foot. Rows for 1, 1.5, 2, 3, 4 inches.

Casing Diameter: 2 (inches)
Water Height in Well: 6.23 (feet)
Total Depth: 12.14 (feet)
Water Volume in Well: 1.02 (gallons)
Depth to Water: 5.91 (FP) 7.62 (420)
Purge Volume: 3.05 gal (calculated) 3.75 gal (removed)
Depth to Top of Screen: 2.14 (feet)

Min. Purge Vol. for Passive Sampling ((tubing)(ml/ft)+(pump Vol)) =

Measured using: Electric water level tape.
Purged using: Bailer/Polypro Rope Dedicated Bladder pump/poly tubing Other DISPOSABLE BAITER
Sampled using: Bailer/Polypro Rope Dedicated Bladder pump/poly tubing Other DISPOSABLE BAITER

Field Measurements table with columns: Temperature, pH, Conductivity, Turbidity, Volume, Water Level During Purging, Time. Includes handwritten data points.

Field Measurements at Time of Sampling table with columns: Temperature, pH, Conductivity, Turbidity, Volume, Water Level During Sampling, Time. Includes handwritten data points.

Instrument Calibration table with columns: Turbidity, pH/Conductivity, Meter Type, and calibration standards.

Physical Properties: Odor: STRONG PETROLEUM, Color: DARK BLACKISH-BROWN, Turbidity: HIGH
Analysis Required: VOC 826, DRB 8015, PAH 8270, HYDROCARBON FINGERPRINT
Sample time/date: 1629 / 12-15-11

Description of Flow:
Deviations from SAP: COLLECTED HYDROCARBON FINGERPRINT BOTTLES HERE @ 1610 (12/05/11)

Sampler: BRAD BASHORE Signature: [Handwritten Signature]

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 26 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	MW-2	Protective Abutment:	Y - N
Weather Conditions	Air Temperature	Well Yield:	Low - Mod. - High
Total Well Depth (TWD) =		Remarks:	
Depth To Groundwater (DGW) =	4.46		
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x			
3 Casing Volumes =			
Total Volume of Water Removed =			
Method of Well Evacuation	TB SSB WW GP Other		
Method of Sample Collection	TB SSB WW GP Other		

Evacuation and Collection Methods
 TB - Teflon Bailor
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Grunkos Pump

Constants for Casing Diameters
 1.5" = 0.092
 2" = 0.163
 3" = 0.367
 4" = 0.652

5" = 1.02
 6" = 1.47
 7" = 2.00
 8" = 2.61

Field Analyses

Parameter	Well Sample Time:	Remarks:
VOLUME PURGED (GALLONS)		
TIME (24 HOUR SYSTEM)		
pH (SU)		
WATER TEMPERATURE (°C)		
SPECIFIC CONDUCTIVITY (UMHOS/CM)		
TURBIDITY (SUBJECTIVE)*		
ODOR (SUBJECTIVE)**		

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 24 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	NW3	Protective Abutment:	Y - N
Weather Conditions	Air Temperature	Well Yield: Low - Mod. - High	Integrity Satisfactory: Y - N
Total Well Depth (TWD) =		<u>Remarks:</u>	
Depth To Groundwater (DGW) =	7.03		
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	=	gal.	
3 Casing Volumes =		gal. = Standard Evacuation Volume	
Total Volume of Water Removed =		gal.	
Method of Well Evacuation	TB SSB WW GP Other		
Method of Sample Collection	TB SSB WW GP Other		

Evacuation and Collection Methods
 TB - Teflon Bailor
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Grundfos Pump

Constants for Casing Diameters
 1.5" = 0.092 5" = 1.02
 2" = 0.163 6" = 1.47
 3" = 0.367 7" = 2.00
 4" = 0.652 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)							Well Sample Time:
TIME (24 HOUR SYSTEM)							Remarks:
pH (SU)							
WATER TEMPERATURE (°C.)							
SPECIFIC CONDUCTIVITY (UMHOS/CM)							
TURBIDITY (SUBJECTIVE)*							
ODOR (SUBJECTIVE)**							

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 26 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	MW-4	Well Yield: Low - Mod. - High	Integrity Satisfactory: Y - N
Weather Conditions		Air Temperature	
Total Well Depth (TWD) =		°C:	
Depth To Groundwater (DGW) = 5.12			
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	=	gal.	
3 Casing Volumes =	=	gal. = Standard Evacuation Volume	
Total Volume of Water Removed =		gal.	
Method of Well Evacuation	TB SSB WW GP Other		
Method of Sample Collection	TB SSB WW GP Other		

Evacuation and Collection Methods
 TB - Teflon Bailor
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Grunfos Pump

Constants for Casing Diameters
 1.5" = 0.092
 2" = 0.163
 3" = 0.367
 4" = 0.652

5" = 1.02
 6" = 1.47
 7" = 2.00
 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)							Well Sample Time:
TIME (24 HOUR SYSTEM)							Remarks:
pH (SU)							
WATER TEMPERATURE (°C.)							
SPECIFIC CONDUCTIVITY (UMHOS/CM)							
TURBIDITY (SUBJECTIVE)*							
ODOR (SUBJECTIVE)**							

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 26 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	MW-5	Casing Diameter:	inches
Weather Conditions	Air Temperature	Guard Pipe:	PVC - Metal - No
Total Well Depth (TWD) =		Protective Abutment:	Y - N
Depth To Groundwater (DGW) =	6.22	Well Yield:	Low - Mod. - High
Length Of Water Column (LWC) =		Integrity Satisfactory:	Y - N
1 Casing Volume (OCV) = LWC x	=	Remarks:	
3 Casing Volumes =	gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB SSB WW GP Other		
Method of Sample Collection	TB SSB WW GP Other		

Evacuation and Collection Methods
 TB - Telfon Bailor
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Grundfos Pump

Constants for Casing Diameters
 1.5" = 0.092 5" = 1.02
 2" = 0.163 6" = 1.47
 3" = 0.367 7" = 2.00
 4" = 0.652 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)								Well Sample Time:
TIME (24 HOUR SYSTEM)								Remarks:
pH (SU)								
WATER TEMPERATURE (°C.)								
SPECIFIC CONDUCTIVITY (UMHOS/CM)								
TURBIDITY (SUBJECTIVE)*								
ODOR (SUBJECTIVE)**								

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)	March 26 2012		
Field Personnel	BTF		
Facility Name	Arcelor Georgetown		
Well ID #	MW-6		
Weather Conditions	Air Temperature		
Total Well Depth (TWD) =	°C.		
Depth To Groundwater (DGW) =	5.36		
Length Of Water Column (LWC) =	=		
1 Casing Volume (OCV) = LWC x	gal.		
3 Casing Volumes =	gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB	SSB	WW GP Other
Method of Sample Collection	TB	SSB	WW GP Other

Evacuation and Collection Methods
 TB - Teflon Bailor
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Grundfos Pump

Constants for Casing Diameters
 1.5" = 0.092 5" = 1.02
 2" = 0.163 6" = 1.47
 3" = 0.367 7" = 2.00
 4" = 0.652 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)							Well Sample Time:
TIME (24 HOUR SYSTEM)							Remarks:
pH (SU)							
WATER TEMPERATURE (°C.)							
SPECIFIC CONDUCTIVITY (UMHOS/CM)							
TURBIDITY (SUBJECTIVE)*							
ODOR (SUBJECTIVE)**							

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 21 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	MW-7	Protective Abutment:	Y - N
Weather Conditions	Air Temperature	Well Yield: Low - Mod. - High	Integrity Satisfactory: Y - N
Total Well Depth (TWD) =	°C.	Remarks:	
Depth To Groundwater (DGW) =	4.72		
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	=		
3 Casing Volumes =	gal.		
Total Volume of Water Removed =	gal. = Standard Evacuation Volume		
Method of Well Evacuation	TB SSB WW GP Other		
Method of Sample Collection	TB SSB WW GP Other		

Evacuation and Collection Methods

TB - Teflon Bailer	Constants for Casing Diameters
SSB - Stainless Steel Bailer	1.5" = 0.092 5" = 1.02
WW - Well Wizard	2" = 0.163 6" = 1.47
GP - Grunfos Pump	3" = 0.367 7" = 2.00
	4" = 0.652 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)								Well Sample Time:
TIME (24 HOUR SYSTEM)								Remarks:
pH (SU)								
WATER TEMPERATURE (°C.)								
SPECIFIC CONDUCTIVITY (UMHOS/CM)								
TURBIDITY (SUBJECTIVE)*								
ODOR (SUBJECTIVE)**								

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 26 2012	
Field Personnel		BTF	
Facility Name		<i>Arc. Co. Georgetown</i>	
Well ID #		<i>MJ-8</i>	
Weather Conditions		Air Temperature _____ °C.	
Total Well Depth (TWD) =			
Depth To Groundwater (DGW) =		<i>4.95</i>	
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x _____ = _____ gal.			
3 Casing Volumes = _____ gal. = Standard Evacuation Volume			
Total Volume of Water Removed = _____ gal.			
Method of Well Evacuation		TB	SSB
Method of Sample Collection		TB	SSB
		WW	GP
		Other	Other

Evacuation and Collection Methods
 TB - Teflon Bailer
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Grundfos Pump

Constants for Casing Diameters
 1.5" = 0.092 5" = 1.02
 2" = 0.163 6" = 1.47
 3" = 0.367 7" = 2.00
 4" = 0.652 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)								Well Sample Time:
TIME (24 HOUR SYSTEM)								Remarks:
pH (SU)								
WATER TEMPERATURE (°C.)								
SPECIFIC CONDUCTIVITY (UMHOS/CM)								
TURBIDITY (SUBJECTIVE)*								
ODOR (SUBJECTIVE)**								

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 26 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	MW-9	Weather Conditions	Air Temperature
Total Well Depth (TWD) =			°C.
Depth To Groundwater (DGW) =	5.58		
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	=		gal.
3 Casing Volumes =		gal. = Standard Evacuation Volume	
Total Volume of Water Removed =			gal.
Method of Well Evacuation	TB SSB WW GP Other		
Method of Sample Collection	TB SSB WW GP Other		

Evacuation and Collection Methods
 TB - Teflon Bailor
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Grunfos Pump

Constants for Casing Diameters
 1 5" = 0.092
 2" = 0.163
 3" = 0.367
 4" = 0.652
 5" = 1.02
 6" = 1.47
 7" = 2.00
 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)								Well Sample Time:
TIME (24 HOUR SYSTEM)								Remarks:
pH (SU)								
WATER TEMPERATURE (°C.)								
SPECIFIC CONDUCTIVITY (UMHOS/CM)								
TURBIDITY (SUBJECTIVE)*								
ODOR (SUBJECTIVE)**								

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)	March 2012			Casing Diameter:	inches	Casing Material: PVC - Metal
Field Personnel	BTF			Guard Pipe:	PVC - Metal - No	Locking Cap: Y - N
Facility Name	Arcelor Georgetown			Protective Abutment:	Y - N	Integrity Satisfactory: Y - N
Well ID #	AW-10			Well Yield:	Low - Mod. - High	
Weather Conditions	Air Temperature			Remarks:		
Total Well Depth (TWD) =						
Depth To Groundwater (DGW) =	5 5 3					
Length Of Water Column (LWC) =						
1 Casing Volume (OCV) = LWC x	=					
3 Casing Volumes =	gal. = Standard Evacuation Volume					
Total Volume of Water Removed =						
Method of Well Evacuation	TB	SSB	WW	GP	Other	
Method of Sample Collection	TB	SSB	WW	GP	Other	

Evacuation and Collection Methods
 TB - Teflon Bailor
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Grundfos Pump

Constants for Casing Diameters
 1.5" = 0.092 5" = 1.02
 2" = 0.163 6" = 1.47
 3" = 0.367 7" = 2.00
 4" = 0.652 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)								Well Sample Time:
TIME (24 HOUR SYSTEM)								Remarks:
pH (SU)								
WATER TEMPERATURE (°C.)								
SPECIFIC CONDUCTIVITY (UMHOS/CM)								
TURBIDITY (SUBJECTIVE)*								
ODOR (SUBJECTIVE)**								

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 26 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	MW-11	Protective Abutment:	Y - N
Weather Conditions	Air Temperature	Well Yield:	Low - Mod. - High
Total Well Depth (TWD) =		Remarks:	
Depth To Groundwater (DGW) =	5.78		
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	=		
3 Casing Volumes =	gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB SSB WW GP Other		
Method of Sample Collection	TB SSB WW GP Other		

Evacuation and Collection Methods
 TB - Teflon Bailer
 SSB - Stainless Steel Bailer
 WW - Well Wizard
 GP - Grinnfos Pump

Constants for Casing Diameters
 1.5" = 0.092 5" = 1.02
 2" = 0.163 6" = 1.47
 3" = 0.367 7" = 2.00
 4" = 0.652 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)									Well Sample Time:
TIME (24 HOUR SYSTEM)									Remarks:
pH (SU)									
WATER TEMPERATURE (°C)									
SPECIFIC CONDUCTIVITY (UMHOS/CM)									
TURBIDITY (SUBJECTIVE)*									
ODOR (SUBJECTIVE)**									

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = JIGHI ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)	March 26 2012		
Field Personnel	BTF		
Facility Name	Arcelor Georgetown		
Well ID #	M1-12		
Weather Conditions	Air Temperature		
Total Well Depth (TWD) =			
Depth To Groundwater (DGW) =	4.80		
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	=		
3 Casing Volumes =	gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB	SSB	WW GP Other
Method of Sample Collection	TB	SSB	WW GP Other

Evacuation and Collection Methods

TB - Teflon Bailer
 SSB - Stainless Steel Bailer
 WW - Well Wizard
 GP - Grunfos Pump

Constants for Casing Diameters

1.5" = 0.092	5" = 1.02
2" = 0.163	6" = 1.47
3" = 0.367	7" = 2.00
4" = 0.652	8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)								Well Sample Time:
TIME (24 HOUR SYSTEM)								Remarks:
pH (SU)								
WATER TEMPERATURE (°C.)								
SPECIFIC CONDUCTIVITY (UMHOS/CM)								
TURBIDITY (SUBJECTIVE)*								
ODOR (SUBJECTIVE)**								

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 26 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	MW-14	Protective Abutment:	Y - N
Weather Conditions	Air Temperature	Well Yield: Low - Mod. - High	Integrity Satisfactory: Y - N
Total Well Depth (TWD) =	°C.	Remarks:	
Depth To Groundwater (DGW) =	1.32		
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	=		
3 Casing Volumes =	gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB SSB WW GP Other		
Method of Sample Collection	TB SSB WW GP Other		

Evacuation and Collection Methods
 TB - Teflon Bailor
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Groutless Pump

Constants for Casing Diameters
 1.5" = 0.092
 2" = 0.163
 3" = 0.367
 4" = 0.652

5" = 1.02
 6" = 1.47
 7" = 2.00
 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)							Well Sample Time:
TIME (24 HOUR SYSTEM)							Remarks:
pH (SU)							
WATER TEMPERATURE (°C.)							
SPECIFIC CONDUCTIVITY (UMHOS/CM)							
TURBIDITY (SUBJECTIVE)*							
ODOR (SUBJECTIVE)**							

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)	March 26 2012		
Field Personnel	BTF		
Facility Name	Arcelor Georgetown		
Well ID #	MV-15		
Weather Conditions	Air Temperature		
Total Well Depth (TWD) =			
Depth To Groundwater (DGW) =	1.50		
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	= gal.		
3 Casing Volumes =	gal. = Standard Evacuation Volume		
Total Volume of Water Removed =			
Method of Well Evacuation	TB	SSB	WW GP Other
Method of Sample Collection	TB	SSB	WW GP Other

Evacuation and Collection Methods	Constants for Casing Diameters
TR - Teflon Bailor	1.5" = 0.092 5" = 1.02
SSB - Stainless Steel Bailor	2" = 0.163 6" = 1.47
WW - Well Wizard	3" = 0.367 7" = 2.00
GP - Grunfos Pump	4" = 0.652 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)	TIME (24 HOUR SYSTEM)	pH (SU)	WATER TEMPERATURE (°C.)	SPECIFIC CONDUCTIVITY (UMHOS/CM)	TURBIDITY (SUBJECTIVE)*	ODOR (SUBJECTIVE)**	Well Sample Time:
							Remarks:

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)	March 26 2012		
Field Personnel	BTF		
Facility Name	<i>Arcelor Georgia</i>		
Well ID #	<i>MW-16</i>		
Weather Conditions	Air Temperature		
Total Well Depth (TWD) =	°C.		
Depth To Groundwater (DGW) =	<i>5.25'</i>		
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	= gal.		
3 Casing Volumes =	gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB	SSB	WW GP Other
Method of Sample Collection	TB	SSB	WW GP Other

Evacuation and Collection Methods
 TB - Teflon Bailer
 SSB - Stainless Steel Bailer
 WW - Well Wizard
 GP - Grunfos Pump

Constants for Casing Diameters
 1.5" = 0.092 5" = 1.02
 2" = 0.163 6" = 1.47
 3" = 0.367 7" = 2.00
 4" = 0.652 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)								Well Sample Time:
TIME (24 HOUR SYSTEM)								Remarks:
pH (SU)								
WATER TEMPERATURE (°C.)								
SPECIFIC CONDUCTIVITY (UMHOS/CM)								
TURBIDITY (SUBJECTIVE)*								
ODOR (SUBJECTIVE)**								

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)	March 26 2012		
Field Personnel	BTF		
Facility Name	<i>Arzelor Gear, Inc</i>		
Well ID #	<i>MW-17</i>	Air Temperature	°C.
Weather Conditions			
Total Well Depth (TWD) =			
Depth To Groundwater (DGW) =	<i>4.96</i>		
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	=		
3 Casing Volumes =	gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB	SSB	WW GP Other
Method of Sample Collection	TB	SSB	WW GP Other

Evacuation and Collection Methods
 TB - Teflon Bailer
 SSB - Stainless Steel Bailer
 WW - Well Wizard
 GP - Grunfos Pump

Constants for Casing Diameters
 1.5" = 0.092 5" = 1.02
 2" = 0.163 6" = 1.47
 3" = 0.367 7" = 2.00
 4" = 0.652 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)									Well Sample Time:
TIME (24 HOUR SYSTEM)									<u>Remarks:</u>
pH (SU)									
WATER TEMPERATURE (°C.)									
SPECIFIC CONDUCTIVITY (UMHOS/CM)									
TURBIDITY (SUBJECTIVE)*									
ODOR (SUBJECTIVE)**									

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 26 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	AW-18	Casing Diameter:	inches
Weather Conditions	Air Temperature	Guard Pipe:	PVC - Metal - No
Total Well Depth (TWD) =	°C.	Protective Abutment:	Y - N
Depth To Groundwater (DGW) = 5.80		Well Yield: Low - Mod. - High	
Length Of Water Column (LWC) =		Remarks:	
1 Casing Volume (OCV) = LWC x	gal.		
3 Casing Volumes =	gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB	SSB	WW GP Other
Method of Sample Collection	TB	SSB	WW GP Other

Evacuation and Collection Methods
 TB - Teflon Bailer
 SSB - Stainless Steel Bailer
 WW - Well Wizard
 GP - Grundfos Pump

Constants for Casing Diameters
 1.5" = 0.092 5" = 1.02
 2" = 0.163 6" = 1.47
 3" = 0.367 7" = 2.00
 4" = 0.652 8" = 2.61

Field Analyses

Parameter	1 = NONE	2 = FAINT	3 = MODERATE	4 = STRONG	Well Sample Time:
VOLUME PURGED (GALLONS)					Remarks:
TIME (24 HOUR SYSTEM)					
pH (SU)					
WATER TEMPERATURE (°C.)					
SPECIFIC CONDUCTIVITY (UMHOS/CM)					
TURBIDITY (SUBJECTIVE)*					
ODOR (SUBJECTIVE)**					

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY) March 26 2012		Casing Diameter: inches	Casing Material: PVC - Metal
Field Personnel BTF		Guard Pipe: PVC - Metal - No	Locking Cap: Y - N
Facility Name Arcelor Georgetown		Protective Abutment: Y - N	Integrity Satisfactory: Y - N
Well ID # AW-17	Well Yield: Low - Mod. - High	Remarks:	
Weather Conditions Air Temperature °C.			
Total Well Depth (TWD) =			
Depth To Groundwater (DGW) = 542			
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	gal.		
3 Casing Volumes =	gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB SSB WW GP Other		
Method of Sample Collection	TB SSB WW GP Other		

Evacuation and Collection Methods

- TB - Teflon Bailer
- SSB - Stainless Steel Bailer
- WW - Well Wizard
- GP - Grundfos Pump

Constants for Casing Diameters

- 1.5" = 0.092
- 2" = 0.163
- 3" = 0.367
- 4" = 0.652
- 5" = 1.02
- 6" = 1.47
- 7" = 2.00
- 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)							Well Sample Time:
TIME (24 HOUR SYSTEM)							Remarks:
pH (SU)							
WATER TEMPERATURE (°C.)							
SPECIFIC CONDUCTIVITY (UMHOS/CM)							
TURBIDITY (SUBJECTIVE)*							
ODOR (SUBJECTIVE)**							

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 24 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	AW 22	Protective Abutment:	Y - N
Weather Conditions	Air Temperature	Well Yield: Low - Mod. - High	
Total Well Depth (TWD) =		Remarks:	
Depth To Groundwater (DGW) =	4.82		
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	=		
3 Casing Volumes =	gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB SSB WW GP Other		
Method of Sample Collection	TB SSB WW GP Other		

Evacuation and Collection Methods

TB - Teflon Bailer	5" = 1.02
SSB - Stainless Steel Bailer	2" = 0.163
WW - Well Wizard	3" = 0.367
GP - Grunfos Pump	4" = 0.652
	8" = 2.61

Constants for Casing Diameters

Field Analyses

VOLUME PURGED (GALLONS)								Well Sample Time:
TIME (24 HOUR SYSTEM)								Remarks:
pH (SU)								
WATER TEMPERATURE (°C.)								
SPECIFIC CONDUCTIVITY (UMHOS/CM)								
TURBIDITY (SUBJECTIVE)*								
ODOR (SUBJECTIVE)**								

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 26 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	TW-1		
Weather Conditions		Air Temperature	°C.
Total Well Depth (TWD) =			
Depth To Groundwater (DGW) =	10.48		
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x	=	gal.	
3 Casing Volumes =		gal. = Standard Evacuation Volume	
Total Volume of Water Removed =		gal.	
Method of Well Evacuation	TB SSB WW GP Other		
Method of Sample Collection	TB SSB WW GP Other		

Evacuation and Collection Methods

TB - Teflon Bailer	Constants for Casing Diameters
SSB - Stainless Steel Bailer	1.5" = 0.092
WW - Well Wizard	2" = 0.163
GP - Grundfos Pump	3" = 0.367
	4" = 0.652
	5" = 1.02
	6" = 1.47
	7" = 2.00
	8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)											Well Sample Time:
TIME (24 HOUR SYSTEM)											Remarks:
pH (SU)											
WATER TEMPERATURE (°C.)											
SPECIFIC CONDUCTIVITY (UMHOS/CM)											
TURBIDITY (SUBJECTIVE)*											
ODOR (SUBJECTIVE)**											

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)	March 26 2012	Casing Diameter:	inches	Casing Material:	PVC - Metal
Field Personnel	BTF	Guard Pipe:	PVC - Metal - No	Locking Cap:	Y - N
Facility Name	Arcelor Georgia	Protective Abutment:	Y - N	Integrity Satisfactory:	Y - N
Well ID #	MAN Hill 4-2	Well Yield:	Low - Mod. - High	Remarks:	
Weather Conditions	Air Temperature				
Total Well Depth (TWD) =	°C.				
Depth To Groundwater (DGW) =					
Length Of Water Column (LWC) =					
1 Casing Volume (OCV) = LWC x	gal.				
3 Casing Volumes =	gal. = Standard Evacuation Volume				
Total Volume of Water Removed =	gal.				
Method of Well Evacuation	TB SSB WW GP Other	Grabs			
Method of Sample Collection	TB SSB WW GP Other	↓			

Evacuation and Collection Methods
 TB - Teflon Bailor
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Grunfos Pump

Constants for Casing Diameters
 1.5" = 0.092
 2" = 0.163
 3" = 0.367
 4" = 0.652
 5" = 1.02
 6" = 1.47
 7" = 2.00
 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)	1st				Well Sample Time:	1445
TIME (24 HOUR SYSTEM)	1445				Remarks:	
pH (SU)	8.35					
WATER TEMPERATURE (°C.)	26.2					
SPECIFIC CONDUCTIVITY (UMHOS/CM)	304 (298)					
TURBIDITY (SUBJECTIVE)*	4.16					
ODOR (SUBJECTIVE)**	1					

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 26 2012	
Field Personnel		BTF	
Facility Name		<i>Arctic Georgia Tech</i>	
Well ID #	<i>MAR1016-A-4</i>	Weather Conditions	Air Temperature
Total Well Depth (TWD) =		°C.	
Depth To Groundwater (DGW) =			
Length Of Water Column (LWC) =			
1 Casing Volume (OCV) = LWC x			gal.
3 Casing Volumes =			gal. = Standard Evacuation Volume
Total Volume of Water Removed =		gal.	
Method of Well Evacuation	TB	SSB	WW GP Other
Method of Sample Collection	TB	SSB	WW GP Other

Evacuation and Collection Methods
 TB - Teflon Bailer
 SSB - Stainless Steel Bailer
 WW - Well Wizard
 GP - Grunfos Pump

Constants for Casing Diameters
 1.5" = 0.092
 2" = 0.163
 3" = 0.367
 4" = 0.652

5" = 1.02
 6" = 1.47
 7" = 2.00
 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)	<i>1.57</i>					Well Sample Time: <i>14:30</i>
TIME (24 HOUR SYSTEM)	<i>1436</i>					Remarks:
pH (SU)	<i>8.90</i>					
WATER TEMPERATURE (°C.)	<i>25.7</i>					
SPECIFIC CONDUCTIVITY (UMHOS/CM)	<i>367</i>					
TURBIDITY (SUBJECTIVE)*	<i>7.10</i>					
ODOR (SUBJECTIVE)**	<i>(369)</i>					

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 26, 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	ML-CA-1		
Weather Conditions	41.3/21.2	Air Temperature	°C
Total Well Depth (TWD) =	17.00	11.16	
Depth To Groundwater (DGW) =	5.49		
Length Of Water Column (LWC) =	6.11		
1 Casing Volume (OCV) = LWC x	6.11	= 1	gal.
3 Casing Volumes =	3.0		gal. = Standard Evacuation Volume
Total Volume of Water Removed =			gal.
Method of Well Evacuation	GP	SSB	WW GP Other
Method of Sample Collection	TB	SSB	WW GP Other

Evacuation and Collection Methods
 TB - Teflon Bailor
 GP - Stainless Steel Bailor
 WW - Well Wizard
 GP - Grunfos Pump

Constants for Casing Diameters
 1.5" = 0.092
 2" = 0.163
 3" = 0.367
 4" = 0.652
 5" = 1.02
 6" = 1.47
 7" = 2.00
 8" = 2.61

Field Analyses

	1st	1.0	2.0	3.0	Well Sample Time: 12:31
VOLUME PURGED (GALLONS)					
TIME (24 HOUR SYSTEM)	1222	1225	1227	1229	
pH (SU)	6.21	6.28	6.34	6.43	
WATER TEMPERATURE (°C)	26.6	27.7	27.7	25.2	
SPECIFIC CONDUCTIVITY (UMHOS/CM)	371	397	427	514 (514)	
TURBIDITY (SUBJECTIVE)*	71000	71000	71000	71000	
ODOR (SUBJECTIVE)**	1	1	1	1	
Remarks:					

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 24 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	AW-A-2	Weather Conditions	Air Temperature
Total Well Depth (TWD) =	17.40		°C.
Depth To Groundwater (DGW) =	5.22		
Length Of Water Column (LWC) =	7.68		
1 Casing Volume (OCV) = LWC x	0.163		gal.
3 Casing Volumes =	3.8		gal. = Standard Evacuation Volume
Total Volume of Water Removed =			gal.
Method of Well Evacuation	TB	SSB	WW GP Other
Method of Sample Collection	TB	SSB	WW GP Other

Evacuation and Collection Methods
 TB - Teflon Bailor
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Giraffus Pump

Constants for Casing Diameters
 1.5" = 0.092
 2" = 0.163
 3" = 0.367
 4" = 0.652

5" = 1.02
 6" = 1.47
 7" = 2.00
 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)	1.3	2.6	3.8	Well Sample Time: 12:56
TIME (24 HOUR SYSTEM)	1247	1251	1254	Remarks:
pH (SU)	9.18	9.37	9.55	
WATER TEMPERATURE (°C.)	24.0	23.1	22.4	
SPECIFIC CONDUCTIVITY (UMHOS/CM)	308	256	278.3	(292)
TURBIDITY (SUBJECTIVE)*	71000	71000	71000	
ODOR (SUBJECTIVE)**	1	1	1	

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)	March 26 2012	
Field Personnel	BTF	
Facility Name	Arcelor Georgetown	
Well ID #	MW CA-3	
Weather Conditions	Air Temperature	
Total Well Depth (TWD) =	13.19	
Depth To Groundwater (DGW) =	7.52	
Length Of Water Column (LWC) =	5.67	
1 Casing Volume (OCV) = LWC x	0.163	= 0.92 gal.
3 Casing Volumes =	2.8	gal. = Standard Evacuation Volume
Total Volume of Water Removed =		
Method of Well Evacuation	(TB) SSB WW GP Other	
Method of Sample Collection	(TB) SSB WW GP Other	

Evacuation and Collection Methods
 TB - Teflon Bailer
 SSB - Stainless Steel Bailer
 WW - Well Wizard
 GP - Gumbo Pump

Constants for Casing Diameters
 1.5" = 0.092
 2" = 0.163
 3" = 0.367
 4" = 0.652

Field Analyses

VOLUME PURGED (GALLONS)	1.5"	2"	3"	4"	5"	6"	7"	8"	Well Sample Time:
TIME (24 HOUR SYSTEM)	132	1134	6.13	6.07	1138	6.05	2.5	1138	1138
pH (SU)	24	241	241	241	241	241	241	241	
WATER TEMPERATURE (°C.)	2619	1723	1723	2675	2675	2675	2550	2550	(26006)
SPECIFIC CONDUCTIVITY (UMHOS/CM)	7100	7100	7100	7100	7100	7100	7100	7100	
TURBIDITY (SUBJECTIVE)*	4	4	4	4	4	4	4	4	
ODOR (SUBJECTIVE)**									

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

** 1 = NONE 2 = PAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 2012	
Field Personnel		BTF	
Facility Name		Arcelor Georgetown	
Well ID #	PW-CA-4	Casing Diameter:	2 inches
Weather Conditions	61 326/h	Guard Pipe:	PVC - Metal - No
Total Well Depth (TWD) =	1326	Protective Abutment:	Y - N
Depth To Groundwater (DGW) =	7.94	Well Yield:	Low - Mod. - High
Length Of Water Column (LWC) =	5.30	Remarks:	
1 Casing Volume (OCV) = LWC x	0.163		
3 Casing Volumes =	2.6		
Total Volume of Water Removed =			
Method of Well Evacuation	TB		
Method of Sample Collection	TB		

Evacuation and Collection Methods
 TB - Teflon Bailer
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Grunfos Pump

Constants for Casing Diameters
 1.5" = 0.092
 2" = 0.163
 3" = 0.367
 4" = 0.652

5" = 1.02
 6" = 1.47
 7" = 2.00
 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)	0.9	1.8	3.6	Well Sample Time:	1111
TIME (24 HOUR SYSTEM)	1102	1106	1108	Remarks:	
pH (SU)	6.20	6.36	6.49		
WATER TEMPERATURE (°C.)	23.5	23.2	23.1		
SPECIFIC CONDUCTIVITY (UMHOS/CM)	695	716	750		
TURBIDITY (SUBJECTIVE)*	156	71000	71000		
ODOR (SUBJECTIVE)**					

* 1 - CLEAR 2 - SLIGHT 3 - MODERATE 4 - HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY) March 26 2012		Casing Diameter: 2 inches	Casing Material: PVC - Metal
Field Personnel BTF		Guard Pipe: PVC - Metal - No	Locking Cap: Y - N
Facility Name Arcelor Georgetown		Protective Abutment: Y - N	Integrity Satisfactory: Y - N
Well ID # MW-20		Well Yield: Low - Mod. - High	
Weather Conditions Air Temperature		Remarks:	
Total Well Depth (TWD) = 12.18			
Depth To Groundwater (DGW) = 5.75			
Length Of Water Column (LWC) = 6.43			
1 Casing Volume (OCV) = LWC x 0.163 = 1 gal.			
3 Casing Volumes = 3 gal. = Standard Evacuation Volume			
Total Volume of Water Removed =			
Method of Well Evacuation TB SSB WW GP Other			
Method of Sample Collection TB SSB WW GP Other			

Evacuation and Collection Methods
 TB - Teflon Bailer
 SSB - Stainless Steel Bailer
 WW - Well Wizard
 GP - Grumfos Pump

Constants for Casing Diameters
 1.5" = 0.092
 2" = 0.163
 3" = 0.367
 4" = 0.652
 5" = 1.02
 6" = 1.47
 7" = 2.00
 8" = 2.61

Field Analyses

Well	1	2	3	Well Sample Time:
VOLUME PURGED (GALLONS)	1377	1351	1357	1356
TIME (24 HOUR SYSTEM)	7.63	7.01	6.86	Remarks:
pH (SU)	29.7	23.9	22.2	
WATER TEMPERATURE (°C.)	37.9	29.3	37.2	
SPECIFIC CONDUCTIVITY (UMHOS/CM)	507	7100	7100	
TURBIDITY (SUBJECTIVE)*	1	1	1	
ODOR (SUBJECTIVE)**				

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)	March 26 2012	Casing Diameter:	inches	Casing Material:	PVC - Metal
Field Personnel	BTF	Guard Pipe:	PVC - Metal - No	Locking Cap:	Y - N
Facility Name	Arcelor Georgia	Protective Abutment:	Y - N	Integrity Satisfactory:	Y - N
Well ID #	MW-21 (040-1)	Well Yield:	Low - Mod. - High	Remarks:	
Weather Conditions	Air Temperature	\uparrow ph vertical in 7 ph effe			
Total Well Depth (TWD) =	12.15				
Depth To Groundwater (DGW) =	5.50				
Length Of Water Column (LWC) =	6.65				
1 Casing Volume (OCV) = LWC x	0.163	gal.			
3 Casing Volumes =	3.3	gal. = Standard Evacuation Volume			
Total Volume of Water Removed =		gal.			
Method of Well Evacuation	(TB) SSB WW GP Other				
Method of Sample Collection	(TB) SSB WW GP Other				

Evacuation and Collection Methods

- TB - Teflon Bailor
- SSB - Stainless Steel Bailor
- WW - Well Wizard
- GP - Grunfos Pump

Constants for Casing Diameters

- 1.5" = 0.092
- 2" = 0.163
- 3" = 0.367
- 4" = 0.652
- 5" = 1.02
- 6" = 1.47
- 7" = 2.00
- 8" = 2.61

Field Analyses

VOLUME PURGED (GALLONS)	1.1	Well Sample Time:	1323
TIME (24 HOUR SYSTEM)	1314	Remarks:	
pH (SU)	11.79		ph e 1.1
WATER TEMPERATURE (°C.)	27.2		
SPECIFIC CONDUCTIVITY (UMHOS/CM)	3875		
TURBIDITY (SUBJECTIVE)*	1.65		
ODOR (SUBJECTIVE)**	()		

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH
 ** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

Field Data Information Sheet For Groundwater Sampling

Date (MM-DD-YY)		March 26 2012			
Field Personnel		BTF			
Facility Name		Arcelor Georgetown			
Well ID #	MW-23	Protective Abutment:	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
Weather Conditions	Air Temperature	Well Yield: Low - Mod. - High			
Total Well Depth (TWD) =	12.14	Remarks:			
Depth To Groundwater (DGW) =	7.62				
Length Of Water Column (LWC) =	4.52				
1 Casing Volume (OCV) = LWC x	0.167	= 0.7			
3 Casing Volumes =	1.5	gal. = Standard Evacuation Volume			
Total Volume of Water Removed =		gal.			
Method of Well Evacuation	TB	SSB	WW	GP	Other
Method of Sample Collection	TB	SSB	WW	GP	Other

Evacuation and Collection Methods
 TB - Teflon Bailor
 SSB - Stainless Steel Bailor
 WW - Well Wizard
 GP - Giraffes Pump

Constants for Casing Diameters
 1.5" = 0.092
 2" = 0.163
 3" = 0.367
 4" = 0.652
 5" = 1.02
 6" = 1.47
 7" = 2.00
 8" = 2.61

Field Analyses

	1st	6.7	1.4	2.1	Well Sample Time:
VOLUME PURGED (GALLONS)	12.02	12.04	12.06		12:10
TIME (24 HOUR SYSTEM)	6:20	6:51	6:35		
pH (SU)	25.9	24.6	24.8		
WATER TEMPERATURE (°C)	81.7	85	82	(62.1)	Dry C.L.U
SPECIFIC CONDUCTIVITY (UMHOS/CM)	7100	7000	7000		
TURBIDITY (SUBJECTIVE)*	4	4	4		
ODOR (SUBJECTIVE)**					

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

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APPENDIX B

Report of Analysis

Civil & Environmental Consultants, Inc.

8740 Orion Place
Suite 100
Columbus, OH 43240
Attention: Andrew McCorkle

Project Name: **Georgetown MW & Soil**

Project Number: **111-036**

Lot Number: **ML16014**

Date Completed: **01/18/2012**



Grant Wilton
Project Manager



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The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

* ML16014 *

SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DENR No: 329

Case Narrative

Civil & Environmental Consultants, Inc.

Lot Number: ML16014

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

REVISION 1

The PAH's for sample -002 were rerun at a 2x dilution.

REVISION 2

The samples were initially analyzed for BTEX/MTBE only. The TCL VOA list was reported from the BTEX/MTBE analytical sequences.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Summary Civil & Environmental Consultants, Inc. Lot Number: ML16014

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	MW-CA-1/S-2	Solid	12/14/2011 1153	12/16/2011
002	MW-CA-3/S-3	Solid	12/13/2011 1600	12/16/2011
003	MW-CA-2/S-1	Solid	12/13/2011 1815	12/16/2011
004	MW-CA-4/S-3	Solid	12/13/2011 1157	12/16/2011

(4 samples)

SHEALY ENVIRONMENTAL SERVICES, INC.

Executive Summary Civil & Environmental Consultants, Inc. Lot Number: ML16014

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	MW-CA-1/S-2	Solid	Acetone	8260B	130		ug/kg	5
001	MW-CA-1/S-2	Solid	2-Butanone (MEK)	8260B	23		ug/kg	5
001	MW-CA-1/S-2	Solid	Tetrachloroethene	8260B	10		ug/kg	5
001	MW-CA-1/S-2	Solid	Benzo(a)anthracene	8270D	580		ug/kg	7
001	MW-CA-1/S-2	Solid	Benzo(a)pyrene	8270D	490		ug/kg	7
001	MW-CA-1/S-2	Solid	Benzo(b)fluoranthene	8270D	580		ug/kg	7
001	MW-CA-1/S-2	Solid	Chrysene	8270D	520		ug/kg	7
001	MW-CA-1/S-2	Solid	Fluoranthene	8270D	800		ug/kg	7
001	MW-CA-1/S-2	Solid	Pyrene	8270D	680		ug/kg	7
001	MW-CA-1/S-2	Solid	TPH-DRO	8015C	370000	I11	ug/kg	8
002	MW-CA-3/S-3	Solid	Cyclohexane	8260B	69		ug/kg	9
002	MW-CA-3/S-3	Solid	1,1-Dichloroethene	8260B	1000		ug/kg	9
002	MW-CA-3/S-3	Solid	cis-1,2-Dichloroethene	8260B	260000		ug/kg	9
002	MW-CA-3/S-3	Solid	Tetrachloroethene	8260B	1800000		ug/kg	9
002	MW-CA-3/S-3	Solid	Trichloroethene	8260B	280000		ug/kg	10
002	MW-CA-3/S-3	Solid	Vinyl chloride	8260B	6000		ug/kg	10
002	MW-CA-3/S-3	Solid	Xylenes (total)	8260B	10000		ug/kg	10
002	MW-CA-3/S-3	Solid	Naphthalene	8270D	490		ug/kg	11
002	MW-CA-3/S-3	Solid	Naphthalene	8270D	450		ug/kg	12
002	MW-CA-3/S-3	Solid	TPH-DRO	8015C	5200000	I11	ug/kg	13
003	MW-CA-2/S-1	Solid	Acetone	8260B	24		ug/kg	14
003	MW-CA-2/S-1	Solid	cis-1,2-Dichloroethene	8260B	10		ug/kg	14
003	MW-CA-2/S-1	Solid	Tetrachloroethene	8260B	7.6		ug/kg	14
003	MW-CA-2/S-1	Solid	TPH-DRO	8015C	26000	I11	ug/kg	17
004	MW-CA-4/S-3	Solid	Acetone	8260B	54		ug/kg	18
004	MW-CA-4/S-3	Solid	cis-1,2-Dichloroethene	8260B	34		ug/kg	18
004	MW-CA-4/S-3	Solid	Tetrachloroethene	8260B	8.8		ug/kg	18
004	MW-CA-4/S-3	Solid	Fluoranthene	8270D	110		ug/kg	20
004	MW-CA-4/S-3	Solid	Pyrene	8270D	110		ug/kg	20
004	MW-CA-4/S-3	Solid	TPH-DRO	8015C	66000	I11	ug/kg	21

(30 detections)

Volatile Organic Compounds by GC/MS

 Client: **Civil & Environmental Consultants, Inc.**

 Laboratory ID: **ML16014-001**

 Description: **MW-CA-1/S-2**

 Matrix: **Solid**

 Date Sampled: **12/14/2011 1153**

 % Solids: **87.7 12/20/2011 0205**

 Date Received: **12/16/2011**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/27/2011 2016	LBS		75868	5.96

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	130		19	ug/kg	1
Benzene	71-43-2	8260B	ND		4.8	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.8	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.8	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	23		9.6	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.8	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.8	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.8	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.8	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.8	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.8	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.8	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.8	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.8	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.8	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.8	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.6	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.8	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.8	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.8	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.6	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.8	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.8	ug/kg	1
Styrene	100-42-5	8260B	ND		4.8	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.8	ug/kg	1
Tetrachloroethene	127-18-4	8260B	10		4.8	ug/kg	1
Toluene	108-88-3	8260B	ND		4.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.8	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.8	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.8	ug/kg	1

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16014-001
Description: MW-CA-1/S-2	Matrix: Solid
Date Sampled: 12/14/2011 1153	% Solids: 87.7 12/20/2011 0205
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/27/2011 2016	LBS		75868	5.96

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.8	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		4.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		72	53-142
Bromofluorobenzene		86	47-138
Toluene-d8		81	68-124

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Semivolatile Organic Compounds by GC/MS

Client: **Civil & Environmental Consultants, Inc.**

Laboratory ID: **ML16014-001**

Description: **MW-CA-1/S-2**

Matrix: **Solid**

Date Sampled: **12/14/2011 1153**

% Solids: **87.7 12/20/2011 0205**

Date Received: **12/16/2011**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	5	12/31/2011 0812	SJA	12/19/2011 1746	74041

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		380	ug/kg	1
Anthracene	120-12-7	8270D	ND		380	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	580		380	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	490		380	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	580		380	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		380	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		380	ug/kg	1
Chrysene	218-01-9	8270D	520		380	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		380	ug/kg	1
Fluoranthene	206-44-0	8270D	800		380	ug/kg	1
Fluorene	86-73-7	8270D	ND		380	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		380	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		380	ug/kg	1
Naphthalene	91-20-3	8270D	ND		380	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		380	ug/kg	1
Pyrene	129-00-0	8270D	680		380	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		76	33-102
Nitrobenzene-d5		54	22-109
Terphenyl-d14		81	41-120

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

TPH - DRO

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16014-001
Description: MW-CA-1/S-2	Matrix: Solid
Date Sampled: 12/14/2011 1153	% Solids: 87.7 12/20/2011 0205
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8015C	1	12/21/2011 1039	PMS	12/20/2011 1758	74155

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	370000	111	7600	ug/kg	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits				
o - Terphenyl		94	55-120				

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: **Civil & Environmental Consultants, Inc.**

Laboratory ID: **ML16014-002**

Description: **MW-CA-3/S-3**

Matrix: **Solid**

Date Sampled: **12/13/2011 1600**

% Solids: **82.3 12/20/2011 0205**

Date Received: **12/16/2011**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1000	12/27/2011 2104	LBS		75870	5.86
2	5035	8260B	1	12/23/2011 2352	LBS		75872	5.92

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		21000	ug/kg	1
Benzene	71-43-2	8260B	ND		5200	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5200	ug/kg	1
Bromoform	75-25-2	8260B	ND		5200	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.1	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	ND		10000	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.1	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		5200	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5200	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.1	ug/kg	2
Chloroform	67-66-3	8260B	ND		5200	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5200	ug/kg	1
Cyclohexane	110-82-7	8260B	69		5.1	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5200	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5200	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5200	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5200	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5200	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5200	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5200	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5200	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5200	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	1000		5.1	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	260000		5200	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5200	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5200	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5200	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5200	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5200	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10000	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5200	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5200	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5200	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10000	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5200	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.1	ug/kg	2
Styrene	100-42-5	8260B	ND		5200	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5200	ug/kg	1
Tetrachloroethene	127-18-4	8260B	1800000		5200	ug/kg	1
Toluene	108-88-3	8260B	ND		5200	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5200	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5200	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5200	ug/kg	1

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: **Civil & Environmental Consultants, Inc.**

Laboratory ID: **ML16014-002**

Description: **MW-CA-3/S-3**

Matrix: **Solid**

Date Sampled: **12/13/2011 1600**

% Solids: **82.3 12/20/2011 0205**

Date Received: **12/16/2011**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1000	12/27/2011 2104	LBS		75870	5.86
2	5035	8260B	1	12/23/2011 2352	LBS		75872	5.92

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,1,2-Trichloroethane	79-00-5	8260B	ND		5200	ug/kg	1
Trichloroethene	79-01-6	8260B	280000		5200	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5200	ug/kg	1
Vinyl chloride	75-01-4	8260B	6000		5200	ug/kg	1
Xylenes (total)	1330-20-7	8260B	10000		5200	ug/kg	1

Surrogate	Q	Run 1		Q	Run 2	
		% Recovery	Acceptance Limits		% Recovery	Acceptance Limits
1,2-Dichloroethane-d4	N	177	53-142		103	53-142
Bromofluorobenzene	N	0.00	47-138	N	16	47-138
Toluene-d8	N	155	68-124	N	242	68-124

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Semivolatile Organic Compounds by GC/MS

Client: **Civil & Environmental Consultants, Inc.**

Laboratory ID: **ML16014-002**

Description: **MW-CA-3/S-3**

Matrix: **Solid**

Date Sampled: **12/13/2011 1600**

% Solids: **82.3 12/20/2011 0205**

Date Received: **12/16/2011**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	5	12/30/2011 0419	WD	12/19/2011 1746	74041
2	3550C	8270D	2	01/13/2012 1648	JCG	12/19/2011 1746	74041

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		390	ug/kg	1
Anthracene	120-12-7	8270D	ND		390	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		390	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		390	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		390	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		390	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		390	ug/kg	1
Chrysene	218-01-9	8270D	ND		390	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		390	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		390	ug/kg	1
Fluorene	86-73-7	8270D	ND		390	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		390	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		390	ug/kg	1
Naphthalene	91-20-3	8270D	490		390	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		390	ug/kg	1
Pyrene	129-00-0	8270D	ND		390	ug/kg	1

Surrogate	Q	Run 1		Q	Run 2	
		% Recovery	Acceptance Limits		% Recovery	Acceptance Limits
2-Fluorobiphenyl		77	33-102		66	33-102
Nitrobenzene-d5	N	0.00	22-109		93	22-109
Terphenyl-d14		47	41-120		62	41-120

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Semivolatile Organic Compounds by GC/MS

Client: **Civil & Environmental Consultants, Inc.**

Laboratory ID: **ML16014-002**

Description: **MW-CA-3/S-3**

Matrix: **Solid**

Date Sampled: **12/13/2011 1600**

% Solids: **82.3 12/20/2011 0205**

Date Received: **12/16/2011**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	5	12/30/2011 0419	WD	12/19/2011 1746	74041
2	3550C	8270D	2	01/13/2012 1648	JCG	12/19/2011 1746	74041

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND*		160	ug/kg	2
Anthracene	120-12-7	8270D	ND*		160	ug/kg	2
Benzo(a)anthracene	56-55-3	8270D	ND*		160	ug/kg	2
Benzo(a)pyrene	50-32-8	8270D	ND*		160	ug/kg	2
Benzo(b)fluoranthene	205-99-2	8270D	ND*		160	ug/kg	2
Benzo(g,h,i)perylene	191-24-2	8270D	ND*		160	ug/kg	2
Benzo(k)fluoranthene	207-08-9	8270D	ND*		160	ug/kg	2
Chrysene	218-01-9	8270D	ND*		160	ug/kg	2
Dibenzo(a,h)anthracene	53-70-3	8270D	ND*		160	ug/kg	2
Fluoranthene	206-44-0	8270D	ND*		160	ug/kg	2
Fluorene	86-73-7	8270D	ND*		160	ug/kg	2
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND*		160	ug/kg	2
2-Methylnaphthalene	91-57-6	8270D	ND*		160	ug/kg	2
Naphthalene	91-20-3	8270D	450*		160	ug/kg	2
Phenanthrene	85-01-8	8270D	ND*		160	ug/kg	2
Pyrene	129-00-0	8270D	ND*		160	ug/kg	2

Surrogate	Q	Run 1		Q	Run 2	
		% Recovery	Acceptance Limits		% Recovery	Acceptance Limits
2-Fluorobiphenyl		77	33-102		66	33-102
Nitrobenzene-d5	N	0.00	22-109		93	22-109
Terphenyl-d14		47	41-120		62	41-120

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

TPH - DRO

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16014-002
Description: MW-CA-3/S-3	Matrix: Solid
Date Sampled: 12/13/2011 1600	% Solids: 82.3 12/20/2011 0205
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	3550C	8015C	5	12/21/2011 1307	PMS	12/20/2011 1758	74155

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	5200000	I11	40000	ug/kg	2
Surrogate	Q	Run 2 % Recovery	Acceptance Limits				
o - Terphenyl		79	55-120				

Footnote(s): I11 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

 Client: **Civil & Environmental Consultants, Inc.**

 Laboratory ID: **ML16014-003**

 Description: **MW-CA-2/S-1**

 Matrix: **Solid**

 Date Sampled: **12/13/2011 1815**

 % Solids: **86.6 12/20/2011 0205**

 Date Received: **12/16/2011**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/22/2011 1211	LBS		75867	5.95

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	24		19	ug/kg	1
Benzene	71-43-2	8260B	ND		4.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		9.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	10		4.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.9	ug/kg	1
Styrene	100-42-5	8260B	ND		4.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	7.6		4.9	ug/kg	1
Toluene	108-88-3	8260B	ND		4.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.9	ug/kg	1

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16014-003
Description: MW-CA-2/S-1	Matrix: Solid
Date Sampled: 12/13/2011 1815	% Solids: 86.6 12/20/2011 0205
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/22/2011 1211	LBS		75867	5.95

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		4.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	53-142
Bromofluorobenzene		97	47-138
Toluene-d8		91	68-124

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Semivolatile Organic Compounds by GC/MS

Client: **Civil & Environmental Consultants, Inc.**

Laboratory ID: **ML16014-003**

Description: **MW-CA-2/S-1**

Matrix: **Solid**

Date Sampled: **12/13/2011 1815**

% Solids: **86.6 12/20/2011 0205**

Date Received: **12/16/2011**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/20/2011 1944	SJA	12/19/2011 1746	74041

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		76	ug/kg	1
Anthracene	120-12-7	8270D	ND		76	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		76	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		76	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		76	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		76	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		76	ug/kg	1
Chrysene	218-01-9	8270D	ND		76	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		76	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		76	ug/kg	1
Fluorene	86-73-7	8270D	ND		76	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		76	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		76	ug/kg	1
Naphthalene	91-20-3	8270D	ND		76	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		76	ug/kg	1
Pyrene	129-00-0	8270D	ND		76	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		47	33-102
Nitrobenzene-d5		43	22-109
Terphenyl-d14		57	41-120

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

TPH - DRO

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16014-003
Description: MW-CA-2/S-1	Matrix: Solid
Date Sampled: 12/13/2011 1815	% Solids: 86.6 12/20/2011 0205
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8015C	1	12/21/2011 1142	PMS	12/20/2011 1758	74155

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	26000	111	7500	ug/kg	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits				
o - Terphenyl		97	55-120				

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: **Civil & Environmental Consultants, Inc.**

Laboratory ID: **ML16014-004**

Description: **MW-CA-4/S-3**

Matrix: **Solid**

Date Sampled: **12/13/2011 1157**

% Solids: **64.6 12/20/2011 0205**

Date Received: **12/16/2011**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/27/2011 2040	LBS		75868	6.30

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	54		25	ug/kg	1
Benzene	71-43-2	8260B	ND		6.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.1	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.1	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		12	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.1	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.1	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.1	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.1	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.1	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.1	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	34		6.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.1	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.1	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.1	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.1	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.1	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.1	ug/kg	1
Styrene	100-42-5	8260B	ND		6.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.1	ug/kg	1
Tetrachloroethene	127-18-4	8260B	8.8		6.1	ug/kg	1
Toluene	108-88-3	8260B	ND		6.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.1	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.1	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.1	ug/kg	1

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16014-004
Description: MW-CA-4/S-3	Matrix: Solid
Date Sampled: 12/13/2011 1157	% Solids: 64.6 12/20/2011 0205
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/27/2011 2040	LBS		75868	6.30

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		70	53-142
Bromofluorobenzene		94	47-138
Toluene-d8		80	68-124

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Semivolatile Organic Compounds by GC/MS

Client: **Civil & Environmental Consultants, Inc.**

Laboratory ID: **ML16014-004**

Description: **MW-CA-4/S-3**

Matrix: **Solid**

Date Sampled: **12/13/2011 1157**

% Solids: **64.6 12/20/2011 0205**

Date Received: **12/16/2011**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/20/2011 2003	SJA	12/19/2011 1746	74041

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		100	ug/kg	1
Anthracene	120-12-7	8270D	ND		100	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		100	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		100	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		100	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		100	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		100	ug/kg	1
Chrysene	218-01-9	8270D	ND		100	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		100	ug/kg	1
Fluoranthene	206-44-0	8270D	110		100	ug/kg	1
Fluorene	86-73-7	8270D	ND		100	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		100	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		100	ug/kg	1
Naphthalene	91-20-3	8270D	ND		100	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		100	ug/kg	1
Pyrene	129-00-0	8270D	110		100	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		54	33-102
Nitrobenzene-d5		49	22-109
Terphenyl-d14		56	41-120

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

TPH - DRO

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16014-004
Description: MW-CA-4/S-3	Matrix: Solid
Date Sampled: 12/13/2011 1157	% Solids: 64.6 12/20/2011 0205
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8015C	1	12/21/2011 1246	PMS	12/20/2011 1758	74155

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	66000	I11	10000	ug/kg	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits				
o - Terphenyl		97	55-120				

Footnote(s): I11 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ75867-001

Matrix: Solid

Batch: 75867

Prep Method: 5035

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/kg	12/22/2011 1052
Benzene	ND		1	5.0	ug/kg	12/22/2011 1052
Bromodichloromethane	ND		1	5.0	ug/kg	12/22/2011 1052
Bromoform	ND		1	5.0	ug/kg	12/22/2011 1052
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	12/22/2011 1052
2-Butanone (MEK)	ND		1	10	ug/kg	12/22/2011 1052
Carbon disulfide	ND		1	5.0	ug/kg	12/22/2011 1052
Carbon tetrachloride	ND		1	5.0	ug/kg	12/22/2011 1052
Chlorobenzene	ND		1	5.0	ug/kg	12/22/2011 1052
Chloroethane	ND		1	5.0	ug/kg	12/22/2011 1052
Chloroform	ND		1	5.0	ug/kg	12/22/2011 1052
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	12/22/2011 1052
Cyclohexane	ND		1	5.0	ug/kg	12/22/2011 1052
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	12/22/2011 1052
Dibromochloromethane	ND		1	5.0	ug/kg	12/22/2011 1052
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	12/22/2011 1052
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	12/22/2011 1052
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	12/22/2011 1052
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	12/22/2011 1052
Dichlorodifluoromethane	ND		1	5.0	ug/kg	12/22/2011 1052
1,2-Dichloroethane	ND		1	5.0	ug/kg	12/22/2011 1052
1,1-Dichloroethane	ND		1	5.0	ug/kg	12/22/2011 1052
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/22/2011 1052
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/22/2011 1052
1,1-Dichloroethene	ND		1	5.0	ug/kg	12/22/2011 1052
1,2-Dichloropropane	ND		1	5.0	ug/kg	12/22/2011 1052
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/22/2011 1052
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/22/2011 1052
Ethylbenzene	ND		1	5.0	ug/kg	12/22/2011 1052
2-Hexanone	ND		1	10	ug/kg	12/22/2011 1052
Isopropylbenzene	ND		1	5.0	ug/kg	12/22/2011 1052
Methyl acetate	ND		1	5.0	ug/kg	12/22/2011 1052
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	12/22/2011 1052
4-Methyl-2-pentanone	ND		1	10	ug/kg	12/22/2011 1052
Methylcyclohexane	ND		1	5.0	ug/kg	12/22/2011 1052
Methylene chloride	ND		1	5.0	ug/kg	12/22/2011 1052
Styrene	ND		1	5.0	ug/kg	12/22/2011 1052
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	12/22/2011 1052
Tetrachloroethene	ND		1	5.0	ug/kg	12/22/2011 1052
Toluene	ND		1	5.0	ug/kg	12/22/2011 1052
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	12/22/2011 1052
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	12/22/2011 1052
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	12/22/2011 1052
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	12/22/2011 1052

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ75867-001

Matrix: Solid

Batch: 75867

Prep Method: 5035

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	12/22/2011 1052
Trichlorofluoromethane	ND		1	5.0	ug/kg	12/22/2011 1052
Vinyl chloride	ND		1	5.0	ug/kg	12/22/2011 1052
Xylenes (total)	ND		1	5.0	ug/kg	12/22/2011 1052
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		102	47-138			
1,2-Dichloroethane-d4		92	53-142			
Toluene-d8		94	68-124			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ75867-002

Matrix: Solid

Batch: 75867

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	105	42-149	12/22/2011 0918
Benzene	50	55		1	111	69-123	12/22/2011 0918
Bromodichloromethane	50	54		1	107	69-121	12/22/2011 0918
Bromoform	50	49		1	99	61-119	12/22/2011 0918
Bromomethane (Methyl bromide)	50	54		1	108	35-144	12/22/2011 0918
2-Butanone (MEK)	100	110		1	105	57-148	12/22/2011 0918
Carbon disulfide	50	60		1	120	58-122	12/22/2011 0918
Carbon tetrachloride	50	58		1	117	58-136	12/22/2011 0918
Chlorobenzene	50	53		1	105	59-129	12/22/2011 0918
Chloroethane	50	55		1	111	42-163	12/22/2011 0918
Chloroform	50	56		1	112	71-125	12/22/2011 0918
Chloromethane (Methyl chloride)	50	59		1	117	34-134	12/22/2011 0918
Cyclohexane	50	59		1	117	53-139	12/22/2011 0918
1,2-Dibromo-3-chloropropane (DBCP)	50	45		1	89	55-125	12/22/2011 0918
Dibromochloromethane	50	50		1	100	66-119	12/22/2011 0918
1,2-Dibromoethane (EDB)	50	49		1	98	74-124	12/22/2011 0918
1,4-Dichlorobenzene	50	54		1	107	52-133	12/22/2011 0918
1,3-Dichlorobenzene	50	56		1	113	51-134	12/22/2011 0918
1,2-Dichlorobenzene	50	53		1	106	57-131	12/22/2011 0918
Dichlorodifluoromethane	50	58		1	115	10-157	12/22/2011 0918
1,2-Dichloroethane	50	52		1	104	67-129	12/22/2011 0918
1,1-Dichloroethane	50	56		1	112	71-127	12/22/2011 0918
trans-1,2-Dichloroethene	50	59		1	119	68-131	12/22/2011 0918
cis-1,2-Dichloroethene	50	56		1	112	70-122	12/22/2011 0918
1,1-Dichloroethene	50	59		1	118	69-138	12/22/2011 0918
1,2-Dichloropropane	50	53		1	107	72-124	12/22/2011 0918
trans-1,3-Dichloropropene	50	50		1	100	70-124	12/22/2011 0918
cis-1,3-Dichloropropene	50	54		1	109	70-126	12/22/2011 0918
Ethylbenzene	50	54		1	109	59-128	12/22/2011 0918
2-Hexanone	100	90		1	90	54-137	12/22/2011 0918
Isopropylbenzene	50	59		1	119	50-136	12/22/2011 0918
Methyl acetate	50	48		1	95	59-137	12/22/2011 0918
Methyl tertiary butyl ether (MTBE)	50	53		1	106	72-122	12/22/2011 0918
4-Methyl-2-pentanone	100	100		1	100	60-134	12/22/2011 0918
Methylcyclohexane	50	60		1	119	41-144	12/22/2011 0918
Methylene chloride	50	55		1	110	77-129	12/22/2011 0918
Styrene	50	52		1	104	54-136	12/22/2011 0918
1,1,2,2-Tetrachloroethane	50	51		1	103	69-132	12/22/2011 0918
Tetrachloroethene	50	55		1	110	45-150	12/22/2011 0918
Toluene	50	56		1	111	61-129	12/22/2011 0918
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	70	N	1	139	49-136	12/22/2011 0918
1,2,4-Trichlorobenzene	50	53		1	105	34-145	12/22/2011 0918
1,1,2-Trichloroethane	50	51		1	102	55-128	12/22/2011 0918
1,1,1-Trichloroethane	50	59		1	118	63-128	12/22/2011 0918

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ75867-002

Matrix: Solid

Batch: 75867

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	57		1	113	62-126	12/22/2011 0918
Trichlorofluoromethane	50	58		1	117	45-138	12/22/2011 0918
Vinyl chloride	50	59		1	117	42-132	12/22/2011 0918
Xylenes (total)	100	110		1	114	58-128	12/22/2011 0918
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		98			47-138		
1,2-Dichloroethane-d4		89			53-142		
Toluene-d8		96			68-124		

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ75867-003

Batch: 75867

Analytical Method: 8260B

Matrix: Solid

Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	110		1	110	4.8	42-149	20	12/22/2011 0941
Benzene	50	53		1	105	5.2	69-123	20	12/22/2011 0941
Bromodichloromethane	50	51		1	103	4.3	69-121	20	12/22/2011 0941
Bromoform	50	48		1	96	2.8	61-119	20	12/22/2011 0941
Bromomethane (Methyl bromide)	50	52		1	104	4.0	35-144	20	12/22/2011 0941
2-Butanone (MEK)	100	110		1	115	8.5	57-148	20	12/22/2011 0941
Carbon disulfide	50	58		1	116	3.4	58-122	20	12/22/2011 0941
Carbon tetrachloride	50	56		1	112	4.2	58-136	20	12/22/2011 0941
Chlorobenzene	50	50		1	100	5.5	59-129	20	12/22/2011 0941
Chloroethane	50	52		1	104	6.7	42-163	20	12/22/2011 0941
Chloroform	50	55		1	111	0.83	71-125	20	12/22/2011 0941
Chloromethane (Methyl chloride)	50	55		1	111	5.8	34-134	20	12/22/2011 0941
Cyclohexane	50	56		1	111	5.2	53-139	20	12/22/2011 0941
1,2-Dibromo-3-chloropropane (DBCP)	50	44		1	88	1.0	55-125	20	12/22/2011 0941
Dibromochloromethane	50	49		1	98	2.3	66-119	20	12/22/2011 0941
1,2-Dibromoethane (EDB)	50	50		1	99	1.0	74-124	20	12/22/2011 0941
1,4-Dichlorobenzene	50	50		1	101	6.5	52-133	20	12/22/2011 0941
1,3-Dichlorobenzene	50	50		1	100	12	51-134	20	12/22/2011 0941
1,2-Dichlorobenzene	50	49		1	98	8.0	57-131	20	12/22/2011 0941
Dichlorodifluoromethane	50	54		1	108	6.4	10-157	20	12/22/2011 0941
1,2-Dichloroethane	50	52		1	105	0.77	67-129	20	12/22/2011 0941
1,1-Dichloroethane	50	54		1	109	2.6	71-127	20	12/22/2011 0941
trans-1,2-Dichloroethene	50	58		1	116	1.8	68-131	20	12/22/2011 0941
cis-1,2-Dichloroethene	50	55		1	110	1.8	70-122	20	12/22/2011 0941
1,1-Dichloroethene	50	57		1	114	3.6	69-138	20	12/22/2011 0941
1,2-Dichloropropane	50	52		1	103	3.1	72-124	20	12/22/2011 0941
trans-1,3-Dichloropropene	50	50		1	99	0.70	70-124	20	12/22/2011 0941
cis-1,3-Dichloropropene	50	52		1	103	5.0	70-126	20	12/22/2011 0941
Ethylbenzene	50	52		1	103	5.4	59-128	20	12/22/2011 0941
2-Hexanone	100	94		1	94	4.9	54-137	20	12/22/2011 0941
Isopropylbenzene	50	53		1	105	12	50-136	20	12/22/2011 0941
Methyl acetate	50	50		1	100	5.2	59-137	20	12/22/2011 0941
Methyl tertiary butyl ether (MTBE)	50	53		1	107	0.65	72-122	20	12/22/2011 0941
4-Methyl-2-pentanone	100	100		1	102	1.9	60-134	20	12/22/2011 0941
Methylcyclohexane	50	56		1	112	6.2	41-144	20	12/22/2011 0941
Methylene chloride	50	55		1	110	0.11	77-129	20	12/22/2011 0941
Styrene	50	50		1	100	3.4	54-136	20	12/22/2011 0941
1,1,2,2-Tetrachloroethane	50	50		1	100	2.9	69-132	20	12/22/2011 0941
Tetrachloroethene	50	52		1	104	5.9	45-150	20	12/22/2011 0941
Toluene	50	52		1	104	6.6	61-129	20	12/22/2011 0941
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	66		1	132	5.7	49-136	20	12/22/2011 0941
1,2,4-Trichlorobenzene	50	50		1	100	4.8	34-145	20	12/22/2011 0941
1,1,2-Trichloroethane	50	50		1	100	1.6	55-128	20	12/22/2011 0941
1,1,1-Trichloroethane	50	56		1	112	4.7	63-128	20	12/22/2011 0941

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ75867-003

Matrix: Solid

Batch: 75867

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	54		1	108	4.5	62-126	20	12/22/2011 0941
Trichlorofluoromethane	50	55		1	110	5.6	45-138	20	12/22/2011 0941
Vinyl chloride	50	56		1	111	5.2	42-132	20	12/22/2011 0941
Xylenes (total)	100	110		1	109	4.6	58-128	20	12/22/2011 0941
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		99	47-138						
1,2-Dichloroethane-d4		88	53-142						
Toluene-d8		93	68-124						

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ75868-001

Matrix: Solid

Batch: 75868

Prep Method: 5035

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/kg	12/27/2011 1929
Benzene	ND		1	5.0	ug/kg	12/27/2011 1929
Bromodichloromethane	ND		1	5.0	ug/kg	12/27/2011 1929
Bromoform	ND		1	5.0	ug/kg	12/27/2011 1929
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	12/27/2011 1929
2-Butanone (MEK)	ND		1	10	ug/kg	12/27/2011 1929
Carbon disulfide	ND		1	5.0	ug/kg	12/27/2011 1929
Carbon tetrachloride	ND		1	5.0	ug/kg	12/27/2011 1929
Chlorobenzene	ND		1	5.0	ug/kg	12/27/2011 1929
Chloroethane	ND		1	5.0	ug/kg	12/27/2011 1929
Chloroform	ND		1	5.0	ug/kg	12/27/2011 1929
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	12/27/2011 1929
Cyclohexane	ND		1	5.0	ug/kg	12/27/2011 1929
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	12/27/2011 1929
Dibromochloromethane	ND		1	5.0	ug/kg	12/27/2011 1929
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	12/27/2011 1929
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	12/27/2011 1929
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	12/27/2011 1929
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	12/27/2011 1929
Dichlorodifluoromethane	ND		1	5.0	ug/kg	12/27/2011 1929
1,2-Dichloroethane	ND		1	5.0	ug/kg	12/27/2011 1929
1,1-Dichloroethane	ND		1	5.0	ug/kg	12/27/2011 1929
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/27/2011 1929
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/27/2011 1929
1,1-Dichloroethene	ND		1	5.0	ug/kg	12/27/2011 1929
1,2-Dichloropropane	ND		1	5.0	ug/kg	12/27/2011 1929
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/27/2011 1929
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/27/2011 1929
Ethylbenzene	ND		1	5.0	ug/kg	12/27/2011 1929
2-Hexanone	ND		1	10	ug/kg	12/27/2011 1929
Isopropylbenzene	ND		1	5.0	ug/kg	12/27/2011 1929
Methyl acetate	ND		1	5.0	ug/kg	12/27/2011 1929
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	12/27/2011 1929
4-Methyl-2-pentanone	ND		1	10	ug/kg	12/27/2011 1929
Methylcyclohexane	ND		1	5.0	ug/kg	12/27/2011 1929
Methylene chloride	ND		1	5.0	ug/kg	12/27/2011 1929
Styrene	ND		1	5.0	ug/kg	12/27/2011 1929
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	12/27/2011 1929
Tetrachloroethene	ND		1	5.0	ug/kg	12/27/2011 1929
Toluene	ND		1	5.0	ug/kg	12/27/2011 1929
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	12/27/2011 1929
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	12/27/2011 1929
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	12/27/2011 1929
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	12/27/2011 1929

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ75868-001

Matrix: Solid

Batch: 75868

Prep Method: 5035

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	12/27/2011 1929
Trichlorofluoromethane	ND		1	5.0	ug/kg	12/27/2011 1929
Vinyl chloride	ND		1	5.0	ug/kg	12/27/2011 1929
Xylenes (total)	ND		1	5.0	ug/kg	12/27/2011 1929
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene	N	0.00	47-138			
1,2-Dichloroethane-d4	N	0.00	53-142			
Toluene-d8	N	0.00	68-124			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ75868-002

Matrix: Solid

Batch: 75868

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	93		1	93	42-149	12/27/2011 1750
Benzene	50	45		1	90	69-123	12/27/2011 1750
Bromodichloromethane	50	45		1	90	69-121	12/27/2011 1750
Bromoform	50	44		1	88	61-119	12/27/2011 1750
Bromomethane (Methyl bromide)	50	42		1	85	35-144	12/27/2011 1750
2-Butanone (MEK)	100	110		1	107	57-148	12/27/2011 1750
Carbon disulfide	50	49		1	98	58-122	12/27/2011 1750
Carbon tetrachloride	50	42		1	84	58-136	12/27/2011 1750
Chlorobenzene	50	47		1	94	59-129	12/27/2011 1750
Chloroethane	50	42		1	84	42-163	12/27/2011 1750
Chloroform	50	44		1	87	71-125	12/27/2011 1750
Chloromethane (Methyl chloride)	50	45		1	90	34-134	12/27/2011 1750
Cyclohexane	50	40		1	79	53-139	12/27/2011 1750
1,2-Dibromo-3-chloropropane (DBCP)	50	32		1	65	55-125	12/27/2011 1750
Dibromochloromethane	50	45		1	90	66-119	12/27/2011 1750
1,2-Dibromoethane (EDB)	50	48		1	97	74-124	12/27/2011 1750
1,4-Dichlorobenzene	50	45		1	91	52-133	12/27/2011 1750
1,3-Dichlorobenzene	50	46		1	92	51-134	12/27/2011 1750
1,2-Dichlorobenzene	50	42		1	85	57-131	12/27/2011 1750
Dichlorodifluoromethane	50	50		1	101	10-157	12/27/2011 1750
1,2-Dichloroethane	50	46		1	92	67-129	12/27/2011 1750
1,1-Dichloroethane	50	43		1	85	71-127	12/27/2011 1750
trans-1,2-Dichloroethene	50	47		1	94	68-131	12/27/2011 1750
cis-1,2-Dichloroethene	50	45		1	90	70-122	12/27/2011 1750
1,1-Dichloroethene	50	46		1	91	69-138	12/27/2011 1750
1,2-Dichloropropane	50	46		1	91	72-124	12/27/2011 1750
trans-1,3-Dichloropropene	50	48		1	95	70-124	12/27/2011 1750
cis-1,3-Dichloropropene	50	49		1	98	70-126	12/27/2011 1750
Ethylbenzene	50	46		1	92	59-128	12/27/2011 1750
2-Hexanone	100	110		1	109	54-137	12/27/2011 1750
Isopropylbenzene	50	46		1	92	50-136	12/27/2011 1750
Methyl acetate	50	43		1	87	59-137	12/27/2011 1750
Methyl tertiary butyl ether (MTBE)	50	41		1	81	72-122	12/27/2011 1750
4-Methyl-2-pentanone	100	100		1	102	60-134	12/27/2011 1750
Methylcyclohexane	50	39		1	78	41-144	12/27/2011 1750
Methylene chloride	50	41		1	82	77-129	12/27/2011 1750
Styrene	50	47		1	95	54-136	12/27/2011 1750
1,1,2,2-Tetrachloroethane	50	43		1	86	69-132	12/27/2011 1750
Tetrachloroethene	50	50		1	100	45-150	12/27/2011 1750
Toluene	50	50		1	101	61-129	12/27/2011 1750
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	53		1	106	49-136	12/27/2011 1750
1,2,4-Trichlorobenzene	50	31		1	61	34-145	12/27/2011 1750
1,1,2-Trichloroethane	50	46		1	93	55-128	12/27/2011 1750
1,1,1-Trichloroethane	50	41		1	81	63-128	12/27/2011 1750

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ75868-002

Matrix: Solid

Batch: 75868

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	50		1	99	62-126	12/27/2011 1750
Trichlorofluoromethane	50	45		1	89	45-138	12/27/2011 1750
Vinyl chloride	50	49		1	97	42-132	12/27/2011 1750
Xylenes (total)	100	91		1	91	58-128	12/27/2011 1750
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		106	47-138				
1,2-Dichloroethane-d4		69	53-142				
Toluene-d8		84	68-124				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ75868-003

Batch: 75868

Analytical Method: 8260B

Matrix: Solid

Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	92		1	92	1.2	42-149	20	12/27/2011 1814
Benzene	50	44		1	89	1.2	69-123	20	12/27/2011 1814
Bromodichloromethane	50	44		1	89	1.1	69-121	20	12/27/2011 1814
Bromoform	50	45		1	90	1.4	61-119	20	12/27/2011 1814
Bromomethane (Methyl bromide)	50	45		1	90	6.1	35-144	20	12/27/2011 1814
2-Butanone (MEK)	100	110		1	107	0.16	57-148	20	12/27/2011 1814
Carbon disulfide	50	50		1	99	1.2	58-122	20	12/27/2011 1814
Carbon tetrachloride	50	42		1	85	1.1	58-136	20	12/27/2011 1814
Chlorobenzene	50	47		1	94	0.67	59-129	20	12/27/2011 1814
Chloroethane	50	44		1	89	5.9	42-163	20	12/27/2011 1814
Chloroform	50	44		1	89	1.6	71-125	20	12/27/2011 1814
Chloromethane (Methyl chloride)	50	46		1	93	2.8	34-134	20	12/27/2011 1814
Cyclohexane	50	42		1	84	5.6	53-139	20	12/27/2011 1814
1,2-Dibromo-3-chloropropane (DBCP)	50	33		1	67	3.4	55-125	20	12/27/2011 1814
Dibromochloromethane	50	44		1	89	1.5	66-119	20	12/27/2011 1814
1,2-Dibromoethane (EDB)	50	48		1	95	1.7	74-124	20	12/27/2011 1814
1,4-Dichlorobenzene	50	46		1	93	1.8	52-133	20	12/27/2011 1814
1,3-Dichlorobenzene	50	46		1	92	0.53	51-134	20	12/27/2011 1814
1,2-Dichlorobenzene	50	43		1	86	1.4	57-131	20	12/27/2011 1814
Dichlorodifluoromethane	50	51		1	101	0.45	10-157	20	12/27/2011 1814
1,2-Dichloroethane	50	46		1	92	0.65	67-129	20	12/27/2011 1814
1,1-Dichloroethane	50	43		1	86	1.0	71-127	20	12/27/2011 1814
trans-1,2-Dichloroethene	50	48		1	96	2.1	68-131	20	12/27/2011 1814
cis-1,2-Dichloroethene	50	46		1	91	1.8	70-122	20	12/27/2011 1814
1,1-Dichloroethene	50	46		1	93	1.8	69-138	20	12/27/2011 1814
1,2-Dichloropropane	50	45		1	90	1.7	72-124	20	12/27/2011 1814
trans-1,3-Dichloropropene	50	47		1	93	2.3	70-124	20	12/27/2011 1814
cis-1,3-Dichloropropene	50	48		1	96	1.6	70-126	20	12/27/2011 1814
Ethylbenzene	50	45		1	90	1.9	59-128	20	12/27/2011 1814
2-Hexanone	100	110		1	106	3.5	54-137	20	12/27/2011 1814
Isopropylbenzene	50	47		1	94	2.1	50-136	20	12/27/2011 1814
Methyl acetate	50	45		1	89	2.5	59-137	20	12/27/2011 1814
Methyl tertiary butyl ether (MTBE)	50	42		1	85	4.3	72-122	20	12/27/2011 1814
4-Methyl-2-pentanone	100	100		1	103	0.89	60-134	20	12/27/2011 1814
Methylcyclohexane	50	46		1	92	16	41-144	20	12/27/2011 1814
Methylene chloride	50	43		1	86	3.9	77-129	20	12/27/2011 1814
Styrene	50	48		1	95	0.47	54-136	20	12/27/2011 1814
1,1,2,2-Tetrachloroethane	50	43		1	86	0.59	69-132	20	12/27/2011 1814
Tetrachloroethene	50	49		1	99	1.5	45-150	20	12/27/2011 1814
Toluene	50	50		1	99	1.5	61-129	20	12/27/2011 1814
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	55		1	110	3.8	49-136	20	12/27/2011 1814
1,2,4-Trichlorobenzene	50	35		1	70	14	34-145	20	12/27/2011 1814
1,1,2-Trichloroethane	50	46		1	92	0.95	55-128	20	12/27/2011 1814
1,1,1-Trichloroethane	50	41		1	83	1.8	63-128	20	12/27/2011 1814

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ75868-003

Matrix: Solid

Batch: 75868

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	48		1	96	3.6	62-126	20	12/27/2011 1814
Trichlorofluoromethane	50	45		1	90	0.93	45-138	20	12/27/2011 1814
Vinyl chloride	50	49		1	98	0.60	42-132	20	12/27/2011 1814
Xylenes (total)	100	91		1	91	0.12	58-128	20	12/27/2011 1814
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		107	47-138						
1,2-Dichloroethane-d4		68	53-142						
Toluene-d8		84	68-124						

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ75870-001

Matrix: Solid

Batch: 75870

Prep Method: 5035

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		50	1000	ug/kg	12/30/2011 0904
Benzene	ND		50	250	ug/kg	12/30/2011 0904
Bromodichloromethane	ND		50	250	ug/kg	12/30/2011 0904
Bromoform	ND		50	250	ug/kg	12/30/2011 0904
2-Butanone (MEK)	ND		50	500	ug/kg	12/30/2011 0904
Carbon tetrachloride	ND		50	250	ug/kg	12/30/2011 0904
Chlorobenzene	ND		50	250	ug/kg	12/30/2011 0904
Chloroform	ND		50	250	ug/kg	12/30/2011 0904
Chloromethane (Methyl chloride)	ND		50	250	ug/kg	12/30/2011 0904
1,2-Dibromo-3-chloropropane (DBCP)	ND		50	250	ug/kg	12/30/2011 0904
Dibromochloromethane	ND		50	250	ug/kg	12/30/2011 0904
1,2-Dibromoethane (EDB)	ND		50	250	ug/kg	12/30/2011 0904
1,4-Dichlorobenzene	ND		50	250	ug/kg	12/30/2011 0904
1,3-Dichlorobenzene	ND		50	250	ug/kg	12/30/2011 0904
1,2-Dichlorobenzene	ND		50	250	ug/kg	12/30/2011 0904
Dichlorodifluoromethane	ND		50	250	ug/kg	12/30/2011 0904
1,2-Dichloroethane	ND		50	250	ug/kg	12/30/2011 0904
1,1-Dichloroethane	ND		50	250	ug/kg	12/30/2011 0904
trans-1,2-Dichloroethene	ND		50	250	ug/kg	12/30/2011 0904
cis-1,2-Dichloroethene	ND		50	250	ug/kg	12/30/2011 0904
1,2-Dichloropropane	ND		50	250	ug/kg	12/30/2011 0904
trans-1,3-Dichloropropene	ND		50	250	ug/kg	12/30/2011 0904
cis-1,3-Dichloropropene	ND		50	250	ug/kg	12/30/2011 0904
Ethylbenzene	ND		50	250	ug/kg	12/30/2011 0904
2-Hexanone	ND		50	500	ug/kg	12/30/2011 0904
Isopropylbenzene	ND		50	250	ug/kg	12/30/2011 0904
Methyl acetate	ND		50	250	ug/kg	12/30/2011 0904
Methyl tertiary butyl ether (MTBE)	ND		50	250	ug/kg	12/30/2011 0904
4-Methyl-2-pentanone	ND		50	500	ug/kg	12/30/2011 0904
Methylcyclohexane	ND		50	250	ug/kg	12/30/2011 0904
Styrene	ND		50	250	ug/kg	12/30/2011 0904
1,1,1,2-Tetrachloroethane	ND		50	250	ug/kg	12/30/2011 0904
Tetrachloroethene	ND		50	250	ug/kg	12/30/2011 0904
Toluene	ND		50	250	ug/kg	12/30/2011 0904
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		50	250	ug/kg	12/30/2011 0904
1,2,4-Trichlorobenzene	ND		50	250	ug/kg	12/30/2011 0904
1,1,2-Trichloroethane	ND		50	250	ug/kg	12/30/2011 0904
1,1,1-Trichloroethane	ND		50	250	ug/kg	12/30/2011 0904
Trichloroethene	ND		50	250	ug/kg	12/30/2011 0904
Trichlorofluoromethane	ND		50	250	ug/kg	12/30/2011 0904
Vinyl chloride	ND		50	250	ug/kg	12/30/2011 0904
Xylenes (total)	ND		50	250	ug/kg	12/30/2011 0904

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ75870-001

Matrix: Solid

Batch: 75870

Prep Method: 5035

Analytical Method: 8260B

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		81	47-138
1,2-Dichloroethane-d4		78	53-142
Toluene-d8		76	68-124

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ75870-002

Matrix: Solid

Batch: 75870

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	5000	4000		50	79	42-149	12/30/2011 0906
Benzene	2500	1800		50	70	69-123	12/30/2011 0906
Bromodichloromethane	2500	2200		50	88	69-121	12/30/2011 0906
Bromoform	2500	2200		50	87	61-119	12/30/2011 0906
2-Butanone (MEK)	5000	4200		50	84	57-148	12/30/2011 0906
Carbon tetrachloride	2500	1800		50	73	58-136	12/30/2011 0906
Chlorobenzene	2500	2300		50	92	59-129	12/30/2011 0906
Chloroform	2500	2000		50	80	71-125	12/30/2011 0906
Chloromethane (Methyl chloride)	2500	850		50	34	34-134	12/30/2011 0906
1,2-Dibromo-3-chloropropane (DBCP)	2500	2400		50	97	55-125	12/30/2011 0906
Dibromochloromethane	2500	2300		50	93	66-119	12/30/2011 0906
1,2-Dibromoethane (EDB)	2500	2400		50	96	74-124	12/30/2011 0906
1,4-Dichlorobenzene	2500	2500		50	102	52-133	12/30/2011 0906
1,3-Dichlorobenzene	2500	2600		50	104	51-134	12/30/2011 0906
1,2-Dichlorobenzene	2500	2500		50	102	57-131	12/30/2011 0906
Dichlorodifluoromethane	2500	1500		50	61	10-157	12/30/2011 0906
1,2-Dichloroethane	2500	1800		50	71	67-129	12/30/2011 0906
1,1-Dichloroethane	2500	1800	N	50	70	71-127	12/30/2011 0906
trans-1,2-Dichloroethene	2500	1500	N	50	61	68-131	12/30/2011 0906
cis-1,2-Dichloroethene	2500	1900		50	78	70-122	12/30/2011 0906
1,2-Dichloropropane	2500	2000		50	81	72-124	12/30/2011 0906
trans-1,3-Dichloropropene	2500	2300		50	93	70-124	12/30/2011 0906
cis-1,3-Dichloropropene	2500	2300		50	93	70-126	12/30/2011 0906
Ethylbenzene	2500	2300		50	93	59-128	12/30/2011 0906
2-Hexanone	5000	4500		50	90	54-137	12/30/2011 0906
Isopropylbenzene	2500	2700		50	108	50-136	12/30/2011 0906
Methyl acetate	2500	2000		50	80	59-137	12/30/2011 0906
Methyl tertiary butyl ether (MTBE)	2500	2000		50	81	72-122	12/30/2011 0906
4-Methyl-2-pentanone	5000	4400		50	89	60-134	12/30/2011 0906
Methylcyclohexane	2500	1600		50	65	41-144	12/30/2011 0906
Styrene	2500	2000		50	80	54-136	12/30/2011 0906
1,1,2,2-Tetrachloroethane	2500	2700		50	110	69-132	12/30/2011 0906
Tetrachloroethene	2500	2100		50	85	45-150	12/30/2011 0906
Toluene	2500	2100		50	83	61-129	12/30/2011 0906
1,1,2-Trichloro-1,2,2-Trifluoroethane	2500	2200		50	86	49-136	12/30/2011 0906
1,2,4-Trichlorobenzene	2500	2800		50	114	34-145	12/30/2011 0906
1,1,2-Trichloroethane	2500	2500		50	99	55-128	12/30/2011 0906
1,1,1-Trichloroethane	2500	1900		50	76	63-128	12/30/2011 0906
Trichloroethene	2500	1900		50	78	62-126	12/30/2011 0906
Trichlorofluoromethane	2500	1200		50	48	45-138	12/30/2011 0906
Vinyl chloride	2500	1100		50	42	42-132	12/30/2011 0906
Xylenes (total)	5000	4600		50	93	58-128	12/30/2011 0906

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ75870-002

Matrix: Solid

Batch: 75870

Prep Method: 5035

Analytical Method: 8260B

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		89	47-138
1,2-Dichloroethane-d4		69	53-142
Toluene-d8		79	68-124

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ75870-003

Matrix: Solid

Batch: 75870

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	5000	4200		50	84	5.7	42-149	20	12/30/2011 0926
Benzene	2500	1900		50	77	9.5	69-123	20	12/30/2011 0926
Bromodichloromethane	2500	2200		50	90	2.4	69-121	20	12/30/2011 0926
Bromoform	2500	2100		50	86	1.1	61-119	20	12/30/2011 0926
2-Butanone (MEK)	5000	4400		50	88	4.5	57-148	20	12/30/2011 0926
Carbon tetrachloride	2500	1900		50	77	5.1	58-136	20	12/30/2011 0926
Chlorobenzene	2500	2400		50	95	3.8	59-129	20	12/30/2011 0926
Chloroform	2500	2100		50	83	3.8	71-125	20	12/30/2011 0926
Chloromethane (Methyl chloride)	2500	1000		50	41	19	34-134	20	12/30/2011 0926
1,2-Dibromo-3-chloropropane (DBCP)	2500	2300		50	92	5.3	55-125	20	12/30/2011 0926
Dibromochloromethane	2500	2400		50	96	3.2	66-119	20	12/30/2011 0926
1,2-Dibromoethane (EDB)	2500	2500		50	99	3.1	74-124	20	12/30/2011 0926
1,4-Dichlorobenzene	2500	2600		50	103	1.8	52-133	20	12/30/2011 0926
1,3-Dichlorobenzene	2500	2800		50	111	6.0	51-134	20	12/30/2011 0926
1,2-Dichlorobenzene	2500	2600		50	103	1.0	57-131	20	12/30/2011 0926
Dichlorodifluoromethane	2500	1600		50	65	7.1	10-157	20	12/30/2011 0926
1,2-Dichloroethane	2500	1900		50	76	7.2	67-129	20	12/30/2011 0926
1,1-Dichloroethane	2500	1900		50	76	7.6	71-127	20	12/30/2011 0926
trans-1,2-Dichloroethene	2500	1700		50	69	11	68-131	20	12/30/2011 0926
cis-1,2-Dichloroethene	2500	2000		50	82	4.7	70-122	20	12/30/2011 0926
1,2-Dichloropropane	2500	2200		50	87	7.3	72-124	20	12/30/2011 0926
trans-1,3-Dichloropropene	2500	2400		50	95	1.8	70-124	20	12/30/2011 0926
cis-1,3-Dichloropropene	2500	2300		50	94	1.2	70-126	20	12/30/2011 0926
Ethylbenzene	2500	2400		50	97	5.1	59-128	20	12/30/2011 0926
2-Hexanone	5000	3900		50	77	15	54-137	20	12/30/2011 0926
Isopropylbenzene	2500	2900		50	116	6.9	50-136	20	12/30/2011 0926
Methyl acetate	2500	2400		50	96	19	59-137	20	12/30/2011 0926
Methyl tertiary butyl ether (MTBE)	2500	2100		50	86	5.9	72-122	20	12/30/2011 0926
4-Methyl-2-pentanone	5000	4200		50	84	5.7	60-134	20	12/30/2011 0926
Methylcyclohexane	2500	1800		50	72	10	41-144	20	12/30/2011 0926
Styrene	2500	1800		50	73	9.7	54-136	20	12/30/2011 0926
1,1,2,2-Tetrachloroethane	2500	2800		50	110	0.50	69-132	20	12/30/2011 0926
Tetrachloroethene	2500	2400		50	94	10	45-150	20	12/30/2011 0926
Toluene	2500	2200		50	87	5.2	61-129	20	12/30/2011 0926
1,1,2-Trichloro-1,2,2-Trifluoroethane	2500	2400		50	96	9.9	49-136	20	12/30/2011 0926
1,2,4-Trichlorobenzene	2500	2800		50	113	1.0	34-145	20	12/30/2011 0926
1,1,2-Trichloroethane	2500	2500		50	100	0.53	55-128	20	12/30/2011 0926
1,1,1-Trichloroethane	2500	1900		50	77	2.2	63-128	20	12/30/2011 0926
Trichloroethene	2500	2000		50	82	5.1	62-126	20	12/30/2011 0926
Trichlorofluoromethane	2500	1300		50	52	7.9	45-138	20	12/30/2011 0926
Vinyl chloride	2500	1200		50	48	11	42-132	20	12/30/2011 0926
Xylenes (total)	5000	4900		50	98	5.2	58-128	20	12/30/2011 0926

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ75870-003

Matrix: Solid

Batch: 75870

Prep Method: 5035

Analytical Method: 8260B

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		91	47-138
1,2-Dichloroethane-d4		72	53-142
Toluene-d8		82	68-124

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ75872-001

Matrix: Solid

Batch: 75872

Prep Method: 5035

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	12/23/2011 1723
Carbon disulfide	ND		1	5.0	ug/kg	12/23/2011 1723
Chloroethane	ND		1	5.0	ug/kg	12/23/2011 1723
Cyclohexane	ND		1	5.0	ug/kg	12/23/2011 1723
1,1-Dichloroethene	ND		1	5.0	ug/kg	12/23/2011 1723
Methylene chloride	ND		1	5.0	ug/kg	12/23/2011 1723
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		100	47-138			
1,2-Dichloroethane-d4		100	53-142			
Toluene-d8		95	68-124			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ75872-002

Matrix: Solid

Batch: 75872

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Bromomethane (Methyl bromide)	50	55		1	110	35-144	12/23/2011 1549
Carbon disulfide	50	59		1	119	58-122	12/23/2011 1549
Chloroethane	50	60		1	120	42-163	12/23/2011 1549
Cyclohexane	50	49		1	99	53-139	12/23/2011 1549
1,1-Dichloroethene	50	55		1	110	69-138	12/23/2011 1549
Methylene chloride	50	50		1	99	77-129	12/23/2011 1549
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		105	47-138				
1,2-Dichloroethane-d4		97	53-142				
Toluene-d8		100	68-124				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ75872-003

Matrix: Solid

Batch: 75872

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Bromomethane (Methyl bromide)	50	49		1	98	12	35-144	20	12/23/2011 1612
Carbon disulfide	50	52		1	104	14	58-122	20	12/23/2011 1612
Chloroethane	50	61		1	122	1.6	42-163	20	12/23/2011 1612
Cyclohexane	50	44		1	88	11	53-139	20	12/23/2011 1612
1,1-Dichloroethene	50	49		1	97	13	69-138	20	12/23/2011 1612
Methylene chloride	50	45		1	90	9.6	77-129	20	12/23/2011 1612
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		97	47-138						
1,2-Dichloroethane-d4		89	53-142						
Toluene-d8		92	68-124						

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: MQ74041-001

Matrix: Solid

Batch: 74041

Prep Method: 3550C

Analytical Method: 8270D

Prep Date: 12/19/2011 1746

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
2-Methylnaphthalene	ND		1	67	ug/kg	12/20/2011 1532
Acenaphthene	ND		1	67	ug/kg	12/20/2011 1532
Anthracene	ND		1	67	ug/kg	12/20/2011 1532
Benzo(a)anthracene	ND		1	67	ug/kg	12/20/2011 1532
Benzo(a)pyrene	ND		1	67	ug/kg	12/20/2011 1532
Benzo(b)fluoranthene	ND		1	67	ug/kg	12/20/2011 1532
Benzo(g,h,i)perylene	ND		1	67	ug/kg	12/20/2011 1532
Benzo(k)fluoranthene	ND		1	67	ug/kg	12/20/2011 1532
Chrysene	ND		1	67	ug/kg	12/20/2011 1532
Dibenzo(a,h)anthracene	ND		1	67	ug/kg	12/20/2011 1532
Fluoranthene	ND		1	67	ug/kg	12/20/2011 1532
Fluorene	ND		1	67	ug/kg	12/20/2011 1532
Indeno(1,2,3-c,d)pyrene	ND		1	67	ug/kg	12/20/2011 1532
Naphthalene	ND		1	67	ug/kg	12/20/2011 1532
Phenanthrene	ND		1	67	ug/kg	12/20/2011 1532
Pyrene	ND		1	67	ug/kg	12/20/2011 1532
Surrogate	Q	% Rec	Acceptance Limit			
2-Fluorobiphenyl		79	33-102			
Nitrobenzene-d5		72	22-109			
Terphenyl-d14		76	41-120			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: MQ74041-002

Matrix: Solid

Batch: 74041

Prep Method: 3550C

Analytical Method: 8270D

Prep Date: 12/19/2011 1746

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
2-Methylnaphthalene	1300	1000		1	77	30-130	12/20/2011 1808
Acenaphthene	1300	920		1	69	30-130	12/20/2011 1808
Anthracene	1300	900		1	68	30-130	12/20/2011 1808
Benzo(a)anthracene	1300	970		1	73	30-130	12/20/2011 1808
Benzo(a)pyrene	1300	1100		1	81	30-130	12/20/2011 1808
Benzo(b)fluoranthene	1300	930		1	70	30-130	12/20/2011 1808
Benzo(g,h,i)perylene	1300	900		1	68	30-130	12/20/2011 1808
Benzo(k)fluoranthene	1300	1000		1	76	30-130	12/20/2011 1808
Chrysene	1300	970		1	73	30-130	12/20/2011 1808
Dibenzo(a,h)anthracene	1300	940		1	71	30-130	12/20/2011 1808
Fluoranthene	1300	940		1	71	30-130	12/20/2011 1808
Fluorene	1300	900		1	68	30-130	12/20/2011 1808
Indeno(1,2,3-c,d)pyrene	1300	930		1	69	30-130	12/20/2011 1808
Naphthalene	1300	840		1	63	30-130	12/20/2011 1808
Phenanthrene	1300	930		1	70	30-130	12/20/2011 1808
Pyrene	1300	1000		1	76	30-130	12/20/2011 1808
Surrogate	Q	% Rec	Acceptance Limit				
2-Fluorobiphenyl		68	33-102				
Nitrobenzene-d5		67	22-109				
Terphenyl-d14		67	41-120				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: ML16014-001MS

Matrix: Solid

Batch: 74041

Prep Method: 3550C

Analytical Method: 8270D

Prep Date: 12/19/2011 1746

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	1500	84	N	5	5.6	30-130	12/30/2011 0321
Anthracene	ND	1500	83	N	5	5.6	30-130	12/30/2011 0321
Benzo(a)anthracene	580	1500	93	N	5	-33	30-130	12/30/2011 0321
Benzo(a)pyrene	490	1500	100	N	5	-26	30-130	12/30/2011 0321
Benzo(b)fluoranthene	580	1500	94	N	5	-33	30-130	12/30/2011 0321
Benzo(g,h,i)perylene	ND	1500	95	N	5	6.4	30-130	12/30/2011 0321
Benzo(k)fluoranthene	ND	1500	95	N	5	-17	30-130	12/30/2011 0321
Chrysene	520	1500	78	N	5	-30	30-130	12/30/2011 0321
Dibenzo(a,h)anthracene	ND	1500	85	N	5	5.7	30-130	12/30/2011 0321
Fluoranthene	800	1500	96	N	5	-47	30-130	12/30/2011 0321
Fluorene	ND	1500	88	N	5	5.9	30-130	12/30/2011 0321
Indeno(1,2,3-c,d)pyrene	ND	1500	95	N	5	6.3	30-130	12/30/2011 0321
2-Methylnaphthalene	ND	1500	89	N	5	6.0	30-130	12/30/2011 0321
Naphthalene	ND	1500	79	N	5	5.3	30-130	12/30/2011 0321
Phenanthrene	ND	1500	91	N	5	6.1	30-130	12/30/2011 0321
Pyrene	680	1500	86	N	5	-40	30-130	12/30/2011 0321
Surrogate	Q	% Rec	Acceptance Limit					
2-Fluorobiphenyl		77	33-102					
Nitrobenzene-d5		75	22-109					
Terphenyl-d14		62	41-120					

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: ML16014-001MD

Matrix: Solid

Batch: 74041

Prep Method: 3550C

Analytical Method: 8270D

Prep Date: 12/19/2011 1746

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date	
Acenaphthene	ND	1500	80	N	5	5.3	4.3	30-130	20	12/30/2011 0350	
Anthracene	ND	1500	82	N	5	5.4	2.1	30-130	20	12/30/2011 0350	
Benzo(a)anthracene	580	1500	88	N	5	-33	5.1	30-130	20	12/30/2011 0350	
Benzo(a)pyrene	490	1500	86	N	5	-27	19	30-130	20	12/30/2011 0350	
Benzo(b)fluoranthene	580	1500	87	N	5	-33	8.3	30-130	20	12/30/2011 0350	
Benzo(g,h,i)perylene	ND	1500	77	N,+	5	5.1	21	30-130	20	12/30/2011 0350	
Benzo(k)fluoranthene	ND	1500	77	N	5	-18	20	30-130	20	12/30/2011 0350	
Chrysene	520	1500	70	N	5	-30	11	30-130	20	12/30/2011 0350	
Dibenzo(a,h)anthracene	ND	1500	75	N	5	5.0	12	30-130	20	12/30/2011 0350	
Fluoranthene	800	1500	86	N	5	-48	11	30-130	20	12/30/2011 0350	
Fluorene	ND	1500	84	N	5	5.6	4.3	30-130	20	12/30/2011 0350	
Indeno(1,2,3-c,d)pyrene	ND	1500	74	N,+	5	4.9	25	30-130	20	12/30/2011 0350	
2-Methylnaphthalene	ND	1500	85	N	5	5.7	3.9	30-130	20	12/30/2011 0350	
Naphthalene	ND	1500	74	N	5	4.9	5.9	30-130	20	12/30/2011 0350	
Phenanthrene	ND	1500	84	N	5	5.6	7.9	30-130	20	12/30/2011 0350	
Pyrene	680	1500	72	N	5	-40	18	30-130	20	12/30/2011 0350	
Surrogate	Q	% Rec	Acceptance Limit								
2-Fluorobiphenyl		70	33-102								
Nitrobenzene-d5		74	22-109								
Terphenyl-d14		56	41-120								

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

TPH - DRO - MB

Sample ID: MQ74155-001

Batch: 74155

Analytical Method: 8015C

Matrix: Solid

Prep Method: 3550C

Prep Date: 12/20/2011 1758

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
TPH-DRO	ND		1	6700	ug/kg	12/21/2011 0957
Surrogate	Q	% Rec	Acceptance Limit			
o - Terphenyl		97	55-120			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Shealy Environmental Services, Inc.

106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

QC Data for Lot Number: ML16014

Level 1 Report v2.1

TPH - DRO - LCS

Sample ID: MQ74155-002

Matrix: Solid

Batch: 74155

Prep Method: 3550C

Analytical Method: 8015C

Prep Date: 12/20/2011 1758

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TPH-DRO	83000	62000		1	75	70-130	12/21/2011 1018
Surrogate	Q	% Rec	Acceptance Limit				
o - Terphenyl		90	55-120				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

TPH - DRO - MS

Sample ID: ML16014-003MS

Matrix: Solid

Batch: 74155

Prep Method: 3550C

Analytical Method: 8015C

Prep Date: 12/20/2011 1758

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TPH-DRO	26000	96000	110000		1	84	70-130	12/21/2011 1204
Surrogate	Q	% Rec	Acceptance Limit					
o - Terphenyl		95	55-120					

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

TPH - DRO - MSD

Sample ID: ML16014-003MD

Matrix: Solid

Batch: 74155

Prep Method: 3550C

Analytical Method: 8015C

Prep Date: 12/20/2011 1758

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
TPH-DRO	26000	95000	97000		1	74	10	70-130	20	12/21/2011 1225
Surrogate	Q	% Rec	Acceptance Limit							
o - Terphenyl		91	55-120							

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
 Document Number: F-AD-016
 Revision Number: 9

Page 1 of 1
 Replaces Date: 05/06/11
 Effective Date: 10/11/11

Sample Receipt Checklist (SRC)

Client: CFC Cooler Inspected by/date: 6/12/11 Lot #: ML16014

Means of receipt: <input type="checkbox"/> SESI <input type="checkbox"/> Client <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Airborne Exp <input type="checkbox"/> Other		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	1. Were custody seals present on the cooler?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	2. If custody seals were present, were they intact and unbroken?
Cooler ID/temperature upon receipt <u>1. 7</u> °C / °C / °C / °C		
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles		
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> None		
If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/> 3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____ (For coolers received via commercial courier, PMs are to be notified immediately.)
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/> 4. Is the commercial courier's packing slip attached to this form?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	5. Were proper custody procedures (relinquished/received) followed?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/> 5a Were samples relinquished by client to commercial courier?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	6. Were sample IDs listed?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	7. Was collection date & time listed?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	8. Were tests to be performed listed on the COC?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	9. Did all samples arrive in the proper containers for each test?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	10. Did all container label information (ID, date, time) agree with COC?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	12. Was adequate sample volume available?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	13. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	14. Were any samples containers missing?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	15. Were there any excess samples not listed on COC?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/> 16. Were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any VOA vials?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/> 17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/> 18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/> 19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/> 20. Were collection temperatures documented on the COC for NC samples?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/> 21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)		
Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H ₂ SO ₄ , HNO ₃ , HCl, NaOH) with the SR # (number) _____.		
Sample(s) _____ were received with bubbles >6 mm in diameter.		
Sample(s) _____ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb.		

Corrective Action taken, if necessary:

Was client notified: Yes No
 SESI employee: _____
 Comments: _____

Did client respond: Yes No
 Date of response: _____

Report of Analysis

Civil & Environmental Consultants, Inc.
8740 Orion Place
Suite 100
Columbus, OH 43240
Attention: Andrew McCorkle

Project Name: Georgetown MW & Soil

Project Number: 111-036

Lot Number: ML16005

Date Completed: 01/18/2012



Grant Wilton
Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

* ML 16005 *

SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DENR No: 329

Case Narrative

Civil & Environmental Consultants, Inc.

Lot Number: ML16005

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

TPH-DRO - Method 8015A

Samples -002 and -008 had the surrogate, o-Terphenyl, recovered outside the acceptance limit. The samples were re-extracted outside the holding time. The results from both runs are reported.

REVISION 1

The samples were initially analyzed for BTEX/MTBE only. The TCL VOA list was reported from the BTEX/MTBE analytical sequences.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Summary Civil & Environmental Consultants, Inc. Lot Number: ML16005

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	MW-20	Aqueous	12/15/2011 1136	12/16/2011
002	MW-CA-2	Aqueous	12/15/2011 1219	12/16/2011
003	MW-21	Aqueous	12/15/2011 1404	12/16/2011
004	MW-CA-1	Aqueous	12/15/2011 1311	12/16/2011
005	MW-CA-0	Aqueous	12/15/2011	12/16/2011
006	MW-CA-4	Aqueous	12/15/2011 1504	12/16/2011
007	MW-CA-3	Aqueous	12/15/2011 1542	12/16/2011
008	MW-23	Aqueous	12/15/2011 1629	12/16/2011

(8 samples)

SHEALY ENVIRONMENTAL SERVICES, INC.

Executive Summary Civil & Environmental Consultants, Inc.

Lot Number: ML16005

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	MW-20	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	1.3		ug/L	6
001	MW-20	Aqueous	TPH-DRO	8015C	420	I1	ug/L	9
002	MW-CA-2	Aqueous	Benzene	8260B	1.7		ug/L	10
002	MW-CA-2	Aqueous	trans-1,2-Dichloroethene	8260B	2.2		ug/L	10
002	MW-CA-2	Aqueous	cis-1,2-Dichloroethene	8260B	9.9		ug/L	10
002	MW-CA-2	Aqueous	Tetrachloroethene	8260B	7.2		ug/L	10
002	MW-CA-2	Aqueous	Toluene	8260B	1.0		ug/L	10
002	MW-CA-2	Aqueous	Trichloroethene	8260B	11		ug/L	11
002	MW-CA-2	Aqueous	Acenaphthene	8270D	3.3		ug/L	12
002	MW-CA-2	Aqueous	Fluorene	8270D	1.0		ug/L	12
002	MW-CA-2	Aqueous	Naphthalene	8270D	9.8		ug/L	12
002	MW-CA-2	Aqueous	TPH-DRO	8015C	830	I1	ug/L	13
002	MW-CA-2	Aqueous	TPH-DRO	8015C	780	H	ug/L	14
003	MW-21	Aqueous	Acetone	8260B	55		ug/L	15
003	MW-21	Aqueous	Benzene	8260B	2.1		ug/L	15
003	MW-21	Aqueous	Ethylbenzene	8260B	1.8		ug/L	15
003	MW-21	Aqueous	Toluene	8260B	1.4		ug/L	15
003	MW-21	Aqueous	Xylenes (total)	8260B	1.3		ug/L	16
003	MW-21	Aqueous	Acenaphthene	8270D	6.0		ug/L	17
003	MW-21	Aqueous	Fluorene	8270D	3.9		ug/L	17
003	MW-21	Aqueous	2-Methylnaphthalene	8270D	3.0		ug/L	17
003	MW-21	Aqueous	Naphthalene	8270D	79		ug/L	17
003	MW-21	Aqueous	Phenanthrene	8270D	3.5		ug/L	17
003	MW-21	Aqueous	TPH-DRO	8015C	3100	I11	ug/L	18
004	MW-CA-1	Aqueous	cis-1,2-Dichloroethene	8260B	1.7		ug/L	19
004	MW-CA-1	Aqueous	Tetrachloroethene	8260B	3.8		ug/L	19
004	MW-CA-1	Aqueous	TPH-DRO	8015C	450	I1	ug/L	22
005	MW-CA-0	Aqueous	Acetone	8260B	34		ug/L	23
005	MW-CA-0	Aqueous	Benzene	8260B	2.0		ug/L	23
005	MW-CA-0	Aqueous	Ethylbenzene	8260B	1.6		ug/L	23
005	MW-CA-0	Aqueous	Toluene	8260B	1.3		ug/L	23
005	MW-CA-0	Aqueous	Xylenes (total)	8260B	1.3		ug/L	24
005	MW-CA-0	Aqueous	TPH-DRO	8015C	3100	I11	ug/L	25
006	MW-CA-4	Aqueous	TPH-DRO	8015C	1000	I11	ug/L	29
007	MW-CA-3	Aqueous	Benzene	8260B	2.8		ug/L	30
007	MW-CA-3	Aqueous	1,1-Dichloroethane	8260B	97		ug/L	30
007	MW-CA-3	Aqueous	trans-1,2-Dichloroethene	8260B	16		ug/L	30
007	MW-CA-3	Aqueous	cis-1,2-Dichloroethene	8260B	7100		ug/L	30
007	MW-CA-3	Aqueous	1,1-Dichloroethene	8260B	43		ug/L	30
007	MW-CA-3	Aqueous	Ethylbenzene	8260B	3.3		ug/L	30
007	MW-CA-3	Aqueous	Isopropylbenzene	8260B	4.9		ug/L	30
007	MW-CA-3	Aqueous	Tetrachloroethene	8260B	2200		ug/L	30
007	MW-CA-3	Aqueous	Toluene	8260B	15		ug/L	30
007	MW-CA-3	Aqueous	Trichloroethene	8260B	700		ug/L	31
007	MW-CA-3	Aqueous	Vinyl chloride	8260B	3400		ug/L	31

Executive Summary (Continued)

Lot Number: ML16005

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
007	MW-CA-3	Aqueous	Xylenes (total)	8260B	32		ug/L	31
007	MW-CA-3	Aqueous	Naphthalene	8270D	1.1		ug/L	32
007	MW-CA-3	Aqueous	TPH-DRO	8015C	4000	I11	ug/L	33
008	MW-23	Aqueous	Benzene	8260B	1.1		ug/L	34
008	MW-23	Aqueous	1,1-Dichloroethane	8260B	11		ug/L	34
008	MW-23	Aqueous	trans-1,2-Dichloroethene	8260B	12		ug/L	34
008	MW-23	Aqueous	cis-1,2-Dichloroethene	8260B	6800		ug/L	34
008	MW-23	Aqueous	1,1-Dichloroethene	8260B	15		ug/L	34
008	MW-23	Aqueous	Ethylbenzene	8260B	4.7		ug/L	34
008	MW-23	Aqueous	Isopropylbenzene	8260B	5.4		ug/L	34
008	MW-23	Aqueous	Tetrachloroethene	8260B	6200		ug/L	34
008	MW-23	Aqueous	Toluene	8260B	9.1		ug/L	34
008	MW-23	Aqueous	Trichloroethene	8260B	2300		ug/L	35
008	MW-23	Aqueous	Vinyl chloride	8260B	600		ug/L	35
008	MW-23	Aqueous	Xylenes (total)	8260B	57		ug/L	35
008	MW-23	Aqueous	TPH-DRO	8015C	310000	I11	ug/L	37
008	MW-23	Aqueous	TPH-DRO	8015C	660000	H	ug/L	38

(62 detections)

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-001

Description: MW-20

Matrix: Aqueous

Date Sampled: 12/15/2011 1136

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/21/2011 1736	LBS		75859

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1.3		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

Footnote(s): I1 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-001
Description: MW-20	Matrix: Aqueous
Date Sampled: 12/15/2011 1136	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/21/2011 1736	LBS		75859

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		115	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		100	70-130

Footnote(s): 11 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Semivolatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-001

Description: MW-20

Matrix: Aqueous

Date Sampled: 12/15/2011 1136

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	01/06/2012 0044	SJA	12/20/2011 1405	74106

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.1	ug/L	1
Anthracene	120-12-7	8270D	ND		1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.1	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.1	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.1	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.1	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.1	ug/L	1
Chrysene	218-01-9	8270D	ND		1.1	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.1	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.1	ug/L	1
Fluorene	86-73-7	8270D	ND		1.1	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.1	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.1	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.1	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.1	ug/L	1
Pyrene	129-00-0	8270D	ND		1.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		111	37-129
Nitrobenzene-d5		89	38-127
Terphenyl-d14		84	10-148

Footnote(s): 11 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

TPH - DRO

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-001
Description: MW-20	Matrix: Aqueous
Date Sampled: 12/15/2011 1136	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	12/22/2011 1055	PMS	12/20/2011 1547	74107

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	420	I1	210	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
o - Terphenyl		87	53-118

Footnote(s): I1 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-002

Description: MW-CA-2

Matrix: Aqueous

Date Sampled: 12/15/2011 1219

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/21/2011 1759	LBS		75859

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	1.7		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	2.2		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	9.9		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	7.2		1.0	ug/L	1
Toluene	108-88-3	8260B	1.0		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

Footnote(s): I1 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-002
Description: MW-CA-2	Matrix: Aqueous
Date Sampled: 12/15/2011 1219	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/21/2011 1759	LBS		75859

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	11		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		117	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		99	70-130

Footnote(s): 11 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Semivolatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-002

Description: MW-CA-2

Matrix: Aqueous

Date Sampled: 12/15/2011 1219

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/30/2011 0029	WD	12/20/2011 1405	74106

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	3.3		1.0	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	ug/L	1
Fluorene	86-73-7	8270D	1.0		1.0	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	ug/L	1
Naphthalene	91-20-3	8270D	9.8		1.0	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		48	37-129
Nitrobenzene-d5		57	38-127
Terphenyl-d14		20	10-148

Footnote(s): 11 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

TPH - DRO

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-002
Description: MW-CA-2	Matrix: Aqueous
Date Sampled: 12/15/2011 1219	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	12/22/2011 1116	PMS	12/20/2011 1547	74107
2	3520C	8015C	1	12/29/2011 1107	PMS	12/27/2011 1543	74505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	830*	I1	220	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits	
o - Terphenyl	N	48	53-118	H	53	53-118	

Footnote(s): I1 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

TPH - DRO

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-002
Description: MW-CA-2	Matrix: Aqueous
Date Sampled: 12/15/2011 1219	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	12/22/2011 1116	PMS	12/20/2011 1547	74107
2	3520C	8015C	1	12/29/2011 1107	PMS	12/27/2011 1543	74505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	780	H	210	ug/L	2
Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits	
o - Terphenyl	N	48	53-118	H	53	53-118	

Footnote(s): 11 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-003

Description: MW-21

Matrix: Aqueous

Date Sampled: 12/15/2011 1404

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/22/2011 1503	LBS		75860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	55		20	ug/L	1
Benzene	71-43-2	8260B	2.1		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	1.8		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	ug/L	1
Toluene	108-88-3	8260B	1.4		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-003
Description: MW-21	Matrix: Aqueous
Date Sampled: 12/15/2011 1404	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/22/2011 1503	LBS		75860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	1.3		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		98	70-130

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Semivolatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-003

Description: MW-21

Matrix: Aqueous

Date Sampled: 12/15/2011 1404

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/30/2011 0058	WD	12/20/2011 1405	74106
2	3520C	8270D	5	01/04/2012 2053	SJA	12/20/2011 1405	74106

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	6.0		1.1	ug/L	1
Anthracene	120-12-7	8270D	ND		1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.1	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.1	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.1	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.1	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.1	ug/L	1
Chrysene	218-01-9	8270D	ND		1.1	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.1	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.1	ug/L	1
Fluorene	86-73-7	8270D	3.9		1.1	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.1	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	3.0		1.1	ug/L	1
Naphthalene	91-20-3	8270D	79		5.3	ug/L	2
Phenanthrene	85-01-8	8270D	3.5		1.1	ug/L	1
Pyrene	129-00-0	8270D	ND		1.1	ug/L	1

Surrogate	Run 1			Run 2		
	Q	% Recovery	Acceptance Limits	Q	% Recovery	Acceptance Limits
2-Fluorobiphenyl		45	37-129		58	37-129
Nitrobenzene-d5		48	38-127		52	38-127
Terphenyl-d14		35	10-148		47	10-148

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

TPH - DRO

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-003
Description: MW-21	Matrix: Aqueous
Date Sampled: 12/15/2011 1404	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	12/22/2011 1137	PMS	12/20/2011 1547	74107

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	3100	111	210	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
o - Terphenyl		93	53-118

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-004

Description: MW-CA-1

Matrix: Aqueous

Date Sampled: 12/15/2011 1311

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/22/2011 1526	LBS		75860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	1.7		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	3.8		1.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

Footnote(s): I1 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-004
Description: MW-CA-1	Matrix: Aqueous
Date Sampled: 12/15/2011 1311	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/22/2011 1526	LBS		75860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		96	70-130

Footnote(s): 11 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Semivolatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-004

Description: MW-CA-1

Matrix: Aqueous

Date Sampled: 12/15/2011 1311

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/30/2011 0126	WD	12/20/2011 1405	74106

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.1	ug/L	1
Anthracene	120-12-7	8270D	ND		1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.1	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.1	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.1	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.1	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.1	ug/L	1
Chrysene	218-01-9	8270D	ND		1.1	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.1	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.1	ug/L	1
Fluorene	86-73-7	8270D	ND		1.1	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.1	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.1	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.1	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.1	ug/L	1
Pyrene	129-00-0	8270D	ND		1.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		46	37-129
Nitrobenzene-d5		49	38-127
Terphenyl-d14		27	10-148

Footnote(s): 11 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

TPH - DRO

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-004
Description: MW-CA-1	Matrix: Aqueous
Date Sampled: 12/15/2011 1311	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	12/22/2011 1158	PMS	12/20/2011 1547	74107

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	450	I1	210	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits				
o - Terphenyl		83	53-118				

Footnote(s): I1 - The chromatographic pattern is that of an unknown hydrocarbon

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-005

Description: MW-CA-0

Matrix: Aqueous

Date Sampled: 12/15/2011

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/22/2011 1549	LBS		75860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	34		20	ug/L	1
Benzene	71-43-2	8260B	2.0		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	1.6		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	ug/L	1
Toluene	108-88-3	8260B	1.3		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-005
Description: MW-CA-0	Matrix: Aqueous
Date Sampled: 12/15/2011	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/22/2011 1549	LBS		75860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	1.3		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		96	70-130

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

TPH - DRO

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-005
Description: MW-CA-0	Matrix: Aqueous
Date Sampled: 12/15/2011	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	12/22/2011 1219	PMS	12/20/2011 1547	74107

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	3100	I11	210	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
o - Terphenyl		95	53-118

Footnote(s): I11 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-006

Description: MW-CA-4

Matrix: Aqueous

Date Sampled: 12/15/2011 1504

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/22/2011 1612	LBS		75860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-006
Description: MW-CA-4	Matrix: Aqueous
Date Sampled: 12/15/2011 1504	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/22/2011 1612	LBS		75860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		96	70-130

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Semivolatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-006

Description: MW-CA-4

Matrix: Aqueous

Date Sampled: 12/15/2011 1504

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/30/2011 0155	WD	12/20/2011 1405	74106

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.1	ug/L	1
Anthracene	120-12-7	8270D	ND		1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.1	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.1	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.1	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.1	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.1	ug/L	1
Chrysene	218-01-9	8270D	ND		1.1	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.1	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.1	ug/L	1
Fluorene	86-73-7	8270D	ND		1.1	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.1	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.1	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.1	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.1	ug/L	1
Pyrene	129-00-0	8270D	ND		1.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		52	37-129
Nitrobenzene-d5		56	38-127
Terphenyl-d14		35	10-148

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

TPH - DRO

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-006
Description: MW-CA-4	Matrix: Aqueous
Date Sampled: 12/15/2011 1504	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3520C	8015C	1	12/22/2011 1240	PMS	12/20/2011 1547	74107		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	1000	111	210	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
o - Terphenyl		85	53-118

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-007

Description: MW-CA-3

Matrix: Aqueous

Date Sampled: 12/15/2011 1542

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/22/2011 1917	LBS		75860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	2.8		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	97		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	16		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	7100		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	43		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	3.3		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	4.9		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	2200		1.0	ug/L	1
Toluene	108-88-3	8260B	15		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-007
Description: MW-CA-3	Matrix: Aqueous
Date Sampled: 12/15/2011 1542	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/22/2011 1917	LBS		75860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	700		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	3400		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	32		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		115	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		98	70-130

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Semivolatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-007

Description: MW-CA-3

Matrix: Aqueous

Date Sampled: 12/15/2011 1542

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/30/2011 0224	WD	12/20/2011 1405	74106

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.1	ug/L	1
Anthracene	120-12-7	8270D	ND		1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.1	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.1	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.1	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.1	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.1	ug/L	1
Chrysene	218-01-9	8270D	ND		1.1	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.1	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.1	ug/L	1
Fluorene	86-73-7	8270D	ND		1.1	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.1	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.1	ug/L	1
Naphthalene	91-20-3	8270D	1.1		1.1	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.1	ug/L	1
Pyrene	129-00-0	8270D	ND		1.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		45	37-129
Nitrobenzene-d5		55	38-127
Terphenyl-d14		27	10-148

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

TPH - DRO

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-007
Description: MW-CA-3	Matrix: Aqueous
Date Sampled: 12/15/2011 1542	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	12/22/2011 1301	PMS	12/20/2011 1547	74107

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	4000	I11	220	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
o - Terphenyl		67	53-118

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-008

Description: MW-23

Matrix: Aqueous

Date Sampled: 12/15/2011 1629

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/22/2011 1940	LBS		75860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	1.1		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	11		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	12		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	6800		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	15		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	4.7		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	5.4		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	6200		1.0	ug/L	1
Toluene	108-88-3	8260B	9.1		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.	Laboratory ID: ML16005-008
Description: MW-23	Matrix: Aqueous
Date Sampled: 12/15/2011 1629	
Date Received: 12/16/2011	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/22/2011 1940	LBS		75860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	2300		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	600		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	57		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		114	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		98	70-130

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	H = Out of holding time
ND = Not detected at or above the PQL	J = Estimated result < PQL and ≥ MDL	P = The RPD between two GC columns exceeds 40%	N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"		* = Reportable result (only when report all runs)	

Semivolatile Organic Compounds by GC/MS

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-008

Description: MW-23

Matrix: Aqueous

Date Sampled: 12/15/2011 1629

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	100	01/06/2012 0834	SJA	12/20/2011 1405	74106

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		110	ug/L	1
Anthracene	120-12-7	8270D	ND		110	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		110	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		110	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		110	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		110	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		110	ug/L	1
Chrysene	218-01-9	8270D	ND		110	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		110	ug/L	1
Fluoranthene	206-44-0	8270D	ND		110	ug/L	1
Fluorene	86-73-7	8270D	ND		110	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		110	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		110	ug/L	1
Naphthalene	91-20-3	8270D	ND		110	ug/L	1
Phenanthrene	85-01-8	8270D	ND		110	ug/L	1
Pyrene	129-00-0	8270D	ND		110	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		56	37-129
Nitrobenzene-d5	N	0.00	38-127
Terphenyl-d14		59	10-148

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

TPH - DRO

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-008

Description: MW-23

Matrix: Aqueous

Date Sampled: 12/15/2011 1629

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	10	12/27/2011 1029	PMS	12/20/2011 1547	74107
2	3520C	8015C	50	12/29/2011 1302	PMS	12/27/2011 1543	74505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	310000*	I11	2100	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits	
o - Terphenyl	N	52	53-118	HN	29	53-118	

Footnote(s): I11 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

TPH - DRO

Client: Civil & Environmental Consultants, Inc.

Laboratory ID: ML16005-008

Description: MW-23

Matrix: Aqueous

Date Sampled: 12/15/2011 1629

Date Received: 12/16/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	10	12/27/2011 1029	PMS	12/20/2011 1547	74107
2	3520C	8015C	50	12/29/2011 1302	PMS	12/27/2011 1543	74505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	660000	H	11000	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
o - Terphenyl	N	52	53-118	HN	29	53-118

Footnote(s): 111 - The chromatographic pattern resembles an unknown oil

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ75859-001

Matrix: Aqueous

Batch: 75859

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	12/21/2011 1024
Benzene	ND		1	1.0	ug/L	12/21/2011 1024
Bromodichloromethane	ND		1	1.0	ug/L	12/21/2011 1024
Bromoform	ND		1	1.0	ug/L	12/21/2011 1024
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	12/21/2011 1024
2-Butanone (MEK)	ND		1	10	ug/L	12/21/2011 1024
Carbon disulfide	ND		1	1.0	ug/L	12/21/2011 1024
Carbon tetrachloride	ND		1	1.0	ug/L	12/21/2011 1024
Chlorobenzene	ND		1	1.0	ug/L	12/21/2011 1024
Chloroethane	ND		1	2.0	ug/L	12/21/2011 1024
Chloroform	ND		1	1.0	ug/L	12/21/2011 1024
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	12/21/2011 1024
Cyclohexane	ND		1	1.0	ug/L	12/21/2011 1024
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	12/21/2011 1024
Dibromochloromethane	ND		1	1.0	ug/L	12/21/2011 1024
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	12/21/2011 1024
1,2-Dichlorobenzene	ND		1	1.0	ug/L	12/21/2011 1024
1,3-Dichlorobenzene	ND		1	1.0	ug/L	12/21/2011 1024
1,4-Dichlorobenzene	ND		1	1.0	ug/L	12/21/2011 1024
Dichlorodifluoromethane	ND		1	2.0	ug/L	12/21/2011 1024
1,1-Dichloroethane	ND		1	1.0	ug/L	12/21/2011 1024
1,2-Dichloroethane	ND		1	1.0	ug/L	12/21/2011 1024
1,1-Dichloroethene	ND		1	1.0	ug/L	12/21/2011 1024
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	12/21/2011 1024
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	12/21/2011 1024
1,2-Dichloropropane	ND		1	1.0	ug/L	12/21/2011 1024
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	12/21/2011 1024
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	12/21/2011 1024
Ethylbenzene	ND		1	1.0	ug/L	12/21/2011 1024
2-Hexanone	ND		1	10	ug/L	12/21/2011 1024
Isopropylbenzene	ND		1	1.0	ug/L	12/21/2011 1024
Methyl acetate	ND		1	1.0	ug/L	12/21/2011 1024
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	12/21/2011 1024
4-Methyl-2-pentanone	ND		1	10	ug/L	12/21/2011 1024
Methylcyclohexane	ND		1	5.0	ug/L	12/21/2011 1024
Methylene chloride	ND		1	1.0	ug/L	12/21/2011 1024
Styrene	ND		1	1.0	ug/L	12/21/2011 1024
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	12/21/2011 1024
Tetrachloroethene	ND		1	1.0	ug/L	12/21/2011 1024
Toluene	ND		1	1.0	ug/L	12/21/2011 1024
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	12/21/2011 1024
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	12/21/2011 1024
1,1,1-Trichloroethane	ND		1	1.0	ug/L	12/21/2011 1024
1,1,2-Trichloroethane	ND		1	1.0	ug/L	12/21/2011 1024

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ75859-001

Matrix: Aqueous

Batch: 75859

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	12/21/2011 1024
Trichlorofluoromethane	ND		1	1.0	ug/L	12/21/2011 1024
Vinyl chloride	ND		1	1.0	ug/L	12/21/2011 1024
Xylenes (total)	ND		1	1.0	ug/L	12/21/2011 1024
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		99	70-130			
1,2-Dichloroethane-d4		102	70-130			
Toluene-d8		98	70-130			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ75859-002

Matrix: Aqueous

Batch: 75859

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	87		1	87	70-130	12/21/2011 0915
Benzene	50	45		1	91	70-130	12/21/2011 0915
Bromodichloromethane	50	51		1	102	70-130	12/21/2011 0915
Bromoform	50	45		1	89	70-130	12/21/2011 0915
Bromomethane (Methyl bromide)	50	43		1	87	60-140	12/21/2011 0915
2-Butanone (MEK)	100	95		1	95	60-140	12/21/2011 0915
Carbon disulfide	50	47		1	93	60-140	12/21/2011 0915
Carbon tetrachloride	50	49		1	98	70-130	12/21/2011 0915
Chlorobenzene	50	46		1	91	70-130	12/21/2011 0915
Chloroethane	50	43		1	86	42-163	12/21/2011 0915
Chloroform	50	50		1	99	70-130	12/21/2011 0915
Chloromethane (Methyl chloride)	50	38		1	75	70-130	12/21/2011 0915
Cyclohexane	50	44		1	88	70-130	12/21/2011 0915
1,2-Dibromo-3-chloropropane (DBCP)	50	39		1	78	70-130	12/21/2011 0915
Dibromochloromethane	50	49		1	99	70-130	12/21/2011 0915
1,2-Dibromoethane (EDB)	50	47		1	94	70-130	12/21/2011 0915
1,2-Dichlorobenzene	50	48		1	95	70-130	12/21/2011 0915
1,3-Dichlorobenzene	50	48		1	96	70-130	12/21/2011 0915
1,4-Dichlorobenzene	50	46		1	92	70-130	12/21/2011 0915
Dichlorodifluoromethane	50	36		1	73	60-140	12/21/2011 0915
1,1-Dichloroethane	50	46		1	91	70-130	12/21/2011 0915
1,2-Dichloroethane	50	49		1	97	70-130	12/21/2011 0915
1,1-Dichloroethene	50	45		1	90	70-130	12/21/2011 0915
cis-1,2-Dichloroethene	50	47		1	94	70-130	12/21/2011 0915
trans-1,2-Dichloroethene	50	46		1	92	70-130	12/21/2011 0915
1,2-Dichloropropane	50	46		1	93	70-130	12/21/2011 0915
cis-1,3-Dichloropropene	50	50		1	99	70-130	12/21/2011 0915
trans-1,3-Dichloropropene	50	48		1	97	70-130	12/21/2011 0915
Ethylbenzene	50	47		1	94	70-130	12/21/2011 0915
2-Hexanone	100	96		1	96	60-140	12/21/2011 0915
Isopropylbenzene	50	49		1	98	70-130	12/21/2011 0915
Methyl acetate	50	44		1	89	15-128	12/21/2011 0915
Methyl tertiary butyl ether (MTBE)	50	50		1	100	70-130	12/21/2011 0915
4-Methyl-2-pentanone	100	100		1	103	60-140	12/21/2011 0915
Methylcyclohexane	50	45		1	90	70-130	12/21/2011 0915
Methylene chloride	50	45		1	90	70-130	12/21/2011 0915
Styrene	50	50		1	101	70-130	12/21/2011 0915
1,1,2,2-Tetrachloroethane	50	48		1	97	60-140	12/21/2011 0915
Tetrachloroethene	50	45		1	90	70-130	12/21/2011 0915
Toluene	50	47		1	93	70-130	12/21/2011 0915
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	55		1	110	70-130	12/21/2011 0915
1,2,4-Trichlorobenzene	50	48		1	96	70-130	12/21/2011 0915
1,1,1-Trichloroethane	50	49		1	98	70-130	12/21/2011 0915
1,1,2-Trichloroethane	50	47		1	93	70-130	12/21/2011 0915

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ75859-002

Matrix: Aqueous

Batch: 75859

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	46		1	91	70-130	12/21/2011 0915
Trichlorofluoromethane	50	45		1	90	70-130	12/21/2011 0915
Vinyl chloride	50	39		1	78	70-130	12/21/2011 0915
Xylenes (total)	100	95		1	95	70-130	12/21/2011 0915
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		98	70-130				
1,2-Dichloroethane-d4		107	70-130				
Toluene-d8		101	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ75860-001

Matrix: Aqueous

Batch: 75860

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	12/22/2011 1124
Benzene	ND		1	1.0	ug/L	12/22/2011 1124
Bromodichloromethane	ND		1	1.0	ug/L	12/22/2011 1124
Bromoform	ND		1	1.0	ug/L	12/22/2011 1124
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	12/22/2011 1124
2-Butanone (MEK)	ND		1	10	ug/L	12/22/2011 1124
Carbon disulfide	ND		1	1.0	ug/L	12/22/2011 1124
Carbon tetrachloride	ND		1	1.0	ug/L	12/22/2011 1124
Chlorobenzene	ND		1	1.0	ug/L	12/22/2011 1124
Chloroethane	ND		1	2.0	ug/L	12/22/2011 1124
Chloroform	ND		1	1.0	ug/L	12/22/2011 1124
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	12/22/2011 1124
Cyclohexane	ND		1	1.0	ug/L	12/22/2011 1124
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	12/22/2011 1124
Dibromochloromethane	ND		1	1.0	ug/L	12/22/2011 1124
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	12/22/2011 1124
1,2-Dichlorobenzene	ND		1	1.0	ug/L	12/22/2011 1124
1,3-Dichlorobenzene	ND		1	1.0	ug/L	12/22/2011 1124
1,4-Dichlorobenzene	ND		1	1.0	ug/L	12/22/2011 1124
Dichlorodifluoromethane	ND		1	2.0	ug/L	12/22/2011 1124
1,1-Dichloroethane	ND		1	1.0	ug/L	12/22/2011 1124
1,2-Dichloroethane	ND		1	1.0	ug/L	12/22/2011 1124
1,1-Dichloroethene	ND		1	1.0	ug/L	12/22/2011 1124
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	12/22/2011 1124
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	12/22/2011 1124
1,2-Dichloropropane	ND		1	1.0	ug/L	12/22/2011 1124
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	12/22/2011 1124
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	12/22/2011 1124
Ethylbenzene	ND		1	1.0	ug/L	12/22/2011 1124
2-Hexanone	ND		1	10	ug/L	12/22/2011 1124
Isopropylbenzene	ND		1	1.0	ug/L	12/22/2011 1124
Methyl acetate	ND		1	1.0	ug/L	12/22/2011 1124
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	12/22/2011 1124
4-Methyl-2-pentanone	ND		1	10	ug/L	12/22/2011 1124
Methylcyclohexane	ND		1	5.0	ug/L	12/22/2011 1124
Methylene chloride	ND		1	1.0	ug/L	12/22/2011 1124
Styrene	ND		1	1.0	ug/L	12/22/2011 1124
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	12/22/2011 1124
Tetrachloroethene	ND		1	1.0	ug/L	12/22/2011 1124
Toluene	ND		1	1.0	ug/L	12/22/2011 1124
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	12/22/2011 1124
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	12/22/2011 1124
1,1,1-Trichloroethane	ND		1	1.0	ug/L	12/22/2011 1124
1,1,2-Trichloroethane	ND		1	1.0	ug/L	12/22/2011 1124

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ75860-001

Matrix: Aqueous

Batch: 75860

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	12/22/2011 1124
Trichlorofluoromethane	ND		1	1.0	ug/L	12/22/2011 1124
Vinyl chloride	ND		1	1.0	ug/L	12/22/2011 1124
Xylenes (total)	ND		1	1.0	ug/L	12/22/2011 1124
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		104	70-130			
1,2-Dichloroethane-d4		114	70-130			
Toluene-d8		97	70-130			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ75860-002

Matrix: Aqueous

Batch: 75860

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	87		1	87	70-130	12/22/2011 0951
Benzene	50	46		1	92	70-130	12/22/2011 0951
Bromodichloromethane	50	58		1	117	70-130	12/22/2011 0951
Bromoform	50	48		1	96	70-130	12/22/2011 0951
Bromomethane (Methyl bromide)	50	46		1	91	60-140	12/22/2011 0951
2-Butanone (MEK)	100	88		1	88	60-140	12/22/2011 0951
Carbon disulfide	50	46		1	93	60-140	12/22/2011 0951
Carbon tetrachloride	50	57		1	113	70-130	12/22/2011 0951
Chlorobenzene	50	49		1	97	70-130	12/22/2011 0951
Chloroethane	50	44		1	88	42-163	12/22/2011 0951
Chloroform	50	54		1	108	70-130	12/22/2011 0951
Chloromethane (Methyl chloride)	50	45		1	90	70-130	12/22/2011 0951
Cyclohexane	50	48		1	97	70-130	12/22/2011 0951
1,2-Dibromo-3-chloropropane (DBCP)	50	39		1	77	70-130	12/22/2011 0951
Dibromochloromethane	50	56		1	112	70-130	12/22/2011 0951
1,2-Dibromoethane (EDB)	50	52		1	104	70-130	12/22/2011 0951
1,2-Dichlorobenzene	50	49		1	98	70-130	12/22/2011 0951
1,3-Dichlorobenzene	50	50		1	99	70-130	12/22/2011 0951
1,4-Dichlorobenzene	50	49		1	97	70-130	12/22/2011 0951
Dichlorodifluoromethane	50	59		1	117	60-140	12/22/2011 0951
1,1-Dichloroethane	50	48		1	96	70-130	12/22/2011 0951
1,2-Dichloroethane	50	57		1	114	70-130	12/22/2011 0951
1,1-Dichloroethene	50	46		1	92	70-130	12/22/2011 0951
cis-1,2-Dichloroethene	50	47		1	94	70-130	12/22/2011 0951
trans-1,2-Dichloroethene	50	46		1	92	70-130	12/22/2011 0951
1,2-Dichloropropane	50	48		1	96	70-130	12/22/2011 0951
cis-1,3-Dichloropropene	50	53		1	106	70-130	12/22/2011 0951
trans-1,3-Dichloropropene	50	53		1	106	70-130	12/22/2011 0951
Ethylbenzene	50	50		1	100	70-130	12/22/2011 0951
2-Hexanone	100	100		1	104	60-140	12/22/2011 0951
Isopropylbenzene	50	51		1	101	70-130	12/22/2011 0951
Methyl acetate	50	46		1	93	15-128	12/22/2011 0951
Methyl tertiary butyl ether (MTBE)	50	50		1	101	70-130	12/22/2011 0951
4-Methyl-2-pentanone	100	110		1	110	60-140	12/22/2011 0951
Methylcyclohexane	50	46		1	91	70-130	12/22/2011 0951
Methylene chloride	50	45		1	89	70-130	12/22/2011 0951
Styrene	50	54		1	108	70-130	12/22/2011 0951
1,1,2,2-Tetrachloroethane	50	47		1	95	60-140	12/22/2011 0951
Tetrachloroethene	50	50		1	100	70-130	12/22/2011 0951
Toluene	50	50		1	99	70-130	12/22/2011 0951
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	58		1	117	70-130	12/22/2011 0951
1,2,4-Trichlorobenzene	50	48		1	96	70-130	12/22/2011 0951
1,1,1-Trichloroethane	50	56		1	111	70-130	12/22/2011 0951
1,1,2-Trichloroethane	50	48		1	97	70-130	12/22/2011 0951

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ75860-002

Matrix: Aqueous

Batch: 75860

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	49		1	99	70-130	12/22/2011 0951
Trichlorofluoromethane	50	56		1	113	70-130	12/22/2011 0951
Vinyl chloride	50	45		1	89	70-130	12/22/2011 0951
Xylenes (total)	100	100		1	100	70-130	12/22/2011 0951
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		105	70-130				
1,2-Dichloroethane-d4		122	70-130				
Toluene-d8		102	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ75860-003

Matrix: Aqueous

Batch: 75860

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	78		1	78	10	70-130	20	12/22/2011 1014
Benzene	50	46		1	92	0.26	70-130	20	12/22/2011 1014
Bromodichloromethane	50	56		1	113	3.2	70-130	20	12/22/2011 1014
Bromoform	50	45		1	91	5.8	70-130	20	12/22/2011 1014
Bromomethane (Methyl bromide)	50	52		1	103	12	60-140	20	12/22/2011 1014
2-Butanone (MEK)	100	80		1	80	9.7	60-140	20	12/22/2011 1014
Carbon disulfide	50	48		1	97	4.1	60-140	20	12/22/2011 1014
Carbon tetrachloride	50	57		1	114	0.71	70-130	20	12/22/2011 1014
Chlorobenzene	50	49		1	97	0.15	70-130	20	12/22/2011 1014
Chloroethane	50	48		1	96	8.5	42-163	20	12/22/2011 1014
Chloroform	50	53		1	106	1.8	70-130	20	12/22/2011 1014
Chloromethane (Methyl chloride)	50	47		1	93	4.2	70-130	20	12/22/2011 1014
Cyclohexane	50	50		1	100	4.0	70-130	20	12/22/2011 1014
1,2-Dibromo-3-chloropropane (DBCP)	50	38		1	76	1.4	70-130	20	12/22/2011 1014
Dibromochloromethane	50	54		1	109	3.2	70-130	20	12/22/2011 1014
1,2-Dibromoethane (EDB)	50	49		1	98	5.5	70-130	20	12/22/2011 1014
1,2-Dichlorobenzene	50	50		1	100	1.9	70-130	20	12/22/2011 1014
1,3-Dichlorobenzene	50	51		1	102	2.5	70-130	20	12/22/2011 1014
1,4-Dichlorobenzene	50	49		1	99	1.7	70-130	20	12/22/2011 1014
Dichlorodifluoromethane	50	63		1	125	6.7	60-140	20	12/22/2011 1014
1,1-Dichloroethane	50	47		1	95	1.1	70-130	20	12/22/2011 1014
1,2-Dichloroethane	50	54		1	108	5.0	70-130	20	12/22/2011 1014
1,1-Dichloroethene	50	47		1	95	3.2	70-130	20	12/22/2011 1014
cis-1,2-Dichloroethene	50	47		1	93	0.80	70-130	20	12/22/2011 1014
trans-1,2-Dichloroethene	50	46		1	93	0.50	70-130	20	12/22/2011 1014
1,2-Dichloropropane	50	46		1	93	3.2	70-130	20	12/22/2011 1014
cis-1,3-Dichloropropene	50	51		1	102	3.6	70-130	20	12/22/2011 1014
trans-1,3-Dichloropropene	50	52		1	104	2.6	70-130	20	12/22/2011 1014
Ethylbenzene	50	51		1	103	2.9	70-130	20	12/22/2011 1014
2-Hexanone	100	93		1	93	11	60-140	20	12/22/2011 1014
Isopropylbenzene	50	54		1	108	6.2	70-130	20	12/22/2011 1014
Methyl acetate	50	42		1	84	10	15-128	20	12/22/2011 1014
Methyl tertiary butyl ether (MTBE)	50	49		1	98	2.4	70-130	20	12/22/2011 1014
4-Methyl-2-pentanone	100	99		1	99	10	60-140	20	12/22/2011 1014
Methylcyclohexane	50	47		1	94	3.6	70-130	20	12/22/2011 1014
Methylene chloride	50	45		1	90	0.71	70-130	20	12/22/2011 1014
Styrene	50	54		1	107	0.80	70-130	20	12/22/2011 1014
1,1,2,2-Tetrachloroethane	50	47		1	94	0.85	60-140	20	12/22/2011 1014
Tetrachloroethene	50	49		1	98	1.7	70-130	20	12/22/2011 1014
Toluene	50	49		1	98	1.3	70-130	20	12/22/2011 1014
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	62		1	124	6.5	70-130	20	12/22/2011 1014
1,2,4-Trichlorobenzene	50	49		1	97	1.3	70-130	20	12/22/2011 1014
1,1,1-Trichloroethane	50	56		1	112	0.82	70-130	20	12/22/2011 1014
1,1,2-Trichloroethane	50	47		1	95	1.8	70-130	20	12/22/2011 1014

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ75860-003

Matrix: Aqueous

Batch: 75860

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	49		1	98	1.0	70-130	20	12/22/2011 1014
Trichlorofluoromethane	50	59		1	118	4.1	70-130	20	12/22/2011 1014
Vinyl chloride	50	49		1	99	9.7	70-130	20	12/22/2011 1014
Xylenes (total)	100	100		1	100	0.12	70-130	20	12/22/2011 1014
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		102	70-130						
1,2-Dichloroethane-d4		115	70-130						
Toluene-d8		99	70-130						

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: MQ74106-001

Matrix: Aqueous

Batch: 74106

Prep Method: 3520C

Analytical Method: 8270D

Prep Date: 12/20/2011 1405

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
2-Methylnaphthalene	ND		1	1.0	ug/L	12/29/2011 1914
Acenaphthene	ND		1	1.0	ug/L	12/29/2011 1914
Anthracene	ND		1	1.0	ug/L	12/29/2011 1914
Benzo(a)anthracene	ND		1	1.0	ug/L	12/29/2011 1914
Benzo(a)pyrene	ND		1	1.0	ug/L	12/29/2011 1914
Benzo(b)fluoranthene	ND		1	1.0	ug/L	12/29/2011 1914
Benzo(g,h,i)perylene	ND		1	1.0	ug/L	12/29/2011 1914
Benzo(k)fluoranthene	ND		1	1.0	ug/L	12/29/2011 1914
Chrysene	ND		1	1.0	ug/L	12/29/2011 1914
Dibenzo(a,h)anthracene	ND		1	1.0	ug/L	12/29/2011 1914
Fluoranthene	ND		1	1.0	ug/L	12/29/2011 1914
Fluorene	ND		1	1.0	ug/L	12/29/2011 1914
Indeno(1,2,3-c,d)pyrene	ND		1	1.0	ug/L	12/29/2011 1914
Naphthalene	ND		1	1.0	ug/L	12/29/2011 1914
Phenanthrene	ND		1	1.0	ug/L	12/29/2011 1914
Pyrene	ND		1	1.0	ug/L	12/29/2011 1914
Surrogate	Q	% Rec	Acceptance Limit			
2-Fluorobiphenyl		109	37-129			
Nitrobenzene-d5		118	38-127			
Terphenyl-d14		112	10-148			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: MQ74106-002

Matrix: Aqueous

Batch: 74106

Prep Method: 3520C

Analytical Method: 8270D

Prep Date: 12/20/2011 1405

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
2-Methylnaphthalene	20	20		1	100	49-122	01/03/2012 1716
Acenaphthene	20	21		1	105	51-130	01/03/2012 1716
Anthracene	20	20		1	99	48-122	01/03/2012 1716
Benzo(a)anthracene	20	21		1	103	50-143	01/03/2012 1716
Benzo(a)pyrene	20	23		1	114	55-141	01/03/2012 1716
Benzo(b)fluoranthene	20	21		1	107	48-147	01/03/2012 1716
Benzo(g,h,i)perylene	20	19		1	97	48-139	01/03/2012 1716
Benzo(k)fluoranthene	20	22		1	110	48-148	01/03/2012 1716
Chrysene	20	21		1	107	51-137	01/03/2012 1716
Dibenzo(a,h)anthracene	20	21		1	103	48-139	01/03/2012 1716
Fluoranthene	20	21		1	104	50-124	01/03/2012 1716
Fluorene	20	21		1	103	39-122	01/03/2012 1716
Indeno(1,2,3-c,d)pyrene	20	20		1	99	49-146	01/03/2012 1716
Naphthalene	20	18		1	92	45-118	01/03/2012 1716
Phenanthrene	20	21		1	103	49-122	01/03/2012 1716
Pyrene	20	21		1	107	50-130	01/03/2012 1716
Surrogate	Q	% Rec	Acceptance Limit				
2-Fluorobiphenyl		101	37-129				
Nitrobenzene-d5		102	38-127				
Terphenyl-d14		93	10-148				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

TPH - DRO - MB

Sample ID: MQ74107-001

Matrix: Aqueous

Batch: 74107

Prep Method: 3520C

Analytical Method: 8015C

Prep Date: 12/20/2011 1547

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
TPH-DRO	ND		1	200	ug/L	12/22/2011 1012
Surrogate	Q	% Rec	Acceptance Limit			
o - Terphenyl		91	53-118			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

TPH - DRO - LCS

Sample ID: MQ74107-002

Matrix: Aqueous

Batch: 74107

Prep Method: 3520C

Analytical Method: 8015C

Prep Date: 12/20/2011 1547

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TPH-DRO	2500	2000		1	81	70-130	12/22/2011 1033
Surrogate	Q	% Rec	Acceptance Limit				
o - Terphenyl		91	53-118				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

TPH - DRO - MB

Sample ID: MQ74505-001
 Batch: 74505
 Analytical Method: 8015C

Matrix: Aqueous
 Prep Method: 3520C
 Prep Date: 12/27/2011 1543

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
TPH-DRO	ND		1	200	ug/L	12/29/2011 1003
Surrogate	Q % Rec		Acceptance Limit			
o - Terphenyl	97		53-118			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

TPH - DRO - LCS

Sample ID: MQ74505-002

Matrix: Aqueous

Batch: 74505

Prep Method: 3520C

Analytical Method: 8015C

Prep Date: 12/27/2011 1543

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TPH-DRO	2500	2100		1	86	70-130	12/29/2011 1024
Surrogate	Q	% Rec	Acceptance Limit				
o - Terphenyl		93	53-118				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

TPH - DRO - LCSD

Sample ID: MQ74505-003

Matrix: Aqueous

Batch: 74505

Prep Method: 3520C

Analytical Method: 8015C

Prep Date: 12/27/2011 1543

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
TPH-DRO	2500	2100		1	84	2.4	70-130	20	12/29/2011 1046
Surrogate	Q	% Rec	Acceptance Limit						
o - Terphenyl		92	53-118						

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Civil & Environmental Consultants, Inc.

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Export - Four Triangle Lane, Suite 200 • Export, Pennsylvania 15632 • 724/327-5200 • Fax 724/327-5280
Indianapolis - 1 North Pennsylvania St. • Suite 1100 • Indianapolis, Indiana 46204 • 317/655-7777 • Fax 317/655-7778
Nashville - 405 Duke Drive, Suite 270 • Franklin, Tennessee 37067 • 615/333-7797 • Fax 615/333-7751
St. Louis - 4848 Park 370 Blvd. • Suite F • Hazelwood, Missouri 63042 • 314/656-4566 • Fax 314/656-4595

Report To: →

Project No. 111-036	Project Name GEORGETOWN MAW	Matrix	Analyses Requested		Page 1 of 1
Samplers (signatures) BRAD BASHORE ANDY MCCOZZLE		A Q U E O U S	VOC 8260	PAH 8270	Turnaround X Standard — Rush MULLOOS
Date	Time	No. of Containers			Remarks
12/15/11	1504	7	X	X	
↓	1542	7	X	X	
↓	1629	7	X	X	HOT!!!!
Relinquished by <i>[Signature]</i>	Date 12/15/11	Time 1840	Received by FEDEX	Date	Time
Relinquished by FEDEx	Date 12/16/11	Time 0900	Received by Laboratory <i>[Signature]</i>	Date 12-16-11	Time 0900
Custody Intact Yes No	Custody Seal No.	Lab Log No.	Remarks T=18		

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
 Document Number: F-AD-016
 Revision Number: 9

Page 1 of 1
 Replaces Date: 05/06/11
 Effective Date: 10/11/11

Envi Consultant Sample Receipt Checklist (SRC)

Client: Civil Eng'g Co Cooler Inspected by/date: bu 12/16/11 Lot #: ML1605
12/16/11

Means of receipt: <input type="checkbox"/> SESI <input type="checkbox"/> Client <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Airborne Exp <input type="checkbox"/> Other			
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	1. Were custody seals present on the cooler?	
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	2. If custody seals were present, were they intact and unbroken?	
Cooler ID/temperature upon receipt <u>216</u> °C <u>1.8</u> °C <u>2.0</u> °C <u>1</u> °C			
Method: <input type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles			
Method of coolant: <input type="checkbox"/> Wet Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> None			
If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.			
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____ (For coolers received via commercial courier, PMs are to be notified immediately.)
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	4. Is the commercial courier's packing slip attached to this form?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		5. Were proper custody procedures (relinquished/received) followed?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>	5a Were samples relinquished by client to commercial courier?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		6. Were sample IDs listed?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		7. Was collection date & time listed?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		8. Were tests to be performed listed on the COC?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		9. Did all samples arrive in the proper containers for each test?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		10. Did all container label information (ID, date, time) agree with COC?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		12. Was adequate sample volume available?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		14. Were any samples containers missing?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		15. Were there any excess samples not listed on COC?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>	16. Were bubbles present >"pea-size" (½" or 6mm in diameter) in any VOA vials?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	20. Were collection temperatures documented on the COC for NC samples?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)			
Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H ₂ SO ₄ , HNO ₃ , HCl, NaOH) with the SR # (number) _____			
Sample(s) _____ were received with bubbles >6 mm in diameter.			
Sample(s) _____ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb.			

Corrective Action taken, if necessary:

Was client notified: Yes No Did client respond: Yes No
 SESI employee: _____ Date of response: _____

Comments: _____

Report of Analysis

Civil and Environmental Consultants, Inc.
8740 Orion Place
Suite 100
Columbus, OH 43240
Attention: Roy Stanley

Project Name: Georgetown MW & Soil

Lot Number: NC27001
Date Completed: 04/12/2012
Date Revised: 04/16/2012



Grant Wilton
Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

* NC27001 *

Case Narrative

Civil and Environmental Consultants, Inc.

Lot Number: NC27001

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Semivolatile Organic Analysis - Method 8270D

Sample -005 was prepped at half volume due to the viscous nature of the sample.

Sample -006 had two surrogates recovered below control limits due to matrix interference. The sample was analyzed at a 50X dilution due to matrix interference.

Sample -029 was concentrated to a final volume of 5 ml due to the viscous nature of the sample.

TPH-DRO - Method 8015A

Sample -005 had low surrogate recovery. The sample was re-extracted and re-analyzed after the holding time expired. The re-analysis fails surrogate recovery low indicating matrix interference. Chromatographic pattern resembles a fuel/oil.

Sample -006 had low surrogate recovery. The sample was re-extracted and re-analyzed after the holding time expired. The re-analysis fails surrogate recovery low indicating matrix interference. Chromatographic pattern resembles a fuel.

Sample -027 had low surrogate recovery. MS/MSD had low analyte recovery indicating a matrix interference. There was no sample remaining for re-extraction. Chromatographic pattern resembles a fuel.

Sample -029 was concentrated to a final volume of 10 ml due to the viscous nature of the sample. Low surrogate recovery due to matrix interference. Chromatographic pattern resembles a fuel/oil.

Volatile Organic Analysis - Method 8260B

Bromomethane and 1,1,2-Trichloro-1,2,2-Trifluoroethane were recovered above the control limit in the LCS/LCSD associated with batch 81491. All samples associated with this LCS pair were non-detect for these compounds.

Vinyl chloride was detected above the control limit in the LCS/LCSD associated with batch 81491 indicating a potential high bias to the results. Vinyl chloride was detected in sample -01.

Acetone was detected in the LCSD associated with batch 81491. All samples were non-detect for Acetone.

Cyclohexane was detected in the Method Blank associated with batch 81595. Cyclohexane was non-detect in the associated sample.

Sample -029 was analyzed at 100X and 1000X dilutions due to the high concentration of target analytes. Runs 2 and 3 were analyzed after the holding time expired. The results from all runs are reported.

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-003

Description: MW-CA-1

Matrix: Aqueous

Date Sampled: 03/26/2012 1231

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(pH - Field) SM 4500-H	1	03/26/2012 1231	BTF		
1		(Temperature) SM	1	03/26/2012 1231	BTF		
1		(Water level)	1	03/26/2012 1231	BTF		
1		(Well Depth)	1	03/26/2012 1231	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
pH - Field		SM 4500-H B Field	6.43		0.000	su	1
Temperature - Field		SM 2550B	25.2		0.000	° C	1
Water level depth from top of casing		No Method	5.49		0.00	feet	1
Well Depth		No Method	11.60		0.00	feet	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-003

Description: MW-CA-1

Matrix: Aqueous

Date Sampled: 03/26/2012 1231

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1522	AAC		81491

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-003
Description: MW-CA-1	Matrix: Aqueous
Date Sampled: 03/26/2012 1231	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1522	AAC		81491

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		91	70-130

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Semivolatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-003

Description: MW-CA-1

Matrix: Aqueous

Date Sampled: 03/26/2012 1231

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	04/03/2012 0158	TAF	03/28/2012 1823	81294

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.0	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	ug/L	1
Fluorene	86-73-7	8270D	ND		1.0	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.0	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		79	37-129
Nitrobenzene-d5		80	38-127
Terphenyl-d14		31	10-148

PQL = Practical quantitation limit

B = Detected in the method blank

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H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

TPH - DRO

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-003
Description: MW-CA-1	Matrix: Aqueous
Date Sampled: 03/26/2012 1231	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	03/29/2012 1918	MSM	03/28/2012 1543	81271

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	370	11	210	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits				
o - Terphenyl		57	53-118				

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-004

Description: MW-CA-2

Matrix: Aqueous

Date Sampled: 03/26/2012 1256

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(pH - Field) SM 4500-H	1	03/26/2012 1256	BTF		
1		(Temperature) SM	1	03/26/2012 1256	BTF		
1		(Water level)	1	03/26/2012 1256	BTF		
1		(Well Depth)	1	03/26/2012 1256	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
pH - Field		SM 4500-H B Field	9.5		0.000	su	1
Temperature - Field		SM 2550B	22.4		0.000	° C	1
Water level depth from top of casing		No Method	5.22		0.00	feet	1
Well Depth		No Method	12.90		0.00	feet	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-004

Description: MW-CA-2

Matrix: Aqueous

Date Sampled: 03/26/2012 1256

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1545	AAC		81491

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	2.0		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	1.7		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	7.6		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	9.9		1.0	ug/L	1
Toluene	108-88-3	8260B	1.3		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-004
Description: MW-CA-2	Matrix: Aqueous
Date Sampled: 03/26/2012 1256	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1545	AAC		81491

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	8.2		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		92	70-130

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Semivolatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-004

Description: MW-CA-2

Matrix: Aqueous

Date Sampled: 03/26/2012 1256

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	03/30/2012 2201	WD	03/28/2012 1823	81294

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	4.8		1.0	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	ug/L	1
Fluorene	86-73-7	8270D	1.1		1.0	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	ug/L	1
Naphthalene	91-20-3	8270D	8.4		1.0	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	37-129
Nitrobenzene-d5		60	38-127
Terphenyl-d14		14	10-148

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

TPH - DRO

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-004
Description: MW-CA-2	Matrix: Aqueous
Date Sampled: 03/26/2012 1256	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	03/29/2012 1940	MSM	03/28/2012 1543	81271

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	740	11	200	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
o - Terphenyl		59	53-118

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-005

Description: MW-CA-3

Matrix: Aqueous

Date Sampled: 03/26/2012 1140

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(pH - Field) SM 4500-H	1	03/26/2012 1140	BTF		
1		(Temperature) SM	1	03/26/2012 1140	BTF		
1		(Water level)	1	03/26/2012 1140	BTF		
1		(Well Depth)	1	03/26/2012 1140	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
pH - Field		SM 4500-H B Field	6.05		0.000	su	1
Temperature - Field		SM 2550B	24.0		0.000	° C	1
Water level depth from top of casing		No Method	7.52		0.00	feet	1
Well Depth		No Method	13.19		0.00	feet	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-005

Description: MW-CA-3

Matrix: Aqueous

Date Sampled: 03/26/2012 1140

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1817	AAC		81492
2	5030B	8260B	100	04/05/2012 0656	DD		81873

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	3.0		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	120		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	44		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	27000	H	100	ug/L	2
1,1-Dichloroethene	75-35-4	8260B	74		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	7.7		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	9.2		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	1.4		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	7.3		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	12000	H	100	ug/L	2
Toluene	108-88-3	8260B	18		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-005
Description: MW-CA-3	Matrix: Aqueous
Date Sampled: 03/26/2012 1140	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1817	AAC		81492
2	5030B	8260B	100	04/05/2012 0656	DD		81873

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260B	3900	H	100	ug/L	2
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	6200	H	100	ug/L	2
Xylenes (total)	1330-20-7	8260B	85		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130	H	88	70-130
Bromofluorobenzene		103	70-130	H	83	70-130
Toluene-d8		98	70-130	H	77	70-130

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Semivolatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-005

Description: MW-CA-3

Matrix: Aqueous

Date Sampled: 03/26/2012 1140

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	04/02/2012 1423	SJA	03/28/2012 1823	81294

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		2.0	ug/L	1
Anthracene	120-12-7	8270D	ND		2.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		2.0	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		2.0	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		2.0	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		2.0	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		2.0	ug/L	1
Chrysene	218-01-9	8270D	ND		2.0	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		2.0	ug/L	1
Fluoranthene	206-44-0	8270D	ND		2.0	ug/L	1
Fluorene	86-73-7	8270D	ND		2.0	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		2.0	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		2.0	ug/L	1
Naphthalene	91-20-3	8270D	17		2.0	ug/L	1
Phenanthrene	85-01-8	8270D	ND		2.0	ug/L	1
Pyrene	129-00-0	8270D	ND		2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		46	37-129
Nitrobenzene-d5		47	38-127
Terphenyl-d14		22	10-148

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

TPH - DRO

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-005
Description: MW-CA-3	Matrix: Aqueous
Date Sampled: 03/26/2012 1140	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	5	04/03/2012 0002	MSM	03/28/2012 1543	81271

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	180000	I11	1000	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits				
o - Terphenyl	N	18	53-118				

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-006

Description: MW-CA-4

Matrix: Aqueous

Date Sampled: 03/26/2012 1111

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(pH - Field) SM 4500-H	1	03/26/2012 1111	BTF		
1		(Temperature) SM	1	03/26/2012 1111	BTF		
1		(Water level)	1	03/26/2012 1111	BTF		
1		(Well Depth)	1	03/26/2012 1111	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
pH - Field		SM 4500-H B Field	6.5		0.000	su	1
Temperature - Field		SM 2550B	23.1		0.000	° C	1
Water level depth from top of casing		No Method	7.94		0.00	feet	1
Well Depth		No Method	13.24		0.00	feet	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-006

Description: MW-CA-4

Matrix: Aqueous

Date Sampled: 03/26/2012 1111

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1608	AAC		81491

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-006
Description: MW-CA-4	Matrix: Aqueous
Date Sampled: 03/26/2012 1111	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1608	AAC		81491

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		90	70-130

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Semivolatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-006

Description: MW-CA-4

Matrix: Aqueous

Date Sampled: 03/26/2012 1111

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	04/02/2012 1448	SJA	03/28/2012 1823	81294

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.0	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	ug/L	1
Fluorene	86-73-7	8270D	ND		1.0	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.0	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl	N	35	37-129
Nitrobenzene-d5		49	38-127
Terphenyl-d14	N	7.2	10-148

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

TPH - DRO

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-006
Description: MW-CA-4	Matrix: Aqueous
Date Sampled: 03/26/2012 1111	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	03/29/2012 2024	MSM	03/28/2012 1543	81271

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	380	I1	200	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits				
o - Terphenyl	N	17	53-118				

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-007
Description: MW-2	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	4.96		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-008
Description: MW-3	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	7.03		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-009
Description: MW-4	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	5.12		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-010

Description: MW-5

Matrix: Aqueous

Date Sampled: 03/26/2012

Date Received: 03/27/2012

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	6.22		0.00	feet	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-011
Description: MW-6	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	5.36		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-012

Description: MW-7

Matrix: Aqueous

Date Sampled: 03/26/2012

Date Received: 03/27/2012

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	4.72		0.00	feet	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-013
Description: MW-8	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	4.95		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-014
Description: MW-9	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	5.58		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-015
Description: MW-10	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	5.53		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-016
Description: MW-11	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	5.48		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-017
Description: MW-12	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	4.80		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-018

Description: MW-13

Matrix: Aqueous

Date Sampled: 03/26/2012

Date Received: 03/27/2012

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	1.10		0.00	feet	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-019
Description: MW-14	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	1.32		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-020
Description: MW-15	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	1.50		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-021
Description: MW-16	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	5.25		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-022
Description: MW-17	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	4.90		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-023
Description: MW-18	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	5.80		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-024
Description: MW-19	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	5.42		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-025

Description: MW-20

Matrix: Aqueous

Date Sampled: 03/26/2012 1356

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(pH - Field) SM 4500-H	1	03/26/2012 1356	BTF		
1		(Temperature) SM	1	03/26/2012 1356	BTF		
1		(Water level)	1	03/26/2012 1356	BTF		
1		(Well Depth)	1	03/26/2012 1356	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
pH - Field		SM 4500-H B Field	6.86		0.000	su	1
Temperature - Field		SM 2550B	22.2		0.000	° C	1
Water level depth from top of casing		No Method	5.75		0.00	feet	1
Well Depth		No Method	12.18		0.00	feet	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-025

Description: MW-20

Matrix: Aqueous

Date Sampled: 03/26/2012 1356

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1631	AAC		81491

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1.2		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-025
Description: MW-20	Matrix: Aqueous
Date Sampled: 03/26/2012 1356	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1631	AAC		81491

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		89	70-130

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Semivolatle Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-025

Description: MW-20

Matrix: Aqueous

Date Sampled: 03/26/2012 1356

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	04/03/2012 0223	TAF	03/28/2012 1823	81294

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.0	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	ug/L	1
Fluorene	86-73-7	8270D	ND		1.0	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.0	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		68	37-129
Nitrobenzene-d5		63	38-127
Terphenyl-d14		33	10-148

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

TPH - DRO

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-025
Description: MW-20	Matrix: Aqueous
Date Sampled: 03/26/2012 1356	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	03/29/2012 2046	MSM	03/28/2012 1543	81271

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	370	11	200	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
o - Terphenyl		77	53-118

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-026

Description: MW-21

Matrix: Aqueous

Date Sampled: 03/26/2012 1323

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(pH - Field) SM 4500-H	1	03/26/2012 1323	BTF		
1		(Temperature) SM	1	03/26/2012 1323	BTF		
1		(Water level)	1	03/26/2012 1323	BTF		
1		(Well Depth)	1	03/26/2012 1323	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
pH - Field		SM 4500-H B Field	12.0		0.000	su	1
Temperature - Field		SM 2550B	26.7		0.000	° C	1
Water level depth from top of casing		No Method	5.50		0.00	feet	1
Well Depth		No Method	12.15		0.00	feet	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-026

Description: MW-21

Matrix: Aqueous

Date Sampled: 03/26/2012 1323

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1653	AAC		81491

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-026
Description: MW-21	Matrix: Aqueous
Date Sampled: 03/26/2012 1323	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1653	AAC		81491

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		90	70-130

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Semivolatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-026

Description: MW-21

Matrix: Aqueous

Date Sampled: 03/26/2012 1323

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	04/02/2012 1539	SJA	03/28/2012 1823	81294

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	3.6		1.0	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	ug/L	1
Fluorene	86-73-7	8270D	2.0		1.0	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	2.1		1.0	ug/L	1
Naphthalene	91-20-3	8270D	36		1.0	ug/L	1
Phenanthrene	85-01-8	8270D	1.8		1.0	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		65	37-129
Nitrobenzene-d5		55	38-127
Terphenyl-d14		25	10-148

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

TPH - DRO

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-026
Description: MW-21	Matrix: Aqueous
Date Sampled: 03/26/2012 1323	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	03/29/2012 2108	MSM	03/28/2012 1543	81271

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	2500	111	200	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits				
o - Terphenyl		56	53-118				

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-027

Description: DUP-1

Matrix: Aqueous

Date Sampled: 03/26/2012 1323

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1716	AAC		81491

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-027
Description: DUP-1	Matrix: Aqueous
Date Sampled: 03/26/2012 1323	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1716	AAC		81491

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		91	70-130

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Semivolatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-027

Description: DUP-1

Matrix: Aqueous

Date Sampled: 03/26/2012 1323

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	2	04/03/2012 0247	TAF	03/28/2012 1823	81294

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	4.5		2.0	ug/L	1
Anthracene	120-12-7	8270D	ND		2.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		2.0	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		2.0	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		2.0	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		2.0	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		2.0	ug/L	1
Chrysene	218-01-9	8270D	ND		2.0	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		2.0	ug/L	1
Fluoranthene	206-44-0	8270D	ND		2.0	ug/L	1
Fluorene	86-73-7	8270D	2.3		2.0	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		2.0	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	3.2		2.0	ug/L	1
Naphthalene	91-20-3	8270D	52		2.0	ug/L	1
Phenanthrene	85-01-8	8270D	2.2		2.0	ug/L	1
Pyrene	129-00-0	8270D	ND		2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		63	37-129
Nitrobenzene-d5		65	38-127
Terphenyl-d14		44	10-148

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

TPH - DRO

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-027
Description: DUP-1	Matrix: Aqueous
Date Sampled: 03/26/2012 1323	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	1	03/29/2012 2130	MSM	03/28/2012 1543	81271

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	2600	I11	200	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
o - Terphenyl	N	49	53-118

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-028
Description: MW-22	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	4.82		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-029

Description: MW-23

Matrix: Aqueous

Date Sampled: 03/26/2012 1210

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(pH - Field) SM 4500-H	1	03/26/2012 1210	BTF		
1		(Temperature) SM	1	03/26/2012 1210	BTF		
1		(Water level)	1	03/26/2012 1210	BTF		
1		(Well Depth)	1	03/26/2012 1210	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
pH - Field		SM 4500-H B Field	6.39		0.000	su	1
Temperature - Field		SM 2550B	24.8		0.000	° C	1
Water level depth from top of casing		No Method	7.62		0.00	feet	1
Well Depth		No Method	12.14		0.00	feet	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-029

Description: MW-23

Matrix: Aqueous

Date Sampled: 03/26/2012 1210

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1838	AAC		81492
2	5030B	8260B	100	04/05/2012 1647	AAC		81915
3	5030B	8260B	1000	04/11/2012 2139	JJG		82374

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	3.6		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	2.1		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	9.6		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	40		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	47		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	6100		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	58		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	12		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	17		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	1.9		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	9200		1.0	ug/L	1
Toluene	108-88-3	8260B	29		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-029

Description: MW-23

Matrix: Aqueous

Date Sampled: 03/26/2012 1210

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1838	AAC		81492
2	5030B	8260B	100	04/05/2012 1647	AAC		81915
3	5030B	8260B	1000	04/11/2012 2139	JJG		82374

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,1,2-Trichloroethane	79-00-5	8260B	55		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260B	4100		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	1600		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	130		1.0	ug/L	1

Surrogate	Q	Run 1		Q	Run 2		Q	Run 3	
		% Recovery	Acceptance Limits		% Recovery	Acceptance Limits		% Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130	H	97	70-130	H	103	70-130
Bromofluorobenzene	N	140	70-130	H	85	70-130	H	98	70-130
Toluene-d8		102	70-130	H	79	70-130	H	100	70-130

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

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J = Estimated result < PQL and ≥ MDL

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Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-029

Description: MW-23

Matrix: Aqueous

Date Sampled: 03/26/2012 1210

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1838	AAC		81492
2	5030B	8260B	100	04/05/2012 1647	AAC		81915
3	5030B	8260B	1000	04/11/2012 2139	JJG		82374

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND*	H	2000	ug/L	2
Benzene	71-43-2	8260B	ND*	H	100	ug/L	2
Bromodichloromethane	75-27-4	8260B	ND*	H	100	ug/L	2
Bromoform	75-25-2	8260B	ND*	H	100	ug/L	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND*	H	200	ug/L	2
2-Butanone (MEK)	78-93-3	8260B	ND*	H	1000	ug/L	2
Carbon disulfide	75-15-0	8260B	ND*	H	100	ug/L	2
Carbon tetrachloride	56-23-5	8260B	ND*	H	100	ug/L	2
Chlorobenzene	108-90-7	8260B	ND*	H	100	ug/L	2
Chloroethane	75-00-3	8260B	ND*	H	200	ug/L	2
Chloroform	67-66-3	8260B	ND*	H	100	ug/L	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND*	H	100	ug/L	2
Cyclohexane	110-82-7	8260B	ND*	H	100	ug/L	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND*	H	100	ug/L	2
Dibromochloromethane	124-48-1	8260B	ND*	H	100	ug/L	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND*	H	100	ug/L	2
1,4-Dichlorobenzene	106-46-7	8260B	ND*	H	100	ug/L	2
1,3-Dichlorobenzene	541-73-1	8260B	ND*	H	100	ug/L	2
1,2-Dichlorobenzene	95-50-1	8260B	ND*	H	100	ug/L	2
Dichlorodifluoromethane	75-71-8	8260B	ND*	H	200	ug/L	2
1,2-Dichloroethane	107-06-2	8260B	ND*	H	100	ug/L	2
1,1-Dichloroethane	75-34-3	8260B	ND*	H	100	ug/L	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND*	H	100	ug/L	2
cis-1,2-Dichloroethene	156-59-2	8260B	29000*	H	100	ug/L	2
1,1-Dichloroethene	75-35-4	8260B	ND*	H	100	ug/L	2
1,2-Dichloropropane	78-87-5	8260B	ND*	H	100	ug/L	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND*	H	100	ug/L	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND*	H	100	ug/L	2
Ethylbenzene	100-41-4	8260B	ND*	H	100	ug/L	2
2-Hexanone	591-78-6	8260B	ND*	H	1000	ug/L	2
Isopropylbenzene	98-82-8	8260B	ND*	H	100	ug/L	2
Methyl acetate	79-20-9	8260B	ND*	H	100	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND*	H	100	ug/L	2
4-Methyl-2-pentanone	108-10-1	8260B	ND*	H	1000	ug/L	2
Methylcyclohexane	108-87-2	8260B	ND*	H	500	ug/L	2
Methylene chloride	75-09-2	8260B	ND*	H	100	ug/L	2
Styrene	100-42-5	8260B	ND*	H	100	ug/L	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	230*	H	100	ug/L	2
Tetrachloroethene	127-18-4	8260B	42000	H	100	ug/L	2
Toluene	108-88-3	8260B	ND*	H	100	ug/L	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND*	H	100	ug/L	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND*	H	100	ug/L	2

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-029

Description: MW-23

Matrix: Aqueous

Date Sampled: 03/26/2012 1210

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1838	AAC		81492
2	5030B	8260B	100	04/05/2012 1647	AAC		81915
3	5030B	8260B	1000	04/11/2012 2139	JJG		82374

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,1,2-Trichloroethane	79-00-5	8260B	ND*	H	100	ug/L	2
1,1,1-Trichloroethane	71-55-6	8260B	ND*	H	100	ug/L	2
Trichloroethene	79-01-6	8260B	9900*	H	100	ug/L	2
Trichlorofluoromethane	75-69-4	8260B	ND*	H	100	ug/L	2
Vinyl chloride	75-01-4	8260B	1700*	H	100	ug/L	2
Xylenes (total)	1330-20-7	8260B	120*	H	100	ug/L	2

Surrogate	Q	Run 1		Q	Run 2		Q	Run 3	
		% Recovery	Acceptance Limits		% Recovery	Acceptance Limits		% Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130	H	97	70-130	H	103	70-130
Bromofluorobenzene	N	140	70-130	H	85	70-130	H	98	70-130
Toluene-d8		102	70-130	H	79	70-130	H	100	70-130

PQL = Practical quantitation limit

B = Detected in the method blank

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ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-029

Description: MW-23

Matrix: Aqueous

Date Sampled: 03/26/2012 1210

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1838	AAC		81492
2	5030B	8260B	100	04/05/2012 1647	AAC		81915
3	5030B	8260B	1000	04/11/2012 2139	JJG		82374

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND	H	20000	ug/L	3
Benzene	71-43-2	8260B	ND	H	1000	ug/L	3
Bromodichloromethane	75-27-4	8260B	ND	H	1000	ug/L	3
Bromoform	75-25-2	8260B	ND	H	1000	ug/L	3
Bromomethane (Methyl bromide)	74-83-9	8260B	ND	H	2000	ug/L	3
2-Butanone (MEK)	78-93-3	8260B	ND	H	10000	ug/L	3
Carbon disulfide	75-15-0	8260B	ND	H	1000	ug/L	3
Carbon tetrachloride	56-23-5	8260B	ND	H	1000	ug/L	3
Chlorobenzene	108-90-7	8260B	ND	H	1000	ug/L	3
Chloroethane	75-00-3	8260B	ND	H	2000	ug/L	3
Chloroform	67-66-3	8260B	ND	H	1000	ug/L	3
Chloromethane (Methyl chloride)	74-87-3	8260B	ND	H	1000	ug/L	3
Cyclohexane	110-82-7	8260B	ND	H	1000	ug/L	3
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND	H	1000	ug/L	3
Dibromochloromethane	124-48-1	8260B	ND	H	1000	ug/L	3
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND	H	1000	ug/L	3
1,4-Dichlorobenzene	106-46-7	8260B	ND	H	1000	ug/L	3
1,3-Dichlorobenzene	541-73-1	8260B	ND	H	1000	ug/L	3
1,2-Dichlorobenzene	95-50-1	8260B	ND	H	1000	ug/L	3
Dichlorodifluoromethane	75-71-8	8260B	ND	H	2000	ug/L	3
1,2-Dichloroethane	107-06-2	8260B	ND	H	1000	ug/L	3
1,1-Dichloroethane	75-34-3	8260B	ND	H	1000	ug/L	3
trans-1,2-Dichloroethene	156-60-5	8260B	ND	H	1000	ug/L	3
cis-1,2-Dichloroethene	156-59-2	8260B	33000	H	1000	ug/L	3
1,1-Dichloroethene	75-35-4	8260B	ND	H	1000	ug/L	3
1,2-Dichloropropane	78-87-5	8260B	ND	H	1000	ug/L	3
trans-1,3-Dichloropropene	10061-02-6	8260B	ND	H	1000	ug/L	3
cis-1,3-Dichloropropene	10061-01-5	8260B	ND	H	1000	ug/L	3
Ethylbenzene	100-41-4	8260B	ND	H	1000	ug/L	3
2-Hexanone	591-78-6	8260B	ND	H	10000	ug/L	3
Isopropylbenzene	98-82-8	8260B	ND	H	1000	ug/L	3
Methyl acetate	79-20-9	8260B	ND	H	1000	ug/L	3
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND	H	1000	ug/L	3
4-Methyl-2-pentanone	108-10-1	8260B	ND	H	10000	ug/L	3
Methylcyclohexane	108-87-2	8260B	ND	H	5000	ug/L	3
Methylene chloride	75-09-2	8260B	ND	H	1000	ug/L	3
Styrene	100-42-5	8260B	ND	H	1000	ug/L	3
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND	H	1000	ug/L	3
Tetrachloroethene	127-18-4	8260B	34000*	H	1000	ug/L	3
Toluene	108-88-3	8260B	ND	H	1000	ug/L	3
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND	H	1000	ug/L	3
1,2,4-Trichlorobenzene	120-82-1	8260B	ND	H	1000	ug/L	3

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-029

Description: MW-23

Matrix: Aqueous

Date Sampled: 03/26/2012 1210

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2012 1838	AAC		81492
2	5030B	8260B	100	04/05/2012 1647	AAC		81915
3	5030B	8260B	1000	04/11/2012 2139	JJG		82374

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,1,2-Trichloroethane	79-00-5	8260B	ND	H	1000	ug/L	3
1,1,1-Trichloroethane	71-55-6	8260B	ND	H	1000	ug/L	3
Trichloroethene	79-01-6	8260B	11000	H	1000	ug/L	3
Trichlorofluoromethane	75-69-4	8260B	ND	H	1000	ug/L	3
Vinyl chloride	75-01-4	8260B	1700	H	1000	ug/L	3
Xylenes (total)	1330-20-7	8260B	ND	H	1000	ug/L	3

Surrogate	Q	Run 1		Q	Run 2		Q	Run 3	
		% Recovery	Acceptance Limits		% Recovery	Acceptance Limits		% Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130	H	97	70-130	H	103	70-130
Bromofluorobenzene	N	140	70-130	H	85	70-130	H	98	70-130
Toluene-d8		102	70-130	H	79	70-130	H	100	70-130

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

Semivolatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-029

Description: MW-23

Matrix: Aqueous

Date Sampled: 03/26/2012 1210

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	50	04/02/2012 1629	SJA	03/28/2012 1823	81294

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270D	ND		51	ug/L	1
Anthracene	120-12-7	8270D	ND		51	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		51	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		51	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		51	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		51	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		51	ug/L	1
Chrysene	218-01-9	8270D	ND		51	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		51	ug/L	1
Fluoranthene	206-44-0	8270D	ND		51	ug/L	1
Fluorene	86-73-7	8270D	ND		51	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		51	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		51	ug/L	1
Naphthalene	91-20-3	8270D	ND		51	ug/L	1
Phenanthrene	85-01-8	8270D	ND		51	ug/L	1
Pyrene	129-00-0	8270D	ND		51	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl	N	4.3	37-129
Nitrobenzene-d5	N	295	38-127
Terphenyl-d14	N	7.7	10-148

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

* = Reportable result (only when report all runs)

TPH - DRO

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-029
Description: MW-23	Matrix: Aqueous
Date Sampled: 03/26/2012 1210	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8015C	2	03/29/2012 2235	MSM	03/28/2012 1543	81271

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		8015C	2700000	I11	400	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits				
o - Terphenyl	N	16	53-118				

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Inorganic non-metals

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-030
Description: TW-1	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method (Water level)	Dilution	Analysis Date	Analyst	Prep Date	Batch
1			1	03/26/2012 0000	BTF		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Water level depth from top of casing		No Method	10.98		0.00	feet	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.

Laboratory ID: NC27001-031

Description: Trip Blank

Matrix: Aqueous

Date Sampled: 03/26/2012

Date Received: 03/27/2012

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/01/2012 1550	AAC		81595

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: Civil and Environmental Consultants, Inc.	Laboratory ID: NC27001-031
Description: Trip Blank	Matrix: Aqueous
Date Sampled: 03/26/2012	
Date Received: 03/27/2012	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/01/2012 1550	AAC		81595

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		79	70-130
Bromofluorobenzene		74	70-130
Toluene-d8		78	70-130

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the PQL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" * = Reportable result (only when report all runs)

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ81491-001

Matrix: Aqueous

Batch: 81491

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	03/30/2012 0940
Benzene	ND		1	1.0	ug/L	03/30/2012 0940
Bromodichloromethane	ND		1	1.0	ug/L	03/30/2012 0940
Bromoform	ND		1	1.0	ug/L	03/30/2012 0940
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	03/30/2012 0940
2-Butanone (MEK)	ND		1	10	ug/L	03/30/2012 0940
Carbon disulfide	ND		1	1.0	ug/L	03/30/2012 0940
Carbon tetrachloride	ND		1	1.0	ug/L	03/30/2012 0940
Chlorobenzene	ND		1	1.0	ug/L	03/30/2012 0940
Chloroethane	ND		1	2.0	ug/L	03/30/2012 0940
Chloroform	ND		1	1.0	ug/L	03/30/2012 0940
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	03/30/2012 0940
Cyclohexane	ND		1	1.0	ug/L	03/30/2012 0940
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	03/30/2012 0940
Dibromochloromethane	ND		1	1.0	ug/L	03/30/2012 0940
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	03/30/2012 0940
1,3-Dichlorobenzene	ND		1	1.0	ug/L	03/30/2012 0940
1,4-Dichlorobenzene	ND		1	1.0	ug/L	03/30/2012 0940
1,2-Dichlorobenzene	ND		1	1.0	ug/L	03/30/2012 0940
Dichlorodifluoromethane	ND		1	2.0	ug/L	03/30/2012 0940
1,1-Dichloroethane	ND		1	1.0	ug/L	03/30/2012 0940
1,2-Dichloroethane	ND		1	1.0	ug/L	03/30/2012 0940
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	03/30/2012 0940
1,1-Dichloroethene	ND		1	1.0	ug/L	03/30/2012 0940
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	03/30/2012 0940
1,2-Dichloropropane	ND		1	1.0	ug/L	03/30/2012 0940
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	03/30/2012 0940
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	03/30/2012 0940
Ethylbenzene	ND		1	1.0	ug/L	03/30/2012 0940
2-Hexanone	ND		1	10	ug/L	03/30/2012 0940
Isopropylbenzene	ND		1	1.0	ug/L	03/30/2012 0940
Methyl acetate	ND		1	1.0	ug/L	03/30/2012 0940
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	03/30/2012 0940
4-Methyl-2-pentanone	ND		1	10	ug/L	03/30/2012 0940
Methylcyclohexane	ND		1	5.0	ug/L	03/30/2012 0940
Methylene chloride	ND		1	1.0	ug/L	03/30/2012 0940
Styrene	ND		1	1.0	ug/L	03/30/2012 0940
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	03/30/2012 0940
Tetrachloroethene	ND		1	1.0	ug/L	03/30/2012 0940
Toluene	ND		1	1.0	ug/L	03/30/2012 0940
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	03/30/2012 0940
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	03/30/2012 0940
1,1,1-Trichloroethane	ND		1	1.0	ug/L	03/30/2012 0940
1,1,2-Trichloroethane	ND		1	1.0	ug/L	03/30/2012 0940

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ81491-001

Matrix: Aqueous

Batch: 81491

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	03/30/2012 0940
Trichlorofluoromethane	ND		1	1.0	ug/L	03/30/2012 0940
Vinyl chloride	ND		1	1.0	ug/L	03/30/2012 0940
Xylenes (total)	ND		1	1.0	ug/L	03/30/2012 0940
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		95	70-130			
1,2-Dichloroethane-d4		93	70-130			
Toluene-d8		92	70-130			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ81491-002

Matrix: Aqueous

Batch: 81491

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	107	70-130	03/30/2012 0812
Benzene	50	50		1	100	70-130	03/30/2012 0812
Bromodichloromethane	50	58		1	116	70-130	03/30/2012 0812
Bromoform	50	57		1	113	70-130	03/30/2012 0812
Bromomethane (Methyl bromide)	50	71	N	1	142	60-140	03/30/2012 0812
2-Butanone (MEK)	100	110		1	109	60-140	03/30/2012 0812
Carbon disulfide	50	44		1	89	60-140	03/30/2012 0812
Carbon tetrachloride	50	63		1	126	70-130	03/30/2012 0812
Chlorobenzene	50	52		1	104	70-130	03/30/2012 0812
Chloroethane	50	65		1	130	42-163	03/30/2012 0812
Chloroform	50	50		1	101	70-130	03/30/2012 0812
Chloromethane (Methyl chloride)	50	62		1	124	70-130	03/30/2012 0812
Cyclohexane	50	47		1	94	70-130	03/30/2012 0812
1,2-Dibromo-3-chloropropane (DBCP)	50	49		1	99	70-130	03/30/2012 0812
Dibromochloromethane	50	61		1	122	70-130	03/30/2012 0812
1,2-Dibromoethane (EDB)	50	57		1	113	70-130	03/30/2012 0812
1,3-Dichlorobenzene	50	53		1	107	70-130	03/30/2012 0812
1,4-Dichlorobenzene	50	52		1	104	70-130	03/30/2012 0812
1,2-Dichlorobenzene	50	54		1	109	70-130	03/30/2012 0812
Dichlorodifluoromethane	50	61		1	121	60-140	03/30/2012 0812
1,1-Dichloroethane	50	46		1	93	70-130	03/30/2012 0812
1,2-Dichloroethane	50	56		1	111	70-130	03/30/2012 0812
cis-1,2-Dichloroethene	50	50		1	100	70-130	03/30/2012 0812
1,1-Dichloroethene	50	52		1	103	70-130	03/30/2012 0812
trans-1,2-Dichloroethene	50	51		1	102	70-130	03/30/2012 0812
1,2-Dichloropropane	50	49		1	97	70-130	03/30/2012 0812
trans-1,3-Dichloropropene	50	55		1	110	70-130	03/30/2012 0812
cis-1,3-Dichloropropene	50	54		1	108	70-130	03/30/2012 0812
Ethylbenzene	50	53		1	105	70-130	03/30/2012 0812
2-Hexanone	100	120		1	123	60-140	03/30/2012 0812
Isopropylbenzene	50	54		1	108	70-130	03/30/2012 0812
Methyl acetate	50	47		1	95	15-128	03/30/2012 0812
Methyl tertiary butyl ether (MTBE)	50	51		1	102	70-130	03/30/2012 0812
4-Methyl-2-pentanone	100	120		1	123	60-140	03/30/2012 0812
Methylcyclohexane	50	50		1	99	70-130	03/30/2012 0812
Methylene chloride	50	46		1	92	70-130	03/30/2012 0812
Styrene	50	57		1	113	70-130	03/30/2012 0812
1,1,2,2-Tetrachloroethane	50	52		1	104	60-140	03/30/2012 0812
Tetrachloroethene	50	54		1	108	70-130	03/30/2012 0812
Toluene	50	55		1	109	70-130	03/30/2012 0812
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	74	N	1	148	70-130	03/30/2012 0812
1,2,4-Trichlorobenzene	50	51		1	103	70-130	03/30/2012 0812
1,1,1-Trichloroethane	50	56		1	113	70-130	03/30/2012 0812
1,1,2-Trichloroethane	50	55		1	109	70-130	03/30/2012 0812

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ81491-002

Matrix: Aqueous

Batch: 81491

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	55		1	110	70-130	03/30/2012 0812
Trichlorofluoromethane	50	62		1	123	70-130	03/30/2012 0812
Vinyl chloride	50	66	N	1	133	70-130	03/30/2012 0812
Xylenes (total)	100	110		1	106	70-130	03/30/2012 0812
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		98	70-130				
1,2-Dichloroethane-d4		91	70-130				
Toluene-d8		92	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ81491-003

Matrix: Aqueous

Batch: 81491

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	140	N,+	1	138	25	70-130	20	03/30/2012 0834
Benzene	50	52		1	103	3.2	70-130	20	03/30/2012 0834
Bromodichloromethane	50	58		1	116	0.12	70-130	20	03/30/2012 0834
Bromoform	50	55		1	110	2.6	70-130	20	03/30/2012 0834
Bromomethane (Methyl bromide)	50	70	N	1	141	0.84	60-140	20	03/30/2012 0834
2-Butanone (MEK)	100	120		1	120	9.6	60-140	20	03/30/2012 0834
Carbon disulfide	50	46		1	93	4.2	60-140	20	03/30/2012 0834
Carbon tetrachloride	50	62		1	123	2.3	70-130	20	03/30/2012 0834
Chlorobenzene	50	55		1	109	4.4	70-130	20	03/30/2012 0834
Chloroethane	50	66		1	133	1.7	42-163	20	03/30/2012 0834
Chloroform	50	51		1	101	0.16	70-130	20	03/30/2012 0834
Chloromethane (Methyl chloride)	50	63		1	125	1.2	70-130	20	03/30/2012 0834
Cyclohexane	50	48		1	97	2.7	70-130	20	03/30/2012 0834
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	91	7.5	70-130	20	03/30/2012 0834
Dibromochloromethane	50	61		1	122	0.54	70-130	20	03/30/2012 0834
1,2-Dibromoethane (EDB)	50	57		1	114	0.88	70-130	20	03/30/2012 0834
1,3-Dichlorobenzene	50	53		1	107	0.28	70-130	20	03/30/2012 0834
1,4-Dichlorobenzene	50	52		1	105	0.92	70-130	20	03/30/2012 0834
1,2-Dichlorobenzene	50	54		1	108	0.49	70-130	20	03/30/2012 0834
Dichlorodifluoromethane	50	59		1	117	3.2	60-140	20	03/30/2012 0834
1,1-Dichloroethane	50	48		1	96	3.3	70-130	20	03/30/2012 0834
1,2-Dichloroethane	50	54		1	108	2.7	70-130	20	03/30/2012 0834
cis-1,2-Dichloroethene	50	51		1	102	2.0	70-130	20	03/30/2012 0834
1,1-Dichloroethene	50	54		1	108	4.8	70-130	20	03/30/2012 0834
trans-1,2-Dichloroethene	50	52		1	104	2.4	70-130	20	03/30/2012 0834
1,2-Dichloropropane	50	52		1	104	6.0	70-130	20	03/30/2012 0834
trans-1,3-Dichloropropene	50	55		1	111	0.82	70-130	20	03/30/2012 0834
cis-1,3-Dichloropropene	50	56		1	112	3.3	70-130	20	03/30/2012 0834
Ethylbenzene	50	53		1	107	1.2	70-130	20	03/30/2012 0834
2-Hexanone	100	120		1	124	0.92	60-140	20	03/30/2012 0834
Isopropylbenzene	50	55		1	110	2.3	70-130	20	03/30/2012 0834
Methyl acetate	50	48		1	96	1.6	15-128	20	03/30/2012 0834
Methyl tertiary butyl ether (MTBE)	50	51		1	101	0.60	70-130	20	03/30/2012 0834
4-Methyl-2-pentanone	100	130		1	126	3.0	60-140	20	03/30/2012 0834
Methylcyclohexane	50	52		1	105	5.0	70-130	20	03/30/2012 0834
Methylene chloride	50	48		1	95	3.4	70-130	20	03/30/2012 0834
Styrene	50	58		1	115	1.7	70-130	20	03/30/2012 0834
1,1,2,2-Tetrachloroethane	50	51		1	103	1.2	60-140	20	03/30/2012 0834
Tetrachloroethene	50	55		1	110	2.4	70-130	20	03/30/2012 0834
Toluene	50	57		1	114	3.8	70-130	20	03/30/2012 0834
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	76	N	1	153	3.0	70-130	20	03/30/2012 0834
1,2,4-Trichlorobenzene	50	51		1	102	0.77	70-130	20	03/30/2012 0834
1,1,1-Trichloroethane	50	56		1	113	0.34	70-130	20	03/30/2012 0834
1,1,2-Trichloroethane	50	57		1	114	4.3	70-130	20	03/30/2012 0834

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ81491-003

Matrix: Aqueous

Batch: 81491

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	56		1	113	2.0	70-130	20	03/30/2012 0834
Trichlorofluoromethane	50	61		1	121	1.8	70-130	20	03/30/2012 0834
Vinyl chloride	50	66	N	1	132	0.52	70-130	20	03/30/2012 0834
Xylenes (total)	100	110		1	108	1.5	70-130	20	03/30/2012 0834
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		96	70-130						
1,2-Dichloroethane-d4		88	70-130						
Toluene-d8		94	70-130						

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ81492-001

Matrix: Aqueous

Batch: 81492

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	03/30/2012 1049
Benzene	ND		1	1.0	ug/L	03/30/2012 1049
Bromodichloromethane	ND		1	1.0	ug/L	03/30/2012 1049
Bromoform	ND		1	1.0	ug/L	03/30/2012 1049
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	03/30/2012 1049
2-Butanone (MEK)	ND		1	10	ug/L	03/30/2012 1049
Carbon disulfide	ND		1	1.0	ug/L	03/30/2012 1049
Carbon tetrachloride	ND		1	1.0	ug/L	03/30/2012 1049
Chlorobenzene	ND		1	1.0	ug/L	03/30/2012 1049
Chloroethane	ND		1	2.0	ug/L	03/30/2012 1049
Chloroform	ND		1	1.0	ug/L	03/30/2012 1049
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	03/30/2012 1049
Cyclohexane	ND		1	1.0	ug/L	03/30/2012 1049
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	03/30/2012 1049
Dibromochloromethane	ND		1	1.0	ug/L	03/30/2012 1049
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	03/30/2012 1049
1,4-Dichlorobenzene	ND		1	1.0	ug/L	03/30/2012 1049
1,3-Dichlorobenzene	ND		1	1.0	ug/L	03/30/2012 1049
1,2-Dichlorobenzene	ND		1	1.0	ug/L	03/30/2012 1049
Dichlorodifluoromethane	ND		1	2.0	ug/L	03/30/2012 1049
1,2-Dichloroethane	ND		1	1.0	ug/L	03/30/2012 1049
1,1-Dichloroethane	ND		1	1.0	ug/L	03/30/2012 1049
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	03/30/2012 1049
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	03/30/2012 1049
1,1-Dichloroethene	ND		1	1.0	ug/L	03/30/2012 1049
1,2-Dichloropropane	ND		1	1.0	ug/L	03/30/2012 1049
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	03/30/2012 1049
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	03/30/2012 1049
Ethylbenzene	ND		1	1.0	ug/L	03/30/2012 1049
2-Hexanone	ND		1	10	ug/L	03/30/2012 1049
Isopropylbenzene	ND		1	1.0	ug/L	03/30/2012 1049
Methyl acetate	ND		1	1.0	ug/L	03/30/2012 1049
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	03/30/2012 1049
4-Methyl-2-pentanone	ND		1	10	ug/L	03/30/2012 1049
Methylcyclohexane	ND		1	5.0	ug/L	03/30/2012 1049
Methylene chloride	ND		1	1.0	ug/L	03/30/2012 1049
Styrene	ND		1	1.0	ug/L	03/30/2012 1049
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	03/30/2012 1049
Tetrachloroethene	ND		1	1.0	ug/L	03/30/2012 1049
Toluene	ND		1	1.0	ug/L	03/30/2012 1049
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	03/30/2012 1049
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	03/30/2012 1049
1,1,2-Trichloroethane	ND		1	1.0	ug/L	03/30/2012 1049
1,1,1-Trichloroethane	ND		1	1.0	ug/L	03/30/2012 1049

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ81492-001

Matrix: Aqueous

Batch: 81492

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	03/30/2012 1049
Trichlorofluoromethane	ND		1	1.0	ug/L	03/30/2012 1049
Vinyl chloride	ND		1	1.0	ug/L	03/30/2012 1049
Xylenes (total)	ND		1	1.0	ug/L	03/30/2012 1049
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		94	70-130			
1,2-Dichloroethane-d4		103	70-130			
Toluene-d8		97	70-130			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ81492-002

Matrix: Aqueous

Batch: 81492

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	120		1	121	70-130	03/30/2012 0924
Benzene	50	48		1	97	70-130	03/30/2012 0924
Bromodichloromethane	50	52		1	103	70-130	03/30/2012 0924
Bromoform	50	44		1	88	70-130	03/30/2012 0924
Bromomethane (Methyl bromide)	50	46		1	93	60-140	03/30/2012 0924
2-Butanone (MEK)	100	100		1	103	60-140	03/30/2012 0924
Carbon disulfide	50	52		1	103	60-140	03/30/2012 0924
Carbon tetrachloride	50	51		1	103	70-130	03/30/2012 0924
Chlorobenzene	50	48		1	95	70-130	03/30/2012 0924
Chloroethane	50	49		1	99	42-163	03/30/2012 0924
Chloroform	50	47		1	94	70-130	03/30/2012 0924
Chloromethane (Methyl chloride)	50	56		1	112	70-130	03/30/2012 0924
Cyclohexane	50	50		1	100	70-130	03/30/2012 0924
1,2-Dibromo-3-chloropropane (DBCP)	50	51		1	102	70-130	03/30/2012 0924
Dibromochloromethane	50	46		1	93	70-130	03/30/2012 0924
1,2-Dibromoethane (EDB)	50	54		1	107	70-130	03/30/2012 0924
1,4-Dichlorobenzene	50	49		1	99	70-130	03/30/2012 0924
1,3-Dichlorobenzene	50	51		1	102	70-130	03/30/2012 0924
1,2-Dichlorobenzene	50	50		1	101	70-130	03/30/2012 0924
Dichlorodifluoromethane	50	54		1	108	60-140	03/30/2012 0924
1,2-Dichloroethane	50	49		1	98	70-130	03/30/2012 0924
1,1-Dichloroethane	50	48		1	97	70-130	03/30/2012 0924
trans-1,2-Dichloroethene	50	48		1	95	70-130	03/30/2012 0924
cis-1,2-Dichloroethene	50	48		1	95	70-130	03/30/2012 0924
1,1-Dichloroethene	50	48		1	96	70-130	03/30/2012 0924
1,2-Dichloropropane	50	50		1	100	70-130	03/30/2012 0924
trans-1,3-Dichloropropene	50	48		1	96	70-130	03/30/2012 0924
cis-1,3-Dichloropropene	50	47		1	94	70-130	03/30/2012 0924
Ethylbenzene	50	52		1	103	70-130	03/30/2012 0924
2-Hexanone	100	120		1	120	60-140	03/30/2012 0924
Isopropylbenzene	50	54		1	108	70-130	03/30/2012 0924
Methyl acetate	50	49		1	97	15-128	03/30/2012 0924
Methyl tertiary butyl ether (MTBE)	50	51		1	102	70-130	03/30/2012 0924
4-Methyl-2-pentanone	100	110		1	114	60-140	03/30/2012 0924
Methylcyclohexane	50	52		1	103	70-130	03/30/2012 0924
Methylene chloride	50	45		1	91	70-130	03/30/2012 0924
Styrene	50	55		1	111	70-130	03/30/2012 0924
1,1,2,2-Tetrachloroethane	50	53		1	106	60-140	03/30/2012 0924
Tetrachloroethene	50	49		1	98	70-130	03/30/2012 0924
Toluene	50	48		1	97	70-130	03/30/2012 0924
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	56		1	111	70-130	03/30/2012 0924
1,2,4-Trichlorobenzene	50	52		1	105	70-130	03/30/2012 0924
1,1,2-Trichloroethane	50	50		1	100	70-130	03/30/2012 0924
1,1,1-Trichloroethane	50	50		1	99	70-130	03/30/2012 0924

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ81492-002

Matrix: Aqueous

Batch: 81492

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	48		1	96	70-130	03/30/2012 0924
Trichlorofluoromethane	50	50		1	101	70-130	03/30/2012 0924
Vinyl chloride	50	49		1	98	70-130	03/30/2012 0924
Xylenes (total)	100	100		1	104	70-130	03/30/2012 0924
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		98	70-130				
1,2-Dichloroethane-d4		109	70-130				
Toluene-d8		100	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ81595-001

Matrix: Aqueous

Batch: 81595

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	04/01/2012 1458
Benzene	ND		1	1.0	ug/L	04/01/2012 1458
Bromodichloromethane	ND		1	1.0	ug/L	04/01/2012 1458
Bromoform	ND		1	1.0	ug/L	04/01/2012 1458
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	04/01/2012 1458
2-Butanone (MEK)	ND		1	10	ug/L	04/01/2012 1458
Carbon disulfide	ND		1	1.0	ug/L	04/01/2012 1458
Carbon tetrachloride	ND		1	1.0	ug/L	04/01/2012 1458
Chlorobenzene	ND		1	1.0	ug/L	04/01/2012 1458
Chloroethane	ND		1	2.0	ug/L	04/01/2012 1458
Chloroform	ND		1	1.0	ug/L	04/01/2012 1458
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	04/01/2012 1458
Cyclohexane	1.7		1	1.0	ug/L	04/01/2012 1458
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	04/01/2012 1458
Dibromochloromethane	ND		1	1.0	ug/L	04/01/2012 1458
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	04/01/2012 1458
1,2-Dichlorobenzene	ND		1	1.0	ug/L	04/01/2012 1458
1,3-Dichlorobenzene	ND		1	1.0	ug/L	04/01/2012 1458
1,4-Dichlorobenzene	ND		1	1.0	ug/L	04/01/2012 1458
Dichlorodifluoromethane	ND		1	2.0	ug/L	04/01/2012 1458
1,1-Dichloroethane	ND		1	1.0	ug/L	04/01/2012 1458
1,2-Dichloroethane	ND		1	1.0	ug/L	04/01/2012 1458
1,1-Dichloroethene	ND		1	1.0	ug/L	04/01/2012 1458
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	04/01/2012 1458
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	04/01/2012 1458
1,2-Dichloropropane	ND		1	1.0	ug/L	04/01/2012 1458
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	04/01/2012 1458
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	04/01/2012 1458
Ethylbenzene	ND		1	1.0	ug/L	04/01/2012 1458
2-Hexanone	ND		1	10	ug/L	04/01/2012 1458
Isopropylbenzene	ND		1	1.0	ug/L	04/01/2012 1458
Methyl acetate	ND		1	1.0	ug/L	04/01/2012 1458
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	04/01/2012 1458
4-Methyl-2-pentanone	ND		1	10	ug/L	04/01/2012 1458
Methylcyclohexane	ND		1	5.0	ug/L	04/01/2012 1458
Methylene chloride	ND		1	1.0	ug/L	04/01/2012 1458
Styrene	ND		1	1.0	ug/L	04/01/2012 1458
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	04/01/2012 1458
Tetrachloroethene	ND		1	1.0	ug/L	04/01/2012 1458
Toluene	ND		1	1.0	ug/L	04/01/2012 1458
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	04/01/2012 1458
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	04/01/2012 1458
1,1,1-Trichloroethane	ND		1	1.0	ug/L	04/01/2012 1458
1,1,2-Trichloroethane	ND		1	1.0	ug/L	04/01/2012 1458

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ81595-001

Matrix: Aqueous

Batch: 81595

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	04/01/2012 1458
Trichlorofluoromethane	ND		1	1.0	ug/L	04/01/2012 1458
Vinyl chloride	ND		1	1.0	ug/L	04/01/2012 1458
Xylenes (total)	ND		1	1.0	ug/L	04/01/2012 1458
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		97	70-130			
1,2-Dichloroethane-d4		100	70-130			
Toluene-d8		99	70-130			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ81595-002

Matrix: Aqueous

Batch: 81595

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	94		1	94	70-130	04/01/2012 1220
Benzene	50	51		1	103	70-130	04/01/2012 1220
Bromodichloromethane	50	53		1	106	70-130	04/01/2012 1220
Bromoform	50	53		1	107	70-130	04/01/2012 1220
Bromomethane (Methyl bromide)	50	48		1	97	60-140	04/01/2012 1220
2-Butanone (MEK)	100	100		1	102	60-140	04/01/2012 1220
Carbon disulfide	50	52		1	103	60-140	04/01/2012 1220
Carbon tetrachloride	50	57		1	113	70-130	04/01/2012 1220
Chlorobenzene	50	49		1	98	70-130	04/01/2012 1220
Chloroethane	50	55		1	110	42-163	04/01/2012 1220
Chloroform	50	52		1	104	70-130	04/01/2012 1220
Chloromethane (Methyl chloride)	50	48		1	95	70-130	04/01/2012 1220
Cyclohexane	50	53		1	107	70-130	04/01/2012 1220
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	95	70-130	04/01/2012 1220
Dibromochloromethane	50	54		1	109	70-130	04/01/2012 1220
1,2-Dibromoethane (EDB)	50	49		1	99	70-130	04/01/2012 1220
1,2-Dichlorobenzene	50	48		1	97	70-130	04/01/2012 1220
1,3-Dichlorobenzene	50	51		1	102	70-130	04/01/2012 1220
1,4-Dichlorobenzene	50	49		1	98	70-130	04/01/2012 1220
Dichlorodifluoromethane	50	50		1	99	60-140	04/01/2012 1220
1,1-Dichloroethane	50	50		1	100	70-130	04/01/2012 1220
1,2-Dichloroethane	50	51		1	102	70-130	04/01/2012 1220
1,1-Dichloroethene	50	53		1	106	70-130	04/01/2012 1220
cis-1,2-Dichloroethene	50	51		1	102	70-130	04/01/2012 1220
trans-1,2-Dichloroethene	50	52		1	104	70-130	04/01/2012 1220
1,2-Dichloropropane	50	49		1	98	70-130	04/01/2012 1220
cis-1,3-Dichloropropene	50	52		1	103	70-130	04/01/2012 1220
trans-1,3-Dichloropropene	50	49		1	98	70-130	04/01/2012 1220
Ethylbenzene	50	54		1	107	70-130	04/01/2012 1220
2-Hexanone	100	120		1	121	60-140	04/01/2012 1220
Isopropylbenzene	50	52		1	104	70-130	04/01/2012 1220
Methyl acetate	50	50		1	101	15-128	04/01/2012 1220
Methyl tertiary butyl ether (MTBE)	50	51		1	103	70-130	04/01/2012 1220
4-Methyl-2-pentanone	100	110		1	114	60-140	04/01/2012 1220
Methylcyclohexane	50	54		1	109	70-130	04/01/2012 1220
Methylene chloride	50	46		1	92	70-130	04/01/2012 1220
Styrene	50	54		1	109	70-130	04/01/2012 1220
1,1,2,2-Tetrachloroethane	50	52		1	104	60-140	04/01/2012 1220
Tetrachloroethene	50	51		1	102	70-130	04/01/2012 1220
Toluene	50	51		1	101	70-130	04/01/2012 1220
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	59		1	117	70-130	04/01/2012 1220
1,2,4-Trichlorobenzene	50	39		1	79	70-130	04/01/2012 1220
1,1,1-Trichloroethane	50	53		1	105	70-130	04/01/2012 1220
1,1,2-Trichloroethane	50	48		1	95	70-130	04/01/2012 1220

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ81595-002

Matrix: Aqueous

Batch: 81595

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	51		1	102	70-130	04/01/2012 1220
Trichlorofluoromethane	50	58		1	115	70-130	04/01/2012 1220
Vinyl chloride	50	51		1	102	70-130	04/01/2012 1220
Xylenes (total)	100	110		1	105	70-130	04/01/2012 1220
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		103	70-130				
1,2-Dichloroethane-d4		108	70-130				
Toluene-d8		102	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ81595-003

Matrix: Aqueous

Batch: 81595

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	87		1	87	8.4	70-130	20	04/01/2012 1241
Benzene	50	51		1	102	1.3	70-130	20	04/01/2012 1241
Bromodichloromethane	50	52		1	104	1.5	70-130	20	04/01/2012 1241
Bromoform	50	53		1	105	1.4	70-130	20	04/01/2012 1241
Bromomethane (Methyl bromide)	50	53		1	106	8.7	60-140	20	04/01/2012 1241
2-Butanone (MEK)	100	95		1	95	6.9	60-140	20	04/01/2012 1241
Carbon disulfide	50	54		1	108	4.3	60-140	20	04/01/2012 1241
Carbon tetrachloride	50	56		1	112	0.95	70-130	20	04/01/2012 1241
Chlorobenzene	50	49		1	98	0.27	70-130	20	04/01/2012 1241
Chloroethane	50	52		1	103	6.4	42-163	20	04/01/2012 1241
Chloroform	50	51		1	103	1.1	70-130	20	04/01/2012 1241
Chloromethane (Methyl chloride)	50	52		1	103	8.3	70-130	20	04/01/2012 1241
Cyclohexane	50	54		1	108	1.4	70-130	20	04/01/2012 1241
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	94	1.7	70-130	20	04/01/2012 1241
Dibromochloromethane	50	53		1	106	2.6	70-130	20	04/01/2012 1241
1,2-Dibromoethane (EDB)	50	50		1	99	0.47	70-130	20	04/01/2012 1241
1,2-Dichlorobenzene	50	48		1	96	1.0	70-130	20	04/01/2012 1241
1,3-Dichlorobenzene	50	51		1	102	0.14	70-130	20	04/01/2012 1241
1,4-Dichlorobenzene	50	48		1	97	1.3	70-130	20	04/01/2012 1241
Dichlorodifluoromethane	50	51		1	102	2.7	60-140	20	04/01/2012 1241
1,1-Dichloroethane	50	51		1	103	2.4	70-130	20	04/01/2012 1241
1,2-Dichloroethane	50	52		1	103	1.4	70-130	20	04/01/2012 1241
1,1-Dichloroethene	50	52		1	104	1.3	70-130	20	04/01/2012 1241
cis-1,2-Dichloroethene	50	52		1	105	2.8	70-130	20	04/01/2012 1241
trans-1,2-Dichloroethene	50	51		1	101	2.6	70-130	20	04/01/2012 1241
1,2-Dichloropropane	50	49		1	97	0.81	70-130	20	04/01/2012 1241
cis-1,3-Dichloropropene	50	51		1	103	0.47	70-130	20	04/01/2012 1241
trans-1,3-Dichloropropene	50	49		1	97	1.1	70-130	20	04/01/2012 1241
Ethylbenzene	50	53		1	105	1.8	70-130	20	04/01/2012 1241
2-Hexanone	100	120		1	115	4.8	60-140	20	04/01/2012 1241
Isopropylbenzene	50	52		1	104	0.54	70-130	20	04/01/2012 1241
Methyl acetate	50	49		1	99	2.3	15-128	20	04/01/2012 1241
Methyl tertiary butyl ether (MTBE)	50	50		1	100	2.5	70-130	20	04/01/2012 1241
4-Methyl-2-pentanone	100	110		1	107	6.3	60-140	20	04/01/2012 1241
Methylcyclohexane	50	54		1	108	0.66	70-130	20	04/01/2012 1241
Methylene chloride	50	49		1	97	5.1	70-130	20	04/01/2012 1241
Styrene	50	55		1	109	0.48	70-130	20	04/01/2012 1241
1,1,2,2-Tetrachloroethane	50	51		1	102	2.5	60-140	20	04/01/2012 1241
Tetrachloroethene	50	49		1	99	3.3	70-130	20	04/01/2012 1241
Toluene	50	50		1	100	1.5	70-130	20	04/01/2012 1241
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	62		1	123	5.0	70-130	20	04/01/2012 1241
1,2,4-Trichlorobenzene	50	42		1	85	7.5	70-130	20	04/01/2012 1241
1,1,1-Trichloroethane	50	53		1	107	1.5	70-130	20	04/01/2012 1241
1,1,2-Trichloroethane	50	46		1	93	2.5	70-130	20	04/01/2012 1241

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ81595-003

Matrix: Aqueous

Batch: 81595

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	51		1	103	0.52	70-130	20	04/01/2012 1241
Trichlorofluoromethane	50	59		1	117	2.0	70-130	20	04/01/2012 1241
Vinyl chloride	50	52		1	104	2.7	70-130	20	04/01/2012 1241
Xylenes (total)	100	110		1	105	0.13	70-130	20	04/01/2012 1241
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		102	70-130						
1,2-Dichloroethane-d4		102	70-130						
Toluene-d8		96	70-130						

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ81873-001

Matrix: Aqueous

Batch: 81873

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	04/04/2012 2345
Tetrachloroethene	ND		1	1.0	ug/L	04/04/2012 2345
Trichloroethene	ND		1	1.0	ug/L	04/04/2012 2345
Vinyl chloride	ND		1	1.0	ug/L	04/04/2012 2345
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		82	70-130			
1,2-Dichloroethane-d4		84	70-130			
Toluene-d8		76	70-130			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ81873-002

Matrix: Aqueous

Batch: 81873

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
cis-1,2-Dichloroethene	50	39		1	78	70-130	04/04/2012 2213
Tetrachloroethene	50	41		1	83	70-130	04/04/2012 2213
Trichloroethene	50	42		1	84	70-130	04/04/2012 2213
Vinyl chloride	50	35		1	70	70-130	04/04/2012 2213
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		86	70-130				
1,2-Dichloroethane-d4		88	70-130				
Toluene-d8		80	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ81873-003

Matrix: Aqueous

Batch: 81873

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
cis-1,2-Dichloroethene	50	40		1	79	2.1	70-130	20	04/04/2012 2236
Tetrachloroethene	50	44		1	88	5.5	70-130	20	04/04/2012 2236
Trichloroethene	50	44		1	88	5.0	70-130	20	04/04/2012 2236
Vinyl chloride	50	38		1	76	8.5	70-130	20	04/04/2012 2236
Surrogate	Q	% Rec			Acceptance Limit				
Bromofluorobenzene		87			70-130				
1,2-Dichloroethane-d4		88			70-130				
Toluene-d8		82			70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ81915-001

Matrix: Aqueous

Batch: 81915

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	04/05/2012 1029
Benzene	ND		1	1.0	ug/L	04/05/2012 1029
Bromodichloromethane	ND		1	1.0	ug/L	04/05/2012 1029
Bromoform	ND		1	1.0	ug/L	04/05/2012 1029
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	04/05/2012 1029
2-Butanone (MEK)	ND		1	10	ug/L	04/05/2012 1029
Carbon disulfide	ND		1	1.0	ug/L	04/05/2012 1029
Carbon tetrachloride	ND		1	1.0	ug/L	04/05/2012 1029
Chlorobenzene	ND		1	1.0	ug/L	04/05/2012 1029
Chloroethane	ND		1	2.0	ug/L	04/05/2012 1029
Chloroform	ND		1	1.0	ug/L	04/05/2012 1029
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	04/05/2012 1029
Cyclohexane	ND		1	1.0	ug/L	04/05/2012 1029
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	04/05/2012 1029
Dibromochloromethane	ND		1	1.0	ug/L	04/05/2012 1029
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	04/05/2012 1029
1,4-Dichlorobenzene	ND		1	1.0	ug/L	04/05/2012 1029
1,3-Dichlorobenzene	ND		1	1.0	ug/L	04/05/2012 1029
1,2-Dichlorobenzene	ND		1	1.0	ug/L	04/05/2012 1029
Dichlorodifluoromethane	ND		1	2.0	ug/L	04/05/2012 1029
1,1-Dichloroethane	ND		1	1.0	ug/L	04/05/2012 1029
1,2-Dichloroethane	ND		1	1.0	ug/L	04/05/2012 1029
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	04/05/2012 1029
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	04/05/2012 1029
1,1-Dichloroethene	ND		1	1.0	ug/L	04/05/2012 1029
1,2-Dichloropropane	ND		1	1.0	ug/L	04/05/2012 1029
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	04/05/2012 1029
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	04/05/2012 1029
Ethylbenzene	ND		1	1.0	ug/L	04/05/2012 1029
2-Hexanone	ND		1	10	ug/L	04/05/2012 1029
Isopropylbenzene	ND		1	1.0	ug/L	04/05/2012 1029
Methyl acetate	ND		1	1.0	ug/L	04/05/2012 1029
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	04/05/2012 1029
4-Methyl-2-pentanone	ND		1	10	ug/L	04/05/2012 1029
Methylcyclohexane	ND		1	5.0	ug/L	04/05/2012 1029
Methylene chloride	ND		1	1.0	ug/L	04/05/2012 1029
Styrene	ND		1	1.0	ug/L	04/05/2012 1029
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	04/05/2012 1029
Tetrachloroethene	ND		1	1.0	ug/L	04/05/2012 1029
Toluene	ND		1	1.0	ug/L	04/05/2012 1029
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	04/05/2012 1029
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	04/05/2012 1029
1,1,1-Trichloroethane	ND		1	1.0	ug/L	04/05/2012 1029
1,1,2-Trichloroethane	ND		1	1.0	ug/L	04/05/2012 1029

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ81915-001

Matrix: Aqueous

Batch: 81915

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	04/05/2012 1029
Trichlorofluoromethane	ND		1	1.0	ug/L	04/05/2012 1029
Vinyl chloride	ND		1	1.0	ug/L	04/05/2012 1029
Xylenes (total)	ND		1	1.0	ug/L	04/05/2012 1029
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		86	70-130			
1,2-Dichloroethane-d4		85	70-130			
Toluene-d8		77	70-130			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ81915-002

Matrix: Aqueous

Batch: 81915

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	104	70-130	04/05/2012 0857
Benzene	50	44		1	88	70-130	04/05/2012 0857
Bromodichloromethane	50	49		1	99	70-130	04/05/2012 0857
Bromoform	50	48		1	97	70-130	04/05/2012 0857
Bromomethane (Methyl bromide)	50	50		1	100	60-140	04/05/2012 0857
2-Butanone (MEK)	100	97		1	97	60-140	04/05/2012 0857
Carbon disulfide	50	41		1	82	60-140	04/05/2012 0857
Carbon tetrachloride	50	48		1	96	70-130	04/05/2012 0857
Chlorobenzene	50	48		1	96	70-130	04/05/2012 0857
Chloroethane	50	48		1	95	42-163	04/05/2012 0857
Chloroform	50	44		1	88	70-130	04/05/2012 0857
Chloromethane (Methyl chloride)	50	47		1	95	70-130	04/05/2012 0857
Cyclohexane	50	42		1	83	70-130	04/05/2012 0857
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	92	70-130	04/05/2012 0857
Dibromochloromethane	50	55		1	109	70-130	04/05/2012 0857
1,2-Dibromoethane (EDB)	50	50		1	100	70-130	04/05/2012 0857
1,4-Dichlorobenzene	50	48		1	97	70-130	04/05/2012 0857
1,3-Dichlorobenzene	50	49		1	98	70-130	04/05/2012 0857
1,2-Dichlorobenzene	50	49		1	98	70-130	04/05/2012 0857
Dichlorodifluoromethane	50	50		1	101	60-140	04/05/2012 0857
1,1-Dichloroethane	50	42		1	84	70-130	04/05/2012 0857
1,2-Dichloroethane	50	47		1	94	70-130	04/05/2012 0857
trans-1,2-Dichloroethene	50	42		1	84	70-130	04/05/2012 0857
cis-1,2-Dichloroethene	50	43		1	86	70-130	04/05/2012 0857
1,1-Dichloroethene	50	41		1	83	70-130	04/05/2012 0857
1,2-Dichloropropane	50	45		1	90	70-130	04/05/2012 0857
trans-1,3-Dichloropropene	50	55		1	110	70-130	04/05/2012 0857
cis-1,3-Dichloropropene	50	51		1	102	70-130	04/05/2012 0857
Ethylbenzene	50	49		1	99	70-130	04/05/2012 0857
2-Hexanone	100	110		1	111	60-140	04/05/2012 0857
Isopropylbenzene	50	51		1	101	70-130	04/05/2012 0857
Methyl acetate	50	42		1	84	15-128	04/05/2012 0857
Methyl tertiary butyl ether (MTBE)	50	45		1	89	70-130	04/05/2012 0857
4-Methyl-2-pentanone	100	99		1	99	60-140	04/05/2012 0857
Methylcyclohexane	50	47		1	95	70-130	04/05/2012 0857
Methylene chloride	50	40		1	81	70-130	04/05/2012 0857
Styrene	50	51		1	102	70-130	04/05/2012 0857
1,1,2,2-Tetrachloroethane	50	50		1	100	60-140	04/05/2012 0857
Tetrachloroethene	50	48		1	96	70-130	04/05/2012 0857
Toluene	50	44		1	89	70-130	04/05/2012 0857
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	52		1	104	70-130	04/05/2012 0857
1,2,4-Trichlorobenzene	50	55		1	111	70-130	04/05/2012 0857
1,1,1-Trichloroethane	50	46		1	91	70-130	04/05/2012 0857
1,1,2-Trichloroethane	50	46		1	92	70-130	04/05/2012 0857

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ81915-002

Matrix: Aqueous

Batch: 81915

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	46		1	91	70-130	04/05/2012 0857
Trichlorofluoromethane	50	48		1	96	70-130	04/05/2012 0857
Vinyl chloride	50	48		1	97	70-130	04/05/2012 0857
Xylenes (total)	100	98		1	98	70-130	04/05/2012 0857
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		84			70-130		
1,2-Dichloroethane-d4		86			70-130		
Toluene-d8		79			70-130		

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ81915-003

Matrix: Aqueous

Batch: 81915

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	120		1	124	18	70-130	20	04/05/2012 0920
Benzene	50	45		1	90	2.2	70-130	20	04/05/2012 0920
Bromodichloromethane	50	50		1	101	2.1	70-130	20	04/05/2012 0920
Bromoform	50	50		1	100	3.0	70-130	20	04/05/2012 0920
Bromomethane (Methyl bromide)	50	50		1	100	0.16	60-140	20	04/05/2012 0920
2-Butanone (MEK)	100	100		1	104	6.9	60-140	20	04/05/2012 0920
Carbon disulfide	50	41		1	82	0.39	60-140	20	04/05/2012 0920
Carbon tetrachloride	50	47		1	95	1.4	70-130	20	04/05/2012 0920
Chlorobenzene	50	49		1	99	3.0	70-130	20	04/05/2012 0920
Chloroethane	50	47		1	94	0.97	42-163	20	04/05/2012 0920
Chloroform	50	46		1	92	4.5	70-130	20	04/05/2012 0920
Chloromethane (Methyl chloride)	50	48		1	96	1.4	70-130	20	04/05/2012 0920
Cyclohexane	50	42		1	83	0.012	70-130	20	04/05/2012 0920
1,2-Dibromo-3-chloropropane (DBCP)	50	50		1	101	9.5	70-130	20	04/05/2012 0920
Dibromochloromethane	50	56		1	112	2.6	70-130	20	04/05/2012 0920
1,2-Dibromoethane (EDB)	50	52		1	104	3.6	70-130	20	04/05/2012 0920
1,4-Dichlorobenzene	50	50		1	99	2.4	70-130	20	04/05/2012 0920
1,3-Dichlorobenzene	50	51		1	101	3.0	70-130	20	04/05/2012 0920
1,2-Dichlorobenzene	50	51		1	102	4.1	70-130	20	04/05/2012 0920
Dichlorodifluoromethane	50	49		1	97	3.9	60-140	20	04/05/2012 0920
1,1-Dichloroethane	50	44		1	88	3.9	70-130	20	04/05/2012 0920
1,2-Dichloroethane	50	47		1	95	1.1	70-130	20	04/05/2012 0920
trans-1,2-Dichloroethene	50	44		1	88	4.1	70-130	20	04/05/2012 0920
cis-1,2-Dichloroethene	50	45		1	90	4.8	70-130	20	04/05/2012 0920
1,1-Dichloroethene	50	42		1	85	2.7	70-130	20	04/05/2012 0920
1,2-Dichloropropane	50	46		1	92	2.2	70-130	20	04/05/2012 0920
trans-1,3-Dichloropropene	50	56		1	111	1.3	70-130	20	04/05/2012 0920
cis-1,3-Dichloropropene	50	52		1	103	0.88	70-130	20	04/05/2012 0920
Ethylbenzene	50	51		1	102	2.9	70-130	20	04/05/2012 0920
2-Hexanone	100	120		1	118	6.2	60-140	20	04/05/2012 0920
Isopropylbenzene	50	51		1	103	1.7	70-130	20	04/05/2012 0920
Methyl acetate	50	45		1	91	8.3	15-128	20	04/05/2012 0920
Methyl tertiary butyl ether (MTBE)	50	46		1	92	2.9	70-130	20	04/05/2012 0920
4-Methyl-2-pentanone	100	100		1	105	5.2	60-140	20	04/05/2012 0920
Methylcyclohexane	50	47		1	94	0.25	70-130	20	04/05/2012 0920
Methylene chloride	50	42		1	83	3.4	70-130	20	04/05/2012 0920
Styrene	50	53		1	105	3.3	70-130	20	04/05/2012 0920
1,1,2,2-Tetrachloroethane	50	52		1	105	4.6	60-140	20	04/05/2012 0920
Tetrachloroethene	50	49		1	99	2.6	70-130	20	04/05/2012 0920
Toluene	50	45		1	89	0.57	70-130	20	04/05/2012 0920
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	51		1	101	2.6	70-130	20	04/05/2012 0920
1,2,4-Trichlorobenzene	50	56		1	112	1.6	70-130	20	04/05/2012 0920
1,1,1-Trichloroethane	50	46		1	91	0.23	70-130	20	04/05/2012 0920
1,1,2-Trichloroethane	50	48		1	95	3.1	70-130	20	04/05/2012 0920

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ81915-003

Matrix: Aqueous

Batch: 81915

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	47		1	93	2.2	70-130	20	04/05/2012 0920
Trichlorofluoromethane	50	47		1	94	2.2	70-130	20	04/05/2012 0920
Vinyl chloride	50	48		1	96	0.52	70-130	20	04/05/2012 0920
Xylenes (total)	100	100		1	100	2.4	70-130	20	04/05/2012 0920
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		86	70-130						
1,2-Dichloroethane-d4		87	70-130						
Toluene-d8		80	70-130						

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ82374-001

Matrix: Aqueous

Batch: 82374

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	04/11/2012 2022
Benzene	ND		1	1.0	ug/L	04/11/2012 2022
Bromodichloromethane	ND		1	1.0	ug/L	04/11/2012 2022
Bromoform	ND		1	1.0	ug/L	04/11/2012 2022
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	04/11/2012 2022
2-Butanone (MEK)	ND		1	10	ug/L	04/11/2012 2022
Carbon disulfide	ND		1	1.0	ug/L	04/11/2012 2022
Carbon tetrachloride	ND		1	1.0	ug/L	04/11/2012 2022
Chlorobenzene	ND		1	1.0	ug/L	04/11/2012 2022
Chloroethane	ND		1	2.0	ug/L	04/11/2012 2022
Chloroform	ND		1	1.0	ug/L	04/11/2012 2022
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	04/11/2012 2022
Cyclohexane	ND		1	1.0	ug/L	04/11/2012 2022
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	04/11/2012 2022
Dibromochloromethane	ND		1	1.0	ug/L	04/11/2012 2022
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	04/11/2012 2022
1,4-Dichlorobenzene	ND		1	1.0	ug/L	04/11/2012 2022
1,2-Dichlorobenzene	ND		1	1.0	ug/L	04/11/2012 2022
1,3-Dichlorobenzene	ND		1	1.0	ug/L	04/11/2012 2022
Dichlorodifluoromethane	ND		1	2.0	ug/L	04/11/2012 2022
1,2-Dichloroethane	ND		1	1.0	ug/L	04/11/2012 2022
1,1-Dichloroethane	ND		1	1.0	ug/L	04/11/2012 2022
1,1-Dichloroethene	ND		1	1.0	ug/L	04/11/2012 2022
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	04/11/2012 2022
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	04/11/2012 2022
1,2-Dichloropropane	ND		1	1.0	ug/L	04/11/2012 2022
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	04/11/2012 2022
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	04/11/2012 2022
Ethylbenzene	ND		1	1.0	ug/L	04/11/2012 2022
2-Hexanone	ND		1	10	ug/L	04/11/2012 2022
Isopropylbenzene	ND		1	1.0	ug/L	04/11/2012 2022
Methyl acetate	ND		1	1.0	ug/L	04/11/2012 2022
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	04/11/2012 2022
4-Methyl-2-pentanone	ND		1	10	ug/L	04/11/2012 2022
Methylcyclohexane	ND		1	5.0	ug/L	04/11/2012 2022
Methylene chloride	ND		1	1.0	ug/L	04/11/2012 2022
Styrene	ND		1	1.0	ug/L	04/11/2012 2022
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	04/11/2012 2022
Tetrachloroethene	ND		1	1.0	ug/L	04/11/2012 2022
Toluene	ND		1	1.0	ug/L	04/11/2012 2022
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	04/11/2012 2022
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	04/11/2012 2022
1,1,2-Trichloroethane	ND		1	1.0	ug/L	04/11/2012 2022
1,1,1-Trichloroethane	ND		1	1.0	ug/L	04/11/2012 2022

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ82374-001

Matrix: Aqueous

Batch: 82374

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	04/11/2012 2022
Trichlorofluoromethane	ND		1	1.0	ug/L	04/11/2012 2022
Vinyl chloride	ND		1	1.0	ug/L	04/11/2012 2022
Xylenes (total)	ND		1	1.0	ug/L	04/11/2012 2022
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		99	70-130			
1,2-Dichloroethane-d4		101	70-130			
Toluene-d8		100	70-130			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ82374-002

Matrix: Aqueous

Batch: 82374

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	100	70-130	04/11/2012 1857
Benzene	50	57		1	113	70-130	04/11/2012 1857
Bromodichloromethane	50	52		1	105	70-130	04/11/2012 1857
Bromoform	50	45		1	90	70-130	04/11/2012 1857
Bromomethane (Methyl bromide)	50	48		1	96	60-140	04/11/2012 1857
2-Butanone (MEK)	100	110		1	115	60-140	04/11/2012 1857
Carbon disulfide	50	52		1	103	60-140	04/11/2012 1857
Carbon tetrachloride	50	60		1	119	70-130	04/11/2012 1857
Chlorobenzene	50	54		1	109	70-130	04/11/2012 1857
Chloroethane	50	50		1	99	42-163	04/11/2012 1857
Chloroform	50	58		1	117	70-130	04/11/2012 1857
Chloromethane (Methyl chloride)	50	45		1	90	70-130	04/11/2012 1857
Cyclohexane	50	56		1	112	70-130	04/11/2012 1857
1,2-Dibromo-3-chloropropane (DBCP)	50	53		1	106	70-130	04/11/2012 1857
Dibromochloromethane	50	48		1	97	70-130	04/11/2012 1857
1,2-Dibromoethane (EDB)	50	58		1	115	70-130	04/11/2012 1857
1,4-Dichlorobenzene	50	53		1	106	70-130	04/11/2012 1857
1,2-Dichlorobenzene	50	55		1	110	70-130	04/11/2012 1857
1,3-Dichlorobenzene	50	55		1	111	70-130	04/11/2012 1857
Dichlorodifluoromethane	50	48		1	96	60-140	04/11/2012 1857
1,2-Dichloroethane	50	56		1	113	70-130	04/11/2012 1857
1,1-Dichloroethane	50	57		1	115	70-130	04/11/2012 1857
1,1-Dichloroethene	50	58		1	116	70-130	04/11/2012 1857
cis-1,2-Dichloroethene	50	57		1	115	70-130	04/11/2012 1857
trans-1,2-Dichloroethene	50	58		1	116	70-130	04/11/2012 1857
1,2-Dichloropropane	50	57		1	115	70-130	04/11/2012 1857
cis-1,3-Dichloropropene	50	54		1	108	70-130	04/11/2012 1857
trans-1,3-Dichloropropene	50	52		1	103	70-130	04/11/2012 1857
Ethylbenzene	50	56		1	113	70-130	04/11/2012 1857
2-Hexanone	100	120		1	117	60-140	04/11/2012 1857
Isopropylbenzene	50	60		1	120	70-130	04/11/2012 1857
Methyl acetate	50	58		1	117	15-128	04/11/2012 1857
Methyl tertiary butyl ether (MTBE)	50	61		1	121	70-130	04/11/2012 1857
4-Methyl-2-pentanone	100	120		1	120	60-140	04/11/2012 1857
Methylcyclohexane	50	60		1	120	70-130	04/11/2012 1857
Methylene chloride	50	57		1	114	70-130	04/11/2012 1857
Styrene	50	57		1	114	70-130	04/11/2012 1857
1,1,2,2-Tetrachloroethane	50	59		1	118	60-140	04/11/2012 1857
Tetrachloroethene	50	56		1	111	70-130	04/11/2012 1857
Toluene	50	56		1	112	70-130	04/11/2012 1857
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	59		1	119	70-130	04/11/2012 1857
1,2,4-Trichlorobenzene	50	58		1	116	70-130	04/11/2012 1857
1,1,2-Trichloroethane	50	56		1	111	70-130	04/11/2012 1857
1,1,1-Trichloroethane	50	56		1	111	70-130	04/11/2012 1857

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ82374-002

Matrix: Aqueous

Batch: 82374

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	57		1	114	70-130	04/11/2012 1857
Trichlorofluoromethane	50	50		1	100	70-130	04/11/2012 1857
Vinyl chloride	50	48		1	95	70-130	04/11/2012 1857
Xylenes (total)	100	120		1	117	70-130	04/11/2012 1857
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		98			70-130		
1,2-Dichloroethane-d4		100			70-130		
Toluene-d8		101			70-130		

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ82374-003

Matrix: Aqueous

Batch: 82374

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	94		1	94	6.3	70-130	20	04/11/2012 1918
Benzene	50	56		1	111	1.9	70-130	20	04/11/2012 1918
Bromodichloromethane	50	52		1	103	1.6	70-130	20	04/11/2012 1918
Bromoform	50	45		1	91	0.48	70-130	20	04/11/2012 1918
Bromomethane (Methyl bromide)	50	47		1	95	1.1	60-140	20	04/11/2012 1918
2-Butanone (MEK)	100	110		1	111	3.1	60-140	20	04/11/2012 1918
Carbon disulfide	50	49		1	99	4.6	60-140	20	04/11/2012 1918
Carbon tetrachloride	50	57		1	115	3.6	70-130	20	04/11/2012 1918
Chlorobenzene	50	54		1	108	0.84	70-130	20	04/11/2012 1918
Chloroethane	50	49		1	99	0.42	42-163	20	04/11/2012 1918
Chloroform	50	57		1	114	2.5	70-130	20	04/11/2012 1918
Chloromethane (Methyl chloride)	50	42		1	85	6.2	70-130	20	04/11/2012 1918
Cyclohexane	50	53		1	106	4.8	70-130	20	04/11/2012 1918
1,2-Dibromo-3-chloropropane (DBCP)	50	53		1	106	0.19	70-130	20	04/11/2012 1918
Dibromochloromethane	50	48		1	97	0.062	70-130	20	04/11/2012 1918
1,2-Dibromoethane (EDB)	50	58		1	116	0.71	70-130	20	04/11/2012 1918
1,4-Dichlorobenzene	50	53		1	106	0.25	70-130	20	04/11/2012 1918
1,2-Dichlorobenzene	50	55		1	109	0.35	70-130	20	04/11/2012 1918
1,3-Dichlorobenzene	50	55		1	110	0.78	70-130	20	04/11/2012 1918
Dichlorodifluoromethane	50	46		1	92	4.8	60-140	20	04/11/2012 1918
1,2-Dichloroethane	50	54		1	109	3.4	70-130	20	04/11/2012 1918
1,1-Dichloroethane	50	56		1	112	2.4	70-130	20	04/11/2012 1918
1,1-Dichloroethene	50	56		1	112	3.6	70-130	20	04/11/2012 1918
cis-1,2-Dichloroethene	50	56		1	113	1.7	70-130	20	04/11/2012 1918
trans-1,2-Dichloroethene	50	56		1	113	2.5	70-130	20	04/11/2012 1918
1,2-Dichloropropane	50	57		1	113	1.4	70-130	20	04/11/2012 1918
cis-1,3-Dichloropropene	50	53		1	107	1.2	70-130	20	04/11/2012 1918
trans-1,3-Dichloropropene	50	52		1	103	0.27	70-130	20	04/11/2012 1918
Ethylbenzene	50	56		1	112	1.0	70-130	20	04/11/2012 1918
2-Hexanone	100	110		1	114	2.4	60-140	20	04/11/2012 1918
Isopropylbenzene	50	59		1	118	2.1	70-130	20	04/11/2012 1918
Methyl acetate	50	57		1	114	2.8	15-128	20	04/11/2012 1918
Methyl tertiary butyl ether (MTBE)	50	59		1	119	2.2	70-130	20	04/11/2012 1918
4-Methyl-2-pentanone	100	120		1	117	2.5	60-140	20	04/11/2012 1918
Methylcyclohexane	50	58		1	116	3.7	70-130	20	04/11/2012 1918
Methylene chloride	50	55		1	110	3.5	70-130	20	04/11/2012 1918
Styrene	50	57		1	114	0.31	70-130	20	04/11/2012 1918
1,1,2,2-Tetrachloroethane	50	59		1	117	0.78	60-140	20	04/11/2012 1918
Tetrachloroethene	50	55		1	110	1.5	70-130	20	04/11/2012 1918
Toluene	50	55		1	110	1.8	70-130	20	04/11/2012 1918
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	56		1	112	5.9	70-130	20	04/11/2012 1918
1,2,4-Trichlorobenzene	50	57		1	115	0.90	70-130	20	04/11/2012 1918
1,1,2-Trichloroethane	50	56		1	112	0.44	70-130	20	04/11/2012 1918
1,1,1-Trichloroethane	50	54		1	108	2.8	70-130	20	04/11/2012 1918

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ82374-003

Matrix: Aqueous

Batch: 82374

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	55		1	111	2.5	70-130	20	04/11/2012 1918
Trichlorofluoromethane	50	48		1	97	3.2	70-130	20	04/11/2012 1918
Vinyl chloride	50	45		1	91	4.7	70-130	20	04/11/2012 1918
Xylenes (total)	100	120		1	116	0.60	70-130	20	04/11/2012 1918
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		99	70-130						
1,2-Dichloroethane-d4		104	70-130						
Toluene-d8		101	70-130						

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: NQ81294-001

Matrix: Aqueous

Batch: 81294

Prep Method: 3520C

Analytical Method: 8270D

Prep Date: 03/28/2012 1823

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
2-Methylnaphthalene	ND		1	1.0	ug/L	03/30/2012 1608
Acenaphthene	ND		1	1.0	ug/L	03/30/2012 1608
Anthracene	ND		1	1.0	ug/L	03/30/2012 1608
Benzo(a)anthracene	ND		1	1.0	ug/L	03/30/2012 1608
Benzo(a)pyrene	ND		1	1.0	ug/L	03/30/2012 1608
Benzo(b)fluoranthene	ND		1	1.0	ug/L	03/30/2012 1608
Benzo(g,h,i)perylene	ND		1	1.0	ug/L	03/30/2012 1608
Benzo(k)fluoranthene	ND		1	1.0	ug/L	03/30/2012 1608
Chrysene	ND		1	1.0	ug/L	03/30/2012 1608
Dibenzo(a,h)anthracene	ND		1	1.0	ug/L	03/30/2012 1608
Fluoranthene	ND		1	1.0	ug/L	03/30/2012 1608
Fluorene	ND		1	1.0	ug/L	03/30/2012 1608
Indeno(1,2,3-c,d)pyrene	ND		1	1.0	ug/L	03/30/2012 1608
Naphthalene	ND		1	1.0	ug/L	03/30/2012 1608
Phenanthrene	ND		1	1.0	ug/L	03/30/2012 1608
Pyrene	ND		1	1.0	ug/L	03/30/2012 1608
Surrogate	Q	% Rec	Acceptance Limit			
2-Fluorobiphenyl		102	37-129			
Nitrobenzene-d5		99	38-127			
Terphenyl-d14		97	10-148			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: NQ81294-002

Matrix: Aqueous

Batch: 81294

Prep Method: 3520C

Analytical Method: 8270D

Prep Date: 03/28/2012 1823

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
2-Methylnaphthalene	20	19		1	95	49-122	03/30/2012 1634
Acenaphthene	20	19		1	93	51-130	03/30/2012 1634
Anthracene	20	19		1	94	48-122	03/30/2012 1634
Benzo(a)anthracene	20	19		1	95	50-143	03/30/2012 1634
Benzo(a)pyrene	20	19		1	97	55-141	03/30/2012 1634
Benzo(b)fluoranthene	20	19		1	96	48-147	03/30/2012 1634
Benzo(g,h,i)perylene	20	19		1	94	48-139	03/30/2012 1634
Benzo(k)fluoranthene	20	19		1	93	48-148	03/30/2012 1634
Chrysene	20	19		1	93	51-137	03/30/2012 1634
Dibenzo(a,h)anthracene	20	19		1	93	48-139	03/30/2012 1634
Fluoranthene	20	19		1	95	50-124	03/30/2012 1634
Fluorene	20	19		1	94	39-122	03/30/2012 1634
Indeno(1,2,3-c,d)pyrene	20	18		1	92	49-146	03/30/2012 1634
Naphthalene	20	17		1	86	45-118	03/30/2012 1634
Phenanthrene	20	19		1	93	49-122	03/30/2012 1634
Pyrene	20	19		1	95	50-130	03/30/2012 1634
Surrogate	Q	% Rec	Acceptance Limit				
2-Fluorobiphenyl		91	37-129				
Nitrobenzene-d5		91	38-127				
Terphenyl-d14		86	10-148				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

TPH - DRO - MB

Sample ID: NQ81271-001
 Batch: 81271
 Analytical Method: 8015C

Matrix: Aqueous
 Prep Method: 3520C
 Prep Date: 03/28/2012 1543

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
TPH-DRO	ND		1	200	ug/L	03/29/2012 1750
Surrogate	Q	% Rec	Acceptance Limit			
o - Terphenyl		94	53-118			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

TPH - DRO - LCS

Sample ID: NQ81271-002

Matrix: Aqueous

Batch: 81271

Prep Method: 3520C

Analytical Method: 8015C

Prep Date: 03/28/2012 1543

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TPH-DRO	2500	2400		1	94	70-130	03/29/2012 1812
Surrogate	Q	% Rec	Acceptance Limit				
o - Terphenyl		96	53-118				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

TPH - DRO - MS

Sample ID: NC27001-027MS

Matrix: Aqueous

Batch: 81271

Prep Method: 3520C

Analytical Method: 8015C

Prep Date: 03/28/2012 1543

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TPH-DRO	2600	5100	6100	N	1	69	70-130	03/29/2012 2151
Surrogate	Q	% Rec	Acceptance Limit					
o - Terphenyl		94	53-118					

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

TPH - DRO - MSD

Sample ID: NC27001-027MD

Matrix: Aqueous

Batch: 81271

Prep Method: 3520C

Analytical Method: 8015C

Prep Date: 03/28/2012 1543

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
TPH-DRO	2600	5100	5700	N	1	60	7.9	70-130	20	03/29/2012 2213
Surrogate	Q	% Rec	Acceptance Limit							
o - Terphenyl		86	53-118							

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the PQL

J = Estimated result < PQL and \geq MDL

+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

SHEALY ENVIRONMENTAL SERVICES, INC.
 106 Vantage Point Drive
 West Columbia, South Carolina 29172
 Telephone No. (803) 791-9700 Fax No. (803) 791-9111

Number 111570

SHEALY Chain of Custody Record

Client: Arctic Georgia Telephone No. / Fax No. / E-mail: _____ Quote No. _____
 Address: _____ City: _____ State: _____ Zip Code: _____
 Project Name: Groundwater Printed Name: Orlando T. Felarik Lat No. _____
 Project No. _____ P.C. No. _____
 Sampler's Signature: [Signature] Date: 3/26 2017
 X _____
 Printed Name: _____

Sample ID / Description (Containers for each sample may be contained on one line.)	Date	Time	Matrix			No. of Containers by Preservative Type						Remarks / Cooler I.D.	
			Acetate	Soil	Water	Unpres	H2SO4	HNO3	HF	NaOH	BA		
MW-16	3/26												
MW-17		1356	X										
MW-18		1323	X										
MW-19		1323	X										
MW-20			X										
MW-21			X										
DUP-1			X										
MW-22		1210	X										Very oily!
MW-23			X										
TU-1													

Report to Contact: _____
 Telephone No. / Fax No. / E-mail: _____
 Worksheet No. _____ Page 3 of 4
 Analysis: (Attach list if more space is needed.)
 MW-20, MW-21, MW-22, MW-23, TU-1, MW-17, MW-18, MW-19, MW-16
 Lab No. NC 27601
 Remarks / Cooler I.D. _____

Sample Disposal: Return to Client Deposal by Lab
 Note: All samples are returned for six weeks from receipt unless other arrangements are made.

Possible Hazard Identification: Non-Hazard Flammable Skin Irritant Poison Unknown
 Turn Around Time Required (Prior lab approval required for expedited TAT):
 1. Relinquished by: [Signature] Date: 3/27/17 Time: 060
 2. Relinquished by: _____ Date: _____ Time: _____
 3. Relinquished by: _____ Date: _____ Time: _____

Comments: LAB USE ONLY
 Received on ice (Circle) / Yes / No (ice Pack) _____
 Laboratory received by: [Signature] Date: 3-27-17 Time: 1208W
 Receipt Temp: 3.3 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy
 Document Number: F-AD-012 Effective Date: 06-04-02

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
 Document Number: F-AD-916
 Revision Number: 9

Page 1 of 1
 Replaces Date: 05/06/11
 Effective Date: 10/11/11

Sample Receipt Checklist (SRC)

Client: Civil + Env'l Control Cooler Inspected by/date: ECB/27/12 Lot #: NC2760

Means of receipt: <input checked="" type="checkbox"/> SESI <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Airborne Exp <input type="checkbox"/> Other			
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	1. Were custody seals present on the cooler?	
Yes <input type="checkbox"/>	No <input type="checkbox"/>	2. If custody seals were present, were they intact and unbroken?	
Cooler ID/temperature upon receipt <u>33</u> °C / °C / °C / °C			
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles			
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> None			
If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.			
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____ (For coolers received via commercial courier, PMs are to be notified immediately.)
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	4. Is the commercial courier's packing slip attached to this form?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		5. Were proper custody procedures (relinquished/received) followed?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	5a Were samples relinquished by client to commercial courier?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		6. Were sample IDs listed?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		7. Was collection date & time listed?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		8. Were tests to be performed listed on the COC?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		9. Did all samples arrive in the proper containers for each test?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		10. Did all container label information (ID, date, time) agree with COC?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		12. Was adequate sample volume available?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		14. Were any samples containers missing?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		15. Were there any excess samples not listed on COC?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	20. Were collection temperatures documented on the COC for NC samples?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)			
Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H ₂ SO ₄ , HNO ₃ , HCl, NaOH) with the SR # (number) _____.			
Sample(s) _____ were received with bubbles >6 mm in diameter.			
Sample(s) _____ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb.			

Corrective Action taken, if necessary:

Was client notified: Yes No

Did client respond: Yes No

SESI employee: _____

Date of response: _____

Comments:



APPENDIX C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

March 6, 2012

Andrew G. McCorkle
Civil & Environmental Consultants, Inc.
8740 Orion Place, Suite 100
Columbus, OH 43240

Dear Mr. McCorkle:

Included are the results from the testing of material submitted on December 16, 2011 from the 111-036 Georgetown MW, F&BI 112246 project. The product samples submitted for forensic evaluation arrived in good condition. Upon arrival, the samples Virgin Hydraulic Oil, MW-23, and MW-21 were placed in a refrigerator maintained at 4°C until removed for sample processing.

The samples Virgin Hydraulic Oil and MW-23 were diluted and analyzed using a gas chromatograph fitted with a mass spectrometer (GC/MS). The GC/MS traces generated are enclosed. Please note that the sample MW-21 was not analyzed by GC/MS due to insufficient product volume.

Review of the GC/MS trace generated for the reference sample Virgin Hydraulic Oil shows that this sample contains a hydraulic oil. Review of the GC/MS trace generated for the sample MW-23 shows that this sample contains a low boiling material such as weathered gasoline, a petroleum based solvent such as mineral spirits or Stoddard solvent, or similar materials; and a high boiling material such as hydraulic oil or similar materials.

The selective ion scans generated for the samples Virgin Hydraulic Oil and MW-23 were compared in order to determine if the oil portion of the product in the sample MW-23 is consistent with that present in the reference sample Virgin Hydraulic Oil. This comparison shows that the oil from the sample MW-23 shows similarities to that of the reference sample Virgin Hydraulic Oil.

FRIEDMAN & BRUYA, INC.


ENVIRONMENTAL CHEMISTS

Andrew G. McCorkle
March 6, 2012
Page 2

Please contact us if additional consultation is needed by our firm in the interpretation of the analytical results provided. We appreciate this opportunity to be of service to you and hope you will call if you should have any questions. We will hold your samples for 30 days before disposal unless directed otherwise.

Sincerely,

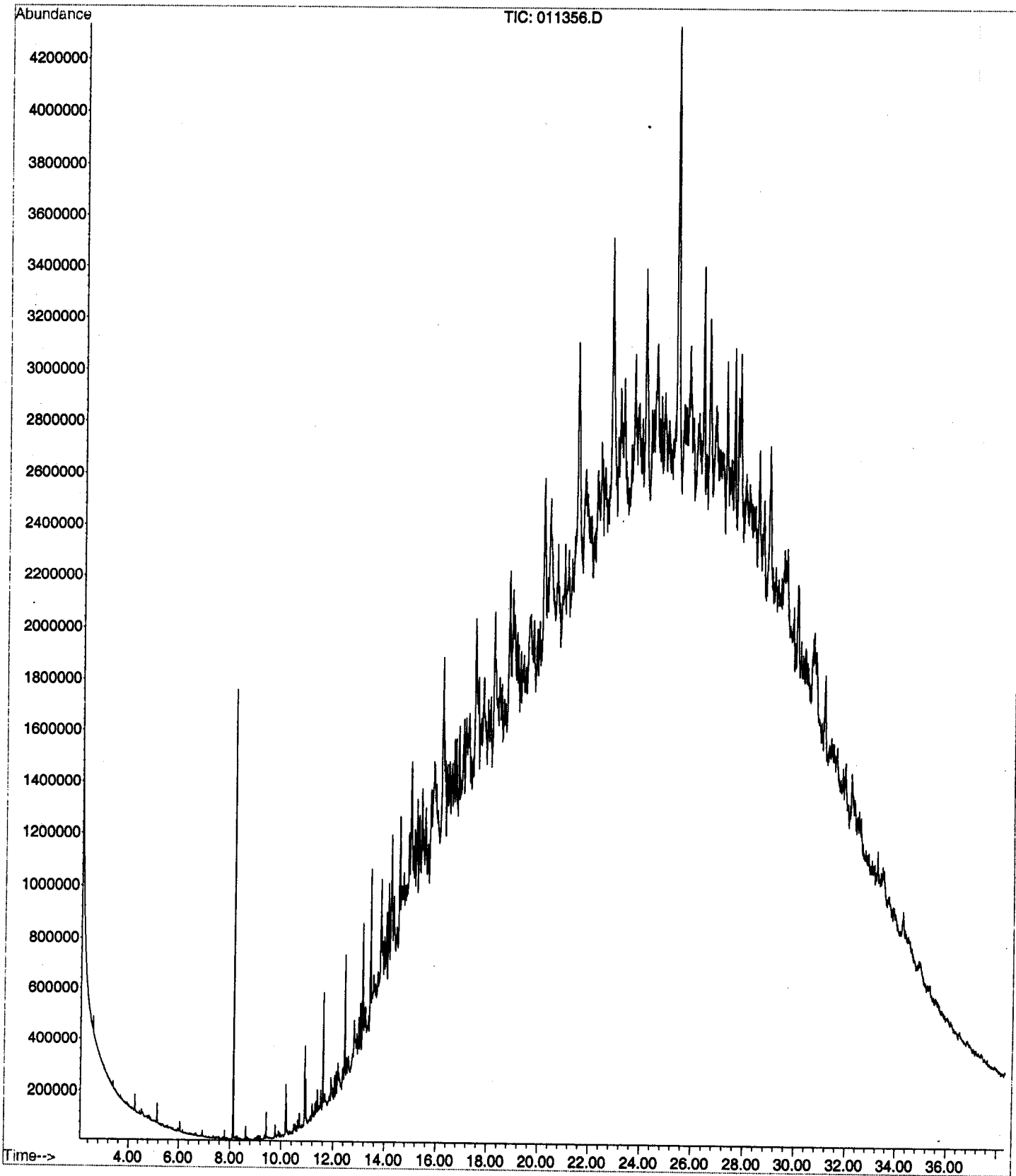
FRIEDMAN & BRUYA, INC.

A handwritten signature in black ink that reads "Bradley T. Benson". The signature is written in a cursive style with a large, prominent initial "B".

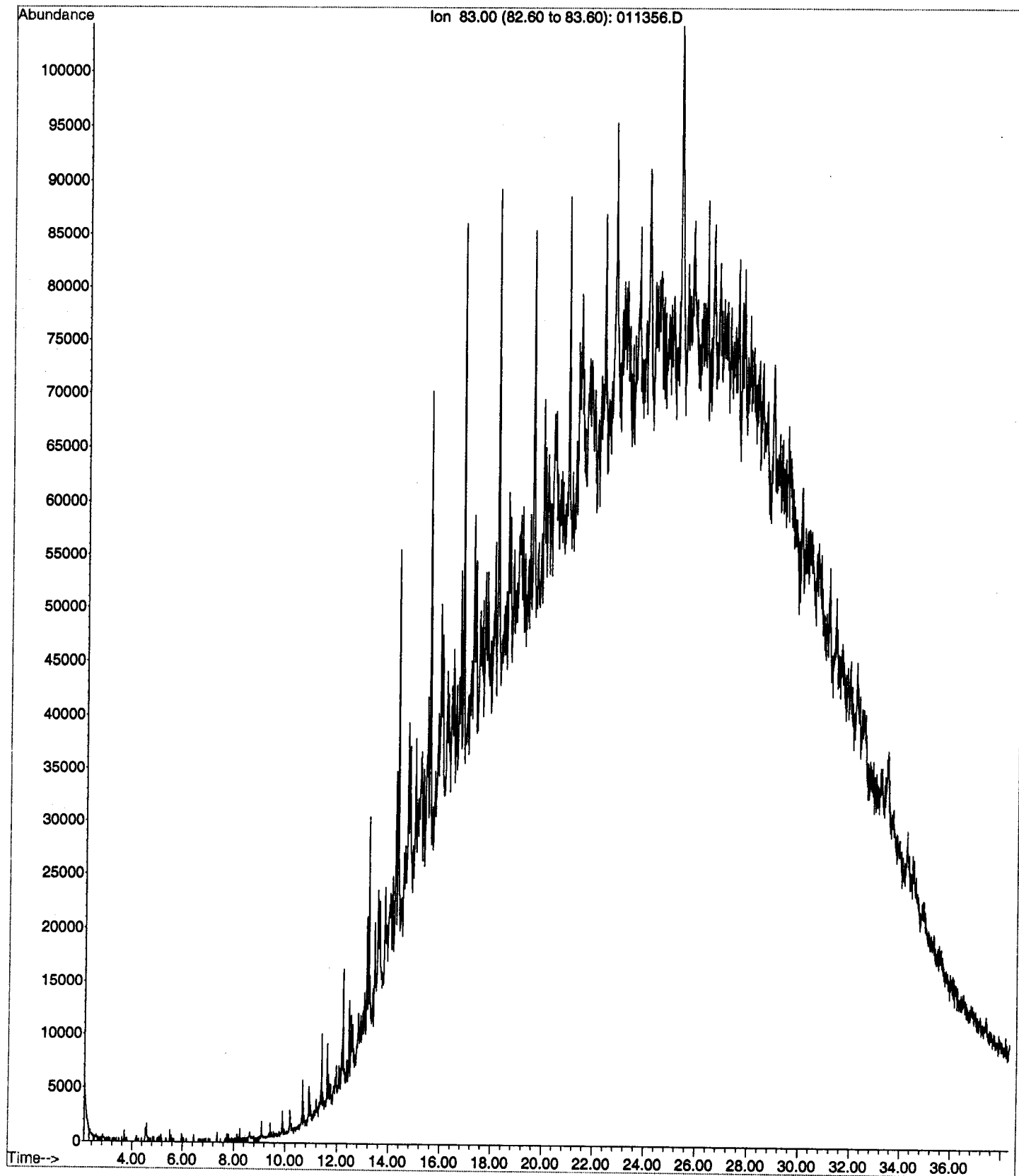
Bradley T. Benson
Chemist

Enclosures
mcp/BTB
NAA0306R.DOC

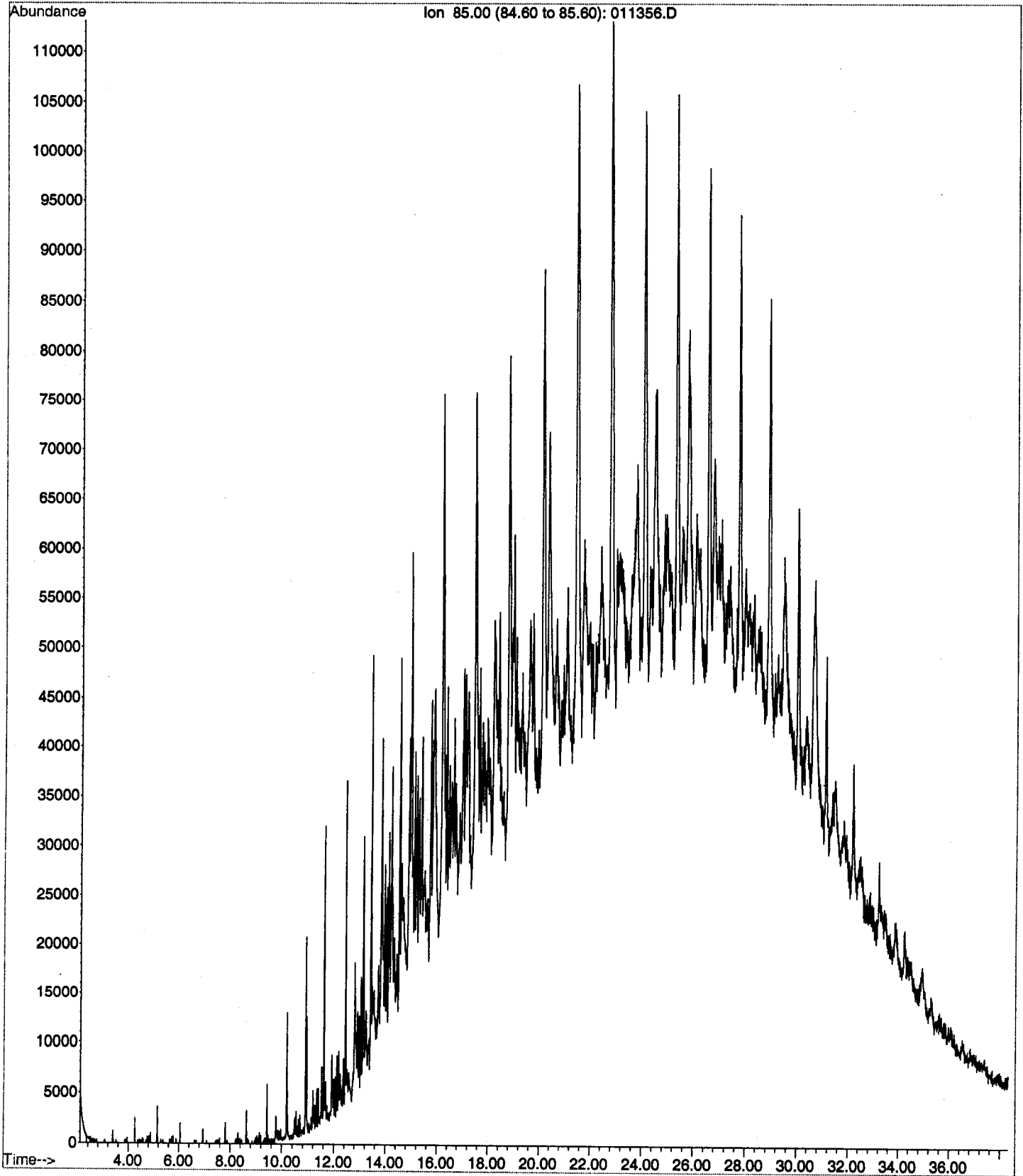
File : L:\01-13-12\011356.D
Operator : YA
Acquired : 15 Jan 2012 9:37 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-01
Misc Info :
Vial Number: 33



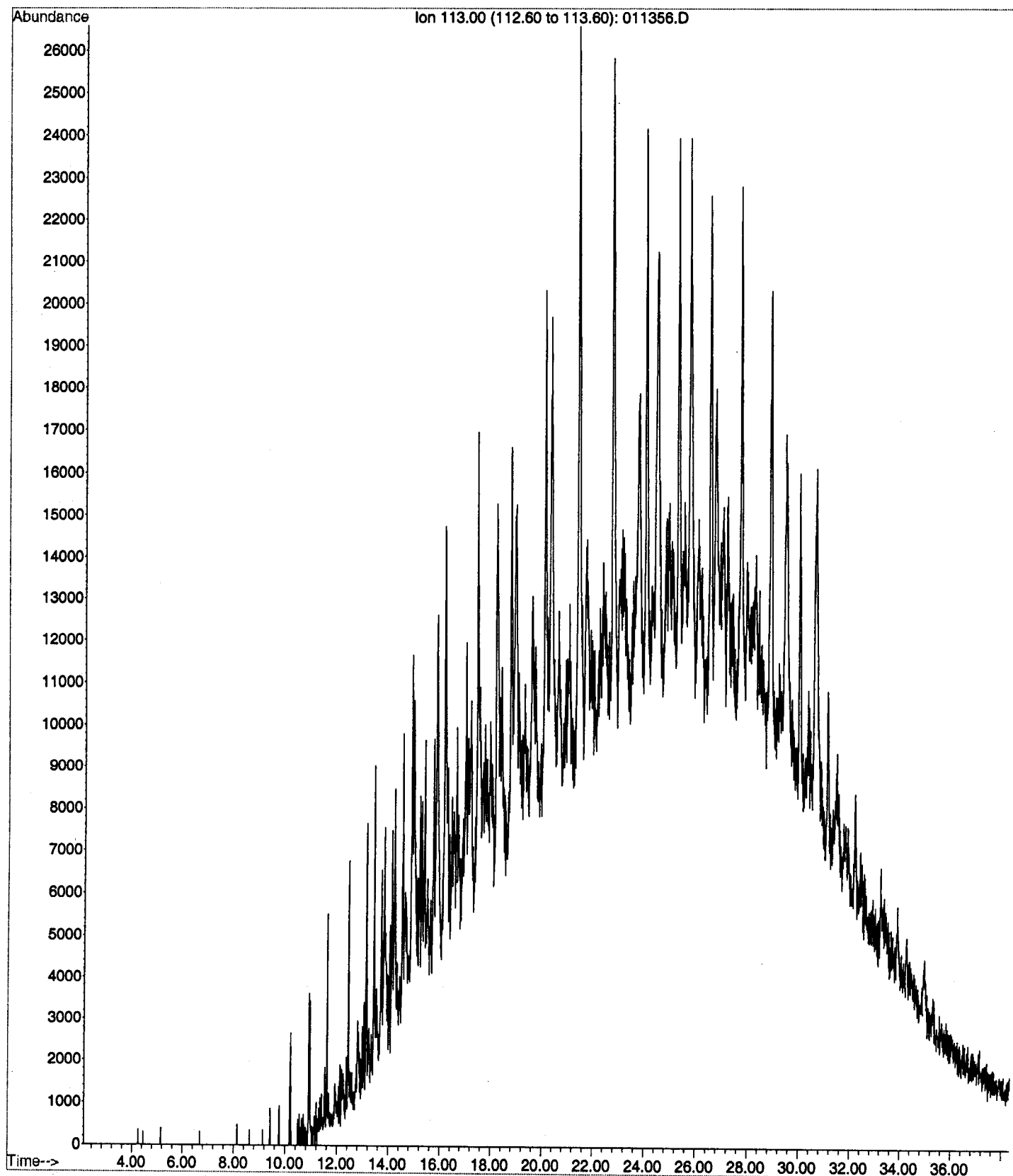
File : L:\01-13-12\011356.D
Operator : YA
Acquired : 15 Jan 2012 9:37 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-01
Misc Info :
Vial Number: 33



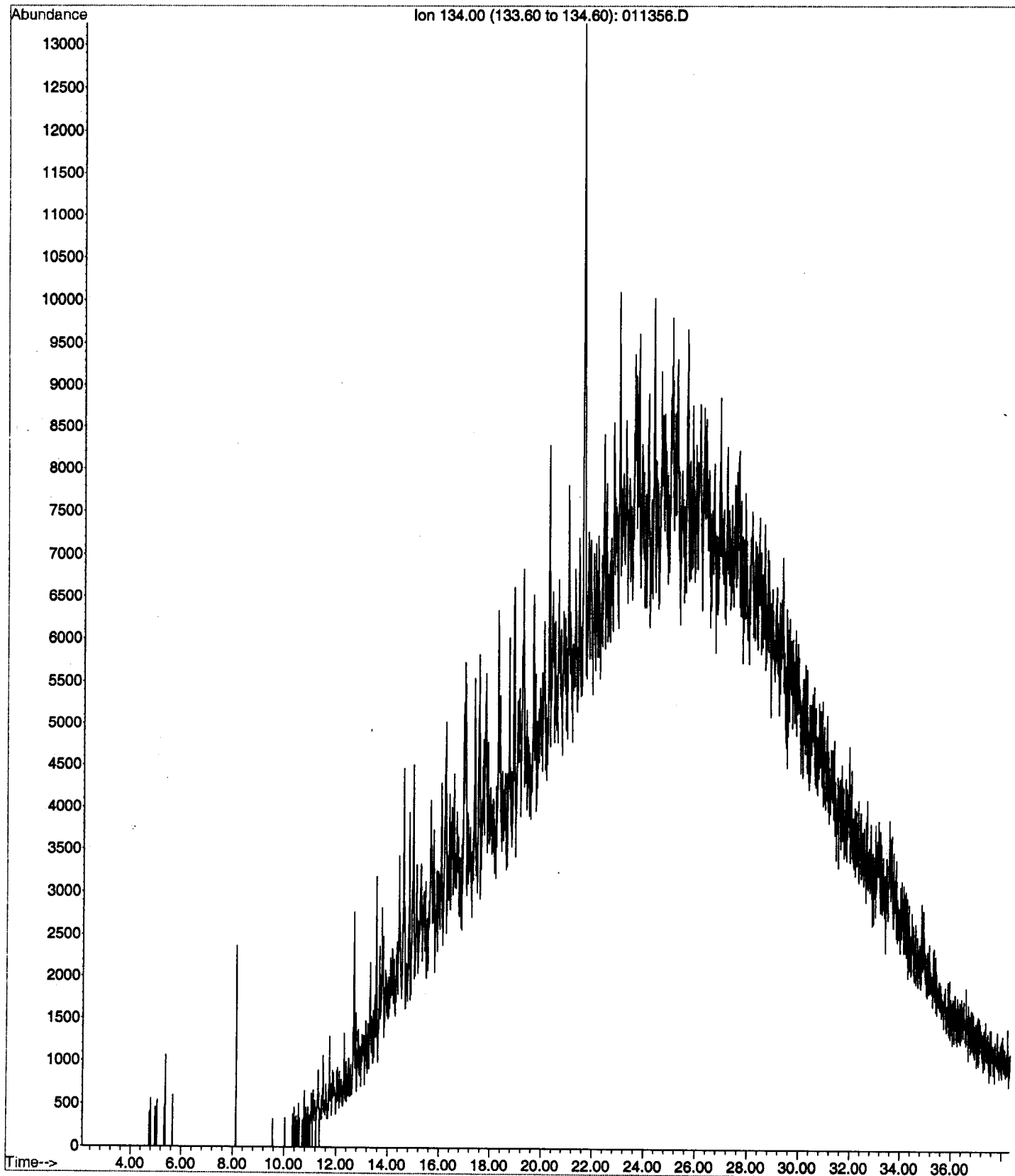
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Acquired : 15 Jan 2012 9:37 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-01
Misc Info :
Vial Number: 33



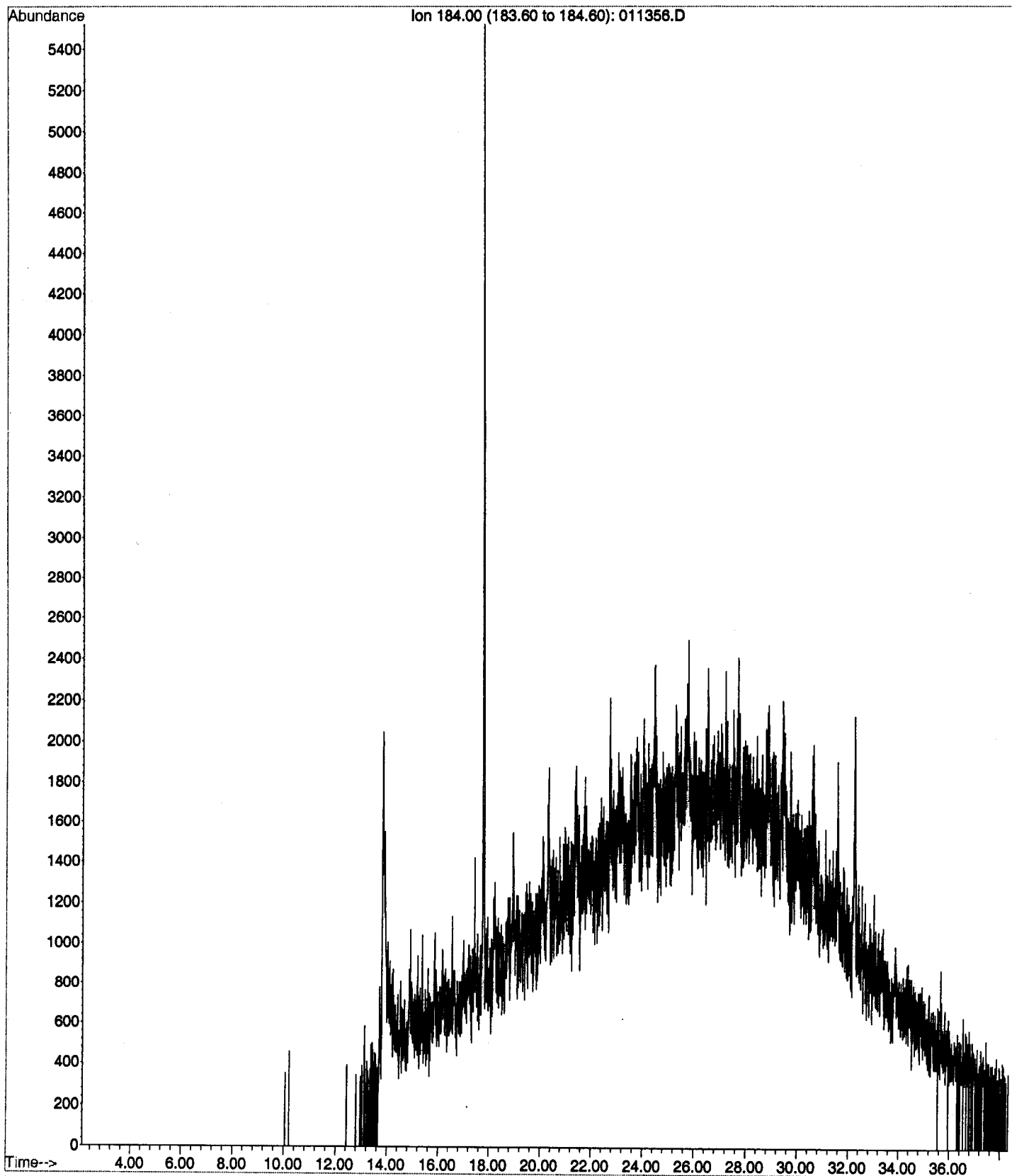
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Operator : YA
Acquired : 15 Jan 2012 9:37 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-01
Misc Info :
Vial Number: 33



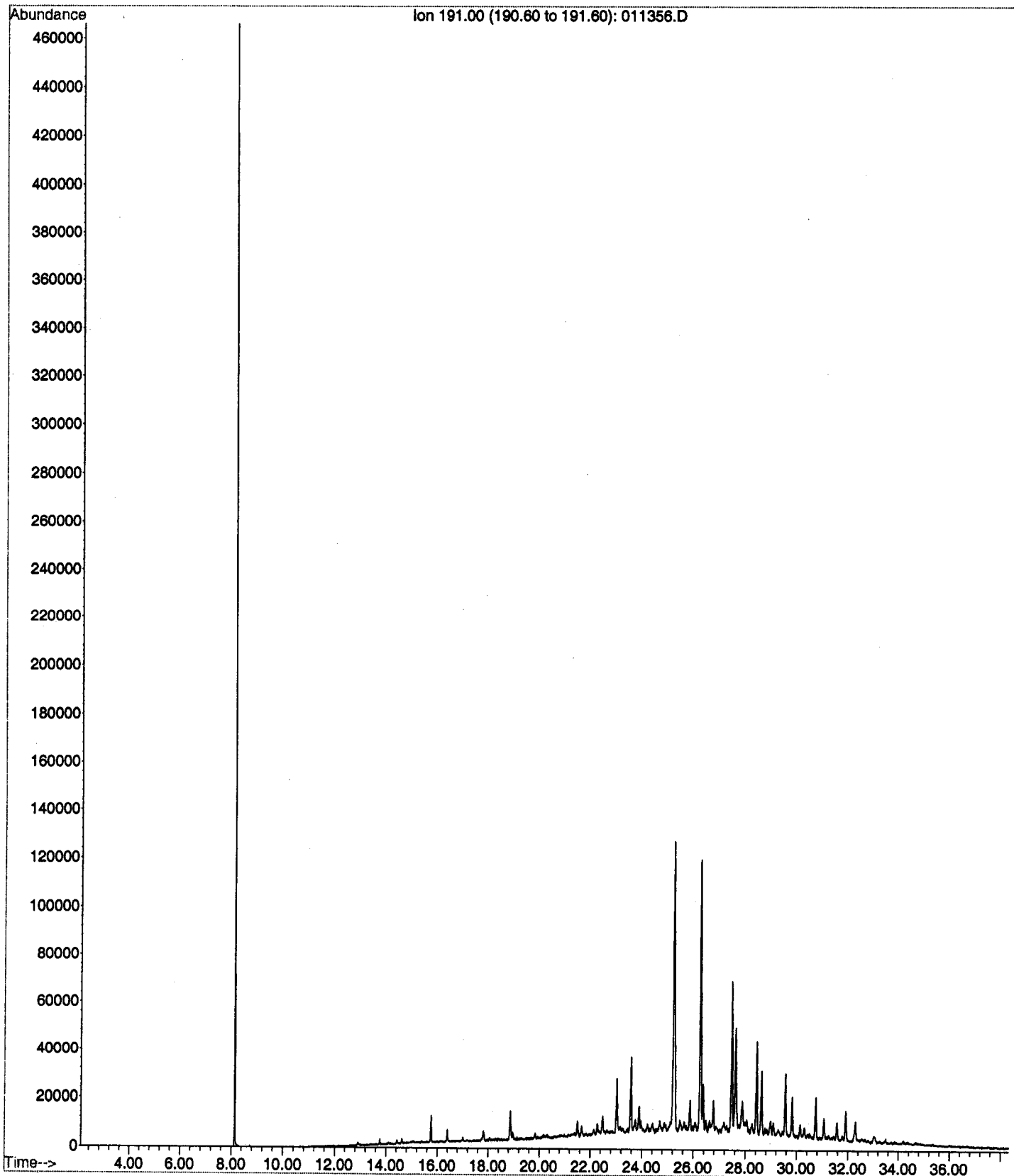
File : L:\01-13-12\011356.D
Operator : YA
Acquired : 15 Jan 2012 9:37 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-01
Misc Info :
Vial Number: 33



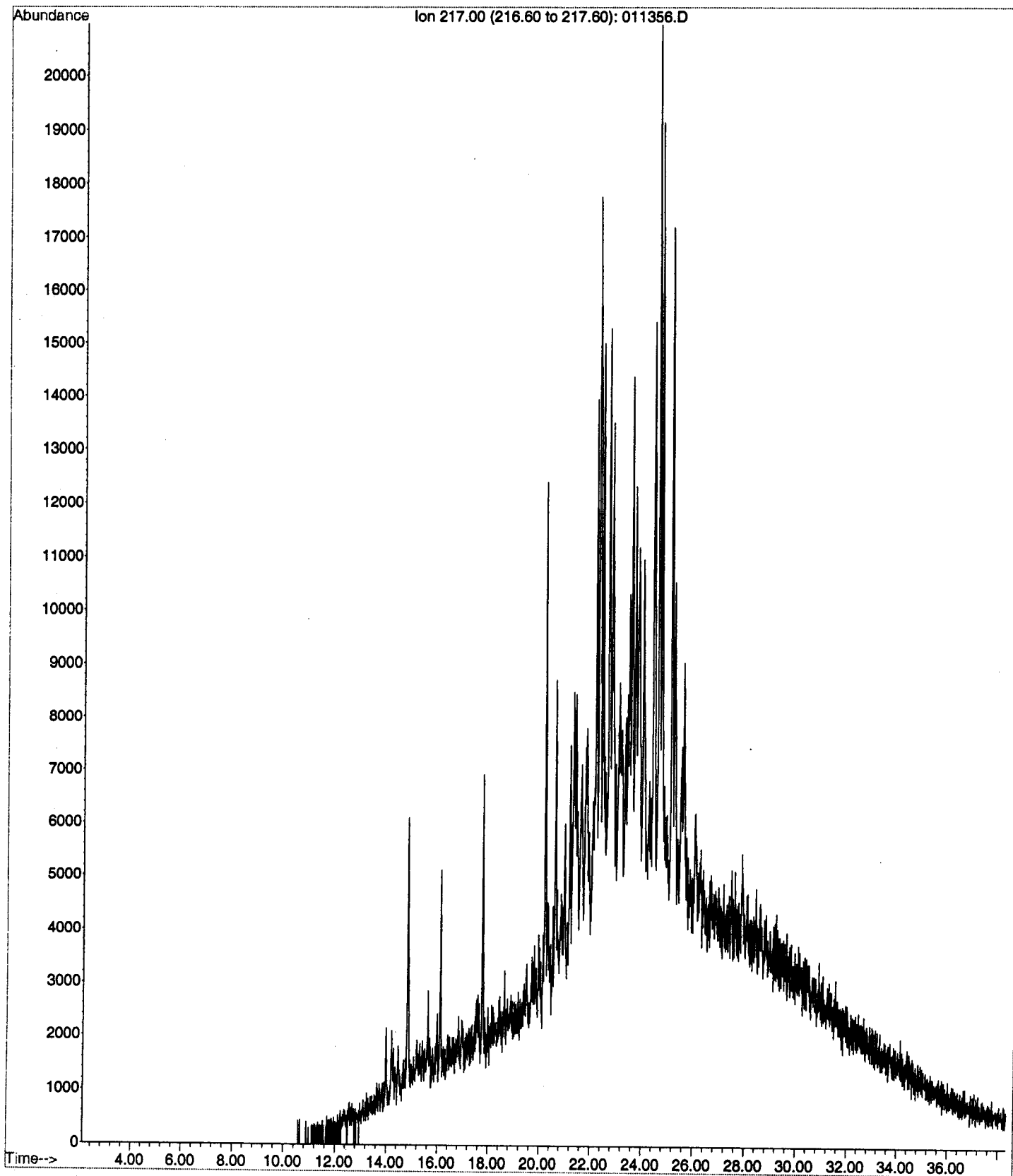
File : L:\01-13-12\011356.D
Operator : YA
Acquired : 15 Jan 2012 9:37 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-01
Misc Info :
Vial Number: 33



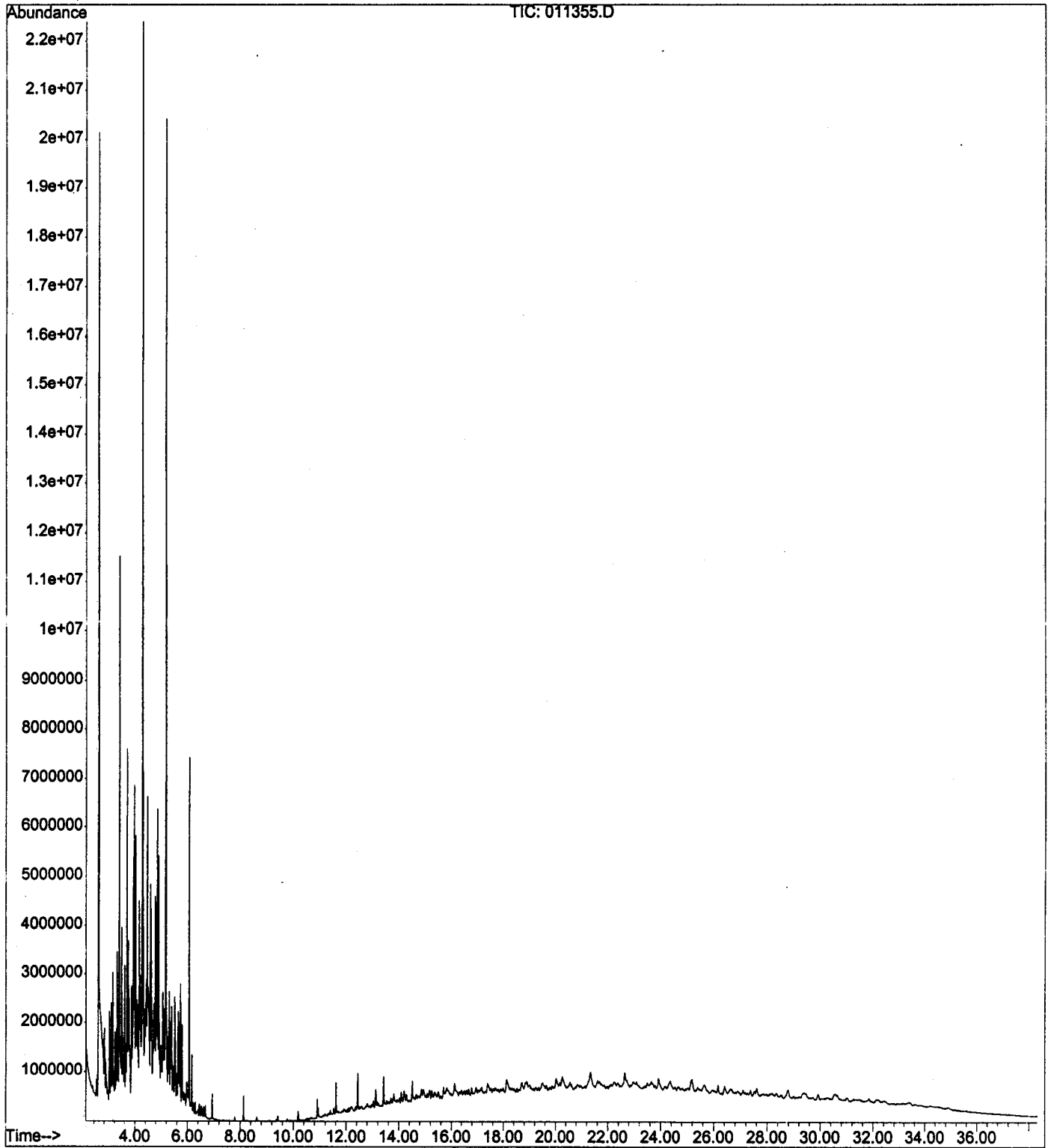
File : L:\01-13-12\011356.D
Operator : YA
Acquired : 15 Jan 2012 9:37 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-01
Misc Info :
Vial Number: 33



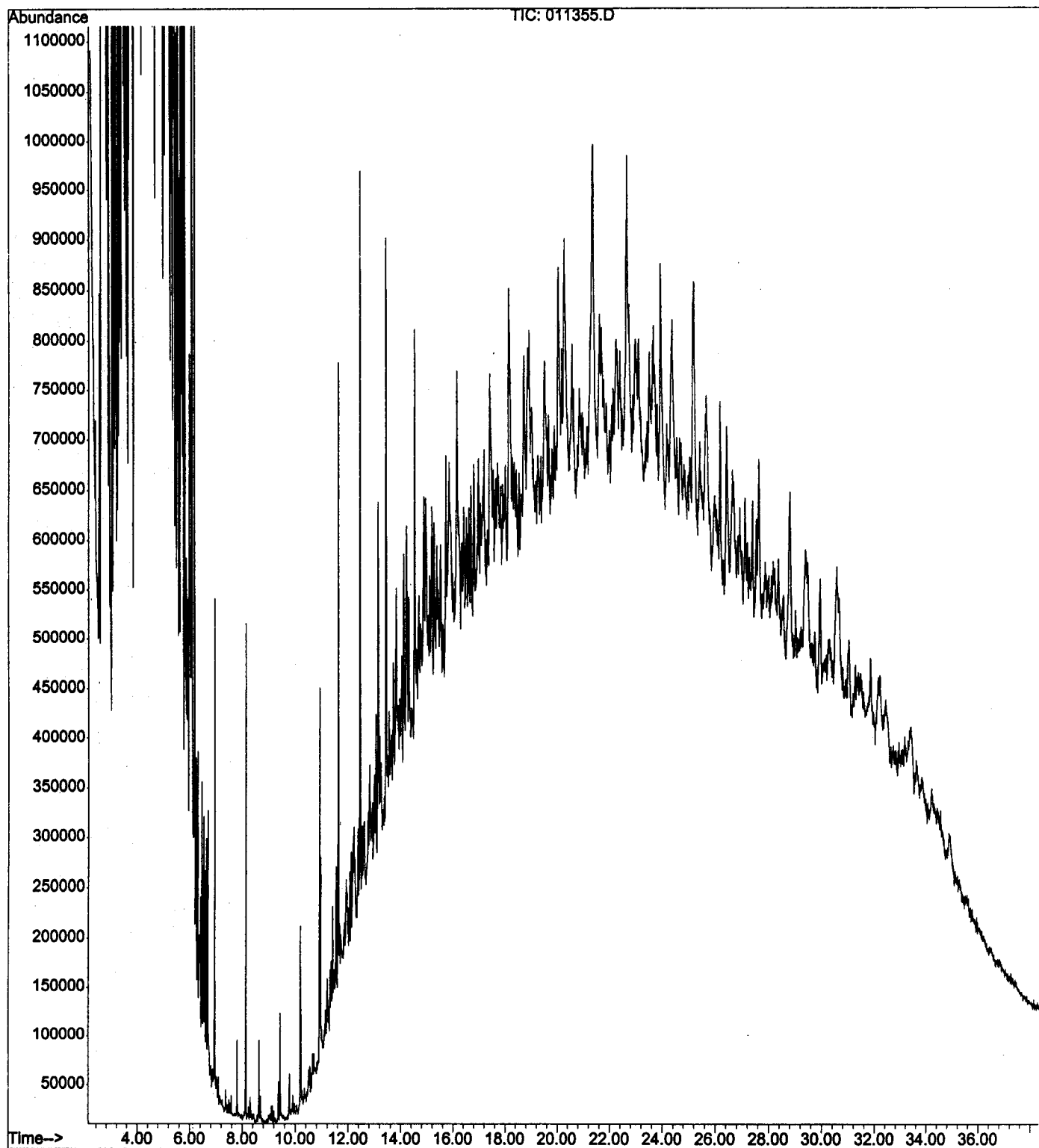
File : L:\01-13-12\011356.D
Operator : YA
Acquired : 15 Jan 2012 9:37 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-01
Misc Info :
Vial Number: 33



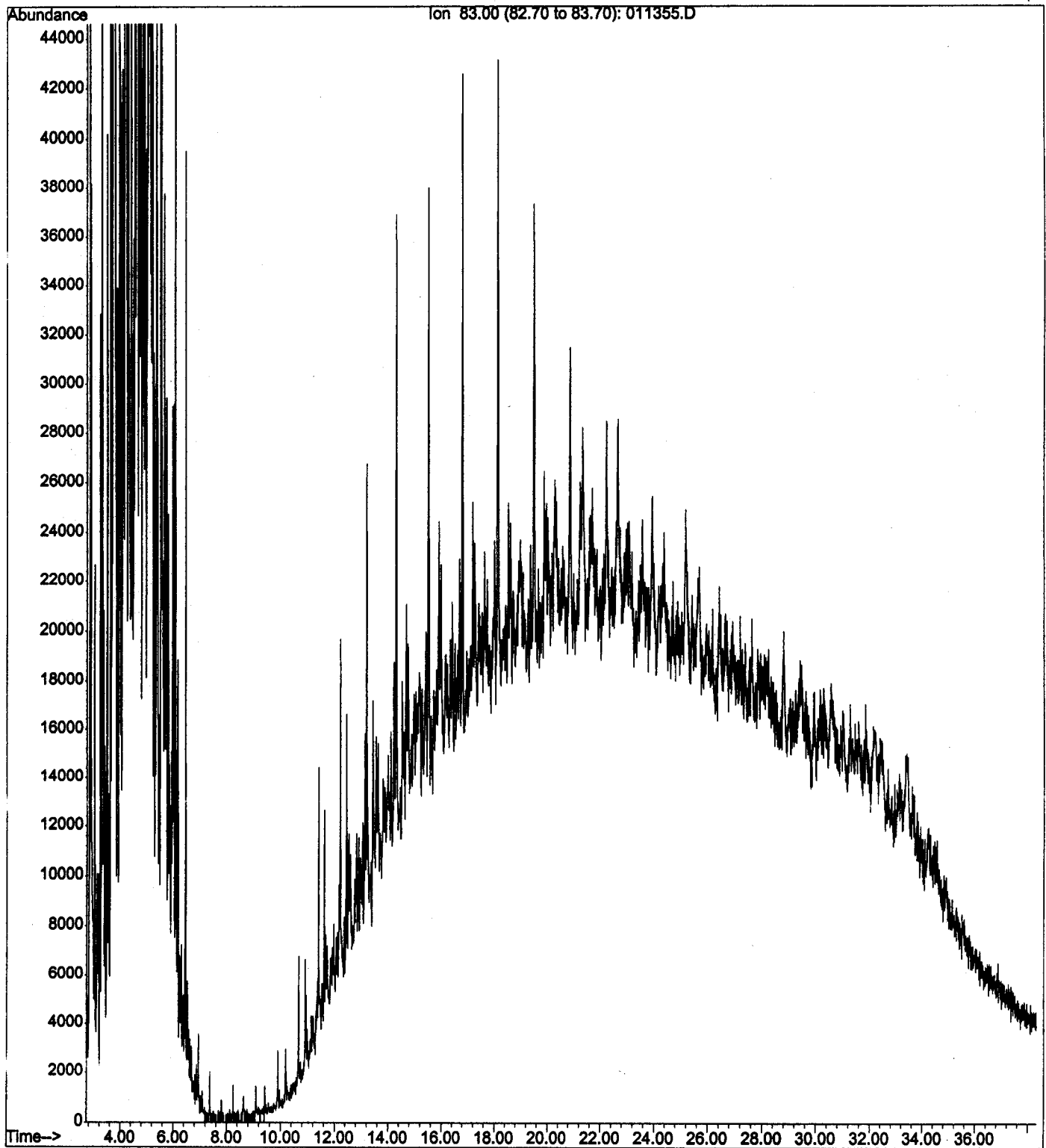
File : C:\01-13-12\011355.D
Operator : YA
Acquired : 15 Jan 2012 8:47 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-02
Misc Info :
Vial Number: 32



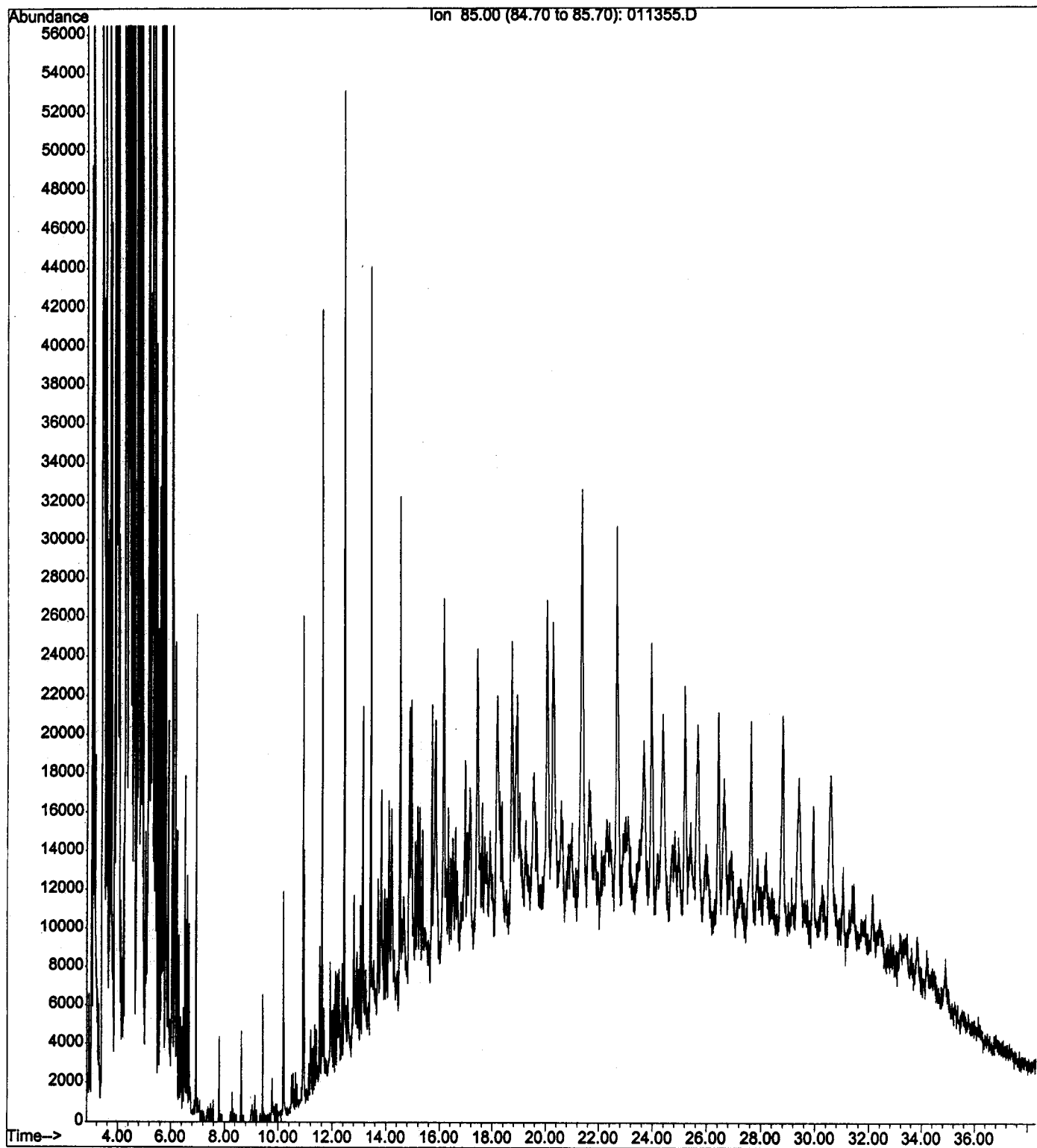
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Operator : YA
Acquired : 15 Jan 2012 8:47 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-02
Misc Info :
Vial Number: 32



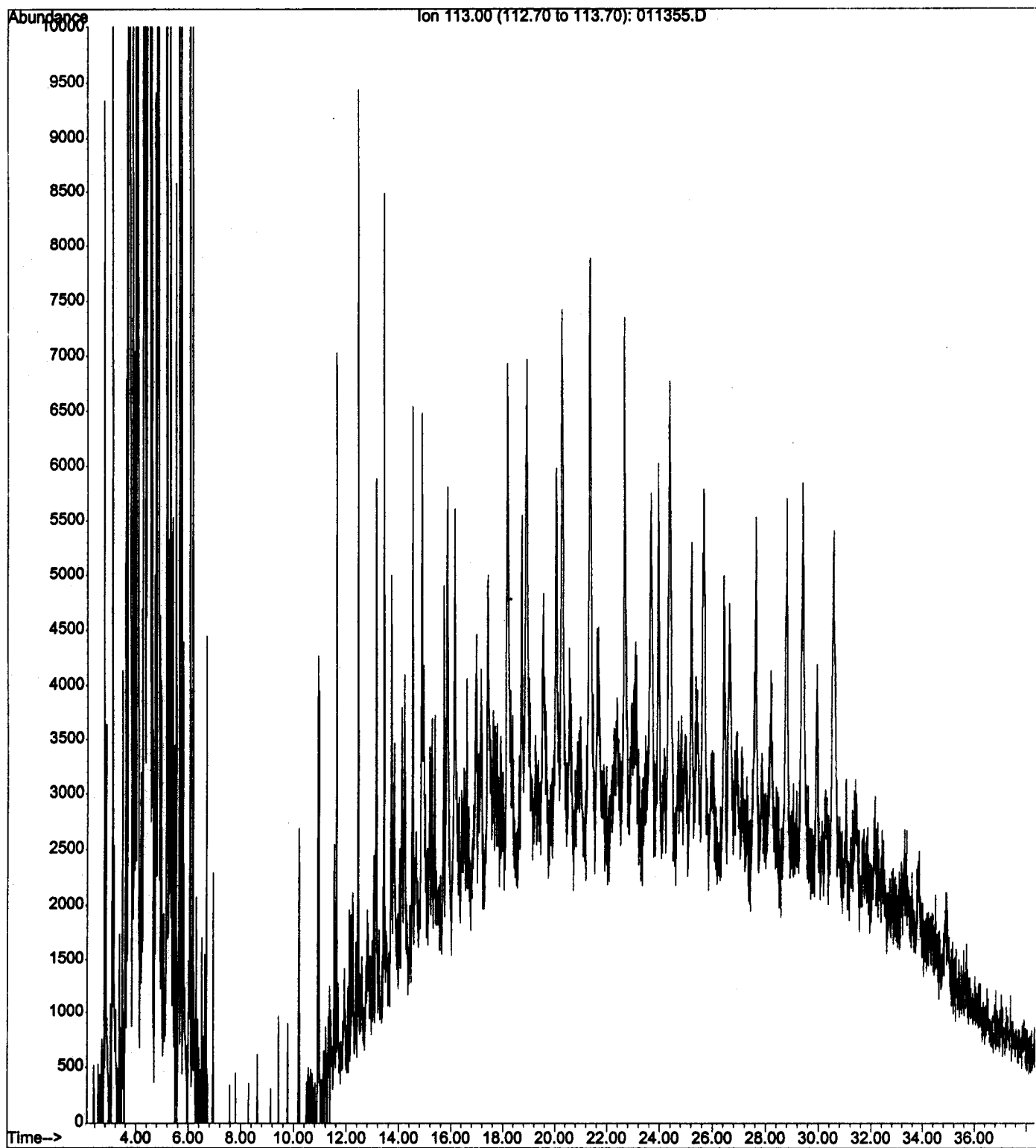
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Acquired : 15 Jan 2012 8:47 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-02
Misc Info :
Vial Number: 32



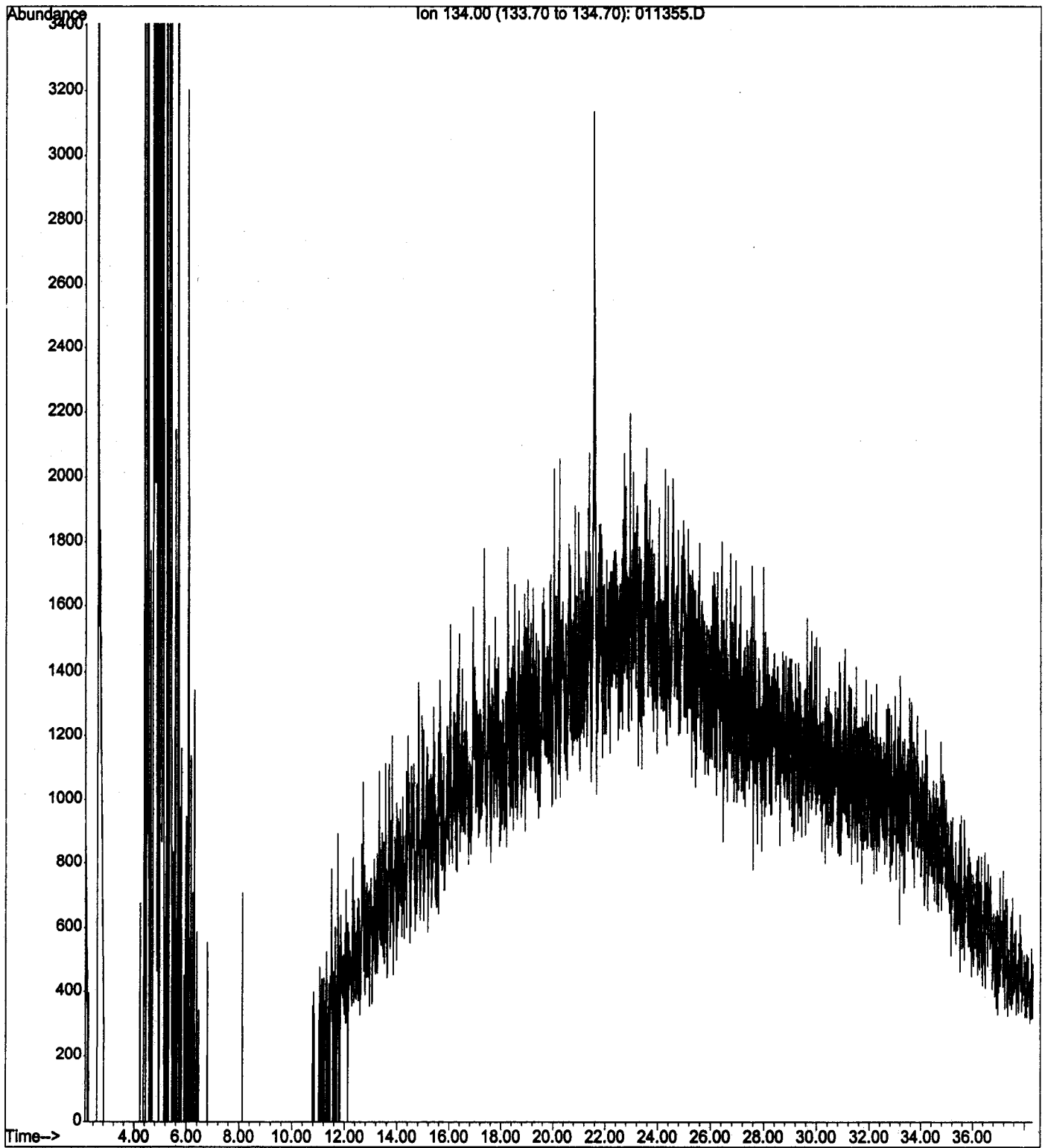
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Acquired : 15 Jan 2012 8:47 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-02
Misc Info :
Vial Number: 32



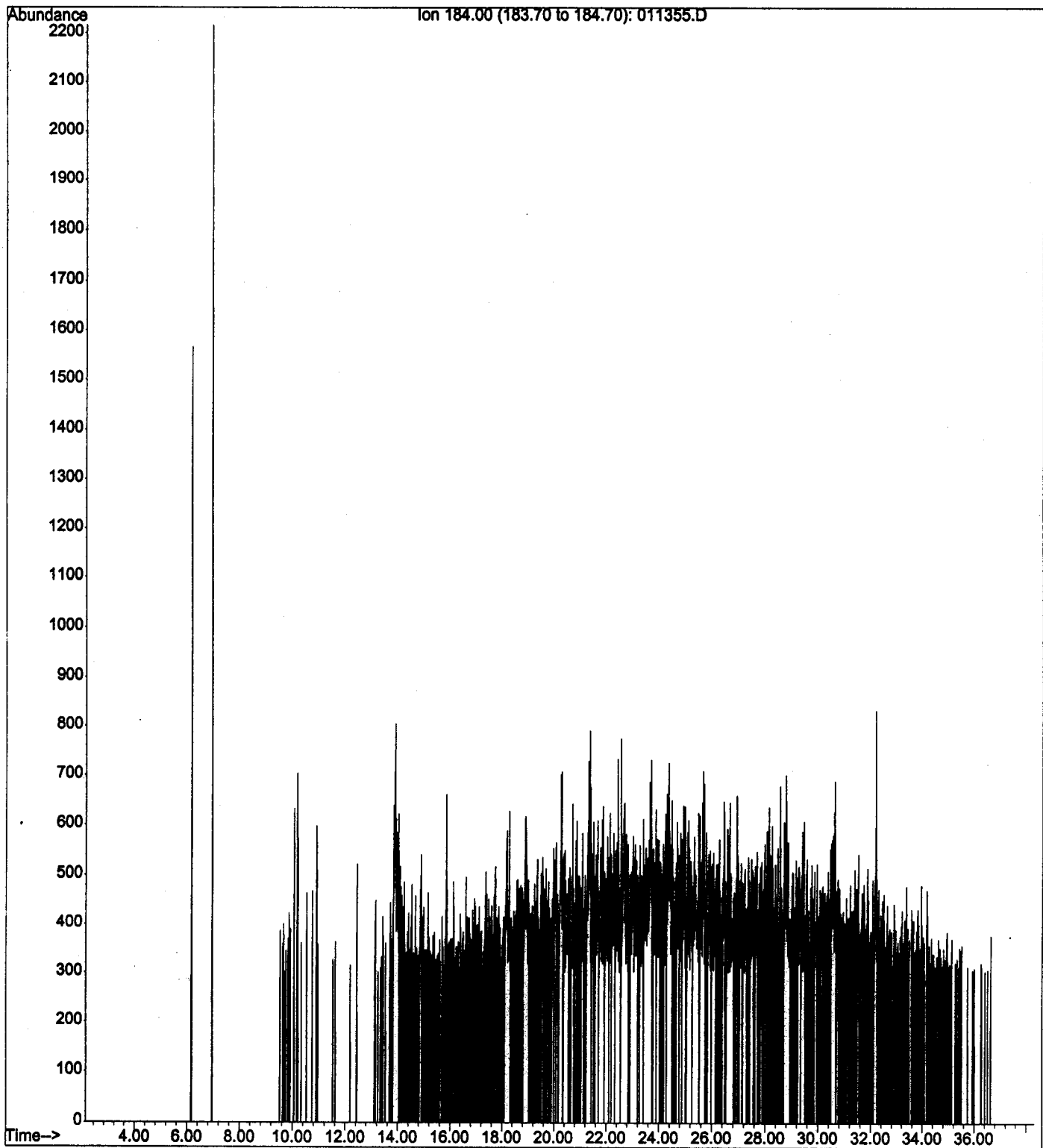
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Operator : YA
Acquired : 15 Jan 2012 8:47 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-02
Misc Info :
Vial Number: 32



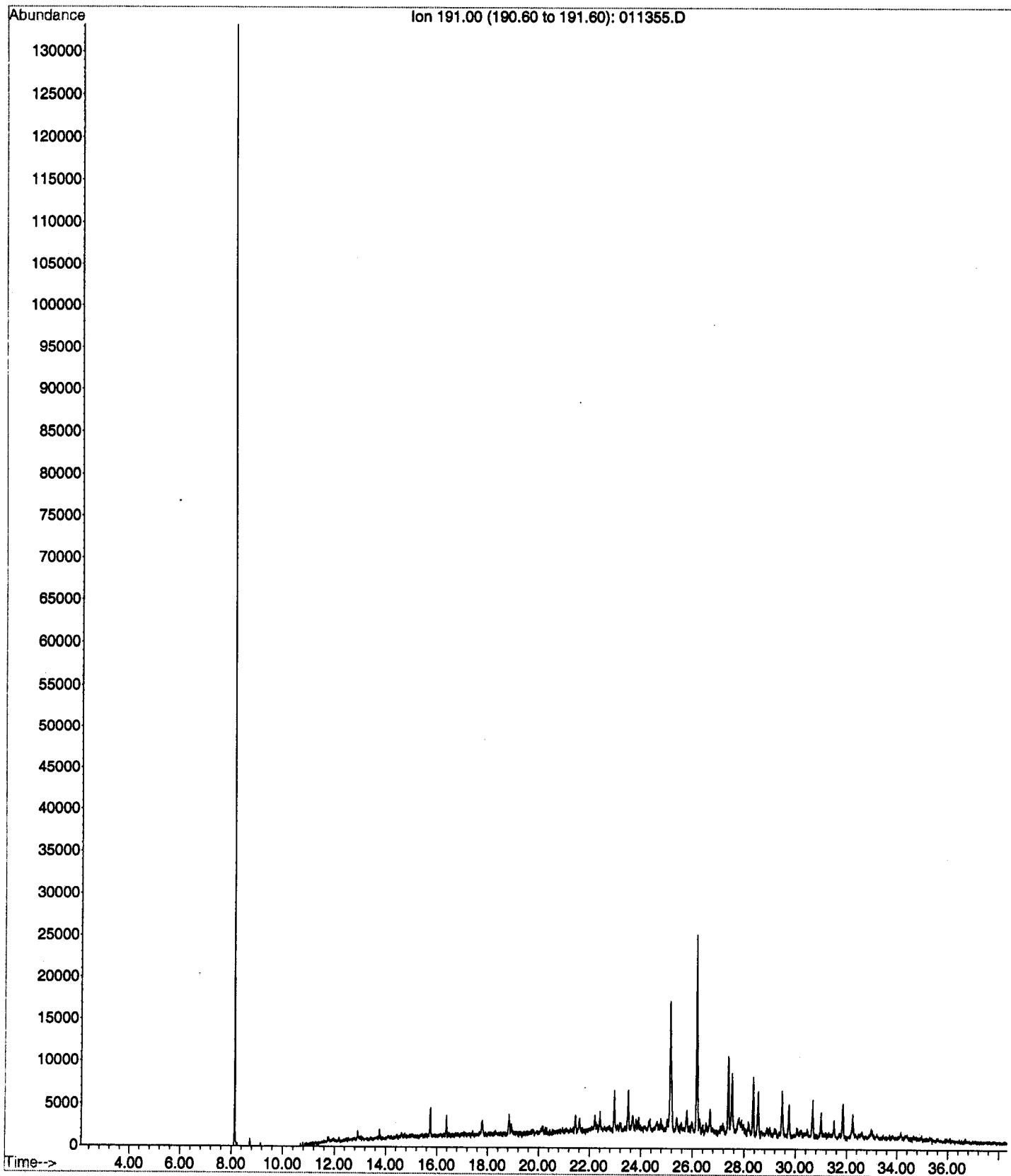
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Acquired : 15 Jan 2012 8:47 am using AcqMethod BNA1
Instrument : GCMS8
Sample Name: 101246-02
Misc Info :
Vial Number: 32



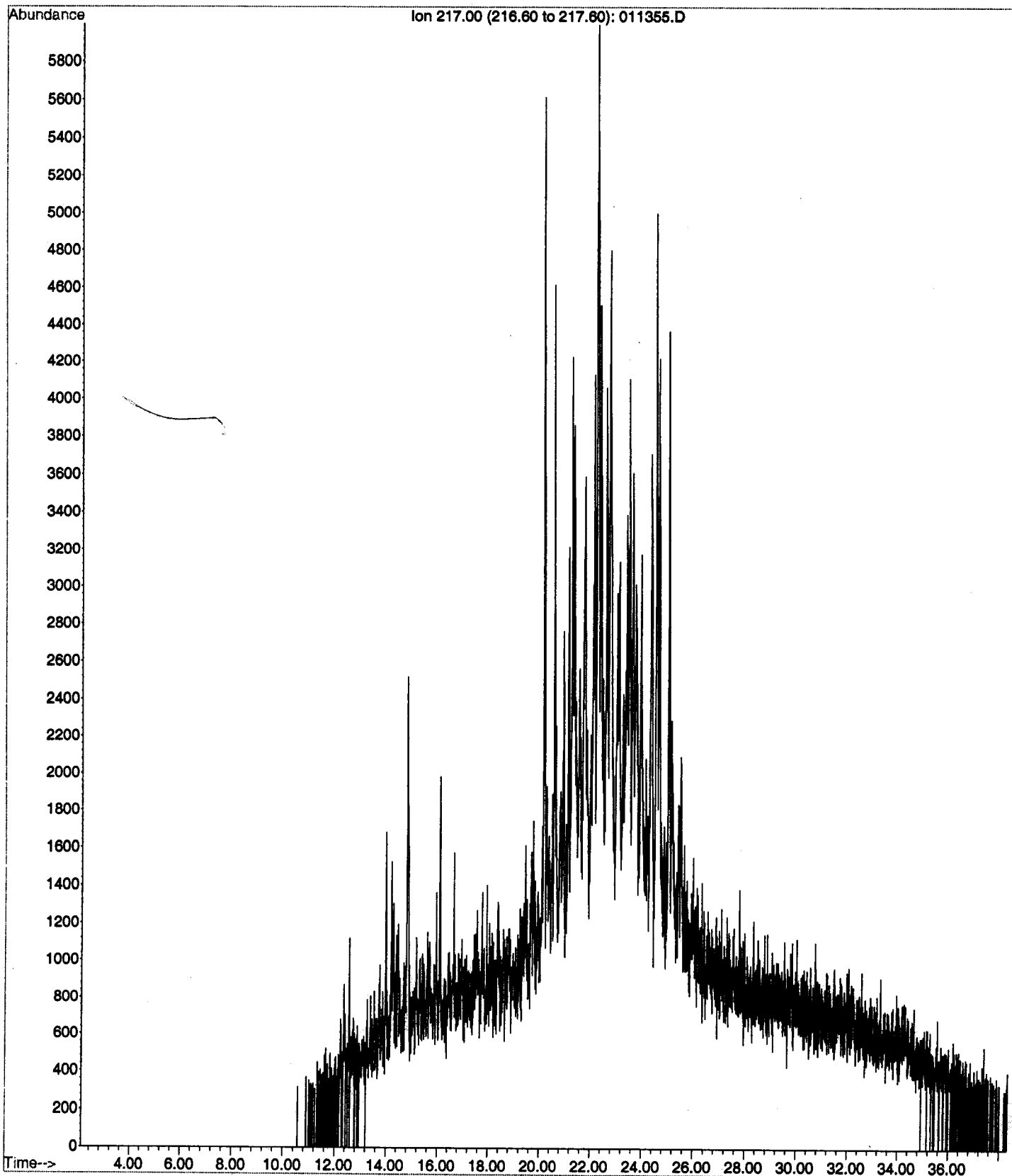
File : C:\01-13-12\011355.D
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- PEPPER TO:**
- Pittsburgh - 333 Baldwin Road • Pittsburgh, Pennsylvania 15205 • 412/429-2324 • Fax 412/429-2114
 - Chicago - 3041 Woodcreek Drive, Suite 210 • Downers Grove, Illinois 60515 • 630/963-6026 • Fax 630/963-6027
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 - St. Louis - 4848 Park 370 Blvd. • Suite F • Hazelwood, Missouri 63042 • 314/656-4566 • Fax 314/656-4595

Project No. 111-036		Project Name GEORGETOWN MW		Matrix		Analyses Requested		Page 1 of 1	
Samplers (signatures) BAD BASHORE		CEC Project Manager ANDY MCCORRLE		A Q U E O U S		N O N A Q U E O U S		Turnaround X Standard _ Rush	
Date	Time	Sample ID	No. of Containers	GC/MS Fingerprint Analysis		Remarks			
12/15/11	1200	VIRGIN HYDRAULIC OIL	2	X	X	Lab ID			
	1610	MW-23	2	X	X	of 2			
	1404	MW-21	2	X	X	A B A B A B			
Relinquished by		Date	Time	Received by	Relinquished by	Date	Time	Received by	
[Signature]		12/15/11	1840	FEDEX					
Custody Intact Yes No		Custody Seal No.		Lab Log No.		Remarks		Received by Laboratory	
								FTBI	
								Date 12-16-11 Time 9:30	

Samples received at 0 °C