20395

30 Patewood Drive
Suite 300
Greenville, SC 29615

864.281.0030 PHONE
864.281.0288 FAX

www.trcsolutions.com

May 1, 2017

Ms. Addie Walker
Project Manager
State Voluntary Cleanup Program
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: ABC+ Pilot Study Report
Former WestPoint Home Site, Clemson, South Carolina
File #20395 (Formerly Site ID #00895)

Dear Ms. Walker:

Enclosed is one hard copy and one CD of the ABC+ Pilot Study Report for the Former WestPoint Home Site in Clemson, South Carolina. This technical report has been prepared to provide a description of the ABC+® pilot study program and the results and lessons learned that were acquired during the field effort.

With the completion of this study, WPH will move forward with the development of a Focused Feasibility Study (FFS) as outlined in the *Workplan for Well Installation, ABC+ Pilot Study, and Focused Feasibility Study* (TRC, 2015) and supplemental amendments

Sincerely,

TRC Environmental Corporation

Steve W. Webb, Ph.D., P.E
Senior Project Manager

Attachments

cc: Lucas Berresford, BLWM
Bruce Crawford, BOW (letter only)
Eddie Lanier, WestPoint Home
Lisa Clark, TRC

ABC+ Pilot Study Report

Former WestPoint Home Site – Clemson, South Carolina

May 2017

Prepared For
WestPoint Home, Inc.

LISA CLARK REGISTERED No. 2162 SOUTH CAROLINA PROFESSIONAL GEOLOGIST

Steve W. Webb, Ph.D., P.E.
Senior Project Manager

Lisa M. Clark, P.G.
Senior Hydrogeologist

30 PATEWOOD DRIVE, SUITE 300, GREENVILLE, SC 29615, • 864.281.0030 PHONE • 864.281.0288 FAX • WWW.TRCSOLUTIONS.COM

Table of Contents

List of Tables

List of Figures

List of Appendices

Section 1
Introduction

The former WestPoint Home, Inc. (WPH) facility is located on West Cherry Road near Clemson, South Carolina (Figure 1-1). The facility was closed in April 2006 and demolished during the period of 2008-2009. Previous investigations conducted at the site have revealed the presence of two discrete plumes of volatile organic compounds (VOCs), each comprised primarily of tetrachloroethene (PCE). These plumes have come to be more commonly designated as the "upgradient" and "downgradient" VOC plumes. Site investigations indicate that both of these VOC plumes appear to originate from underground process piping that serviced the former manufacturing complex. No substantive data or information has indicated that either of these two VOC plumes could be tied to surficial spills or releases. From their subsurface points of origin, each of the two VOC plumes extend in a southeastwardly direction to Hartwell Lake, where pore water sampling indicates that low levels of VOCs are discharging into the surface water of the lake.

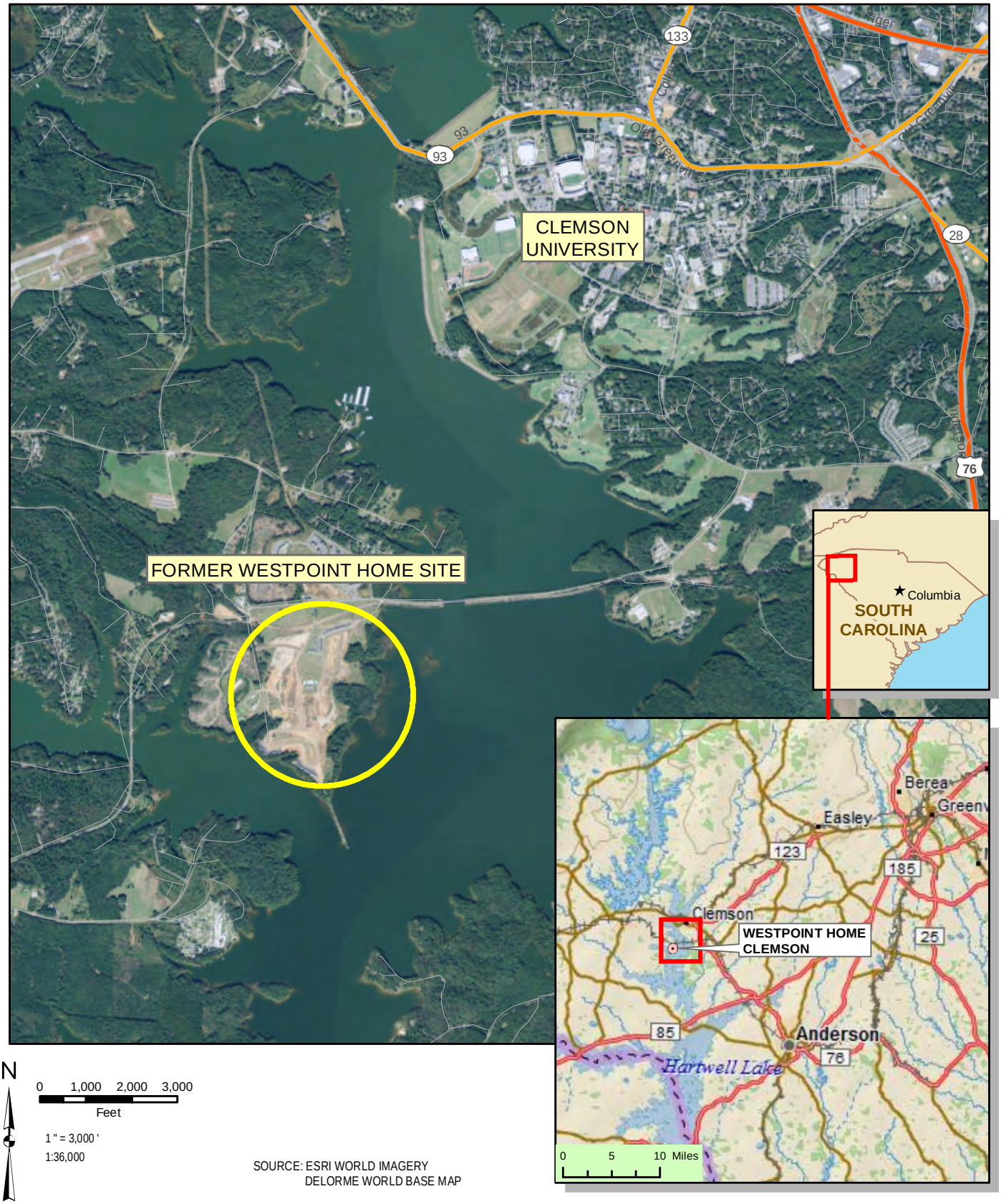
The property is currently owned and managed by Tom Winkopp, Realtor/Developer, LLC. The former textile manufacturing site is being redeveloped, primarily for apartments and single family housing for students attending nearby Clemson University. Future site development plans include eventual construction of residential units within the immediate vicinity of the upgradient and downgradient VOC plumes. The developer has indicated that further residential development within the immediate vicinity of the upgradient and downgradient VOC plumes will not be conducted until the underlying, VOC-affected groundwater has been suitably remediated.

A work plan was prepared and submitted to the South Carolina Department of Health and Environmental Control (SC DHEC) in April 2015 to address conducting a pilot study to assess and evaluate the possible application of an *in situ* treatment technology involving Enhanced Reductive Dechlorination (ERD) and zero-valent iron (ZVI) treatment. These are both treatment technologies that have received prior consideration for possible application and remediation of the two VOC plumes. Following Department review and comments, the pilot study work plan was approved and initiated in June 2016.

More specifically, the pilot study developed for the former WPH facility was prepared to evaluate a treatment technology developed by Redox Tech, LLC, (Redox Tech) that makes use of an innovative treatment product that is commercially referred to as ABC^{+}®. ABC^{+} is an acronym for "Anaerobic BioChem plus" and represents a formulation of Redox Tech's standard ERD treatment formulation (ABC®) that has been enhanced with the addition of ZVI. Thus,

ABC+® represents a treatment technology that can be applied as a useful means of stimulating anaerobic ERD processes in the subsurface groundwater, the ZVI component can serve as a supplemental physical-chemical treatment aide, as well. TRC would like to evaluate whether or not ABC+® can be reasonably applied via direct-push injection as a method to dechlorinate the PCE levels that have been detected within the Site groundwater.

This technical report has been prepared to provide a description of the ABC+® pilot study program and the results and lessons learned that were acquired during the field effort. If ABC+® can be successfully deployed during the pilot study effort, TRC is hopeful that this sort of treatment technology might have expanded application during the pending Focused Feasibility Study (FFS) and beyond.



TRC
30 Patewood Drive, Suite 300
Patewood Plaza One
Greenville, SC 29615
Phone: 864.281.0030
Fax 864.281.0288

WESTPOINT HOME, INC.
CLEMSON, SOUTH CAROLINA

FIGURE 1-1
SITE LOCATION

DRAWN BY:	DJS
APPROVED BY:	LMC
PROJECT NO:	226253.0.0.15
FILE NO.	
DATE:	APRIL 2017

P:_Vision\226253 - WPH Clemson\ArcGIS10\2015\Figure1-1.mxd Date
Saved: 4/11/2017 12:11:49 PM

Section 2
Overview of Treatment Technology

Reductive dechlorination is a widely-accepted, biologically mediated process by which chlorinated hydrocarbons can be degraded using microbes under anoxic/anaerobic conditions. During this naturally occurring process, anaerobic microbes (dehalogenators) have the ability to substitute hydrogen (H) for chlorine (Cl) on various chlorinated ethene compounds, effectively dechlorinating the target compound and reducing its toxicity.

Reductive dechlorination is fundamentally a redox reaction that requires both an electron donor and an electron acceptor. Additionally, the anaerobic microbes that are capable of mediating this chemical reaction require nutrients and conducive environmental conditions under which they might grow and proliferate. The ABC treatment formulation is specifically blended for a site's characteristics and uses a combination of organic substrates including lactate esters, glycerine, and emulsified fatty acids that are introduced into the subsurface to serve as the functional electron donors with different metabolic rates. The availability of carbon at different metabolic rates facilitates the growth of a more balanced microbial consortium including the main chlorinated ethene degrader (dehalococcoides) without domination by an undesirable species or group (*e.g.*, methanogens). The electron acceptors for the ERD treatment process include the chlorinated VOCs being targeted for treatment, plus other naturally occurring groundwater constituents such as dissolved oxygen (DO), nitrate, manganese (IV), iron (III), sulfate, and carbon dioxide.

The formulation of the organic substrate (electron donor) affects the manner in which the reductive dechlorination treatment process will play out in the environment. Substrates such as sodium lactate can be quickly metabolized by the dehalogenators and can result in enhanced degradation of the chlorinated VOCs. However, these effects may also be short lived, enabling chlorinated VOC concentrations from nearby soils and groundwater to desorb and create conditions of VOC rebound. Slower metabolizing organic substrates, such as emulsified fatty acids, and vegetable oil (which requires a hydrolysis reaction to fatty acid before it can be used by dehlaogenating organisms), are also receiving considerable attention in the literature, but they are also much slower to establish/sustain reductive dechlorination conditions. TRC has considered these possible options and has selected the combination substrate (ABC® formulation) as our desired choice of treatment media for this pilot study. We acknowledge that there are other commercially available treatment additives and choices that can be tailored to site-specific conditions.

As indicated earlier, zerovalent iron (ZVI) is an abiotic means to facilitate the redox reaction responsible for substituting hydrogen ions for the chlorines present on the chlorinated VOCs. The ZVI employed in this reaction is basically a bulk reducing agent that is suitable for this type of treatment. The corrosion of iron metal (which tends to occur slowly when submerged) yields the formation of Fe^{2+} and hydrogen, both of which represent useful reducing agents for chlorinated solvents. On ZVI surfaces, chlorinated ethenes are directly dechlorinated via the beta elimination pathway without accumulation of the daughter products that are generated during ERD treatment. The by-products of ZVI oxidation also enhance the growth of biological chlorinated compound reducers. ZVI, once injected into the subsurface, does not tend to migrate within the aquifer, but rather stays in-place and continues to affect VOC-containing groundwater as is passes through the treatment material.

The combined influence of the ERD treatment components with the abiotic treatment components of the ZVI have led TRC to select this treatment material from Redox Tech for the pilot study at the former Clemson site. According to Redox Tech literature on their ABC+® product, this formulation has been developed to promote both rapid onset and long lasting reductive dechlorination. This is accomplished by using both the ERD and abiotic treatment components in a symbiotic manner, where each treatment process can facilitate and enhance the performance of the other. The relative amounts of the various organic substrates, nutrients and iron can easily be adjusted to address/accommodate site-specific conditions and requirements.

Section 3
Description of the Pilot Study

The pilot study work plan was initially submitted for SC DHEC review in April 2015, as part of a broader document that included work plan details for additional well installation/ sampling and the preparation of a Focused Feasibility Study (FFS). Following receipt of comments from SC DHEC, the final work plan for the ABC$^+$ pilot study was resubmitted in July 2016.

The ABC$^+$ pilot study was designed to be conducted at two locations – one treatment area near the upper end of the upgradient plume area and the second treatment area near the head of the downgradient plume area. These two treatment areas were selected to evaluate possible heterogeneities that might exist between these two site areas. The pilot study treatment activities for the upgradient plume area were conducted just upgradient of existing permanent monitoring wells RMW-27 and RMW-27A. Similarly, the pilot study activities for the downgradient plume area conducted just upgradient of permanent monitoring wells RMW-23 and RMW-23A. Figure 3-1 shows the locations of these two pilot study areas.

3.1 Pilot Study Objectives

The objectives of the pilot study included the following:

- Evaluate and document the active microbial communities present in subsurface soils and groundwater.
- Confirm the technical practicability of applying direct-push injection as the primary means of delivering ABC$^+$ to depths in excess of 50 feet below ground surface (bgs).
- Confirm the treatment efficacy of ABC$^+$ upon the site-specific VOCs in groundwater and determine the observed radius of influence (ROI).
- Determine if bioaugmentation of the indigenous microbial population is necessary to enhance/accelerate growth of suitable bacteria.
- Collect sufficient field data to support a thorough technology evaluation as part of the subsequent Focused Feasibility Study (FFS).

During Department review of the draft work plan, these pilot study objectives underwent discussion and modification. In an effort to streamline the review/approval process, WPH determined that it would be advantageous to include a bioaugmentation treatment product (*i.e.* Shaws' Dechlorinating Culture [SDC-9™]) within the pilot study formulation. This bioaugmentation culture contains *dehalococcoides sp.* (DHC), a strain of anaerobic bacteria that is known to degrade a wide range of chlorinated contaminants including PCE and its daughter

products via dehalorespiration. As a result, microbial assays to discern the active microbial communities present at the site were not required during the pilot study.

3.2 Pre-Pilot Study Sampling Activities and Site Conditions

Prior to conducting the pilot study, six observation wells were installed at various locations downgradient of the proposed injection points. Within the upgradient plume area, observation wells OW-01 and OW-02 were installed at the water table approximately 30 feet downgradient of RMW-27. RMW-27 and RMW-27A were the primary monitoring points for the upgradient plume pilot study area. Observation well OW-03A was installed with a screened interval across the intermediate groundwater zone, approximately 35 to 45 feet bgs. For the downgradient plume area pilot study injections, observation wells OW-04 and OW-05 were installed across the water table approximately 30 feet downgradient of RMW-23. Similarly, RMW-23 and RMW-23A represented the primary monitoring points for the downgradient plume pilot study. Observation well OW-06A was installed with a screen in the intermediate zone, approximately 35 to 45 feet bgs. These wells were installed in May 2016. Table 3-1 presents the construction information for the new and existing wells utilized during the pilot study. Well locations are included on Figure 3-1.

Groundwater levels were measured in the existing and newly installed monitoring and observation wells on May 24, 2016. Table 3-2 presents a summary of the depth to water (as measured below the top of the well casing) and calculated groundwater elevations. Figure 3-2 presents the configuration of the water table developed from the May 24, 2016 water level measurements. Figure 3-3 illustrates the potentiometric surface of the intermediate aquifer zone. As previously presented in the *Addendum to 2014 Groundwater and Surface Water Investigation Report* (TRC, 2015), groundwater within the shallow aquifer flows to the east-southeast, while groundwater in the intermediate aquifer flows more toward the southeast. In both cases, the direction of groundwater flow is ultimately toward Hartwell Lake, where discharge to this surface water body occurs. During the May 24, 2016 event, water levels were measured only within the wells that were intended to be used for the pilot study. For subsequent monitoring events, water levels were measured in a wider array of monitoring and observation wells.

In May 2016, groundwater samples were collected from wells included in the ABC$^+$ pilot study and analyzed for VOC concentrations. These baseline data were then used to update the VOC plume maps for the shallow and intermediate aquifer zones that were presented in the *Addendum to 2014 Groundwater and Surface Water Investigation Report* (TRC, 2015). Analytical results for the May 2016 pre-injection sampling are included on Table 3-3. Figure 3-4 presents a pre-injection isoconcentration map for PCE in the shallow groundwater zone; Figure 3-5

presents a pre-injection isoconcentration map for PCE in the intermediate aquifer zone. As illustrated by these figures, the targeted treatment locations selected for each of the ABC+ pilot study areas are representative of the areas exhibiting the highest PCE concentrations in both the upgradient and downgradient plume areas.

3.3 Hydraulic Conductivity Testing

Horizontal aquifer hydraulic conductivities were estimated using single-well aquifer tests, commonly referred to as slug tests. Prior to the ABC+ injections, rising and/or falling head slug tests were conducted at monitoring wells RMW-16B, RMW-16C, RMW-18, RMW-18A, RMW-23, RMW-23A, RMW-23B, and RMW-23D. The results of these tests were submitted to SC DHEC in WPH correspondence dated December 9, 2015.

At the time these initial slug tests were performed (June 2015), wells RMW-18 and RMW-18A had been selected as the primary monitoring points for ABC+ injections in the upgradient plume. However, upon review of groundwater monitoring data collected from recently installed wells RMW-27 and RMW-27A, a revised location for injection of the ABC+ treatment materials was selected more proximal to the original PCE source. A decision was made to alter the location of the pilot ABC+ injections from the area around RMW-18/18A area to the area around wells RMW-27/27A.

In order to assess the potential impact on groundwater flow from the ABC+ injections, follow-up slug testing was conducted on four monitoring wells that were previously tested, including RMW-23, RMW-23A, RMW-23B, and RMW-18. This follow-up slug testing was performed on April 13, 2017. These follow-up slug tests were conducted in a manner identical to the pre-injection slug testing. The results of the pre- and post-injection slug tests are provided in the following table.

AQUIFER ID AQUIFER ZONE TEST TYPE	AQUIFER TYPE	ESTIMATED HYDRAULIC CONDUCTIVITY (ft/day)			
		Pre-ABC+ Injection		Post-ABC+ Injection	
		RISING HEAD TEST	FALLING HEAD TEST	RISING HEAD TEST	FALLING HEAD TEST
RMW-18	Water Table	12.76	NA	8.84	NA
RMW-23	Water Table	30.25	NA	21.79	NA
RMW-23A	Intermediate	2.87	2.87	0.77	0.60
RMW-23B	Top of Rock	0.57	0.32	0.41	0.19

Upon examination of the data, one might reasonably surmise indications of an apparent drop from the pre-pilot to the post-pilot hydraulic conductivity values as evidenced by direct

comparison of the testing results summarized above. However, similar reductions in hydraulic conductivity were observed within well RMW-23, which experienced "daylighting" during the ABC+ injection (a topic that receives more detailed consideration in Sections 3.4 and 4.3), and well RMW-18, which is located at a distance beyond the area influenced by the ABC+ pilot injections. Top of rock well RMW-23B, which did not experience "daylighting" effects during the injection, but was located within the area of influence of the injections, also exhibited a similar apparent decrease in hydraulic conductivity between the rising head tests as RMW-23 and RMW-18. This suggests that the reason for the apparent decline in hydraulic conductivity within this area may not be specifically related to the ABC+ pilot study injections, but to other factors. Potential factors contributing to the apparent differences in estimated hydraulic conductivity between events include:

- the localized nature of the hydraulic response (*i.e.*, immediate vicinity of the well);
- the small diameter of the wells being tested (*i.e.* 2-inch);
- the short duration of the tests (*i.e.*, 5 to 35 minutes);
- a reduction in the amount of groundwater contained within the wells (*i.e.*, 1- to 1.5-foot lower water levels),
- inherent subjectivity in the interpretation of slug test data (*i.e.*, placement of best fit line).

Due to the various contributing factors, the results from the slug testing should not be "over-interpreted."

Intermediate aquifer well RMW-23A, which experienced "daylighting" during the ABC+ injections and was subsequently redeveloped, showed a larger apparent drop in hydraulic conductivity compared to RMW-23, the water table well at the same location. A portion of this larger decline may be attributable to the continuing presence of ABC+ media within the immediate vicinity of this well. The rate of groundwater flow within the intermediate zone is less than half that of the water table zone, thus requiring a longer period of time for injected fluids to migrate and dissipate. This well will continue to be monitored for evidence of ABC and follow-up slug testing may be performed when pre-injection conditions are reestablished.

3.4 Pilot Study Injection Activities

The ABC+ pilot study program was initiated in the field on June 20, 2016. Representatives from Redox Tech mixed the treatment fluids to be used during the injection events in 400-gallon batches. These treatment mixtures were prepared in portable tote tanks, using potable water that had been de-oxygenated. Each batch of treatment material was sufficient to inject two five-foot depth intervals. Each batch of treatment media included the following ingredients:

- Deoxygenated water
- 50 pounds of powdered ZVI
- 47.5 pounds (5.5 gallons) of ABC
- 1.4 liters of SDC-9 (bioaugmentation)
- 2 pounds of guar
- 0.176 liters of RTB-1 (nutrient blend)
- 5 pounds of sodium bicarbonate

As specified in the work plan, three injection locations were utilized within each pilot study plume area. Figure 3-6 illustrates the three injection locations that were used within the upgradient plume area, designated IP-P-01 through IP-P-03. Prior to injecting the ABC+ into the subsurface, the Geoprobe 7822 direct-push (DP) rig was deployed to determine the maximum depth to which the DP rig could extend into the subsurface of the pilot study area.

At upgradient injection location IP-P-03, the DP rig was able to push to a depth of 76.5 feet bgs. This depth correlates to the bottom of the intermediate aquifer zone. The rods were then raised to 55 feet bgs, at which point the ABC+ injection was initiated. The initial injection occurred at a depth of 55 feet bgs, at which point 200 gallons of ABC+ were introduced into the subsurface at an injection pressure of 200 pounds per square inch (psi). The rods were withdrawn at 5-foot intervals until a depth of 15 feet bgs was achieved. This final depth roughly correlated with approximately 5 feet above the observed water table.

In order to minimize the possibility of "daylighting" injection fluids (*i.e.* a condition where the treatment fluid emerges from the ground surface or within a nearby monitoring well), the applied injection pressure was reduced to 150 psi for the upper two depth intervals. ABC+ injections were conducted at IP-P-02 and were underway at IP-P-01, when, at a depth of 35 feet bgs, there were visual signs of injectate beginning to discharge from well RMW-27A. The DP rig was moved a few feet to the west (*i.e.*, in a direction away from the monitoring wells) and injection activities were completed.

The DP rig and ABC+ treatment equipment were then relocated to the downgradient plume area, near permanent well RMW-23. Figure 3-7 illustrates the ABC+ injection locations that were used in this area. At IP-P-06, the DP rig was able to achieve a maximum depth of 70 feet bgs. ABC+ injections were then initiated at 55 feet bgs and continued towards the surface at 5-foot intervals. At the 40-foot bgs interval, ABC+ injectate began to discharge from observation well OW-6A. Because of the presence of near-surface obstructions, the DP rig could not be moved. Instead, the injection strategy at this interval was modified to adopt a more gradual and less aggressive approach. The ABC+ treatment material was introduced at a reduced pressure of 150 psi, then the crew waited 20 minutes, after which the remainder of the ABC+ injectate was introduced. At the 20-foot bgs interval, injectate was observed emerging from RMW-23. This interval was also injected at the lower pressure and with a pause in treatment activities.

The DP rig was relocated to the IP-P-05 injection location, but encountered refusal before reaching the water table. Following several abortive attempts at nearby locations, the DP rig was able to successfully extend to a depth of 55 feet bgs at a location approximately 10 feet southwest of RMW-23. At this location, the injection pressure was once again modulated between 100 and 200 psi. At the 30-foot bgs interval, a small amount of ABC$^+$ injectate was observed emerging from RMW-23.

At the IP-P-04 injection location, the DP rig encountered refusal at a shallow depth. Various attempts were made before the DP rig was able to successfully extend to a depth of 55 feet bgs at a location approximately 10 feet northeast of RMW-23. All nine depth intervals of this injection location were treated at a pressure of 100 psi without incident. Redox Tech staff prepared a field summary of their injection activities, which is provided as Appendix A.

"Daylighting" is a term that refers to a condition where the treatment fluid emerges from the ground surface or within a nearby monitoring well. Ideally, the injected material would displace a uniform disk of soil, in this case with a radius of about 8 feet from the injection point. In reality, the distribution of the ABC$^+$ treatment materials is never uniform. The pressurized injectate tends to follow preferential flow pathways that occur along zones of weakness within the soil fabric, such as remnant foliation, fractures, joints, and soil heterogeneities. Because this pilot study has demonstrated that soil in the affected area is prone to preferential pathways, this tendency can be compensated for in the design of a full-scale treatment program. These are discussed in Section 4.3.

3.5 Pilot Study Performance Monitoring

Because ABC$^+$ injectate was observed to have "daylighted" at several of the monitoring wells located nearest to the injection points, modifications were necessarily developed and applied to the performance monitoring program. ABC$^+$ injectate was observed to have entered well RMW-27A within the upgradient pilot study area. Within the downgradient pilot study area, ABC$^+$ injectate was observed to have entered observation well OW-6A and permanent wells RMW-23, and RMW-23A.

Initially, the field response was to monitor and observe the specific conductivity of the performance monitoring wells, the thought being that the ABC$^+$ injectate might gradually migrate out of the wells without need for more aggressive field intervention. During this period of time, TRC field technicians collected routine measurements of specific conductivity to determine if there were apparent trends. Although specific conductivity was determined to be declining within the "daylighted" wells, TRC could discern that ABC$^+$ injectate was still present within each of these wells at concentrations greater than in the adjacent aquifer.

Initially, solid PVC slugs were used to displace the ABC+-containing groundwater within each well casing and attempt to force it back out into the surrounding aquifer. While additional improvements to water quality were observed using this method, there continued to be evidence that ABC+ within each of the affected wells exceeded the concentrations of the nearby aquifer. In concert with SC DHEC, a decision was made to conduct aggressive redevelopment of the affected wells. These well redevelopment activities resulted in a pronounced improvement of the water quality of monitoring wells that were influenced by the injection activities. As a consequence, TRC has resampled each of these wells for comparison with the groundwater quality measurements collected from the DP samples that were collected during the latest round of groundwater sampling that was conducted in February 2017.

Following completion of the ABC+ injections, TRC conducted monitoring of groundwater indicator parameters on a roughly monthly basis. This initial performance monitoring program was conducted at the various observation wells located proximal to the injection points. The purpose of this initial program of monitoring indicator parameters was to attempt to discern when there was first evidence of the ABC+ traversing from the injection location to the nearest monitoring well location.

In January 2017, there was sufficient field evidence to suggest that a more comprehensive monitoring event could be conducted to better evaluate the overall performance of the pilot study. During this performance monitoring event, TRC conducted sampling of the various monitoring and observation wells, as well as supplementing these activities with the collection of groundwater samples from Geoprobe® direct-push sampling probes. The combined application of both permanent well data and DP test results has allowed TRC to develop a more comprehensive interpretation of the pilot study data. A more detailed discussion of this information and data follows.

The various data collected during the performance monitoring of the ABC+ pilot study have been summarized in the tables that follow. Figures 3-8 and 3-9 of the report illustrate the locations of each of the groundwater monitoring locations utilized to evaluate the upgradient and downgradient plume areas. These figures highlight both the permanent well locations, as well as the one-time, direct push locations.

	UPGRADIENT PLUME	DOWNGRADIENT PLUME
PERMANENT MONITORING WELLS	RMW-2, RMW-18/18A, RMW-20/20A, RMW-21/21A, RMW-27/27A, 27B	MG-05/05A, RMW-17/17A, RMW-23/23A/23B, RMW-28A
PILOT STUDY OBSERVATION WELLS	OW-01, OW-02, OW-03A	OW-04, OW-05, OW-06A
DIRECT PUSH LOCATIONS	DP-01 through DP-09	DP-11 through DP-19

The performance monitoring activities conducted during the ABC+ pilot study are summarized below:

SAMPLING EVENT/DATE	PARAMETERS	SELECTED WELL GROUPINGS
Pre-injection (May 24-28, 2016 targeted resampling June 14, 2016)	VOCs, potassium, sulfate, total organic carbon (selected wells), field screening parameters (pH, Oxidation/Reduction Potential (ORP), DO, conductivity, temperature, turbidity, ferrous iron)	Permanent monitoring wells in the pilot study area Pilot study observation wells
Month 1 (July 27, 2016)	pH, ORP, DO, conductivity, temperature, ferrous iron, sulfate	Permanent monitoring wells Pilot study observation wells
Month 2 (September 7-9, 2016)	pH, ORP, DO, conductivity, temperature, sulfate	Permanent monitoring wells in the pilot study area Pilot study observation wells
Month 3 (October 3-5, 2016)	pH, ORP, DO, conductivity, temperature	Permanent monitoring wells in the pilot study area Pilot study observation wells
Month 4 (November 15-21, 2016 and December 1-2, 2016)	All wells: pH, ORP, DO, conductivity, temperature, ferrous iron, sulfate Selected wells: VOCs, dissolved gases, potassium, sulfide, TOC	Permanent monitoring wells in the pilot study area Pilot study observation wells
Month 5 (January 20-27, 2017)	All wells: pH, ORP, DO, conductivity, temperature, turbidity, ferrous iron, sulfate Selected wells: VOCs, dissolved gases, potassium, sulfide, TOC	Permanent monitoring wells in the pilot study area Pilot study observation wells
Month 6 (February 16 – March 1, 2017)	pH, ORP, DO, conductivity, temperature, ferrous iron, sulfate, sulfide, potassium, VOCs, dissolved gases	Permanent monitoring wells in the pilot study area Pilot study observation wells Direct push samples in the pilot study area

Table 3-3 provides a summary of the results of field and laboratory analytical results collected from the various permanent monitoring and observation well locations during the ABC+ pilot study. Table 3-4 provides the results of the various field and laboratory results that were collected from the direct push sample locations. A compilation of the full package of laboratory data sheets are included in Appendix B. A discussion of these results as they relate to TRC's

observations, findings, and recommendations regarding the efficacy and performance of the ABC$^+$ (*i.e.*, integrated ERD and ZVI treatment methods) treatment protocol is presented in Section 4 of this report.

In addition to the ongoing groundwater monitoring activities that were conducted at the site, TRC deployed down-well specific conductivity (SC) sensors connected to data-loggers that were installed at each pilot study area. By using these sensors, TRC was able to conduct more precise observations of when the ABC$^+$ injectate material initially began to appear at each well so equipped. For the upgradient plume area, a conductivity sensor was installed in observation well OW-02. This sensor operated continuously until its removal on January 16, 2017. During its period of active operation, there were no obvious indications of ABC$^+$ treatment materials entering this well (as evidence by changes in specific conductivity).

For the downgradient plume area, a conductivity sensor was installed in observation well OW-05. The sensor also operated continuously until its removal on January 16, 2017. The conductivity data from this sensor showed that a significant increase in conductivity began to occur on January 3, 2017. The nature of this rise in observed conductivity leads TRC to conclude that the ABC$^+$ treatment material had finally reached this well. Figure 3-10 presents a compilation of time versus specific conductivity data for observation well OW-05. Note that well OW-05 is located between 30 and 45 feet from the nearest of the three ABC$^+$ injection points. Based on nearby sidegradient and upgradient DP results, we can assume that the ABC$^+$ injectate achieved an initial average distance of at least 10 feet from the nearest injection point during injection. Using this as a basis, the rate of migration to well OW-05 can be calculated to be approximately 40 to 70 feet per year. This migration rate likely underestimates the actual rate of groundwater flow, as the location of well OW-05 is not likely situated along the centerline of the downgradient plume migration direction.

Table 3-1
Well Construction Data Summary

Well ID	Monitored Interval	Well Diameter (inches)	Northing	Easting	Ground Surface Elevation (ft MSL)	Top of Well Casing Elevation (ft MSL)	Total Well Depth (ft BGS)	Well Screen Interval (ft BGS)	Well Completion
MG-05	Water Table	1	1028929.331	1440706.873	670.03	669.77	20	10-20	Flush
MG-05A	Intermediate	2	1028918.168	1440709.553	670.23	673.18	55	50-55	Above grade
RMW-02	Water Table	2	1029038.558	1440286.92	687.05	686.99	29	19-29	Flush
RMW-17	Water Table	2	1028781.464	1440765.901	674.16	676.99	17	7-17	Above grade
RMW-17A	Intermediate	2	1028780.534	1440769.918	674.09	676.94	56	51-56	Above grade
RMW-18	Water Table	2	1028999.353	1440138.4	685.95	688.96	25	15-25	Above grade
RMW-18A	Intermediate	2	1029000.245	1440133.515	685.86	688.96	55	50-55	Above grade
RMW-20	Water Table	2	1028872.996	1440257.536	684.53	687.45	23	13-23	Above grade
RMW-20A	Intermediate	2	1028869.054	1440256.479	684.8	687.35	55	50-55	Above grade
RMW-20B	Top of Rock	2	1028863.852	1440255.1	684.5	687.1	108	103-108	Above grade
RMW-20C	Bedrock	2	1028857.563	1440254.491	687.26	687.26	119	114-119	Above grade
RMW-21	Water Table	2	1028957.931	1440257.111	688.52	688.52	24	14-24	Above grade
RMW-21A	Intermediate	2	1028963.108	1440258.52	688.56	688.56	55	50-55	Above grade
RMW-23	Water Table	2	1028901.862	1440601.755	675.47	678.49	16	6-16	Above grade
RMW-23A	Intermediate	2	1028899.181	1440604.209	675.06	677.94	55	50-55	Above grade
RMW-23B	Top of Rock	2	1028896.445	1440610.401	674.5	677.88	92	87-92	Above grade
RMW-23C	Bedrock	2	1028893.709	1440616.455	674.45	677.44	98	93-98	Above grade
RMW-23D	Bedrock	2	1028915.91	1440573.78	677.6	680.23	123	118-123	Above grade
RMW-27	Water Table	2	1029049.48	1440058.33	684.96	687.91	25	15-25	Above grade
RMW-27A	Intermediate	2	1029050.23	1440053.17	684.91	687.79	55	50-55	Above grade
RMW-27B	Top of Rock	2	1029050.45	1440048.49	684.85	687.83	96.5	91.5-96.5	Above grade
RMW-28A	Intermediate	2	1028791.41	1440598.85	678.42	681.5	55	50-55	Above grade
RMW-28B	Top of Rock	2	1028793.26	1440592.44	678.4	681.19	98	93-98	Above grade
OW-01	Water Table	2	1440085.9	1029031.23	685.42	688.51	25	15 - 25	Above grade
OW-02	Water Table	2	1440077.27	1029025.7	685.3	688.77	25	15 - 25	Above grade
OW-03A	Intermediate	2	1440059.79	1029031.77	685.43	688.5	45	35-45	Above grade
OW-04	Water Table	2	1440632.13	1028890.58	673.58	676.92	25	15 - 25	Above grade
OW-05	Water Table	2	1440626.14	1028882.85	673.79	676.99	25	15 - 25	Above grade
OW-06A	Intermediate	2	1440610.27	1028885.65	674.86	678.33	45	35-45	Above grade

Table 3-2
Groundwater Elevation Measurements
May 24, 2016

Well ID	Measuring Point Elevation	Depth to Water	Water Elevation
MG-05	669.77	5.31	664.46
MG-05A	673.18	8.20	664.98
OW-01	688.51	19.39	669.12
OW-02	688.77	19.65	669.12
OW-03A	688.50	19.34	669.16
OW-04	676.92	12.00	664.92
OW-05	676.99	12.03	664.96
OW-06A	678.33	13.26	665.07
RMW-02	686.99	19.67	667.32
RMW-17	676.99	12.97	664.02
RMW-17A	676.94	12.98	663.96
RMW-18	688.96	20.32	668.64
RMW-18A	688.96	20.23	668.73
RMW-20	687.45	20.30	667.15
RMW-20A	687.35	20.36	666.99
RMW-21	688.52	21.07	667.45
RMW-21A	688.56	21.20	667.36
RMW-23	678.49	13.36	665.13
RMW-23A	677.94	12.73	665.21
RMW-23B	677.88	12.61	665.27
RMW-27	687.91	18.25	669.66
RMW-27A	687.79	18.55	669.24
RMW-27B	687.83	18.83	669.00
RMW-28A	681.50	16.49	665.01
RMW-29	688.00	18.63	669.37

Table 3-3
Pilot Study Field Parameter and Laboratory Results
Monitoring and Observation Well Samples

PARAMETER	SAMPLE LOCATION/DATE														
	MG-05								MG-05A						
	Pre-Injection		Post-Injection						Pre-Injection	Post-Injection					
	05/28/2016	06/14/2016	07/27/2016	09/07/2016	10/03/2016	11/17/2016	01/24/2017	02/24/2017	05/28/2016	07/27/2016	09/07/2016	10/05/2016	11/17/2016	01/24/2017	02/24/2017
VOCs [1] (mg/L)															
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	< 0.0050	< 0.05	NA	NA	NA	NA	NA	< 0.05
1,1-Dichloroethane	**0.00095 J**	**0.0011 J**	NA	NA	NA	NA	NA	< 0.0050	< 0.05	NA	NA	NA	NA	NA	< 0.05
1,1-Dichloroethene	**0.00043 J**	**0.00039 J**	NA	NA	NA	NA	NA	< 0.0050	< 0.05	NA	NA	NA	NA	NA	< 0.05
2-Butanone (MEK)	< 0.01	< 0.01	NA	NA	NA	NA	NA	< 0.01	< 0.1	NA	NA	NA	NA	NA	< 0.1
2-Hexanone	< 0.01	< 0.01	NA	NA	NA	NA	NA	< 0.01	< 0.1	NA	NA	NA	NA	NA	< 0.1
4-Methyl-2-pentanone	< 0.01	< 0.01	NA	NA	NA	NA	NA	< 0.01	< 0.1	NA	NA	NA	NA	NA	< 0.1
Acetone	< 0.02	< 0.02	NA	NA	NA	NA	NA	< 0.02	< 0.2	NA	NA	NA	NA	NA	< 0.2
Benzene	**0.0013 J**	**0.0016 J**	NA	NA	NA	NA	NA	< 0.0050	< 0.05	NA	NA	NA	NA	NA	< 0.05
Chloroform	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	< 0.0050	< 0.05	NA	NA	NA	NA	NA	< 0.05
cis-1,2-Dichloroethene	**0.0044 J**	**0.0048 J**	NA	NA	NA	NA	NA	**0.00064 J**	< 0.05	NA	NA	NA	NA	NA	< 0.05
Ethylbenzene	< 0.00053 J u	< 0.0050	NA	NA	NA	NA	NA	< 0.0050	< 0.05	NA	NA	NA	NA	NA	< 0.05
Isopropylbenzene	< 0.0050	**0.00015 J**	NA	NA	NA	NA	NA	< 0.0050	< 0.05	NA	NA	NA	NA	NA	< 0.05
Methylene chloride	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	< 0.0050	< 0.05	NA	NA	NA	NA	NA	< 0.05
Methyl acetate	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	< 0.0050	< 0.05	NA	NA	NA	NA	NA	< 0.05
Tetrachloroethene	**0.014**	**0.015**	NA	NA	NA	NA	NA	**0.016**	**0.5**	NA	NA	NA	NA	NA	**0.79**
Trichloroethene	**0.0022 J**	**0.0024 J**	NA	NA	NA	NA	NA	**0.00046 J**	< 0.05	NA	NA	NA	NA	NA	< 0.05
Vinyl chloride	< 0.0020	< 0.0020	NA	NA	NA	NA	NA	< 0.0020	< 0.02	NA	NA	NA	NA	NA	< 0.02
Xylenes, total	< 0.0061 u	**0.0052**	NA	NA	NA	NA	NA	< 0.0050	< 0.05	NA	NA	NA	NA	NA	< 0.05
Gases (ug/L)															
Methane	NA	NA	NA	NA	NA	NA	NA	< 0.50 n	NA	NA	NA	NA	NA	NA	< 0.50 n
Ethane	NA	NA	NA	NA	NA	NA	NA	< 0.10 n	NA	NA	NA	NA	NA	NA	< 0.10 n
Ethene	NA	NA	NA	NA	NA	NA	NA	< 0.10 n	NA	NA	NA	NA	NA	NA	< 0.10 n
Metals (mg/L)															
Potassium	**1.2 J**	NA	NA	NA	NA	NA	NA	**0.49**	**1.2 J**	NA	NA	NA	NA	NA	**0.75**
General Chemistry (mg/L)															
Sulfate	**6.3**	NA	**4.4**	**1.7**	NA	**2.4**	**23**	**19**	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0
Sulfide	NA	NA	NA	NA	NA	NA	NA	**1.7**	NA	NA	NA	NA	NA	NA	< 1.0
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA	**0.97 J**	NA	NA	NA	NA	NA	NA	**0.46 J**
Field Parameters															
pH (s.u.)	NA	NA	**4.86**	**4.77**	**4.65**	**4.32**	**4.42**	**4.33**	**6.18**	**5.92**	**6.63**	**6.11**	**6.24**	**6.4**	**5.79**
Temperature (°C)	NA	NA	NA	**26.36**	**21.21**	**16.01**	**20.22**	**19.44**	**19.53**	NA	**29.74**	**19.77**	**15.39**	**22.47**	**18.56**
Specific Conductivity (uS/cm)	NA	NA	**111**	**49**	**86**	**69**	**59**	**41**	**101**	**183**	**111**	**169**	**108**	**117**	**80**
Dissolved Oxygen (mg/L)	NA	NA	**0.12 [2]**	**0.48**	**0.37**	**1.31**	**3.49**	**2.92**	**8.32**	**14.93 [2]**	**3.96**	**4.78**	**7.05**	**5.07**	**5.83**
Oxidation Reduction Potential (mV)	NA	NA	**129.2**	**197**	**548**	**530**	**233**	**347**	**209**	**182.2**	**316**	**368**	**318**	**194**	**207**
Turbidity (ntu)	NA	NA	NA	NA	NA	NA	NA	NA	**0**	NA	NA	NA	NA	NA	NA
Dissolved Ferrous Iron (mg/L)	NA	NA	NA	NA	**0.2**	**0**	**0**	**0**	**0**	NA	NA	**0**	**0**	**0**	**0**

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

j+ - Concentration considered an estimate biased high based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-3
Pilot Study Field Parameter and Laboratory Results
Monitoring and Observation Well Samples

PARAMETER	SAMPLE LOCATION/DATE														
	OW-01								OW-02						
	Pre-Injection	Post-Injection							Pre-Injection	Post-Injection					
	05/26/2016	07/27/2016	09/08/2016	10/04/2016	11/18/2016	12/02/2016	01/24/2017	02/20/2017	05/25/2016	07/27/2016	09/08/2016	10/05/2016	11/18/2016	01/24/2017	02/20/2017
VOCs [1] (mg/L)															
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	< 0.25	NA	NA	NA	NA	NA	NA	< 0.1	< 0.1	NA	NA	NA	NA	NA	< 0.05
1,1-Dichloroethane	< 0.25	NA	NA	NA	NA	NA	NA	< 0.1	< 0.1	NA	NA	NA	NA	NA	< 0.05
1,1-Dichloroethene	< 0.25	NA	NA	NA	NA	NA	NA	< 0.1	< 0.1	NA	NA	NA	NA	NA	< 0.05
2-Butanone (MEK)	< 0.5	NA	NA	NA	NA	NA	NA	< 0.2	< 0.2	NA	NA	NA	NA	NA	< 0.1
2-Hexanone	< 0.5	NA	NA	NA	NA	NA	NA	< 0.2	< 0.2	NA	NA	NA	NA	NA	< 0.1
4-Methyl-2-pentanone	< 0.5	NA	NA	NA	NA	NA	NA	< 0.2	< 0.2	NA	NA	NA	NA	NA	< 0.1
Acetone	< 1	NA	NA	NA	NA	NA	NA	< 0.4	< 0.4	NA	NA	NA	NA	NA	< 0.2
Benzene	< 0.25	NA	NA	NA	NA	NA	NA	< 0.1	< 0.1	NA	NA	NA	NA	NA	< 0.05
Chloroform	< 0.25	NA	NA	NA	NA	NA	NA	< 0.1	< 0.1	NA	NA	NA	NA	NA	< 0.05
cis-1,2-Dichloroethene	< 0.25	NA	NA	NA	NA	NA	NA	< 0.1	**0.0045 J**	NA	NA	NA	NA	NA	< 0.05
Ethylbenzene	< 0.25	NA	NA	NA	NA	NA	NA	< 0.1	< 0.1	NA	NA	NA	NA	NA	< 0.05
Isopropylbenzene	< 0.25	NA	NA	NA	NA	NA	NA	< 0.1	< 0.1	NA	NA	NA	NA	NA	< 0.05
Methylene chloride	< 0.25	NA	NA	NA	NA	NA	NA	< 0.1	< 0.1	NA	NA	NA	NA	NA	< 0.05
Methyl acetate	< 0.25	NA	NA	NA	NA	NA	NA	< 0.1	< 0.1	NA	NA	NA	NA	NA	< 0.05
Tetrachloroethene	**5.4**	NA	NA	NA	NA	NA	NA	**1.7**	**3.6**	NA	NA	NA	NA	NA	**1**
Trichloroethene	< 0.25	NA	NA	NA	NA	NA	NA	**0.0097 J**	**0.0059 J**	NA	NA	NA	NA	NA	< 0.05
Vinyl chloride	< 0.1	NA	NA	NA	NA	NA	NA	< 0.04	< 0.04	NA	NA	NA	NA	NA	< 0.02
Xylenes, total	< 0.25	NA	NA	NA	NA	NA	NA	< 0.1	< 0.1	NA	NA	NA	NA	NA	< 0.05
Gases (ug/L)															
Methane	NA	NA	NA	NA	NA	NA	NA	**720 n**	NA	NA	NA	NA	NA	NA	**62 n**
Ethane	NA	NA	NA	NA	NA	NA	NA	**0.33 n**	NA	NA	NA	NA	NA	NA	**0.15 n**
Ethene	NA	NA	NA	NA	NA	NA	NA	**0.14 n**	NA	NA	NA	NA	NA	NA	< 0.10 n
Metals (mg/L)															
Potassium	**1.4 J**	NA	NA	NA	NA	NA	NA	**0.78**	**1.8 J**	NA	NA	NA	NA	NA	**0.79**
General Chemistry (mg/L)															
Sulfate	**100**	**110**	**120**	NA	**160**	NA	**170**	**130**	**120**	**130**	**130**	NA	**170**	**130**	**130**
Sulfide	NA	NA	NA	NA	NA	NA	NA	**1.1**	NA	NA	NA	NA	NA	NA	**0.83 J**
Total Organic Carbon	**1.1 B**	NA	NA	NA	NA	NA	NA	**3.9**	**1.2 B**	NA	NA	NA	NA	NA	**1.8**
Field Parameters															
pH (s.u.)	**5.53**	**4.85**	**4.48**	**5.06**	**5**	**4.55**	**4.95**	**4.84**	**5.72**	**4.86**	**4.83**	**4.87**	**4.99**	**4.86**	**4.54**
Temperature (°C)	**20.83**	NA	**24.73**	**22.17**	**17.64**	**18.46**	**19.44**	**21.5**	**21.31**	NA	**25.47**	**20.71**	**17.96**	**20.09**	**22.01**
Specific Conductivity (uS/cm)	**767**	**766**	**624**	**836**	**610**	**647**	**607**	**373**	**917**	**811**	**512**	**817**	**516**	**527**	**371**
Dissolved Oxygen (mg/L)	**3.79**	**0.06 [2]**	**2.48**	**2.44**	**5.01**	**1.05**	**5.44**	**0.22**	**3.7**	**9.91 [2]**	**6.58**	**3.73**	**6.1**	**4.30**	**1.68**
Oxidation Reduction Potential (mV)	**303**	**308.9**	**257**	**166**	**-47**	**169**	**137**	**94**	**219**	**77.6**	**374**	**422**	**106**	**180**	**479**
Turbidity (ntu)	**9.48**	NA	NA	NA	NA	NA	NA	NA	**15.8**	NA	NA	NA	NA	NA	NA
Dissolved Ferrous Iron (mg/L)	**0**	NA	NA	**0.3**	**0**	NA	**0**	**0**	**0**	NA	NA	**0**	**0**	**0**	**0**

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

j+ - Concentration considered an estimate biased high based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-3
Pilot Study Field Parameter and Laboratory Results
Monitoring and Observation Well Samples

PARAMETER	SAMPLE LOCATION/DATE															
	OW-03A							OW-04								
	Pre-Injection	Post-Injection						Pre-Injection		Post-Injection						
	05/26/2016	07/27/2016	09/07/2016	10/05/2016	12/02/2016	01/24/2017	02/20/2017	05/28/2016	06/14/2016	07/27/2016	09/07/2016	10/03/2016	11/18/2016	12/02/2016	01/20/2017	02/24/2017
VOCs [1] (mg/L)																
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	< 0.05	NA	NA	NA	< 0.025	NA	< 0.05	< 0.0050	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050
1,1-Dichloroethane	< 0.05	NA	NA	NA	< 0.025	NA	< 0.05	< 0.0050	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050
1,1-Dichloroethene	< 0.05	NA	NA	NA	< 0.025	NA	< 0.05	< 0.0050	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050
2-Butanone (MEK)	< 0.1	NA	NA	NA	< 0.05	NA	< 0.1	< 0.01	< 0.01	NA	NA	NA	< 0.01	NA	< 0.01	< 0.01
2-Hexanone	< 0.1	NA	NA	NA	< 0.05	NA	< 0.1	< 0.01	< 0.01	NA	NA	NA	< 0.01	NA	< 0.01	< 0.01
4-Methyl-2-pentanone	< 0.1	NA	NA	NA	< 0.05	NA	< 0.1	< 0.01	< 0.01	NA	NA	NA	< 0.01	NA	< 0.01	< 0.01
Acetone	< 0.2	NA	NA	NA	< 0.1	NA	< 0.2	< 0.02	< 0.0037 J u	NA	NA	NA	< 0.02	NA	< 0.02	**0.0033 J**
Benzene	< 0.05	NA	NA	NA	< 0.025	NA	< 0.05	< 0.0050	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050
Chloroform	**0.0068 J j**	NA	NA	NA	< 0.025	NA	< 0.05	< 0.0050	**0.00030 J**	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050
cis-1,2-Dichloroethene	< 0.05	NA	NA	NA	< 0.025	NA	< 0.05	**0.0022 J**	**0.0026 J**	NA	NA	NA	< 0.0050	NA	**0.0057**	**0.0050**
Ethylbenzene	< 0.05	NA	NA	NA	< 0.025	NA	< 0.05	< 0.012 u	**0.00040 J**	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050
Isopropylbenzene	< 0.05	NA	NA	NA	< 0.025	NA	< 0.05	< 0.0050	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050
Methylene chloride	< 0.05	NA	NA	NA	< 0.025	NA	< 0.05	< 0.0050	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050
Methyl acetate	< 0.05	NA	NA	NA	< 0.025	NA	< 0.05	< 0.0050	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050
Tetrachloroethene	**0.72 j**	NA	NA	NA	**1.3**	NA	**0.66**	**0.028**	**0.038**	NA	NA	NA	**0.033**	NA	**0.12**	**0.1**
Trichloroethene	< 0.05	NA	NA	NA	< 0.025	NA	< 0.05	**0.00033 J**	**0.00038 J**	NA	NA	NA	< 0.0050	NA	< 0.0050	**0.00071 J**
Vinyl chloride	< 0.02	NA	NA	NA	< 0.01	NA	< 0.02	< 0.0020	< 0.0020	NA	NA	NA	< 0.0020	NA	< 0.0020	< 0.0020
Xylenes, total	< 0.05	NA	NA	NA	< 0.025	NA	< 0.05	< 0.038 u	**0.00092 J**	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050
Gases (ug/L)																
Methane	NA	NA	NA	NA	< 10	NA	< 0.50 n	NA	NA	NA	NA	NA	**880**	NA	**5.2 n**	**3.3 n**
Ethane	NA	NA	NA	NA	< 10	NA	< 0.10 n	NA	NA	NA	NA	NA	< 10	NA	**0.0071 Jn**	< 0.10 n
Ethene	NA	NA	NA	NA	< 10	NA	< 0.10 n	NA	NA	NA	NA	NA	< 10	NA	< 0.1 n	< 0.10 n
Metals (mg/L)																
Potassium	**0.94 J**	NA	NA	NA	**0.81**	NA	**0.8**	**2.7 J**	NA	NA	NA	NA	**1**	NA	**0.92**	**0.91**
General Chemistry (mg/L)																
Sulfate	**2.4**	**0.66 J**	< 1.0	NA	< 1.0	< 1.0	< 1.0	**23**	NA	**0.59 J**	< 1.0	NA	**18**	NA	**5.4**	**1.6**
Sulfide	NA	NA	NA	NA	< 1.0	NA	**0.77 J**	NA	NA	NA	NA	NA	< 1.0	NA	< 1.0 uj	**0.64 J**
Total Organic Carbon	< 0.44 BJ u	NA	NA	NA	< 1.0	NA	**0.36 J**	< 0.50 BJ u	**0.23 J**	NA	NA	NA	**2.3**	NA	< 1.0	**1.2**
Field Parameters																
pH (s.u.)	**6.03**	**5.43**	**6.32**	**6.77**	**4.55**	**5.41**	**4.97**	**5.8**	**5.17**	**4.19**	**5.31**	**5.48**	**6.12**	**4.39**	**5.37**	**5.02**
Temperature (°C)	**22.48**	NA	**30.99**	**21.28**	**17.9**	**20.27**	**22.43**	**19.6**	**19.85**	NA	**27.24**	**22.45**	**18.66**	**17.46**	**20.03**	**19.86**
Specific Conductivity (uS/cm)	**58**	**49**	**33**	**53**	**35**	**40**	**25**	**96**	**204**	**65**	**37**	**87**	**148**	**39**	**111**	**78**
Dissolved Oxygen (mg/L)	**5.71**	**0.05 [2]**	**6.18**	**6.20**	**8.19**	**7.87**	**6.14**	**0.21**	NA	**7.53 [2]**	**2.24**	**2.19**	**3.55**	**1.98**	**1.77**	**1.11**
Oxidation Reduction Potential (mV)	**265**	**260.7**	**279**	**277**	**250**	**176**	**297**	**215**	NA	**100.4**	**127**	**156**	**-47**	**269**	**114**	**134**
Turbidity (ntu)	**1.49**	NA	NA	NA	NA	NA	NA	**0**	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Ferrous Iron (mg/L)	**0**	NA	NA	**0**	**0**	**0**	**0**	**0**	NA	NA	NA	**5.5**	**>10**	NA	**8**	**2.5**

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

j+ - Concentration considered an estimate biased high based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-3
Pilot Study Field Parameter and Laboratory Results
Monitoring and Observation Well Samples

PARAMETER	SAMPLE LOCATION/DATE													
	OW-05							OW-06A						
	Pre-Injection	Post-Injection						Pre-Injection		Post-Injection				
	05/25/2016	07/27/2016	09/07/2016	10/04/2016	11/18/2016	01/20/2017	02/24/2017	05/27/2016	06/14/2016	07/27/2016	09/07/2016	10/05/2016	11/21/2016	01/26/2017	02/28/2017
VOCs [1] (mg/L)															
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	< 0.0050	NA	NA	NA	< 0.0050	< 0.0050	< 0.0050	< 0.05	< 0.025	NA	NA	NA	NA	NA	< 0.0050
1,1-Dichloroethane	< 0.0050	NA	NA	NA	< 0.0050	< 0.0050	< 0.0050	< 0.05	**0.0030 J**	NA	NA	NA	NA	NA	**0.0012 J**
1,1-Dichloroethene	< 0.0050	NA	NA	NA	< 0.0050	< 0.0050	< 0.0050	< 0.05	< 0.025	NA	NA	NA	NA	NA	< 0.0050
2-Butanone (MEK)	< 0.01	NA	NA	NA	< 0.01	**0.14**	**0.06**	< 0.1	< 0.05	NA	NA	NA	NA	NA	**0.022**
2-Hexanone	< 0.01	NA	NA	NA	< 0.01	< 0.01	< 0.01	< 0.1	< 0.05	NA	NA	NA	NA	NA	< 0.01
4-Methyl-2-pentanone	< 0.01	NA	NA	NA	< 0.01	< 0.01	< 0.01	< 0.1	< 0.05	NA	NA	NA	NA	NA	< 0.01
Acetone	< 0.0021 J u	NA	NA	NA	< 0.02	**0.026**	**0.012 J**	< 0.2	< 0.1	NA	NA	NA	NA	NA	**0.016 J**
Benzene	< 0.0050	NA	NA	NA	< 0.0050	< 0.0050	< 0.0050	< 0.05	< 0.025	NA	NA	NA	NA	NA	< 0.0050
Chloroform	< 0.0050	NA	NA	NA	< 0.0050	< 0.0050	< 0.0050	**0.0061 J**	**0.0013 J**	NA	NA	NA	NA	NA	< 0.0050
cis-1,2-Dichloroethene	**0.0045 J**	NA	NA	NA	< 0.0050	**0.0097**	**0.0058**	**0.013 J**	**0.022 J**	NA	NA	NA	NA	NA	**0.0062**
Ethylbenzene	< 0.0050	NA	NA	NA	< 0.0050	< 0.0050	< 0.0050	< 0.05	< 0.025	NA	NA	NA	NA	NA	< 0.0050
Isopropylbenzene	< 0.0050	NA	NA	NA	< 0.0050	< 0.0050	< 0.0050	< 0.05	< 0.025	NA	NA	NA	NA	NA	< 0.0050
Methylene chloride	< 0.0050	NA	NA	NA	< 0.0050	< 0.0050	< 0.0050	< 0.05	< 0.025	NA	NA	NA	NA	NA	**0.00049 J**
Methyl acetate	< 0.0050	NA	NA	NA	< 0.0050	< 0.0050	< 0.0050	< 0.05	< 0.025	NA	NA	NA	NA	NA	**0.0018 J**
Tetrachloroethene	**0.028**	NA	NA	NA	**0.019**	**0.033**	**0.031**	**0.52**	**0.75**	NA	NA	NA	NA	NA	**0.016**
Trichloroethene	**0.00037 J**	NA	NA	NA	< 0.0050	**0.0071**	**0.0032 J**	< 0.05	**0.0031 J**	NA	NA	NA	NA	NA	**0.0011 J**
Vinyl chloride	< 0.0020	NA	NA	NA	< 0.0020	< 0.0020	< 0.0020	< 0.02	< 0.01	NA	NA	NA	NA	NA	< 0.0020
Xylenes, total	< 0.0050	NA	NA	NA	< 0.0050	< 0.0050	< 0.0050	< 0.018 J u	**0.02 J**	NA	NA	NA	NA	NA	< 0.0050
Gases (ug/L)															
Methane	NA	NA	NA	NA	**78**	**3300 n**	**3700 n**	NA	NA	NA	NA	NA	NA	NA	**7600 n**
Ethane	NA	NA	NA	NA	< 10	**0.18 n**	< 0.10 n	NA	NA	NA	NA	NA	NA	NA	**3.0 n**
Ethene	NA	NA	NA	NA	< 10	**0.093 Jn**	**0.10 n**	NA	NA	NA	NA	NA	NA	NA	**1.3 n**
Metals (mg/L)															
Potassium	**0.83 J**	NA	NA	NA	**1.6**	**3.3**	**4.2**	**1.2 J**	NA	NA	NA	NA	NA	NA	**36**
General Chemistry (mg/L)															
Sulfate	**7.2**	**5.5**	< 1.0	NA	**4.5**	**23**	**5.7**	**1.1**	NA	< 50	< 50	NA	< 10	< 10	< 5.0
Sulfide	NA	NA	NA	NA	< 1.0	**1.9**	< 1.0	NA	NA	NA	NA	NA	NA	NA	< 1.0
Total Organic Carbon	< 0.39 BJ u	NA	NA	NA	**3.2**	**68**	**51**	< 0.51 BJ u	**0.24 J**	NA	NA	NA	NA	NA	**130**
Field Parameters															
pH (s.u.)	**5.22**	**3.79**	**4.55**	**4.47**	**4.81**	**6.04**	**4.33**	**5.5**	**4.63**	**6.63**	**6.82**	**6.20**	**6.63**	**6.67**	**6.87**
Temperature (°C)	**21.98**	NA	**22.92**	**21.32**	**19.08**	**20.63**	**19.44**	**20.24**	**20.72**	NA	**28.68**	**20.91**	**16.15**	**17.59**	**19.66**
Specific Conductivity (uS/cm)	**66**	**48**	**37**	**55**	**47**	**358**	**41**	**63**	**59**	**11480**	**5150**	**1940**	**1920**	**1020**	**409**
Dissolved Oxygen (mg/L)	**2.22**	**8.18 [2]**	**3.69**	**3.39**	**6.1**	**0.75**	**2.92**	**0**	NA	**2.39 [2]**	**0.27**	**2.75**	**0**	**0.35**	**0**
Oxidation Reduction Potential (mV)	**294**	**116.6**	**390**	**346**	**234**	**20**	**347**	**263**	NA	**-113**	**-254**	**122**	**-175**	**-68**	**-197**
Turbidity (ntu)	**2.81**	NA	NA	NA	NA	NA	NA	**0**	NA	NA	NA	NA	NA	NA	NA
Dissolved Ferrous Iron (mg/L)	**0**	NA	NA	**3.0**	**0.5**	**9**	**0**	**0**	NA	NA	NA	NA	**>10**	**>10**	**>10**

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

j+ - Concentration considered an estimate biased high based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-3
Pilot Study Field Parameter and Laboratory Results
Monitoring and Observation Well Samples

PARAMETER	SAMPLE LOCATION/DATE														
	RMW-02								RMW-17						
	Pre-Injection	Post-Injection							Pre-Injection	Post-Injection					
	05/28/2016	07/27/2016	09/08/2016	09/09/2016	10/05/2016	12/02/2016	01/27/2017	02/28/2017	05/29/2016	07/27/2016	09/07/2016	10/04/2016	11/17/2016	01/24/2017	02/22/2017
VOCs [1] (mg/L)															
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	< 2.5	NA	NA	NA	NA	NA	NA	< 1	< 0.025	NA	NA	NA	NA	NA	< 0.025
1,1-Dichloroethane	< 2.5	NA	NA	NA	NA	NA	NA	< 1	< 0.025	NA	NA	NA	NA	NA	< 0.025
1,1-Dichloroethene	< 2.5	NA	NA	NA	NA	NA	NA	< 1	< 0.025	NA	NA	NA	NA	NA	< 0.025
2-Butanone (MEK)	< 5	NA	NA	NA	NA	NA	NA	< 2	< 0.05	NA	NA	NA	NA	NA	< 0.05
2-Hexanone	< 5	NA	NA	NA	NA	NA	NA	< 2	< 0.05	NA	NA	NA	NA	NA	< 0.05
4-Methyl-2-pentanone	< 5	NA	NA	NA	NA	NA	NA	< 2	< 0.05	NA	NA	NA	NA	NA	< 0.05
Acetone	< 10	NA	NA	NA	NA	NA	NA	< 4	< 0.1	NA	NA	NA	NA	NA	< 0.1
Benzene	< 2.5	NA	NA	NA	NA	NA	NA	< 1	< 0.025	NA	NA	NA	NA	NA	< 0.025
Chloroform	< 2.5	NA	NA	NA	NA	NA	NA	< 1	< 0.025	NA	NA	NA	NA	NA	< 0.025
cis-1,2-Dichloroethene	< 2.5	NA	NA	NA	NA	NA	NA	< 1	**0.0077 J**	NA	NA	NA	NA	NA	**0.0025 J**
Ethylbenzene	**17**	NA	NA	NA	NA	NA	NA	**7.9**	< 0.025	NA	NA	NA	NA	NA	< 0.025
Isopropylbenzene	< 2.5	NA	NA	NA	NA	NA	NA	< 1	< 0.025	NA	NA	NA	NA	NA	< 0.025
Methylene chloride	< 2.5	NA	NA	NA	NA	NA	NA	< 1	< 0.025	NA	NA	NA	NA	NA	< 0.025
Methyl acetate	< 2.5	NA	NA	NA	NA	NA	NA	< 1	< 0.025	NA	NA	NA	NA	NA	< 0.025
Tetrachloroethene	< 2.5	NA	NA	NA	NA	NA	NA	< 1	**0.26**	NA	NA	NA	NA	NA	**0.88**
Trichloroethene	< 2.5	NA	NA	NA	NA	NA	NA	< 1	**0.00083 J**	NA	NA	NA	NA	NA	**0.0041 J**
Vinyl chloride	< 1	NA	NA	NA	NA	NA	NA	< 0.4	< 0.01	NA	NA	NA	NA	NA	< 0.01
Xylenes, total	**51**	NA	NA	NA	NA	NA	NA	**25**	< 0.025	NA	NA	NA	NA	NA	< 0.025
Gases (ug/L)															
Methane	NA	NA	NA	NA	NA	NA	NA	**3700 n**	NA	NA	NA	NA	NA	NA	**320 n**
Ethane	NA	NA	NA	NA	NA	NA	NA	< 0.10 n	NA	NA	NA	NA	NA	NA	< 0.10 n
Ethene	NA	NA	NA	NA	NA	NA	NA	**0.22 n**	NA	NA	NA	NA	NA	NA	< 0.10 n
Metals (mg/L)															
Potassium	**38**	NA	NA	NA	NA	NA	NA	**32**	**0.80 J**	NA	NA	NA	NA	NA	**0.56**
General Chemistry (mg/L)															
Sulfate	**12**	**14**	**12**	NA	NA	**9.2**	**9.3**	**8.9**	**20**	**110**	**17**	NA	**20**	**21**	**22**
Sulfide	NA	NA	NA	NA	NA	NA	NA	< 1.0	NA	NA	NA	NA	NA	NA	< 1.0
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA	**7.9**	NA	NA	NA	NA	NA	NA	**0.93 J**
Field Parameters															
pH (s.u.)	**11.89**	**9.68**	**12.74**	**12.80**	**10.64**	**11.43**	**12.5**	**11.36**	**5.05**	**3.89**	**4.75**	**4.78**	**4.76**	**4.76**	**4.28**
Temperature (°C)	**21.3**	NA	**25.16**	**26.65**	**26.14**	**18.03**	**17.81**	**21.23**	**17.05**	NA	**25.97**	**20.48**	**17.3**	**19.87**	**17.24**
Specific Conductivity (uS/cm)	**1320**	**381**	**571**	**644**	**586**	**854**	**1020**	**593**	**103**	**100**	**62**	**100**	**62**	**79**	**85**
Dissolved Oxygen (mg/L)	**0**	**13.78 [2]**	**0**	**0**	**0.67**	**0**	**0.10**	**0**	**0.46**	**7.96 (2)**	**2.17**	**1.76**	**7.65**	**0.48**	**0**
Oxidation Reduction Potential (mV)	**-301**	**-4.0**	**3**	**-95**	**-42**	**-109**	**102**	**-269**	**334**	**105.9**	**375**	**398**	**356**	**451**	**555**
Turbidity (ntu)	**8.07**	NA	NA	NA	NA	NA	NA	NA	**0**	NA	NA	NA	NA	NA	NA
Dissolved Ferrous Iron (mg/L)	**0**	NA	NA	NA	**6.0**	**0.05**	**0**	**0.15**	**0**	NA	NA	**0**	**0**	**0**	**0**

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

j+ - Concentration considered an estimate biased high based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-3
Pilot Study Field Parameter and Laboratory Results
Monitoring and Observation Well Samples

PARAMETER	SAMPLE LOCATION/DATE													
	RMW-17A							RMW-18						
	Pre-Injection	Post-Injection						Pre-Injection	Post-Injection					
	05/29/2016	07/27/2016	09/07/2016	10/04/2016	11/17/2016	01/24/2017	02/22/2017	05/25/2016	07/27/2016	09/08/2016	10/05/2016	11/17/2016	01/27/2017	02/22/2017
VOCs [1] (mg/L)														
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	< 0.05	NA	NA	NA	NA	NA	< 0.25	< 0.1	NA	NA	NA	NA	NA	< 0.25
1,1-Dichloroethane	< 0.05	NA	NA	NA	NA	NA	< 0.25	< 0.1	NA	NA	NA	NA	NA	< 0.25
1,1-Dichloroethene	< 0.05	NA	NA	NA	NA	NA	< 0.25	< 0.1	NA	NA	NA	NA	NA	< 0.25
2-Butanone (MEK)	< 0.1	NA	NA	NA	NA	NA	< 0.5	< 0.2	NA	NA	NA	NA	NA	< 0.5
2-Hexanone	< 0.1	NA	NA	NA	NA	NA	< 0.5	< 0.2	NA	NA	NA	NA	NA	< 0.5
4-Methyl-2-pentanone	< 0.1	NA	NA	NA	NA	NA	< 0.5	< 0.2	NA	NA	NA	NA	NA	< 0.5
Acetone	< 0.2	NA	NA	NA	NA	NA	< 1	< 0.4	NA	NA	NA	NA	NA	< 1
Benzene	< 0.05	NA	NA	NA	NA	NA	< 0.25	< 0.1	NA	NA	NA	NA	NA	< 0.25
Chloroform	< 0.05	NA	NA	NA	NA	NA	< 0.25	< 0.1	NA	NA	NA	NA	NA	< 0.25
cis-1,2-Dichloroethene	**0.0043 J**	NA	NA	NA	NA	NA	< 0.25	**0.036 J**	NA	NA	NA	NA	NA	**0.055 J**
Ethylbenzene	< 0.05	NA	NA	NA	NA	NA	< 0.25	< 0.1	NA	NA	NA	NA	NA	< 0.25
Isopropylbenzene	< 0.05	NA	NA	NA	NA	NA	< 0.25	< 0.1	NA	NA	NA	NA	NA	< 0.25
Methylene chloride	< 0.05	NA	NA	NA	NA	NA	< 0.25	< 0.1	NA	NA	NA	NA	NA	< 0.25
Methyl acetate	< 0.05	NA	NA	NA	NA	NA	< 0.25	< 0.1	NA	NA	NA	NA	NA	< 0.25
Tetrachloroethene	**0.98**	NA	NA	NA	NA	NA	**3.5**	**2.1**	NA	NA	NA	NA	NA	**4.2**
Trichloroethene	< 0.05	NA	NA	NA	NA	NA	< 0.25	< 0.1	NA	NA	NA	NA	NA	< 0.25
Vinyl chloride	< 0.02	NA	NA	NA	NA	NA	< 0.1	< 0.04	NA	NA	NA	NA	NA	< 0.1
Xylenes, total	< 0.05	NA	NA	NA	NA	NA	< 0.25	< 0.1	NA	NA	NA	NA	NA	< 0.25
Gases (ug/L)														
Methane	NA	NA	NA	NA	NA	NA	**0.99 n**	NA	NA	NA	NA	NA	NA	**14 n**
Ethane	NA	NA	NA	NA	NA	NA	< 0.10 n	NA	NA	NA	NA	NA	NA	< 0.10 n
Ethene	NA	NA	NA	NA	NA	NA	< 0.10 n	NA	NA	NA	NA	NA	NA	< 0.10 n
Metals (mg/L)														
Potassium	**1.2 J**	NA	NA	NA	NA	NA	**0.84**	**1.1 J**	NA	NA	NA	NA	NA	**1.3**
General Chemistry (mg/L)														
Sulfate	**37**	**39**	**37**	NA	**39**	**35**	**33**	**50**	**82**	**86**	NA	**93**	**100**	**110**
Sulfide	NA	NA	NA	NA	NA	NA	**0.74 J**	NA	NA	NA	NA	NA	NA	**0.91 J**
Total Organic Carbon	NA	NA	NA	NA	NA	NA	**0.55 J**	NA	NA	NA	NA	NA	NA	**0.90 J**
Field Parameters														
pH (s.u.)	**6.07**	**5.48**	**6.18**	**5.92**	**5.93**	**5.96**	**5.58**	**5.52**	**4.94**	**5**	**5.19**	**5.27**	**4.87**	**4.93**
Temperature (°C)	**18.76**	NA	**26.55**	**21.97**	**15.51**	**18.64**	**18.54**	**22.17**	NA	**22.06**	**22.44**	**17.99**	**15.54**	**20.68**
Specific Conductivity (uS/cm)	**175**	**180**	**118**	**169**	**118**	**143**	**88**	**462**	**563**	**436**	**598**	**421**	**733**	**355**
Dissolved Oxygen (mg/L)	**0**	**6.03 [2]**	**0.71**	**0.70**	**8.95**	**0.09**	**0**	**4.38**	**0.06 [2]**	**3.7**	**4.29**	**9.21**	**4.97**	**4.99**
Oxidation Reduction Potential (mV)	**148**	**54.7**	**299**	**286**	**232**	**337**	**250**	**436**	**347.6**	**373**	**347**	**382**	**213**	**355**
Turbidity (ntu)	**0.93**	NA	NA	NA	NA	NA	NA	**1.27**	NA	NA	NA	NA	NA	NA
Dissolved Ferrous Iron (mg/L)	**0**	NA	NA	**0**	**0**	**0**	**0**	**0**	NA	NA	**0**	**0**	**0**	**0**

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

j+ - Concentration considered an estimate biased high based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-3
Pilot Study Field Parameter and Laboratory Results
Monitoring and Observation Well Samples

PARAMETER	SAMPLE LOCATION/DATE													
	RMW-18A							RMW-20						
	Pre-Injection	Post-Injection						Pre-Injection	Post-Injection					
	05/26/2016	07/27/2016	09/08/2016	10/05/2016	11/17/2016	01/27/2017	02/22/2017	05/25/2016	07/27/2016	09/07/2016	10/03/2016	11/15/2016	01/24/2017	02/21/2017
VOCs [1] (mg/L)														
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.0050	NA	NA	NA	NA	NA	< 0.0050
1,1-Dichloroethane	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.0050	NA	NA	NA	NA	NA	< 0.0050
1,1-Dichloroethene	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.0050	NA	NA	NA	NA	NA	< 0.0050
2-Butanone (MEK)	< 1	NA	NA	NA	NA	NA	< 2	< 0.01	NA	NA	NA	NA	NA	< 0.01
2-Hexanone	< 1	NA	NA	NA	NA	NA	< 2	< 0.01	NA	NA	NA	NA	NA	< 0.01
4-Methyl-2-pentanone	< 1	NA	NA	NA	NA	NA	< 2	< 0.01	NA	NA	NA	NA	NA	< 0.01
Acetone	< 2	NA	NA	NA	NA	NA	< 4	< 0.02	NA	NA	NA	NA	NA	< 0.02
Benzene	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.0050	NA	NA	NA	NA	NA	< 0.0050
Chloroform	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.0050	NA	NA	NA	NA	NA	< 0.0050
cis-1,2-Dichloroethene	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.0050	NA	NA	NA	NA	NA	< 0.0050
Ethylbenzene	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.0050	NA	NA	NA	NA	NA	< 0.0050
Isopropylbenzene	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.0050	NA	NA	NA	NA	NA	< 0.0050
Methylene chloride	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.0050	NA	NA	NA	NA	NA	< 0.0050
Methyl acetate	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.0050	NA	NA	NA	NA	NA	< 0.0050
Tetrachloroethene	**11**	NA	NA	NA	NA	NA	**7.6**	**0.13**	NA	NA	NA	NA	NA	**0.13**
Trichloroethene	< 0.5	NA	NA	NA	NA	NA	< 1	**0.00018 J**	NA	NA	NA	NA	NA	< 0.0050
Vinyl chloride	< 0.2	NA	NA	NA	NA	NA	< 0.4	< 0.0020	NA	NA	NA	NA	NA	< 0.0020
Xylenes, total	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.0050	NA	NA	NA	NA	NA	< 0.0050
Gases (ug/L)														
Methane	NA	NA	NA	NA	NA	NA	< 0.50 n	NA	NA	NA	NA	NA	NA	< 0.50 n
Ethane	NA	NA	NA	NA	NA	NA	< 0.10 n	NA	NA	NA	NA	NA	NA	< 0.10 n
Ethene	NA	NA	NA	NA	NA	NA	< 0.10 n	NA	NA	NA	NA	NA	NA	< 0.10 n
Metals (mg/L)														
Potassium	**1.6 J**	NA	NA	NA	NA	NA	**1.5**	**1.8 J**	NA	NA	NA	NA	NA	**2.5**
General Chemistry (mg/L)														
Sulfate	**160**	**120**	**110**	NA	**110**	**110**	**120**	**11**	**19**	**8.2**	NA	**5.8**	**8.0**	**10**
Sulfide	NA	NA	NA	NA	NA	NA	**1.2**	NA	NA	NA	NA	NA	NA	**0.87 J**
Total Organic Carbon	NA	NA	NA	NA	NA	NA	**0.84 J**	NA	NA	NA	NA	NA	NA	**0.92 J**
Field Parameters														
pH (s.u.)	**5.63**	**4.74**	**4.51**	**5.29**	**4.86**	**4.62**	**4.72**	**5.11**	**4.46**	**4.72**	**4.53**	**4.58**	**4.5**	**4.08**
Temperature (°C)	**22.28**	NA	**22.55**	**23.86**	**18.14**	**16.84**	**20.94**	**22.29**	NA	**31.13**	**23.68**	**18.99**	**20.51**	**20.05**
Specific Conductivity (uS/cm)	**697**	**782**	**578**	**788**	**609**	**751**	**439**	**176**	**192**	**119**	**211**	**140**	**177**	**110**
Dissolved Oxygen (mg/L)	**4.17**	**0.04 [2]**	**2.01**	**2.48**	**4.73**	**3.29**	**2.95**	**1.84**	**12.52 [2]**	**2.51**	**3.28**	**6.29**	**5.27**	**3.8**
Oxidation Reduction Potential (mV)	**328**	**334.8**	**398**	**301**	**330**	**223**	**360**	**299**	**277.4**	**298**	**393**	**351**	**216**	**335**
Turbidity (ntu)	**0**	NA	NA	NA	NA	NA	NA	**0**	NA	NA	NA	NA	NA	NA
Dissolved Ferrous Iron (mg/L)	**0.1**	NA	NA	NA	**0**	**0**	**0**	**0**	NA	NA	**2.0**	**0**	**0**	**0**

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

j+ - Concentration considered an estimate biased high based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-3
Pilot Study Field Parameter and Laboratory Results
Monitoring and Observation Well Samples

PARAMETER	SAMPLE LOCATION/DATE													
	RMW-20A							RMW-21						
	Pre-Injection	Post-Injection						Pre-Injection	Post-Injection					
	05/27/2016	07/27/2016	09/08/2016	10/05/2016	11/18/2016	01/27/2017	02/23/2017	05/25/2016	07/27/2016	09/07/2016	10/04/2016	11/17/2016	01/26/2017	02/21/2017
VOCs [1] (mg/L)														
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	**0.055 J j+**	NA	NA	NA	NA	NA	**0.049 J**	< 0.025	NA	NA	NA	NA	NA	< 0.025
1,1-Dichloroethane	< 0.25	NA	NA	NA	NA	NA	< 0.5	< 0.025	NA	NA	NA	NA	NA	< 0.025
1,1-Dichloroethene	< 0.25	NA	NA	NA	NA	NA	< 0.5	< 0.025	NA	NA	NA	NA	NA	< 0.025
2-Butanone (MEK)	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.05	NA	NA	NA	NA	NA	< 0.05
2-Hexanone	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.05	NA	NA	NA	NA	NA	< 0.05
4-Methyl-2-pentanone	< 0.5	NA	NA	NA	NA	NA	< 1	< 0.05	NA	NA	NA	NA	NA	< 0.05
Acetone	< 1	NA	NA	NA	NA	NA	< 2	< 0.1	NA	NA	NA	NA	NA	< 0.1
Benzene	< 0.25	NA	NA	NA	NA	NA	< 0.5	< 0.025	NA	NA	NA	NA	NA	< 0.025
Chloroform	< 0.25	NA	NA	NA	NA	NA	< 0.5	< 0.025	NA	NA	NA	NA	NA	< 0.025
cis-1,2-Dichloroethene	< 0.25	NA	NA	NA	NA	NA	< 0.5	< 0.025	NA	NA	NA	NA	NA	< 0.025
Ethylbenzene	< 0.25	NA	NA	NA	NA	NA	< 0.5	< 0.025	NA	NA	NA	NA	NA	< 0.025
Isopropylbenzene	< 0.25	NA	NA	NA	NA	NA	< 0.5	< 0.025	NA	NA	NA	NA	NA	< 0.025
Methylene chloride	< 0.25	NA	NA	NA	NA	NA	< 0.5	< 0.025	NA	NA	NA	NA	NA	< 0.025
Methyl acetate	< 0.25	NA	NA	NA	NA	NA	< 0.5	< 0.025	NA	NA	NA	NA	NA	< 0.025
Tetrachloroethene	**5.2**	NA	NA	NA	NA	NA	**6.4**	**0.52**	NA	NA	NA	NA	NA	**0.51**
Trichloroethene	< 0.25	NA	NA	NA	NA	NA	< 0.5	**0.0027 J**	NA	NA	NA	NA	NA	**0.0028 J**
Vinyl chloride	< 0.1	NA	NA	NA	NA	NA	< 0.2	< 0.01	NA	NA	NA	NA	NA	< 0.01
Xylenes, total	< 0.25	NA	NA	NA	NA	NA	< 0.5	< 0.025	NA	NA	NA	NA	NA	< 0.025
Gases (ug/L)														
Methane	NA	NA	NA	NA	NA	NA	< 0.50 n	NA	NA	NA	NA	NA	NA	< 0.50 n
Ethane	NA	NA	NA	NA	NA	NA	< 0.10 n	NA	NA	NA	NA	NA	NA	< 0.10 n
Ethene	NA	NA	NA	NA	NA	NA	< 0.10 n	NA	NA	NA	NA	NA	NA	< 0.10 n
Metals (mg/L)														
Potassium	**0.90 J**	NA	NA	NA	NA	NA	**0.67**	**0.50 J**	NA	NA	NA	NA	NA	**0.41**
General Chemistry (mg/L)														
Sulfate	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	**24**	**27 j**	**24**	NA	**32**	**26**	**24**
Sulfide	NA	NA	NA	NA	NA	NA	**0.73 J**	NA	NA	NA	NA	NA	NA	< 1.0
Total Organic Carbon	NA	NA	NA	NA	NA	NA	**0.35 J**	NA	NA	NA	NA	NA	NA	**0.94 J**
Field Parameters														
pH (s.u.)	**5.45**	**4.28**	**4.62**	**5.13**	**4.09**	**4.89**	**4.87**	**5.3**	**4.73**	**5.08**	**5.02**	**5.07**	**4.9**	**4.36**
Temperature (°C)	**21.83**	NA	**27.21**	**22.65**	**15.68**	**18.87**	**21.94**	**22.84**	NA	**31.89**	**28.41**	**19.29**	**18.77**	**21.01**
Specific Conductivity (uS/cm)	**37**	**40**	**24**	**34**	**24**	**33**	**19**	**211**	**205**	**127**	**202**	**157**	**164**	**104**
Dissolved Oxygen (mg/L)	**5.93**	**9.47 [2]**	**3.83**	**3.89**	**7.59**	**5.50**	**6.44**	**2.22**	**0.08 [2]**	**3.22**	**1.69**	**8.4**	**2.03**	**1.67**
Oxidation Reduction Potential (mV)	**296**	**137.4**	**399**	**392**	**322**	**219**	**295**	**289**	**189.2**	**379**	**292**	**377**	**180**	**373**
Turbidity (ntu)	**0**	NA	NA	NA	NA	NA	NA	**8.55**	NA	NA	NA	NA	NA	NA
Dissolved Ferrous Iron (mg/L)	**0**	NA	NA	NA	**0**	**0**	**0**	**0**	NA	NA	**0**	**0**	**0**	**0**

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

j+ - Concentration considered an estimate biased high based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-3
Pilot Study Field Parameter and Laboratory Results
Monitoring and Observation Well Samples

PARAMETER	SAMPLE LOCATION/DATE														
	RMW-21A							RMW-23							
	Pre-Injection	Post-Injection						Pre-Injection	Post-Injection						
	05/26/2016	07/27/2016	09/07/2016	10/04/2016	11/17/2016	01/26/2017	02/21/2017	05/25/2016	07/27/2016	09/07/2016	10/04/2016	11/15/2016	12/01/2016	01/23/2017	02/27/2017
VOCs [1] (mg/L)															
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	< 0.1	NA	NA	NA	NA	NA	< 0.25	< 0.0050	NA	NA	NA	< 0.05	NA	NA	< 0.0050
1,1-Dichloroethane	< 0.1	NA	NA	NA	NA	NA	< 0.25	< 0.0050	NA	NA	NA	< 0.05	NA	NA	< 0.0050
1,1-Dichloroethene	< 0.1	NA	NA	NA	NA	NA	< 0.25	< 0.0050	NA	NA	NA	< 0.05	NA	NA	< 0.0050
2-Butanone (MEK)	< 0.2	NA	NA	NA	NA	NA	< 0.5	< 0.01	NA	NA	NA	**0.46**	NA	NA	**0.29**
2-Hexanone	< 0.2	NA	NA	NA	NA	NA	< 0.5	< 0.01	NA	NA	NA	< 0.1	NA	NA	**0.0073 J**
4-Methyl-2-pentanone	< 0.2	NA	NA	NA	NA	NA	< 0.5	< 0.01	NA	NA	NA	< 0.1	NA	NA	< 0.01
Acetone	< 0.4	NA	NA	NA	NA	NA	< 1	< 0.02	NA	NA	NA	< 0.2	NA	NA	**0.12**
Benzene	< 0.1	NA	NA	NA	NA	NA	< 0.25	< 0.0050	NA	NA	NA	< 0.05	NA	NA	< 0.0050
Chloroform	< 0.1	NA	NA	NA	NA	NA	< 0.25	< 0.0050	NA	NA	NA	< 0.05	NA	NA	< 0.0050
cis-1,2-Dichloroethene	< 0.1	NA	NA	NA	NA	NA	< 0.25	**0.00092 J**	NA	NA	NA	< 0.05	NA	NA	**0.0010 J**
Ethylbenzene	< 0.1	NA	NA	NA	NA	NA	< 0.25	< 0.0050	NA	NA	NA	< 0.05	NA	NA	< 0.0050
Isopropylbenzene	< 0.1	NA	NA	NA	NA	NA	< 0.25	< 0.0050	NA	NA	NA	< 0.05	NA	NA	< 0.0050
Methylene chloride	< 0.1	NA	NA	NA	NA	NA	< 0.25	< 0.0050	NA	NA	NA	< 0.05	NA	NA	< 0.0050
Methyl acetate	< 0.1	NA	NA	NA	NA	NA	< 0.25	< 0.0050	NA	NA	NA	< 0.05	NA	NA	**0.0019 J**
Tetrachloroethene	**2.9**	NA	NA	NA	NA	NA	**6.1**	**0.012**	NA	NA	NA	< 0.05	NA	NA	**0.00051 J**
Trichloroethene	**0.0045 J**	NA	NA	NA	NA	NA	< 0.25	**0.00025 J**	NA	NA	NA	< 0.05	NA	NA	< 0.0050
Vinyl chloride	< 0.04	NA	NA	NA	NA	NA	< 0.1	< 0.0020	NA	NA	NA	< 0.02	NA	NA	< 0.0020
Xylenes, total	< 0.1	NA	NA	NA	NA	NA	< 0.25	< 0.0050	NA	NA	NA	< 0.05	NA	NA	< 0.0050
Gases (ug/L)															
Methane	NA	NA	NA	NA	NA	NA	< 0.50 n	NA	NA	NA	NA	**5100**	NA	NA	**19000 n**
Ethane	NA	NA	NA	NA	NA	NA	< 0.10 n	NA	NA	NA	NA	< 10	NA	NA	**0.22 n**
Ethene	NA	NA	NA	NA	NA	NA	< 0.10 n	NA	NA	NA	NA	< 10	NA	NA	**0.33 n**
Metals (mg/L)															
Potassium	**2.7 J**	NA	NA	NA	NA	NA	**2**	**0.58 J**	NA	NA	NA	**120**	NA	NA	**39**
General Chemistry (mg/L)															
Sulfate	**51**	**83**	**85**	NA	**90**	**45**	**74**	**40**	**54**	< 50	NA	< 10	NA	**6.8**	< 5.0
Sulfide	NA	NA	NA	NA	NA	NA	< 1.0	NA	NA	NA	NA	< 1.0	NA	NA	< 1.0
Total Organic Carbon	NA	NA	NA	NA	NA	NA	**1.2**	**1.1 B**	NA	NA	NA	**990**	NA	NA	**330**
Field Parameters															
pH (s.u.)	**5.37**	**4.62**	**5.05**	**4.92**	**4.86**	**4.69**	**4.48**	**5.16**	**6.62**	**6.9**	**6.42**	**6.6**	**6.38**	**6.57**	**6.87**
Temperature (°C)	**22.59**	NA	**31.44**	**22.92**	**19.37**	**20.19**	**21.8**	**20.1**	NA	**24.08**	**24.50**	**16.95**	**16.08**	**18.69**	**18.23**
Specific Conductivity (uS/cm)	**817**	**791**	**475**	**781**	**543**	**594**	**400**	**147**	**10080**	**4580**	**4760**	**2180**	**1150**	**2080**	**1180**
Dissolved Oxygen (mg/L)	**1.45**	**0.05 [2]**	**3.46**	**1.98**	**8.44**	**2.19**	**1.74**	**0**	**11.05 [2]**	**1.22**	**0.74**	**11.6**	**0.11**	**0.35**	**0.25**
Oxidation Reduction Potential (mV)	**294**	**272.4**	**390**	**266**	**384**	**193**	**351**	**366**	**-283.5**	**-182**	**-111**	**-227**	**-67**	**-138**	**-180**
Turbidity (ntu)	**0**	NA	NA	NA	NA	NA	NA	**0.65**	NA	NA	NA	NA	NA	NA	NA
Dissolved Ferrous Iron (mg/L)	**0**	NA	NA	**0.8**	**0**	**0**	**0**	**0**	NA	NA	NA	**>10**	NA	**>10**	**>10**

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

j+ - Concentration considered an estimate biased high based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-3
Pilot Study Field Parameter and Laboratory Results
Monitoring and Observation Well Samples

PARAMETER	SAMPLE LOCATION/DATE													
	RMW-23A							RMW-23B						
	Pre-Injection	Post-Injection						Pre-Injection	Post-Injection					
	05/27/2016	07/27/2016	09/07/2016	10/04/2016	11/21/2016	01/23/2017	02/28/2017	05/27/2016	07/27/2016	09/07/2016	10/04/2016	12/01/2016	01/23/2017	03/01/2017
VOCs [1] (mg/L)														
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	< 0.1	NA	NA	NA	NA	NA	< 0.0050	< 0.025	NA	NA	NA	< 0.025	< 0.025	< 0.05
1,1-Dichloroethane	< 0.1	NA	NA	NA	NA	NA	< 0.0050	< 0.025	NA	NA	NA	< 0.025	< 0.025	< 0.05
1,1-Dichloroethene	< 0.1	NA	NA	NA	NA	NA	< 0.0050	< 0.025	NA	NA	NA	< 0.025	< 0.025	< 0.05
2-Butanone (MEK)	< 0.2	NA	NA	NA	NA	NA	**0.2**	< 0.05	NA	NA	NA	**0.26**	**0.21**	**0.046 J**
2-Hexanone	< 0.2	NA	NA	NA	NA	NA	< 0.01	< 0.05	NA	NA	NA	< 0.05	< 0.05	< 0.1
4-Methyl-2-pentanone	< 0.2	NA	NA	NA	NA	NA	**0.0039 J**	< 0.05	NA	NA	NA	< 0.05	< 0.05	< 0.1
Acetone	< 0.4	NA	NA	NA	NA	NA	**0.025**	< 0.1	NA	NA	NA	**0.12**	< 0.1	**0.022 J**
Benzene	< 0.1	NA	NA	NA	NA	NA	< 0.0050	< 0.025	NA	NA	NA	< 0.025	< 0.025	< 0.05
Chloroform	< 0.1	NA	NA	NA	NA	NA	< 0.0050	< 0.025	NA	NA	NA	< 0.025	< 0.025	< 0.05
cis-1,2-Dichloroethene	< 0.1	NA	NA	NA	NA	NA	**0.0025 J**	< 0.025	NA	NA	NA	**0.75**	**0.92**	**0.33**
Ethylbenzene	< 0.1	NA	NA	NA	NA	NA	< 0.0050	< 0.025	NA	NA	NA	< 0.025	< 0.025	< 0.05
Isopropylbenzene	< 0.1	NA	NA	NA	NA	NA	< 0.0050	< 0.025	NA	NA	NA	< 0.025	< 0.025	< 0.05
Methylene chloride	< 0.1	NA	NA	NA	NA	NA	< 0.0050	< 0.025	NA	NA	NA	< 0.025	< 0.025	< 0.05
Methyl acetate	< 0.1	NA	NA	NA	NA	NA	**0.0077**	< 0.025	NA	NA	NA	< 0.025	< 0.025	< 0.05
Tetrachloroethene	**1.7**	NA	NA	NA	NA	NA	**0.064**	**0.52**	NA	NA	NA	**0.089**	**0.4**	**0.72**
Trichloroethene	< 0.1	NA	NA	NA	NA	NA	**0.0045 J**	**0.0016 J**	NA	NA	NA	< 0.025	< 0.025	**0.015 J**
Vinyl chloride	< 0.04	NA	NA	NA	NA	NA	< 0.0020	< 0.01	NA	NA	NA	< 0.01	**0.014**	< 0.02
Xylenes, total	< 0.1	NA	NA	NA	NA	NA	< 0.0050	< 0.025	NA	NA	NA	< 0.025	< 0.025	< 0.05
Gases (ug/L)														
Methane	NA	NA	NA	NA	NA	NA	**6300 n**	NA	NA	NA	NA	**8200**	**19000 n**	**8600 n**
Ethane	NA	NA	NA	NA	NA	NA	**12 n**	NA	NA	NA	NA	< 10	**7.6 n**	**1.9 n**
Ethene	NA	NA	NA	NA	NA	NA	**2.2 n**	NA	NA	NA	NA	< 10	**14 n**	**3.5 n**
Metals (mg/L)														
Potassium	**0.94 J**	NA	NA	NA	NA	NA	**34**	**1.2 J**	NA	NA	NA	**5.2**	**2.8**	**1.7**
General Chemistry (mg/L)														
Sulfate	< 1.0	< 50	< 50	NA	< 10	< 5.0	< 5.0	**2.5**	< 50	< 50	NA	**1.0**	**5.6**	< 1.0
Sulfide	NA	NA	NA	NA	NA	NA	< 1.0	NA	NA	NA	NA	< 1.0	< 1.0	**1.2**
Total Organic Carbon	< 0.37 BJ u	NA	NA	NA	NA	NA	**500**	NA	NA	NA	NA	**110**	**35**	**7.8**
Field Parameters														
pH (s.u.)	**6.04**	**6.08**	**6.94**	**5.95**	**6.06**	**5.95**	**6.21**	**7.09**	**5.05**	**6.41**	**6.47**	**7.11**	**6.92**	**6.26**
Temperature (°C)	**22.11**	NA	**24.31**	**21.35**	**15.95**	**18.37**	**19.56**	**20.46**	NA	**22.58**	**23.38**	**15.7**	**20.4**	**19.68**
Specific Conductivity (uS/cm)	**95**	**7796**	**5280**	**4330**	**2140**	**1830**	**935**	**124**	**3026**	**2570**	**1110**	**595**	**331**	**116**
Dissolved Oxygen (mg/L)	**1.9**	**0.10 [2]**	**0.37**	**0.37**	**0**	**0.06**	**1.92**	**0.55**	**1.06 [2]**	**0.01**	**1.72**	**0**	**1.74**	**0**
Oxidation Reduction Potential (mV)	**255**	**-485.3**	**-133**	**-159**	**-149**	**-88**	**-175**	**66**	**-57.2**	**-161**	**-109**	**-40**	**-120**	**-119**
Turbidity (ntu)	**0**	NA	NA	NA	NA	NA	NA	**0.69**	NA	NA	NA	NA	NA	NA
Dissolved Ferrous Iron (mg/L)	**0**	NA	NA	NA	**>10**	**>10**	**>10**	**0**	NA	NA	NA	**>10**	**>10**	**>10**

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

j+ - Concentration considered an estimate biased high based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-3
Pilot Study Field Parameter and Laboratory Results
Monitoring and Observation Well Samples

PARAMETER	SAMPLE LOCATION/DATE																	
	RMW-27								RMW-27A									
	Pre-Injection	Post-Injection							Pre-Injection		Post-Injection							
	05/25/2016	07/27/2016	09/08/2016	09/09/2016	10/04/2016	11/18/2016	01/20/2017	02/22/2017	05/26/2016	DU-16201 05/26/2016	07/27/2016	09/06/2016	09/07/2016	10/03/2016	10/04/2016	11/17/2016	01/26/2017	03/01/2017
VOCs [1] (mg/L)																		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	< 0.1	NA	NA	NA	NA	< 0.025	< 0.05	< 0.25	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	NA	NA	< 0.0050
1,1-Dichloroethane	< 0.1	NA	NA	NA	NA	< 0.025	< 0.05	< 0.25	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	NA	NA	< 0.0050
1,1-Dichloroethene	< 0.1	NA	NA	NA	NA	< 0.025	< 0.05	< 0.25	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	NA	NA	< 0.0050
2-Butanone (MEK)	< 0.2	NA	NA	NA	NA	< 0.05	< 0.1	< 0.5	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	**0.25**
2-Hexanone	< 0.2	NA	NA	NA	NA	< 0.05	< 0.1	< 0.5	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	< 0.01
4-Methyl-2-pentanone	< 0.2	NA	NA	NA	NA	< 0.05	< 0.1	< 0.5	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	< 0.01
Acetone	< 0.4	NA	NA	NA	NA	< 0.1	< 0.2	< 1	< 0.02	< 0.02	NA	NA	NA	NA	NA	NA	NA	**0.031**
Benzene	< 0.1	NA	NA	NA	NA	< 0.025	< 0.05	< 0.25	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	NA	NA	< 0.0050
Chloroform	< 0.1	NA	NA	NA	NA	< 0.025	< 0.05	< 0.25	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	NA	NA	< 0.0050
cis-1,2-Dichloroethene	< 0.1	NA	NA	NA	NA	< 0.025	< 0.05	< 0.25	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	NA	NA	< 0.0050
Ethylbenzene	< 0.1	NA	NA	NA	NA	< 0.025	< 0.05	< 0.25	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	NA	NA	< 0.0050
Isopropylbenzene	< 0.1	NA	NA	NA	NA	< 0.025	< 0.05	< 0.25	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	NA	NA	< 0.0050
Methylene chloride	< 0.1	NA	NA	NA	NA	< 0.025	< 0.05	< 0.25	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	NA	NA	< 0.0050
Methyl acetate	< 0.1	NA	NA	NA	NA	< 0.025	< 0.05	< 0.25	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	NA	NA	**0.0079**
Tetrachloroethene	**2.4**	NA	NA	NA	NA	**0.29**	**3.3**	**2.8**	**0.0085**	**0.01**	NA	NA	NA	NA	NA	NA	NA	**0.0056**
Trichloroethene	< 0.1	NA	NA	NA	NA	< 0.025	< 0.05	< 0.25	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	NA	NA	**0.0026 J**
Vinyl chloride	< 0.04	NA	NA	NA	NA	< 0.01	< 0.02	< 0.1	< 0.0020	< 0.0020	NA	NA	NA	NA	NA	NA	NA	< 0.0020
Xylenes, total	< 0.1	NA	NA	NA	NA	< 0.025	< 0.05	< 0.25	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	NA	NA	< 0.0050
Gases (ug/L)																		
Methane	NA	NA	NA	NA	NA	**770**	**2000 n**	**1600 n**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**14000 n**
Ethane	NA	NA	NA	NA	NA	< 10	**0.6 n**	**0.60 n**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.0 n**
Ethene	NA	NA	NA	NA	NA	< 10	**0.67 n**	**0.54 n**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.88 n**
Metals (mg/L)																		
Potassium	**0.71 J**	NA	NA	NA	NA	< 0.4	< 0.4	**0.39 J**	**0.61 J**	**0.63 J**	NA	NA	NA	NA	NA	NA	NA	**16**
General Chemistry (mg/L)																		
Sulfate	**180**	**75**	**42**	NA	NA	**47**	**37**	**68**	**1.9**	**1.6**	< 50	< 50	NA	NA	NA	< 50	< 50	< 5.0
Sulfide	NA	NA	NA	NA	NA	< 1.0	< 1.0	**0.73 J**	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
Total Organic Carbon	**1.2 B**	NA	NA	NA	NA	< 1.0	< 1.0	**1.1**	< 0.33 BJ u	NA	NA	NA	NA	NA	NA	NA	NA	**340**
Field Parameters																		
pH (s.u.)	**5.56**	**4.79**	**5.19**	**4.61**	**5.32**	**5.32**	**4.88**	**5.21**	**6.74**	NA	**6.45**	NA	**6.55**	**6.12**	NA	**6.54**	**6.24**	**6.79**
Temperature (°C)	**20.55**	NA	**27.59**	**23.85**	**27.70**	**19.38**	**22.43**	**21.61**	**22.57**	NA	NA	NA	**28.89**	NA	**24.59**	**17.61**	**17.92**	**22.65**
Specific Conductivity (uS/cm)	**1110**	**422**	**196**	**219**	**262**	**195**	**345**	**503**	**47**	NA	**10670**	NA	**7000**	NA	**5750**	**4280**	**3160**	**623**
Dissolved Oxygen (mg/L)	**5.12**	**9.06 [2]**	NA	**0.89**	**2.57**	**0**	**0**	**0**	**5.14**	NA	**3.54 [2]**	NA	**1.92**	NA	**0.47**	**0.91**	**0.12**	**0**
Oxidation Reduction Potential (mV)	**220**	**69.7**	**204**	**220**	**141**	**18**	**176**	**122**	**237**	NA	**-150.4**	NA	**-510**	NA	**-125**	**-144**	**-102**	**-187**
Turbidity (ntu)	**0.93**	NA	NA	NA	NA	NA	NA	NA	**0**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Ferrous Iron (mg/L)	**0**	NA	NA	NA	**0.8**	**0.25**	**0**	**0**	**0**	NA	NA	NA	NA	NA	NA	**>10**	**>10**	**>10**

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

j+ - Concentration considered an estimate biased high based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-3
Pilot Study Field Parameter and Laboratory Results
Monitoring and Observation Well Samples

PARAMETER	SAMPLE LOCATION/DATE														
	RMW-27B							RMW-28A							
	Pre-Injection	Post-Injection						Pre-Injection		Post-Injection					
	05/24/2016	07/27/2016	09/07/2016	10/05/2016	12/01/2016	01/26/2017	02/23/2017	05/28/2016	06/14/2016	07/27/2016	09/07/2016	10/03/2016	11/15/2016	12/02/2016	01/20/2017	02/22/2017
VOCs [1] (mg/L)																
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	< 0.0050	**0.0010 J**
1,1-Dichloroethane	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	< 0.0050	< 0.0050
1,1-Dichloroethene	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	< 0.0050	< 0.0050
2-Butanone (MEK)	< 0.01	NA	NA	NA	< 0.01	NA	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	< 0.01	< 0.01
2-Hexanone	< 0.01	NA	NA	NA	< 0.01	NA	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	< 0.01	< 0.01
4-Methyl-2-pentanone	< 0.01	NA	NA	NA	< 0.01	NA	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	< 0.01	< 0.01
Acetone	< 0.02	NA	NA	NA	< 0.02	NA	< 0.02	< 0.02	< 0.0039 J u	NA	NA	NA	NA	NA	< 0.02	< 0.02
Benzene	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	< 0.0050	< 0.0050
Chloroform	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	**0.00069 J**	**0.00059 J**	NA	NA	NA	NA	NA	< 0.0050	**0.00042 J**
cis-1,2-Dichloroethene	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	**0.00070 J**	**0.00078 J**	NA	NA	NA	NA	NA	< 0.0050	**0.0015 J**
Ethylbenzene	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0088 u	**0.0051**	NA	NA	NA	NA	NA	< 0.0050	< 0.0050
Isopropylbenzene	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	< 0.0050	< 0.0050
Methylene chloride	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	< 0.0050	< 0.0050
Methyl acetate	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.0050	< 0.0050	NA	NA	NA	NA	NA	< 0.0050	< 0.0050
Tetrachloroethene	**0.15**	NA	NA	NA	**0.16**	NA	**0.078**	**0.027**	**0.042**	NA	NA	NA	NA	NA	**0.15**	**0.15**
Trichloroethene	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	**0.00032 J**	**0.00060 J**	NA	NA	NA	NA	NA	< 0.0050	**0.0017 J**
Vinyl chloride	< 0.0020	NA	NA	NA	< 0.0020	NA	< 0.0020	< 0.0020	< 0.0020	NA	NA	NA	NA	NA	< 0.0020	< 0.0020
Xylenes, total	< 0.0050	NA	NA	NA	< 0.0050	NA	< 0.0050	< 0.03 u	**0.023**	NA	NA	NA	NA	NA	< 0.0050	< 0.0050
Gases (ug/L)																
Methane	NA	NA	NA	NA	**12**	NA	**0.88 n**	NA	NA	NA	NA	NA	NA	NA	**260 n**	**190 n**
Ethane	NA	NA	NA	NA	< 10	NA	< 0.10 n	NA	NA	NA	NA	NA	NA	NA	**0.0098 Jn**	< 0.10 n
Ethene	NA	NA	NA	NA	< 10	NA	**0.45 n**	NA	NA	NA	NA	NA	NA	NA	**0.074 Jn**	< 0.10 n
Metals (mg/L)																
Potassium	**1.5 J**	NA	NA	NA	**1.8**	NA	**1.6**	**0.84 J**	NA	NA	NA	NA	NA	NA	**0.62**	**0.64**
General Chemistry (mg/L)																
Sulfate	**8.0**	**41**	**33**	NA	**4.7**	**32**	**4.3**	**25**	NA	**33**	**30**	NA	**14**	NA	**11**	**9.9**
Sulfide	NA	NA	NA	NA	< 1.0	NA	**0.75 J**	NA	NA	NA	NA	NA	NA	NA	< 1.0	**1.1**
Total Organic Carbon	NA	NA	NA	NA	< 1.0	NA	**0.41 J**	NA	NA	NA	NA	NA	NA	NA	< 1.0	**0.50 J**
Field Parameters																
pH (s.u.)	**7.48**	**8.49**	**9.75**	**8.75**	**7.31**	**9**	**6.96**	**5.72**	**4.94**	**4.75**	**5.77**	**5.58**	**5.9**	**5.1**	**5.2**	**5.57**
Temperature (°C)	**26.09**	NA	**31.15**	**21.45**	**19.37**	**18.74**	**24.54**	**20.12**	**20.63**	NA	**25.11**	**29.71**	**15.69**	**15.58**	**19.24**	**19.25**
Specific Conductivity (uS/cm)	**153**	**297**	**175**	**299**	**110**	**224**	**132**	**74**	**135**	**147**	**91**	**118**	**88**	**96**	**87**	**98**
Dissolved Oxygen (mg/L)	**0**	**8.19 [2]**	**0.47**	**0.69**	**0.08**	**1.23**	**0.46**	**0**	NA	**7.89 [2]**	**0.19**	**0.14**	**1.29**	**0**	**0.55**	**0**
Oxidation Reduction Potential (mV)	**-107**	**-180.0**	**-51**	**50**	**-71**	**-145**	**-67**	**11**	NA	**97.7**	**113**	**143**	**7**	**211**	**111**	**107**
Turbidity (ntu)	**0.47**	NA	NA	NA	NA	NA	NA	**0**	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Ferrous Iron (mg/L)	**0**	NA	NA	**0**	**0.2**	**0**	**0**	**4.0**	NA	NA	NA	**0.4**	**>10**	NA	**4.00**	**3**

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

j+ - Concentration considered an estimate biased high based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-4
Pilot Study Field Parameter and Laboratory Results
Direct-Push Groundwater Samples

PARAMETER	SAMPLE LOCATION / DATE														
	UPGRADIENT PLUME														
	DP-01 02/20/2017	DP-01A 02/20/2017	DP-02 02/17/2017	DP-02A 02/17/2017	DP-03 02/17/2017	DP-03A 02/17/2017	DP-04 02/17/2017	DP-04A 02/17/2017	DP-05A 02/16/2017	DP-06 02/16/2017	DP-06A 02/16/2017	DP-07 02/16/2017	DP-07A 02/16/2017	DP-08A 02/20/2017	DP-09 02/23/2017
VOCs[(1)] (mg/L)															
1,1-Dichloroethane	< 0.025	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.025	< 0.0050	< 0.025	< 0.05	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.25
1,1-Dichloroethene	< 0.025	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.025	< 0.0050	< 0.025	< 0.05	< 0.0050	**0.00049 J**	< 0.0050	< 0.0050	< 0.25
2-Butanone (MEK)	< 0.05	**0.11**	**0.046**	**0.0039 J**	< 0.01	< 0.01	< 0.05	< 0.01	**0.059**	< 0.1	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
4-Methyl-2-pentanone	< 0.05	**0.0022 J**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.05	< 0.1	< 0.01	< 0.01	< 0.01	< 0.01	< 0.5
Acetone	< 0.1	**0.12**	**0.23**	**0.011 J**	**0.0026 J**	**0.013 J**	**0.052 J**	**0.0058 J**	**0.098 J**	< 0.2	**0.0078 J**	**0.021**	**0.0052 J**	**0.0054 J**	< 1
Benzene	< 0.025	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.025	< 0.0050	< 0.025	< 0.05	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.25
Bromomethane	< 0.025	< 0.0050	**0.0017 J**	< 0.0050	< 0.0050	< 0.0050	**0.0021 J**	< 0.0050	< 0.025	< 0.05	< 0.0050	**0.0048 J**	< 0.0050	< 0.0050	< 0.25
Carbon disulfide	< 0.025	< 0.0050	**0.0041 J**	< 0.0050	< 0.0050	< 0.0050	< 0.025	< 0.0050	< 0.025	< 0.05	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.25
Chloromethane	< 0.025	< 0.0050	**0.0015 J**	< 0.0050	< 0.0050	< 0.0050	< 0.025	< 0.0050	< 0.025	< 0.05	< 0.0050	**0.0037 J**	< 0.0050	< 0.0050	< 0.25
cis-1,2-Dichloroethene	**0.0095 J**	< 0.0050	**0.0043 J**	< 0.0050	< 0.0050	< 0.0050	**0.0028 J**	< 0.0050	< 0.025	**0.025 J**	< 0.0050	**0.0012 J**	< 0.0050	< 0.0050	< 0.25
Methyl acetate	< 0.025	**0.015**	**0.0075**	< 0.0050	< 0.0050	< 0.0050	< 0.025	< 0.0050	**0.0066 J**	< 0.05	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.25
Tetrachloroethene	**0.52**	**0.0014 J**	**0.034**	< 0.0050	**0.11**	**0.00055 J**	**0.24**	**0.0013 J**	**0.0065 J**	**1.2**	< 0.0050	**0.17**	**0.15**	< 0.0050	**2.8**
Trichloroethene	**0.0073 J**	< 0.0050	**0.00099 J**	< 0.0050	**0.00062 J**	< 0.0050	**0.0034 J**	< 0.0050	< 0.025	**0.017 J**	< 0.0050	**0.0044 J**	< 0.0050	< 0.0050	**0.02 J**
Gases (ug/L)															
Methane	**6400 n**	**830 n**	**2000 n**	**2400 n**	**1.6 n**	**11000 n**	**2700 n**	**1.6 n**	**3400 n**	**550 n**	**24 n**	**2100 n**	< 0.50 n	< 0.50 n	**1200 n**
Ethane	**5.9 n**	**1.7 n**	**2.5 n**	**0.76 n**	< 0.10 n	**1.4 n**	**2.1 n**	**0.12 n**	**0.87 n**	**1.6 n**	**0.91 n**	**0.66 n**	**0.12 n**	< 0.10 n	**1.4 n**
Ethene	**8.0 n**	**1.5 n**	**3.2 n**	**0.45 n**	< 0.10 n	**0.33 n**	**1.4 n**	< 0.10 n	**0.71 n**	**1.4 n**	< 0.10 n	**0.44 n**	< 0.10 n	< 0.10 n	**4.2 n**
General Chemistry (mg/L)															
Sulfate	**67**	**1.4 J**	**90**	**0.64 J**	**81**	< 1.0	**47**	< 1.0	< 1.0	**95**	< 1.0	**66**	< 1.0	< 1.0	**130**
Field Parameters															
pH (s.u.)	**5.4**	**5.78**	**5.01**	**6.36**	**5.85**	**5.9**	**4.91**	**6.02**	**5.65**	**5.91**	**6.48**	**5.91**	**5.92**	**6.56**	**6.14**
Temperature (°C)	**21.19**	**24.84**	**23.77**	**25**	**22.84**	**24.08**	**16.56**	**22.65**	**17.33**	**21.1**	**23.26**	**22.61**	**22.17**	**28.42**	**22.94**
Specific Conductivity (uS/cm)	**494**	**868**	**794**	**136**	**283**	**68**	**425**	**57**	**855**	**650**	**70.1**	**371**	**50**	**68**	**727**
Dissolved Oxygen (mg/L)	**0**	**0**	**0**	**0.30**	**3.50**	**0**	**0**	**4.55**	**0**	**0**	**1.07**	**0**	**4.19**	**3.82**	**0**
Oxidation Reduction Potential (mV)	**-78**	**-443**	**-13**	**-12**	**97**	**40**	**-25**	**6**	**-61**	**33**	**-23**	**30**	**44**	**31**	**43**
Dissolved Ferrous Iron (mg/L)	**3**	**10 j**	**10 j**	**4**	**0.10**	**1**	**3**	**0.20**	**6**	**4**	**0.30**	**1**	**0**	**0**	**0.40**

(1) Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

J - Estimated concentration.
j - Concentration considered an estimate based on data validation.
n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.
< - Concentration less than the Quantitation Limit.
NA - Not analyzed.
Bolding indicates constituent detection.

Table 3-4
Pilot Study Field Parameter and Laboratory Results
Direct-Push Groundwater Samples

PARAMETER	SAMPLE LOCATION/DATE DOWNGRADIENT PLUME														
	DP-11 02/22/2017	DP-11A 02/22/2017	DP-12 02/20/2017	DP-12A 02/20/2017	DP-13 02/23/2017	DP-13A 02/23/2017	DP-14 02/21/2017	DP-14A 02/21/2017	DP-15 02/21/2017	DP-15A 02/21/2017	DP-16 02/22/2017	DP-16A 02/23/2017	DP-17 02/21/2017	DP-17A 02/22/2017	DP-18 02/22/2017
VOCs[(1)] (mg/L)															
1,1-Dichloroethane	< 0.025	< 0.1	**0.0013 J**	< 0.25	**0.00092 J**	< 0.1	**0.00043 J**	**0.0012 J**	< 0.05	< 0.25	**0.0010 J**	< 0.25	< 0.05	< 0.25	< 0.0050
1,1-Dichloroethene	< 0.025	< 0.1	< 0.0050	< 0.25	< 0.0050	< 0.1	< 0.0050	< 0.0050	< 0.05	< 0.25	< 0.0050	< 0.25	< 0.05	< 0.25	< 0.0050
2-Butanone (MEK)	< 0.05	< 0.2	< 0.01	< 0.5	< 0.01	< 0.2	< 0.01	**0.0075 J**	< 0.1	< 0.5	< 0.01	< 0.5	< 0.1	< 0.5	< 0.01
4-Methyl-2-pentanone	< 0.05	< 0.2	< 0.01	< 0.5	< 0.01	< 0.2	< 0.01	< 0.01	< 0.1	< 0.5	< 0.01	< 0.5	< 0.1	< 0.5	< 0.01
Acetone	< 0.1	< 0.4	**0.0025 J**	< 1	< 0.02	< 0.4	< 0.02	**0.011 J**	< 0.2	< 1	< 0.02	< 1	< 0.2	< 1	< 0.02
Benzene	< 0.025	< 0.1	< 0.0050	< 0.25	< 0.0050	< 0.1	< 0.0050	< 0.0050	< 0.05	< 0.25	< 0.0050	< 0.25	< 0.05	< 0.25	**0.00040 J**
Bromomethane	< 0.025	< 0.1	< 0.0050	< 0.25	< 0.0050	< 0.1	< 0.0050	< 0.0050	< 0.05	< 0.25	< 0.0050	< 0.25	< 0.05	< 0.25	< 0.0050
Carbon disulfide	< 0.025	< 0.1	< 0.0050	< 0.25	< 0.0050	< 0.1	< 0.0050	< 0.0050	< 0.05	< 0.25	< 0.0050	< 0.25	< 0.05	< 0.25	< 0.0050
Chloromethane	< 0.025	< 0.1	< 0.0050	< 0.25	< 0.0050	< 0.1	< 0.0050	< 0.0050	< 0.05	< 0.25	< 0.0050	< 0.25	< 0.05	< 0.25	< 0.0050
cis-1,2-Dichloroethene	**0.0083 J**	< 0.1	**0.014**	< 0.25	**0.01**	**0.022 J**	**0.0047 J**	**0.013**	**0.013 J**	< 0.25	**0.014**	**0.05 J**	< 0.05	< 0.25	**0.0016 J**
Methyl acetate	< 0.025	< 0.1	< 0.0050	< 0.25	< 0.0050	< 0.1	< 0.0050	< 0.0050	< 0.05	< 0.25	< 0.0050	< 0.25	< 0.05	< 0.25	< 0.0050
Tetrachloroethene	**0.42**	**1.9**	**0.039**	**3.7**	**0.028**	**1.2**	**0.0093**	**0.087**	**0.86**	**4.7**	**0.033**	**3.6**	**0.93**	**4.2**	**0.19**
Trichloroethene	**0.0040 J**	< 0.1	**0.0015 J**	< 0.25	**0.00087 J**	< 0.1	**0.00062 J**	**0.0016 J**	**0.056**	< 0.25	**0.0012 J**	< 0.25	< 0.05	< 0.25	**0.0026 J**
Gases (ug/L)															
Methane	**770 n**	**13 n**	**2700 n**	**48 n**	**1.1 n**	**0.90 n**	**7900 n**	**260 n**	**28 n**	**2.3 n**	**520 n**	**8.5 n**	**1.5 n**	< 0.50 n	**24 n**
Ethane	**0.71 n**	**1.2 n**	**0.22 n**	**11 n**	< 0.10 n	**0.25 n**	**0.57 n**	**2.8 n**	**0.19 n**	**3.4 n**	**0.69 n**	**1.5 n**	**0.39 n**	< 0.10 n	< 0.10 n
Ethene	**0.64 n**	**0.84 n**	**0.18 n**	**1.9 n**	< 0.10 n	**0.24 n**	**0.21 n**	**0.75 n**	**0.10 n**	**0.66 n**	**0.42 n**	**1.1 n**	**0.32 n**	< 0.10 n	< 0.10 n
General Chemistry (mg/L)															
Sulfate	< 1.0	**1.1**	**8.4**	< 1.0	**58**	< 1.0	**72**	< 1.0	< 1.0	< 1.0	**28**	**0.86 J**	< 1.0	< 1.0	**9.0**
Field Parameters															
pH (s.u.)	**5.81**	**6.64**	**6.84**	**6.22**	**5.02**	**5.74**	**6.46**	**5.49**	**6.17**	**6.21**	**5.48**	**6.18**	**5.39**	**5.79**	**5.1**
Temperature (°C)	**17.47**	**18.2**	**21.01**	**21.2**	**25.07**	**25.41**	**18.35**	**18.34**	**19.56**	**30.56**	**22.3**	**19.24**	**22.43**	**17.76**	**19.82**
Specific Conductivity (uS/cm)	**262**	**390**	**343**	**172**	**173**	**74**	**463**	**85**	**264**	**96**	**126**	**128**	**236**	**120**	**300**
Dissolved Oxygen (mg/L)	**0**	**0**	**0**	**0**	**0.23**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2.91**	**0**
Oxidation Reduction Potential (mV)	**-23**	**-95**	**-94**	**-110**	**221**	**67**	**-103**	**30**	**-45**	**-39**	**67**	**-75**	**116**	**55**	**175**
Dissolved Ferrous Iron (mg/L)	**10 j**	**10 j**	**3**	**4**	**0.60**	**2**	**10 j**	**10 j**	**10 j**	**10 j**	**4**	**8**	**3**	**0.20**	**0.60**

[(1)] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 3-4
Pilot Study Field Parameter and Laboratory Results
Direct-Push Groundwater Samples

PARAMETER	SAMPLE LOCATION/DATE		
	DOWNGRADIENT PLUME		
	DP-18A 02/22/2017	DP-19 02/23/2017	DP-19A 02/23/2017
VOCs[(1)] (mg/L)			
1,1-Dichloroethane	< 0.05	**0.0016 J**	< 0.1
1,1-Dichloroethene	< 0.05	< 0.0050	< 0.1
2-Butanone (MEK)	< 0.1	< 0.01	< 0.2
4-Methyl-2-pentanone	< 0.1	< 0.01	< 0.2
Acetone	< 0.2	< 0.02	< 0.4
Benzene	< 0.05	< 0.0050	< 0.1
Bromomethane	< 0.05	< 0.0050	< 0.1
Carbon disulfide	< 0.05	< 0.0050	< 0.1
Chloromethane	< 0.05	< 0.0050	< 0.1
cis-1,2-Dichloroethene	< 0.05	**0.052**	**0.028 J**
Methyl acetate	< 0.05	< 0.0050	< 0.1
Tetrachloroethene	**0.51**	**0.15**	**1.5**
Trichloroethene	< 0.05	**0.0047 J**	< 0.1
Gases (ug/L)			
Methane	< 0.50 n	**1800 n**	**12 n**
Ethane	< 0.10 n	**0.50 n**	**1.6 n**
Ethene	< 0.10 n	**0.23 n**	**1.3 n**
General Chemistry (mg/L)			
Sulfate	< 1.0	**53**	**5.4**
Field Parameters			
pH (s.u.)	**6.25**	**6.17**	**6.53**
Temperature (°C)	**20.13**	**22.95**	**25.6**
Specific Conductivity (uS/cm)	**158**	**279**	**96**
Dissolved Oxygen (mg/L)	**5.12**	**0**	**0**
Oxidation Reduction Potential (mV)	**6**	**39**	**-93**
Dissolved Ferrous Iron (mg/L)	**0.40**	**0**	**8**

[(1)] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

LEGEND

- MONITORING WELLS
- INJECTION LOCATION AREAS

NOTES

Aerial photograph obtained from Google Earth Pro and image is dated 10/15/2015.

N

0 200 400 Feet

1 " = 200 '

1:2,400

PROJECT:

WESTPOINT HOME
CLEMSON, SOUTH CAROLINA

SHEET TITLE:

FIGURE 3-1
DATA POINT MAP & INJECTION LOCATION AREAS

DRAWN BY:	DJS	SCALE: 1: 2,400	PROJ. NO. 226253.0.0.2
CHECKED BY:	LMC		FILE NO. Figure 3-1 - Data Point and Injection.mxd
APPROVED BY:	SWW	DATE PRINTED:	
DATE:	APRIL 2017		

TRC

TRC - GIS

Coordinate System: NAD 1983 StatePlane South Carolina FIPS 3900 Feet (Foot US)
Map Rotation: 0

Saved By: DSZYNAL on 4/27/2017, 10:57:25 AM
Path: U:\West Point Home\Clemson SC\ArcGIS\10226253\2017\Figure 3-1 - Data Point and Injection.mxd

LEGEND

- WATER TABLE MONITORING WELL
- WATER TABLE ELEVATION CONTOUR (FT NAVD). DASHED WHERE INFERRED.
- GROUNDWATER FLOW DIRECTION

NOTES

GOOGLE EARTH AERIAL FROM OCTOBER 2015.

WATER LEVELS MEASURED MAY 24, 2016.

NM = NOT MEASURED

WATER ELEVATION FOR HARTWELL LAKE OBTAINED FROM www.sas.usace.army.mil.

N

0 200 400 Feet

1 " = 200 '

1:2,400

PROJECT:
WESTPOINT HOME, INC.
CLEMSON, SOUTH CAROLINA

SHEET TITLE:
WATER TABLE CONFIGURATION
MAY 24, 2016

DRAWN BY:	DSZYNAL	SCALE: 1: 2,400	PROJ. NO. 226253.0.0.5
CHECKED BY:	LCLARK		FILE NO. Figure 3-2 - Shallow_WT_2016May.mxd
APPROVED BY:	SWEBB	DATE PRINTED:	**FIGURE 3-2**
DATE:	MARCH 2017		

TRC

Saved By: DSZYNAL on 4/27/2017, 10:59:58 AM
Path: U:\West Point Home\Clemson SC\ArcGIS\10226253\2016\Figure 3-2 - Shallow_WT_2016May.mxd
Coordinate System: NAD 1983 StatePlane South Carolina FIPS 3900 Feet (Foot US)
Map Rotation: 0

TRC - GIS

LEGEND

- INTERMEDIATE MONITORING WELL
- INTERMEDIATE PIEZOMETRIC SURFACE ELEVATION CONTOUR (FT NAVD). DASHED WHERE INFERRED.
- GROUNDWATER FLOW DIRECTION

NOTES

GOOGLE EARTH AERIAL FROM OCTOBER 2015.

WATER LEVELS MEASURED MAY 24, 2016.

NM = NOT MEASURED

WATER ELEVATION FOR HARTWELL LAKE OBTAINED FROM www.sas.usace.army.mil.

N

0 200 400 Feet

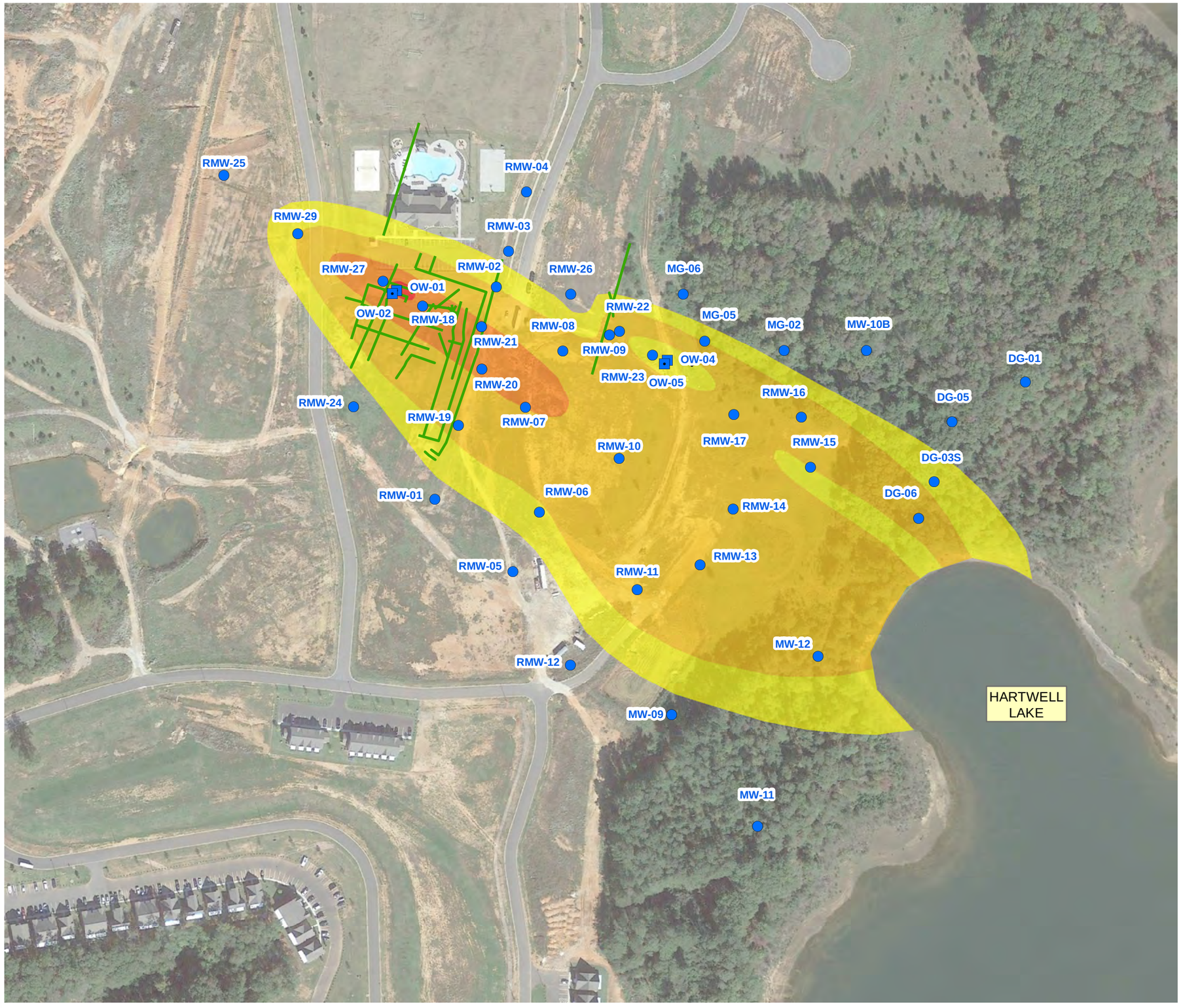
1 " = 200 '
1:2,400

PROJECT:
WESTPOINT HOME, INC.
CLEMSON, SOUTH CAROLINA

SHEET TITLE:
PIEZOMETRIC SURFACE - INTERMEDIATE ZONE
MAY 24, 2016

DRAWN BY: DSZYNAL	SCALE: 1: 2,400	PROJ. NO. 226253.0.0.5	
CHECKED BY: LCLARK		FILE NO. Figure 3-3 - Intermediate_PZ_2016May.mxd	
APPROVED BY: SWEBB	DATE PRINTED:	**FIGURE 3-3**	
DATE: APRIL 2017			

TRC



LEGEND

- WATER TABLE MONITORING WELL
- OBSERVATION WELL

GROUNDWATER SAMPLES COLLECTED
JULY 2014 THROUGH FEBRUARY 2017 (mg/L)

- >0.005 - 0.05 mg/L
- >0.05 - 0.5 mg/L
- >0.5 - 5 mg/L
- >5 mg/L

NOTES

AERIAL PHOTOGRAPHY FROM GOOGLE EARTH PRO OCTOBER 2015

LOCATIONS OF PIPING AND OTHER STRUCTURES (GREEN LINES) ARE FOR REFERENCE ONLY. FACILITY WAS DEMOLISHED 2008-2009.

PCE - TETRACHLOROETHENE

N

0 200 400 Feet

1 " = 200 '
1:2,400

PROJECT:
WESTPOINT HOME, INC.
CLEMSON, SOUTH CAROLINA

SHEET TITLE:
FIGURE 3-4
PCE DISTRIBUTION IN SHALLOW AQUIFER
PRE INJECTION

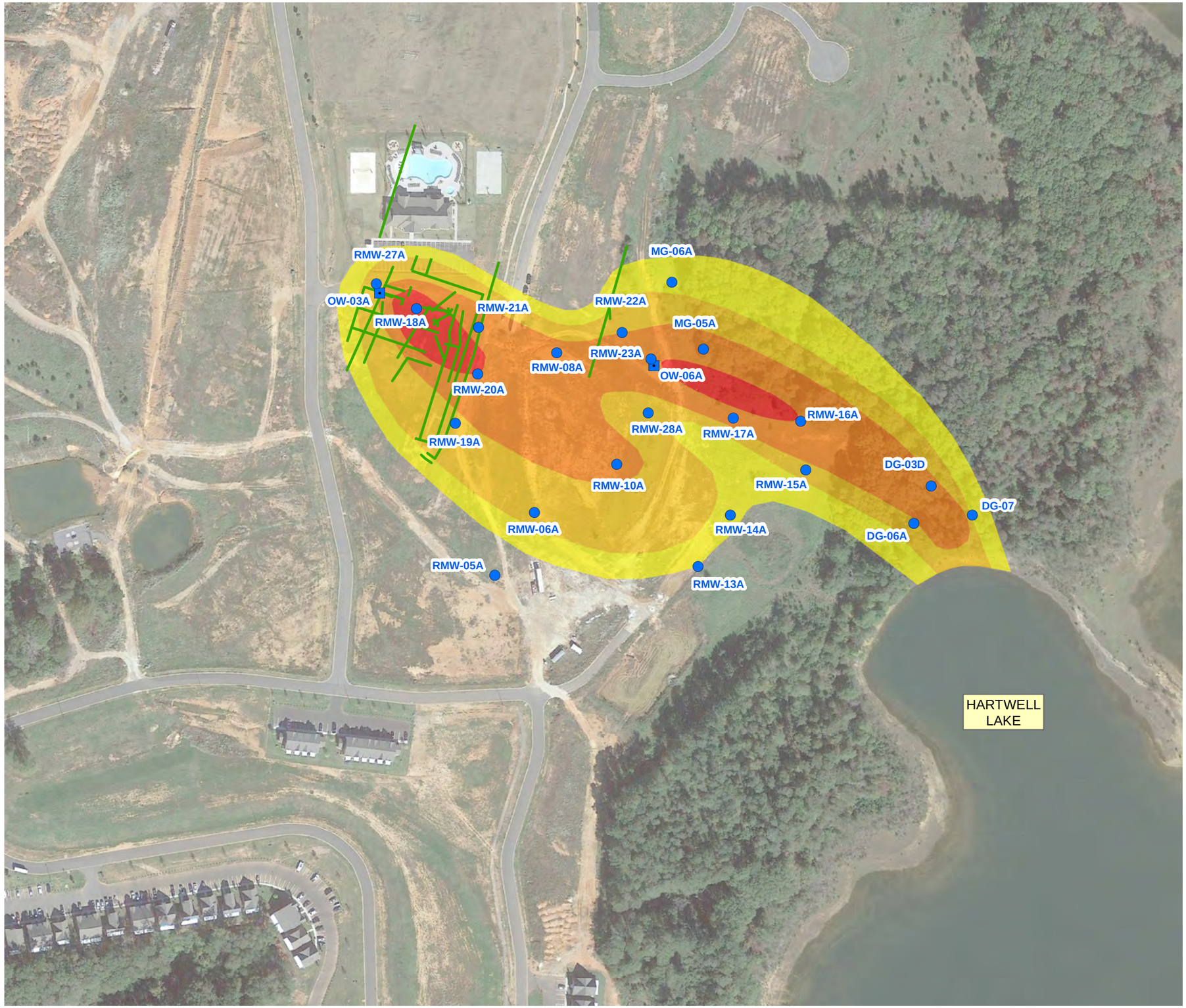
DRAWN BY:	DSZYNAL	SCALE: 1: 2,400	PROJ. NO. 226253.0.0.6
CHECKED BY:	CLARK L		FILE NO. Figure 3-4 - PCE - WaterTable.mxd
APPROVED BY:	WEBB S	DATE PRINTED:	
DATE:	APRIL 2017		

TRC

TRC - GIS

Coordinate System: NAD 1983 StatePlane South Carolina FIPS 3900 Feet (Foot US)
Map Rotation: 0

Saved By: DSZYNAL on 4/27/2017, 11:09:06 AM
Path: U:\West Point Home\Clemson SC\ArcGIS\10226253\2017\Figure 3-4 - PCE - WaterTable.mxd



LEGEND

- WATER TABLE MONITORING WELL
- OBSERVATION WELL

GROUNDWATER SAMPLES COLLECTED
JULY 2014 THROUGH FEBRUARY 2017

- >0.005 - 0.05 mg/L
- >0.05 - 0.5 mg/L
- >0.5 - 5 mg/L
- >5 mg/L

NOTES

AERIAL PHOTOGRAPHY FROM GOOGLE EARTH PRO OCTOBER 2015

LOCATIONS OF PIPING AND OTHER STRUCTURES (GREEN LINES) ARE FOR REFERENCE ONLY. FACILITY WAS DEMOLISHED 2008-2009.

PCE - TETRACHLOROETHENE

N

0 200 400 Feet

1 " = 200 '
1:2,400

PROJECT:
WESTPOINT HOME, INC.
CLEMSON, SOUTH CAROLINA

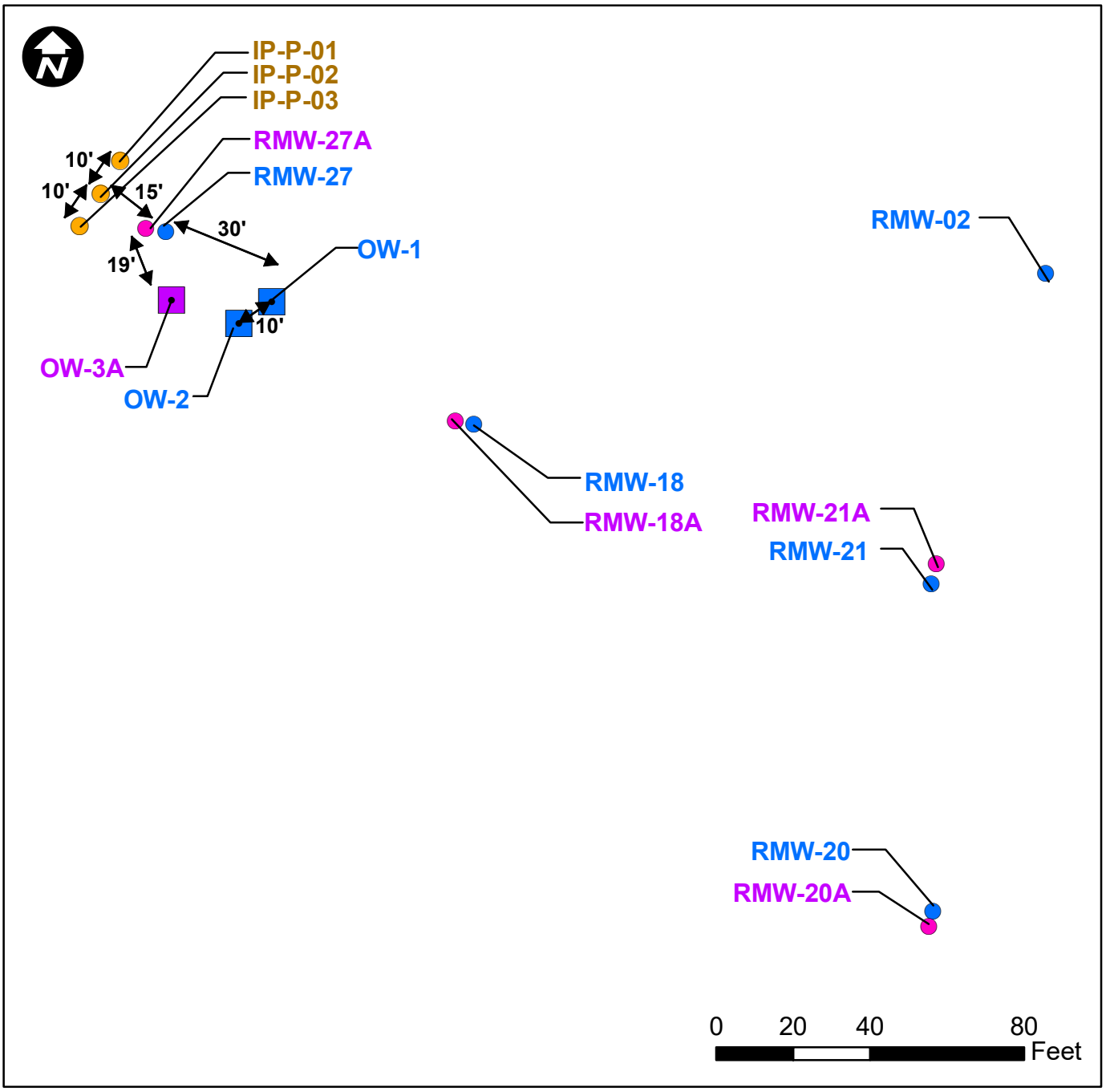
SHEET TITLE:
FIGURE 3-5
PCE DISTRIBUTION IN INTERMEDIATE AQUIFER
PRE-INJECTION

DRAWN BY:	DSZYNAL	SCALE:	PROJ. NO. 226253.0.0.15
CHECKED BY:	CLARK L	1: 2,400	FILE NO. Figure 3-5 - PCE - Intermediate.mxd
APPROVED BY:	WEBB S	DATE PRINTED:	
DATE:	APRIL 2017		

TRC

TRC - GIS
Coordinate System: NAD 1983 StatePlane South Carolina FIPS 3900 Feet (Foot US)
Map Rotation: 0
Saved By: DSZYNAL on 4/27/2017, 11:14:35 AM
Path: U:\West Point Home\Clemson SC\ArcGIS\10226253\2017\Figure 3-5 - PCE - Intermediate.mxd

TRC - GIS



LEGEND

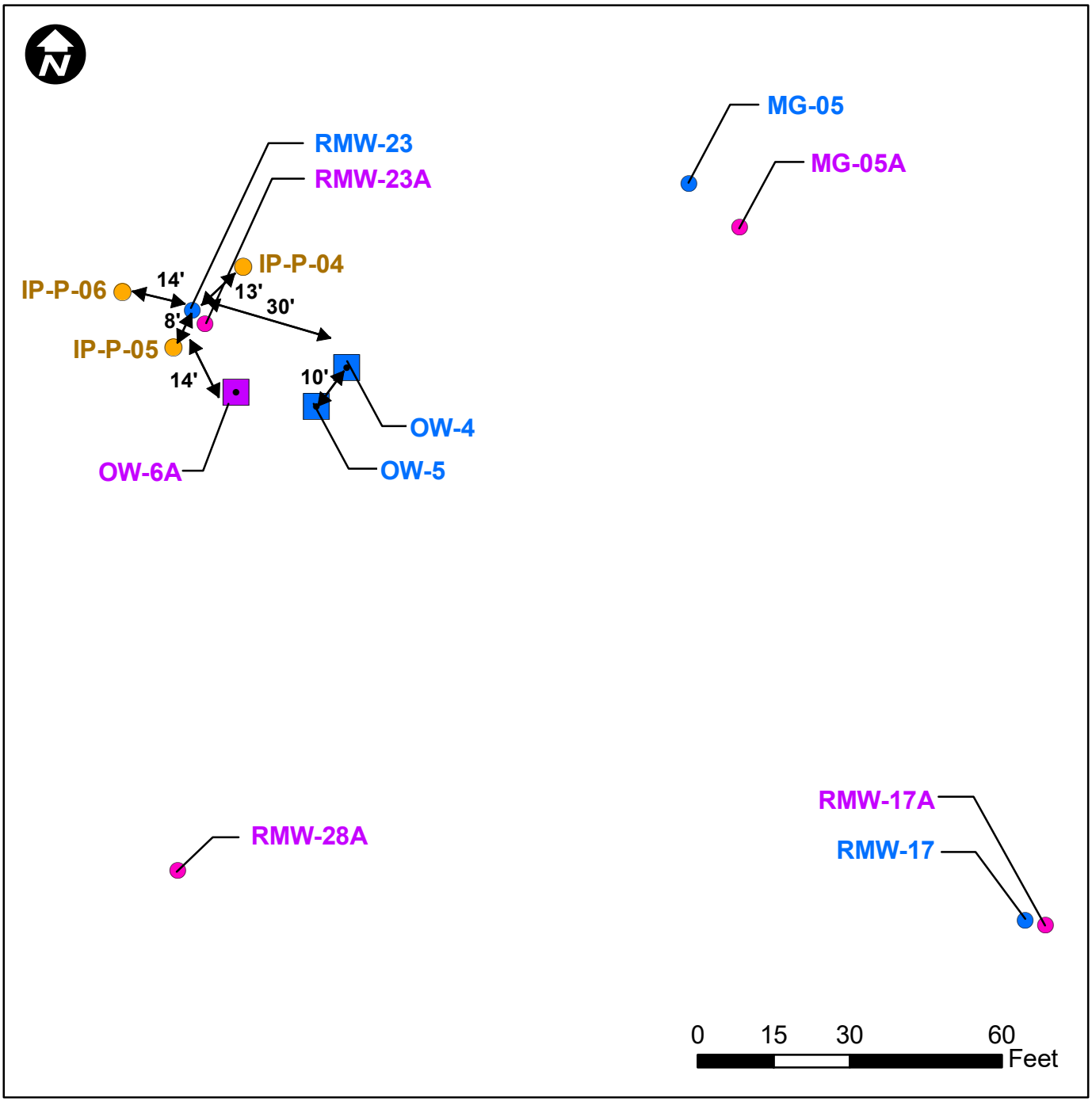
- INJECTION LOCATION
- WATER TABLE MONITORING WELLS
- INTERMEDIATE MONITORING WELLS
- OBSERVATION WELLS - SHALLOW AQUIFER ZONE
- OBSERVATION WELLS - INTERMEDIATE AQUIFER ZONE
- ESTIMATED GROUNDWATER FLOW PATHWAYS IN SHALLOW AQUIFER ZONE
- ESTIMATED GROUNDWATER FLOW PATHWAYS IN INTERMEDIATE AQUIFER ZONE
- WATER TABLE ELEVATION CONTOUR (FT MSL)
- INTERMEDIATE PIEZOMETER SURFACE ELEVATION CONTOUR (FT MSL)

TRC

WESTPOINT HOME
CLEMSON, SOUTH CAROLINA

FIGURE 3-6
INJECTION AND MONITORING NETWORK
UPGRADIENT PLUME

DRAWN BY:	DJS
APPROVED BY:	LMC/JEP
PROJECT NO:	226253.0.0
FILE NO.	Figure 3-6 - IMN - Upgradient Plume.mxd
DATE:	APRIL 2017



LEGEND

- INJECTION LOCATION
- WATER TABLE MONITORING WELLS
- INTERMEDIATE MONITORING WELLS
- OBSERVATION WELLS - SHALLOW AQUIFER ZONE
- OBSERVATION WELLS - INTERMEDIATE AQUIFER ZONE
- ESTIMATED GROUNDWATER FLOW PATHWAYS IN SHALLOW AQUIFER ZONE
- ESTIMATED GROUNDWATER FLOW PATHWAYS IN INTERMEDIATE AQUIFER ZONE
- WATER TABLE ELEVATION CONTOUR (FT MSL)
- INTERMEDIATE PIEZOMETRIC SURFACE ELEVATION CONTOUR (FT MSL)

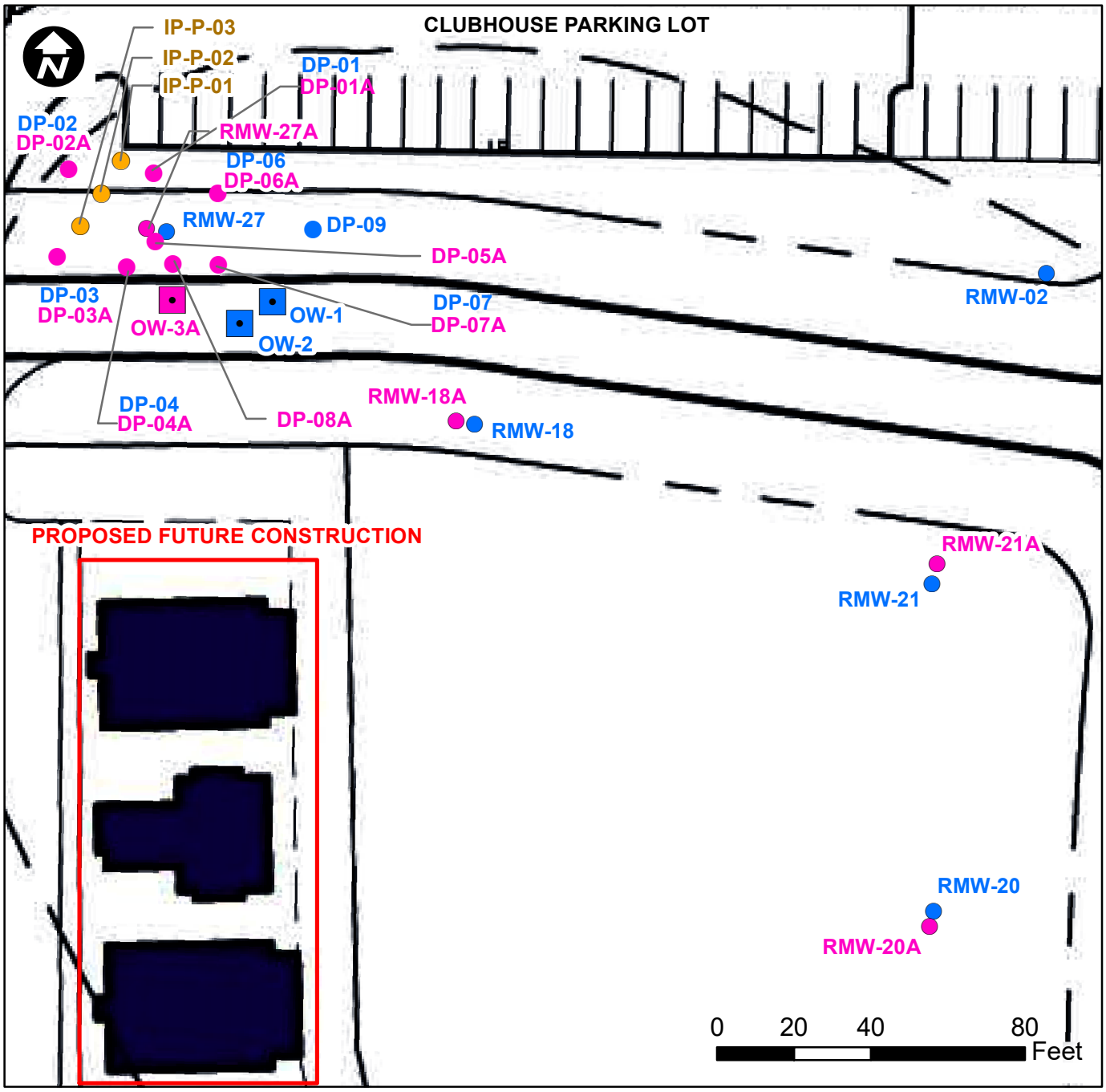
TRC

WESTPOINT HOME
CLEMSON, SOUTH CAROLINA

FIGURE 3-7
INJECTION AND MONITORING NETWORK
DOWNGRADIENT PLUME

DRAWN BY:	DJS
APPROVED BY:	LMC
PROJECT NO:	226253.0.0
FILE NO.	Figure 3-7 - IMN - Downgradient Plume.mxd
DATE:	APRIL 2017

TRC - GIS



LEGEND

- INJECTION LOCATION
- WATER TABLE MONITORING WELLS & DP LOCATIONS
- INTERMEDIATE MONITORING WELLS & DP LOCATIONS
- OBSERVATION WELLS - SHALLOW AQUIFER ZONE
- OBSERVATION WELLS - INTERMEDIATE AQUIFER ZONE

NOTE:
IMAGE BACKGROUND PROVIDED BY TOM WINKOPP REALTOR/DEVELOPER

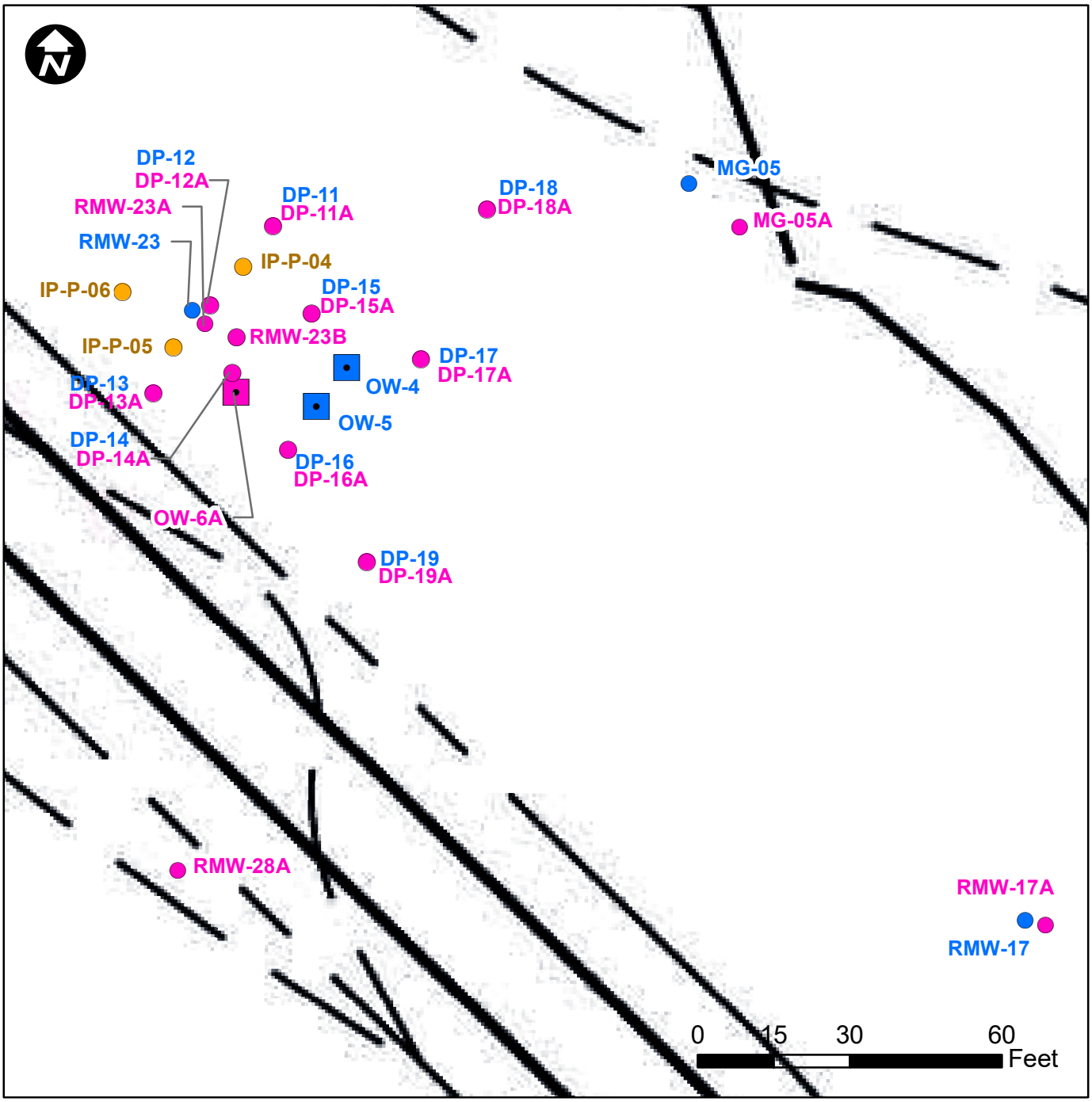
TRC

WESTPOINT HOME
CLEMSON, SOUTH CAROLINA

FIGURE 3-8
COMPREHENSIVE GROUNDWATER MONITORING NETWORK
UPGRADIENT PLUME

DRAWN BY:	DJS
APPROVED BY:	LMC/JEP
PROJECT NO:	226253.0.0
FILE NO.	Figure 3-8 - Upgradient Plume.mxd
DATE:	APRIL 2017

TRC - GIS



LEGEND

- INJECTION LOCATION
- WATER TABLE MONITORING WELLS & DP LOCATIONS
- INTERMEDIATE MONITORING WELLS & DP LOCATIONS
- OBSERVATION WELLS - SHALLOW AQUIFER ZONE
- OBSERVATION WELLS - INTERMEDIATE AQUIFER ZONE

NOTE:
IMAGE BACKGROUND PROVIDED BY TOM WINKOPP REALTOR/DEVELOPER

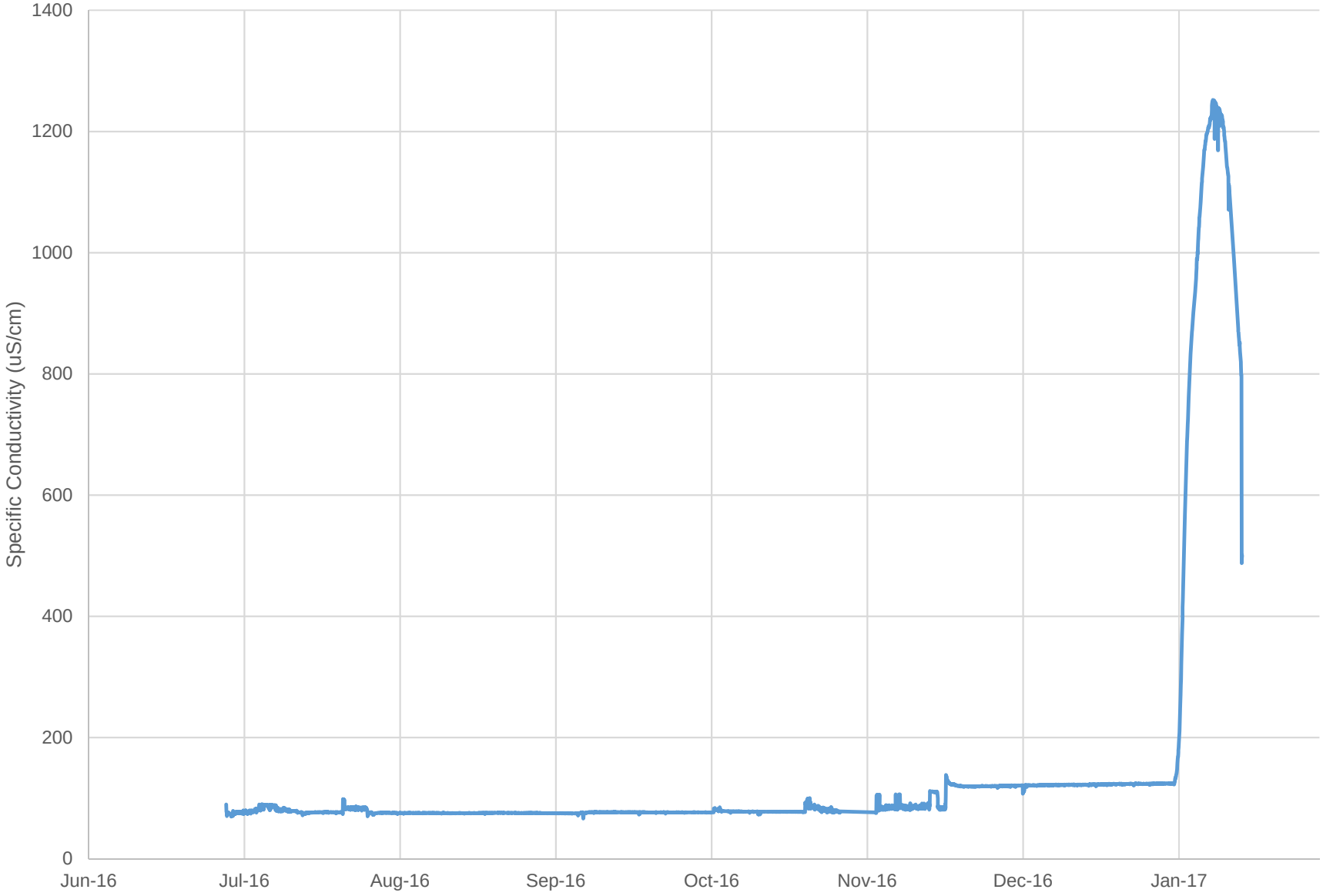
TRC

WESTPOINT HOME
CLEMSON, SOUTH CAROLINA

FIGURE 3-9
COMPREHENSIVE GROUNDWATER MONITORING NETWORK
DOWNGRADIENT PLUME

DRAWN BY:	DJS
APPROVED BY:	LMC
PROJECT NO:	226253.0.0
FILE NO.	Figure 3-9 - Downgradient Plume.mxd
DATE:	APRIL 2017

Figure 3-10
Specific Conductivity at OW-05



P:\Clients\West Point Home\Clemson SC\226253 - Remedial Action Work Planning\Pilot Study\Data Loggers\OW-05\OW-05_Append_2016-10-21_13-52-34-771.xlsx

Section 4
Discussion of Pilot Study Results

The ABC+ pilot study was initiated in late June 2016 and the latest round of performance monitoring was completed in March 2017. This amounts to a period of slightly more than 8 months since the initial ABC+ injections were conducted. During this time-frame, TRC collected various data and lines of evidence to be evaluated against the objectives of the pilot study, first outlined in Section 3.1 of this report. The discussion that follows is intended to highlight those aspects of the pilot study that would lead us to conclude that the application of ABC+ represents a reasonable and cost-effective option for this site. The discussion that follows also identifies and highlights areas where WPH might desire to reconsider the possibility of incorporating ERD and ZVI treatment methodologies into an integrated remedial alternative.

4.1 Delineation of Microbial Communities

As discussed earlier, a decision was reached during the work planning process to forego delineation of the existing microbial populations that may or might not be present at the Clemson site. Overall, site conditions appeared to be more aerobic and less conducive to anaerobic processes. Rather than spend considerable effort and resources on discerning the specific microbial communities that were present, it was mutually agreed that a suitable and robust bioaugmentation culture would be added to the ABC+ injectate. The culture that was selected is commercially available as Shaw's dechlorinating culture (SDC-9™). This culture contains *Dehalococcoides sp.* (DHC), which are widely acknowledged as microbes capable of biodegrading a wide range of chlorinated solvent compounds via dehalorespiration. A total of 19 liters of this bioaugmentation culture was added to each of the pilot study areas, divided evenly among the various depth intervals and injection point locations.

Because DHC was added to the ABC+ injectate, delineation of the various microbial communities using available microcosm analyses was not implemented during the pilot study. During the pilot test, TRC did monitor and observe the activity and response of the microorganisms (either naturally occurring or artificially introduced) via various metabolic by-products or biochemical reactions that would not otherwise have occurred without the influence of ABC+ treatment enhancements in the aquifer. As presented on Tables 4-1 through 4-3, there are a number of lines of evidence that TRC followed during the pilot study to demonstrate/discern that dehalorespiration was occurring and was sustained within the subsurface during the pilot study, including:

- The observation of depressed levels of DO and reduced ORP (see Table 4-1)

- Observation of ferrous iron species, a good indicator of reducing conditions (see Table 4-1)
- Observation of dissolved gases generated during anaerobic metabolism, such as methane, ethane, and ethene (see Table 4-2)
- Observation of PCE daughter products, such as TCE and cis-1,2-DCE, which had previously been undetected at the site (see Table 4-3)
- Observation of various metabolic breakdown products from the carbon substrate and lactate esters, such as methyl ethyl ketone, acetone, and methyl acetate (see Table 4-3)
- Observation of elevated sulfide levels, a further indication of reducing conditions (see Table 4-1)
- Elevated concentrations of total organic carbon (TOC), which relate to the presence of fermentable carbon in the ABC+ (see Table 4-1)

4.2 Technical Practicability of Direct Push Injection

A crucial consideration regarding the potential success of ABC+ as a suitable remedy for site groundwater is whether or not direct push technology could be effectively applied to introduce the treatment materials to specific depth intervals within each of the VOC-affected plume areas. As previously discussed in Section 3.3, prior to injecting ABC+ materials into each of the prescribed pilot study injection locations, the DP rig must first achieve a suitable depth into which meaningful quantities of ABC+ could be injected. Thus, one of the key objectives of the pilot study was to assess the maximum depth to which the DP tooling could be extended within a particular area of interest. For the upgradient plume area, the DPT rig was situated at the IP-P-03 injection location and achieved a depth of 76.5 feet bgs. This depth correlates to the bottom of the intermediate aquifer zone. For the downgradient plume area, the DP rig was situated at IP-P-06 and was able to achieve a maximum depth of 70 feet bgs. Again, this depth correlates to the bottom of the intermediate aquifer zone. These depths are believed to be sufficient to achieve a meaningful delivery of the ABC+ treatment media across a significant portion of the observed VOC plume areas.

Within the downgradient plume area, TRC encountered several instances where shallow obstacles limited our ability to achieve treatment depths below the water table at two of the downgradient plume injection points. Shallow debris from the demolition activities appears to be the cause of this difficulty and the situation was resolved by adjusting injection locations. This indicates that some level of flexibility may be needed during full-scale implementation of an ABC+ remedial alternative in order to identify and accommodate suitable placement of future injection locations.

4.3 Distribution and Treatment Efficacy of ABC+

During the ABC+ injection event, the treatment chemicals were injected into the subsurface through a 5/8-inch nozzle under pressures ranging up to 200 psi. Beginning near the bottom of each injection boring and proceeding upward, approximately 200 gallons of treatment material were injected into the subsurface at five foot intervals. Under ideal conditions, introduction of the ABC+ material in this uniform manner would theoretically result in a disk that displaces the soil within that treatment zone. It would also result in a theoretical radius of treatment extending slightly more than 8 feet from the injection point. In reality, the distribution of the ABC+ treatment materials is not nearly this uniform and can be prone to follow preferential flow pathways that occur along zones of weakness within the soil fabric, such as remnant foliation, fractures, joints, and soil heterogeneities.

When a preferential flow pathway intersects a nearby monitoring well, it is possible for the injected ABC+ material to enter the well screen and this circumstance is referred to as "daylighting." In the upgradient plume pilot study area, this circumstance occurred at the 35-foot bgs level for IP-P-01. In the downgradient plume pilot study area, this is believed to have occurred at the 40-foot bgs level, the 25-foot bgs level, and the 20-foot bgs level for IP-P-06.

During the pilot study, the ABC+ injection points were purposely located within 15 feet of the nearest monitoring well to expedite our ability to monitor and assess the effects of the injections. During a full-scale injection event, the timing and anticipated schedule of the remediation effort would not be as time-critical as during a pilot study. Thus, a greater distance would be maintained between injection locations and nearby permanent wells. Also, we have discerned from the Clemson pilot study that injection pressures can be reduced, to some extent, and still achieve treatment objectives while lessening the incidence of "daylighting" ABC+ material into nearby monitoring wells.

Rehabilitation activities relating to those monitoring wells that experienced "daylighting" was discussed in Section 3.4 of this report. Over time, TRC fully anticipates that these affected wells, following aggressive well redevelopment efforts, will be restored to full function and provide useful data. Each of the rehabilitated monitoring wells was sampled during the February 2017 performance monitoring event and the groundwater quality results were compared to those of nearby DP groundwater samples. These data suggest to TRC that residual amounts of the ABC+ injectate are still present inside the well casing of these wells, but there has been dramatic improvement in each of these wells. We anticipate that residual levels of the lactate-based injectate will continue to degrade over time and the affected wells may be used to help assess site conditions. Ongoing performance monitoring will be required to establish when these wells have been restored to full function.

Since the ABC+ injection event, TRC has conducted extensive monitoring across both pilot study areas looking for evidence of the distribution and treatment efficacy of the ABC+ injections. These performance monitoring activities have included monthly sampling and evaluation of field and laboratory indicator parameters (described in Section 3.5 of this report) and quarterly evaluations of the observed levels of VOCs and dissolved gases that were detected in selected monitoring wells.

The analytical method used to quantify sulfate levels (ion chromatography) in the groundwater has provided us with another useful screening tool to evaluate evidence of ABC+ distribution within the pilot study areas. In addition to the commonly occurring anions present in groundwater, the ion chromatogram is also capable revealing evidence of ABC+ distribution in the environment. When an unidentified peak was noted in the ion chromatograms, TRC submitted a dilute sample of the ABC material to the laboratory for further evaluation. The lactate-based materials present in the ABC sample exhibited the same elutriation time as this unknown peak. These findings have proved to be useful as a qualitative tool to discern when the ABC treatment components have reached a particular monitoring location. This ABC-related peak has come to be acknowledged as evidence that the lactate components of the ABC have migrated into the area represented by the groundwater sample. Although we are not using this technique as a quantifiable measure of lactate concentration, the relative size of the chromatogram peaks helps us develop a better sense of the relative magnitude of the treatment product that is present and the likelihood of seeing various metabolic products derived from the ABC+ degradation of the PCE.

During the first five monitoring events of the ABC+ pilot study (July 2016 through January 2017), TRC observed that the most significant evidence of ABC+ treatment activity was generally limited to the nearby monitoring and observation wells where the injectate had daylighted. Beyond these monitoring wells, there was only limited evidence of ABC+ distribution observed. The lines of evidence that TRC identified during this time-frame included the following:

- Observation well OW-1 exhibited evidence of low lactate concentrations during monitoring event 5
- Observation well OW-04 exhibited evidence of low lactate concentrations, ferrous iron, dissolved gases, and low DO/ORP during monitoring events 3, 4, and 5
- Observation well OW-05 exhibited evidence of low lactate concentrations, ferrous iron , dissolved gases, and low DO/ORP during monitoring events 3, 4, and 5
- Permanent well RMW-28A exhibited evidence of low lactate concentrations during monitoring event 4 and a lower DO and dissolved gases during monitoring event 5

Following our December 8, 2016 meeting with SC DHEC, monitoring event 6 was expanded to include additional direct push (DP) groundwater sampling points, as well as the existing permanent monitoring and observation well sampling locations. This has turned out to be a very useful and strategic modification to the pilot study sampling program, as this expanded sampling effort has revealed much new and useful information.

During monitoring event 6, TRC collected DP groundwater samples from both the shallow and intermediate depth intervals. These DP groundwater samples have helped infill a considerable amount of area between permanent wells and expanded our understanding of how the ABC$^+$ has distributed through the subsurface. Figure 3-8 provides a compilation of the various DP and permanent sampling locations utilized within the upgradient plume pilot study area. Figure 3-9 includes a compilation of the various DP and permanent sampling locations utilized within the downgradient plume pilot study area. The discussion that follows is intended to present the results and findings from the monitoring event 6, where expanded DPT and permanent well monitoring was conducted.

Lines of evidence for ABC$^+$ treatment distribution and efficacy were introduced in Section 4.1. TRC's interpretation of the monitoring data with respect to these lines of evidence are presented for the upgradient plume in Table 4-4 and for the downgradient plume in Table 4-5. The table includes color coding for the lines of evidence as green for "good" or "well supported," yellow for "weaker" or "less well supported," and red for "not supported." The lines of evidence evaluated in these tables include the following:

- Low DO and low ORP
- Presence of ferrous iron
- Presence of methane, ethane, or ethene dissolved gas
- Presence of chlorinated VOC byproducts such as trichloroethene or *cis*-1,2-dichlroethene
- Presence of lactate byproducts such as methyl ethyl ketone, acetone, or methyl acetate or presence of the lactate-related peak on the ion chromatogram.

Note that the lactate byproducts are intermediate steps in the process and will be fully consumed over time.

Figure 4-1 graphically presents the information in Tables 4-4 and 4-5 by showing a green area around the monitoring wells and DP sampling points where at least one well supported line of evidence or multiple less well supported lines of evidence indicate that the area represented has been positively influenced by the pilot ABC$^+$ injections.

4.3.1 Upgradient Plume Area

During monitoring event 6, groundwater samples were collected to evaluate VOCs and dissolved gases in each of the wells, in addition to the standard field and laboratory indicators that had previously been evaluated during monitoring events 1 through 5. Within the upgradient plume pilot study area, laboratory analyses revealed solid evidence of ABC$^+$ moderated treatment effects at OW-1. OW-1 apparently represents the southern edge of observed treatment within this portion of the pilot study area. The most definitive line of evidence at OW-1 was the confirmed presence of dissolved gases which are typically indicative of ERD-related treatment. OW-2 also exhibited some detections of these dissolved gases, but at lower concentrations than OW-1. TRC took this as an indication of reduced treatment effectiveness across a more extended distance from the migration pathway of the pilot study injections.

The results of the DP sampling suggest that the shallow groundwater is migrating from the upgradient plume injection points in an eastward-trending direction. This was an unexpected observation, as we would have anticipated the shallow groundwater to be moving more to the southeast, as shown in Figure 4-1. TRC also observed good evidence of active ABC$^+$ treatment activity at DP-01/01A, located sidegradient to downgradient of the injection points, and at DP-02/02A, slightly upgradient of the injection points.

These observations suggest that there was an initial injection radius of influence of at least 10 feet. Positive indications of ABC$^+$ treatment activity at DP-09 further suggest a migration rate of about 60 feet over an 8 month period, which could be extended to an annual flow rate of about 90 feet per year for the shallow groundwater regime. The effect of ABC$^+$ injection activity within the intermediate zone groundwater appears to be occurring at a slower rate than the shallow groundwater. Based on the onset of ABC$^+$ treatment affects at DP-5A after 8 months, TRC estimates that migration of the treatment media within the intermediate groundwater zone is occurring toward the southeast at about 26 feet per year.

4.3.2 Downgradient Plume Area

Within the downgradient pilot study area, observation wells OW-04 and OW-05 exhibited indications of ABC$^+$ treatment effects as early as October 2016, but these indications became more widespread in February 2016. The lines of evidence observed at well OW-05 appeared to exhibit greater response effects than at OW-04. This suggests to TRC that migration of the ABC$^+$ from the three injection points may have traveled in slightly different directions. The composite of this effect is better observed in Figure 4-1.

You should recall that during the downgradient pilot study effort, subsurface obstacles or demolition debris necessitated movement of two ABC$^+$ injection points from their initial locations. The possibility of geologic controls at work in this area cannot be ruled out.

The results of the DP sampling conducted within the downgradient plume area suggests that migration of the ABC$^+$ within the shallow groundwater is occurring in a direction towards the east-southeast, as shown on Figure 4-1. There are clear lines of evidence suggesting ongoing ABC$^+$ treatment activity at DP-18. This suggests a migration rate of about 45 feet over the 8 month duration of the pilot study for an annual rate of about 70 feet per year in the shallow groundwater. The apparent migration of the ABC$^+$ treatment media within the intermediate zone groundwater is in a more southeast to southerly direction. Based on the observation of ABC$^+$ treatment effects at DP-19A 8 months following injection, TRC estimates that migration of the treatment media within the intermediate zone of this area is occurring toward the southeast at about 85 feet per year. ABC$^+$ treatment influences were observed at RMW-28A, located approximately 165 feet to the south, within about 3 months of injection. This rapid migration of the ABC$^+$ most likely occurred as a result of a preferential flow pathway and is probably not representative of what we would reasonably expect of groundwater migration within the intermediate groundwater zone.

As noted earlier for the upgradient plume area, Figure 4-1 provides a summary of TRC's interpretation of the areas of influence noted within the downgradient groundwater plume area after 7 months of treatment activity. Figure 10 was prepared using the various lines of evidence summarized in Tables 4-4 and 4-5. Where there occurred definitive evidence of ABC$^+$ treatment activity, TRC included these areas within the overall zone of observed treatment influence. As noted earlier, time versus VOC concentration plots were not utilized to evaluate treatment performance, since a relatively small area surrounded by a larger plume area was subject to treatment. In this scale of time and location, VOC concentration plots do not provide definitive evidence for or against treatment efficacy, especially in comparison to other lines of evidence available from the pilot study. Based on the most recent groundwater sampling efforts, TRC is of the opinion that ABC$^+$ treatment injections have resulted in pervasive and positive aquifer response. Thus, the downgradient plume area also appears to have responded to the ABC$^+$ treatments applied during the pilot study.

4.4 Implications for the Focused Feasibility Study

A primary objective of this ABC+ pilot study was to discern whether or not the integration of two innovative remedial treatment alternatives, ERD and ZVI, might represent a reasonable and cost-effectively approach to addressing the observed levels of PCE in the groundwater of the former WPH Clemson site. SC DHEC has required a Focused Feasibility Study (FFS) be prepared for the site and this document is currently in preparation. Currently, the scope of the FFS encompasses the following remedial treatment alternatives:

- *In situ* chemical oxidation (ISCO) - a widely-accepted and aggressive treatment strategy for degrading chlorinated VOCs in the groundwater of the site. Because the site is the focus of ongoing construction of student apartments and single family housing, the application of ISCO in proximity to a residential community setting creates safety and health concerns.
- Enhanced Reductive Dechlorination (ERD) – this treatment strategy represents another widely accepted remedial approach that relies upon stimulation/augmentation of naturally occurring anaerobes that possess the unique ability of degrading VOCs via dehalorespiration. For a site like the former Clemson facility, ERD would require introduction of suitable nutrients and organic substrates to facilitate this anaerobic transformation and transition into monitored natural attenuation (MNA).
- Zero Valent Iron (ZVI) - Similar to ISCO, ZVI represents a physical-chemical approach to inducing reductive dechlorination of chlorinated ethenes. ZVI functions best in a reducing environment and has demonstrated success in a wide variety of different environments and flow regimes.
- Anaerobic BioChem Plus (ABC+) – ABC+ represents an appealing hybrid of the ERD and ZVI treatment technologies. Together, ERD and ZVI exhibit many synergistic influences that might provide a unique approach to addressing conditions observed at the former Clemson site.

The ABC+ pilot study has successfully demonstrated that direct push technologies can be reasonably applied at the site to deliver ISCO, ERD or ZVI treatment media. At many sites across the South Carolina Upstate, DPT is not possible and can encounter many near surface obstacles and probe refusal. This does not appear to be the case at the Clemson site.

The ABC+ pilot study has also demonstrated that ERD, ZVI and suitable supplements (*i.e.*, nutrients, buffer solutions, and bioaugmentation cultures) can also be delivered to appropriate depths and in sufficient quantity to achieve meaningful contaminant reduction.

On the basis of this ABC+ pilot study, TRC is now comfortable proceeding with final preparation of the Focused Feasibility Study and conducting an evaluation of the remedial alternatives listed above. The FFS will contain more detailed information and discussion regarding each of these remedial alternatives and provide a suitable technical basis upon which

future remedy selection for the site can be based. Much of the conceptual layout and technical considerations for the FFS treatment alternatives will be based upon site-specific information derived from this ABC$^+$ pilot study.

Table 4-1
Field and Laboratory Indicator Data Summary

SAMPLE LOCATION/DATE		PARAMETER[1]										
WELL	DATE	Potassium	Sulfate	Sulfide	Total Organic Carbon	pH (s.u.)	Temperature (°C)	Specific Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (ntu)	Dissolved Ferrous Iron (mg/L)
UPGRADIENT PLUME AREA												
DP-01	02/20/2017	NA	**67**	NA	NA	**5.4**	**21.19**	**494**	**0**	**-78**	NA	**3**
DP-01A	02/20/2017	NA	**1.4 J**	NA	NA	**5.78**	**24.84**	**868**	**0**	**-443**	NA	**> 10**
DP-02	02/17/2017	NA	**90**	NA	NA	**5.01**	**23.77**	**794**	**0**	**-13**	NA	**> 10**
DP-02A	02/17/2017	NA	**0.64 J**	NA	NA	**6.36**	**25**	**136**	**0.30**	**-12**	NA	**4**
DP-03	02/17/2017	NA	**81**	NA	NA	**5.85**	**22.84**	**283**	**3.50**	**97**	NA	**0.10**
DP-03A	02/17/2017	NA	< 1.0	NA	NA	**5.9**	**24.08**	**68**	**0**	**40**	NA	**1**
DP-04	02/17/2017	NA	**47**	NA	NA	**4.91**	**16.56**	**425**	**0**	**-25**	NA	**3**
DP-04A	02/17/2017	NA	< 1.0	NA	NA	**6.02**	**22.65**	**57**	**4.55**	**6**	NA	**0.20**
DP-05A	02/16/2017	NA	< 1.0	NA	NA	**5.65**	**17.33**	**855**	**0**	**-61**	NA	**6**
DP-06	02/16/2017	NA	**95**	NA	NA	**5.91**	**21.1**	**650**	**0**	**33**	NA	**4**
DP-06A	02/16/2017	NA	< 1.0	NA	NA	**6.48**	**23.26**	**70.1**	**1.07**	**-23**	NA	**0.30**
DP-07	02/16/2017	NA	**66**	NA	NA	**5.91**	**22.61**	**371**	**0**	**30**	NA	**1**
DP-07A	02/16/2017	NA	< 1.0	NA	NA	**5.92**	**22.17**	**50**	**4.19**	**44**	NA	**0**
DP-08A	02/20/2017	NA	< 1.0	NA	NA	**6.56**	**28.42**	**68**	**3.82**	**31**	NA	**0**
DP-09	02/23/2017	NA	**130**	NA	NA	**6.14**	**22.94**	**727**	**0**	**43**	NA	**0.40**
OW-01	05/26/2016	**1.4 J**	**100**	NA	**1.1 B**	**5.53**	**20.83**	**767**	**3.79**	**303**	**9.48**	**0**
OW-01	07/27/2016	NA	**110**	NA	NA	**4.85**	NA	**766**	**0.06** [2]	**308.9**	NA	NA
OW-01	09/08/2016	NA	**120**	NA	NA	**4.48**	**24.73**	**624**	**2.48**	**257**	NA	NA
OW-01	10/04/2016	NA	NA	NA	NA	**5.06**	**22.17**	**836**	**2.44**	**166**	NA	**0.3**
OW-01	11/18/2016	NA	**160**	NA	NA	**5**	**17.64**	**610**	**5.01**	**-47**	NA	**0**
OW-01	12/02/2016	NA	NA	NA	NA	**4.55**	**18.46**	**647**	**1.05**	**169**	NA	NA
OW-01	01/24/2017	NA	**170**	NA	NA	**4.95**	**19.44**	**607**	**5.44**	**137**	NA	**0**
OW-01	02/20/2017	**0.78**	**130**	**1.1**	**3.9**	**4.84**	**21.5**	**373**	**0.22**	**94**	NA	**0**
OW-02	05/25/2016	**1.8 J**	**120**	NA	**1.2 B**	**5.72**	**21.31**	**917**	**3.7**	**219**	**15.8**	**0**
OW-02	07/27/2016	NA	**130**	NA	NA	**4.86**	NA	**811**	**9.91** [2]	**77.6**	NA	NA
OW-02	09/08/2016	NA	**130**	NA	NA	**4.83**	**25.47**	**512**	**6.58**	**374**	NA	NA
OW-02	10/05/2016	NA	NA	NA	NA	**4.87**	**20.71**	**817**	**3.73**	**422**	NA	**0**
OW-02	11/18/2016	NA	**170**	NA	NA	**4.99**	**17.96**	**516**	**6.1**	**106**	NA	**0**
OW-02	01/24/2017	NA	**130**	NA	NA	**4.86**	**20.09**	**527**	**4.30**	**180**	NA	**0**
OW-02	02/20/2017	**0.79**	**130**	**0.83 J**	**1.8**	**4.54**	**22.01**	**371**	**1.68**	**479**	NA	**0**
OW-03A	05/26/2016	**0.94 J**	**2.4**	NA	< 0.44 BJ u	**6.03**	**22.48**	**58**	**5.71**	**265**	**1.49**	**0**
OW-03A	07/27/2016	NA	**0.66 J**	NA	NA	**5.43**	NA	**49**	**0.05** [2]	**260.7**	NA	NA
OW-03A	09/07/2016	NA	< 1.0	NA	NA	**6.32**	**30.99**	**33**	**6.18**	**279**	NA	NA
OW-03A	10/05/2016	NA	NA	NA	NA	**6.77**	**21.28**	**53**	**6.20**	**277**	NA	**0**
OW-03A	12/02/2016	**0.81**	< 1.0	< 1.0	< 1.0	**4.55**	**17.9**	**35**	**8.19**	**250**	NA	**0**
OW-03A	01/24/2017	NA	< 1.0	NA	NA	**5.41**	**20.27**	**40**	**7.87**	**176**	NA	**0**
OW-03A	02/20/2017	**0.8**	< 1.0	**0.77 J**	**0.36 J**	**4.97**	**22.43**	**25**	**6.14**	**297**	NA	**0**

Table 4-1
Field and Laboratory Indicator Data Summary

SAMPLE LOCATION/DATE		PARAMETER[1]										
WELL	DATE	Potassium	Sulfate	Sulfide	Total Organic Carbon	pH (s.u.)	Temperature (°C)	Specific Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (ntu)	Dissolved Ferrous Iron (mg/L)
RMW-02	05/28/2016	38	12	NA	NA	11.89	21.3	1320	0	-301	8.07	0
RMW-02	07/27/2016	NA	14	NA	NA	9.68	NA	381	13.78 [2]	-4.0	NA	NA
RMW-02	09/08/2016	NA	12	NA	NA	12.74	25.16	571	0	3	NA	NA
RMW-02	09/09/2016	NA	NA	NA	NA	12.80	26.65	644	0	-95	NA	NA
RMW-02	10/05/2016	NA	NA	NA	NA	10.64	26.14	586	0.67	-42	NA	6.0
RMW-02	12/02/2016	NA	9.2	NA	NA	11.43	18.03	854	0	-109	NA	0.05
RMW-02	01/27/2017	NA	9.3	NA	NA	12.5	17.81	1020	0.10	102	NA	0
RMW-02	02/28/2017	32	8.9	< 1.0	7.9	11.36	21.23	593	0	-269	NA	0.15
RMW-18	05/25/2016	1.1 J	50	NA	NA	5.52	22.17	462	4.38	436	1.27	0
RMW-18	07/27/2016	NA	82	NA	NA	4.94	NA	563	0.06 [2]	347.6	NA	NA
RMW-18	09/08/2016	NA	86	NA	NA	5	22.06	436	3.7	373	NA	NA
RMW-18	10/05/2016	NA	NA	NA	NA	5.19	22.44	598	4.29	347	NA	0
RMW-18	11/17/2016	NA	93	NA	NA	5.27	17.99	421	9.21	382	NA	0
RMW-18	01/27/2017	NA	100	NA	NA	4.87	15.54	733	4.97	213	NA	0
RMW-18	02/22/2017	1.3	110	0.91 J	0.90 J	4.93	20.68	355	4.99	355	NA	0
RMW-18A	05/26/2016	1.6 J	160	NA	NA	5.63	22.28	697	4.17	328	0	0.1
RMW-18A	07/27/2016	NA	120	NA	NA	4.74	NA	782	0.04 [2]	334.8	NA	NA
RMW-18A	09/08/2016	NA	110	NA	NA	4.51	22.55	578	2.01	398	NA	NA
RMW-18A	10/05/2016	NA	NA	NA	NA	5.29	23.86	788	2.48	301	NA	NA
RMW-18A	11/17/2016	NA	110	NA	NA	4.86	18.14	609	4.73	330	NA	0
RMW-18A	01/27/2017	NA	110	NA	NA	4.62	16.84	751	3.29	223	NA	0
RMW-18A	02/22/2017	1.5	120	1.2	0.84 J	4.72	20.94	439	2.95	360	NA	0
RMW-20	05/25/2016	1.8 J	11	NA	NA	5.11	22.29	176	1.84	299	0	0
RMW-20	07/27/2016	NA	19	NA	NA	4.46	NA	192	12.52 [2]	277.4	NA	NA
RMW-20	09/07/2016	NA	8.2	NA	NA	4.72	31.13	119	2.51	298	NA	NA
RMW-20	10/03/2016	NA	NA	NA	NA	4.53	23.68	211	3.28	393	NA	2.0
RMW-20	11/15/2016	NA	5.8	NA	NA	4.58	18.99	140	6.29	351	NA	0
RMW-20	01/24/2017	NA	8.0	NA	NA	4.5	20.51	177	5.27	216	NA	0
RMW-20	02/21/2017	2.5	10	0.87 J	0.92 J	4.08	20.05	110	3.8	335	NA	0
RMW-20A	05/27/2016	0.90 J	< 1.0	NA	NA	5.45	21.83	37	5.93	296	0	0
RMW-20A	07/27/2016	NA	< 1.0	NA	NA	4.28	NA	40	9.47 [2]	137.4	NA	NA
RMW-20A	09/08/2016	NA	< 1.0	NA	NA	4.62	27.21	24	3.83	399	NA	NA
RMW-20A	10/05/2016	NA	NA	NA	NA	5.13	22.65	34	3.89	392	NA	NA
RMW-20A	11/18/2016	NA	< 1.0	NA	NA	4.09	15.68	24	7.59	322	NA	0
RMW-20A	01/27/2017	NA	< 1.0	NA	NA	4.89	18.87	33	5.50	219	NA	0
RMW-20A	02/23/2017	0.67	< 1.0	0.73 J	0.35 J	4.87	21.94	19	6.44	295	NA	0
RMW-21	05/25/2016	0.50 J	24	NA	NA	5.3	22.84	211	2.22	289	8.55	0
RMW-21	07/27/2016	NA	27 j	NA	NA	4.73	NA	205	0.08 [2]	189.2	NA	NA

Table 4-1
Field and Laboratory Indicator Data Summary

SAMPLE LOCATION/DATE		PARAMETER[1]										
WELL	DATE	Potassium	Sulfate	Sulfide	Total Organic Carbon	pH (s.u.)	Temperature (°C)	Specific Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (ntu)	Dissolved Ferrous Iron (mg/L)
RMW-21	09/07/2016	NA	24	NA	NA	5.08	31.89	127	3.22	379	NA	NA
RMW-21	10/04/2016	NA	NA	NA	NA	5.02	28.41	202	1.69	292	NA	0
RMW-21	11/17/2016	NA	32	NA	NA	5.07	19.29	157	8.4	377	NA	0
RMW-21	01/26/2017	NA	26	NA	NA	4.9	18.77	164	2.03	180	NA	0
RMW-21	02/21/2017	0.41	24	< 1.0	0.94 J	4.36	21.01	104	1.67	373	NA	0
RMW-21A	05/26/2016	2.7 J	51	NA	NA	5.37	22.59	817	1.45	294	0	0
RMW-21A	07/27/2016	NA	83	NA	NA	4.62	NA	791	0.05 [2]	272.4	NA	NA
RMW-21A	09/07/2016	NA	85	NA	NA	5.05	31.44	475	3.46	390	NA	NA
RMW-21A	10/04/2016	NA	NA	NA	NA	4.92	22.92	781	1.98	266	NA	0.8
RMW-21A	11/17/2016	NA	90	NA	NA	4.86	19.37	543	8.44	384	NA	0
RMW-21A	01/26/2017	NA	45	NA	NA	4.69	20.19	594	2.19	193	NA	0
RMW-21A	02/21/2017	2	74	< 1.0	1.2	4.48	21.8	400	1.74	351	NA	0
RMW-27	05/25/2016	0.71 J	180	NA	1.2 B	5.56	20.55	1110	5.12	220	0.93	0
RMW-27	07/27/2016	NA	75	NA	NA	4.79	NA	422	9.06 [2]	69.7	NA	NA
RMW-27	09/08/2016	NA	42	NA	NA	5.19	27.59	196	NA	204	NA	NA
RMW-27	09/09/2016	NA	NA	NA	NA	4.61	23.85	219	0.89	220	NA	NA
RMW-27	10/04/2016	NA	NA	NA	NA	5.32	27.70	262	2.57	141	NA	0.8
RMW-27	11/18/2016	< 0.4	47	< 1.0	< 1.0	5.32	19.38	195	0	18	NA	0.25
RMW-27	01/20/2017	< 0.4	37	< 1.0	< 1.0	4.88	22.43	345	0	176	NA	0
RMW-27	02/22/2017	0.39 J	68	0.73 J	1.1	5.21	21.61	503	0	122	NA	0
RMW-27A	05/26/2016	0.61 J	1.9	NA	< 0.33 BJ u	6.74	22.57	47	5.14	237	0	0
RMW-27A	05/26/2016	0.63 J	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
RMW-27A	07/27/2016	NA	< 50	NA	NA	6.45	NA	10670	3.54 [2]	-150.4	NA	NA
RMW-27A	09/06/2016	NA	< 50	NA	NA	NA	NA	NA	NA	NA	NA	NA
RMW-27A	09/07/2016	NA	NA	NA	NA	6.55	28.89	7000	1.92	-510	NA	NA
RMW-27A	10/03/2016	NA	NA	NA	NA	6.12	NA	NA	NA	NA	NA	NA
RMW-27A	10/04/2016	NA	NA	NA	NA	NA	24.59	5750	0.47	-125	NA	NA
RMW-27A	11/17/2016	NA	< 50	NA	NA	6.54	17.61	4280	0.91	-144	NA	>10
RMW-27A	01/26/2017	NA	< 50	NA	NA	6.24	17.92	3160	0.12	-102	NA	>10
RMW-27A	03/01/2017	16	< 5.0	< 1.0	340	6.79	22.65	623	0	-187	NA	>10
RMW-27B	05/24/2016	1.5 J	8.0	NA	NA	7.48	26.09	153	0	-107	0.47	0
RMW-27B	07/27/2016	NA	41	NA	NA	8.49	NA	297	8.19 [2]	-180.0	NA	NA
RMW-27B	09/07/2016	NA	33	NA	NA	9.75	31.15	175	0.47	-51	NA	NA
RMW-27B	10/05/2016	NA	NA	NA	NA	8.75	21.45	299	0.69	50	NA	0
RMW-27B	12/01/2016	1.8	4.7	< 1.0	< 1.0	7.31	19.37	110	0.08	-71	NA	0.2
RMW-27B	01/26/2017	NA	32	NA	NA	9	18.74	224	1.23	-145	NA	0
RMW-27B	02/23/2017	1.6	4.3	0.75 J	0.41 J	6.96	24.54	132	0.46	-67	NA	0

Table 4-1
Field and Laboratory Indicator Data Summary

SAMPLE LOCATION/DATE		PARAMETER[1]										
WELL	DATE	Potassium	Sulfate	Sulfide	Total Organic Carbon	pH (s.u.)	Temperature (°C)	Specific Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (ntu)	Dissolved Ferrous Iron (mg/L)
DOWNGRADIENT PLUME AREA												
DP-11	02/22/2017	NA	< 1.0	NA	NA	**5.81**	**17.47**	**262**	**0**	**-23**	NA	**> 10**
DP-11A	02/22/2017	NA	**1.1**	NA	NA	**6.64**	**18.2**	**390**	**0**	**-95**	NA	**> 10**
DP-12	02/20/2017	NA	**8.4**	NA	NA	**6.84**	**21.01**	**343**	**0**	**-94**	NA	**3**
DP-12A	02/20/2017	NA	< 1.0	NA	NA	**6.22**	**21.2**	**172**	**0**	**-110**	NA	**4**
DP-13	02/23/2017	NA	**58**	NA	NA	**5.02**	**25.07**	**173**	**0.23**	**221**	NA	**0.60**
DP-13A	02/23/2017	NA	< 1.0	NA	NA	**5.74**	**25.41**	**74**	**0**	**67**	NA	**2**
DP-14	02/21/2017	NA	**72**	NA	NA	**6.46**	**18.35**	**463**	**0**	**-103**	NA	**> 10**
DP-14A	02/21/2017	NA	< 1.0	NA	NA	**5.49**	**18.34**	**85**	**0**	**30**	NA	**> 10**
DP-15	02/21/2017	NA	< 1.0	NA	NA	**6.17**	**19.56**	**264**	**0**	**-45**	NA	**> 10**
DP-15A	02/21/2017	NA	< 1.0	NA	NA	**6.21**	**30.56**	**96**	**0**	**-39**	NA	**> 10**
DP-16	02/22/2017	NA	**28**	NA	NA	**5.48**	**22.3**	**126**	**0**	**67**	NA	**4**
DP-16A	02/23/2017	NA	**0.86 J**	NA	NA	**6.18**	**19.24**	**128**	**0**	**-75**	NA	**8**
DP-17	02/21/2017	NA	< 1.0	NA	NA	**5.39**	**22.43**	**236**	**0**	**116**	NA	**3**
DP-17A	02/22/2017	NA	< 1.0	NA	NA	**5.79**	**17.76**	**120**	**2.91**	**55**	NA	**0.20**
DP-18	02/22/2017	NA	**9.0**	NA	NA	**5.1**	**19.82**	**300**	**0**	**175**	NA	**0.60**
DP-18A	02/22/2017	NA	< 1.0	NA	NA	**6.25**	**20.13**	**158**	**5.12**	**6**	NA	**0.40**
DP-19	02/23/2017	NA	**53**	NA	NA	**6.17**	**22.95**	**279**	**0**	**39**	NA	**0**
DP-19A	02/23/2017	NA	**5.4**	NA	NA	**6.53**	**25.6**	**96**	**0**	**-93**	NA	**8**
MG-05	05/28/2016	**1.2 J**	**6.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA
MG-05	07/27/2016	NA	**4.4**	NA	NA	**4.86**	NA	**111**	**0.12** [2]	**129.2**	NA	NA
MG-05	09/07/2016	NA	**1.7**	NA	NA	**4.77**	**26.36**	**49**	**0.48**	**197**	NA	NA
MG-05	10/03/2016	NA	NA	NA	NA	**4.65**	**21.21**	**86**	**0.37**	**548**	NA	**0.2**
MG-05	11/17/2016	NA	**2.4**	NA	NA	**4.32**	**16.01**	**69**	**1.31**	**530**	NA	**0**
MG-05	01/24/2017	NA	**23**	NA	NA	**4.42**	**20.22**	**59**	**3.49**	**233**	NA	**0**
MG-05	02/24/2017	**0.49**	**19**	**1.7**	**0.97 J**	**4.33**	**19.44**	**41**	**2.92**	**347**	NA	**0**
MG-05A	05/28/2016	**1.2 J**	< 1.0	NA	NA	**6.18**	**19.53**	**101**	**8.32**	**209**	**0**	**0**
MG-05A	07/27/2016	NA	< 1.0	NA	NA	**5.92**	NA	**183**	**14.93** [2]	**182.2**	NA	NA
MG-05A	09/07/2016	NA	< 1.0	NA	NA	**6.63**	**29.74**	**111**	**3.96**	**316**	NA	NA
MG-05A	10/05/2016	NA	NA	NA	NA	**6.11**	**19.77**	**169**	**4.78**	**368**	NA	**0**
MG-05A	11/17/2016	NA	< 1.0	NA	NA	**6.24**	**15.39**	**108**	**7.05**	**318**	NA	**0**
MG-05A	01/24/2017	NA	< 1.0	NA	NA	**6.4**	**22.47**	**117**	**5.07**	**194**	NA	**0**
MG-05A	02/24/2017	**0.75**	< 1.0	< 1.0	**0.46 J**	**5.79**	**18.56**	**80**	**5.83**	**207**	NA	**0**
OW-04	05/28/2016	**2.7 J**	**23**	NA	< 0.50 BJ u	**5.8**	**19.6**	**96**	**0.21**	**215**	**0**	**0**
OW-04	06/14/2016	NA	NA	NA	**0.23 J**	**5.17**	**19.85**	**204**	NA	NA	NA	NA
OW-04	07/27/2016	NA	**0.59 J**	NA	NA	**4.19**	NA	**65**	**7.53** [2]	**100.4**	NA	NA
OW-04	09/07/2016	NA	< 1.0	NA	NA	**5.31**	**27.24**	**37**	**2.24**	**127**	NA	NA
OW-04	10/03/2016	NA	NA	NA	NA	**5.48**	**22.45**	**87**	**2.19**	**156**	NA	**5.5**

Table 4-1
Field and Laboratory Indicator Data Summary

SAMPLE LOCATION/DATE		PARAMETER[1]										
WELL	DATE	Potassium	Sulfate	Sulfide	Total Organic Carbon	pH (s.u.)	Temperature (°C)	Specific Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (ntu)	Dissolved Ferrous Iron (mg/L)
OW-04	11/18/2016	1	18	< 1.0	2.3	6.12	18.66	148	3.55	-47	NA	>10
OW-04	12/02/2016	NA	NA	NA	NA	4.39	17.46	39	1.98	269	NA	NA
OW-04	01/20/2017	0.92	5.4	< 1.0 uj	< 1.0	5.37	20.03	111	1.77	114	NA	8
OW-04	02/24/2017	0.91	1.6	0.64 J	1.2	5.02	19.86	78	1.11	134	NA	2.5
OW-05	05/25/2016	0.83 J	7.2	NA	< 0.39 BJ u	5.22	21.98	66	2.22	294	2.81	0
OW-05	07/27/2016	NA	5.5	NA	NA	3.79	NA	48	8.18 [2]	116.6	NA	NA
OW-05	09/07/2016	NA	< 1.0	NA	NA	4.55	22.92	37	3.69	390	NA	NA
OW-05	10/04/2016	NA	NA	NA	NA	4.47	21.32	55	3.39	346	NA	3.0
OW-05	11/18/2016	1.6	4.5	< 1.0	3.2	4.81	19.08	47	6.1	234	NA	0.5
OW-05	01/20/2017	3.3	23	1.9	68	6.04	20.63	358	0.75	20	NA	9
OW-05	02/24/2017	4.2	5.7	< 1.0	51	4.33	19.44	41	2.92	347	NA	0
OW-06A	05/27/2016	1.2 J	1.1	NA	< 0.51 BJ u	5.5	20.24	63	0	263	0	0
OW-06A	06/14/2016	NA	NA	NA	0.24 J	4.63	20.72	59	NA	NA	NA	NA
OW-06A	07/27/2016	NA	< 50	NA	NA	6.63	NA	11480	2.39 [2]	-113	NA	NA
OW-06A	09/07/2016	NA	< 50	NA	NA	6.82	28.68	5150	0.27	-254	NA	NA
OW-06A	10/05/2016	NA	NA	NA	NA	6.20	20.91	1940	2.75	122	NA	NA
OW-06A	11/21/2016	NA	< 10	NA	NA	6.63	16.15	1920	0	-175	NA	>10
OW-06A	01/26/2017	NA	< 10	NA	NA	6.67	17.59	1020	0.35	-68	NA	>10
OW-06A	02/28/2017	36	< 5.0	< 1.0	130	6.87	19.66	409	0	-197	NA	>10
RMW-17	05/29/2016	0.80 J	20	NA	NA	5.05	17.05	103	0.46	334	0	0
RMW-17	07/27/2016	NA	110	NA	NA	3.89	NA	100	7.96 (2)	105.9	NA	NA
RMW-17	09/07/2016	NA	17	NA	NA	4.75	25.97	62	2.17	375	NA	NA
RMW-17	10/04/2016	NA	NA	NA	NA	4.78	20.48	100	1.76	398	NA	0
RMW-17	11/17/2016	NA	20	NA	NA	4.76	17.3	62	7.65	356	NA	0
RMW-17	01/24/2017	NA	21	NA	NA	4.76	19.87	79	0.48	451	NA	0
RMW-17	02/22/2017	0.56	22	< 1.0	0.93 J	4.28	17.24	85	0	555	NA	0
RMW-17A	05/29/2016	1.2 J	37	NA	NA	6.07	18.76	175	0	148	0.93	0
RMW-17A	07/27/2016	NA	39	NA	NA	5.48	NA	180	6.03 [2]	54.7	NA	NA
RMW-17A	09/07/2016	NA	37	NA	NA	6.18	26.55	118	0.71	299	NA	NA
RMW-17A	10/04/2016	NA	NA	NA	NA	5.92	21.97	169	0.70	286	NA	0
RMW-17A	11/17/2016	NA	39	NA	NA	5.93	15.51	118	8.95	232	NA	0
RMW-17A	01/24/2017	NA	35	NA	NA	5.96	18.64	143	0.09	337	NA	0
RMW-17A	02/22/2017	0.84	33	0.74 J	0.55 J	5.58	18.54	88	0	250	NA	0
RMW-23	05/25/2016	0.58 J	40	NA	1.1 B	5.16	20.1	147	0	366	0.65	0
RMW-23	07/27/2016	NA	54	NA	NA	6.62	NA	10080	11.05 [2]	-283.5	NA	NA
RMW-23	09/07/2016	NA	< 50	NA	NA	6.9	24.08	4580	1.22	-182	NA	NA
RMW-23	10/04/2016	NA	NA	NA	NA	6.42	24.50	4760	0.74	-111	NA	NA
RMW-23	11/15/2016	120	< 10	< 1.0	990	6.6	16.95	2180	11.6	-227	NA	>10
RMW-23	12/01/2016	NA	NA	NA	NA	6.38	16.08	1150	0.11	-67	NA	NA

Table 4-1
Field and Laboratory Indicator Data Summary

SAMPLE LOCATION/DATE		PARAMETER[1]										
WELL	DATE	Potassium	Sulfate	Sulfide	Total Organic Carbon	pH (s.u.)	Temperature (°C)	Specific Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (ntu)	Dissolved Ferrous Iron (mg/L)
RMW-23	01/23/2017	NA	**6.8**	NA	NA	**6.57**	**18.69**	**2080**	**0.35**	**-138**	NA	**>10**
RMW-23	02/27/2017	**39**	< 5.0	< 1.0	**330**	**6.87**	**18.23**	**1180**	**0.25**	**-180**	NA	**>10**
RMW-23A	05/27/2016	**0.94 J**	< 1.0	NA	< 0.37 BJ u	**6.04**	**22.11**	**95**	**1.9**	**255**	**0**	**0**
RMW-23A	07/27/2016	NA	< 50	NA	NA	**6.08**	NA	**7796**	**0.10** [2]	**-485.3**	NA	NA
RMW-23A	09/07/2016	NA	< 50	NA	NA	**6.94**	**24.31**	**5280**	**0.37**	**-133**	NA	NA
RMW-23A	10/04/2016	NA	NA	NA	NA	**5.95**	**21.35**	**4330**	**0.37**	**-159**	NA	NA
RMW-23A	11/21/2016	NA	< 10	NA	NA	**6.06**	**15.95**	**2140**	**0**	**-149**	NA	**>10**
RMW-23A	01/23/2017	NA	< 5.0	NA	NA	**5.95**	**18.37**	**1830**	**0.06**	**-88**	NA	**>10**
RMW-23A	02/28/2017	**34**	< 5.0	< 1.0	**500**	**6.21**	**19.56**	**935**	**1.92**	**-175**	NA	**>10**
RMW-23B	05/27/2016	**1.2 J**	**2.5**	NA	NA	**7.09**	**20.46**	**124**	**0.55**	**66**	**0.69**	**0**
RMW-23B	07/27/2016	NA	< 50	NA	NA	**5.05**	NA	**3026**	**1.06** [2]	**-57.2**	NA	NA
RMW-23B	09/07/2016	NA	< 50	NA	NA	**6.41**	**22.58**	**2570**	**0.01**	**-161**	NA	NA
RMW-23B	10/04/2016	NA	NA	NA	NA	**6.47**	**23.38**	**1110**	**1.72**	**-109**	NA	NA
RMW-23B	12/01/2016	**5.2**	**1.0**	< 1.0	**110**	**7.11**	**15.7**	**595**	**0**	**-40**	NA	**>10**
RMW-23B	01/23/2017	**2.8**	**5.6**	< 1.0	**35**	**6.92**	**20.4**	**331**	**1.74**	**-120**	NA	**>10**
RMW-23B	03/01/2017	**1.7**	< 1.0	**1.2**	**7.8**	**6.26**	**19.68**	**116**	**0**	**-119**	NA	**>10**
RMW-28A	05/28/2016	**0.84 J**	**25**	NA	NA	**5.72**	**20.12**	**74**	**0**	**11**	**0**	**4.0**
RMW-28A	06/14/2016	NA	NA	NA	NA	**4.94**	**20.63**	**135**	NA	NA	NA	NA
RMW-28A	07/27/2016	NA	**33**	NA	NA	**4.75**	NA	**147**	**7.89** [2]	**97.7**	NA	NA
RMW-28A	09/07/2016	NA	**30**	NA	NA	**5.77**	**25.11**	**91**	**0.19**	**113**	NA	NA
RMW-28A	10/03/2016	NA	NA	NA	NA	**5.58**	**29.71**	**118**	**0.14**	**143**	NA	**0.4**
RMW-28A	11/15/2016	NA	**14**	NA	NA	**5.9**	**15.69**	**88**	**1.29**	**7**	NA	**>10**
RMW-28A	12/02/2016	NA	NA	NA	NA	**5.1**	**15.58**	**96**	**0**	**211**	NA	NA
RMW-28A	01/20/2017	**0.62**	**11**	< 1.0	< 1.0	**5.2**	**19.24**	**87**	**0.55**	**111**	NA	**4.00**
RMW-28A	02/22/2017	**0.64**	**9.9**	**1.1**	**0.50 J**	**5.57**	**19.25**	**98**	**0**	**107**	NA	**3**

[1] All concentrations reported in mg/L unless specified otherwise.

[2] Field parameter measurements taken in July 2016 used YSI meters. All other measurements taken with Horiba meters. DO results may not be comparable between meters.

B (organic) - Present in analytical method blank.

J - Estimated concentration.

j - Concentration considered an estimate based on data validation.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

u - Laboratory reported detection not validated during data validation process.

< - Concentration less than the Quantitation Limit.

NA - Not analyzed.

Bolding indicates constituent detection.

Table 4-2
Dissolved Gases Data Summary

SAMPLE LOCATION/DATE		PARAMETER		
		Methane	Ethane	Ethene
UPGRADIENT PLUME AREA				
DP-01	02/20/2017	**6400 n**	**5.9 n**	**8.0 n**
DP-01A	02/20/2017	**830 n**	**1.7 n**	**1.5 n**
DP-02	02/17/2017	**2000 n**	**2.5 n**	**3.2 n**
DP-02A	02/17/2017	**2400 n**	**0.76 n**	**0.45 n**
DP-03	02/17/2017	**1.6 n**	< 0.10 n	< 0.10 n
DP-03A	02/17/2017	**11000 n**	**1.4 n**	**0.33 n**
DP-04	02/17/2017	**2700 n**	**2.1 n**	**1.4 n**
DP-04A	02/17/2017	**1.6 n**	**0.12 n**	< 0.10 n
DP-05A	02/16/2017	**3400 n**	**0.87 n**	**0.71 n**
DP-06	02/16/2017	**550 n**	**1.6 n**	**1.4 n**
DP-06A	02/16/2017	**24 n**	**0.91 n**	< 0.10 n
DP-07	02/16/2017	**2100 n**	**0.66 n**	**0.44 n**
DP-07A	02/16/2017	< 0.50 n	**0.12 n**	< 0.10 n
DP-08A	02/20/2017	< 0.50 n	< 0.10 n	< 0.10 n
DP-09	02/23/2017	**1200 n**	**1.4 n**	**4.2 n**
OW-01	02/20/2017	**720 n**	**0.33 n**	**0.14 n**
OW-02	02/20/2017	**62 n**	**0.15 n**	< 0.10 n
OW-03A	02/20/2017	< 0.50 n	< 0.10 n	< 0.10 n
RMW-02	02/28/2017	**3700 n**	< 0.10 n	**0.22 n**
RMW-18	02/22/2017	**14 n**	< 0.10 n	< 0.10 n
RMW-18A	02/22/2017	< 0.50 n	< 0.10 n	< 0.10 n
RMW-20	02/21/2017	< 0.50 n	< 0.10 n	< 0.10 n
RMW-20A	02/23/2017	< 0.50 n	< 0.10 n	< 0.10 n
RMW-21	02/21/2017	< 0.50 n	< 0.10 n	< 0.10 n
RMW-21A	02/21/2017	< 0.50 n	< 0.10 n	< 0.10 n
RMW-27	11/18/2016	**770**	< 10	< 10
RMW-27	01/20/2017	**2000 n**	**0.6 n**	**0.67 n**
RMW-27	02/22/2017	**1600 n**	**0.60 n**	**0.54 n**
RMW-27A	03/01/2017	**14000 n**	**1.0 n**	**0.88 n**
RMW-27B	12/01/2016	**12**	< 10	< 10
RMW-27B	02/23/2017	**0.88 n**	< 0.10 n	**0.45 n**

Table 4-2
Dissolved Gases Data Summary

SAMPLE LOCATION/DATE		PARAMETER		
		Methane	Ethane	Ethene
DOWNGRADIENT PLUME AREA				
DP-11	02/22/2017	**770 n**	**0.71 n**	**0.64 n**
DP-11A	02/22/2017	**13 n**	**1.2 n**	**0.84 n**
DP-12	02/20/2017	**2700 n**	**0.22 n**	**0.18 n**
DP-12A	02/20/2017	**48 n**	**11 n**	**1.9 n**
DP-13	02/23/2017	**1.1 n**	< 0.10 n	< 0.10 n
DP-13A	02/23/2017	**0.90 n**	**0.25 n**	**0.24 n**
DP-14	02/21/2017	**7900 n**	**0.57 n**	**0.21 n**
DP-14A	02/21/2017	**260 n**	**2.8 n**	**0.75 n**
DP-15	02/21/2017	**28 n**	**0.19 n**	**0.10 n**
DP-15A	02/21/2017	**2.3 n**	**3.4 n**	**0.66 n**
DP-16	02/22/2017	**520 n**	**0.69 n**	**0.42 n**
DP-16A	02/23/2017	**8.5 n**	**1.5 n**	**1.1 n**
DP-17	02/21/2017	**1.5 n**	**0.39 n**	**0.32 n**
DP-17A	02/22/2017	< 0.50 n	< 0.10 n	< 0.10 n
DP-18	02/22/2017	**24 n**	< 0.10 n	< 0.10 n
DP-18A	02/22/2017	< 0.50 n	< 0.10 n	< 0.10 n
DP-19	02/23/2017	**1800 n**	**0.50 n**	**0.23 n**
DP-19A	02/23/2017	**12 n**	**1.6 n**	**1.3 n**
MG-05	02/24/2017	< 0.50 n	< 0.10 n	< 0.10 n
MG-05A	02/24/2017	< 0.50 n	< 0.10 n	< 0.10 n
OW-04	11/18/2016	**880**	< 10	< 10
OW-04	01/20/2017	**5.2 n**	**0.0071 Jn**	< 0.1 n
OW-04	02/24/2017	**3.3 n**	< 0.10 n	< 0.10 n
OW-05	11/18/2016	**78**	< 10	< 10
OW-05	01/20/2017	**3300 n**	**0.18 n**	**0.093 Jn**
OW-05	02/24/2017	**3700 n**	< 0.10 n	**0.10 n**
OW-06A	02/28/2017	**7600 n**	**3.0 n**	**1.3 n**
RMW-17	02/22/2017	**320 n**	< 0.10 n	< 0.10 n
RMW-17A	02/22/2017	**0.99 n**	< 0.10 n	< 0.10 n
RMW-23	11/15/2016	**5100**	< 10	< 10
RMW-23	02/27/2017	**19000 n**	**0.22 n**	**0.33 n**
RMW-23A	02/28/2017	**6300 n**	**12 n**	**2.2 n**
RMW-23B	12/01/2016	**8200**	< 10	< 10
RMW-23B	01/23/2017	**19000 n**	**7.6 n**	**14 n**
RMW-23B	03/01/2017	**8600 n**	**1.9 n**	**3.5 n**
RMW-28A	01/20/2017	**260 n**	**0.0098 Jn**	**0.074 Jn**
RMW-28A	02/22/2017	**190 n**	< 0.10 n	< 0.10 n

Concentrations reported in ug/L.

J - Estimated concentration.

n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.

< - Concentration less than the Quantitation Limit.

Bolding indicates constituent detection.

Table 4-3
VOC Data Summary

SAMPLE LOCATION/DATE		PARAMETER[1]																			
		1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1,1-Dichloroethane	1,1-Dichloroethene	Butanone (MEK)	2-Hexanone	4-Methyl-2-pentanone	Acetone	Benzene	Bromomethane	Carbon disulfide	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Ethyl benzene	Isopropyl benzene	Methylene chloride	Methyl acetate	Tetrachloroethene	Trichloroethene	Vinyl chloride	Xylenes, total
UPGRADIENT PLUME AREA																						
DP-01	02/20/2017	< 25	< 25	< 25	< 50	< 50	< 50	< 100	< 25	< 25	< 25	< 25	< 25	**9.5 J**	< 25	< 25	< 25	< 25	**520**	**7.3 J**	< 10	< 25
DP-01A	02/20/2017	< 5.0	< 5.0	< 5.0	**110**	< 10	**2.2 J**	**120**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**15**	**1.4 J**	< 5.0	< 2.0	< 5.0
DP-02	02/17/2017	< 5.0	< 5.0	< 5.0	**46**	< 10	< 10	**230**	< 5.0	**1.7 J**	**4.1 J**	< 5.0	**1.5 J**	**4.3 J**	< 5.0	< 5.0	< 5.0	**7.5**	**34**	**0.99 J**	< 2.0	< 5.0
DP-02A	02/17/2017	< 5.0	< 5.0	< 5.0	**3.9 J**	< 10	< 10	**11 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	< 5.0
DP-03	02/17/2017	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	**2.6 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**110**	**0.62 J**	< 2.0	< 5.0
DP-03A	02/17/2017	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	**13 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.55 J**	< 5.0	< 2.0	< 5.0
DP-04	02/17/2017	< 25	< 25	< 25	< 50	< 50	< 50	**52 J**	< 25	**2.1 J**	< 25	< 25	< 25	**2.8 J**	< 25	< 25	< 25	< 25	**240**	**3.4 J**	< 10	< 25
DP-04A	02/17/2017	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	**5.8 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.3 J**	< 5.0	< 2.0	< 5.0
DP-05A	02/16/2017	< 25	< 25	< 25	**59**	< 50	< 50	**98 J**	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	**6.6 J**	**6.5 J**	< 25	< 10	< 25
DP-06	02/16/2017	< 50	< 50	< 50	< 100	< 100	< 100	< 200	< 50	< 50	< 50	< 50	< 50	**25 J**	< 50	< 50	< 50	< 50	**1200**	**17 J**	< 20	< 50
DP-06A	02/16/2017	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	**7.8 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	< 5.0
DP-07	02/16/2017	< 5.0	< 5.0	**0.49 J**	< 10	< 10	< 10	**21**	< 5.0	**4.8 J**	< 5.0	< 5.0	**3.7 J**	**1.2 J**	< 5.0	< 5.0	< 5.0	< 5.0	**170**	**4.4 J**	< 2.0	< 5.0
DP-07A	02/16/2017	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	**5.2 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**150**	< 5.0	< 2.0	< 5.0
DP-08A	02/20/2017	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	**5.4 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	< 5.0
DP-09	02/23/2017	< 250	< 250	< 250	< 500	< 500	< 500	< 1000	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	**2800**	**20 J**	< 100	< 250
OW-01	05/26/2016	< 0.25	< 0.25	< 0.25	< 0.5	< 0.5	< 0.5	< 1	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	**5.4**	< 0.25	< 0.1	< 0.25
OW-01	02/20/2017	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.4	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**1.7**	**0.0097 J**	< 0.04	< 0.1
OW-02	05/25/2016	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.4	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**0.0045 J**	< 0.1	< 0.1	< 0.1	< 0.1	**3.6**	**0.0059 J**	< 0.04	< 0.1
OW-02	02/20/2017	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	**1**	< 0.05	< 0.02	< 0.05
OW-03A	05/26/2016	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.2	< 0.05	<0.05	<0.05	**0.0068 J j**	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	**0.72 j**	< 0.05	< 0.02	< 0.05
OW-03A	12/02/2016	< 0.025	< 0.025	< 0.025	< 0.05	< 0.05	< 0.05	< 0.1	< 0.025	<0.025	<0.025	< 0.025	<0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	**1.3**	< 0.025	< 0.01	< 0.025
OW-03A	02/20/2017	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.2	< 0.05	<0.05	<0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	**0.66**	< 0.05	< 0.02	< 0.05
RMW-18	05/25/2016	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.4	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**0.036 J**	< 0.1	< 0.1	< 0.1	< 0.1	**2.1**	< 0.1	< 0.04	< 0.1
RMW-18	02/22/2017	< 0.25	< 0.25	< 0.25	< 0.5	< 0.5	< 0.5	< 1	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	**0.055 J**	< 0.25	< 0.25	< 0.25	< 0.25	**4.2**	< 0.25	< 0.1	< 0.25
RMW-18A	05/26/2016	< 0.5	< 0.5	< 0.5	< 1	< 1	< 1	< 2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**11**	< 0.5	< 0.2	< 0.5
RMW-18A	02/22/2017	< 1	< 1	< 1	< 2	< 2	< 2	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**7.6**	< 1	< 0.4	< 1
RMW-20	05/25/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.13**	**0.00018 J**	< 0.0020	< 0.0050
RMW-20	02/21/2017	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.13**	< 0.0050	< 0.0020	< 0.0050
RMW-20A	05/27/2016	**0.055 J j+**	< 0.25	< 0.25	< 0.5	< 0.5	< 0.5	< 1	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	**5.2**	< 0.25	< 0.1	< 0.25
RMW-20A	02/23/2017	**0.049 J**	< 0.5	< 0.5	< 1	< 1	< 1	< 2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**6.4**	< 0.5	< 0.2	< 0.5
RMW-21	05/25/2016	< 0.025	< 0.025	< 0.025	< 0.05	< 0.05	< 0.05	< 0.1	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	**0.52**	**0.0027 J**	< 0.01	< 0.025
RMW-21	02/21/2017	< 0.025	< 0.025	< 0.025	< 0.05	< 0.05	< 0.05	< 0.1	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	**0.51**	**0.0028 J**	< 0.01	< 0.025
RMW-21A	05/26/2016	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.4	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**2.9**	**0.0045 J**	< 0.04	< 0.1
RMW-21A	02/21/2017	< 0.25	< 0.25	< 0.25	< 0.5	< 0.5	< 0.5	< 1	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	**6.1**	< 0.25	< 0.1	< 0.25
RMW-27	05/25/2016	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.4	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**2.4**	< 0.1	< 0.04	< 0.1
RMW-27	11/18/2016	< 0.025	< 0.025	< 0.025	< 0.05	< 0.05	< 0.05	< 0.1	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	**0.29**	< 0.025	< 0.01	< 0.025
RMW-27	01/20/2017	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	**3.3**	< 0.05	< 0.02	< 0.05
RMW-27	02/22/2017	< 0.25	< 0.25	< 0.25	< 0.5	< 0.5	< 0.5	< 1	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	**2.8**	< 0.25	< 0.1	< 0.25
RMW-27A	05/26/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0085**	< 0.0050	< 0.0020	< 0.0050
RMW-27A	05/26/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.01**	< 0.0050	< 0.0020	< 0.0050
RMW-27A	03/01/2017	< 0.0050	< 0.0050	< 0.0050	**0.25**	< 0.01	< 0.01	**0.031**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0079**	**0.0056**	**0.0026 J**	< 0.0020	< 0.0050
RMW-27B	05/24/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.15**	< 0.0050	< 0.0020	< 0.0050
RMW-27B	12/01/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.16**	< 0.0050	< 0.0020	< 0.0050
RMW-27B	02/23/2017	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.078**	< 0.0050	< 0.0020	< 0.0050
DOWNGRADIENT PLUME AREA																						
DP-11	02/22/2017	< 25	< 25	< 25	< 50	< 50	< 50	< 100	< 25	< 25	< 25	< 25	< 25	**8.3 J**	< 25	< 25	< 25	< 25	**420**	**4.0 J**	< 10	< 25
DP-11A	02/22/2017	< 100	< 100	< 100	< 200	< 200	< 200	< 400	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	**1900**	< 100	< 40	< 100
DP-12	02/20/2017	< 5.0	**1.3 J**	< 5.0	< 10	< 10	< 10	**2.5 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**14**	< 5.0	< 5.0	< 5.0	< 5.0	**39**	**1.5 J**	< 2.0	< 5.0
DP-12A	02/20/2017	< 250	< 250	< 250	< 500	< 500	< 500	< 1000	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	**3700**	< 250	< 100	< 250
DP-13	02/23/2017	< 5.0	**0.92 J**	< 5.0	< 10	< 10	< 10	< 20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**10**	< 5.0	< 5.0	< 5.0	< 5.0	**28**	**0.87 J**	< 2.0	< 5.0
DP-13A	02/23/2017	< 100	< 100	< 100	< 200	< 200	< 200	< 400	< 100	< 100	< 100	< 100	< 100	**22 J**	< 100	< 100	< 100	< 100	**1200**	< 100	< 40	< 100
DP-14	02/21/2017	< 5.0	**0.43 J**	< 5.0	< 10	< 10	< 10	< 20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**4.7 J**	< 5.0	< 5.0	< 5.0	< 5.0	**9.3**	**0.62 J**	< 2.0	< 5.0
DP-14A	02/21/2017	< 5.0	**1.2 J**	< 5.0	**7.5 J**	< 10	< 10	**11 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**13**	< 5.0	< 5.0	< 5.0	< 5.0	**87**	**1.6 J**	< 2.0	< 5.0
DP-15	02/21/2017	< 50	< 50	< 50	< 100	< 100	< 100	< 200	< 50	< 50	< 50	< 50	< 50	**13 J**	< 50	< 50	< 50	< 50	**860**	**56**	< 20	< 50
DP-15A	02/21/2017	< 250	< 250	< 250	< 500	< 500	< 500	< 1000	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	**4700**	< 250	< 100	< 250
DP-16	02/22/2017	< 5.0	**1.0 J**	< 5.0	< 10	< 10	< 10	< 20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**14**	< 5.0	< 5.0	< 5.0	< 5.0	**33**	**1.2 J**	< 2.0	< 5.0
DP-16A	02/23/2017	< 250	< 250	< 250	< 500	< 500	< 500	< 1000	< 250	< 250	< 250	< 250	< 250	**50 J**	< 250	< 250	< 250	< 250	**3600**	< 250	< 100	< 250
DP-17	02/21/2017	< 50	< 50	< 50	< 100	< 100	< 100	< 200	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	**930**	< 50	< 20	< 50
DP-17A	02/22/2017	< 250	< 250	< 250	< 500	< 500	< 500	< 1000	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 250	**4200**	< 250	< 100	< 250
DP-18	02/22/2017	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 20	**0.40 J**	< 5.0	< 5.0	< 5.0	< 5.0	**1.6 J**	< 5.0	< 5.0	< 5.0	< 5.0	**190**	**2.6 J**	< 2.0	< 5.0
DP-18A	02/22/2017	< 50	< 50	< 50	< 100	< 100	< 100	< 200	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	**510**	< 50	< 20	< 50
DP-19	02/23/2017	< 5.0	**1.6 J**	< 5.0	< 10	< 10	< 10	< 20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**52**	< 5.0	< 5.0	< 5.0	< 5.0	**150**	**4.7 J**	< 2.0	< 5.0
DP-19A	02/23/2017	< 100	< 100	< 100	< 200	< 200	< 200	< 400	< 100	< 100	< 100	< 100	< 100	**28 J**	< 100	< 100	< 100	< 100	**1500**	< 100	< 40	< 100
MG-05	05/28/2016	< 0.0050	**0.00095 J**	**0.00043 J**	< 0.01	< 0.01	< 0.01	< 0.02	**0.0013 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0044 J**	< 0.00053 J u	< 0.0050	< 0.0050	< 0.0050	**0.014**	**0.0022 J**	< 0.0020	< 0.0061 u
MG-05	06/14/2016	< 0.0050	**0.0011 J**	**0.00039 J**	< 0.01	< 0.01	< 0.01	< 0.02	**0.0016 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0048 J**	< 0.0050	**0.00015 J**	< 0.0050	< 0.0050	**0.015**	**0.0024 J**	< 0.0020	**0.0052**
MG-05	02/24/2017	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.00064 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.016**	**0.00046 J**	< 0.0020	< 0.0050

Table 4-3
VOC Data Summary

SAMPLE LOCATION	DATE	PARAMETER[1]																				
		1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1,1-Dichloroethane	1,1-Dichloroethene	Butanone (MEK)	2-Hexanone	4-Methyl-2-pentanone	Acetone	Benzene	Bromomethane	Carbon disulfide	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Ethyl benzene	Isopropyl benzene	Methylene chloride	Methyl acetate	Tetrachloroethene	Trichloroethene	Vinyl chloride	Xylenes, total
MG-05A	05/28/2016	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	**0.5**	< 0.05	< 0.02	< 0.05
MG-05A	02/24/2017	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	**0.79**	< 0.05	< 0.02	< 0.05
OW-04	05/28/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0022 J**	< 0.012 u	< 0.0050	< 0.0050	< 0.0050	**0.028**	**0.00033 J**	< 0.0020	< 0.038 u
OW-04	06/14/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.0037 J u	< 0.0050	< 0.0050	< 0.0050	**0.00030 J**	< 0.0050	**0.0026 J**	**0.00040 J**	< 0.0050	< 0.0050	< 0.0050	**0.038**	**0.00038 J**	< 0.0020	**0.00092 J**
OW-04	11/18/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.033**	< 0.0050	< 0.0020	< 0.0050
OW-04	01/20/2017	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0057**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.12**	< 0.0050	< 0.0020	< 0.0050
OW-04	02/24/2017	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	**0.0033 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0050**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.1**	**0.00071 J**	< 0.0020	< 0.0050
OW-05	05/25/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.0021 J u	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0045 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.028**	**0.00037 J**	< 0.0020	< 0.0050
OW-05	11/18/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.019**	< 0.0050	< 0.0020	< 0.0050
OW-05	01/20/2017	< 0.0050	< 0.0050	< 0.0050	**0.14**	< 0.01	< 0.01	**0.026**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0097**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.033**	**0.0071**	< 0.0020	< 0.0050
OW-05	02/24/2017	< 0.0050	< 0.0050	< 0.0050	**0.06**	< 0.01	< 0.01	**0.012 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0058**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.031**	**0.0032 J**	< 0.0020	< 0.0050
OW-06A	05/27/2016	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.2	< 0.05	< 0.05	< 0.05	**0.0061 J**	< 0.05	**0.013 J**	< 0.05	< 0.05	< 0.05	< 0.05	**0.52**	< 0.05	< 0.02	< 0.018 J u
OW-06A	06/14/2016	< 0.025	**0.0030 J**	< 0.025	< 0.05	< 0.05	< 0.05	< 0.1	< 0.025	< 0.025	< 0.025	**0.0013 J**	< 0.025	**0.022 J**	< 0.025	< 0.025	< 0.025	< 0.025	**0.75**	**0.0031 J**	< 0.01	**0.02 J**
OW-06A	02/28/2017	< 0.0050	**0.0012 J**	< 0.0050	**0.022**	< 0.01	< 0.01	**0.016 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0062**	< 0.0050	< 0.0050	**0.00049 J**	**0.0018 J**	**0.016**	**0.0011 J**	< 0.0020	< 0.0050
RMW-02	05/28/2016	< 2.5	< 2.5	< 2.5	< 5	< 5	< 5	< 10	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	**17**	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 1	**51**
RMW-02	02/28/2017	< 1	< 1	< 1	< 2	< 2	< 2	< 4	< 1	< 1	< 1	< 1	< 1	< 1	**7.9**	< 1	< 1	< 1	< 1	< 1	< 0.4	**25**
RMW-17	05/29/2016	< 0.025	< 0.025	< 0.025	< 0.05	< 0.05	< 0.05	< 0.1	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	**0.0077 J**	< 0.025	< 0.025	< 0.025	< 0.025	**0.26**	**0.00083 J**	< 0.01	< 0.025
RMW-17	02/22/2017	< 0.025	< 0.025	< 0.025	< 0.05	< 0.05	< 0.05	< 0.1	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	**0.0025 J**	< 0.025	< 0.025	< 0.025	< 0.025	**0.88**	**0.0041 J**	< 0.01	< 0.025
RMW-17A	05/29/2016	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	**0.0043 J**	< 0.05	< 0.05	< 0.05	< 0.05	**0.98**	< 0.05	< 0.02	< 0.05
RMW-17A	02/22/2017	< 0.25	< 0.25	< 0.25	< 0.5	< 0.5	< 0.5	< 1	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	**3.5**	< 0.25	< 0.1	< 0.25
RMW-23	05/25/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.00092 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.012**	**0.00025 J**	< 0.0020	< 0.0050
RMW-23	11/15/2016	< 0.05	< 0.05	< 0.05	**0.46**	< 0.1	< 0.1	< 0.2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02	< 0.05
RMW-23	02/27/2017	< 0.0050	< 0.0050	< 0.0050	**0.29**	**0.0073 J**	< 0.01	**0.12**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0010 J**	< 0.0050	< 0.0050	< 0.0050	**0.0019 J**	**0.00051 J**	< 0.0050	< 0.0020	< 0.0050
RMW-23A	05/27/2016	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.4	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**1.7**	< 0.1	< 0.04	< 0.1
RMW-23A	02/28/2017	< 0.0050	< 0.0050	< 0.0050	**0.2**	< 0.01	**0.0039 J**	**0.025**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0025 J**	< 0.0050	< 0.0050	< 0.0050	**0.0077**	**0.064**	**0.0045 J**	< 0.0020	< 0.0050
RMW-23B	05/27/2016	< 0.025	< 0.025	< 0.025	< 0.05	< 0.05	< 0.05	< 0.1	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	**0.52**	**0.0016 J**	< 0.01	< 0.025
RMW-23B	12/01/2016	< 0.025	< 0.025	< 0.025	**0.26**	< 0.05	< 0.05	**0.12**	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	**0.75**	< 0.025	< 0.025	< 0.025	< 0.025	**0.089**	< 0.025	< 0.01	< 0.025
RMW-23B	01/23/2017	< 0.025	< 0.025	< 0.025	**0.21**	< 0.05	< 0.05	< 0.1	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	**0.92**	< 0.025	< 0.025	< 0.025	< 0.025	**0.4**	< 0.025	**0.014**	< 0.025
RMW-23B	03/01/2017	< 0.05	< 0.05	< 0.05	**0.046 J**	< 0.1	< 0.1	**0.022 J**	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	**0.33**	< 0.05	< 0.05	< 0.05	< 0.05	**0.72**	**0.015 J**	< 0.02	< 0.05
RMW-28A	05/28/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	**0.00069 J**	< 0.0050	**0.00070 J**	< 0.0088 u	< 0.0050	< 0.0050	< 0.0050	**0.027**	**0.00032 J**	< 0.0020	< 0.03 u
RMW-28A	06/14/2016	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.0039 J u	< 0.0050	< 0.0050	< 0.0050	**0.00059 J**	< 0.0050	**0.00078 J**	**0.0051**	< 0.0050	< 0.0050	< 0.0050	**0.042**	**0.00060 J**	< 0.0020	**0.023**
RMW-28A	01/20/2017	< 0.0050	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.15**	< 0.0050	< 0.0020	< 0.0050
RMW-28A	02/22/2017	**0.0010 J**	< 0.0050	< 0.0050	< 0.01	< 0.01	< 0.01	< 0.02	< 0.0050	< 0.0050	< 0.0050	**0.00042 J**	< 0.0050	**0.0015 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.15**	**0.0017 J**	< 0.0020	< 0.0050

[1] Only VOC parameters detected in at least one sample at a concentration above the reporting limit are included in this summary table.
Concentrations reported in mg/L.
B (organic) - Present in analytical method blank.
J - Estimated concentration.
j - Concentration considered an estimate based on data validation.
j+ - Concentration considered an estimate biased high based on data validation.
n - The laboratory does not hold NELAP/TNI accrediation for this method or analyte.
u - Laboratory reported detection not validated during data validation process.
< - Concentration less than the Quantitation Limit.
NA - Not analyzed.
Bolding indicates constituent detection.

Table 4-4
ERD and Migration Lines of Evidence – Upgradient Plume Pilot Area

WATER TABLE AQUIFER														
Well/ Evidence	**DP-01**	**DP-02**	**DP-03**	**RMW-27**	**DP-04**	**DP-06**	**DP-07**	**OW-02**	**OW-01**	**DP-09**	**RMW-18**	**RMW-21**	**RMW-02**	**RMW-20**
DO/ORP														
Ferrous Iron														
Dissolved Gases														
cVOC By-Products														
Lactate By-Products														

INTERMEDIATE AQUIFER													
Well/ Evidence	**DP-01A**	**DP-02A**	**DP-03A**	**RMW-27A**	**DP-05A**	**DP-04A**	**DP-08A**	**OW-03A**	**DP-06A**	**DP-07A**	**RMW-18A**	**RMW-21A**	**RMW-20A**
DO/ORP													
Ferrous Iron													
Dissolved Gases													
cVOC By-Products													
Lactate By-Products													

INCREASING DISTANCE FROM INJECTION

KEY
DO - Less than 0.5 mg/L is good, Less than 1.0 mg/L is weak evidence
ORP - less than 50 mV is good, Less than 100 mV is weak evidence
Ferrous Iron - Present above 1 mg/L is good, present less than 1 mg/L is weak
Dissolved Gases - Methane present above 1000 ug/L is good, present less than 1000 ug/L is weak
Dissolved Gases - Ethane/ethene present above 1 ug/L is good, present less than 1 ug/L is weak
cVOC By-Products - includes TCE, cis-1,2-DCE, VC (compare to pre-injection)
Lactate By-Products - MEK, MIBK, acetone, methyl acetate OR Lactate-related peak on chromatogram

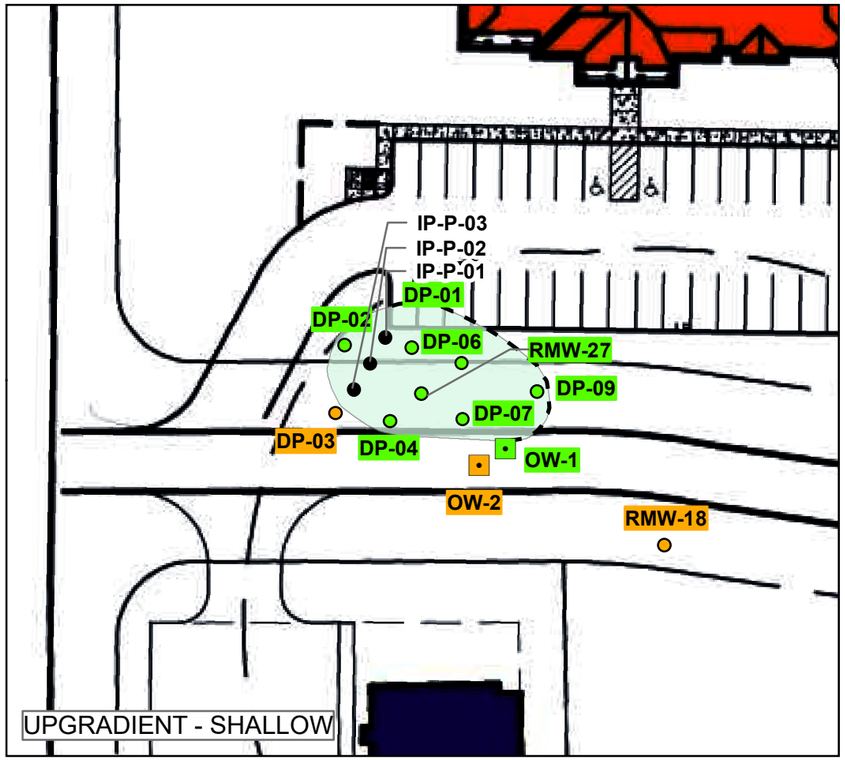
Green - good evidence for ERD conditions or distribution
Yellow - weak evidence for ERD conditions or distribution
Red - poor evidence for ERD conditions or distribution

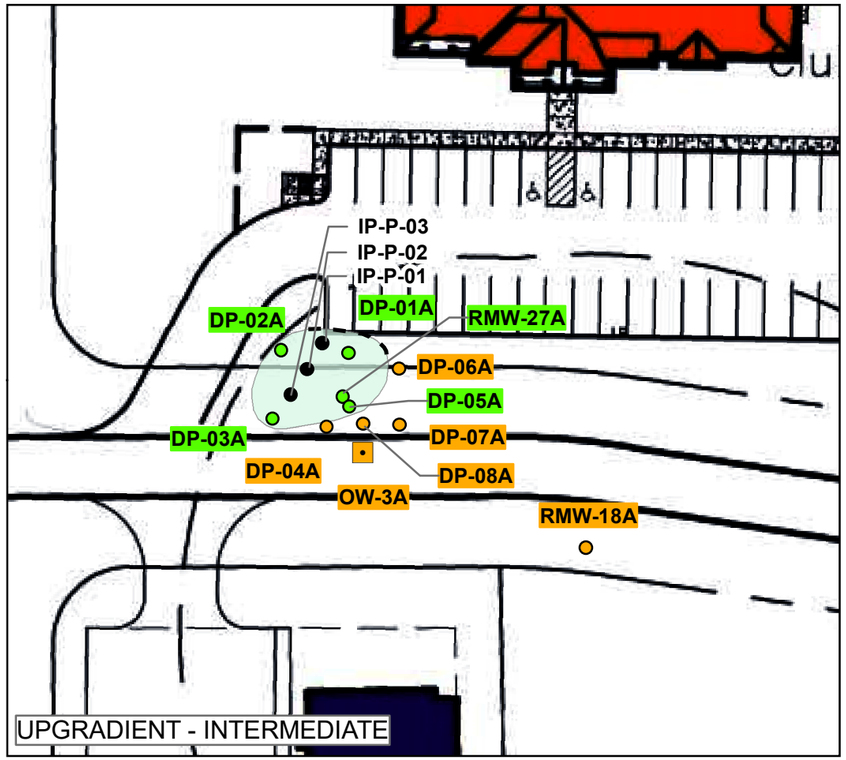
Table 4-5
ERD and Migration Lines of Evidence – Downgradient Plume Pilot Area

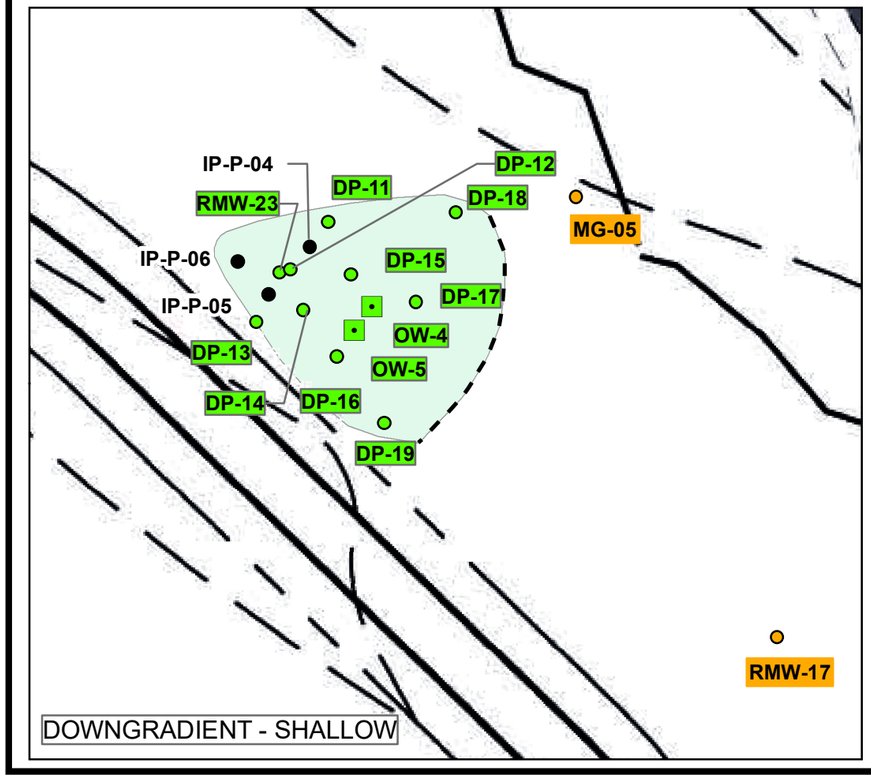
WATER TABLE AQUIFER														
Well/ Evidence	**RMW-23**	**DP-12**	**DP-13**	**DP-11**	**DP-14**	**DP-15**	**DP-16**	**OW-05**	**OW-04**	**DP-17**	**DP-18**	**DP-19**	**MG-05**	**RMW-17**
DO/ORP														
Ferrous Iron														
Dissolved Gases														
cVOC By-Products														
Lactate By-Products														
INTERMEDIATE AQUIFER														
Well/ Evidence	**RMW-23A**	**DP-12A**	**DP-13A**	**DP-11A**	**DP-14A**	**OW-06A**	**DP-15A**	**DP-16A**	**DP-17A**	**DP-18A**	**DP-19A**	**MG-05A**	**RMW-28A**	**RMW-17A**
DO/ORP														
Ferrous Iron														
Dissolved Gases														
cVOC By-Products														
Lactate By-Products														
	INCREASING DISTANCE FROM INJECTION													

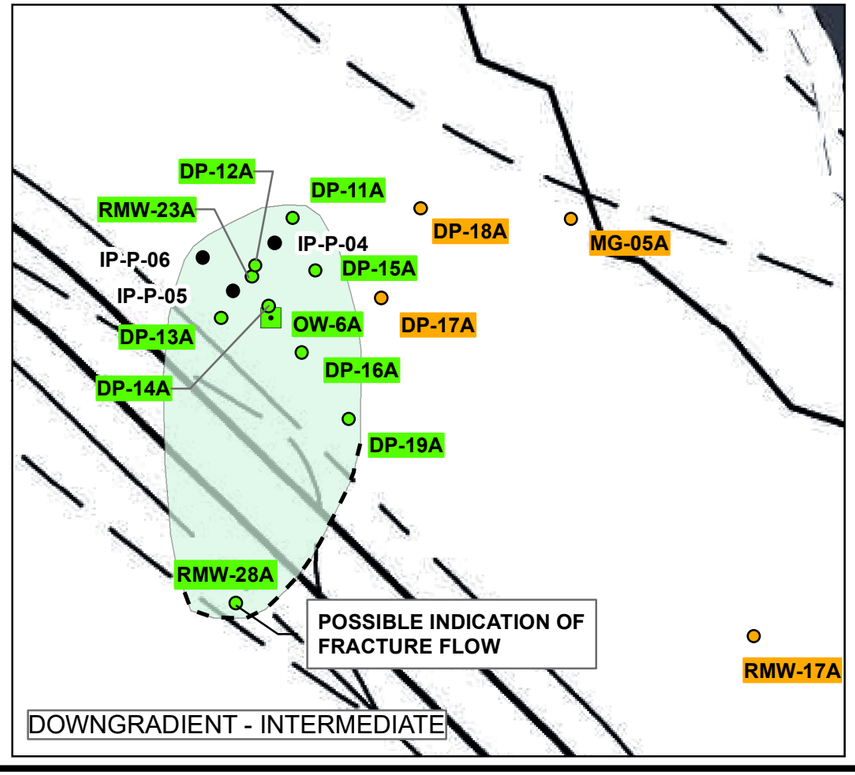
KEY
DO - Less than 0.5 mg/L is good, Less than 1.0 mg/L is weak evidence
ORP - less than 50 mV is good, Less than 100 mV is weak evidence
Ferrous Iron - Present above 1 mg/L is good, present less than 1 mg/L is weak
Dissolved Gases - Methane present above 1000 ug/L is good, present less than 1000 ug/L is weak
Dissolved Gases - Ethane/ethene present above 1 ug/L is good, present less than 1 ug/L is weak
cVOC By-Products - includes TCE, cis-1,2-DCE, VC (compare to pre-injection)
Lactate By-Products - MEK, MIBK, acetone, methyl acetate OR Lactate-related peak on chromatogram

Green - good evidence for ERD conditions or distribution
Yellow - weak evidence for ERD conditions or distribution
Red - poor evidence for ERD conditions or distribution









LEGEND

- ABC+ INJECTION LOCATION
- MONITORING WELL AND DIRECT PUSH LOCATION WATER QUALITY INDICATIVE OF ERD
- MONITORING WELL AND DIRECT PUSH LOCATION NO CHANGE IN WATER QUALITY OBSERVED
- OBSERVATION WELL WATER QUALITY INDICATIVE OF ERD
- OBSERVATION WELL NO CHANGE IN WATER QUALITY OBSERVED
- AREA OF INFLUENCE (DASHED WHERE INFERRED)

NOTES:

INDICATIONS OF ERD INCLUDE:

DISSOLVED GASES - METHANE (STRONGY REDUCING CONDITIONS)
ETHANE/ETHENE (DECHLORINATION OF VOCs)

FERROUS IRON - REDUCING CONDITIONS

LOW DO/LOW ORP - REDUCING CONDITIONS

IMAGE BACKGROUND PROVIDED BY TOM WINKOPP REALTOR/DEVELOPER

N

0 50 100 Feet

PROJECT:	WESTPOINT HOME CLEMSON, SOUTH CAROLINA
SHEET TITLE:	ESTIMATED AREA OF ABC+ INFLUENCE

DRAWN BY:	DJS	SCALE:	PROJ. NO. 226253.0.0.6
CHECKED BY:	LMC/JEP	AS NOTED	FILE NO. Figure 4-1 - Areas of Influence.mxd
APPROVED BY:	SWEBB	DATE PRINTED:	FIGURE 4-1
DATE:	APRIL 2017		

TRC

Coordinate System: NAD 1983 StatePlane South Carolina FIPS 3900 Feet (Foot US)
Map Rotation: 0
Saved By: DSZYNAL on 4/27/2017, 11:50:03 AM
Path: U:\West Point Home\Clemson SC\ArcGIS\10226253\2017\Figure 4-1 - Areas of Influence.mxd
TRC - GIS

Appendix A
Redox Tech Injection Report

REDOX TECH, LLC

"Providing Innovative In Situ Soil and Groundwater Treatment"

Injection Field Summary Report For
The Pier
918 Queens Park Loop
Seneca, SC 29678

Prepared by Ed Escochea on July 15, 2016

Field Contractor	Redox Tech, LLC	**Client**	TRC
Field Lead	Ed Escochea	**Field Lead**	David Szynal
Phone Number	(770) 297-5237	**Phone Number**	(864-420-3976)
Email Address	escochea@redox-tech.com	**Email Address**	
Start Date	June 20, 2016	**End Date**	June 29, 2019
Chemical	ABC+ Sodium Bicarbonate RTB-1	**Total Pounds**	21,060 lbs 1,080 lbs 40.50 liters
Concentration	50 gal/hopper 50 lbs ZVI/hopper 47.5 lbs (5.5 gal) ABC/hopper 2 lbs guar/hopper 0.176 liters RTB-1/hopper 5 lbs sodium bicarbonate/hopper		
Injection Points	IP-P-1 thru IP-P-6		
Injection Intervals	Every 5 feet from 55' to 15'		

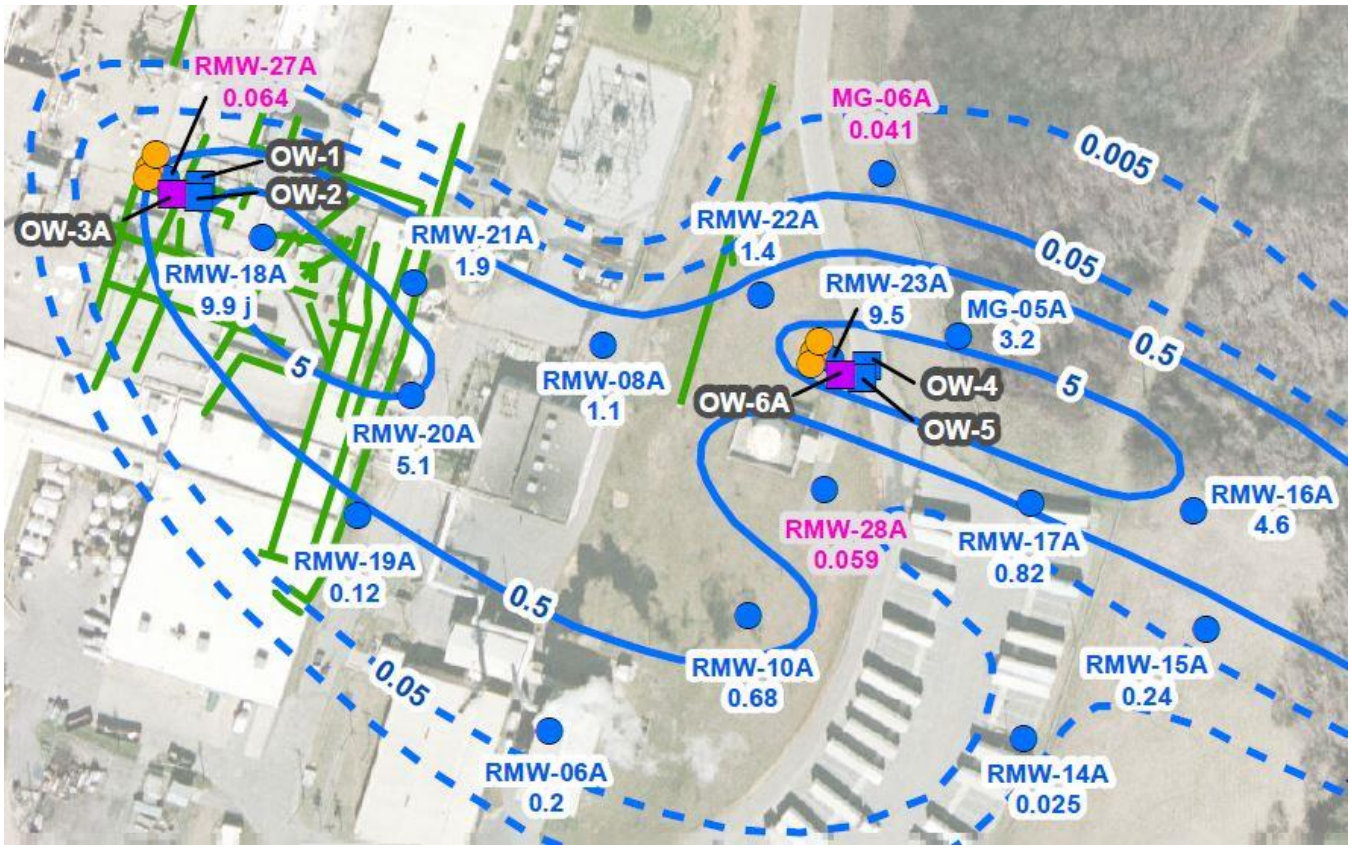
Summary: Over an eight-day period, 10,260 pounds of ABC, 1,080 lbs of Sodium Bicarbonate, 10,800 lbs of ZVI and 20.5 liters of RTB-1 were injected into 6 locations using a Redox Tech injection trailer. The injection pressures stayed between 200 and 100 psi during the injections. No "blow by" (fluid leaking around the rods and appearing at the ground surface near the rods) was observed and no "daylighting" (fluid appearing at the ground surface but some distance away from rods) was observed. However when injecting at IP-P-01, well number RMW-27A was influenced and about a gallon of ABC+ discharged from the well. Wells OW-6A and RMW-23 were also influenced. When this occurred, injections were stopped and once the crew secured the expansion plug, discharging ceased. Injections were completed as described in Table 1 and the locations shown on Figure 1.

Table 1. Injection Details

Date	Well ID	Start Time	Stop Time	Depth (ft)	Volume Injected (gal)	Injection Pressure (psi)	Notes (flow change, etc.)
6/21/16	IP-P-03			76.5			Push to refusal
6/21/16	IP-P-03	1218	1250	55	200	200	
6/21/16	IP-P-03	1259	1323	50	200	200	
6/21/16	IP-P-03	1546	1608	45	200	200	
6/21/16	IP-P-03	1609	1629	40	200	200	
6/22/16	IP-P-03	0937	0957	35	200	200	
6/22/16	IP-P-03	1005	1025	30	200	200	
6/22/16	IP-P-03	1049	1108	25	200	200	
6/22/16	IP-P-03	1109	1127	20	200	200	
6/22/16	IP-P-03	1156	1213	15	200	200	
6/22/16	IP-P-02	1442	1500	55	200	200	
6/22/16	IP-P-02	1527	1514	50	200	200	
6/22/16	IP-P-02	1610	1626	45	200	200	
6/22/16	IP-P-02	1646	1705	40	200	200	
6/22/16	IP-P-02	1734	1754	35	200	200	
6/22/16	IP-P-02	1812	1830	30	200	200	
6/22/16	IP-P-02	1834	1851	25	200	200	
6/23/16	IP-P-02	0842	0859	20	200	150	
6/23/16	IP-P-02	0902	0921	15	200	150	
6/23/16	IP-P-01	1053	1109	55	200	200	
6/23/16	IP-P-01	1110	1127	50	200	200	
6/23/16	IP-P-01	1327	1346	45	200	200	
6/23/16	IP-P-01	1348	1404	40	200	200	
6/23/16	IP-P-01	1459	1504	35	50	200	ABC discharging from well rmw-27a stop to secure expansion plug
6/23/16	IP-P-01	1524	1538	35	150	200	
6/23/16	IP-P-01	1538	1556	30	200	200	
6/23/16	IP-P-01	1623	1638	25	200	200	
6/23/16	IP-P-01	1639	1655	20	200	200	
6/23/16	IP-P-01	1721	1740	15	200	200	
6/27/16	IP-P-06			70			Push to refusal
6/27/16	IP-P-06	1049	1106	55	200	200	
6/27/16	IP-P-06	1111	1132	50	200	200	
6/27/16	IP-P-06	1412	1429	45	200	200	
6/27/16	IP-P-06	1433	1446	40	140	200	Stopped @1446 blow by well OW-6A
6/27/16	IP-P-06	1514	1520	40	60	200	

Table 1. Injection Details							
Date	**Well ID**	**Start Time**	**Stop Time**	**Depth (ft)**	**Volume Injected (gal)**	**Injection Pressure (psi)**	**Notes (flow change, etc.)**
6/27/16	IP-P-06	1522	1539	35	200	200	
6/27/16	IP-P-06	1542	1558	30	200	200	
6/27/16	IP-P-06	1614	1625	25	130	200	Blow by well OW-6A
6/27/16	IP-P-06	1648	1654	25	70	150	
6/27/16	IP-P-06	1655	1704	20	125	150	Blow by Well RMW-23
6/27/16	IP-P-06	1722	1728	20	75	150	
6/27/16	IP-P-06	1802	1821	15	200	100	
6/28/16	IP-P-05	1003	1023	55	200	150	
6/28/16	IP-P-05	1025	1040	50	200	200	
6/28/16	IP-P-05	1104	1120	45	200	200	
6/28/16	IP-P-05	1122	1140	40	200	150	
6/28/16	IP-P-05	1410	1425	35	200	150	
6/28/16	IP-P-05	1427	1445	30	200	150	
6/28/16	IP-P-05	1506	1527	25	200	100	
6/28/16	IP-P-05	1529	1550	20	200	100	
6/28/16	IP-P-05	1627	1651	15	200	100	
6/29/16	IP-P-04	0930	0954	55	200	100	
6/29/16	IP-P-04	3957	1020	50	200	100	
6/29/16	IP-P-04	1033	1053	45	200	100	
6/29/16	IP-P-04	1056	1114	40	200	100	
6/29/16	IP-P-04	1307	1329	35	200	100	
6/29/16	IP-P-04	1338	1354	30	200	100	
6/29/16	IP-P-04	1438	1502	25	200	100	
6/29/16	IP-P-04	1504	1525	20	200	100	
6/29/16	IP-P-04	1547	1610	15	200	100	

Figure 1. Injection Locations



Appendix B
Laboratory Data Sheets

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: **WPH Clemson**

Project Number: **226253.0000.0000.000009**

Lot Number: **RE27079**

Date Completed: **06/03/2016**

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: WPH-Clemson, SC

Project Number: 226253.0000.0000.000009

Lab Report: RE27079 Shealy Environmental Services
Samples analyzed for VOCs, potassium, sulfate, and TOC

Chain of Custody, Sample Temperature, Sample Preservation: Chains of custody (CoCs) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Recoveries were within QC limits.

Method Blank(s): Method blanks have no detections of targeted analytes except as follows:

- Total organic carbon (TOC) was detected in the method blank at 0.12 J mg/L. **OW-03A, OW-5, and RMW-27A have TOC concentrations comparable to the method blank and are assigned a "u" qualifier.**
- 1,2,4-Trichlorobenzene in method blank at 0.22 J ug/L. 1,2,4-Trichlorobenzene was not detected in the groundwater samples. No qualifiers were added.

Trip Blank: TBLK-16201 had no detections of targeted analytes.

Field Blank: FBLK-16201 in Shealy lab report RE31026 has acetone at 6.0 J ug/L, methylene chloride at 5.2 ug/L, and toluene at 0.24 J ug/L.

- OW-05 has acetone at a concentration comparable to acetone in FBLK-16201. **A "u" flag is assigned to acetone in OW-05.**
- Methylene chloride and toluene were not detected in the groundwater samples included in this report. No qualifiers are assigned.

Equipment Rinse Blank: RBLK-16201 in Shealy lab report RE31026 has acetone at 6.0 J ug/L and methylene chloride at 4.7 ug/L. These concentrations are comparable to those detected in FBLK-16201 in in Shealy lab report RE31026. Any data qualifiers that might result from the detections in RBLK-16201 have already been assigned in the preceding Field Blank section.

LCS/LCSD: LCS recoveries are within QC Limits except noted below. LCSD analyses were not performed.

- Acetone was recovered above the upper QC limit in the LCS. Acetone in OW-05 was assigned a "u" qualifier above; therefore, no additional qualifier is assigned.

MS/MSD: DU-16201 was used for MS/MSD analyses of sulfate. OW-03A was used for MS/MSD analyses of VOCs. RMW-27B was used for MS/MSD analyses of potassium. MS/MSD recoveries and RPDs were within QC limits except as follows:

- Chloroform and tetrachloroethene have MS and MSD recoveries above the upper QC limit. Acetone has MSD recovery above the upper QC limit. Acetone was not detected in OW-03A. Chloroform and tetrachloroethene were detected in OW-03A. **Chloroform and tetrachloroethene in OW-03A are assigned a "j" flag.**

Duplicates: DU-16201 is a field duplicate of RMD-27A. Tetrachloroethene, sulfate and potassium were detected in both the parent and duplicate samples. The RPDs for these three analytes are <20% which demonstrates acceptable precision. No qualifiers were assigned.

Data review performed by: Terry Hertz; TRC Environmental Corp.; 6/8/2016

Case Narrative
TRC Companies, Inc.
Lot Number: RE27079

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.

TOC

A H2SO4 preserved container was not received for sample -007. The laboratory preserved an aliquot of the unpreserved container that was received for this sample. TOC analysis was performed from this aliquot.

The Method Blank associated with batch 14597 yielded a "J" value detection for TOC. No corrective action is required as this is an estimated value recovered below the PQL.

VOCs by GC/MS

The Method Blank associated with batch 14421 yielded a "J" value detection for 1,2,4-Trichlorobenzene. No corrective action is required as this is an estimated value recovered below the PQL.

The LCS associated with batch 14421 recovered Acetone above method criteria. No corrective action is required as all associated samples were non-detect above the PQL for this compound. Sample -008 yielded a "J" value for this compound.

Due to suspected matrix interferences, the MS/MSD associated with batch 14421 recovered Chloroform and Tetrachloroethene above method criteria. In addition, the MSD associated with this batch recovered Acetone above method criteria. All associated samples are non-detect for this compound above the PQL.

Sample Summary
TRC Companies, Inc.
Lot Number: RE27079

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	RMW-27B	Aqueous	05/24/2016 1600	05/27/2016
002	RMW-27	Aqueous	05/25/2016 0930	05/27/2016
003	OW-02	Aqueous	05/25/2016 1055	05/27/2016
004	RMW-18	Aqueous	05/25/2016 1220	05/27/2016
005	RMW-21	Aqueous	05/25/2016 1500	05/27/2016
006	RMW-20	Aqueous	05/25/2016 1620	05/27/2016
007	RMW-23	Aqueous	05/25/2016 1745	05/27/2016
008	OW-05	Aqueous	05/25/2016 1900	05/27/2016
009	RMW-27A	Aqueous	05/26/2016 0955	05/27/2016
010	OW-03A	Aqueous	05/26/2016 1230	05/27/2016
011	OW-01	Aqueous	05/26/2016 1430	05/27/2016
012	RMW-18A	Aqueous	05/26/2016 1630	05/27/2016
013	RMW-21A	Aqueous	05/26/2016	05/27/2016
014	TBLK-16201	Aqueous	05/26/2016	05/27/2016
015	DU-16201	Aqueous	05/24/2016	05/27/2016

(15 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: RE27079

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	RMW-27B	Aqueous	Sulfate	300.0	8.0		mg/L	6
001	RMW-27B	Aqueous	Tetrachloroethene	8260B	150		ug/L	7
001	RMW-27B	Aqueous	Potassium	6010C	1.5	J	mg/L	7
002	RMW-27	Aqueous	Sulfate	300.0	180		mg/L	8
002	RMW-27	Aqueous	TOC	9060A	1.2	B	mg/L	8
002	RMW-27	Aqueous	Tetrachloroethene	8260B	2400		ug/L	9
002	RMW-27	Aqueous	Potassium	6010C	0.71	J	mg/L	9
003	OW-02	Aqueous	Sulfate	300.0	120		mg/L	10
003	OW-02	Aqueous	TOC	9060A	1.2	B	mg/L	10
003	OW-02	Aqueous	cis-1,2-Dichloroethene	8260B	4.5	J	ug/L	10
003	OW-02	Aqueous	Tetrachloroethene	8260B	3600		ug/L	11
003	OW-02	Aqueous	Trichloroethene	8260B	5.9	J	ug/L	11
003	OW-02	Aqueous	Potassium	6010C	1.8	J	mg/L	11
004	RMW-18	Aqueous	Sulfate	300.0	50		mg/L	12
004	RMW-18	Aqueous	cis-1,2-Dichloroethene	8260B	36	J	ug/L	12
004	RMW-18	Aqueous	Tetrachloroethene	8260B	2100		ug/L	13
004	RMW-18	Aqueous	Potassium	6010C	1.1	J	mg/L	13
005	RMW-21	Aqueous	Sulfate	300.0	24		mg/L	14
005	RMW-21	Aqueous	Tetrachloroethene	8260B	520		ug/L	15
005	RMW-21	Aqueous	Trichloroethene	8260B	2.7	J	ug/L	15
005	RMW-21	Aqueous	Potassium	6010C	0.50	J	mg/L	15
006	RMW-20	Aqueous	Sulfate	300.0	11		mg/L	16
006	RMW-20	Aqueous	Tetrachloroethene	8260B	130		ug/L	17
006	RMW-20	Aqueous	Trichloroethene	8260B	0.18	J	ug/L	17
006	RMW-20	Aqueous	Potassium	6010C	1.8	J	mg/L	17
007	RMW-23	Aqueous	Sulfate	300.0	40		mg/L	18
007	RMW-23	Aqueous	TOC	9060A	1.1	B	mg/L	18
007	RMW-23	Aqueous	cis-1,2-Dichloroethene	8260B	0.92	J	ug/L	18
007	RMW-23	Aqueous	Tetrachloroethene	8260B	12		ug/L	19
007	RMW-23	Aqueous	Trichloroethene	8260B	0.25	J	ug/L	19
007	RMW-23	Aqueous	Potassium	6010C	0.58	J	mg/L	19
008	OW-05	Aqueous	Sulfate	300.0	7.2		mg/L	20
008	OW-05	Aqueous	TOC	9060A	0.39	BJ	mg/L	20
008	OW-05	Aqueous	Acetone	8260B	2.1	J	ug/L	20
008	OW-05	Aqueous	cis-1,2-Dichloroethene	8260B	4.5	J	ug/L	20
008	OW-05	Aqueous	Tetrachloroethene	8260B	28		ug/L	21
008	OW-05	Aqueous	Trichloroethene	8260B	0.37	J	ug/L	21
008	OW-05	Aqueous	Potassium	6010C	0.83	J	mg/L	21
009	RMW-27A	Aqueous	Sulfate	300.0	1.9		mg/L	22
009	RMW-27A	Aqueous	TOC	9060A	0.33	BJ	mg/L	22
009	RMW-27A	Aqueous	Tetrachloroethene	8260B	8.5		ug/L	23
009	RMW-27A	Aqueous	Potassium	6010C	0.61	J	mg/L	23
010	OW-03A	Aqueous	Sulfate	300.0	2.4		mg/L	24
010	OW-03A	Aqueous	TOC	9060A	0.44	BJ	mg/L	24
010	OW-03A	Aqueous	Chloroform	8260B	6.8	J	ug/L	24

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
010	OW-03A	Aqueous	Tetrachloroethene	8260B	720		ug/L	25
010	OW-03A	Aqueous	Potassium	6010C	0.94	J	mg/L	25
011	OW-01	Aqueous	Sulfate	300.0	100		mg/L	26
011	OW-01	Aqueous	TOC	9060A	1.1	B	mg/L	26
011	OW-01	Aqueous	Tetrachloroethene	8260B	5400		ug/L	27
011	OW-01	Aqueous	Potassium	6010C	1.4	J	mg/L	27
012	RMW-18A	Aqueous	Sulfate	300.0	160		mg/L	28
012	RMW-18A	Aqueous	Tetrachloroethene	8260B	11000		ug/L	29
012	RMW-18A	Aqueous	Potassium	6010C	1.6	J	mg/L	29
013	RMW-21A	Aqueous	Sulfate	300.0	51		mg/L	30
013	RMW-21A	Aqueous	Tetrachloroethene	8260B	2900		ug/L	31
013	RMW-21A	Aqueous	Trichloroethene	8260B	4.5	J	ug/L	31
013	RMW-21A	Aqueous	Potassium	6010C	2.7	J	mg/L	31
015	DU-16201	Aqueous	Sulfate	300.0	1.6		mg/L	34
015	DU-16201	Aqueous	Tetrachloroethene	8260B	10		ug/L	35
015	DU-16201	Aqueous	Potassium	6010C	0.63	J	mg/L	35

(61 detections)

Client: TRC Companies, Inc.
Description: RMW-27B
Date Sampled: 05/24/2016 1600
Date Received: 05/27/2016

Laboratory ID: RE27079-001
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/01/2016 2345	SLU		14669

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	8.0		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	05/31/2016 2244	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-27B
Date Sampled: 05/24/2016 1600
Date Received: 05/27/2016

Laboratory ID: RE27079-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	05/31/2016 2244	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	150		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		119	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		99	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1727	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	1.5	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-27
Date Sampled: 05/25/2016 0930
Date Received: 05/27/2016

Laboratory ID: RE27079-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	06/02/2016 0009	SLU		14669
1		(TOC) 9060A	1	06/02/2016 1817	BWS		14597

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	180		5.0	1.4	mg/L	1
TOC		9060A	1.2	B	1.0	0.063	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	05/31/2016 2330	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		400	32	ug/L	1
Benzene	71-43-2	8260B	ND		100	4.2	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		100	4.6	ug/L	1
Bromoform	75-25-2	8260B	ND		100	7.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		100	3.8	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		200	36	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		100	9.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		100	6.2	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		100	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		100	5.6	ug/L	1
Chloroform	67-66-3	8260B	ND		100	4.2	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		100	3.8	ug/L	1
Cyclohexane	110-82-7	8260B	ND		100	6.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		100	11	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		100	4.6	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		100	3.4	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		100	9.2	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		100	3.8	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		100	3.8	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		100	17	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		100	3.8	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		100	4.6	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		100	6.2	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		100	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		100	6.6	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		100	5.8	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		100	6.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		100	4.4	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		100	4.2	ug/L	1
2-Hexanone	591-78-6	8260B	ND		200	5.2	ug/L	1

TOC Range: 1.163 - 1.217

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

Client: TRC Companies, Inc.
Description: RMW-27
Date Sampled: 05/25/2016 0930
Date Received: 05/27/2016

Laboratory ID: RE27079-002
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	05/31/2016 2330	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		100	2.8	ug/L	1
Methyl acetate	79-20-9	8260B	ND		100	4.8	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		100	4.6	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		200	5.8	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		100	3.2	ug/L	1
Methylene chloride	75-09-2	8260B	ND		100	8.4	ug/L	1
Styrene	100-42-5	8260B	ND		100	2.6	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		100	2.6	ug/L	1
Tetrachloroethene	127-18-4	8260B	2400		100	4.4	ug/L	1
Toluene	108-88-3	8260B	ND		100	4.8	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		100	6.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		100	2.6	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		100	4.8	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		100	4.4	ug/L	1
Trichloroethene	79-01-6	8260B	ND		100	3.2	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		100	15	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		40	10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		100	6.4	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		119	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		100	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1757	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	0.71	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-02
Date Sampled: 05/25/2016 1055
Date Received: 05/27/2016

Laboratory ID: RE27079-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	06/02/2016 0033	SLU		14669
1		(TOC) 9060A	1	06/02/2016 1854	BWS		14597

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	120		5.0	1.4	mg/L	1
TOC		9060A	1.2	B	1.0	0.063	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	05/31/2016 2353	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		400	32	ug/L	1
Benzene	71-43-2	8260B	ND		100	4.2	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		100	4.6	ug/L	1
Bromoform	75-25-2	8260B	ND		100	7.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		100	3.8	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		200	36	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		100	9.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		100	6.2	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		100	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		100	5.6	ug/L	1
Chloroform	67-66-3	8260B	ND		100	4.2	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		100	3.8	ug/L	1
Cyclohexane	110-82-7	8260B	ND		100	6.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		100	11	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		100	4.6	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		100	3.4	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		100	9.2	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		100	3.8	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		100	3.8	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		100	17	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		100	3.8	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		100	4.6	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		100	6.2	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	4.5	J	100	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		100	6.6	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		100	5.8	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		100	6.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		100	4.4	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		100	4.2	ug/L	1
2-Hexanone	591-78-6	8260B	ND		200	5.2	ug/L	1

TOC Range: 1.21 - 1.261

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

Client: TRC Companies, Inc.
Description: OW-02
Date Sampled: 05/25/2016 1055
Date Received: 05/27/2016

Laboratory ID: RE27079-003
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	05/31/2016 2353	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		100	2.8	ug/L	1
Methyl acetate	79-20-9	8260B	ND		100	4.8	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		100	4.6	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		200	5.8	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		100	3.2	ug/L	1
Methylene chloride	75-09-2	8260B	ND		100	8.4	ug/L	1
Styrene	100-42-5	8260B	ND		100	2.6	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		100	2.6	ug/L	1
Tetrachloroethene	127-18-4	8260B	3600		100	4.4	ug/L	1
Toluene	108-88-3	8260B	ND		100	4.8	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		100	6.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		100	2.6	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		100	4.8	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		100	4.4	ug/L	1
Trichloroethene	79-01-6	8260B	5.9	J	100	3.2	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		100	15	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		40	10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		100	6.4	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		120	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		100	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1802	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	1.8	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-18
Date Sampled: 05/25/2016 1220
Date Received: 05/27/2016

Laboratory ID: RE27079-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0057	SLU		14669

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	50		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	06/01/2016 0016	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		400	32	ug/L	1
Benzene	71-43-2	8260B	ND		100	4.2	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		100	4.6	ug/L	1
Bromoform	75-25-2	8260B	ND		100	7.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		100	3.8	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		200	36	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		100	9.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		100	6.2	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		100	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		100	5.6	ug/L	1
Chloroform	67-66-3	8260B	ND		100	4.2	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		100	3.8	ug/L	1
Cyclohexane	110-82-7	8260B	ND		100	6.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		100	11	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		100	4.6	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		100	3.4	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		100	9.2	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		100	3.8	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		100	3.8	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		100	17	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		100	3.8	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		100	4.6	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		100	6.2	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	36	J	100	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		100	6.6	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		100	5.8	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		100	6.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		100	4.4	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		100	4.2	ug/L	1
2-Hexanone	591-78-6	8260B	ND		200	5.2	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		100	2.8	ug/L	1
Methyl acetate	79-20-9	8260B	ND		100	4.8	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-18
Date Sampled: 05/25/2016 1220
Date Received: 05/27/2016

Laboratory ID: RE27079-004
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	06/01/2016 0016	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		100	4.6	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		200	5.8	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		100	3.2	ug/L	1
Methylene chloride	75-09-2	8260B	ND		100	8.4	ug/L	1
Styrene	100-42-5	8260B	ND		100	2.6	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		100	2.6	ug/L	1
Tetrachloroethene	127-18-4	8260B	2100		100	4.4	ug/L	1
Toluene	108-88-3	8260B	ND		100	4.8	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		100	6.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		100	2.6	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		100	4.8	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		100	4.4	ug/L	1
Trichloroethene	79-01-6	8260B	ND		100	3.2	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		100	15	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		40	10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		100	6.4	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		120	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		101	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1806	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	1.1	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-21
Date Sampled: 05/25/2016 1500
Date Received: 05/27/2016

Laboratory ID: RE27079-005
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0121	SLU		14669

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	24		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	05/31/2016 2307	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		100	8.1	ug/L	1
Benzene	71-43-2	8260B	ND		25	1.1	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	1.2	ug/L	1
Bromoform	75-25-2	8260B	ND		25	1.8	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	0.95	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		50	9.1	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	2.3	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	1.6	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	1.4	ug/L	1
Chloroform	67-66-3	8260B	ND		25	1.1	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	0.95	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	1.5	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	2.8	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	1.2	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	0.85	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	2.3	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	0.95	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	0.95	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	4.3	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	0.95	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	1.2	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	1.6	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		25	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	1.7	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	1.5	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	1.5	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	1.1	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		25	1.1	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	1.3	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	0.70	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	1.2	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-21
Date Sampled: 05/25/2016 1500
Date Received: 05/27/2016

Laboratory ID: RE27079-005
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	05/31/2016 2307	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	1.2	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	1.5	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	0.80	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	2.1	ug/L	1
Styrene	100-42-5	8260B	ND		25	0.65	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	0.65	ug/L	1
Tetrachloroethene	127-18-4	8260B	520		25	1.1	ug/L	1
Toluene	108-88-3	8260B	ND		25	1.2	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	1.5	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	0.65	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	1.2	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	1.1	ug/L	1
Trichloroethene	79-01-6	8260B	2.7	J	25	0.80	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	3.7	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	2.5	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	1.6	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		122	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		103	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1811	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	0.50	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-20
Date Sampled: 05/25/2016 1620
Date Received: 05/27/2016

Laboratory ID: RE27079-006
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0145	SLU		14669

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	11		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/01/2016 0039	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-20
Date Sampled: 05/25/2016 1620
Date Received: 05/27/2016

Laboratory ID: RE27079-006
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/01/2016 0039	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	130		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	0.18	J	5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		117	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		98	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1815	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	1.8	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-23
Date Sampled: 05/25/2016 1745
Date Received: 05/27/2016

Laboratory ID: RE27079-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0209	SLU		14669
1		(TOC) 9060A	1	06/02/2016 1930	BWS		14597

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	40		1.0	0.28	mg/L	1
TOC		9060A	1.1	B	1.0	0.063	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/01/2016 0102	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	0.92	J	5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1

TOC Range: 1.108 - 1.156

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

Client: TRC Companies, Inc.
Description: RMW-23
Date Sampled: 05/25/2016 1745
Date Received: 05/27/2016

Laboratory ID: RE27079-007
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/01/2016 0102	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	12		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	0.25	J	5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		124	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		103	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1820	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	0.58	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-05
Date Sampled: 05/25/2016 1900
Date Received: 05/27/2016

Laboratory ID: RE27079-008
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0233	SLU		14669
1		(TOC) 9060A	1	06/02/2016 2007	BWS		14597

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	7.2		1.0	0.28	mg/L	1
TOC		9060A	0.39	BJ	1.0	0.063	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/01/2016 0125	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	2.1	J	20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	4.5	J	5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1

TOC Range: 0.361 - 0.413

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

Client: TRC Companies, Inc.
Description: OW-05
Date Sampled: 05/25/2016 1900
Date Received: 05/27/2016

Laboratory ID: RE27079-008
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/01/2016 0125	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	28		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	0.37	J	5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		121	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		101	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1824	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	0.83	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-27A
Date Sampled: 05/26/2016 0955
Date Received: 05/27/2016

Laboratory ID: RE27079-009
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0257	SLU		14669
1		(TOC) 9060A	1	06/02/2016 2043	BWS		14597

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	1.9		1.0	0.28	mg/L	1
TOC		9060A	0.33	BJ	1.0	0.063	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/01/2016 0148	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1

TOC Range: 0.304 - 0.342

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-27A
Date Sampled: 05/26/2016 0955
Date Received: 05/27/2016

Laboratory ID: RE27079-009
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/01/2016 0148	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	8.5		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		122	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		102	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1828	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	0.61	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-03A
Date Sampled: 05/26/2016 1230
Date Received: 05/27/2016

Laboratory ID: RE27079-010
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0409	SLU		14669
1		(TOC) 9060A	1	06/02/2016 2120	BWS		14597

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	2.4		1.0	0.28	mg/L	1
TOC		9060A	0.44	BJ	1.0	0.063	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	06/01/2016 0343	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		200	16	ug/L	1
Benzene	71-43-2	8260B	ND		50	2.1	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	2.3	ug/L	1
Bromoform	75-25-2	8260B	ND		50	3.5	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	1.9	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		100	18	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	4.5	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	3.1	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	2.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	2.8	ug/L	1
Chloroform	67-66-3	8260B	6.8	J	50	2.1	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	1.9	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	3.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	5.7	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	2.3	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	1.7	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	4.6	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	1.9	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	1.9	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	8.5	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	1.9	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	2.3	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	3.1	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		50	2.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	3.3	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	2.9	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	3.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	2.2	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		50	2.1	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	2.6	ug/L	1

TOC Range: 0.414 - 0.452

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

Client: TRC Companies, Inc.
Description: OW-03A
Date Sampled: 05/26/2016 1230
Date Received: 05/27/2016

Laboratory ID: RE27079-010
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	06/01/2016 0343	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		50	1.4	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	2.4	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	2.3	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	2.9	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	1.6	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	4.2	ug/L	1
Styrene	100-42-5	8260B	ND		50	1.3	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	1.3	ug/L	1
Tetrachloroethene	127-18-4	8260B	720		50	2.2	ug/L	1
Toluene	108-88-3	8260B	ND		50	2.4	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	3.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	1.3	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	2.4	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	2.2	ug/L	1
Trichloroethene	79-01-6	8260B	ND		50	1.6	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	7.4	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	5.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	3.2	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		99	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1842	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	0.94	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-01
Date Sampled: 05/26/2016 1430
Date Received: 05/27/2016

Laboratory ID: RE27079-011
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0433	SLU		14669
1		(TOC) 9060A	1	06/02/2016 2156	BWS		14597

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	100		1.0	0.28	mg/L	1
TOC		9060A	1.1	B	1.0	0.063	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	06/01/2016 0429	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		1000	81	ug/L	1
Benzene	71-43-2	8260B	ND		250	11	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		250	12	ug/L	1
Bromoform	75-25-2	8260B	ND		250	18	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		250	9.5	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		500	91	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		250	23	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		250	16	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		250	10	ug/L	1
Chloroethane	75-00-3	8260B	ND		250	14	ug/L	1
Chloroform	67-66-3	8260B	ND		250	11	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		250	9.5	ug/L	1
Cyclohexane	110-82-7	8260B	ND		250	15	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		250	28	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		250	12	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		250	8.5	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		250	23	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		250	9.5	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		250	9.5	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		250	43	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		250	9.5	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		250	12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		250	16	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		250	10	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		250	17	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		250	14	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		250	15	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		250	11	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		250	11	ug/L	1
2-Hexanone	591-78-6	8260B	ND		500	13	ug/L	1

TOC Range: 1.111 - 1.172

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

Client: TRC Companies, Inc.
Description: OW-01
Date Sampled: 05/26/2016 1430
Date Received: 05/27/2016

Laboratory ID: RE27079-011
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	06/01/2016 0429	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		250	7.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		250	12	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	12	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		500	14	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		250	8.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		250	21	ug/L	1
Styrene	100-42-5	8260B	ND		250	6.5	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		250	6.5	ug/L	1
Tetrachloroethene	127-18-4	8260B	5400		250	11	ug/L	1
Toluene	108-88-3	8260B	ND		250	12	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		250	15	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		250	6.5	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		250	12	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		250	11	ug/L	1
Trichloroethene	79-01-6	8260B	ND		250	8.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		250	37	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		100	25	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		250	16	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		100	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1846	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	1.4	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-18A
Date Sampled: 05/26/2016 1630
Date Received: 05/27/2016

Laboratory ID: RE27079-012
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0457	SLU		14669

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	160		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	06/01/2016 0452	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		2000	160	ug/L	1
Benzene	71-43-2	8260B	ND		500	21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		500	23	ug/L	1
Bromoform	75-25-2	8260B	ND		500	35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		500	19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		1000	180	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		500	45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		500	31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		500	20	ug/L	1
Chloroethane	75-00-3	8260B	ND		500	28	ug/L	1
Chloroform	67-66-3	8260B	ND		500	21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		500	19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		500	30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		500	57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		500	23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		500	17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		500	46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		500	19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		500	19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		500	85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		500	19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		500	23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		500	31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		500	20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		500	33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		500	29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		500	30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		500	22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		500	21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		1000	26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		500	14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		500	24	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-18A
Date Sampled: 05/26/2016 1630
Date Received: 05/27/2016

Laboratory ID: RE27079-012
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	06/01/2016 0452	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		500	23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		1000	29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		500	16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		500	42	ug/L	1
Styrene	100-42-5	8260B	ND		500	13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		500	13	ug/L	1
Tetrachloroethene	127-18-4	8260B	11000		500	22	ug/L	1
Toluene	108-88-3	8260B	ND		500	24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		500	30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		500	13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		500	24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		500	22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		500	16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		500	74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		200	50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		500	32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		120	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		100	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1850	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	1.6	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-21A
Date Sampled: 05/26/2016
Date Received: 05/27/2016

Laboratory ID: RE27079-013
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0521	SLU		14669

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	51		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	06/01/2016 0406	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		400	32	ug/L	1
Benzene	71-43-2	8260B	ND		100	4.2	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		100	4.6	ug/L	1
Bromoform	75-25-2	8260B	ND		100	7.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		100	3.8	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		200	36	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		100	9.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		100	6.2	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		100	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		100	5.6	ug/L	1
Chloroform	67-66-3	8260B	ND		100	4.2	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		100	3.8	ug/L	1
Cyclohexane	110-82-7	8260B	ND		100	6.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		100	11	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		100	4.6	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		100	3.4	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		100	9.2	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		100	3.8	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		100	3.8	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		100	17	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		100	3.8	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		100	4.6	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		100	6.2	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		100	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		100	6.6	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		100	5.8	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		100	6.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		100	4.4	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		100	4.2	ug/L	1
2-Hexanone	591-78-6	8260B	ND		200	5.2	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		100	2.8	ug/L	1
Methyl acetate	79-20-9	8260B	ND		100	4.8	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-21A
Date Sampled: 05/26/2016
Date Received: 05/27/2016

Laboratory ID: RE27079-013
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	06/01/2016 0406	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		100	4.6	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		200	5.8	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		100	3.2	ug/L	1
Methylene chloride	75-09-2	8260B	ND		100	8.4	ug/L	1
Styrene	100-42-5	8260B	ND		100	2.6	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		100	2.6	ug/L	1
Tetrachloroethene	127-18-4	8260B	2900		100	4.4	ug/L	1
Toluene	108-88-3	8260B	ND		100	4.8	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		100	6.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		100	2.6	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		100	4.8	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		100	4.4	ug/L	1
Trichloroethene	79-01-6	8260B	4.5	J	100	3.2	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		100	15	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		40	10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		100	6.4	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		116	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		97	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1855	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	2.7	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: TBLK-16201
Date Sampled: 05/26/2016
Date Received: 05/27/2016

Laboratory ID: RE27079-014
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	05/31/2016 2158	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: TBLK-16201
Date Sampled: 05/26/2016
Date Received: 05/27/2016

Laboratory ID: RE27079-014
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	05/31/2016 2158	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		98	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 MDL
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"

Client: TRC Companies, Inc.
Description: DU-16201
Date Sampled: 05/24/2016
Date Received: 05/27/2016

Laboratory ID: RE27079-015
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0545	SLU		14669

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	1.6		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/01/2016 0211	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: DU-16201
Date Sampled: 05/24/2016
Date Received: 05/27/2016

Laboratory ID: RE27079-015
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/01/2016 0211	ALL		14421

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	10		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		123	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		104	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/01/2016 1859	CJZ	05/31/2016 0955	14369

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	0.63	J	5.0	0.30	mg/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 MDL
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"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ14597-001
Batch: 14597
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
TOC	0.12	J	1	1.0	0.063	mg/L	06/02/2016 1710

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 MDL
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

Inorganic non-metals - LCS

Sample ID: RQ14597-002
Batch: 14597
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	20	20		1	102	90-110	06/02/2016 1745

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 MDL
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

Inorganic non-metals - MB

Sample ID: RQ14669-001
Batch: 14669
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.28	mg/L	06/01/2016 2257

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ14669-002
Batch: 14669
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	100	90-110	06/01/2016 2321

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 MDL
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

Inorganic non-metals - MS

Sample ID: RE27079-015MS
Batch: 14669
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	1.6	20	20		1	94	90-110	06/02/2016 0609

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 MDL
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

Inorganic non-metals - MSD

Sample ID: RE27079-015MD
Batch: 14669
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	1.6	20	20		1	93	1.2	90-110	20	06/02/2016 0633

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 MDL
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: RQ14421-001
Batch: 14421
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	1.6	ug/L	05/31/2016 2053
Benzene	ND		1	5.0	0.21	ug/L	05/31/2016 2053
Bromodichloromethane	ND		1	5.0	0.23	ug/L	05/31/2016 2053
Bromoform	ND		1	5.0	0.35	ug/L	05/31/2016 2053
Bromomethane (Methyl bromide)	ND		1	5.0	0.19	ug/L	05/31/2016 2053
2-Butanone (MEK)	ND		1	10	1.8	ug/L	05/31/2016 2053
Carbon disulfide	ND		1	5.0	0.45	ug/L	05/31/2016 2053
Carbon tetrachloride	ND		1	5.0	0.31	ug/L	05/31/2016 2053
Chlorobenzene	ND		1	5.0	0.20	ug/L	05/31/2016 2053
Chloroethane	ND		1	5.0	0.28	ug/L	05/31/2016 2053
Chloroform	ND		1	5.0	0.21	ug/L	05/31/2016 2053
Chloromethane (Methyl chloride)	ND		1	5.0	0.19	ug/L	05/31/2016 2053
Cyclohexane	ND		1	5.0	0.30	ug/L	05/31/2016 2053
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.57	ug/L	05/31/2016 2053
Dibromochloromethane	ND		1	5.0	0.23	ug/L	05/31/2016 2053
1,2-Dibromoethane (EDB)	ND		1	5.0	0.17	ug/L	05/31/2016 2053
1,3-Dichlorobenzene	ND		1	5.0	0.19	ug/L	05/31/2016 2053
1,4-Dichlorobenzene	ND		1	5.0	0.19	ug/L	05/31/2016 2053
1,2-Dichlorobenzene	ND		1	5.0	0.46	ug/L	05/31/2016 2053
Dichlorodifluoromethane	ND		1	5.0	0.85	ug/L	05/31/2016 2053
1,1-Dichloroethane	ND		1	5.0	0.19	ug/L	05/31/2016 2053
1,2-Dichloroethane	ND		1	5.0	0.23	ug/L	05/31/2016 2053
cis-1,2-Dichloroethene	ND		1	5.0	0.20	ug/L	05/31/2016 2053
trans-1,2-Dichloroethene	ND		1	5.0	0.33	ug/L	05/31/2016 2053
1,1-Dichloroethene	ND		1	5.0	0.31	ug/L	05/31/2016 2053
1,2-Dichloropropane	ND		1	5.0	0.29	ug/L	05/31/2016 2053
cis-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	05/31/2016 2053
trans-1,3-Dichloropropene	ND		1	5.0	0.22	ug/L	05/31/2016 2053
Ethylbenzene	ND		1	5.0	0.21	ug/L	05/31/2016 2053
2-Hexanone	ND		1	10	0.26	ug/L	05/31/2016 2053
Isopropylbenzene	ND		1	5.0	0.14	ug/L	05/31/2016 2053
Methyl acetate	ND		1	5.0	0.24	ug/L	05/31/2016 2053
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.23	ug/L	05/31/2016 2053
4-Methyl-2-pentanone	ND		1	10	0.29	ug/L	05/31/2016 2053
Methylcyclohexane	ND		1	5.0	0.16	ug/L	05/31/2016 2053
Methylene chloride	ND		1	5.0	0.42	ug/L	05/31/2016 2053
Styrene	ND		1	5.0	0.13	ug/L	05/31/2016 2053
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.13	ug/L	05/31/2016 2053
Tetrachloroethene	ND		1	5.0	0.22	ug/L	05/31/2016 2053
Toluene	ND		1	5.0	0.24	ug/L	05/31/2016 2053
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.30	ug/L	05/31/2016 2053
1,2,4-Trichlorobenzene	0.22	J	1	5.0	0.13	ug/L	05/31/2016 2053
1,1,2-Trichloroethane	ND		1	5.0	0.22	ug/L	05/31/2016 2053
1,1,1-Trichloroethane	ND		1	5.0	0.24	ug/L	05/31/2016 2053

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 MDL
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: RQ14421-001
Batch: 14421
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.16	ug/L	05/31/2016 2053
Trichlorofluoromethane	ND		1	5.0	0.74	ug/L	05/31/2016 2053
Vinyl chloride	ND		1	2.0	0.50	ug/L	05/31/2016 2053
Xylenes (total)	ND		1	5.0	0.32	ug/L	05/31/2016 2053

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		118	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ14421-002
Batch: 14421
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	150	N	1	146	60-140	05/31/2016 1957
Benzene	50	50		1	100	70-130	05/31/2016 1957
Bromodichloromethane	50	53		1	106	70-130	05/31/2016 1957
Bromoform	50	42		1	83	70-130	05/31/2016 1957
Bromomethane (Methyl bromide)	50	50		1	100	60-140	05/31/2016 1957
2-Butanone (MEK)	100	130		1	127	60-140	05/31/2016 1957
Carbon disulfide	50	52		1	104	60-140	05/31/2016 1957
Carbon tetrachloride	50	54		1	107	70-130	05/31/2016 1957
Chlorobenzene	50	49		1	99	70-130	05/31/2016 1957
Chloroethane	50	53		1	106	60-140	05/31/2016 1957
Chloroform	50	58		1	117	70-130	05/31/2016 1957
Chloromethane (Methyl chloride)	50	53		1	107	60-140	05/31/2016 1957
Cyclohexane	50	56		1	113	70-130	05/31/2016 1957
1,2-Dibromo-3-chloropropane (DBCP)	50	52		1	103	70-130	05/31/2016 1957
Dibromochloromethane	50	48		1	95	70-130	05/31/2016 1957
1,2-Dibromoethane (EDB)	50	52		1	103	70-130	05/31/2016 1957
1,3-Dichlorobenzene	50	49		1	98	70-130	05/31/2016 1957
1,4-Dichlorobenzene	50	48		1	97	70-130	05/31/2016 1957
1,2-Dichlorobenzene	50	51		1	102	70-130	05/31/2016 1957
Dichlorodifluoromethane	50	61		1	122	60-140	05/31/2016 1957
1,1-Dichloroethane	50	58		1	116	70-130	05/31/2016 1957
1,2-Dichloroethane	50	58		1	116	70-130	05/31/2016 1957
cis-1,2-Dichloroethene	50	51		1	103	70-130	05/31/2016 1957
trans-1,2-Dichloroethene	50	51		1	102	70-130	05/31/2016 1957
1,1-Dichloroethene	50	56		1	111	70-130	05/31/2016 1957
1,2-Dichloropropane	50	50		1	101	70-130	05/31/2016 1957
cis-1,3-Dichloropropene	50	52		1	103	70-130	05/31/2016 1957
trans-1,3-Dichloropropene	50	51		1	101	70-130	05/31/2016 1957
Ethylbenzene	50	49		1	98	70-130	05/31/2016 1957
2-Hexanone	100	110		1	107	60-140	05/31/2016 1957
Isopropylbenzene	50	50		1	100	70-130	05/31/2016 1957
Methyl acetate	50	57		1	114	60-140	05/31/2016 1957
Methyl tertiary butyl ether (MTBE)	50	52		1	105	70-130	05/31/2016 1957
4-Methyl-2-pentanone	100	120		1	115	60-140	05/31/2016 1957
Methylcyclohexane	50	49		1	98	70-130	05/31/2016 1957
Methylene chloride	50	55		1	111	70-130	05/31/2016 1957
Styrene	50	49		1	99	70-130	05/31/2016 1957
1,1,2,2-Tetrachloroethane	50	49		1	97	70-130	05/31/2016 1957
Tetrachloroethene	50	54		1	108	70-130	05/31/2016 1957
Toluene	50	50		1	101	70-130	05/31/2016 1957
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	57		1	113	70-130	05/31/2016 1957
1,2,4-Trichlorobenzene	50	49		1	97	70-130	05/31/2016 1957
1,1,2-Trichloroethane	50	48		1	97	70-130	05/31/2016 1957
1,1,1-Trichloroethane	50	58		1	116	70-130	05/31/2016 1957

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 MDL
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: RQ14421-002
Batch: 14421
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	50		1	100	70-130	05/31/2016 1957
Trichlorofluoromethane	50	56		1	112	70-130	05/31/2016 1957
Vinyl chloride	50	59		1	118	70-130	05/31/2016 1957
Xylenes (total)	100	100		1	103	70-130	05/31/2016 1957

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		113	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MS

Sample ID: RE27079-010MS
Batch: 14421
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	ND	1000	1400		10	138	60-140	06/01/2016 0515
Benzene	ND	500	520		10	105	70-130	06/01/2016 0515
Bromodichloromethane	ND	500	550		10	109	71-143	06/01/2016 0515
Bromoform	ND	500	410		10	81	65-131	06/01/2016 0515
Bromomethane (Methyl bromide)	ND	500	550		10	110	36-168	06/01/2016 0515
2-Butanone (MEK)	ND	1000	1200		10	124	60-140	06/01/2016 0515
Carbon disulfide	ND	500	560		10	111	60-140	06/01/2016 0515
Carbon tetrachloride	ND	500	540		10	108	37-166	06/01/2016 0515
Chlorobenzene	ND	500	490		10	98	78-129	06/01/2016 0515
Chloroethane	ND	500	590		10	119	60-140	06/01/2016 0515
Chloroform	6.8	500	650	N	10	129	63-123	06/01/2016 0515
Chloromethane (Methyl chloride)	ND	500	590		10	118	20-158	06/01/2016 0515
Cyclohexane	ND	500	500		10	101	70-130	06/01/2016 0515
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	490		10	97	70-130	06/01/2016 0515
Dibromochloromethane	ND	500	480		10	96	74-134	06/01/2016 0515
1,2-Dibromoethane (EDB)	ND	500	530		10	105	70-130	06/01/2016 0515
1,2-Dichlorobenzene	ND	500	490		10	97	70-130	06/01/2016 0515
1,3-Dichlorobenzene	ND	500	470		10	93	70-130	06/01/2016 0515
1,4-Dichlorobenzene	ND	500	460		10	92	70-130	06/01/2016 0515
Dichlorodifluoromethane	ND	500	570		10	113	10-158	06/01/2016 0515
1,1-Dichloroethane	ND	500	640		10	129	69-132	06/01/2016 0515
1,2-Dichloroethane	ND	500	610		10	122	70-130	06/01/2016 0515
1,1-Dichloroethene	ND	500	580		10	116	50-132	06/01/2016 0515
cis-1,2-Dichloroethene	ND	500	550		10	111	70-130	06/01/2016 0515
trans-1,2-Dichloroethene	ND	500	540		10	109	70-130	06/01/2016 0515
1,2-Dichloropropane	ND	500	530		10	106	71-126	06/01/2016 0515
cis-1,3-Dichloropropene	ND	500	500		10	100	69-130	06/01/2016 0515
trans-1,3-Dichloropropene	ND	500	480		10	96	73-131	06/01/2016 0515
Ethylbenzene	ND	500	470		10	94	70-130	06/01/2016 0515
2-Hexanone	ND	1000	1100		10	111	60-140	06/01/2016 0515
Isopropylbenzene	ND	500	450		10	91	70-130	06/01/2016 0515
Methyl acetate	ND	500	550		10	109	15-128	06/01/2016 0515
Methyl tertiary butyl ether (MTBE)	ND	500	550		10	111	70-130	06/01/2016 0515
4-Methyl-2-pentanone	ND	1000	1200		10	116	60-140	06/01/2016 0515
Methylcyclohexane	ND	500	400		10	80	70-130	06/01/2016 0515
Methylene chloride	ND	500	610		10	122	69-129	06/01/2016 0515
Styrene	ND	500	480		10	96	70-130	06/01/2016 0515
1,1,2,2-Tetrachloroethane	ND	500	500		10	99	60-155	06/01/2016 0515
Tetrachloroethene	720	500	1500	N	10	154	70-130	06/01/2016 0515
Toluene	ND	500	510		10	101	70-130	06/01/2016 0515
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	500	500		10	101	70-130	06/01/2016 0515
1,2,4-Trichlorobenzene	ND	500	400		10	80	70-130	06/01/2016 0515
1,1,1-Trichloroethane	ND	500	630		10	125	77-132	06/01/2016 0515
1,1,2-Trichloroethane	ND	500	490		10	98	77-132	06/01/2016 0515

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 MDL
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 - MS

Sample ID: RE27079-010MS
Batch: 14421
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	500	510		10	101	73-124	06/01/2016 0515
Trichlorofluoromethane	ND	500	570		10	115	60-140	06/01/2016 0515
Vinyl chloride	ND	500	660		10	132	29-159	06/01/2016 0515
Xylenes (total)	ND	1000	980		10	98	70-130	06/01/2016 0515

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		115	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MSD

Sample ID: RE27079-010MD
Batch: 14421
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	1000	1500	N	10	152	9.5	60-140	20	06/01/2016 0538
Benzene	ND	500	540		10	108	2.6	70-130	20	06/01/2016 0538
Bromodichloromethane	ND	500	560		10	113	2.8	71-143	20	06/01/2016 0538
Bromoform	ND	500	430		10	85	4.5	65-131	20	06/01/2016 0538
Bromomethane (Methyl bromide)	ND	500	550		10	109	0.65	36-168	20	06/01/2016 0538
2-Butanone (MEK)	ND	1000	1300		10	129	4.6	60-140	20	06/01/2016 0538
Carbon disulfide	ND	500	570		10	114	2.5	60-140	20	06/01/2016 0538
Carbon tetrachloride	ND	500	560		10	112	4.2	37-166	20	06/01/2016 0538
Chlorobenzene	ND	500	510		10	101	2.9	78-129	20	06/01/2016 0538
Chloroethane	ND	500	590		10	118	0.98	60-140	20	06/01/2016 0538
Chloroform	6.8	500	650	N	10	129	0.61	63-123	20	06/01/2016 0538
Chloromethane (Methyl chloride)	ND	500	610		10	122	2.8	20-158	20	06/01/2016 0538
Cyclohexane	ND	500	510		10	103	2.0	70-130	20	06/01/2016 0538
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	520		10	105	7.3	70-130	20	06/01/2016 0538
Dibromochloromethane	ND	500	500		10	100	3.9	74-134	20	06/01/2016 0538
1,2-Dibromoethane (EDB)	ND	500	540		10	108	2.2	70-130	20	06/01/2016 0538
1,2-Dichlorobenzene	ND	500	510		10	103	5.7	70-130	20	06/01/2016 0538
1,3-Dichlorobenzene	ND	500	490		10	99	5.9	70-130	20	06/01/2016 0538
1,4-Dichlorobenzene	ND	500	490		10	98	6.1	70-130	20	06/01/2016 0538
Dichlorodifluoromethane	ND	500	560		10	112	0.97	10-158	20	06/01/2016 0538
1,1-Dichloroethane	ND	500	650		10	131	1.8	69-132	20	06/01/2016 0538
1,2-Dichloroethane	ND	500	620		10	123	1.5	70-130	20	06/01/2016 0538
1,1-Dichloroethene	ND	500	600		10	120	2.8	50-132	20	06/01/2016 0538
cis-1,2-Dichloroethene	ND	500	560		10	113	1.6	70-130	20	06/01/2016 0538
trans-1,2-Dichloroethene	ND	500	560		10	111	2.2	70-130	20	06/01/2016 0538
1,2-Dichloropropane	ND	500	540		10	108	2.1	71-126	20	06/01/2016 0538
cis-1,3-Dichloropropene	ND	500	520		10	103	3.6	69-130	20	06/01/2016 0538
trans-1,3-Dichloropropene	ND	500	490		10	99	2.6	73-131	20	06/01/2016 0538
Ethylbenzene	ND	500	490		10	98	4.2	70-130	20	06/01/2016 0538
2-Hexanone	ND	1000	1100		10	113	2.2	60-140	20	06/01/2016 0538
Isopropylbenzene	ND	500	470		10	95	4.6	70-130	20	06/01/2016 0538
Methyl acetate	ND	500	570		10	114	4.5	15-128	20	06/01/2016 0538
Methyl tertiary butyl ether (MTBE)	ND	500	560		10	112	0.81	70-130	20	06/01/2016 0538
4-Methyl-2-pentanone	ND	1000	1200		10	121	4.5	60-140	20	06/01/2016 0538
Methylcyclohexane	ND	500	410		10	82	2.2	70-130	20	06/01/2016 0538
Methylene chloride	ND	500	610		10	122	0.055	69-129	20	06/01/2016 0538
Styrene	ND	500	490		10	99	3.3	70-130	20	06/01/2016 0538
1,1,2,2-Tetrachloroethane	ND	500	520		10	105	5.3	60-155	20	06/01/2016 0538
Tetrachloroethene	720	500	1600	N	10	167	4.5	70-130	20	06/01/2016 0538
Toluene	ND	500	520		10	104	3.0	70-130	20	06/01/2016 0538
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	500	510		10	103	1.9	70-130	20	06/01/2016 0538
1,2,4-Trichlorobenzene	ND	500	440		10	87	9.0	70-130	20	06/01/2016 0538
1,1,1-Trichloroethane	ND	500	630		10	126	0.80	77-132	20	06/01/2016 0538
1,1,2-Trichloroethane	ND	500	500		10	100	1.9	77-132	20	06/01/2016 0538

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 MDL
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 - MSD

Sample ID: RE27079-010MD
Batch: 14421
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	ND	500	520		10	105	3.4	73-124	20	06/01/2016 0538
Trichlorofluoromethane	ND	500	600		10	119	3.6	60-140	20	06/01/2016 0538
Vinyl chloride	ND	500	670		10	134	1.2	29-159	20	06/01/2016 0538
Xylenes (total)	ND	1000	1000		10	102	3.4	70-130	20	06/01/2016 0538

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

P = The RPD between two GC columns exceeds 40%

J = Estimated result < PQL and ≥ MDL

N = Recovery is out of criteria

+ = 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

ICP-AES - MB

Sample ID: RQ14369-001
Batch: 14369
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 05/31/2016 955

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Potassium	ND		1	5.0	0.30	mg/L	06/01/2016 1718

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-AES - LCS

Sample ID: RQ14369-002
Batch: 14369
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 05/31/2016 955

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	40	41		1	102	80-120	06/01/2016 1723

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-AES - MS

Sample ID: RE27079-001MS
Batch: 14369
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 05/31/2016 955

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	1.5	40	40		1	97	75-125	06/01/2016 1731

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 MDL
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

ICP-AES - MSD

Sample ID: RE27079-001MD
Batch: 14369
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 05/31/2016 955

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Potassium	1.5	40	42		1	102	5.4	75-125	20	06/01/2016 1736

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Chain of Custody
and
Miscellaneous Documents

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

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 61302

Client: TRC	Report to Contact: Lisa Clark / Jerry Hertz	Telephone No. / E-mail:	Quote No.
Address: 30 Patewood Drive Ste. 300	Sampler's Signature: x	Analysis (Attach list if more space is needed)	Page 1 of 2
City: Greenville	State: SC Zip Code: 29615	Printed Name: Will Peavyhouse	
Project Name: WPH Clemson			
Project No.: 226253.0.0 P9	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab / Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No. of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOCs 8260B	TOC 9060A	Potassium Chloride	Sulfate 300.0	Remarks / Cooler I.D.
RMW-27B	5-24-16	1600	G	✓			1		1	3			✓		✓	✓	
RMW-27	5-25-16	0930	G	✓			1	1	1	3			✓	✓	✓	✓	
OW-02	5-25-16	1055	G	✓			1	1	1	3			✓	✓	✓	✓	
RMW-18	5-25-16	1220	G	✓			1		1	3			✓		✓	✓	
RMW-21	5-25-16	1500	G	✓			1		1	3			✓		✓	✓	
RMW-20	5-25-16	1620	G	✓			1		1	3			✓		✓	✓	
RMW-23	5-25-16	1745	G	✓			1	1	1	3			✓	✓	✓	✓	
OW-05	5-25-16	1900	G	✓			1	1	1	3			✓	✓	✓	✓	
RMW-27A	5-26-16	0955	G	✓			1	1	1	3			✓	✓	✓	✓	
OW-03A	5-26-16	1230	G	✓			1	1	1	3			✓	✓	✓	✓	

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time
1. Relinquished by:	5-26-16	1915
2. Relinquished by: Sample Storage	5-27-16	1105
3. Relinquished by: Rachel Hadden	5-27-16	1515
4. Relinquished by:	Date	Time

	Date	Time
1. Received by: Sample Storage	5-25-16	1915
2. Received by: Rachel Hadden	5-27-16	1105
3. Received by:	Date	Time
4. Laboratory received by: Jerry Dowling	5/27/16	1515

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) Yes No Ice Pack
Receipt Temp. 2.6 °C

RE27079

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 61301

Client: TRC	Report to Contact: Lisa Clark / Terry Hunt	Telephone No. / E-mail: 864-281-0030	Quote No.
Address: 30 Patewood Drive Ste. 300	Sampler's Signature: X	Analysis (Attach list if more space is needed)	Page 2 of 2
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Will Perryhouse		RE27079
Project Name: WPH Clemson			
Project No.: 226253.0.0 P9	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Matrix: Aqueous	Soil	Non-Aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOCs 8260B	TOC 9060A	Potassium 6010	Sulfate 300.0	Remarks / Cooler I.D.
OW-01	5-26-16	1430	G	✓			1	1	1	3			✓	✓	✓	✓	
RMW-18A	5-26-16	1630	G	✓			1		1	3			✓		✓	✓	
RMW-21A	5-26-16		G	✓			1		1	3			✓		✓	✓	
TBLK-16201	/	/	G	✓						2			✓				
DUP-16201	/	/	G	✓			1		1	3			✓		✓	✓	

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☐ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	5-26-16	1915	1. Received by: Sample Storage	5-26-16	1915
2. Relinquished by: Sample Storage	5-27-16	1105	2. Received by: Rachel Andrews	5-27-16	1105
3. Relinquished by: Rachel Andrews	5-27-16	1415	3. Received by:	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by: Terry Hunting	5/27/16	1515

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack — Receipt Temp. 2.6 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: MP0018C-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: JSB 5/27/16 Lot #: RE27079

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?
pH strip ID: 15-1440 Cl strip ID: NA Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: 12.6/2.6°C ___/___/___°C ___/___/___°C ___/___/___°C Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☐	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☑	No ☑	JSB 5/27/16	15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17. Were all metals/O&G/THEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?

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_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be >2 by _____ Date: _____
Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR# _____

Sample labels applied by: JSB Verified by: _____ Date: 5/27/16

Comments: Sample 007 did not have TOC bottle

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0000.0000.000009

Lot Number: RE31026

Date Completed: 06/06/2016

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: WPH-Clemson, SC

Project Number: 226253.0000.0000.000009

Lab Report: RE31026 Shealy Environmental Services
Samples analyzed for VOCs, potassium, sulfate, and Total Organic Carbon (TOC)

Chain of Custody, Sample Temperature, Sample Preservation: Chains of custody (CoCs) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Recoveries were within QC limits.

Method Blank(s): Method blanks have no detections of targeted analytes except as follows:

- Total organic carbon (TOC) was detected in the method blank at 0.12 J mg/L. **OW-04, OW-6A, and RMW-23A have TOC concentrations comparable to the method blank and are assigned a "u" qualifier.**

Trip Blank: TBLK-16202 had no detections of targeted analytes.

Field Blank: FBLK-16201 has acetone at 6.0 J ug/L, methylene chloride at 5.2 ug/L, and toluene at 0.24 J ug/L. These three analytes were not detected in the associated groundwater samples. No qualifiers were assigned.

Equipment Rinse Blanks: RBLK-16201 has acetone at 6.0 J ug/L and methylene chloride at 4.7 ug/L. RBLK-16202 has acetone at 3.7 J ug/L, ethylbenzene at 15 ug/L, methylene chloride at 3.4 J ug/L, tetrachloroethene at 1.2 J ug/L, and total xylenes at 48 ug/L. RMW-02 was sampled with a monsoon pump and has elevated concentrations of ethylbenzene. RBLK-16202 was collected on the monsoon pump after post-RMW-02 decontamination of that pump. The monsoon pump was next used to sample, in order, OW-04, RMW-28A, MG-05 and RMW-29.

- Acetone and methylene chloride were not detected in the associated groundwater samples. No qualifiers are assigned to acetone or methylene chloride.
- Samples MG-05, OW-04, RMW-28A, and RMW-29 have ethylbenzene at comparable concentrations to RBLK-16202. Historically, MG-05 and RMW-28A have not had ethylbenzene detections. Ethylbenzene concentrations decrease from OW-04 to RMW-28A to RMW-29. **Ethylbenzene detections in OW-04, RMW-28A, MG-05 and RMW-29 are assigned a "u" qualifier.**

- Groundwater samples do not have tetrachloroethene concentrations comparable to those in RBLK-16202. No qualifiers were assigned.
- Samples OW-06A, MG-05, OW-04, RMW-28A, and RMW-29 have total xylene detections at concentrations comparable to or less than xylene levels in RBLK-16202. Historically, MG-05 and RMW-28A have not had xylene detections. Ethylbenzene concentrations decrease from OW-04 to RMW-28A to RMW-29. **Total xylenes detections in OW-06A, MG-05, OW-04, RMW-28A, and RMW-29 are assigned a "u" qualifier.**

LCS/LCSD: LCS recoveries are within QC Limits except noted below. LCSD analyses were not performed.

- Carbon disulfide and 1,1,2-trichloro-1,2,2-trifluoroethane were recovered above the upper QC limit in the LCS. Groundwater samples have no detections of carbon disulfide; therefore, no qualifiers are assigned. **1,1,2-Trichloro-1,2,2-trifluoroethane in RMW-20A is assigned a "j+" qualifier.**

MS/MSD: OW-06A was used for MS/MSD analyses of TOC. FBLK-16201 and RBLK-16201 were used for MS/MSD analyses of sulfate and those MS/MSD results are not applicable to groundwater matrix performance. RMW-20A was used for MS/MSD analyses of VOCs. RMW-20A was used for MS/MSD analyses of potassium. MS/MSD recoveries and RPDs were within QC limits except as follows:

- Carbon disulfide and 1,1,2-trichloro-1,2,2-trifluoroethane have MS and MSD recoveries above the upper QC limit. 1,1-Dichloroethene has MSD recovery above the upper QC limit. Carbon disulfide and 1,1-Dichloroethene were not detected in RMW-20A; therefore, no qualifiers were assigned. 1,1,2-Trichloro-1,2,2-trifluoroethane was detected in RMW-20A. 1,1,2-Trichloro-1,2,2-trifluoroethane in RMW-20A was assigned a "j+" qualifier in the LCS/LCSD section above. No additional qualifiers are assigned to 1,1,2-Trichloro-1,2,2-trifluoroethane in RMW-20A.

Duplicates: A field duplicate was not collected.

Corrective Action: Future sampling events should sample RMW-02 at the end of the sampling event for as long as the strong odor in the groundwater exists in order to mitigate carryover of ethylbenzene and xylenes to subsequent samples. In addition, a more vigorous decontamination procedure including the addition of a pesticide-grade isopropanol rinse to the field (and office) decontamination procedure needs to occur when strong odors exist in the groundwater as was noted at RMW-02 during the May 2016 sampling event.

Data review performed by: Terry Hertz; TRC Environmental Corp.; 6/8/2016

Case Narrative
TRC Companies, Inc.
Lot Number: RE31026

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.

TOC

The Method Blank associated with batch 14597 yielded a "J" value detection for TOC. No corrective action is required as this is an estimated value recovered below the PQL. All associated samples have been qualified with a "B".

VOCs by GC/MS

The LCS, MS, and MSD associated with batch 14677 recovered Carbon Disulfide and 1,1,2-Trichloro-1,2,2-Trifluoroethane above method criteria. No corrective action was taken as all associated samples are non-detect for Carbon Disulfide and there is only one "J" value detection associated with 1,1,2-Trichloro-1,2,2-Trifluoroethane.

Sample Summary
TRC Companies, Inc.
Lot Number: RE31026

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	RMW-20A	Aqueous	05/27/2016 1000	05/31/2016
002	RMW-23B	Aqueous	05/27/2016 1400	05/31/2016
003	RMW-23A	Aqueous	05/27/2016 1710	05/31/2016
004	OW-6A	Aqueous	05/27/2016 1830	05/31/2016
005	RMW-02	Aqueous	05/28/2016 0930	05/31/2016
006	OW-04	Aqueous	05/28/2016 1110	05/31/2016
007	RMW-28A	Aqueous	05/28/2016 1350	05/31/2016
008	MG-05	Aqueous	05/28/2016 1505	05/31/2016
009	MG-05A	Aqueous	05/28/2016 1550	05/31/2016
010	RMW-29	Aqueous	05/28/2016 1700	05/31/2016
011	RMW-17A	Aqueous	05/29/2016 1000	05/31/2016
012	RMW-17	Aqueous	05/29/2016 1035	05/31/2016
013	RBLK-16202	Aqueous	05/28/2016 0950	05/31/2016
014	TBLK-16202	Aqueous	05/27/2016	05/31/2016
015	FBLK-16201	Aqueous	05/27/2016 0950	05/31/2016
016	RBLK-16201	Aqueous	05/27/2016 1015	05/31/2016

(16 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: RE31026

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	RMW-20A	Aqueous	Tetrachloroethene	8260B	5200		ug/L	7
001	RMW-20A	Aqueous	1,1,2-Trichloro-1,2,2-	8260B	55	J	ug/L	7
001	RMW-20A	Aqueous	Potassium	6010C	0.90	J	mg/L	7
002	RMW-23B	Aqueous	Sulfate	300.0	2.5		mg/L	8
002	RMW-23B	Aqueous	Tetrachloroethene	8260B	520		ug/L	9
002	RMW-23B	Aqueous	Trichloroethene	8260B	1.6	J	ug/L	9
002	RMW-23B	Aqueous	Potassium	6010C	1.2	J	mg/L	9
003	RMW-23A	Aqueous	TOC	9060A	0.37	BJ	mg/L	10
003	RMW-23A	Aqueous	Tetrachloroethene	8260B	1700		ug/L	11
003	RMW-23A	Aqueous	Potassium	6010C	0.94	J	mg/L	11
004	OW-6A	Aqueous	Sulfate	300.0	1.1		mg/L	12
004	OW-6A	Aqueous	TOC	9060A	0.51	BJ	mg/L	12
004	OW-6A	Aqueous	Chloroform	8260B	6.1	J	ug/L	12
004	OW-6A	Aqueous	cis-1,2-Dichloroethene	8260B	13	J	ug/L	12
004	OW-6A	Aqueous	Tetrachloroethene	8260B	520		ug/L	13
004	OW-6A	Aqueous	Xylenes (total)	8260B	18	J	ug/L	13
004	OW-6A	Aqueous	Potassium	6010C	1.2	J	mg/L	13
005	RMW-02	Aqueous	Sulfate	300.0	12		mg/L	14
005	RMW-02	Aqueous	Ethylbenzene	8260B	17000		ug/L	14
005	RMW-02	Aqueous	Xylenes (total)	8260B	51000		ug/L	15
005	RMW-02	Aqueous	Potassium	6010C	38		mg/L	15
006	OW-04	Aqueous	Sulfate	300.0	23		mg/L	16
006	OW-04	Aqueous	TOC	9060A	0.50	BJ	mg/L	16
006	OW-04	Aqueous	cis-1,2-Dichloroethene	8260B	2.2	J	ug/L	16
006	OW-04	Aqueous	Ethylbenzene	8260B	12		ug/L	16
006	OW-04	Aqueous	Tetrachloroethene	8260B	28		ug/L	17
006	OW-04	Aqueous	Trichloroethene	8260B	0.33	J	ug/L	17
006	OW-04	Aqueous	Xylenes (total)	8260B	38		ug/L	17
006	OW-04	Aqueous	Potassium	6010C	2.7	J	mg/L	17
007	RMW-28A	Aqueous	Sulfate	300.0	25		mg/L	18
007	RMW-28A	Aqueous	Chloroform	8260B	0.69	J	ug/L	18
007	RMW-28A	Aqueous	cis-1,2-Dichloroethene	8260B	0.70	J	ug/L	18
007	RMW-28A	Aqueous	Ethylbenzene	8260B	8.8		ug/L	18
007	RMW-28A	Aqueous	Tetrachloroethene	8260B	27		ug/L	19
007	RMW-28A	Aqueous	Trichloroethene	8260B	0.32	J	ug/L	19
007	RMW-28A	Aqueous	Xylenes (total)	8260B	30		ug/L	19
007	RMW-28A	Aqueous	Potassium	6010C	0.84	J	mg/L	19
008	MG-05	Aqueous	Sulfate	300.0	6.3		mg/L	20
008	MG-05	Aqueous	Benzene	8260B	1.3	J	ug/L	20
008	MG-05	Aqueous	1,1-Dichloroethane	8260B	0.95	J	ug/L	20
008	MG-05	Aqueous	1,1-Dichloroethene	8260B	0.43	J	ug/L	20
008	MG-05	Aqueous	cis-1,2-Dichloroethene	8260B	4.4	J	ug/L	20
008	MG-05	Aqueous	Ethylbenzene	8260B	0.53	J	ug/L	20
008	MG-05	Aqueous	Tetrachloroethene	8260B	14		ug/L	21
008	MG-05	Aqueous	Trichloroethene	8260B	2.2	J	ug/L	21

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
008	MG-05	Aqueous	Xylenes (total)	8260B	6.1		ug/L	21
008	MG-05	Aqueous	Potassium	6010C	1.2	J	mg/L	21
009	MG-05A	Aqueous	Tetrachloroethene	8260B	500		ug/L	23
009	MG-05A	Aqueous	Potassium	6010C	1.2	J	mg/L	23
010	RMW-29	Aqueous	Sulfate	300.0	0.76	J	mg/L	24
010	RMW-29	Aqueous	Chloroform	8260B	0.58	J	ug/L	24
010	RMW-29	Aqueous	Ethylbenzene	8260B	3.0	J	ug/L	24
010	RMW-29	Aqueous	Tetrachloroethene	8260B	13		ug/L	25
010	RMW-29	Aqueous	Xylenes (total)	8260B	9.2		ug/L	25
010	RMW-29	Aqueous	Potassium	6010C	0.57	J	mg/L	25
011	RMW-17A	Aqueous	Sulfate	300.0	37		mg/L	26
011	RMW-17A	Aqueous	cis-1,2-Dichloroethene	8260B	4.3	J	ug/L	26
011	RMW-17A	Aqueous	Tetrachloroethene	8260B	980		ug/L	27
011	RMW-17A	Aqueous	Potassium	6010C	1.2	J	mg/L	27
012	RMW-17	Aqueous	Sulfate	300.0	20		mg/L	28
012	RMW-17	Aqueous	cis-1,2-Dichloroethene	8260B	7.7	J	ug/L	28
012	RMW-17	Aqueous	Tetrachloroethene	8260B	260		ug/L	29
012	RMW-17	Aqueous	Trichloroethene	8260B	0.83	J	ug/L	29
012	RMW-17	Aqueous	Potassium	6010C	0.80	J	mg/L	29
013	RBLK-16202	Aqueous	Sulfate	300.0	0.31	J	mg/L	30
013	RBLK-16202	Aqueous	Acetone	8260B	3.7	J	ug/L	30
013	RBLK-16202	Aqueous	Ethylbenzene	8260B	15		ug/L	30
013	RBLK-16202	Aqueous	Methylene chloride	8260B	3.4	J	ug/L	31
013	RBLK-16202	Aqueous	Tetrachloroethene	8260B	1.2	J	ug/L	31
013	RBLK-16202	Aqueous	Xylenes (total)	8260B	48		ug/L	31
015	FBLK-16201	Aqueous	Acetone	8260B	6.0	J	ug/L	34
015	FBLK-16201	Aqueous	Methylene chloride	8260B	5.2		ug/L	35
015	FBLK-16201	Aqueous	Toluene	8260B	0.24	J	ug/L	35
016	RBLK-16201	Aqueous	Acetone	8260B	6.0	J	ug/L	36
016	RBLK-16201	Aqueous	Methylene chloride	8260B	4.7	J	ug/L	37

(75 detections)

Client: TRC Companies, Inc.
Description: RMW-20A
Date Sampled: 05/27/2016 1000
Date Received: 05/31/2016

Laboratory ID: RE31026-001
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0922	SLU		14669

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	06/03/2016 0352	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		1000	81	ug/L	1
Benzene	71-43-2	8260B	ND		250	11	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		250	12	ug/L	1
Bromoform	75-25-2	8260B	ND		250	18	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		250	9.5	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		500	91	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		250	23	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		250	16	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		250	10	ug/L	1
Chloroethane	75-00-3	8260B	ND		250	14	ug/L	1
Chloroform	67-66-3	8260B	ND		250	11	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		250	9.5	ug/L	1
Cyclohexane	110-82-7	8260B	ND		250	15	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		250	28	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		250	12	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		250	8.5	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		250	23	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		250	9.5	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		250	9.5	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		250	43	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		250	9.5	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		250	12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		250	16	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		250	10	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		250	17	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		250	14	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		250	15	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		250	11	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		250	11	ug/L	1
2-Hexanone	591-78-6	8260B	ND		500	13	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		250	7.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		250	12	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-20A
Date Sampled: 05/27/2016 1000
Date Received: 05/31/2016

Laboratory ID: RE31026-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	06/03/2016 0352	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	12	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		500	14	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		250	8.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		250	21	ug/L	1
Styrene	100-42-5	8260B	ND		250	6.5	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		250	6.5	ug/L	1
Tetrachloroethene	127-18-4	8260B	5200		250	11	ug/L	1
Toluene	108-88-3	8260B	ND		250	12	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	55	J	250	15	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		250	6.5	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		250	12	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		250	11	ug/L	1
Trichloroethene	79-01-6	8260B	ND		250	8.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		250	37	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		100	25	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		250	16	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		99	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/02/2016 1847	CJZ	06/01/2016 0952	14458

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	0.90	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-23B
Date Sampled: 05/27/2016 1400
Date Received: 05/31/2016

Laboratory ID: RE31026-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 0946	SLU		14669

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	2.5		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	06/03/2016 0134	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		100	8.1	ug/L	1
Benzene	71-43-2	8260B	ND		25	1.1	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	1.2	ug/L	1
Bromoform	75-25-2	8260B	ND		25	1.8	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	0.95	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		50	9.1	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	2.3	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	1.6	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	1.4	ug/L	1
Chloroform	67-66-3	8260B	ND		25	1.1	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	0.95	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	1.5	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	2.8	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	1.2	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	0.85	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	2.3	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	0.95	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	0.95	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	4.3	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	0.95	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	1.2	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	1.6	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		25	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	1.7	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	1.5	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	1.5	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	1.1	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		25	1.1	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	1.3	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	0.70	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	1.2	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-23B
Date Sampled: 05/27/2016 1400
Date Received: 05/31/2016

Laboratory ID: RE31026-002
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	06/03/2016 0134	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	1.2	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	1.5	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	0.80	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	2.1	ug/L	1
Styrene	100-42-5	8260B	ND		25	0.65	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	0.65	ug/L	1
Tetrachloroethene	127-18-4	8260B	520		25	1.1	ug/L	1
Toluene	108-88-3	8260B	ND		25	1.2	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	1.5	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	0.65	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	1.2	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	1.1	ug/L	1
Trichloroethene	79-01-6	8260B	1.6	J	25	0.80	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	3.7	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	2.5	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	1.6	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		100	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/02/2016 1909	CJZ	06/01/2016 0952	14458

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	1.2	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-23A
Date Sampled: 05/27/2016 1710
Date Received: 05/31/2016

Laboratory ID: RE31026-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 1010	SLU		14669
1		(TOC) 9060A	1	06/02/2016 2233	BWS		14597

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.28	mg/L	1
TOC		9060A	0.37	BJ	1.0	0.063	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	06/03/2016 0329	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		400	32	ug/L	1
Benzene	71-43-2	8260B	ND		100	4.2	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		100	4.6	ug/L	1
Bromoform	75-25-2	8260B	ND		100	7.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		100	3.8	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		200	36	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		100	9.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		100	6.2	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		100	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		100	5.6	ug/L	1
Chloroform	67-66-3	8260B	ND		100	4.2	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		100	3.8	ug/L	1
Cyclohexane	110-82-7	8260B	ND		100	6.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		100	11	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		100	4.6	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		100	3.4	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		100	9.2	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		100	3.8	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		100	3.8	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		100	17	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		100	3.8	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		100	4.6	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		100	6.2	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		100	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		100	6.6	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		100	5.8	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		100	6.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		100	4.4	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		100	4.2	ug/L	1
2-Hexanone	591-78-6	8260B	ND		200	5.2	ug/L	1

TOC Range: 0.359 - 0.384

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

Client: TRC Companies, Inc.
Description: RMW-23A
Date Sampled: 05/27/2016 1710
Date Received: 05/31/2016

Laboratory ID: RE31026-003
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	06/03/2016 0329	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		100	2.8	ug/L	1
Methyl acetate	79-20-9	8260B	ND		100	4.8	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		100	4.6	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		200	5.8	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		100	3.2	ug/L	1
Methylene chloride	75-09-2	8260B	ND		100	8.4	ug/L	1
Styrene	100-42-5	8260B	ND		100	2.6	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		100	2.6	ug/L	1
Tetrachloroethene	127-18-4	8260B	1700		100	4.4	ug/L	1
Toluene	108-88-3	8260B	ND		100	4.8	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		100	6.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		100	2.6	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		100	4.8	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		100	4.4	ug/L	1
Trichloroethene	79-01-6	8260B	ND		100	3.2	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		100	15	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		40	10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		100	6.4	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		101	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/02/2016 1913	CJZ	06/01/2016 0952	14458

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	0.94	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-6A
Date Sampled: 05/27/2016 1830
Date Received: 05/31/2016

Laboratory ID: RE31026-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/02/2016 1034	SLU		14669
1		(TOC) 9060A	1	06/02/2016 2309	BWS		14597

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	1.1		1.0	0.28	mg/L	1
TOC		9060A	0.51	BJ	1.0	0.063	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	06/03/2016 0220	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		200	16	ug/L	1
Benzene	71-43-2	8260B	ND		50	2.1	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	2.3	ug/L	1
Bromoform	75-25-2	8260B	ND		50	3.5	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	1.9	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		100	18	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	4.5	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	3.1	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	2.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	2.8	ug/L	1
Chloroform	67-66-3	8260B	6.1	J	50	2.1	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	1.9	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	3.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	5.7	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	2.3	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	1.7	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	4.6	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	1.9	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	1.9	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	8.5	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	1.9	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	2.3	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	3.1	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	13	J	50	2.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	3.3	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	2.9	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	3.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	2.2	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		50	2.1	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	2.6	ug/L	1

TOC Range: 0.495 - 0.535

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

Client: TRC Companies, Inc.
Description: OW-6A
Date Sampled: 05/27/2016 1830
Date Received: 05/31/2016

Laboratory ID: RE31026-004
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	06/03/2016 0220	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		50	1.4	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	2.4	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	2.3	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	2.9	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	1.6	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	4.2	ug/L	1
Styrene	100-42-5	8260B	ND		50	1.3	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	1.3	ug/L	1
Tetrachloroethene	127-18-4	8260B	520		50	2.2	ug/L	1
Toluene	108-88-3	8260B	ND		50	2.4	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	3.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	1.3	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	2.4	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	2.2	ug/L	1
Trichloroethene	79-01-6	8260B	ND		50	1.6	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	7.4	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	5.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	18	J	50	3.2	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		97	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/02/2016 1918	CJZ	06/01/2016 0952	14458

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	1.2	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-02
Date Sampled: 05/28/2016 0930
Date Received: 05/31/2016

Laboratory ID: RE31026-005
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/03/2016 0041	SLU		14728

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	12		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	500	06/03/2016 0415	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		10000	810	ug/L	1
Benzene	71-43-2	8260B	ND		2500	110	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		2500	120	ug/L	1
Bromoform	75-25-2	8260B	ND		2500	180	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2500	95	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		5000	910	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		2500	230	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		2500	160	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		2500	100	ug/L	1
Chloroethane	75-00-3	8260B	ND		2500	140	ug/L	1
Chloroform	67-66-3	8260B	ND		2500	110	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		2500	95	ug/L	1
Cyclohexane	110-82-7	8260B	ND		2500	150	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		2500	290	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		2500	120	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		2500	85	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		2500	230	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		2500	95	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		2500	95	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2500	430	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		2500	95	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		2500	120	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		2500	160	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		2500	100	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		2500	170	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		2500	150	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		2500	150	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		2500	110	ug/L	1
Ethylbenzene	100-41-4	8260B	17000		2500	110	ug/L	1
2-Hexanone	591-78-6	8260B	ND		5000	130	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		2500	70	ug/L	1
Methyl acetate	79-20-9	8260B	ND		2500	120	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-02
Date Sampled: 05/28/2016 0930
Date Received: 05/31/2016

Laboratory ID: RE31026-005
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	500	06/03/2016 0415	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		2500	120	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		5000	150	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		2500	80	ug/L	1
Methylene chloride	75-09-2	8260B	ND		2500	210	ug/L	1
Styrene	100-42-5	8260B	ND		2500	65	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		2500	65	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		2500	110	ug/L	1
Toluene	108-88-3	8260B	ND		2500	120	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		2500	150	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		2500	65	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		2500	120	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		2500	110	ug/L	1
Trichloroethene	79-01-6	8260B	ND		2500	80	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		2500	370	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1000	250	ug/L	1
Xylenes (total)	1330-20-7	8260B	51000		2500	160	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		101	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	3005A	6010C	1	06/03/2016 1619	CJZ	06/01/2016 0952	14458

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	38		5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 05/28/2016 1110
Date Received: 05/31/2016

Laboratory ID: RE31026-006
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/03/2016 0105	SLU		14728
1		(TOC) 9060A	1	06/03/2016 0205	BWS		14597

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	23		1.0	0.28	mg/L	1
TOC		9060A	0.50	BJ	1.0	0.063	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/02/2016 2339	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	2.2	J	5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	12		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1

TOC Range: 0.493 - 0.51

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

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 05/28/2016 1110
Date Received: 05/31/2016

Laboratory ID: RE31026-006
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/02/2016 2339	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	28		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	0.33	J	5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	38		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		96	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/02/2016 1927	CJZ	06/01/2016 0952	14458

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	2.7	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-28A
Date Sampled: 05/28/2016 1350
Date Received: 05/31/2016

Laboratory ID: RE31026-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/03/2016 0129	SLU		14728

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	25		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/03/2016 0002	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	0.69	J	5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	0.70	J	5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	8.8		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-28A
Date Sampled: 05/28/2016 1350
Date Received: 05/31/2016

Laboratory ID: RE31026-007
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/03/2016 0002	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	27		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	0.32	J	5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	30		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		99	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/02/2016 1940	CJZ	06/01/2016 0952	14458

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	0.84	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: MG-05
Date Sampled: 05/28/2016 1505
Date Received: 05/31/2016

Laboratory ID: RE31026-008
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/03/2016 0153	SLU		14728

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	6.3		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/03/2016 0025	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	1.3	J	5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	0.95	J	5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	0.43	J	5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	4.4	J	5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	0.53	J	5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: MG-05
Date Sampled: 05/28/2016 1505
Date Received: 05/31/2016

Laboratory ID: RE31026-008
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/03/2016 0025	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	14		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	2.2	J	5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	6.1		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		99	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/02/2016 1944	CJZ	06/01/2016 0952	14458

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	1.2	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: MG-05A
Date Sampled: 05/28/2016 1550
Date Received: 05/31/2016

Laboratory ID: RE31026-009
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/03/2016 0217	SLU		14728

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	06/03/2016 0243	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		200	16	ug/L	1
Benzene	71-43-2	8260B	ND		50	2.1	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	2.3	ug/L	1
Bromoform	75-25-2	8260B	ND		50	3.5	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	1.9	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		100	18	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	4.5	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	3.1	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	2.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	2.8	ug/L	1
Chloroform	67-66-3	8260B	ND		50	2.1	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	1.9	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	3.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	5.7	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	2.3	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	1.7	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	4.6	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	1.9	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	1.9	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	8.5	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	1.9	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	2.3	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	3.1	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		50	2.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	3.3	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	2.9	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	3.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	2.2	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		50	2.1	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	2.6	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		50	1.4	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	2.4	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 MDL
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"

Client: TRC Companies, Inc.
Description: MG-05A
Date Sampled: 05/28/2016 1550
Date Received: 05/31/2016

Laboratory ID: RE31026-009
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	06/03/2016 0243	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	2.3	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	2.9	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	1.6	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	4.2	ug/L	1
Styrene	100-42-5	8260B	ND		50	1.3	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	1.3	ug/L	1
Tetrachloroethene	127-18-4	8260B	500		50	2.2	ug/L	1
Toluene	108-88-3	8260B	ND		50	2.4	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	3.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	1.3	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	2.4	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	2.2	ug/L	1
Trichloroethene	79-01-6	8260B	ND		50	1.6	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	7.4	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	5.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	3.2	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		98	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/03/2016 2047	DDD	06/03/2016 0856	14689

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	1.2	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-29
Date Sampled: 05/28/2016 1700
Date Received: 05/31/2016

Laboratory ID: RE31026-010
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/03/2016 0241	SLU		14728

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	0.76	J	1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/03/2016 0048	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	0.58	J	5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	3.0	J	5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-29
Date Sampled: 05/28/2016 1700
Date Received: 05/31/2016

Laboratory ID: RE31026-010
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/03/2016 0048	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	13		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	9.2		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		99	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/03/2016 2051	DDD	06/03/2016 0856	14689

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	0.57	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-17A
Date Sampled: 05/29/2016 1000
Date Received: 05/31/2016

Laboratory ID: RE31026-011
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/03/2016 0305	SLU		14728

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	37		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	06/03/2016 0306	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		200	16	ug/L	1
Benzene	71-43-2	8260B	ND		50	2.1	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	2.3	ug/L	1
Bromoform	75-25-2	8260B	ND		50	3.5	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	1.9	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		100	18	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	4.5	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	3.1	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	2.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	2.8	ug/L	1
Chloroform	67-66-3	8260B	ND		50	2.1	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	1.9	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	3.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	5.7	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	2.3	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	1.7	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	4.6	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	1.9	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	1.9	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	8.5	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	1.9	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	2.3	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	3.1	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	4.3	J	50	2.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	3.3	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	2.9	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	3.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	2.2	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		50	2.1	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	2.6	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		50	1.4	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	2.4	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-17A
Date Sampled: 05/29/2016 1000
Date Received: 05/31/2016

Laboratory ID: RE31026-011
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	06/03/2016 0306	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	2.3	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	2.9	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	1.6	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	4.2	ug/L	1
Styrene	100-42-5	8260B	ND		50	1.3	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	1.3	ug/L	1
Tetrachloroethene	127-18-4	8260B	980		50	2.2	ug/L	1
Toluene	108-88-3	8260B	ND		50	2.4	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	3.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	1.3	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	2.4	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	2.2	ug/L	1
Trichloroethene	79-01-6	8260B	ND		50	1.6	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	7.4	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	5.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	3.2	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		89	70-130
Toluene-d8		97	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/03/2016 2056	DDD	06/03/2016 0856	14689

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	1.2	J	5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-17
Date Sampled: 05/29/2016 1035
Date Received: 05/31/2016

Laboratory ID: RE31026-012
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/03/2016 0329	SLU		14728

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	20		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	06/03/2016 0111	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		100	8.1	ug/L	1
Benzene	71-43-2	8260B	ND		25	1.1	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	1.2	ug/L	1
Bromoform	75-25-2	8260B	ND		25	1.8	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	0.95	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		50	9.1	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	2.3	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	1.6	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	1.4	ug/L	1
Chloroform	67-66-3	8260B	ND		25	1.1	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	0.95	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	1.5	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	2.8	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	1.2	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	0.85	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	2.3	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	0.95	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	0.95	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	4.3	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	0.95	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	1.2	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	1.6	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	7.7	J	25	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	1.7	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	1.5	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	1.5	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	1.1	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		25	1.1	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	1.3	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	0.70	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	1.2	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 MDL
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"

Client: TRC Companies, Inc. | Laboratory ID: RE31026-012
Description: RMW-17 | Matrix: Aqueous
Date Sampled: 05/29/2016 1035
Date Received: 05/31/2016

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	06/03/2016 0111	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	1.2	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	1.5	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	0.80	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	2.1	ug/L	1
Styrene	100-42-5	8260B	ND		25	0.65	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	0.65	ug/L	1
Tetrachloroethene	127-18-4	8260B	260		25	1.1	ug/L	1
Toluene	108-88-3	8260B	ND		25	1.2	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	1.5	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	0.65	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	1.2	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	1.1	ug/L	1
Trichloroethene	79-01-6	8260B	0.83	J	25	0.80	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	3.7	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	2.5	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	1.6	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		96	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/03/2016 2100	DDD	06/03/2016 0856	14689

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	0.80	J	5.0	0.30	mg/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 MDL | 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"

Client: TRC Companies, Inc.
Description: RBLK-16202
Date Sampled: 05/28/2016 0950
Date Received: 05/31/2016

Laboratory ID: RE31026-013
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/03/2016 0353	SLU		14728

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	0.31	J	1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/02/2016 1100	RAG		14611

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	3.7	J	20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	15		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: RBLK-16202
Date Sampled: 05/28/2016 0950
Date Received: 05/31/2016

Laboratory ID: RE31026-013
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/02/2016 1100	RAG		14611

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	3.4	J	5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	1.2	J	5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	48		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		98	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/03/2016 2105	DDD	06/03/2016 0856	14689

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	ND		5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: TBLK-16202
Date Sampled: 05/27/2016
Date Received: 05/31/2016

Laboratory ID: RE31026-014
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/02/2016 1123	RAG		14611

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: TBLK-16202
Date Sampled: 05/27/2016
Date Received: 05/31/2016

Laboratory ID: RE31026-014
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/02/2016 1123	RAG		14611

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		95	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 MDL
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"

Client: TRC Companies, Inc.
Description: FBLK-16201
Date Sampled: 05/27/2016 0950
Date Received: 05/31/2016

Laboratory ID: RE31026-015
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/03/2016 0505	SLU		14728

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/02/2016 1146	RAG		14611

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	6.0	J	20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: FBLK-16201
Date Sampled: 05/27/2016 0950
Date Received: 05/31/2016

Laboratory ID: RE31026-015
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/02/2016 1146	RAG		14611

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	5.2		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	0.24	J	5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		97	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/03/2016 2109	DDD	06/03/2016 0856	14689

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	ND		5.0	0.30	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RBLK-16201
Date Sampled: 05/27/2016 1015
Date Received: 05/31/2016

Laboratory ID: RE31026-016
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	06/03/2016 0617	SLU		14728

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.28	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/02/2016 2253	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	6.0	J	20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: RBLK-16201
Date Sampled: 05/27/2016 1015
Date Received: 05/31/2016

Laboratory ID: RE31026-016
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/02/2016 2253	ECP		14677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	4.7	J	5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		89	70-130
Toluene-d8		97	70-130

ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	06/03/2016 2114	DDD	06/03/2016 0856	14689

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6010C	ND		5.0	0.30	mg/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 MDL
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"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ14597-001
Batch: 14597
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
TOC	0.12	J	1	1.0	0.063	mg/L	06/02/2016 1710

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 MDL
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

Inorganic non-metals - LCS

Sample ID: RQ14597-002
Batch: 14597
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	20	20		1	102	90-110	06/02/2016 1745

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 MDL
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

Inorganic non-metals - MS

Sample ID: RE31026-004MS
Batch: 14597
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	0.51	20	19		1	92	70-130	06/03/2016 0053

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 MDL
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

Inorganic non-metals - MSD

Sample ID: RE31026-004MD
Batch: 14597
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
TOC	0.51	20	19		1	92	0.17	70-130	20	06/03/2016 0129

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 MDL
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

Inorganic non-metals - MB

Sample ID: RQ14669-001
Batch: 14669
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.28	mg/L	06/01/2016 2257

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ14669-002
Batch: 14669
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	100	90-110	06/01/2016 2321

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 MDL
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

Inorganic non-metals - MB

Sample ID: RQ14728-001
Batch: 14728
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.28	mg/L	06/02/2016 2352

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ14728-002
Batch: 14728
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	21		1	105	90-110	06/03/2016 0017

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 MDL
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

Inorganic non-metals - MS

Sample ID: RE31026-015MS
Batch: 14728
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	ND	20	20		1	101	90-110	06/03/2016 0529

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 MDL
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

Inorganic non-metals - MSD

Sample ID: RE31026-015MD
Batch: 14728
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	ND	20	20		1	101	0.083	90-110	20	06/03/2016 0553

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 MDL
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

Inorganic non-metals - MS

Sample ID: RE31026-016MS
Batch: 14728
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	ND	20	21		1	105	90-110	06/03/2016 0641

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 MDL
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

Inorganic non-metals - MSD

Sample ID: RE31026-016MD
Batch: 14728
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	ND	20	21		1	103	1.3	90-110	20	06/03/2016 0705

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 MDL
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: RQ14611-001
Batch: 14611
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	1.6	ug/L	06/02/2016 1008
Benzene	ND		1	5.0	0.21	ug/L	06/02/2016 1008
Bromodichloromethane	ND		1	5.0	0.23	ug/L	06/02/2016 1008
Bromoform	ND		1	5.0	0.35	ug/L	06/02/2016 1008
Bromomethane (Methyl bromide)	ND		1	5.0	0.19	ug/L	06/02/2016 1008
2-Butanone (MEK)	ND		1	10	1.8	ug/L	06/02/2016 1008
Carbon disulfide	ND		1	5.0	0.45	ug/L	06/02/2016 1008
Carbon tetrachloride	ND		1	5.0	0.31	ug/L	06/02/2016 1008
Chlorobenzene	ND		1	5.0	0.20	ug/L	06/02/2016 1008
Chloroethane	ND		1	5.0	0.28	ug/L	06/02/2016 1008
Chloroform	ND		1	5.0	0.21	ug/L	06/02/2016 1008
Chloromethane (Methyl chloride)	ND		1	5.0	0.19	ug/L	06/02/2016 1008
Cyclohexane	ND		1	5.0	0.30	ug/L	06/02/2016 1008
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.57	ug/L	06/02/2016 1008
Dibromochloromethane	ND		1	5.0	0.23	ug/L	06/02/2016 1008
1,2-Dibromoethane (EDB)	ND		1	5.0	0.17	ug/L	06/02/2016 1008
1,4-Dichlorobenzene	ND		1	5.0	0.19	ug/L	06/02/2016 1008
1,2-Dichlorobenzene	ND		1	5.0	0.46	ug/L	06/02/2016 1008
1,3-Dichlorobenzene	ND		1	5.0	0.19	ug/L	06/02/2016 1008
Dichlorodifluoromethane	ND		1	5.0	0.85	ug/L	06/02/2016 1008
1,2-Dichloroethane	ND		1	5.0	0.23	ug/L	06/02/2016 1008
1,1-Dichloroethane	ND		1	5.0	0.19	ug/L	06/02/2016 1008
trans-1,2-Dichloroethene	ND		1	5.0	0.33	ug/L	06/02/2016 1008
1,1-Dichloroethene	ND		1	5.0	0.31	ug/L	06/02/2016 1008
cis-1,2-Dichloroethene	ND		1	5.0	0.20	ug/L	06/02/2016 1008
1,2-Dichloropropane	ND		1	5.0	0.29	ug/L	06/02/2016 1008
trans-1,3-Dichloropropene	ND		1	5.0	0.22	ug/L	06/02/2016 1008
cis-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	06/02/2016 1008
Ethylbenzene	ND		1	5.0	0.21	ug/L	06/02/2016 1008
2-Hexanone	ND		1	10	0.26	ug/L	06/02/2016 1008
Isopropylbenzene	ND		1	5.0	0.14	ug/L	06/02/2016 1008
Methyl acetate	ND		1	5.0	0.24	ug/L	06/02/2016 1008
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.23	ug/L	06/02/2016 1008
4-Methyl-2-pentanone	ND		1	10	0.29	ug/L	06/02/2016 1008
Methylcyclohexane	ND		1	5.0	0.16	ug/L	06/02/2016 1008
Methylene chloride	ND		1	5.0	0.42	ug/L	06/02/2016 1008
Styrene	ND		1	5.0	0.13	ug/L	06/02/2016 1008
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.13	ug/L	06/02/2016 1008
Tetrachloroethene	ND		1	5.0	0.22	ug/L	06/02/2016 1008
Toluene	ND		1	5.0	0.24	ug/L	06/02/2016 1008
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.30	ug/L	06/02/2016 1008
1,2,4-Trichlorobenzene	ND		1	5.0	0.13	ug/L	06/02/2016 1008
1,1,1-Trichloroethane	ND		1	5.0	0.24	ug/L	06/02/2016 1008
1,1,2-Trichloroethane	ND		1	5.0	0.22	ug/L	06/02/2016 1008

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 MDL
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: RQ14611-001
Batch: 14611
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.16	ug/L	06/02/2016 1008
Trichlorofluoromethane	ND		1	5.0	0.74	ug/L	06/02/2016 1008
Vinyl chloride	ND		1	2.0	0.50	ug/L	06/02/2016 1008
Xylenes (total)	ND		1	5.0	0.32	ug/L	06/02/2016 1008

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ14611-002
Batch: 14611
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	120		1	117	60-140	06/02/2016 0910
Benzene	50	48		1	95	70-130	06/02/2016 0910
Bromodichloromethane	50	49		1	97	70-130	06/02/2016 0910
Bromoform	50	46		1	91	70-130	06/02/2016 0910
Bromomethane (Methyl bromide)	50	52		1	104	60-140	06/02/2016 0910
2-Butanone (MEK)	100	110		1	107	60-140	06/02/2016 0910
Carbon disulfide	50	64		1	129	60-140	06/02/2016 0910
Carbon tetrachloride	50	53		1	106	70-130	06/02/2016 0910
Chlorobenzene	50	46		1	92	70-130	06/02/2016 0910
Chloroethane	50	52		1	105	60-140	06/02/2016 0910
Chloroform	50	48		1	97	70-130	06/02/2016 0910
Chloromethane (Methyl chloride)	50	51		1	102	60-140	06/02/2016 0910
Cyclohexane	50	57		1	113	70-130	06/02/2016 0910
1,2-Dibromo-3-chloropropane (DBCP)	50	50		1	99	70-130	06/02/2016 0910
Dibromochloromethane	50	48		1	96	70-130	06/02/2016 0910
1,2-Dibromoethane (EDB)	50	47		1	94	70-130	06/02/2016 0910
1,4-Dichlorobenzene	50	44		1	88	70-130	06/02/2016 0910
1,2-Dichlorobenzene	50	47		1	93	70-130	06/02/2016 0910
1,3-Dichlorobenzene	50	44		1	88	70-130	06/02/2016 0910
Dichlorodifluoromethane	50	62		1	124	60-140	06/02/2016 0910
1,2-Dichloroethane	50	47		1	95	70-130	06/02/2016 0910
1,1-Dichloroethane	50	53		1	106	70-130	06/02/2016 0910
trans-1,2-Dichloroethene	50	51		1	102	70-130	06/02/2016 0910
1,1-Dichloroethene	50	57		1	114	70-130	06/02/2016 0910
cis-1,2-Dichloroethene	50	50		1	100	70-130	06/02/2016 0910
1,2-Dichloropropane	50	46		1	93	70-130	06/02/2016 0910
trans-1,3-Dichloropropene	50	45		1	90	70-130	06/02/2016 0910
cis-1,3-Dichloropropene	50	48		1	95	70-130	06/02/2016 0910
Ethylbenzene	50	47		1	93	70-130	06/02/2016 0910
2-Hexanone	100	91		1	91	60-140	06/02/2016 0910
Isopropylbenzene	50	49		1	98	70-130	06/02/2016 0910
Methyl acetate	50	54		1	107	60-140	06/02/2016 0910
Methyl tertiary butyl ether (MTBE)	50	45		1	91	70-130	06/02/2016 0910
4-Methyl-2-pentanone	100	98		1	98	60-140	06/02/2016 0910
Methylcyclohexane	50	54		1	109	70-130	06/02/2016 0910
Methylene chloride	50	51		1	101	70-130	06/02/2016 0910
Styrene	50	46		1	93	70-130	06/02/2016 0910
1,1,2,2-Tetrachloroethane	50	45		1	91	70-130	06/02/2016 0910
Tetrachloroethene	50	50		1	100	70-130	06/02/2016 0910
Toluene	50	47		1	94	70-130	06/02/2016 0910
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	60		1	120	70-130	06/02/2016 0910
1,2,4-Trichlorobenzene	50	50		1	100	70-130	06/02/2016 0910
1,1,1-Trichloroethane	50	53		1	106	70-130	06/02/2016 0910
1,1,2-Trichloroethane	50	45		1	91	70-130	06/02/2016 0910

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 MDL
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: RQ14611-002
Batch: 14611
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	48		1	96	70-130	06/02/2016 0910
Trichlorofluoromethane	50	59		1	119	70-130	06/02/2016 0910
Vinyl chloride	50	52		1	104	70-130	06/02/2016 0910
Xylenes (total)	100	97		1	97	70-130	06/02/2016 0910

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		89	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

P = The RPD between two GC columns exceeds 40%

J = Estimated result < PQL and ≥ MDL

N = Recovery is out of criteria

+ = 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: RQ14677-001
Batch: 14677
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	1.6	ug/L	06/02/2016 2154
Benzene	ND		1	5.0	0.21	ug/L	06/02/2016 2154
Bromodichloromethane	ND		1	5.0	0.23	ug/L	06/02/2016 2154
Bromoform	ND		1	5.0	0.35	ug/L	06/02/2016 2154
Bromomethane (Methyl bromide)	ND		1	5.0	0.19	ug/L	06/02/2016 2154
2-Butanone (MEK)	ND		1	10	1.8	ug/L	06/02/2016 2154
Carbon disulfide	ND		1	5.0	0.45	ug/L	06/02/2016 2154
Carbon tetrachloride	ND		1	5.0	0.31	ug/L	06/02/2016 2154
Chlorobenzene	ND		1	5.0	0.20	ug/L	06/02/2016 2154
Chloroethane	ND		1	5.0	0.28	ug/L	06/02/2016 2154
Chloroform	ND		1	5.0	0.21	ug/L	06/02/2016 2154
Chloromethane (Methyl chloride)	ND		1	5.0	0.19	ug/L	06/02/2016 2154
Cyclohexane	ND		1	5.0	0.30	ug/L	06/02/2016 2154
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.57	ug/L	06/02/2016 2154
Dibromochloromethane	ND		1	5.0	0.23	ug/L	06/02/2016 2154
1,2-Dibromoethane (EDB)	ND		1	5.0	0.17	ug/L	06/02/2016 2154
1,2-Dichlorobenzene	ND		1	5.0	0.46	ug/L	06/02/2016 2154
1,3-Dichlorobenzene	ND		1	5.0	0.19	ug/L	06/02/2016 2154
1,4-Dichlorobenzene	ND		1	5.0	0.19	ug/L	06/02/2016 2154
Dichlorodifluoromethane	ND		1	5.0	0.85	ug/L	06/02/2016 2154
1,1-Dichloroethane	ND		1	5.0	0.19	ug/L	06/02/2016 2154
1,2-Dichloroethane	ND		1	5.0	0.23	ug/L	06/02/2016 2154
1,1-Dichloroethene	ND		1	5.0	0.31	ug/L	06/02/2016 2154
cis-1,2-Dichloroethene	ND		1	5.0	0.20	ug/L	06/02/2016 2154
trans-1,2-Dichloroethene	ND		1	5.0	0.33	ug/L	06/02/2016 2154
1,2-Dichloropropane	ND		1	5.0	0.29	ug/L	06/02/2016 2154
cis-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	06/02/2016 2154
trans-1,3-Dichloropropene	ND		1	5.0	0.22	ug/L	06/02/2016 2154
Ethylbenzene	ND		1	5.0	0.21	ug/L	06/02/2016 2154
2-Hexanone	ND		1	10	0.26	ug/L	06/02/2016 2154
Isopropylbenzene	ND		1	5.0	0.14	ug/L	06/02/2016 2154
Methyl acetate	ND		1	5.0	0.24	ug/L	06/02/2016 2154
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.23	ug/L	06/02/2016 2154
4-Methyl-2-pentanone	ND		1	10	0.29	ug/L	06/02/2016 2154
Methylcyclohexane	ND		1	5.0	0.16	ug/L	06/02/2016 2154
Methylene chloride	ND		1	5.0	0.42	ug/L	06/02/2016 2154
Styrene	ND		1	5.0	0.13	ug/L	06/02/2016 2154
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.13	ug/L	06/02/2016 2154
Tetrachloroethene	ND		1	5.0	0.22	ug/L	06/02/2016 2154
Toluene	ND		1	5.0	0.24	ug/L	06/02/2016 2154
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.30	ug/L	06/02/2016 2154
1,2,4-Trichlorobenzene	ND		1	5.0	0.13	ug/L	06/02/2016 2154
1,1,1-Trichloroethane	ND		1	5.0	0.24	ug/L	06/02/2016 2154
1,1,2-Trichloroethane	ND		1	5.0	0.22	ug/L	06/02/2016 2154

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 MDL
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: RQ14677-001
Batch: 14677
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.16	ug/L	06/02/2016 2154
Trichlorofluoromethane	ND		1	5.0	0.74	ug/L	06/02/2016 2154
Vinyl chloride	ND		1	2.0	0.50	ug/L	06/02/2016 2154
Xylenes (total)	ND		1	5.0	0.32	ug/L	06/02/2016 2154

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ14677-002
Batch: 14677
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	103	60-140	06/02/2016 2058
Benzene	50	50		1	101	70-130	06/02/2016 2058
Bromodichloromethane	50	50		1	101	70-130	06/02/2016 2058
Bromoform	50	44		1	87	70-130	06/02/2016 2058
Bromomethane (Methyl bromide)	50	54		1	108	60-140	06/02/2016 2058
2-Butanone (MEK)	100	100		1	102	60-140	06/02/2016 2058
Carbon disulfide	50	73	N	1	146	60-140	06/02/2016 2058
Carbon tetrachloride	50	52		1	104	70-130	06/02/2016 2058
Chlorobenzene	50	49		1	97	70-130	06/02/2016 2058
Chloroethane	50	55		1	111	60-140	06/02/2016 2058
Chloroform	50	50		1	100	70-130	06/02/2016 2058
Chloromethane (Methyl chloride)	50	52		1	104	60-140	06/02/2016 2058
Cyclohexane	50	60		1	121	70-130	06/02/2016 2058
1,2-Dibromo-3-chloropropane (DBCP)	50	51		1	102	70-130	06/02/2016 2058
Dibromochloromethane	50	48		1	96	70-130	06/02/2016 2058
1,2-Dibromoethane (EDB)	50	49		1	99	70-130	06/02/2016 2058
1,2-Dichlorobenzene	50	50		1	101	70-130	06/02/2016 2058
1,3-Dichlorobenzene	50	47		1	94	70-130	06/02/2016 2058
1,4-Dichlorobenzene	50	48		1	95	70-130	06/02/2016 2058
Dichlorodifluoromethane	50	62		1	125	60-140	06/02/2016 2058
1,1-Dichloroethane	50	56		1	111	70-130	06/02/2016 2058
1,2-Dichloroethane	50	48		1	95	70-130	06/02/2016 2058
1,1-Dichloroethene	50	63		1	125	70-130	06/02/2016 2058
cis-1,2-Dichloroethene	50	51		1	103	70-130	06/02/2016 2058
trans-1,2-Dichloroethene	50	54		1	108	70-130	06/02/2016 2058
1,2-Dichloropropane	50	49		1	98	70-130	06/02/2016 2058
cis-1,3-Dichloropropene	50	48		1	95	70-130	06/02/2016 2058
trans-1,3-Dichloropropene	50	45		1	90	70-130	06/02/2016 2058
Ethylbenzene	50	49		1	98	70-130	06/02/2016 2058
2-Hexanone	100	93		1	93	60-140	06/02/2016 2058
Isopropylbenzene	50	51		1	102	70-130	06/02/2016 2058
Methyl acetate	50	50		1	101	60-140	06/02/2016 2058
Methyl tertiary butyl ether (MTBE)	50	47		1	93	70-130	06/02/2016 2058
4-Methyl-2-pentanone	100	96		1	96	60-140	06/02/2016 2058
Methylcyclohexane	50	58		1	116	70-130	06/02/2016 2058
Methylene chloride	50	53		1	107	70-130	06/02/2016 2058
Styrene	50	49		1	98	70-130	06/02/2016 2058
1,1,2,2-Tetrachloroethane	50	47		1	94	70-130	06/02/2016 2058
Tetrachloroethene	50	54		1	107	70-130	06/02/2016 2058
Toluene	50	50		1	100	70-130	06/02/2016 2058
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	68	N	1	136	70-130	06/02/2016 2058
1,2,4-Trichlorobenzene	50	57		1	113	70-130	06/02/2016 2058
1,1,1-Trichloroethane	50	55		1	111	70-130	06/02/2016 2058
1,1,2-Trichloroethane	50	47		1	95	70-130	06/02/2016 2058

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 MDL
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: RQ14677-002
Batch: 14677
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	50		1	101	70-130	06/02/2016 2058
Trichlorofluoromethane	50	59		1	117	70-130	06/02/2016 2058
Vinyl chloride	50	53		1	107	70-130	06/02/2016 2058
Xylenes (total)	100	100		1	102	70-130	06/02/2016 2058

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		102	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MS

Sample ID: RE31026-001MS
Batch: 14677
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	ND	5000	5700		50	115	60-140	06/03/2016 0547
Benzene	ND	2500	2700		50	106	70-130	06/03/2016 0547
Bromodichloromethane	ND	2500	2600		50	105	71-143	06/03/2016 0547
Bromoform	ND	2500	2300		50	93	65-131	06/03/2016 0547
Bromomethane (Methyl bromide)	ND	2500	2800		50	111	36-168	06/03/2016 0547
2-Butanone (MEK)	ND	5000	5300		50	105	60-140	06/03/2016 0547
Carbon disulfide	ND	2500	3800	N	50	153	60-140	06/03/2016 0547
Carbon tetrachloride	ND	2500	2800		50	110	37-166	06/03/2016 0547
Chlorobenzene	ND	2500	2500		50	100	78-129	06/03/2016 0547
Chloroethane	ND	2500	2900		50	115	60-140	06/03/2016 0547
Chloroform	ND	2500	2600		50	104	63-123	06/03/2016 0547
Chloromethane (Methyl chloride)	ND	2500	2800		50	111	20-158	06/03/2016 0547
Cyclohexane	ND	2500	3000		50	121	70-130	06/03/2016 0547
1,2-Dibromo-3-chloropropane (DBCP)	ND	2500	2400		50	97	70-130	06/03/2016 0547
Dibromochloromethane	ND	2500	2500		50	99	74-134	06/03/2016 0547
1,2-Dibromoethane (EDB)	ND	2500	2500		50	100	70-130	06/03/2016 0547
1,2-Dichlorobenzene	ND	2500	2400		50	97	70-130	06/03/2016 0547
1,3-Dichlorobenzene	ND	2500	2300		50	92	70-130	06/03/2016 0547
1,4-Dichlorobenzene	ND	2500	2300		50	92	70-130	06/03/2016 0547
Dichlorodifluoromethane	ND	2500	3000		50	121	10-158	06/03/2016 0547
1,1-Dichloroethane	ND	2500	2900		50	115	69-132	06/03/2016 0547
1,2-Dichloroethane	ND	2500	2600		50	102	70-130	06/03/2016 0547
1,1-Dichloroethene	ND	2500	3300		50	132	50-132	06/03/2016 0547
cis-1,2-Dichloroethene	ND	2500	2700		50	108	70-130	06/03/2016 0547
trans-1,2-Dichloroethene	ND	2500	2800		50	114	70-130	06/03/2016 0547
1,2-Dichloropropane	ND	2500	2600		50	102	71-126	06/03/2016 0547
cis-1,3-Dichloropropene	ND	2500	2500		50	100	69-130	06/03/2016 0547
trans-1,3-Dichloropropene	ND	2500	2300		50	91	73-131	06/03/2016 0547
Ethylbenzene	ND	2500	2500		50	101	70-130	06/03/2016 0547
2-Hexanone	ND	5000	4800		50	95	60-140	06/03/2016 0547
Isopropylbenzene	ND	2500	2600		50	103	70-130	06/03/2016 0547
Methyl acetate	ND	2500	2900		50	115	15-128	06/03/2016 0547
Methyl tertiary butyl ether (MTBE)	ND	2500	2400		50	95	70-130	06/03/2016 0547
4-Methyl-2-pentanone	ND	5000	5000		50	100	60-140	06/03/2016 0547
Methylcyclohexane	ND	2500	2800		50	113	70-130	06/03/2016 0547
Methylene chloride	ND	2500	2700		50	110	69-129	06/03/2016 0547
Styrene	ND	2500	2500		50	100	70-130	06/03/2016 0547
1,1,2,2-Tetrachloroethane	ND	2500	2400		50	95	60-155	06/03/2016 0547
Tetrachloroethene	5200	2500	7700		50	100	70-130	06/03/2016 0547
Toluene	ND	2500	2600		50	104	70-130	06/03/2016 0547
1,1,2-Trichloro-1,2,2-Trifluoroethane	55	2500	3400	N	50	132	70-130	06/03/2016 0547
1,2,4-Trichlorobenzene	ND	2500	2400		50	96	70-130	06/03/2016 0547
1,1,1-Trichloroethane	ND	2500	2900		50	116	77-132	06/03/2016 0547
1,1,2-Trichloroethane	ND	2500	2400		50	97	77-132	06/03/2016 0547

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 MDL
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 - MS

Sample ID: RE31026-001MS
Batch: 14677
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	2500	2600		50	105	73-124	06/03/2016 0547
Trichlorofluoromethane	ND	2500	2900		50	117	60-140	06/03/2016 0547
Vinyl chloride	ND	2500	2800		50	113	29-159	06/03/2016 0547
Xylenes (total)	ND	5000	5200		50	104	70-130	06/03/2016 0547

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MSD

Sample ID: RE31026-001MD
Batch: 14677
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	5000	5900		50	119	3.6	60-140	20	06/03/2016 0610
Benzene	ND	2500	2700		50	108	1.0	70-130	20	06/03/2016 0610
Bromodichloromethane	ND	2500	2700		50	107	1.6	71-143	20	06/03/2016 0610
Bromoform	ND	2500	2300		50	94	1.2	65-131	20	06/03/2016 0610
Bromomethane (Methyl bromide)	ND	2500	2800		50	114	2.3	36-168	20	06/03/2016 0610
2-Butanone (MEK)	ND	5000	5400		50	107	2.1	60-140	20	06/03/2016 0610
Carbon disulfide	ND	2500	4000	N	50	160	4.2	60-140	20	06/03/2016 0610
Carbon tetrachloride	ND	2500	2800		50	114	3.5	37-166	20	06/03/2016 0610
Chlorobenzene	ND	2500	2500		50	101	0.71	78-129	20	06/03/2016 0610
Chloroethane	ND	2500	3000		50	120	4.4	60-140	20	06/03/2016 0610
Chloroform	ND	2500	2700		50	107	2.0	63-123	20	06/03/2016 0610
Chloromethane (Methyl chloride)	ND	2500	2800		50	114	2.0	20-158	20	06/03/2016 0610
Cyclohexane	ND	2500	3200		50	126	3.9	70-130	20	06/03/2016 0610
1,2-Dibromo-3-chloropropane (DBCP)	ND	2500	2500		50	101	4.4	70-130	20	06/03/2016 0610
Dibromochloromethane	ND	2500	2500		50	101	1.1	74-134	20	06/03/2016 0610
1,2-Dibromoethane (EDB)	ND	2500	2500		50	99	0.48	70-130	20	06/03/2016 0610
1,2-Dichlorobenzene	ND	2500	2500		50	100	2.9	70-130	20	06/03/2016 0610
1,3-Dichlorobenzene	ND	2500	2300		50	94	1.8	70-130	20	06/03/2016 0610
1,4-Dichlorobenzene	ND	2500	2300		50	94	1.2	70-130	20	06/03/2016 0610
Dichlorodifluoromethane	ND	2500	2900		50	114	5.8	10-158	20	06/03/2016 0610
1,1-Dichloroethane	ND	2500	3000		50	120	3.8	69-132	20	06/03/2016 0610
1,2-Dichloroethane	ND	2500	2500		50	102	0.92	70-130	20	06/03/2016 0610
1,1-Dichloroethene	ND	2500	3400	N	50	135	2.6	50-132	20	06/03/2016 0610
cis-1,2-Dichloroethene	ND	2500	2800		50	110	2.4	70-130	20	06/03/2016 0610
trans-1,2-Dichloroethene	ND	2500	2900		50	117	2.9	70-130	20	06/03/2016 0610
1,2-Dichloropropane	ND	2500	2600		50	103	0.80	71-126	20	06/03/2016 0610
cis-1,3-Dichloropropene	ND	2500	2500		50	100	0.21	69-130	20	06/03/2016 0610
trans-1,3-Dichloropropene	ND	2500	2300		50	92	0.46	73-131	20	06/03/2016 0610
Ethylbenzene	ND	2500	2600		50	102	0.83	70-130	20	06/03/2016 0610
2-Hexanone	ND	5000	4700		50	93	2.0	60-140	20	06/03/2016 0610
Isopropylbenzene	ND	2500	2600		50	105	2.1	70-130	20	06/03/2016 0610
Methyl acetate	ND	2500	3000		50	119	3.2	15-128	20	06/03/2016 0610
Methyl tertiary butyl ether (MTBE)	ND	2500	2500		50	99	3.5	70-130	20	06/03/2016 0610
4-Methyl-2-pentanone	ND	5000	5000		50	100	0.50	60-140	20	06/03/2016 0610
Methylcyclohexane	ND	2500	2900		50	114	1.3	70-130	20	06/03/2016 0610
Methylene chloride	ND	2500	2900		50	114	4.3	69-129	20	06/03/2016 0610
Styrene	ND	2500	2500		50	101	0.47	70-130	20	06/03/2016 0610
1,1,2,2-Tetrachloroethane	ND	2500	2400		50	95	0.49	60-155	20	06/03/2016 0610
Tetrachloroethene	5200	2500	7900		50	110	3.0	70-130	20	06/03/2016 0610
Toluene	ND	2500	2600		50	104	0.56	70-130	20	06/03/2016 0610
1,1,2-Trichloro-1,2,2-Trifluoroethane	55	2500	3500	N	50	137	3.2	70-130	20	06/03/2016 0610
1,2,4-Trichlorobenzene	ND	2500	2600		50	102	6.0	70-130	20	06/03/2016 0610
1,1,1-Trichloroethane	ND	2500	3000		50	120	3.3	77-132	20	06/03/2016 0610
1,1,2-Trichloroethane	ND	2500	2400		50	97	0.50	77-132	20	06/03/2016 0610

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 MDL
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 - MSD

Sample ID: RE31026-001MD
Batch: 14677
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	ND	2500	2700		50	106	1.4	73-124	20	06/03/2016 0610
Trichlorofluoromethane	ND	2500	3000		50	119	2.4	60-140	20	06/03/2016 0610
Vinyl chloride	ND	2500	2900		50	116	2.0	29-159	20	06/03/2016 0610
Xylenes (total)	ND	5000	5300		50	105	1.6	70-130	20	06/03/2016 0610

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-AES - MB

Sample ID: RQ14458-001
Batch: 14458
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 06/01/2016 952

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Potassium	ND		1	5.0	0.30	mg/L	06/03/2016 1610

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-AES - LCS

Sample ID: RQ14458-002
Batch: 14458
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 06/01/2016 952

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	40	39		1	97	80-120	06/03/2016 1615

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-AES - MS

Sample ID: RE31026-001MS
Batch: 14458
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 06/01/2016 952

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	0.90	40	48		1	118	75-125	06/02/2016 1852

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 MDL
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

ICP-AES - MSD

Sample ID: RE31026-001MD
Batch: 14458
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 06/01/2016 952

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Potassium	0.90	40	50		1	122	2.6	75-125	20	06/02/2016 1856

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-AES - MB

Sample ID: RQ14689-001
Batch: 14689
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 06/03/2016 856

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Potassium	ND		1	5.0	0.30	mg/L	06/03/2016 1902

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-AES - LCS

Sample ID: RQ14689-002
Batch: 14689
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 06/03/2016 856

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	40	41		1	103	80-120	06/03/2016 1906

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Chain of Custody
and
Miscellaneous Documents

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

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 61300

Client: TRC	Report to Contact: Liga Clark / Terry Hertz	Telephone No. / E-mail: 864 - 281 - 0030	Quote No.
Address: 30 Patewood Dr. Ste 300	Sampler's Signature: x	Analysis (Attach list if more space is needed)	Page 1 of 2
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Will Pearyhouse		RE31026
Project Name: WPH Clemson			
Project No.: 226253.0.0 P9	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab/Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No of Containers by Preservative Type: Unpres	MEOH	HNO3	HCl	NaOH	S2O3 NH	VOCs 8260B	TOC 9060A	Potassium Gold	Sulfate 300.0	Remarks / Cooler I.D.
RMW-20A	5-27-16	1000	G	✓			1		1	3			✓		✓	✓	RMW-02
RMW-23B	5-27-16	1400	G	✓			1		1	3			✓		✓	✓	had strong
RMW-23A	5-27-16	1710	G	✓			1	1	1	3			✓	✓	✓	✓	odor & sheen
OW-6A	5-27-16	1830	G	✓			1	1	1	3			✓	✓	✓	✓	
RMW-02	5-28-16	0930	G	✓			1		1	3			✓		✓	✓	
OW-04	5-28-16	1110	G	✓			1	1	1	3			✓	✓	✓	✓	
RMW-28A	5-28-16	1350	G	✓			1		1	3			✓	✓	✓	✓	
MG-09	5-28-16	1505	G	✓			1		1	3			✓		✓	✓	
MG-05A	5-28-16	1550	G	✓			1		1	3			✓		✓	✓	
RMW-29	5-28-16	1700	G	✓			1		1	3			✓		✓	✓	

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time
1. Relinquished by: Will Pearyhouse	5-29-16	1200
2. Relinquished by: TRC Storage	5/31/16	1036
3. Relinquished by: Daniel Andrews	5-31-16	1340
4. Relinquished by:	Date	Time

	Date	Time
1. Received by: TRC Sample Storage	5-29-16	1200
2. Received by: Daniel Andrews	5/31/16	1036
3. Received by:	Date	Time
4. Laboratory received by:	5/31/16	1340

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on ice (Circle) (Yes) No Ice Pack — Receipt Temp. 4.0 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 61293

Client TRC	**Report to Contact** Lisa Clark / Terry Hertz	**Telephone No. / E-mail** 864-281-0030	**Quote No.**
Address 30 Patewood dr Ste. 300	**Sampler's Signature** X Will Pennyhouse	**Analysis (Attach list if more space is needed)**	**Page** 2 of 2
City Greenville **State** SC **Zip Code** 29615	**Printed Name** Will Pennyhouse		RE31026
Project Name WPH Clemson			

Project No.	P.O. No.			Matrix				No of Containers by Preservative Type																	
226253.0.0P9																VOC4 8260B	TOC 9060A	Potassium 6010	300.0 Sulfate						
Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Aqueous	Solid	Wipe	Other	Unpres.	H2SO4	HNO3	HCl	NaOH	S2O3 NH												Remarks / Cooler I.D.
RMW-17A	5-29-16	1000	G	✓				1		1	3					✓		✓	✓						
RMW-17	5-29-16	1035	G	✓				1		1	3					✓		✓	✓						
RBLK-16202	5-28-16	0950	G	✓				1		1	3					✓		✓	✓						
TBLK-16202	5-27-16		G	✓							2					✓									

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

1. Relinquished by Will Pennyhouse	Date 5-29-16	Time 1206	1. Received by TRC Sample Storage	Date 5-29-16	Time 1200
2. Relinquished by TRC Sample Storage RMW-17A 5-31-16	Date 5-31-16	Time 1036	2. Received by Rachel Anders	Date 5-31-16	Time 1036
3. Relinquished by Rachel Anders	Date 5-31-16	Time 1340	3. Received by	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by	Date 5/31/16	Time 1340

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY Received on Ice (Circle) (Yes) No Ice Pack — Receipt Temp. 4.2 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s), PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: mcm / 05/31/16 Lot #: RE 316226

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?
pH strip ID: LS-1440 Cl strip ID:			
Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: 4.0/4.2 °C / / °C / / °C / / °C			
Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0.0 °C			
Method of coolant: ☐ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☐	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
mcm 5/31/16 Yes ☑	No ☑		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☑	No ☐	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
mcm 5/31/16 Yes ☑	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?

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_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) 01461 were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be ≥ 2 by _____ Date: _____

Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR# _____

Sample labels applied by: mcm Verified by: _____ Date: 5/31/16

Comments: Sample 015 only were not listed on COC

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0000.0000.000009

Lot Number: RF15100

Date Completed: 06/21/2016

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: WPH-Clemson

Project Number: 226253.0000.0000.000009

Lab Report: RF15100 Shealy Environmental Services
Samples analyzed for VOCs and TOC

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Recoveries were within QC limits.

Method Blanks: The method blanks have no detections of targeted analytes except as follows:

- 1,2,4-Trichlorobenzene was detected in the method blank at 0.31 J ug/L. 1,2,4-Trichlorobenzene was not detected in groundwater samples. No qualifiers are assigned.

Trip Blank: TBLK-16203 had no detections of targeted analytes except as follows:

- 1,2,4-Trichlorobenzene was detected in TBLK-16203 at 0.22 J ug/L. 1,2,4-Trichlorobenzene was not detected in groundwater samples. No qualifiers are assigned.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: RBLK-16203 had no detections of targeted analytes except as follows:

- Acetone was detected in RBLK-16203 at 2.6 J ug/L. Wells OW-04 and RMW-28A contain acetone at comparable concentrations to that in RBLK-16203. **Acetone in OW-04 and RMW-28A is assigned a "u" qualifier.**
- 1,4-Dichlorobenzene was detected in RBLK-16203 at 0.35 J ug/L. 1,4-Dichlorobenzene was not detected in groundwater samples. No qualifiers are assigned.

LCS/LCSD: LCS recoveries are within QC Limits. LCSD analyses were not performed.

MS/MSD: MS/MSD analyses were not performed.

Duplicates: A field duplicate was not collected with these samples.

Data review performed by: Terry Hertz; TRC Environmental Corp. ; 6/24/2016

Case Narrative
TRC Companies, Inc.
Lot Number: RF15100

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.

VOCs by GC/MS

The Method Blank associated with batch 15685 yielded a "J" value detection for 1,2,4-Trichlorobenzene. No corrective action is required as this is an estimated value recovered below the PQL. Associated samples have been qualified with a "B".

Sample Summary
TRC Companies, Inc.
Lot Number: RF15100

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	RMW-29	Aqueous	06/14/2016 0915	06/15/2016
002	MG-05	Aqueous	06/14/2016 1000	06/15/2016
003	RMW-28A	Aqueous	06/14/2016 1200	06/15/2016
004	OW-04	Aqueous	06/14/2016 1340	06/15/2016
005	RBLK-16203	Aqueous	06/14/2016 1530	06/15/2016
006	TBLK-16203	Aqueous	06/14/2016	06/15/2016
007	OW-6A	Aqueous	06/14/2016 1515	06/15/2016

(7 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: RF15100

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	RMW-29	Aqueous	Chloroform	8260B	0.27	J	ug/L	5
001	RMW-29	Aqueous	Tetrachloroethene	8260B	22		ug/L	5
002	MG-05	Aqueous	Benzene	8260B	1.6	J	ug/L	7
002	MG-05	Aqueous	1,1-Dichloroethane	8260B	1.1	J	ug/L	7
002	MG-05	Aqueous	1,1-Dichloroethene	8260B	0.39	J	ug/L	7
002	MG-05	Aqueous	cis-1,2-Dichloroethene	8260B	4.8	J	ug/L	7
002	MG-05	Aqueous	Isopropylbenzene	8260B	0.15	J	ug/L	7
002	MG-05	Aqueous	Tetrachloroethene	8260B	15		ug/L	7
002	MG-05	Aqueous	Trichloroethene	8260B	2.4	J	ug/L	8
002	MG-05	Aqueous	Xylenes (total)	8260B	5.2		ug/L	8
003	RMW-28A	Aqueous	Acetone	8260B	3.9	J	ug/L	9
003	RMW-28A	Aqueous	Chloroform	8260B	0.59	J	ug/L	9
003	RMW-28A	Aqueous	cis-1,2-Dichloroethene	8260B	0.78	J	ug/L	9
003	RMW-28A	Aqueous	Ethylbenzene	8260B	5.1		ug/L	9
003	RMW-28A	Aqueous	Tetrachloroethene	8260B	42		ug/L	9
003	RMW-28A	Aqueous	Trichloroethene	8260B	0.60	J	ug/L	10
003	RMW-28A	Aqueous	Xylenes (total)	8260B	23		ug/L	10
004	OW-04	Aqueous	TOC	9060A	0.23	J	mg/L	11
004	OW-04	Aqueous	Acetone	8260B	3.7	J	ug/L	11
004	OW-04	Aqueous	Chloroform	8260B	0.30	J	ug/L	11
004	OW-04	Aqueous	cis-1,2-Dichloroethene	8260B	2.6	J	ug/L	11
004	OW-04	Aqueous	Ethylbenzene	8260B	0.40	J	ug/L	11
004	OW-04	Aqueous	Tetrachloroethene	8260B	38		ug/L	12
004	OW-04	Aqueous	Trichloroethene	8260B	0.38	J	ug/L	12
004	OW-04	Aqueous	Xylenes (total)	8260B	0.92	J	ug/L	12
005	RBLK-16203	Aqueous	Acetone	8260B	2.6	J	ug/L	13
005	RBLK-16203	Aqueous	1,4-Dichlorobenzene	8260B	0.35	J	ug/L	13
006	TBLK-16203	Aqueous	1,2,4-Trichlorobenzene	8260B	0.22	BJ	ug/L	16
007	OW-6A	Aqueous	TOC	9060A	0.24	J	mg/L	17
007	OW-6A	Aqueous	Chloroform	8260B	1.3	J	ug/L	17
007	OW-6A	Aqueous	1,1-Dichloroethane	8260B	3.0	J	ug/L	17
007	OW-6A	Aqueous	cis-1,2-Dichloroethene	8260B	22	J	ug/L	17
007	OW-6A	Aqueous	Tetrachloroethene	8260B	750		ug/L	18
007	OW-6A	Aqueous	Trichloroethene	8260B	3.1	J	ug/L	18
007	OW-6A	Aqueous	Xylenes (total)	8260B	20	J	ug/L	18

(35 detections)

Client: TRC Companies, Inc.
Description: RMW-29
Date Sampled: 06/14/2016 0915
Date Received: 06/15/2016

Laboratory ID: RF15100-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/16/2016 1150	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	0.27	J	5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	22		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-29
Date Sampled: 06/14/2016 0915
Date Received: 06/15/2016

Laboratory ID: RF15100-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/16/2016 1150	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		105	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 MDL
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"

Client: TRC Companies, Inc.
Description: MG-05
Date Sampled: 06/14/2016 1000
Date Received: 06/15/2016

Laboratory ID: RF15100-002
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/16/2016 1213	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	1.6	J	5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	1.1	J	5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	0.39	J	5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	4.8	J	5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	0.15	J	5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	15		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: MG-05
Date Sampled: 06/14/2016 1000
Date Received: 06/15/2016

Laboratory ID: RF15100-002
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/16/2016 1213	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	2.4	J	5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	5.2		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		107	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-28A
Date Sampled: 06/14/2016 1200
Date Received: 06/15/2016

Laboratory ID: RF15100-003
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/16/2016 1236	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	3.9	J	20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	0.59	J	5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	0.78	J	5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	5.1		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	42		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-28A
Date Sampled: 06/14/2016 1200
Date Received: 06/15/2016

Laboratory ID: RF15100-003
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/16/2016 1236	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	0.60	J	5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	23		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		103	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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 06/14/2016 1340
Date Received: 06/15/2016

Laboratory ID: RF15100-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) 9060A	1	06/20/2016 1645	AMM1		15900

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
TOC		9060A	0.23	J	1.0	0.063	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/16/2016 1259	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	3.7	J	20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	0.30	J	5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	2.6	J	5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	0.40	J	5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	ug/L	1

TOC Range: 0.189 - 0.258

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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 06/14/2016 1340
Date Received: 06/15/2016

Laboratory ID: RF15100-004
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/16/2016 1259	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	38		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	0.38	J	5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.92	J	5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		102	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 MDL
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"

Client: TRC Companies, Inc.
Description: RBLK-16203
Date Sampled: 06/14/2016 1530
Date Received: 06/15/2016

Laboratory ID: RF15100-005
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/16/2016 1104	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	2.6	J	20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	0.35	J	5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: RBLK-16203
Date Sampled: 06/14/2016 1530
Date Received: 06/15/2016

Laboratory ID: RF15100-005
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/16/2016 1104	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		105	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 MDL
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"

Client: TRC Companies, Inc.
Description: TBLK-16203
Date Sampled: 06/14/2016
Date Received: 06/15/2016

Laboratory ID: RF15100-006
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/16/2016 1040	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	1.6	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.23	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.35	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.19	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.45	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.31	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.20	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.28	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.21	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.19	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.57	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.23	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.17	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.46	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.19	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.19	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.85	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.19	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.23	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.33	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.29	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.22	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.21	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.26	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.14	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.24	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.23	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.29	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.16	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.42	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.13	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.13	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.22	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.24	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 MDL
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"

Client: TRC Companies, Inc.
Description: TBLK-16203
Date Sampled: 06/14/2016
Date Received: 06/15/2016

Laboratory ID: RF15100-006
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	06/16/2016 1040	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	0.22	BJ	5.0	0.13	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.24	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.22	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.16	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.74	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		105	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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-6A
Date Sampled: 06/14/2016 1515
Date Received: 06/15/2016

Laboratory ID: RF15100-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) 9060A	1	06/20/2016 1720	AMM1		15900

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
TOC		9060A	0.24	J	1.0	0.063	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	06/16/2016 1540	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		100	8.1	ug/L	1
Benzene	71-43-2	8260B	ND		25	1.1	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	1.2	ug/L	1
Bromoform	75-25-2	8260B	ND		25	1.8	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	0.95	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		50	9.1	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	2.3	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	1.6	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	1.4	ug/L	1
Chloroform	67-66-3	8260B	1.3	J	25	1.1	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	0.95	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	1.5	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	2.8	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	1.2	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	0.85	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	2.3	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	0.95	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	0.95	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	4.3	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	3.0	J	25	0.95	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	1.2	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	1.6	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	22	J	25	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	1.7	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	1.5	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	1.5	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	1.1	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		25	1.1	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	1.3	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	0.70	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	1.2	ug/L	1

TOC Range: 0.204 - 0.262

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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-6A
Date Sampled: 06/14/2016 1515
Date Received: 06/15/2016

Laboratory ID: RF15100-007
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	06/16/2016 1540	TML		15685

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	1.2	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	1.5	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	0.80	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	2.1	ug/L	1
Styrene	100-42-5	8260B	ND		25	0.65	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	0.65	ug/L	1
Tetrachloroethene	127-18-4	8260B	750		25	1.1	ug/L	1
Toluene	108-88-3	8260B	ND		25	1.2	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	1.5	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	0.65	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	1.2	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	1.1	ug/L	1
Trichloroethene	79-01-6	8260B	3.1	J	25	0.80	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	3.7	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	2.5	ug/L	1
Xylenes (total)	1330-20-7	8260B	20	J	25	1.6	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		107	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 MDL
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"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ15900-001
Batch: 15900
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
TOC	ND		1	1.0	0.063	mg/L	06/20/2016 1536

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ15900-002
Batch: 15900
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	20	19		1	93	90-110	06/20/2016 1612

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 MDL
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: RQ15685-001
Batch: 15685
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	1.6	ug/L	06/16/2016 1009
Benzene	ND		1	5.0	0.21	ug/L	06/16/2016 1009
Bromodichloromethane	ND		1	5.0	0.23	ug/L	06/16/2016 1009
Bromoform	ND		1	5.0	0.35	ug/L	06/16/2016 1009
Bromomethane (Methyl bromide)	ND		1	5.0	0.19	ug/L	06/16/2016 1009
2-Butanone (MEK)	ND		1	10	1.8	ug/L	06/16/2016 1009
Carbon disulfide	ND		1	5.0	0.45	ug/L	06/16/2016 1009
Carbon tetrachloride	ND		1	5.0	0.31	ug/L	06/16/2016 1009
Chlorobenzene	ND		1	5.0	0.20	ug/L	06/16/2016 1009
Chloroethane	ND		1	5.0	0.28	ug/L	06/16/2016 1009
Chloroform	ND		1	5.0	0.21	ug/L	06/16/2016 1009
Chloromethane (Methyl chloride)	ND		1	5.0	0.19	ug/L	06/16/2016 1009
Cyclohexane	ND		1	5.0	0.30	ug/L	06/16/2016 1009
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.57	ug/L	06/16/2016 1009
Dibromochloromethane	ND		1	5.0	0.23	ug/L	06/16/2016 1009
1,2-Dibromoethane (EDB)	ND		1	5.0	0.17	ug/L	06/16/2016 1009
1,3-Dichlorobenzene	ND		1	5.0	0.19	ug/L	06/16/2016 1009
1,2-Dichlorobenzene	ND		1	5.0	0.46	ug/L	06/16/2016 1009
1,4-Dichlorobenzene	ND		1	5.0	0.19	ug/L	06/16/2016 1009
Dichlorodifluoromethane	ND		1	5.0	0.85	ug/L	06/16/2016 1009
1,2-Dichloroethane	ND		1	5.0	0.23	ug/L	06/16/2016 1009
1,1-Dichloroethane	ND		1	5.0	0.19	ug/L	06/16/2016 1009
trans-1,2-Dichloroethene	ND		1	5.0	0.33	ug/L	06/16/2016 1009
cis-1,2-Dichloroethene	ND		1	5.0	0.20	ug/L	06/16/2016 1009
1,1-Dichloroethene	ND		1	5.0	0.31	ug/L	06/16/2016 1009
1,2-Dichloropropane	ND		1	5.0	0.29	ug/L	06/16/2016 1009
cis-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	06/16/2016 1009
trans-1,3-Dichloropropene	ND		1	5.0	0.22	ug/L	06/16/2016 1009
Ethylbenzene	ND		1	5.0	0.21	ug/L	06/16/2016 1009
2-Hexanone	ND		1	10	0.26	ug/L	06/16/2016 1009
Isopropylbenzene	ND		1	5.0	0.14	ug/L	06/16/2016 1009
Methyl acetate	ND		1	5.0	0.24	ug/L	06/16/2016 1009
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.23	ug/L	06/16/2016 1009
4-Methyl-2-pentanone	ND		1	10	0.29	ug/L	06/16/2016 1009
Methylcyclohexane	ND		1	5.0	0.16	ug/L	06/16/2016 1009
Methylene chloride	ND		1	5.0	0.42	ug/L	06/16/2016 1009
Styrene	ND		1	5.0	0.13	ug/L	06/16/2016 1009
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.13	ug/L	06/16/2016 1009
Tetrachloroethene	ND		1	5.0	0.22	ug/L	06/16/2016 1009
Toluene	ND		1	5.0	0.24	ug/L	06/16/2016 1009
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.30	ug/L	06/16/2016 1009
1,2,4-Trichlorobenzene	0.31	J	1	5.0	0.13	ug/L	06/16/2016 1009
1,1,1-Trichloroethane	ND		1	5.0	0.24	ug/L	06/16/2016 1009
1,1,2-Trichloroethane	ND		1	5.0	0.22	ug/L	06/16/2016 1009

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 MDL
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: RQ15685-001
Batch: 15685
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.16	ug/L	06/16/2016 1009
Trichlorofluoromethane	ND		1	5.0	0.74	ug/L	06/16/2016 1009
Vinyl chloride	ND		1	2.0	0.50	ug/L	06/16/2016 1009
Xylenes (total)	ND		1	5.0	0.32	ug/L	06/16/2016 1009

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		103	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ15685-002
Batch: 15685
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	130		1	125	60-140	06/16/2016 0914
Benzene	50	54		1	108	70-130	06/16/2016 0914
Bromodichloromethane	50	54		1	108	70-130	06/16/2016 0914
Bromoform	50	43		1	86	70-130	06/16/2016 0914
Bromomethane (Methyl bromide)	50	51		1	103	60-140	06/16/2016 0914
2-Butanone (MEK)	100	130		1	129	60-140	06/16/2016 0914
Carbon disulfide	50	54		1	107	60-140	06/16/2016 0914
Carbon tetrachloride	50	57		1	113	70-130	06/16/2016 0914
Chlorobenzene	50	52		1	104	70-130	06/16/2016 0914
Chloroethane	50	55		1	109	60-140	06/16/2016 0914
Chloroform	50	54		1	107	70-130	06/16/2016 0914
Chloromethane (Methyl chloride)	50	49		1	99	60-140	06/16/2016 0914
Cyclohexane	50	57		1	113	70-130	06/16/2016 0914
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	97	70-130	06/16/2016 0914
Dibromochloromethane	50	51		1	102	70-130	06/16/2016 0914
1,2-Dibromoethane (EDB)	50	52		1	105	70-130	06/16/2016 0914
1,3-Dichlorobenzene	50	50		1	100	70-130	06/16/2016 0914
1,2-Dichlorobenzene	50	51		1	102	70-130	06/16/2016 0914
1,4-Dichlorobenzene	50	50		1	99	70-130	06/16/2016 0914
Dichlorodifluoromethane	50	47		1	93	60-140	06/16/2016 0914
1,2-Dichloroethane	50	49		1	98	70-130	06/16/2016 0914
1,1-Dichloroethane	50	58		1	116	70-130	06/16/2016 0914
trans-1,2-Dichloroethene	50	57		1	113	70-130	06/16/2016 0914
cis-1,2-Dichloroethene	50	54		1	108	70-130	06/16/2016 0914
1,1-Dichloroethene	50	58		1	115	70-130	06/16/2016 0914
1,2-Dichloropropane	50	54		1	109	70-130	06/16/2016 0914
cis-1,3-Dichloropropene	50	55		1	110	70-130	06/16/2016 0914
trans-1,3-Dichloropropene	50	52		1	103	70-130	06/16/2016 0914
Ethylbenzene	50	51		1	103	70-130	06/16/2016 0914
2-Hexanone	100	110		1	112	60-140	06/16/2016 0914
Isopropylbenzene	50	52		1	104	70-130	06/16/2016 0914
Methyl acetate	50	60		1	120	60-140	06/16/2016 0914
Methyl tertiary butyl ether (MTBE)	50	49		1	97	70-130	06/16/2016 0914
4-Methyl-2-pentanone	100	120		1	118	60-140	06/16/2016 0914
Methylcyclohexane	50	57		1	113	70-130	06/16/2016 0914
Methylene chloride	50	55		1	110	70-130	06/16/2016 0914
Styrene	50	53		1	106	70-130	06/16/2016 0914
1,1,2,2-Tetrachloroethane	50	52		1	103	70-130	06/16/2016 0914
Tetrachloroethene	50	55		1	109	70-130	06/16/2016 0914
Toluene	50	53		1	106	70-130	06/16/2016 0914
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	57		1	114	70-130	06/16/2016 0914
1,2,4-Trichlorobenzene	50	50		1	101	70-130	06/16/2016 0914
1,1,1-Trichloroethane	50	55		1	110	70-130	06/16/2016 0914
1,1,2-Trichloroethane	50	51		1	102	70-130	06/16/2016 0914

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 MDL
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: RQ15685-002
Batch: 15685
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	54		1	108	70-130	06/16/2016 0914
Trichlorofluoromethane	50	53		1	106	70-130	06/16/2016 0914
Vinyl chloride	50	51		1	102	70-130	06/16/2016 0914
Xylenes (total)	100	110		1	107	70-130	06/16/2016 0914

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

P = The RPD between two GC columns exceeds 40%

J = Estimated result < PQL and ≥ MDL

N = Recovery is out of criteria

+ = 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

Chain of Custody
and
Miscellaneous Documents

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 61839

Client: TRC	Report to Contact: Lisa Clark / Terry Hertz	Telephone No. / E-mail: 864-281-0300	Quote No.
Address: 30 Patewood Dr Ste 300	Sampler's Signature: x	Analysis (Attach list if more space is needed)	Page: 1 of 1
City: Greenville	State: SC	Zip Code: 29615	Printed Name: Will Peavyhouse	RF15100
Project Name: WPH Clemson			
Project No.: 226253.0.0 P9	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	Sealed Cooler (Y/N)	Grab	Comp	Matrix: Aqueous	Soil	Non-Aqueous	No. of Containers by Preservative Type: Total	HCl	HNO3	H2SO4	NaOH	Na2S2O3	VOCs 8260B	TOC 9060A	Remarks / Cooler I.D.
RMW-29	6-14-16	0915	G			✓			3	3					✓		
MG-05	6-14-16	1000	G			✓			3	3					✓		
RMW-28A	6-14-16	1200	G			✓			3	3					✓		
OW-04	6-14-16	1340	G			✓			4	3	1				✓	✓	
RBLK-16203	6-14-16	1530	G			✓			3	3					✓		
TBLK-16203	6-14-16					✓			2	2					✓		
OW-6A	6-14-16	1515	G			✓			4	3	1				✓		

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☐ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Relinquished by	Date	Time	Received by	Date	Time
1.		6-14-16	1641	1. TRC Storage	6-14-16	1641
2.	TRC Storage	6-15-16	1112	2. Rachel Anderson	6-15-16	1112
3.	Rachel Anderson	6-15-16	1710	3.		
4.				4. Laboratory received by: Tammy Hendrix	6/15/16	1710

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on ice (Circle): (Yes) No Ice Pack — Receipt Temp: 2.9 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-138 Effective Date: 08-01-2014

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc
Document Number: ME0018C-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: JAB / 6/15/16 Lot #: RF15100

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: 16-686 Cl strip ID: NA

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

/ 2.9 / 2.9 °C / / °C / / °C / / °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☑	No ☐		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?

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_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L. (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be ≤ 2 by _____ Date: _____

Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR# _____

Sample labels applied by: JAB Verified by: _____ Date: 6/15/16

Comments: _____

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0000.0000.000004

Lot Number: RG28015

Date Completed: 08/09/2016

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: WPH-Clemson, SC

Project Number: 226253.0000.0000.000004

Lab Report: RG28015 Shealy Environmental Services
Samples analyzed for sulfate

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Not applicable.

Method Blanks: Method blanks have no detections of sulfate.

Trip Blank: A trip blank was not collected with these samples.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS recoveries are within QC Limits. LCSD analyses were not performed.

MS/MSD: OW-05, RMW-20A, and RMW-21 were used for MS/MSD analyses of sulfate. MS/MSD recoveries and RPDs were within QC limits except as follows:

- The sulfate MS recovery for RMW-20A is above the upper QC limit. Sulfate was not detected in RMW-20A. No qualifier was assigned.
- Sulfate MS and MSD recoveries for sample RMW-21 were 1-2% below the lower QC limit. **A "j" qualifier is assigned to sulfate in RMW-21.**

Duplicates: A field duplicate was not collected with these samples.

Data review performed by: Terry Hertz; TRC Environmental Corp. ; 8/10/2016

Case Narrative
TRC Companies, Inc.
Lot Number: RG28015

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.

Sulfate by IC

Due to matrix interferences, samples -001, -009, -010, and -024 have been analyzed at a 50X dilution. The target compound is non-detect at the elevated detection limits.

Due to Matrix interferences, the first MS associated with batch 19358 recovered at 112%. The associated MSD recovered within limits at 103%. The Second MS/MSD recovered at 88% and 89% respectively indicating matrix interferences impacted the recoveries.

Sample Summary
TRC Companies, Inc.
Lot Number: RG28015

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	RMW-27A	Aqueous	07/27/2016 0945	07/28/2016
002	OW-04	Aqueous	07/27/2016 1015	07/28/2016
003	OW-05	Aqueous	07/27/2016 1045	07/28/2016
004	RMW-20	Aqueous	07/27/2016 1040	07/28/2016
005	RMW-28A	Aqueous	07/27/2016 1115	07/28/2016
006	RMW-23	Aqueous	07/27/2016 1120	07/28/2016
007	RMW-17	Aqueous	07/27/2016 1145	07/28/2016
008	RMW-17A	Aqueous	07/27/2016 1205	07/28/2016
009	OW-6A	Aqueous	07/27/2016 1325	07/28/2016
010	RMW-23B	Aqueous	07/27/2016 1355	07/28/2016
011	RMW-27B	Aqueous	07/27/2016 1425	07/28/2016
012	OW-02	Aqueous	07/27/2016 1445	07/28/2016
013	RMW-27	Aqueous	07/27/2016 1505	07/28/2016
014	RMW-20A	Aqueous	07/27/2016 1545	07/28/2016
015	RMW-02	Aqueous	07/27/2016 1635	07/28/2016
016	MG-05	Aqueous	07/27/2016 1230	07/28/2016
017	MG-05A	Aqueous	07/27/2016 1220	07/28/2016
018	RMW-21	Aqueous	07/27/2016 1310	07/28/2016
019	RMW-21A	Aqueous	07/27/2016 1340	07/28/2016
020	OW-03A	Aqueous	07/27/2016 1410	07/28/2016
021	OW-01	Aqueous	07/27/2016 1430	07/28/2016
022	RMW-18	Aqueous	07/27/2016 1450	07/28/2016
023	RMW-18A	Aqueous	07/27/2016 1510	07/28/2016
024	RMW-23A	Aqueous	07/27/2016 1540	07/28/2016

(24 samples)

Executive Summary
TRC Companies, Inc.
Lot Number: RG28015

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	OW-04	Aqueous	Sulfate	300.0	0.59	J	mg/L	6
003	OW-05	Aqueous	Sulfate	300.0	5.5		mg/L	7
004	RMW-20	Aqueous	Sulfate	300.0	19		mg/L	8
005	RMW-28A	Aqueous	Sulfate	300.0	33		mg/L	9
006	RMW-23	Aqueous	Sulfate	300.0	54		mg/L	10
007	RMW-17	Aqueous	Sulfate	300.0	110		mg/L	11
008	RMW-17A	Aqueous	Sulfate	300.0	39		mg/L	12
011	RMW-27B	Aqueous	Sulfate	300.0	41		mg/L	15
012	OW-02	Aqueous	Sulfate	300.0	130		mg/L	16
013	RMW-27	Aqueous	Sulfate	300.0	75		mg/L	17
015	RMW-02	Aqueous	Sulfate	300.0	14		mg/L	19
016	MG-05	Aqueous	Sulfate	300.0	4.4		mg/L	20
018	RMW-21	Aqueous	Sulfate	300.0	27		mg/L	22
019	RMW-21A	Aqueous	Sulfate	300.0	83		mg/L	23
020	OW-03A	Aqueous	Sulfate	300.0	0.66	J	mg/L	24
021	OW-01	Aqueous	Sulfate	300.0	110		mg/L	25
022	RMW-18	Aqueous	Sulfate	300.0	82		mg/L	26
023	RMW-18A	Aqueous	Sulfate	300.0	120		mg/L	27

(18 detections)

Client: TRC Companies, Inc.
Description: RMW-27A
Date Sampled: 07/27/2016 0945
Date Received: 07/28/2016

Laboratory ID: RG28015-001
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Sulfate) 300.0	50	08/05/2016 1106	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		50	14	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 07/27/2016 1015
Date Received: 07/28/2016

Laboratory ID: RG28015-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/03/2016 2337	TAF		19187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	0.59	J	1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-05
Date Sampled: 07/27/2016 1045
Date Received: 07/28/2016

Laboratory ID: RG28015-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/04/2016 0001	TAF		19187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	5.5		1.0	0.28	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-20
Date Sampled: 07/27/2016 1040
Date Received: 07/28/2016

Laboratory ID: RG28015-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/04/2016 0113	TAF		19187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	19		1.0	0.28	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-28A
Date Sampled: 07/27/2016 1115
Date Received: 07/28/2016

Laboratory ID: RG28015-005
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/04/2016 0137	TAF		19187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	33		1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-23
Date Sampled: 07/27/2016 1120
Date Received: 07/28/2016

Laboratory ID: RG28015-006
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Sulfate) 300.0	50	08/05/2016 1130	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	54		50	14	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-17
Date Sampled: 07/27/2016 1145
Date Received: 07/28/2016

Laboratory ID: RG28015-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	08/04/2016 0225	TAF		19187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	110		5.0	1.4	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-17A
Date Sampled: 07/27/2016 1205
Date Received: 07/28/2016

Laboratory ID: RG28015-008
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/04/2016 0338	TAF		19187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	39		1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-6A
Date Sampled: 07/27/2016 1325
Date Received: 07/28/2016

Laboratory ID: RG28015-009
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Sulfate) 300.0	50	08/05/2016 1154	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		50	14	mg/L	2

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

Client: TRC Companies, Inc.
Description: RMW-23B
Date Sampled: 07/27/2016 1355
Date Received: 07/28/2016

Laboratory ID: RG28015-010
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Sulfate) 300.0	50	08/05/2016 1218	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		50	14	mg/L	2

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

Client: TRC Companies, Inc.
Description: RMW-27B
Date Sampled: 07/27/2016 1425
Date Received: 07/28/2016

Laboratory ID: RG28015-011
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Sulfate) 300.0	1	08/05/2016 1242	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	41		1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-02
Date Sampled: 07/27/2016 1445
Date Received: 07/28/2016

Laboratory ID: RG28015-012
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	08/04/2016 0514	TAF		19187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	130		5.0	1.4	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-27
Date Sampled: 07/27/2016 1505
Date Received: 07/28/2016

Laboratory ID: RG28015-013
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	08/05/2016 1306	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	75		5.0	1.4	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-20A
Date Sampled: 07/27/2016 1545
Date Received: 07/28/2016

Laboratory ID: RG28015-014
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/05/2016 1330	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-02
Date Sampled: 07/27/2016 1635
Date Received: 07/28/2016

Laboratory ID: RG28015-015
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/05/2016 1755	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	14		1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: MG-05
Date Sampled: 07/27/2016 1230
Date Received: 07/28/2016

Laboratory ID: RG28015-016
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/05/2016 1554	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	4.4		1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: MG-05A
Date Sampled: 07/27/2016 1220
Date Received: 07/28/2016

Laboratory ID: RG28015-017
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/05/2016 1618	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-21
Date Sampled: 07/27/2016 1310
Date Received: 07/28/2016

Laboratory ID: RG28015-018
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/05/2016 1642	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	27		1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-21A
Date Sampled: 07/27/2016 1340
Date Received: 07/28/2016

Laboratory ID: RG28015-019
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/05/2016 1819	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	83		1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-03A
Date Sampled: 07/27/2016 1410
Date Received: 07/28/2016

Laboratory ID: RG28015-020
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/05/2016 1843	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	0.66	J	1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-01
Date Sampled: 07/27/2016 1430
Date Received: 07/28/2016

Laboratory ID: RG28015-021
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/05/2016 1955	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	110		1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-18
Date Sampled: 07/27/2016 1450
Date Received: 07/28/2016

Laboratory ID: RG28015-022
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/05/2016 2019	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	82		1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-18A
Date Sampled: 07/27/2016 1510
Date Received: 07/28/2016

Laboratory ID: RG28015-023
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	08/05/2016 2043	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	120		1.0	0.28	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-23A
Date Sampled: 07/27/2016 1540
Date Received: 07/28/2016

Laboratory ID: RG28015-024
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	50	08/05/2016 2107	TAF		19358

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		50	14	mg/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 MDL
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"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ19187-001
Batch: 19187
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.28	mg/L	08/03/2016 1602

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 MDL
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

Inorganic non-metals - LCS

Sample ID: RQ19187-002
Batch: 19187
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	21		1	106	90-110	08/03/2016 1626

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 MDL
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

Inorganic non-metals - MS

Sample ID: RG28015-003MS
Batch: 19187
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	5.5	20	26		1	101	90-110	08/04/2016 0025

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 MDL
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

Inorganic non-metals - MSD

Sample ID: RG28015-003MD
Batch: 19187
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	5.5	20	25		1	100	1.2	90-110	20	08/04/2016 0049

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 MDL
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

Inorganic non-metals - MB

Sample ID: RQ19358-001
Batch: 19358
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.28	mg/L	08/05/2016 0909

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ19358-002
Batch: 19358
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	21		1	107	90-110	08/05/2016 0934

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 MDL
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

Inorganic non-metals - MS

Sample ID: RG28015-014MS
Batch: 19358
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	ND	20	22	N	1	112	90-110	08/05/2016 1354

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 MDL
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

Inorganic non-metals - MSD

Sample ID: RG28015-014MD
Batch: 19358
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	ND	20	21		1	103	8.4	90-110	20	08/05/2016 1506

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MS

Sample ID: RG28015-018MS
Batch: 19358
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	27	20	45	N	1	88	90-110	08/05/2016 1706

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 MDL
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

Inorganic non-metals - MSD

Sample ID: RG28015-018MD
Batch: 19358
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	27	20	45	N	1	89	0.51	90-110	20	08/05/2016 1730

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 MDL
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

Chain of Custody
and
Miscellaneous Documents

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 53233

Client	Report to Contact	Telephone No. / E-mail	Quote No.
TRC	Lisa Clark	864-420-8577 / LClark@trcsolutions.com	

Address: 30 Peterwood Drive, Peterwood Ing Suite 200
City: Greenville | State: SC | Zip Code: 29615
Project Name: WPH Clemson
Project No.: 226253.0004
P.O. No.:
Sampler's Signature: X
Printed Name: David Szynal
Analysis (Attach list if more space is needed)
Page 1 of 3

RG28015

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	# of Containers	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No of Containers by Preservative Type: Unpres	HNO3	H2SO4	HCl	NaOH	ZnAc/NaOH	Sulfate	Remarks / Cooler I.D.
RMW-27A	7-27-16	0945	G	X			1						X	
OW-04		1015	G	X			1						X	
OW-05		1045	G	X			1						X	
RMW-20		1040	G	X			1						X	
RMW-28A		1115	G	X			1						X	
RMW-23		1120	G	X			1						X	
RMW-17		1145	G	X			1						X	
RMW-17A		1205	G	X			1						X	
OW-06A		1325	G	X			1						X	
RMW-23B	7-27-2016	1355	G	X			1						X	

Turn Around Time Required (Prior lab approval required for expedited TAT.): [X] Standard [ ] Rush (Specify)

Sample Disposal: [ ] Return to Client [X] Disposal by Lab

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison [ ] Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: David Szynal	7-28-2016	0830	1. Received by: TRC storage Frig	7-28-2016	0830
2. Relinquished by: TRC storage Frig / David Szynal	7-28-2016	0915	2. Received by: Edward Hanna	7-28-16	9:15
3. Relinquished by: Edward Hanna	7-28-16	13:05	3. Received by:	Date	Time
4. Relinquished by:	Date	Time	4. Laboratory received by:	Date 7/28/16	Time 1305

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack
Receipt Temp. 3.1 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

SHEALY **Chain of Custody Record**

Number 58680

Client: TRC	Report to Contact: Lisa Clark	Telephone No. / E-mail: 864-420-8577/l.clark@trcsolutions.com	Quote No.
Address: 30 Patewood Drive, Patewood one, Suite 300	Sampler's Signature: x	Analysis (Attach list if more space is needed)	Page 2 of 3
City: Greenville	State: SC	Zip Code: 29615	
Project Name: WPH Clemson	Printed Name: David Szynal		RG28015
Project No.: 226253.0.0.4	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	Grab / Composite	Matrix: Aqueous	Solid	Non-Aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc / NaOH	Sulfate	Remarks / Cooler I.D.
RMW-27B	7-27-2016	1425	G	X			1						X	
OW-02		1495	G	X			1						X	
RMW-27		1505	G	X			1						X	
RMW-20A		1545	G	X			1						X	
RMW-02		1635	G	X			1						X	
MG-05		1230	G	X			1						X	
MG-05A		1220	G	X			1						X	
RMW-21		1310	G	X			1						X	
RMW-21A		1340	G	X			1						X	
OW-03A	7-27-2016	1410	G	X			1						X	

Turn Around Time Required (Prior lab approval required for expedited TAT.): X Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client X Disposal by Lab

Possible Hazard Identification: X Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify):

	Date	Time
1. Relinquished by: David Szynal	7-28-2016	0830
2. Relinquished by: TRC Storage Frig / David Szynal	7-28-2016	0915
3. Relinquished by: Edward Hanson	7-28-16	13:05
4. Relinquished by:	Date	Time

	Date	Time
1. Received by: TRC Storage Frig	7-28-2016	0830
2. Received by: Edward Hanson	7-28-16	9:15
3. Received by:	Date	Time
4. Laboratory received by:	7/28/16	1305

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack
Receipt Temp. 3.1 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

SHEALY Chain of Custody Record

Number 58681

Client TRC	**Report to Contact** Lisa Clark	**Telephone No. / E-mail** 864-420-8577 / lclark@trcsolutions.com	**Quote No.**
Address 30 Patewood Drive, Patewood One, Suite 300	**Sampler's Signature** x Dal Aal	**Analysis (Attach list if more space is needed)**	**Page** 3 of 3
City Greenville **State** SC **Zip Code** 29615	**Printed Name** David Szymal		RG28015
Project Name WPH Clemson			
Project No. 226253.0.0.4	**P.O. No.**		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Matrix: Aqueous	Soil	Non-Aqueous	No of Containers by Preservative Type: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc NaOH	Sulfate	Remarks / Cooler I.D.
OW-01	7-27-2016	1430	G	X			1						X	
RMW-18	"	1450	G	X			1						X	
RMW-18A	"	1510	G	X			1						X	
RMW-23A	7-27-2016	1540	G	X			1						X	

Turn Around Time Required (Prior lab approval required for expedited TAT.) X Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client X Disposal by Lab

Possible Hazard Identification X Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time
1. Relinquished by: Dal Aal	7-28-2016	0830
2. Relinquished by: TRC Storage Frig / David Szymal	7-28-2016	0915
3. Relinquished by: Edward Hamby	7-28-16	1305
4. Relinquished by:	Date	Time
1. Received by: TRC Storage Frig	7-28-2016	0830
2. Received by: Edward Hamby	7-28-16	9:15
3. Received by:	Date	Time
4. Laboratory received by:	7/28/16	1305

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) (Yes) No Ice Pack Receipt Temp: 3.1 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: mcm 072816 Lot #: R728015

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?
pH strip ID: _____ Cl strip ID: _____ Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: 3.3 °C / / °C / / °C / / °C Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☑	No ☐		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☐	No ☐	NA ☑	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?
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_2SO_4, HNO3, HCl, NaOH) using SR # _____.			
Sample(s) _____ were received with bubbles >6 mm in diameter.			
Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.			
SC Drinking Water Project Sample(s) pH verified to be > 2 by _____ Date: _____ Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR# _____			
Sample labels applied by: mcm Verified by: _____ Date: 7/28/16			

Comments: _____

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0000.0000.000004

Lot Number: RI09034

Date Completed: 09/21/2016

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: WPH-Clemson

Project Number: 226253.0000.0000.000004

Lab Report: RI09034 Shealy Environmental Services
Samples analyzed for sulfate

Chain of Custody, Sample Temperature, Sample Preservation: Chains of custody (CoCs) were signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Not applicable to sulfate analyses.

Method Blanks: Method blanks have no detections of targeted analytes.

Trip Blank, Field Blank, Equipment Rinse Blank: Trip, field, and rinsate blanks were not collected with these samples.

LCS/LCSD: LCS recoveries are within QC Limits. LCSD analyses were not performed.

MS/MSD: OW-04, OW-05, and RMW-20A were used for sulfate MS/MSD analyses. MS/MSD recoveries and RPDs were within QC limits.

Duplicates: A field duplicate was not collected with these samples.

Other: The report narrative states that samples OW-06A, RMW-23, RMW-23A, RMW-23B, and RMW-27A were diluted prior to analysis because of matrix interference.

No flags assigned

Data review performed by: Terry Hertz; TRC Environmental Corp. ; 10/3/2016

Case Narrative
TRC Companies, Inc.
Lot Number: RI09034

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.

Sulfate by IC

Due to matrix interferences, samples -001, -003, -015, -016, and -017 were all analyzed at dilutions. Sulfate has been reported as non-detect at these dilutions.

Sample Summary
TRC Companies, Inc.
Lot Number: RI09034

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	RMW-27A	Aqueous	09/06/2016 1435	09/09/2016
002	OW-05	Aqueous	09/07/2016 0935	09/09/2016
003	RMW-23	Aqueous	09/07/2016 1015	09/09/2016
004	OW-04	Aqueous	09/07/2016 1050	09/09/2016
005	MG-05	Aqueous	09/07/2016 1120	09/09/2016
006	RMW-28A	Aqueous	09/07/2016 1150	09/09/2016
007	RMW-20	Aqueous	09/07/2016 1235	09/09/2016
008	RMW-27B	Aqueous	09/07/2016 1352	09/09/2016
009	OW-03A	Aqueous	09/07/2016 1421	09/09/2016
010	RMW-17	Aqueous	09/07/2016 1513	09/09/2016
011	RMW-17A	Aqueous	09/07/2016 1538	09/09/2016
012	RMW-21	Aqueous	09/07/2016 1622	09/09/2016
013	RMW-21A	Aqueous	09/07/2016 1702	09/09/2016
014	MG-05A	Aqueous	09/07/2016 1741	09/09/2016
015	OW-06A	Aqueous	09/07/2016 1814	09/09/2016
016	RMW-23B	Aqueous	09/07/2016 1853	09/09/2016
017	RMW-23A	Aqueous	09/07/2016 1930	09/09/2016
018	RMW-18	Aqueous	09/08/2016 0858	09/09/2016
019	RMW-18A	Aqueous	09/08/2016 0927	09/09/2016
020	OW-01	Aqueous	09/08/2016 0955	09/09/2016
021	OW-02	Aqueous	09/08/2016 1031	09/09/2016
022	RMW-20A	Aqueous	09/08/2016 1104	09/09/2016
023	RMW-27	Aqueous	09/08/2016 1138	09/09/2016
024	RMW-02	Aqueous	09/08/2016 1417	09/09/2016

(24 samples)

Executive Summary
TRC Companies, Inc.
Lot Number: RI09034

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
005	MG-05	Aqueous	Sulfate	300.0	1.7		mg/L	9
006	RMW-28A	Aqueous	Sulfate	300.0	30		mg/L	10
007	RMW-20	Aqueous	Sulfate	300.0	8.2		mg/L	11
008	RMW-27B	Aqueous	Sulfate	300.0	33		mg/L	12
010	RMW-17	Aqueous	Sulfate	300.0	17		mg/L	14
011	RMW-17A	Aqueous	Sulfate	300.0	37		mg/L	15
012	RMW-21	Aqueous	Sulfate	300.0	24		mg/L	16
013	RMW-21A	Aqueous	Sulfate	300.0	85		mg/L	17
018	RMW-18	Aqueous	Sulfate	300.0	86		mg/L	22
019	RMW-18A	Aqueous	Sulfate	300.0	110		mg/L	23
020	OW-01	Aqueous	Sulfate	300.0	120		mg/L	24
021	OW-02	Aqueous	Sulfate	300.0	130		mg/L	25
023	RMW-27	Aqueous	Sulfate	300.0	42		mg/L	27
024	RMW-02	Aqueous	Sulfate	300.0	12		mg/L	28

(14 detections)

Client: TRC Companies, Inc.
Description: RMW-27A
Date Sampled: 09/06/2016 1435
Date Received: 09/09/2016

Laboratory ID: RI09034-001
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	50	09/17/2016 1629	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		50	mg/L	1

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

Client: TRC Companies, Inc.
Description: OW-05
Date Sampled: 09/07/2016 0935
Date Received: 09/09/2016

Laboratory ID: RI09034-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	09/17/2016 1641	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-23
Date Sampled: 09/07/2016 1015
Date Received: 09/09/2016

Laboratory ID: RI09034-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	50	09/17/2016 1742	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		50	mg/L	1

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

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 09/07/2016 1050
Date Received: 09/09/2016

Laboratory ID: RI09034-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	09/17/2016 1754	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: MG-05
Date Sampled: 09/07/2016 1120
Date Received: 09/09/2016

Laboratory ID: RI09034-005
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	09/17/2016 1830	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	1.7		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-28A
Date Sampled: 09/07/2016 1150
Date Received: 09/09/2016

Laboratory ID: RI09034-006
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	09/17/2016 1842	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	30		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-20
Date Sampled: 09/07/2016 1235
Date Received: 09/09/2016

Laboratory ID: RI09034-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	09/17/2016 1854	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	8.2		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-27B
Date Sampled: 09/07/2016 1352
Date Received: 09/09/2016

Laboratory ID: RI09034-008
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	09/17/2016 1906	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	33		5.0	mg/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"

Client: TRC Companies, Inc.
Description: OW-03A
Date Sampled: 09/07/2016 1421
Date Received: 09/09/2016

Laboratory ID: RI09034-009
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	09/17/2016 1918	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-17
Date Sampled: 09/07/2016 1513
Date Received: 09/09/2016

Laboratory ID: RI09034-010
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	09/17/2016 1930	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	17		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-17A
Date Sampled: 09/07/2016 1538
Date Received: 09/09/2016

Laboratory ID: RI09034-011
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	09/17/2016 2007	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	37		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-21
Date Sampled: 09/07/2016 1622
Date Received: 09/09/2016

Laboratory ID: RI09034-012
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	09/17/2016 2019	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	24		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-21A
Date Sampled: 09/07/2016 1702
Date Received: 09/09/2016

Laboratory ID: RI09034-013
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	09/17/2016 2031	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	85		5.0	mg/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"

Client: TRC Companies, Inc.
Description: MG-05A
Date Sampled: 09/07/2016 1741
Date Received: 09/09/2016

Laboratory ID: RI09034-014
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	09/17/2016 2043	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: OW-06A
Date Sampled: 09/07/2016 1814
Date Received: 09/09/2016

Laboratory ID: RI09034-015
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	50	09/17/2016 2055	SLU		22373

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		50	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-23B
Date Sampled: 09/07/2016 1853
Date Received: 09/09/2016

Laboratory ID: RI09034-016
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	50	09/17/2016 2143	SLU		22375

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		50	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-23A
Date Sampled: 09/07/2016 1930
Date Received: 09/09/2016

Laboratory ID: RI09034-017
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	50	09/17/2016 2155	SLU		22375

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		50	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-18
Date Sampled: 09/08/2016 0858
Date Received: 09/09/2016

Laboratory ID: RI09034-018
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	09/17/2016 2207	SLU		22375

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	86		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-18A
Date Sampled: 09/08/2016 0927
Date Received: 09/09/2016

Laboratory ID: RI09034-019
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	09/17/2016 2220	SLU		22375

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	110		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: OW-01
Date Sampled: 09/08/2016 0955
Date Received: 09/09/2016

Laboratory ID: RI09034-020
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	09/17/2016 2232	SLU		22375

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	120		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: OW-02
Date Sampled: 09/08/2016 1031
Date Received: 09/09/2016

Laboratory ID: RI09034-021
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	09/17/2016 2244	SLU		22375

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	130		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-20A
Date Sampled: 09/08/2016 1104
Date Received: 09/09/2016

Laboratory ID: RI09034-022
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	09/17/2016 2256	SLU		22375

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-27
Date Sampled: 09/08/2016 1138
Date Received: 09/09/2016

Laboratory ID: RI09034-023
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	09/17/2016 2356	SLU		22375

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	42		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-02
Date Sampled: 09/08/2016 1417
Date Received: 09/09/2016

Laboratory ID: RI09034-024
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	09/18/2016 0008	SLU		22375

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	12		1.0	mg/L	1

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

QC Summary

Inorganic non-metals - MB

Sample ID: RQ22373-001
Batch: 22373
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfate	ND		1	1.0	mg/L	09/17/2016 1505

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ22373-002
Batch: 22373
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	19		1	97	90-110	09/17/2016 1517

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

Inorganic non-metals - MS

Sample ID: RI09034-002MS
Batch: 22373
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	ND	20	21		1	104	90-110	09/17/2016 1654

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MSD

Sample ID: RI09034-002MD
Batch: 22373
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	ND	20	21		1	104	0.11	90-110	20	09/17/2016 1706

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MS

Sample ID: RI09034-004MS
Batch: 22373
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	ND	20	19		1	96	90-110	09/17/2016 1806

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MSD

Sample ID: RI09034-004MD
Batch: 22373
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	ND	20	20		1	100	3.6	90-110	20	09/17/2016 1818

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MB

Sample ID: RQ22375-001
Batch: 22375
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfate	ND		1	1.0	mg/L	09/17/2016 2119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ22375-002
Batch: 22375
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	19		1	97	90-110	09/17/2016 2131

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

Inorganic non-metals - MS

Sample ID: RI09034-022MS
Batch: 22375
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	ND	20	19		1	97	90-110	09/17/2016 2332

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MSD

Sample ID: RI09034-022MD
Batch: 22375
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	ND	20	20		1	98	0.85	90-110	20	09/17/2016 2344

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Chain of Custody
and
Miscellaneous Documents

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

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 64385

Client: TRC	Report to Contact: Lisa Clark	Telephone No. / E-mail: (864) 420-8577	Quote No.
Address: 30 Patewood Dr. Suite 300	Sampler's Signature: X	Analysis (Attach list if more space is needed)	Page 1 of 3
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Benjamin Medlin		RI09034
Project Name: WPH Clemson			
Project No.: 226253.0.0	P.O. No.: 95420		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Collected (Composite / Grab)	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No. of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Sulfate	Remarks / Cooler I.D.
RMW-27A	9.6.16	1435	G	x			1						x	
OW-05	9.7.16	0935	G	x			1						x	
RMW-23	9.7.16	1015	G	x			1						x	
OW-04	9.7.16	1050	G	x			1						x	
MG-05	9.7.16	1120	G	x			1						x	
RMW-28A	9.7.16	1150	G	x			1						x	
RMW-20	9.7.16	1235	G	x			1						x	
RMW-27B	9.7.16	1352	G	x			1						x	
OW-03A	9.7.16	1421	G	x			1						x	
RMW-17	9.7.16	1513	G	x			1						x	

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☒ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time
1. Relinquished by	9.9.16	0900
2. Relinquished by	9-9-16	0948
3. Relinquished by	9.9.16	1534
4. Relinquished by	Date	Time

	Date	Time
1. Received by: TRC Sample Storage	9.9.16	0900
2. Received by:	9.9.16	948
3. Received by	Date	Time
4. Laboratory received by	9.9.16	1534

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Circle): (Yes) No Ice Pack — Receipt Temp. 1-8 °C — TB

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 09-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

SHEALY Chain of Custody Record

Number 64386

Client	Report to Contact	Telephone No. / E-mail	Quote No.
TRC	Lisa Clark		

Address	Sampler's Signature	Analysis (Attach list if more space is needed)	Page 2 of 3
30 Patewood Dr. Suite 300	X		

City	State	Zip Code	Printed Name
Greenville	SC	29615	Benjamin Medlin

Project Name	Project No.	P.O. No.
WPH Clemson	226253.0.0	

RI09034

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab/Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	Sodium Hydroxide	Analysis: Sulfate	Remarks / Cooler I.D.
RMW-17A	9.7.16	1538	G	x			1						x	
RMW-21	9.7.16	1622	G	x			1						x	
RMW-21A	9.7.16	1702	G	x			1						x	
MG-05A	9.7.16	1741	G	x			1						x	
OW-06A	9.7.16	1814	G	x			1						x	
RMW-23B	9.7.16	1853	G	x			1						x	
RMW-23A	9.7.16	1930	G	x			1						x	
RMW-18	9.8.16	0858	G	x			1						x	
RMW-18A	9.8.16	0927	G	x			1						x	
OW-01	9.8.16	0955	G	x			1						x	

Turn Around Time Required (Prior lab approval required for expedited TAT.)
☑ Standard ☐ Rush (Specify)

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	9.9.16	0900	1. Received by: TRC Sample Storage	9.9.16	0900
2. Relinquished by	9-9-16	0945	2. Received by	9.9.16	945
3. Relinquished by	9.9.16	1534	3. Received by	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by	9.9.16	1534

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) Yes No Ice Pack
Receipt Temp. 1.8 °C TB

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

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

SHEALY ENVIRONMENTAL SERVICES, INC.

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

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 64387

Client: TRC	Report to Contact: Lisa Clark	Telephone No. / E-mail:	Quote No.:
Address: 30 Patewood Dr. Suite 300	Sampler's Signature: X	Analysis (Attach list if more space is needed): Sulfate	Page 3 of 3
City: Greenville	State: SC	Zip Code: 29615	Printed Name: Benjamin Medlin		RL 09034 Laboratory Lot Number
Project Name: 226253.0.0					
Project No.: WPH Clemson	P.O. No.				

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab / Composite	Matrix: Aqueous	Matrix: Soil	Matrix: Non-Aqueous	No. of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	Soda Ash	Sulfate	Remarks / Cooler I.D.
OW-02	9.8.16	1031	G	X			1						X	
RMW-20A	9.8.16	1104	G	X			1						X	
RMW-27	9.8.16	1138	G	X			1						X	
RMW-02	9.8.16	1417	G	X			1						X	

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☒ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	9.9.16	0900	1. Received by: TRC Sample Storage	9.9.16	0900
2. Relinquished by	9-9-16	0945	2. Received by	9.9.16	945
3. Relinquished by	9.9.16	1834	3. Received by	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by	9-9-16	1534

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on ice (Circle) Yes / No Ice Pack — Receipt Temp. 1.8 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-135 Effective Date: 08-01-2014

Shealy Environmental Services, Inc.
Document Number: ME000180-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: ECA 9/9/16 Lot #: RE09034

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☐	2. If custody seals were present, were they intact and unbroken?
pH strip ID: _____ Cl strip ID: _____ Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: 1-8 1-8 °C / / °C / / °C / / °C Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: G IR Gun Correction Factor: 0 °C Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☐	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☐	No ☐	NA ☑	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☐		22. Was the quote number used taken from the container label?

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_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be ≥ 2 by _____ Date: _____

Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR# _____

Sample labels applied by: ECA Verified by: _____ Date: 9-9-16

Comments: _____

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0.0.5

Lot Number: RK21042

Date Completed: 12/01/2016

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: WestpointHome - Clemson, SC

Project Number: 226253.0000.0000.000005

Lab Report: RK21042 Shealy Environmental Services
Samples analyzed for sulfate, sulfide, VOCs, TOC, potassium, and dissolved gases

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Recoveries were within QC limits.

Method Blanks: Method blanks have no detections of targeted analytes.

Trip Blank: TBLK-16402 had no detections of targeted analytes.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS recoveries are within QC Limits. LCSD analyses were not performed.

MS/MSD: MS/MSD analyses were not performed.

Duplicates: A field duplicate was not collected with these samples.

No flags assigned

Data review performed by: Terry Hertz; TRC Environmental Corp. ; 12/5/2016

Case Narrative
TRC Companies, Inc.
Lot Number: RK21042

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.

Sulfate

Due to matrix interferences, sample -002 has been analyzed at a 10X dilution. The target compound is non-detect at this dilution.

Sample Summary
TRC Companies, Inc.
Lot Number: RK21042

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	TBLK-16402	Aqueous	11/15/2016	11/21/2016
002	RMW-23	Aqueous	11/15/2016 1525	11/21/2016
003	RMW-23	Aqueous	11/15/2016 1645	11/21/2016

(3 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: RK21042

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	RMW-23	Aqueous	TOC	9060A	990		mg/L	7
002	RMW-23	Aqueous	2-Butanone (MEK)	8260B	460		ug/L	7
002	RMW-23	Aqueous	Methane	RSK - 175	5100		ug/L	8
002	RMW-23	Aqueous	Potassium	6020B	120000		ug/L	9

(4 detections)

Client: TRC Companies, Inc.
Description: TBLK-16402
Date Sampled: 11/15/2016
Date Received: 11/21/2016

Laboratory ID: RK21042-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/26/2016 1035	TML		27804

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		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	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"

Client: TRC Companies, Inc.
Description: TBLK-16402
Date Sampled: 11/15/2016
Date Received: 11/21/2016

Laboratory ID: RK21042-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/26/2016 1035	TML		27804

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		87	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"

Client: TRC Companies, Inc.
Description: RMW-23
Date Sampled: 11/15/2016 1525
Date Received: 11/21/2016

Laboratory ID: RK21042-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	10	11/23/2016 0037	TAF		27704
1		(TOC) 9060A	10	11/25/2016 2338	DMA		27734

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		10	mg/L	1
TOC		9060A	990		10	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	11/26/2016 1732	TML		27804

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		200	ug/L	1
Benzene	71-43-2	8260B	ND		50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	ug/L	1
Bromoform	75-25-2	8260B	ND		50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	460		100	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	ug/L	1
Chloroform	67-66-3	8260B	ND		50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	ug/L	1

TOC Range: 97.879 - 100.19

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

Client: TRC Companies, Inc.
Description: RMW-23
Date Sampled: 11/15/2016 1525
Date Received: 11/21/2016

Laboratory ID: RK21042-002
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	11/26/2016 1732	TML		27804

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	ug/L	1
Styrene	100-42-5	8260B	ND		50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		50	ug/L	1
Toluene	108-88-3	8260B	ND		50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	ug/L	1
Trichloroethene	79-01-6	8260B	ND		50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		98	70-130

Dissolved Gases

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		RSK - 175	1	11/28/2016 1704	JM1		27923
2		RSK - 175	5	11/28/2016 2203	JM1		27923

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethane	74-84-0	RSK - 175	ND		10	ug/L	1
Ethene	74-85-1	RSK - 175	ND		10	ug/L	1
Methane	74-82-8	RSK - 175	5100		50	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"

Client: TRC Companies, Inc.
Description: RMW-23
Date Sampled: 11/15/2016 1525
Date Received: 11/21/2016

Laboratory ID: RK21042-002
Matrix: Aqueous

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	11/29/2016 0626	DDD	11/22/2016 0923	27469

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	120000		400	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"

Client: TRC Companies, Inc.
Description: RMW-23
Date Sampled: 11/15/2016 1645
Date Received: 11/21/2016

Laboratory ID: RK21042-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	(Sulfide)	SM 4500-S2 F-2011	1	10/22/2016 1351	CLM		27512

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	mg/L	1

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

QC Summary

Inorganic non-metals - MB

Sample ID: RQ27512-001
Batch: 27512
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfide	ND		1	1.0	mg/L	11/22/2016 1351

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ27512-002
Batch: 27512
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	10	9.1		1	91	80-120	11/22/2016 1351

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MB

Sample ID: RQ27704-001
Batch: 27704
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfate	ND		1	1.0	mg/L	11/22/2016 1900

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ27704-002
Batch: 27704
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	22		1	108	90-110	11/22/2016 1912

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

Inorganic non-metals - MB

Sample ID: RQ27734-001
Batch: 27734
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
TOC	ND		1	1.0	mg/L	11/25/2016 2058

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ27734-002
Batch: 27734
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	20	19		1	93	90-110	11/25/2016 2129

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: RQ27804-001
Batch: 27804
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/26/2016 1007
Benzene	ND		1	5.0	ug/L	11/26/2016 1007
Bromodichloromethane	ND		1	5.0	ug/L	11/26/2016 1007
Bromoform	ND		1	5.0	ug/L	11/26/2016 1007
Bromomethane (Methyl bromide)	ND		1	5.0	ug/L	11/26/2016 1007
2-Butanone (MEK)	ND		1	10	ug/L	11/26/2016 1007
Carbon disulfide	ND		1	5.0	ug/L	11/26/2016 1007
Carbon tetrachloride	ND		1	5.0	ug/L	11/26/2016 1007
Chlorobenzene	ND		1	5.0	ug/L	11/26/2016 1007
Chloroethane	ND		1	5.0	ug/L	11/26/2016 1007
Chloroform	ND		1	5.0	ug/L	11/26/2016 1007
Chloromethane (Methyl chloride)	ND		1	5.0	ug/L	11/26/2016 1007
Cyclohexane	ND		1	5.0	ug/L	11/26/2016 1007
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/L	11/26/2016 1007
Dibromochloromethane	ND		1	5.0	ug/L	11/26/2016 1007
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/L	11/26/2016 1007
1,4-Dichlorobenzene	ND		1	5.0	ug/L	11/26/2016 1007
1,2-Dichlorobenzene	ND		1	5.0	ug/L	11/26/2016 1007
1,3-Dichlorobenzene	ND		1	5.0	ug/L	11/26/2016 1007
Dichlorodifluoromethane	ND		1	5.0	ug/L	11/26/2016 1007
1,2-Dichloroethane	ND		1	5.0	ug/L	11/26/2016 1007
1,1-Dichloroethane	ND		1	5.0	ug/L	11/26/2016 1007
trans-1,2-Dichloroethene	ND		1	5.0	ug/L	11/26/2016 1007
cis-1,2-Dichloroethene	ND		1	5.0	ug/L	11/26/2016 1007
1,1-Dichloroethene	ND		1	5.0	ug/L	11/26/2016 1007
1,2-Dichloropropane	ND		1	5.0	ug/L	11/26/2016 1007
trans-1,3-Dichloropropene	ND		1	5.0	ug/L	11/26/2016 1007
cis-1,3-Dichloropropene	ND		1	5.0	ug/L	11/26/2016 1007
Ethylbenzene	ND		1	5.0	ug/L	11/26/2016 1007
2-Hexanone	ND		1	10	ug/L	11/26/2016 1007
Isopropylbenzene	ND		1	5.0	ug/L	11/26/2016 1007
Methyl acetate	ND		1	5.0	ug/L	11/26/2016 1007
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/L	11/26/2016 1007
4-Methyl-2-pentanone	ND		1	10	ug/L	11/26/2016 1007
Methylcyclohexane	ND		1	5.0	ug/L	11/26/2016 1007
Methylene chloride	ND		1	5.0	ug/L	11/26/2016 1007
Styrene	ND		1	5.0	ug/L	11/26/2016 1007
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/L	11/26/2016 1007
Tetrachloroethene	ND		1	5.0	ug/L	11/26/2016 1007
Toluene	ND		1	5.0	ug/L	11/26/2016 1007
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/L	11/26/2016 1007
1,2,4-Trichlorobenzene	ND		1	5.0	ug/L	11/26/2016 1007
1,1,1-Trichloroethane	ND		1	5.0	ug/L	11/26/2016 1007
1,1,2-Trichloroethane	ND		1	5.0	ug/L	11/26/2016 1007

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ27804-001
Batch: 27804
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/L	11/26/2016 1007
Trichlorofluoromethane	ND		1	5.0	ug/L	11/26/2016 1007
Vinyl chloride	ND		1	2.0	ug/L	11/26/2016 1007
Xylenes (total)	ND		1	5.0	ug/L	11/26/2016 1007

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ27804-002
Batch: 27804
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	93		1	93	60-140	11/26/2016 0915
Benzene	50	52		1	103	70-130	11/26/2016 0915
Bromodichloromethane	50	50		1	101	70-130	11/26/2016 0915
Bromoform	50	46		1	93	70-130	11/26/2016 0915
Bromomethane (Methyl bromide)	50	51		1	103	60-140	11/26/2016 0915
2-Butanone (MEK)	100	100		1	100	60-140	11/26/2016 0915
Carbon disulfide	50	42		1	84	60-140	11/26/2016 0915
Carbon tetrachloride	50	47		1	94	70-130	11/26/2016 0915
Chlorobenzene	50	49		1	98	70-130	11/26/2016 0915
Chloroethane	50	52		1	103	60-140	11/26/2016 0915
Chloroform	50	49		1	97	70-130	11/26/2016 0915
Chloromethane (Methyl chloride)	50	49		1	98	60-140	11/26/2016 0915
Cyclohexane	50	41		1	81	70-130	11/26/2016 0915
1,2-Dibromo-3-chloropropane (DBCP)	50	50		1	101	70-130	11/26/2016 0915
Dibromochloromethane	50	52		1	103	70-130	11/26/2016 0915
1,2-Dibromoethane (EDB)	50	49		1	97	70-130	11/26/2016 0915
1,4-Dichlorobenzene	50	49		1	97	70-130	11/26/2016 0915
1,2-Dichlorobenzene	50	49		1	98	70-130	11/26/2016 0915
1,3-Dichlorobenzene	50	49		1	99	70-130	11/26/2016 0915
Dichlorodifluoromethane	50	56		1	112	60-140	11/26/2016 0915
1,2-Dichloroethane	50	53		1	105	70-130	11/26/2016 0915
1,1-Dichloroethane	50	48		1	95	70-130	11/26/2016 0915
trans-1,2-Dichloroethene	50	47		1	95	70-130	11/26/2016 0915
cis-1,2-Dichloroethene	50	47		1	94	70-130	11/26/2016 0915
1,1-Dichloroethene	50	42		1	85	70-130	11/26/2016 0915
1,2-Dichloropropane	50	44		1	88	70-130	11/26/2016 0915
trans-1,3-Dichloropropene	50	53		1	107	70-130	11/26/2016 0915
cis-1,3-Dichloropropene	50	50		1	101	70-130	11/26/2016 0915
Ethylbenzene	50	51		1	101	70-130	11/26/2016 0915
2-Hexanone	100	92		1	92	60-140	11/26/2016 0915
Isopropylbenzene	50	53		1	107	70-130	11/26/2016 0915
Methyl acetate	50	40		1	80	60-140	11/26/2016 0915
Methyl tertiary butyl ether (MTBE)	50	46		1	91	70-130	11/26/2016 0915
4-Methyl-2-pentanone	100	84		1	84	60-140	11/26/2016 0915
Methylcyclohexane	50	44		1	88	70-130	11/26/2016 0915
Methylene chloride	50	47		1	94	70-130	11/26/2016 0915
Styrene	50	53		1	105	70-130	11/26/2016 0915
1,1,2,2-Tetrachloroethane	50	50		1	99	70-130	11/26/2016 0915
Tetrachloroethene	50	52		1	103	70-130	11/26/2016 0915
Toluene	50	45		1	91	70-130	11/26/2016 0915
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	42		1	84	70-130	11/26/2016 0915
1,2,4-Trichlorobenzene	50	53		1	106	70-130	11/26/2016 0915
1,1,1-Trichloroethane	50	47		1	95	70-130	11/26/2016 0915
1,1,2-Trichloroethane	50	50		1	99	70-130	11/26/2016 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 ≥ 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: RQ27804-002
Batch: 27804
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	49		1	97	70-130	11/26/2016 0915
Trichlorofluoromethane	50	53		1	105	70-130	11/26/2016 0915
Vinyl chloride	50	50		1	100	70-130	11/26/2016 0915
Xylenes (total)	100	110		1	106	70-130	11/26/2016 0915

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		88	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Dissolved Gases - MB

Sample ID: RQ27923-001
Batch: 27923
Analytical Method: RSK - 175
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Ethane	ND		1	10	ug/L	11/28/2016 1610
Ethene	ND		1	10	ug/L	11/28/2016 1610
Methane	ND		1	10	ug/L	11/28/2016 1610

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Dissolved Gases - LCS

Sample ID: RQ27923-002
Batch: 27923
Analytical Method: RSK - 175
Matrix: Aqueous

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ethane	550	670		1	120	70-130	11/28/2016 1528
Ethene	520	610		1	118	70-130	11/28/2016 1528
Methane	300	330		1	113	70-130	11/28/2016 1528

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

ICP-MS Metals - MB

Sample ID: RQ27469-001
Batch: 27469
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 11/22/2016 923

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Potassium	ND		1	400	ug/L	11/29/2016 0413

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - LCS

Sample ID: RQ27469-002
Batch: 27469
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 11/22/2016 923

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	1000	980		1	98	80-120	11/29/2016 0419

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

Chain of Custody
and
Miscellaneous Documents

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 58784

Client: TRC	Report to Contact: Lisa Clark / Terry Hertz	Telephone No. / E-mail: 864 281-0030	Quote No.
Address: 30 Patewood Dr	Sampler's Signature: x Bill Medlin	Analysis (Attach list if more space is needed)	Page 1 of 1
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Bill Medlin		
Project Name: WPH-Clemson			RK21042
Project No.: 226253.0000.0000.00005	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab	Composite	Matrix: Aqueous	Soil	Non-aqueous	No of Containers by Preservative Type: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC's	TOC	Potassium	Diss Gasses	SO4	Sulfide			
TRIK-16402																						
RMW-23	11-15-16	1525	X					1	1	1	5			3	1	1	2	1				
RMW-23	11-15-16	1645	X									3							3			plus Zn acetate

Turn Around Time Required (Prior lab approval required for expedited TAT.)
☐ Standard ☐ Rush (Specify)

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Relinquished by	Date	Time	Received by	Date	Time
1.	Bill Medlin	11-19-16	0930	TRC Sample Storage	11-19-16	0930
2.	TRC sample storage	11/21/16	1445		11/21/16	1445
3.		11/21/16	1845			
4.				Laboratory accepted by:	11-21-16	1845

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) Yes No Ice Pack — Receipt Temp. 1.8 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-06

Page 1 of 1
Effective Date: 11/18/2016
Expiry Date: 11/18/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: SME 11-21-16 Lot #: 162104C

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other			
Yes ☐	No ☐		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☐	2. If custody seals were present, were they intact and unbroken?
pH strip ID: 16-1516, 15-1448 Cl strip ID: LL SME 11-21-16 Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: 11.6 11.8 °C / / °C / / °C / / °C Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0.2 °C Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☐	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes ☑	No ☐	NA ☐	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?
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_2SO_4, HNO_3, HCl, NaOH) using SR # _____.			
Sample(s) _____ were received with bubbles >6 mm in diameter.			
Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.			
SC Drinking Water Project Sample(s) pH verified to be < 2 by _____ Date: _____ Sample(s) _____ were Not received at a pH of < 2 and were adjusted accordingly using SR# _____			
Sample labels applied by: SME Verified by: _____ Date: 11-21-16			

Comments: _____

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0.0.5

Lot Number: RK21041

Date Completed: 12/01/2016

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: WestpointHome - Clemson, SC

Project Number: 226253.0000.0000.000005

Lab Report: RK21041 Shealy Environmental Services
Samples analyzed for sulfate, sulfide, VOCs, TOC, potassium, and dissolved gases

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Recoveries were within QC limits.

Method Blanks: Method blanks have no detections of targeted analytes.

Trip Blank: TBLK-16401 had no detections of targeted analytes.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS recoveries are within QC Limits. LCSD analyses were performed only for sulfide and dissolved gas analyses for which the recoveries and RPDs were within QC limits.

MS/MSD: RMW-27 was used for MS/MSD analyses of VOCs and potassium. MS/MSD recoveries and RPDs were within QC limits except as follows:

- Toluene, 4-methyl-2-pentanone, cis-1,3-dichloropropene, and trans-1,3-dichloropropene have MS/MSD RPDs above the QC Limit. None of these analytes were detected in the sample from RMW-27. No qualifiers were assigned.

Duplicates: A field duplicate was not collected with these samples.

No flags assigned

Data review performed by: Terry Hertz; TRC Environmental Corp. ; 12/5/2016

Case Narrative
TRC Companies, Inc.
Lot Number: RK21041

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.

Sulfate

Due to matrix interferences, sample -004 has been analyzed at a 50X dilution. The target compound is non-detect at this dilution.

Sample Summary
TRC Companies, Inc.
Lot Number: RK21041

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	TBLK-16401	Aqueous	11/15/2016	11/21/2016
002	RMW-20	Aqueous	11/15/2016 1415	11/21/2016
003	RMW-28A	Aqueous	11/15/2016 1030	11/21/2016
004	RMW-27A	Aqueous	11/17/2016 1040	11/21/2016
005	MG-05A	Aqueous	11/17/2016 1250	11/21/2016
006	MG-05	Aqueous	11/17/2016 1310	11/21/2016
007	RMW-17	Aqueous	11/17/2016 1350	11/21/2016
008	RMW-17A	Aqueous	11/17/2016 1415	11/21/2016
009	RMW-21	Aqueous	11/17/2016 1505	11/21/2016
010	RMW-21A	Aqueous	11/17/2016 1527	11/21/2016
011	RMW-18	Aqueous	11/17/2016 1605	11/21/2016
012	RMW-18A	Aqueous	11/17/2016 1640	11/21/2016
013	RMW-20A	Aqueous	11/18/2016 0905	11/21/2016
014	OW-01	Aqueous	11/18/2016 1000	11/21/2016
015	OW-02	Aqueous	11/18/2016 1048	11/21/2016
016	RMW-27	Aqueous	11/18/2016 1155	11/21/2016
017	OW-05	Aqueous	11/18/2016 1500	11/21/2016
018	OW-04	Aqueous	11/18/2016 1655	11/21/2016

(18 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: RK21041

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	RMW-20	Aqueous	Sulfate	300.0	5.8		mg/L	7
003	RMW-28A	Aqueous	Sulfate	300.0	14		mg/L	8
006	MG-05	Aqueous	Sulfate	300.0	2.4		mg/L	11
007	RMW-17	Aqueous	Sulfate	300.0	20		mg/L	12
008	RMW-17A	Aqueous	Sulfate	300.0	39		mg/L	13
009	RMW-21	Aqueous	Sulfate	300.0	32		mg/L	14
010	RMW-21A	Aqueous	Sulfate	300.0	90		mg/L	15
011	RMW-18	Aqueous	Sulfate	300.0	93		mg/L	16
012	RMW-18A	Aqueous	Sulfate	300.0	110		mg/L	17
014	OW-01	Aqueous	Sulfate	300.0	160		mg/L	19
015	OW-02	Aqueous	Sulfate	300.0	170		mg/L	20
016	RMW-27	Aqueous	Sulfate	300.0	47		mg/L	21
016	RMW-27	Aqueous	Tetrachloroethene	8260B	290		ug/L	22
016	RMW-27	Aqueous	Methane	RSK - 175	770		ug/L	22
017	OW-05	Aqueous	Sulfate	300.0	4.5		mg/L	24
017	OW-05	Aqueous	TOC	9060A	3.2		mg/L	24
017	OW-05	Aqueous	Tetrachloroethene	8260B	19		ug/L	25
017	OW-05	Aqueous	Methane	RSK - 175	78		ug/L	25
017	OW-05	Aqueous	Potassium	6020B	1600		ug/L	26
018	OW-04	Aqueous	Sulfate	300.0	18		mg/L	27
018	OW-04	Aqueous	TOC	9060A	2.3		mg/L	27
018	OW-04	Aqueous	Tetrachloroethene	8260B	33		ug/L	28
018	OW-04	Aqueous	Methane	RSK - 175	880		ug/L	28
018	OW-04	Aqueous	Potassium	6020B	1000		ug/L	29

(24 detections)

Client: TRC Companies, Inc.
Description: TBLK-16401
Date Sampled: 11/15/2016
Date Received: 11/21/2016

Laboratory ID: RK21041-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/26/2016 1059	TML		27804

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		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	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"

Client: TRC Companies, Inc.
Description: TBLK-16401
Date Sampled: 11/15/2016
Date Received: 11/21/2016

Laboratory ID: RK21041-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/26/2016 1059	TML		27804

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		99	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"

Client: TRC Companies, Inc.
Description: RMW-20
Date Sampled: 11/15/2016 1415
Date Received: 11/21/2016

Laboratory ID: RK21041-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	11/25/2016 1532	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	5.8		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-28A
Date Sampled: 11/15/2016 1030
Date Received: 11/21/2016

Laboratory ID: RK21041-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	11/25/2016 1544	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	14		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-27A
Date Sampled: 11/17/2016 1040
Date Received: 11/21/2016

Laboratory ID: RK21041-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	50	11/25/2016 1556	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		50	mg/L	1

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

Client: TRC Companies, Inc.
Description: MG-05A
Date Sampled: 11/17/2016 1250
Date Received: 11/21/2016

Laboratory ID: RK21041-005
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	11/25/2016 1608	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: MG-05
Date Sampled: 11/17/2016 1310
Date Received: 11/21/2016

Laboratory ID: RK21041-006
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	11/25/2016 1620	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	2.4		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-17
Date Sampled: 11/17/2016 1350
Date Received: 11/21/2016

Laboratory ID: RK21041-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	11/25/2016 1656	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	20		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-17A
Date Sampled: 11/17/2016 1415
Date Received: 11/21/2016

Laboratory ID: RK21041-008
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	11/25/2016 1709	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	39		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-21
Date Sampled: 11/17/2016 1505
Date Received: 11/21/2016

Laboratory ID: RK21041-009
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	11/25/2016 1721	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	32		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-21A
Date Sampled: 11/17/2016 1527
Date Received: 11/21/2016

Laboratory ID: RK21041-010
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	11/25/2016 1733	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	90		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-18
Date Sampled: 11/17/2016 1605
Date Received: 11/21/2016

Laboratory ID: RK21041-011
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	11/25/2016 1745	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	93		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-18A
Date Sampled: 11/17/2016 1640
Date Received: 11/21/2016

Laboratory ID: RK21041-012
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	11/25/2016 1757	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	110		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-20A
Date Sampled: 11/18/2016 0905
Date Received: 11/21/2016

Laboratory ID: RK21041-013
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	11/25/2016 1809	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: OW-01
Date Sampled: 11/18/2016 1000
Date Received: 11/21/2016

Laboratory ID: RK21041-014
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	11/25/2016 1821	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	160		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: OW-02
Date Sampled: 11/18/2016 1048
Date Received: 11/21/2016

Laboratory ID: RK21041-015
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	11/25/2016 1833	TAF		27820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	170		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-27
Date Sampled: 11/18/2016 1155
Date Received: 11/21/2016

Laboratory ID: RK21041-016
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	11/25/2016 1845	TAF		27820
1		(Sulfide) SM 4500-S2 F-2011	1	11/23/2016 0932	CLM		27680
1		(TOC) 9060A	1	11/25/2016 2200	DMA		27734

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	47		1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	mg/L	1
TOC		9060A	ND		1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	11/26/2016 1755	TML		27804

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		100	ug/L	1
Benzene	71-43-2	8260B	ND		25	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	ug/L	1
Bromoform	75-25-2	8260B	ND		25	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		50	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	ug/L	1
Chloroform	67-66-3	8260B	ND		25	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		25	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	ug/L	1

TOC Range: 0.703 - 0.714

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

Client: TRC Companies, Inc.
Description: RMW-27
Date Sampled: 11/18/2016 1155
Date Received: 11/21/2016

Laboratory ID: RK21041-016
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	11/26/2016 1755	TML		27804

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		25	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	ug/L	1
Styrene	100-42-5	8260B	ND		25	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	ug/L	1
Tetrachloroethene	127-18-4	8260B	290		25	ug/L	1
Toluene	108-88-3	8260B	ND		25	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	ug/L	1
Trichloroethene	79-01-6	8260B	ND		25	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		99	70-130

Dissolved Gases

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		RSK - 175	1	11/29/2016 2316	JJG		28047

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethane	74-84-0	RSK - 175	ND		10	ug/L	2
Ethene	74-85-1	RSK - 175	ND		10	ug/L	2
Methane	74-82-8	RSK - 175	770		10	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"

Client: TRC Companies, Inc.
Description: RMW-27
Date Sampled: 11/18/2016 1155
Date Received: 11/21/2016

Laboratory ID: RK21041-016
Matrix: Aqueous

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	11/29/2016 0531	DDD	11/22/2016 0923	27469

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	ND		400	ug/L	1

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

Client: TRC Companies, Inc.
Description: OW-05
Date Sampled: 11/18/2016 1500
Date Received: 11/21/2016

Laboratory ID: RK21041-017
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	11/25/2016 1921	TAF		27820
1		(Sulfide) SM 4500-S2 F-2011	1	11/23/2016 0932	CLM		27680
1		(TOC) 9060A	1	11/25/2016 2233	DMA		27734

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	4.5		1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	mg/L	1
TOC		9060A	3.2		1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/26/2016 1317	TML		27804

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		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1

TOC Range: 3.164 - 3.261

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

Client: TRC Companies, Inc.
Description: OW-05
Date Sampled: 11/18/2016 1500
Date Received: 11/21/2016

Laboratory ID: RK21041-017
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/26/2016 1317	TML		27804

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	19		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		96	70-130

Dissolved Gases

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		RSK - 175	1	11/29/2016 2329	JJG		28047

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethane	74-84-0	RSK - 175	ND		10	ug/L	2
Ethene	74-85-1	RSK - 175	ND		10	ug/L	2
Methane	74-82-8	RSK - 175	78		10	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"

Client: TRC Companies, Inc.
Description: OW-05
Date Sampled: 11/18/2016 1500
Date Received: 11/21/2016

Laboratory ID: RK21041-017
Matrix: Aqueous

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	11/29/2016 0614	DDD	11/22/2016 0923	27469

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	1600		400	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"

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 11/18/2016 1655
Date Received: 11/21/2016

Laboratory ID: RK21041-018
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	11/25/2016 1933	TAF		27820
1		(Sulfide) SM 4500-S2 F-2011	1	11/23/2016 0932	CLM		27680
1		(TOC) 9060A	1	11/25/2016 2305	DMA		27734

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	18		1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	mg/L	1
TOC		9060A	2.3		1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/26/2016 1307	TML		27802

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		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1

TOC Range: 2.224 - 2.272

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

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 11/18/2016 1655
Date Received: 11/21/2016

Laboratory ID: RK21041-018
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/26/2016 1307	TML		27802

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	33		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		101	70-130

Dissolved Gases

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		RSK - 175	1	11/29/2016 2342	JJG		28047

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethane	74-84-0	RSK - 175	ND		10	ug/L	2
Ethene	74-85-1	RSK - 175	ND		10	ug/L	2
Methane	74-82-8	RSK - 175	880		10	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"

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 11/18/2016 1655
Date Received: 11/21/2016

Laboratory ID: RK21041-018
Matrix: Aqueous

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	11/29/2016 0620	DDD	11/22/2016 0923	27469

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	1000		400	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"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ27680-001
Batch: 27680
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfide	ND		1	1.0	mg/L	11/23/2016 0932

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ27680-002
Batch: 27680
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	10	9.5		1	95	80-120	11/23/2016 0932

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

Inorganic non-metals - LCSD

Sample ID: RQ27680-003
Batch: 27680
Analytical Method: SM 4500-S2 F-2011

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfide	10	9.4		1	94	1.1	80-120	20	11/23/2016 0932

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MB

Sample ID: RQ27734-001
Batch: 27734
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
TOC	ND		1	1.0	mg/L	11/25/2016 2058

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ27734-002
Batch: 27734
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	20	19		1	93	90-110	11/25/2016 2129

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

Inorganic non-metals - MB

Sample ID: RQ27820-001
Batch: 27820
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfate	ND		1	1.0	mg/L	11/25/2016 1420

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ27820-002
Batch: 27820
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	22		1	109	90-110	11/25/2016 1432

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: RQ27802-001
Batch: 27802
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/26/2016 1057
Benzene	ND		1	5.0	ug/L	11/26/2016 1057
Bromodichloromethane	ND		1	5.0	ug/L	11/26/2016 1057
Bromoform	ND		1	5.0	ug/L	11/26/2016 1057
Bromomethane (Methyl bromide)	ND		1	5.0	ug/L	11/26/2016 1057
2-Butanone (MEK)	ND		1	10	ug/L	11/26/2016 1057
Carbon disulfide	ND		1	5.0	ug/L	11/26/2016 1057
Carbon tetrachloride	ND		1	5.0	ug/L	11/26/2016 1057
Chlorobenzene	ND		1	5.0	ug/L	11/26/2016 1057
Chloroethane	ND		1	5.0	ug/L	11/26/2016 1057
Chloroform	ND		1	5.0	ug/L	11/26/2016 1057
Chloromethane (Methyl chloride)	ND		1	5.0	ug/L	11/26/2016 1057
Cyclohexane	ND		1	5.0	ug/L	11/26/2016 1057
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/L	11/26/2016 1057
Dibromochloromethane	ND		1	5.0	ug/L	11/26/2016 1057
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/L	11/26/2016 1057
1,4-Dichlorobenzene	ND		1	5.0	ug/L	11/26/2016 1057
1,3-Dichlorobenzene	ND		1	5.0	ug/L	11/26/2016 1057
1,2-Dichlorobenzene	ND		1	5.0	ug/L	11/26/2016 1057
Dichlorodifluoromethane	ND		1	5.0	ug/L	11/26/2016 1057
1,2-Dichloroethane	ND		1	5.0	ug/L	11/26/2016 1057
1,1-Dichloroethane	ND		1	5.0	ug/L	11/26/2016 1057
cis-1,2-Dichloroethene	ND		1	5.0	ug/L	11/26/2016 1057
trans-1,2-Dichloroethene	ND		1	5.0	ug/L	11/26/2016 1057
1,1-Dichloroethene	ND		1	5.0	ug/L	11/26/2016 1057
1,2-Dichloropropane	ND		1	5.0	ug/L	11/26/2016 1057
trans-1,3-Dichloropropene	ND		1	5.0	ug/L	11/26/2016 1057
cis-1,3-Dichloropropene	ND		1	5.0	ug/L	11/26/2016 1057
Ethylbenzene	ND		1	5.0	ug/L	11/26/2016 1057
2-Hexanone	ND		1	10	ug/L	11/26/2016 1057
Isopropylbenzene	ND		1	5.0	ug/L	11/26/2016 1057
Methyl acetate	ND		1	5.0	ug/L	11/26/2016 1057
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/L	11/26/2016 1057
4-Methyl-2-pentanone	ND		1	10	ug/L	11/26/2016 1057
Methylcyclohexane	ND		1	5.0	ug/L	11/26/2016 1057
Methylene chloride	ND		1	5.0	ug/L	11/26/2016 1057
Styrene	ND		1	5.0	ug/L	11/26/2016 1057
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/L	11/26/2016 1057
Tetrachloroethene	ND		1	5.0	ug/L	11/26/2016 1057
Toluene	ND		1	5.0	ug/L	11/26/2016 1057
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/L	11/26/2016 1057
1,2,4-Trichlorobenzene	ND		1	5.0	ug/L	11/26/2016 1057
1,1,2-Trichloroethane	ND		1	5.0	ug/L	11/26/2016 1057
1,1,1-Trichloroethane	ND		1	5.0	ug/L	11/26/2016 1057

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ27802-001
Batch: 27802
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/L	11/26/2016 1057
Trichlorofluoromethane	ND		1	5.0	ug/L	11/26/2016 1057
Vinyl chloride	ND		1	2.0	ug/L	11/26/2016 1057
Xylenes (total)	ND		1	5.0	ug/L	11/26/2016 1057

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		102	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ27802-002
Batch: 27802
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	92		1	92	60-140	11/26/2016 0959
Benzene	50	45		1	90	70-130	11/26/2016 0959
Bromodichloromethane	50	52		1	104	70-130	11/26/2016 0959
Bromoform	50	48		1	96	70-130	11/26/2016 0959
Bromomethane (Methyl bromide)	50	48		1	95	60-140	11/26/2016 0959
2-Butanone (MEK)	100	95		1	95	60-140	11/26/2016 0959
Carbon disulfide	50	38		1	77	60-140	11/26/2016 0959
Carbon tetrachloride	50	48		1	96	70-130	11/26/2016 0959
Chlorobenzene	50	48		1	97	70-130	11/26/2016 0959
Chloroethane	50	42		1	84	60-140	11/26/2016 0959
Chloroform	50	47		1	95	70-130	11/26/2016 0959
Chloromethane (Methyl chloride)	50	56		1	111	60-140	11/26/2016 0959
Cyclohexane	50	40		1	80	70-130	11/26/2016 0959
1,2-Dibromo-3-chloropropane (DBCP)	50	50		1	101	70-130	11/26/2016 0959
Dibromochloromethane	50	48		1	96	70-130	11/26/2016 0959
1,2-Dibromoethane (EDB)	50	48		1	95	70-130	11/26/2016 0959
1,4-Dichlorobenzene	50	47		1	94	70-130	11/26/2016 0959
1,3-Dichlorobenzene	50	49		1	98	70-130	11/26/2016 0959
1,2-Dichlorobenzene	50	49		1	97	70-130	11/26/2016 0959
Dichlorodifluoromethane	50	51		1	101	60-140	11/26/2016 0959
1,2-Dichloroethane	50	48		1	97	70-130	11/26/2016 0959
1,1-Dichloroethane	50	45		1	91	70-130	11/26/2016 0959
cis-1,2-Dichloroethene	50	43		1	87	70-130	11/26/2016 0959
trans-1,2-Dichloroethene	50	43		1	86	70-130	11/26/2016 0959
1,1-Dichloroethene	50	42		1	83	70-130	11/26/2016 0959
1,2-Dichloropropane	50	48		1	96	70-130	11/26/2016 0959
trans-1,3-Dichloropropene	50	47		1	95	70-130	11/26/2016 0959
cis-1,3-Dichloropropene	50	48		1	95	70-130	11/26/2016 0959
Ethylbenzene	50	50		1	100	70-130	11/26/2016 0959
2-Hexanone	100	110		1	106	60-140	11/26/2016 0959
Isopropylbenzene	50	48		1	96	70-130	11/26/2016 0959
Methyl acetate	50	41		1	82	60-140	11/26/2016 0959
Methyl tertiary butyl ether (MTBE)	50	43		1	86	70-130	11/26/2016 0959
4-Methyl-2-pentanone	100	110		1	105	60-140	11/26/2016 0959
Methylcyclohexane	50	44		1	89	70-130	11/26/2016 0959
Methylene chloride	50	41		1	81	70-130	11/26/2016 0959
Styrene	50	52		1	104	70-130	11/26/2016 0959
1,1,2,2-Tetrachloroethane	50	50		1	99	70-130	11/26/2016 0959
Tetrachloroethene	50	48		1	95	70-130	11/26/2016 0959
Toluene	50	49		1	98	70-130	11/26/2016 0959
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	41		1	82	70-130	11/26/2016 0959
1,2,4-Trichlorobenzene	50	46		1	92	70-130	11/26/2016 0959
1,1,2-Trichloroethane	50	48		1	96	70-130	11/26/2016 0959
1,1,1-Trichloroethane	50	46		1	93	70-130	11/26/2016 0959

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: RQ27802-002
Batch: 27802
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	49		1	98	70-130	11/26/2016 0959
Trichlorofluoromethane	50	53		1	105	70-130	11/26/2016 0959
Vinyl chloride	50	46		1	91	70-130	11/26/2016 0959
Xylenes (total)	100	100		1	104	70-130	11/26/2016 0959

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ27804-001
Batch: 27804
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/26/2016 1007
Benzene	ND		1	5.0	ug/L	11/26/2016 1007
Bromodichloromethane	ND		1	5.0	ug/L	11/26/2016 1007
Bromoform	ND		1	5.0	ug/L	11/26/2016 1007
Bromomethane (Methyl bromide)	ND		1	5.0	ug/L	11/26/2016 1007
2-Butanone (MEK)	ND		1	10	ug/L	11/26/2016 1007
Carbon disulfide	ND		1	5.0	ug/L	11/26/2016 1007
Carbon tetrachloride	ND		1	5.0	ug/L	11/26/2016 1007
Chlorobenzene	ND		1	5.0	ug/L	11/26/2016 1007
Chloroethane	ND		1	5.0	ug/L	11/26/2016 1007
Chloroform	ND		1	5.0	ug/L	11/26/2016 1007
Chloromethane (Methyl chloride)	ND		1	5.0	ug/L	11/26/2016 1007
Cyclohexane	ND		1	5.0	ug/L	11/26/2016 1007
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/L	11/26/2016 1007
Dibromochloromethane	ND		1	5.0	ug/L	11/26/2016 1007
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/L	11/26/2016 1007
1,4-Dichlorobenzene	ND		1	5.0	ug/L	11/26/2016 1007
1,2-Dichlorobenzene	ND		1	5.0	ug/L	11/26/2016 1007
1,3-Dichlorobenzene	ND		1	5.0	ug/L	11/26/2016 1007
Dichlorodifluoromethane	ND		1	5.0	ug/L	11/26/2016 1007
1,2-Dichloroethane	ND		1	5.0	ug/L	11/26/2016 1007
1,1-Dichloroethane	ND		1	5.0	ug/L	11/26/2016 1007
trans-1,2-Dichloroethene	ND		1	5.0	ug/L	11/26/2016 1007
cis-1,2-Dichloroethene	ND		1	5.0	ug/L	11/26/2016 1007
1,1-Dichloroethene	ND		1	5.0	ug/L	11/26/2016 1007
1,2-Dichloropropane	ND		1	5.0	ug/L	11/26/2016 1007
trans-1,3-Dichloropropene	ND		1	5.0	ug/L	11/26/2016 1007
cis-1,3-Dichloropropene	ND		1	5.0	ug/L	11/26/2016 1007
Ethylbenzene	ND		1	5.0	ug/L	11/26/2016 1007
2-Hexanone	ND		1	10	ug/L	11/26/2016 1007
Isopropylbenzene	ND		1	5.0	ug/L	11/26/2016 1007
Methyl acetate	ND		1	5.0	ug/L	11/26/2016 1007
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/L	11/26/2016 1007
4-Methyl-2-pentanone	ND		1	10	ug/L	11/26/2016 1007
Methylcyclohexane	ND		1	5.0	ug/L	11/26/2016 1007
Methylene chloride	ND		1	5.0	ug/L	11/26/2016 1007
Styrene	ND		1	5.0	ug/L	11/26/2016 1007
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/L	11/26/2016 1007
Tetrachloroethene	ND		1	5.0	ug/L	11/26/2016 1007
Toluene	ND		1	5.0	ug/L	11/26/2016 1007
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/L	11/26/2016 1007
1,2,4-Trichlorobenzene	ND		1	5.0	ug/L	11/26/2016 1007
1,1,1-Trichloroethane	ND		1	5.0	ug/L	11/26/2016 1007
1,1,2-Trichloroethane	ND		1	5.0	ug/L	11/26/2016 1007

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ27804-001
Batch: 27804
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/L	11/26/2016 1007
Trichlorofluoromethane	ND		1	5.0	ug/L	11/26/2016 1007
Vinyl chloride	ND		1	2.0	ug/L	11/26/2016 1007
Xylenes (total)	ND		1	5.0	ug/L	11/26/2016 1007

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ27804-002
Batch: 27804
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	93		1	93	60-140	11/26/2016 0915
Benzene	50	52		1	103	70-130	11/26/2016 0915
Bromodichloromethane	50	50		1	101	70-130	11/26/2016 0915
Bromoform	50	46		1	93	70-130	11/26/2016 0915
Bromomethane (Methyl bromide)	50	51		1	103	60-140	11/26/2016 0915
2-Butanone (MEK)	100	100		1	100	60-140	11/26/2016 0915
Carbon disulfide	50	42		1	84	60-140	11/26/2016 0915
Carbon tetrachloride	50	47		1	94	70-130	11/26/2016 0915
Chlorobenzene	50	49		1	98	70-130	11/26/2016 0915
Chloroethane	50	52		1	103	60-140	11/26/2016 0915
Chloroform	50	49		1	97	70-130	11/26/2016 0915
Chloromethane (Methyl chloride)	50	49		1	98	60-140	11/26/2016 0915
Cyclohexane	50	41		1	81	70-130	11/26/2016 0915
1,2-Dibromo-3-chloropropane (DBCP)	50	50		1	101	70-130	11/26/2016 0915
Dibromochloromethane	50	52		1	103	70-130	11/26/2016 0915
1,2-Dibromoethane (EDB)	50	49		1	97	70-130	11/26/2016 0915
1,4-Dichlorobenzene	50	49		1	97	70-130	11/26/2016 0915
1,2-Dichlorobenzene	50	49		1	98	70-130	11/26/2016 0915
1,3-Dichlorobenzene	50	49		1	99	70-130	11/26/2016 0915
Dichlorodifluoromethane	50	56		1	112	60-140	11/26/2016 0915
1,2-Dichloroethane	50	53		1	105	70-130	11/26/2016 0915
1,1-Dichloroethane	50	48		1	95	70-130	11/26/2016 0915
trans-1,2-Dichloroethene	50	47		1	95	70-130	11/26/2016 0915
cis-1,2-Dichloroethene	50	47		1	94	70-130	11/26/2016 0915
1,1-Dichloroethene	50	42		1	85	70-130	11/26/2016 0915
1,2-Dichloropropane	50	44		1	88	70-130	11/26/2016 0915
trans-1,3-Dichloropropene	50	53		1	107	70-130	11/26/2016 0915
cis-1,3-Dichloropropene	50	50		1	101	70-130	11/26/2016 0915
Ethylbenzene	50	51		1	101	70-130	11/26/2016 0915
2-Hexanone	100	92		1	92	60-140	11/26/2016 0915
Isopropylbenzene	50	53		1	107	70-130	11/26/2016 0915
Methyl acetate	50	40		1	80	60-140	11/26/2016 0915
Methyl tertiary butyl ether (MTBE)	50	46		1	91	70-130	11/26/2016 0915
4-Methyl-2-pentanone	100	84		1	84	60-140	11/26/2016 0915
Methylcyclohexane	50	44		1	88	70-130	11/26/2016 0915
Methylene chloride	50	47		1	94	70-130	11/26/2016 0915
Styrene	50	53		1	105	70-130	11/26/2016 0915
1,1,2,2-Tetrachloroethane	50	50		1	99	70-130	11/26/2016 0915
Tetrachloroethene	50	52		1	103	70-130	11/26/2016 0915
Toluene	50	45		1	91	70-130	11/26/2016 0915
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	42		1	84	70-130	11/26/2016 0915
1,2,4-Trichlorobenzene	50	53		1	106	70-130	11/26/2016 0915
1,1,1-Trichloroethane	50	47		1	95	70-130	11/26/2016 0915
1,1,2-Trichloroethane	50	50		1	99	70-130	11/26/2016 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 ≥ 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: RQ27804-002
Batch: 27804
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	49		1	97	70-130	11/26/2016 0915
Trichlorofluoromethane	50	53		1	105	70-130	11/26/2016 0915
Vinyl chloride	50	50		1	100	70-130	11/26/2016 0915
Xylenes (total)	100	110		1	106	70-130	11/26/2016 0915

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		88	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MS

Sample ID: RK21041-016MS
Batch: 27804
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	ND	500	310		5	62	60-140	11/26/2016 1818
Benzene	ND	250	240		5	98	70-130	11/26/2016 1818
Bromodichloromethane	ND	250	260		5	106	71-143	11/26/2016 1818
Bromoform	ND	250	230		5	93	65-131	11/26/2016 1818
Bromomethane (Methyl bromide)	ND	250	260		5	104	36-168	11/26/2016 1818
2-Butanone (MEK)	ND	500	400		5	81	60-140	11/26/2016 1818
Carbon disulfide	ND	250	220		5	88	60-140	11/26/2016 1818
Carbon tetrachloride	ND	250	250		5	98	37-166	11/26/2016 1818
Chlorobenzene	ND	250	250		5	102	78-129	11/26/2016 1818
Chloroethane	ND	250	240		5	96	60-140	11/26/2016 1818
Chloroform	ND	250	250		5	102	63-123	11/26/2016 1818
Chloromethane (Methyl chloride)	ND	250	260		5	105	20-158	11/26/2016 1818
Cyclohexane	ND	250	210		5	86	70-130	11/26/2016 1818
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	220		5	89	70-130	11/26/2016 1818
Dibromochloromethane	ND	250	270		5	110	74-134	11/26/2016 1818
1,2-Dibromoethane (EDB)	ND	250	260		5	106	70-130	11/26/2016 1818
1,2-Dichlorobenzene	ND	250	250		5	99	70-130	11/26/2016 1818
1,3-Dichlorobenzene	ND	250	250		5	98	70-130	11/26/2016 1818
1,4-Dichlorobenzene	ND	250	240		5	97	70-130	11/26/2016 1818
Dichlorodifluoromethane	ND	250	300		5	120	10-158	11/26/2016 1818
1,1-Dichloroethane	ND	250	250		5	99	69-132	11/26/2016 1818
1,2-Dichloroethane	ND	250	240		5	95	70-130	11/26/2016 1818
1,1-Dichloroethene	ND	250	220		5	90	50-132	11/26/2016 1818
cis-1,2-Dichloroethene	ND	250	250		5	98	70-130	11/26/2016 1818
trans-1,2-Dichloroethene	ND	250	250		5	99	70-130	11/26/2016 1818
1,2-Dichloropropane	ND	250	240		5	96	71-126	11/26/2016 1818
cis-1,3-Dichloropropene	ND	250	260		5	103	69-130	11/26/2016 1818
trans-1,3-Dichloropropene	ND	250	280		5	111	73-131	11/26/2016 1818
Ethylbenzene	ND	250	230		5	92	70-130	11/26/2016 1818
2-Hexanone	ND	500	480		5	95	60-140	11/26/2016 1818
Isopropylbenzene	ND	250	300		5	120	70-130	11/26/2016 1818
Methyl acetate	ND	250	200		5	78	15-128	11/26/2016 1818
Methyl tertiary butyl ether (MTBE)	ND	250	230		5	91	70-130	11/26/2016 1818
4-Methyl-2-pentanone	ND	500	430		5	86	60-140	11/26/2016 1818
Methylcyclohexane	ND	250	240		5	96	70-130	11/26/2016 1818
Methylene chloride	ND	250	240		5	97	69-129	11/26/2016 1818
Styrene	ND	250	270		5	108	70-130	11/26/2016 1818
1,1,2,2-Tetrachloroethane	ND	250	240		5	96	60-155	11/26/2016 1818
Tetrachloroethene	290	250	600		5	126	70-130	11/26/2016 1818
Toluene	ND	250	280		5	114	70-130	11/26/2016 1818
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	250	230		5	90	70-130	11/26/2016 1818
1,2,4-Trichlorobenzene	ND	250	230		5	94	70-130	11/26/2016 1818
1,1,1-Trichloroethane	ND	250	250		5	100	77-132	11/26/2016 1818
1,1,2-Trichloroethane	ND	250	270		5	110	77-132	11/26/2016 1818

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MS

Sample ID: RK21041-016MS
Batch: 27804
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	250	260		5	105	73-124	11/26/2016 1818
Trichlorofluoromethane	ND	250	280		5	113	60-140	11/26/2016 1818
Vinyl chloride	ND	250	270		5	106	29-159	11/26/2016 1818
Xylenes (total)	ND	500	520		5	104	70-130	11/26/2016 1818

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		89	70-130
Bromofluorobenzene		106	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MSD

Sample ID: RK21041-016MD
Batch: 27804
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	500	320		5	65	3.8	60-140	20	11/26/2016 1841
Benzene	ND	250	250		5	99	0.55	70-130	20	11/26/2016 1841
Bromodichloromethane	ND	250	220		5	88	18	71-143	20	11/26/2016 1841
Bromoform	ND	250	220		5	88	5.4	65-131	20	11/26/2016 1841
Bromomethane (Methyl bromide)	ND	250	270		5	106	2.5	36-168	20	11/26/2016 1841
2-Butanone (MEK)	ND	500	450		5	91	12	60-140	20	11/26/2016 1841
Carbon disulfide	ND	250	220		5	89	1.7	60-140	20	11/26/2016 1841
Carbon tetrachloride	ND	250	250		5	99	1.1	37-166	20	11/26/2016 1841
Chlorobenzene	ND	250	260		5	103	1.7	78-129	20	11/26/2016 1841
Chloroethane	ND	250	230		5	91	6.1	60-140	20	11/26/2016 1841
Chloroform	ND	250	250		5	102	0.23	63-123	20	11/26/2016 1841
Chloromethane (Methyl chloride)	ND	250	260		5	105	0.12	20-158	20	11/26/2016 1841
Cyclohexane	ND	250	210		5	86	0.28	70-130	20	11/26/2016 1841
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	240		5	96	6.7	70-130	20	11/26/2016 1841
Dibromochloromethane	ND	250	260		5	103	6.8	74-134	20	11/26/2016 1841
1,2-Dibromoethane (EDB)	ND	250	240		5	98	7.7	70-130	20	11/26/2016 1841
1,2-Dichlorobenzene	ND	250	250		5	101	2.4	70-130	20	11/26/2016 1841
1,3-Dichlorobenzene	ND	250	250		5	101	2.9	70-130	20	11/26/2016 1841
1,4-Dichlorobenzene	ND	250	250		5	99	1.9	70-130	20	11/26/2016 1841
Dichlorodifluoromethane	ND	250	300		5	121	0.92	10-158	20	11/26/2016 1841
1,1-Dichloroethane	ND	250	250		5	99	0.36	69-132	20	11/26/2016 1841
1,2-Dichloroethane	ND	250	240		5	95	0.41	70-130	20	11/26/2016 1841
1,1-Dichloroethene	ND	250	230		5	90	0.86	50-132	20	11/26/2016 1841
cis-1,2-Dichloroethene	ND	250	250		5	99	1.2	70-130	20	11/26/2016 1841
trans-1,2-Dichloroethene	ND	250	250		5	100	1.4	70-130	20	11/26/2016 1841
1,2-Dichloropropane	ND	250	250		5	100	4.0	71-126	20	11/26/2016 1841
cis-1,3-Dichloropropene	ND	250	190	+	5	77	29	69-130	20	11/26/2016 1841
trans-1,3-Dichloropropene	ND	250	220	+	5	86	25	73-131	20	11/26/2016 1841
Ethylbenzene	ND	250	260		5	105	13	70-130	20	11/26/2016 1841
2-Hexanone	ND	500	450		5	90	5.6	60-140	20	11/26/2016 1841
Isopropylbenzene	ND	250	280		5	113	6.5	70-130	20	11/26/2016 1841
Methyl acetate	ND	250	160		5	64	20	15-128	20	11/26/2016 1841
Methyl tertiary butyl ether (MTBE)	ND	250	230		5	92	1.2	70-130	20	11/26/2016 1841
4-Methyl-2-pentanone	ND	500	300	+	5	60	35	60-140	20	11/26/2016 1841
Methylcyclohexane	ND	250	240		5	97	1.6	70-130	20	11/26/2016 1841
Methylene chloride	ND	250	240		5	97	0.31	69-129	20	11/26/2016 1841
Styrene	ND	250	270		5	110	1.2	70-130	20	11/26/2016 1841
1,1,2,2-Tetrachloroethane	ND	250	240		5	97	1.7	60-155	20	11/26/2016 1841
Tetrachloroethene	290	250	550		5	104	9.6	70-130	20	11/26/2016 1841
Toluene	ND	250	210	+	5	84	30	70-130	20	11/26/2016 1841
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	250	220		5	90	0.95	70-130	20	11/26/2016 1841
1,2,4-Trichlorobenzene	ND	250	260		5	103	9.6	70-130	20	11/26/2016 1841
1,1,1-Trichloroethane	ND	250	250		5	102	1.6	77-132	20	11/26/2016 1841
1,1,2-Trichloroethane	ND	250	230		5	92	17	77-132	20	11/26/2016 1841

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MSD

Sample ID: RK21041-016MD
Batch: 27804
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	ND	250	260		5	106	0.60	73-124	20	11/26/2016 1841
Trichlorofluoromethane	ND	250	270		5	106	5.8	60-140	20	11/26/2016 1841
Vinyl chloride	ND	250	270		5	107	0.77	29-159	20	11/26/2016 1841
Xylenes (total)	ND	500	550		5	110	6.1	70-130	20	11/26/2016 1841

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		90	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		78	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Dissolved Gases - MB

Sample ID: RQ28047-001
Batch: 28047
Analytical Method: RSK - 175
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Ethane	ND		1	10	ug/L	11/29/2016 2215
Ethene	ND		1	10	ug/L	11/29/2016 2215
Methane	ND		1	10	ug/L	11/29/2016 2215

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Dissolved Gases - LCS

Sample ID: RQ28047-002
Batch: 28047
Analytical Method: RSK - 175
Matrix: Aqueous

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ethane	550	680		1	122	70-130	11/29/2016 2151
Ethene	520	620		1	119	70-130	11/29/2016 2151
Methane	300	340		1	117	70-130	11/29/2016 2151

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

Dissolved Gases - LCSD

Sample ID: RQ28047-003
Batch: 28047
Analytical Method: RSK - 175

Matrix: Aqueous

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ethane	550	640		1	116	5.6	70-130	30	11/29/2016 2202
Ethene	520	590		1	113	5.2	70-130	30	11/29/2016 2202
Methane	300	320		1	109	6.9	70-130	30	11/29/2016 2202

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

ICP-MS Metals - MB

Sample ID: RQ27469-001
Batch: 27469
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 11/22/2016 923

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Potassium	ND		1	400	ug/L	11/29/2016 0413

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - LCS

Sample ID: RQ27469-002
Batch: 27469
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 11/22/2016 923

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	1000	980		1	98	80-120	11/29/2016 0419

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

ICP-MS Metals - MS

Sample ID: RK21041-016MS
Batch: 27469
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 11/22/2016 923

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	ND	1000	1200		1	120	70-130	11/29/2016 0537

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - MSD

Sample ID: RK21041-016MD
Batch: 27469
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 11/22/2016 923

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Potassium	ND	1000	1200		1	117	2.2	70-130	20	11/29/2016 0543

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Chain of Custody
and
Miscellaneous Documents

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

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 58783

Client: TRC	Report to Contact: Lisa Clark / Terry Hurtz	Telephone No. / E-mail: 864-281-0030	Quote No.
Address: 30 Patewood Dr	Sampler's Signature: x Bill Medlin	Analysis (Attach list if more space is needed)	Page 1 of 2
City: Greenvill State: SC Zip Code: 29615	Printed Name: Bill Medlin		RK21041
Project Name: WPIT - Clemson			
Project No.: 226253.0000.0000.000005	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab	Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No of Containers by Preservative Type: Unpres	HNO3	H2SO4	HCl	NaOH	ZnAc/NaOH	Soil Kit	SO4	Remarks / Cooler I.D.
TBLK-16401																
RMW-20	11-15-16	1415	X					2							1	
RMW-28A	11-15-16	1630	X					2							1	
RMW-27A	11-17-16	1040	X					2							1	
MG-05A	11-17-16	1250	X					2							1	
MG-05	11-17-16	1310	X					2							1	
RMW-17	11-17-16	1350	X					2							1	
RMW-17A	11-17-16	1415	X					2							1	
RMW-21	11-17-16	1505	X					2							1	
RMW-21A	11-17-16	1527	X					2							1	

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Bill Medlin	11-19-16	0930	1. Received by: TRC Sample Storage	11-19-16	0930
2. Relinquished by: TRC Sample Storage	11-21-16	1445	2. Received by:	11/21/16	1445
3. Relinquished by:	11/21/16	1845	3. Received by:	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by: S Elliott	11-21-16	1845

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY Received on ice (Circle) (Yes) No Ice Pack Receipt Temp 1.1 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 65078

Client: TRC	Report to Contact: Lisa Clark & Terry Hertz	Telephone No. / E-mail: 864 281-0030	Quote No.
Address: 30 Patewood Dr	Sampler's Signature: x Bill Medlin	Analysis (Attach list if more space is needed)	Page 2 of 2
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Bill Medlin		RK21041
Project Name: WPH - Clemson			
Project No.: 226253.0000.0000.00005	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab / Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-aqueous	No. of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	NaOH/Zn	SO4	VOC's	TOC	Potassium	Ass Gasses	S, Hfide	Remarks / Cooler I.D.
RMW-18	11-17-16	1605	X				X						1						
RMW-18A	11-17-16	1640	X				X						1						
RMW-20A	11-18-16	0905	X				X						1						
OW-01	11-18-16	1000	X				X						1						
OW-02	11-18-16	1048	X				X						1						
RMW-27	11-18-16	1155	X				X	X	X	X	X		1	3	1	1	2	3	
OW-05	11-18-16	1500	X				X	X	X	X	X		1	3	1	1	2	3	
OW-04	11-18-16	1655	X				X	X	X	X	X		1	3	1	1	2	3	

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Bill Medlin	11-19-16	0930	1. Received by: TRC Sample Storage	11-19-16	0930
2. Relinquished by: TRC Sample storage	11-21-16	1445	2. Received by:	11/21/16	1445
3. Relinquished by:	11/21/16	1845	3. Received by:	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by: J Elliott	11-21-16	1845

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) (Yes) No Ice Pack Receipt Temp. 1.1 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 09-01-2014

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-06

Page 1 of 1
Effective Date: 11/18/2016
Expiry Date: 11/18/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: SBC 11-21-16 Lot #: RK21041

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?
pH strip ID: 16-1526, 15-1448 Cl strip ID:			
Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: 10.9 / 11.1 °C / / °C / / °C / / °C			
Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0.2°C			
Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☑	No ☐		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes ☑	No ☐	NA ☐	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?
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_2SO_4, HNO_3, HCl, NaOH) using SR # _____.			
Sample(s) _____ were received with bubbles >6 mm in diameter.			
Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.			
SC Drinking Water Project Sample(s) pH verified to be < 2 by _____ Date: _____ Sample(s) _____ were Not received at a pH of < 2 and were adjusted accordingly using SR# _____			
Sample labels applied by: SBC Verified by: _____ Date: 11-21-16			

Comments: _____

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0.0.5

Lot Number: RK22023

Date Completed: 12/01/2016

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: WestpointHome - Clemson, SC

Project Number: 226253.0000.0000.000005

Lab Report: RK22023 Shealy Environmental Services
Samples analyzed for sulfate, sulfide, VOCs, TOC, potassium, and dissolved gases

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Recoveries were within QC limits.

Method Blanks: Method blanks have no detections of targeted analytes.

Trip Blank: Methylene chloride was detected in TBLK-16401 at 9.8 ug/L. Methylene chloride was not detected in associated, non-blank samples. No qualifiers were assigned.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: Methylene chloride was detected in RBLK-16401 at 7.5 ug/L. Methylene chloride was not detected in associated, non-blank samples. No qualifiers were assigned.

LCS/LCSD: LCS recoveries are within QC Limits. LCSD analyses and an RPD calculation were performed for dissolved gases with results within QC limits.

MS/MSD: MS/MSD analyses were not performed.

Duplicates: A field duplicate was not collected with these samples.

No flags assigned

Data review performed by: Terry Hertz; TRC Environmental Corp. ; 12/5/2016

Case Narrative
TRC Companies, Inc.
Lot Number: RK22023

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.

Sulfate

Due to matrix interferences, samples -002 and -004 have been analyzed at a 10X dilution. The target compound for both compounds is non-detect at the reported dilutions.

Sample Summary
TRC Companies, Inc.
Lot Number: RK22023

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	TBLK-16401	Aqueous	11/21/2016 0630	11/22/2016
002	RMW-23A	Aqueous	11/21/2016 1130	11/22/2016
003	RBLK-16401	Aqueous	11/21/2016 1150	11/22/2016
004	OW-06A	Aqueous	11/21/2016 1345	11/22/2016

(4 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: RK22023

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	TBLK-16401	Aqueous	Methylene chloride	8260B	9.8		ug/L	5
003	RBLK-16401	Aqueous	Methylene chloride	8260B	7.5		ug/L	9

(2 detections)

Client: TRC Companies, Inc.
Description: TBLK-16401
Date Sampled: 11/21/2016 0630
Date Received: 11/22/2016

Laboratory ID: RK22023-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/28/2016 1111	PAP		27871

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		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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	9.8		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	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"

Client: TRC Companies, Inc.
Description: TBLK-16401
Date Sampled: 11/21/2016 0630
Date Received: 11/22/2016

Laboratory ID: RK22023-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/28/2016 1111	PAP		27871

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		104	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"

Client: TRC Companies, Inc.
Description: RMW-23A
Date Sampled: 11/21/2016 1130
Date Received: 11/22/2016

Laboratory ID: RK22023-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	10	11/23/2016 0049	TAF		27704

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		10	mg/L	1

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

Client: TRC Companies, Inc.
Description: RBLK-16401
Date Sampled: 11/21/2016 1150
Date Received: 11/22/2016

Laboratory ID: RK22023-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	11/23/2016 0101	TAF		27704
1		(Sulfide) SM 4500-S2 F-2011	1	11/25/2016 0901	CLM		27799
1		(TOC) 9060A	1	11/26/2016 0413	DMA		27734

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	mg/L	1
TOC		9060A	ND		1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/28/2016 1135	PAP		27871

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		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1

TOC Range: 0.308 - 0.339

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

Client: TRC Companies, Inc.
Description: RBLK-16401
Date Sampled: 11/21/2016 1150
Date Received: 11/22/2016

Laboratory ID: RK22023-003
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/28/2016 1135	PAP		27871

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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	7.5		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		102	70-130

Dissolved Gases

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		RSK - 175	1	11/29/2016 2354	JJG		28047

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethane	74-84-0	RSK - 175	ND		10	ug/L	2
Ethene	74-85-1	RSK - 175	ND		10	ug/L	2
Methane	74-82-8	RSK - 175	ND		10	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"

Client: TRC Companies, Inc.
Description: RBLK-16401
Date Sampled: 11/21/2016 1150
Date Received: 11/22/2016

Laboratory ID: RK22023-003
Matrix: Aqueous

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	11/26/2016 0119	DDD	11/25/2016 0937	27715

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	ND		400	ug/L	1

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

Client: TRC Companies, Inc.
Description: OW-06A
Date Sampled: 11/21/2016 1345
Date Received: 11/22/2016

Laboratory ID: RK22023-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	10	11/22/2016 2301	TAF		27704

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		10	mg/L	1

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

QC Summary

Inorganic non-metals - MB

Sample ID: RQ27704-001
Batch: 27704
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfate	ND		1	1.0	mg/L	11/22/2016 1900

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ27704-002
Batch: 27704
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	22		1	108	90-110	11/22/2016 1912

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

Inorganic non-metals - MB

Sample ID: RQ27734-001
Batch: 27734
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
TOC	ND		1	1.0	mg/L	11/25/2016 2058

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ27734-002
Batch: 27734
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	20	19		1	93	90-110	11/25/2016 2129

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

Inorganic non-metals - MB

Sample ID: RQ27799-001
Batch: 27799
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfide	ND		1	1.0	mg/L	11/25/2016 0901

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ27799-002
Batch: 27799
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	10	9.3		1	93	80-120	11/25/2016 0901

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: RQ27871-001
Batch: 27871
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/28/2016 0957
Benzene	ND		1	5.0	ug/L	11/28/2016 0957
Bromodichloromethane	ND		1	5.0	ug/L	11/28/2016 0957
Bromoform	ND		1	5.0	ug/L	11/28/2016 0957
Bromomethane (Methyl bromide)	ND		1	5.0	ug/L	11/28/2016 0957
2-Butanone (MEK)	ND		1	10	ug/L	11/28/2016 0957
Carbon disulfide	ND		1	5.0	ug/L	11/28/2016 0957
Carbon tetrachloride	ND		1	5.0	ug/L	11/28/2016 0957
Chlorobenzene	ND		1	5.0	ug/L	11/28/2016 0957
Chloroethane	ND		1	5.0	ug/L	11/28/2016 0957
Chloroform	ND		1	5.0	ug/L	11/28/2016 0957
Chloromethane (Methyl chloride)	ND		1	5.0	ug/L	11/28/2016 0957
Cyclohexane	ND		1	5.0	ug/L	11/28/2016 0957
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/L	11/28/2016 0957
Dibromochloromethane	ND		1	5.0	ug/L	11/28/2016 0957
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/L	11/28/2016 0957
1,3-Dichlorobenzene	ND		1	5.0	ug/L	11/28/2016 0957
1,4-Dichlorobenzene	ND		1	5.0	ug/L	11/28/2016 0957
1,2-Dichlorobenzene	ND		1	5.0	ug/L	11/28/2016 0957
Dichlorodifluoromethane	ND		1	5.0	ug/L	11/28/2016 0957
1,1-Dichloroethane	ND		1	5.0	ug/L	11/28/2016 0957
1,2-Dichloroethane	ND		1	5.0	ug/L	11/28/2016 0957
cis-1,2-Dichloroethene	ND		1	5.0	ug/L	11/28/2016 0957
trans-1,2-Dichloroethene	ND		1	5.0	ug/L	11/28/2016 0957
1,1-Dichloroethene	ND		1	5.0	ug/L	11/28/2016 0957
1,2-Dichloropropane	ND		1	5.0	ug/L	11/28/2016 0957
trans-1,3-Dichloropropene	ND		1	5.0	ug/L	11/28/2016 0957
cis-1,3-Dichloropropene	ND		1	5.0	ug/L	11/28/2016 0957
Ethylbenzene	ND		1	5.0	ug/L	11/28/2016 0957
2-Hexanone	ND		1	10	ug/L	11/28/2016 0957
Isopropylbenzene	ND		1	5.0	ug/L	11/28/2016 0957
Methyl acetate	ND		1	5.0	ug/L	11/28/2016 0957
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/L	11/28/2016 0957
4-Methyl-2-pentanone	ND		1	10	ug/L	11/28/2016 0957
Methylcyclohexane	ND		1	5.0	ug/L	11/28/2016 0957
Methylene chloride	ND		1	5.0	ug/L	11/28/2016 0957
Styrene	ND		1	5.0	ug/L	11/28/2016 0957
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/L	11/28/2016 0957
Tetrachloroethene	ND		1	5.0	ug/L	11/28/2016 0957
Toluene	ND		1	5.0	ug/L	11/28/2016 0957
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/L	11/28/2016 0957
1,2,4-Trichlorobenzene	ND		1	5.0	ug/L	11/28/2016 0957
1,1,2-Trichloroethane	ND		1	5.0	ug/L	11/28/2016 0957
1,1,1-Trichloroethane	ND		1	5.0	ug/L	11/28/2016 0957

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ27871-001
Batch: 27871
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/L	11/28/2016 0957
Trichlorofluoromethane	ND		1	5.0	ug/L	11/28/2016 0957
Vinyl chloride	ND		1	2.0	ug/L	11/28/2016 0957
Xylenes (total)	ND		1	5.0	ug/L	11/28/2016 0957

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ27871-002
Batch: 27871
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	98		1	98	60-140	11/28/2016 0859
Benzene	50	48		1	95	70-130	11/28/2016 0859
Bromodichloromethane	50	55		1	110	70-130	11/28/2016 0859
Bromoform	50	50		1	100	70-130	11/28/2016 0859
Bromomethane (Methyl bromide)	50	40		1	81	60-140	11/28/2016 0859
2-Butanone (MEK)	100	100		1	100	60-140	11/28/2016 0859
Carbon disulfide	50	46		1	92	60-140	11/28/2016 0859
Carbon tetrachloride	50	52		1	103	70-130	11/28/2016 0859
Chlorobenzene	50	52		1	103	70-130	11/28/2016 0859
Chloroethane	50	37		1	74	60-140	11/28/2016 0859
Chloroform	50	50		1	100	70-130	11/28/2016 0859
Chloromethane (Methyl chloride)	50	50		1	99	60-140	11/28/2016 0859
Cyclohexane	50	45		1	90	70-130	11/28/2016 0859
1,2-Dibromo-3-chloropropane (DBCP)	50	52		1	105	70-130	11/28/2016 0859
Dibromochloromethane	50	50		1	100	70-130	11/28/2016 0859
1,2-Dibromoethane (EDB)	50	51		1	101	70-130	11/28/2016 0859
1,3-Dichlorobenzene	50	51		1	103	70-130	11/28/2016 0859
1,4-Dichlorobenzene	50	51		1	102	70-130	11/28/2016 0859
1,2-Dichlorobenzene	50	52		1	103	70-130	11/28/2016 0859
Dichlorodifluoromethane	50	43		1	86	60-140	11/28/2016 0859
1,1-Dichloroethane	50	50		1	100	70-130	11/28/2016 0859
1,2-Dichloroethane	50	51		1	102	70-130	11/28/2016 0859
cis-1,2-Dichloroethene	50	49		1	97	70-130	11/28/2016 0859
trans-1,2-Dichloroethene	50	48		1	96	70-130	11/28/2016 0859
1,1-Dichloroethene	50	46		1	93	70-130	11/28/2016 0859
1,2-Dichloropropane	50	50		1	101	70-130	11/28/2016 0859
trans-1,3-Dichloropropene	50	49		1	99	70-130	11/28/2016 0859
cis-1,3-Dichloropropene	50	51		1	102	70-130	11/28/2016 0859
Ethylbenzene	50	53		1	106	70-130	11/28/2016 0859
2-Hexanone	100	110		1	112	60-140	11/28/2016 0859
Isopropylbenzene	50	52		1	104	70-130	11/28/2016 0859
Methyl acetate	50	44		1	89	60-140	11/28/2016 0859
Methyl tertiary butyl ether (MTBE)	50	47		1	93	70-130	11/28/2016 0859
4-Methyl-2-pentanone	100	110		1	106	60-140	11/28/2016 0859
Methylcyclohexane	50	46		1	92	70-130	11/28/2016 0859
Methylene chloride	50	45		1	91	70-130	11/28/2016 0859
Styrene	50	55		1	109	70-130	11/28/2016 0859
1,1,2,2-Tetrachloroethane	50	51		1	103	70-130	11/28/2016 0859
Tetrachloroethene	50	51		1	101	70-130	11/28/2016 0859
Toluene	50	52		1	104	70-130	11/28/2016 0859
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	44		1	87	70-130	11/28/2016 0859
1,2,4-Trichlorobenzene	50	51		1	102	70-130	11/28/2016 0859
1,1,2-Trichloroethane	50	51		1	102	70-130	11/28/2016 0859
1,1,1-Trichloroethane	50	51		1	102	70-130	11/28/2016 0859

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: RQ27871-002
Batch: 27871
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	52		1	103	70-130	11/28/2016 0859
Trichlorofluoromethane	50	45		1	91	70-130	11/28/2016 0859
Vinyl chloride	50	39		1	78	70-130	11/28/2016 0859
Xylenes (total)	100	110		1	111	70-130	11/28/2016 0859

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		102	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Dissolved Gases - MB

Sample ID: RQ28047-001
Batch: 28047
Analytical Method: RSK - 175
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Ethane	ND		1	10	ug/L	11/29/2016 2215
Ethene	ND		1	10	ug/L	11/29/2016 2215
Methane	ND		1	10	ug/L	11/29/2016 2215

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Dissolved Gases - LCS

Sample ID: RQ28047-002
Batch: 28047
Analytical Method: RSK - 175
Matrix: Aqueous

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ethane	550	680		1	122	70-130	11/29/2016 2151
Ethene	520	620		1	119	70-130	11/29/2016 2151
Methane	300	340		1	117	70-130	11/29/2016 2151

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

Dissolved Gases - LCSD

Sample ID: RQ28047-003
Batch: 28047
Analytical Method: RSK - 175

Matrix: Aqueous

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ethane	550	640		1	116	5.6	70-130	30	11/29/2016 2202
Ethene	520	590		1	113	5.2	70-130	30	11/29/2016 2202
Methane	300	320		1	109	6.9	70-130	30	11/29/2016 2202

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

ICP-MS Metals - MB

Sample ID: RQ27715-001
Batch: 27715
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 11/25/2016 937

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Potassium	ND		1	400	ug/L	11/26/2016 0051

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - LCS

Sample ID: RQ27715-002
Batch: 27715
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 11/25/2016 937

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	1000	970		1	97	80-120	11/26/2016 0054

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

Chain of Custody
and
Miscellaneous Documents

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

SHEALY

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 64867

Client: TRC	Report to Contact: Lisa Clark/Terry Hartz	Telephone No. / E-mail: 864 281-0030	Quote No.
Address: 30 Potwood Dr	Sampler's Signature: x Bill Medlin	Analysis (Attach list if more space is needed)	Page 1 of 1
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Bill Medlin		RK22023
Project Name: WPH - Clemson			
Project No.: 226253.0000.0000.000005	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: Aqueous	Solid	Non-Aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC's	SO4	TOC	Sulfide	Potassium	Diss Gasses			Remarks / Cooler I.D.
TBLK-16401	11-21-16	0630	X							2			2								
RMW-23A	11-21-16	1130	X				1							1							
RBLK-16401	11-21-16	1150	X				1	1	1	5	3		3	1	1	3	1	2			
OW-06A	11-21-16	1345	X				1							1							

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time
1. Relinquished by: Bill Medlin	11-22-16	0800
2. Relinquished by: Bill Medlin	11-22-16	0952
3. Relinquished by: Edward Hartley	11/22/16	1409
4. Relinquished by	Date	Time

	Date	Time
1. Received by: TRC Storage Storage	11-22-16	0800
2. Received by: Edward Hartley	11.22.16	0952
3. Received by	Date	Time
4. Laboratory received by: [signature]	11/22/16	1409

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) (Yes) No Ice Pack

Receipt Temp 2.1 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 06-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-06

Page 1 of 1
Effective Date: 11/18/2016
Expiry Date: 11/18/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: mcm/11/22/16 Lot #: R1622023

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?
pH strip ID: 16-15246, 15-14446 Cl strip ID: 16-13264			
Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:			
mcm 11/22/16 2.9/2.1 °C / / °C / / °C / / °C			
Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0.2°C			
Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☑	No ☐		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes ☑	No ☐	NA ☐	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☑	No ☐	NA ☐	19. Were all applicable NH3/TKN/cyanide/phenol/BNA (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?
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_2SO_4, HNO_3, HCl, NaOH) using SR # _____.			
Sample(s) _____ were received with bubbles >6 mm in diameter.			
Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.			
SC Drinking Water Project Sample(s) pH verified to be < 2 by _____ Date: _____ Sample(s) _____ were Not received at a pH of < 2 and were adjusted accordingly using SR# _____			
Sample labels applied by: mcm Verified by: _____ Date: 11/22/16			

Comments: _____

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0.0.5

Lot Number: RL05030

Date Completed: 12/15/2016

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: WestpointHome - Clemson, SC

Project Number: 226253.0000.0000.000005

Lab Report: RL05030 Shealy Environmental Services
Samples analyzed for sulfate, sulfide, VOCs, TOC, potassium, and dissolved gases

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Recoveries were within QC limits.

Method Blanks: Method blanks have no detections of targeted analytes.

Trip Blank: TBLK-16404 had no detections of targeted analytes.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS recoveries are within QC Limits except for dichlorodifluoromethane which was recovered above the QC limit. This compound was not detected in the field samples. No qualifiers were assigned.

An LCSD analysis was performed only for dissolved gases for which the recoveries and RPDs were within QC limits.

MS/MSD: RMW-23B was used for MS/MSD analyses of potassium. RMW-27B was used for MS/MSD analyses of sulfate. OW-03A was used for MS/MSD analyses of sulfide. MS/MSD recoveries and RPDs were within QC limits.

Duplicates: A field duplicate was not collected with these samples.

No flags assigned

Data review performed by: Terry Hertz; TRC Environmental Corp. ; 12/16/2016

Case Narrative
TRC Companies, Inc.
Lot Number: RL05030

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.

VOCs by GC/MS

The LCS associated with batch 28582 recovered Dichlorodifluoromethane above method criteria. No corrective action is necessary as all associated samples are non-detect for this compound.

Sample Summary

TRC Companies, Inc.

Lot Number: RL05030

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	TBLK-16404	Aqueous	12/01/2016 0800	12/05/2016
002	RMW-23B	Aqueous	12/01/2016 1400	12/05/2016
003	RMW-27B	Aqueous	12/01/2016 1720	12/05/2016
004	OW-03A	Aqueous	12/02/2016 1220	12/05/2016
005	RMW-02	Aqueous	12/02/2016 1520	12/05/2016

(5 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: RL05030

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	RMW-23B	Aqueous	Sulfate	300.0	1.0		mg/L	7
002	RMW-23B	Aqueous	TOC	9060A	110		mg/L	7
002	RMW-23B	Aqueous	Acetone	8260B	120		ug/L	7
002	RMW-23B	Aqueous	2-Butanone (MEK)	8260B	260		ug/L	7
002	RMW-23B	Aqueous	cis-1,2-Dichloroethene	8260B	750		ug/L	7
002	RMW-23B	Aqueous	Tetrachloroethene	8260B	89		ug/L	8
002	RMW-23B	Aqueous	Methane	RSK - 175	8200		ug/L	8
002	RMW-23B	Aqueous	Potassium	6020B	5200		ug/L	9
003	RMW-27B	Aqueous	Sulfate	300.0	4.7		mg/L	10
003	RMW-27B	Aqueous	Tetrachloroethene	8260B	160		ug/L	11
003	RMW-27B	Aqueous	Methane	RSK - 175	12		ug/L	11
003	RMW-27B	Aqueous	Potassium	6020B	1800		ug/L	12
004	OW-03A	Aqueous	Tetrachloroethene	8260B	1300		ug/L	14
004	OW-03A	Aqueous	Potassium	6020B	810		ug/L	15
005	RMW-02	Aqueous	Sulfate	300.0	9.2		mg/L	16

(15 detections)

Client: TRC Companies, Inc.
Description: TBLK-16404
Date Sampled: 12/01/2016 0800
Date Received: 12/05/2016

Laboratory ID: RL05030-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/06/2016 1208	TML		28582

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		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	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"

Client: TRC Companies, Inc.
Description: TBLK-16404
Date Sampled: 12/01/2016 0800
Date Received: 12/05/2016

Laboratory ID: RL05030-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/06/2016 1208	TML		28582

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		93	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"

Client: TRC Companies, Inc.
Description: RMW-23B
Date Sampled: 12/01/2016 1400
Date Received: 12/05/2016

Laboratory ID: RL05030-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	12/05/2016 2307	SLU		28536
1		(Sulfide) SM 4500-S2 F-2011	1	12/07/2016 1314	CLM		28925
2		(TOC) 9060A	2	12/09/2016 2022	DMA		28855

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	1.0		1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	mg/L	1
TOC		9060A	110		2.0	mg/L	2

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	12/06/2016 1733	TML		28582

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	120		100	ug/L	1
Benzene	71-43-2	8260B	ND		25	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	ug/L	1
Bromoform	75-25-2	8260B	ND		25	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	260		50	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	ug/L	1
Chloroform	67-66-3	8260B	ND		25	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	750		25	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	ug/L	1

TOC Range: 51.862 - 53.597

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

Client: TRC Companies, Inc.
Description: RMW-23B
Date Sampled: 12/01/2016 1400
Date Received: 12/05/2016

Laboratory ID: RL05030-002
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	12/06/2016 1733	TML		28582

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		25	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	ug/L	1
Styrene	100-42-5	8260B	ND		25	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	ug/L	1
Tetrachloroethene	127-18-4	8260B	89		25	ug/L	1
Toluene	108-88-3	8260B	ND		25	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	ug/L	1
Trichloroethene	79-01-6	8260B	ND		25	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		91	70-130

Dissolved Gases

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		RSK - 175	1	12/07/2016 1733	JJG		28748
2		RSK - 175	10	12/07/2016 1931	JJG		28748

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethane	74-84-0	RSK - 175	ND		10	ug/L	1
Ethene	74-85-1	RSK - 175	ND		10	ug/L	1
Methane	74-82-8	RSK - 175	8200		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"

Client: TRC Companies, Inc.
Description: RMW-23B
Date Sampled: 12/01/2016 1400
Date Received: 12/05/2016

Laboratory ID: RL05030-002
Matrix: Aqueous

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	12/10/2016 1911	DDD	12/06/2016 1724	28616

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	5200		400	ug/L	1

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

Client: TRC Companies, Inc.
Description: RMW-27B
Date Sampled: 12/01/2016 1720
Date Received: 12/05/2016

Laboratory ID: RL05030-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	12/05/2016 2319	SLU		28536
1		(Sulfide) SM 4500-S2 F-2011	1	12/07/2016 1314	CLM		28925
1		(TOC) 9060A	1	12/08/2016 0216	DMA		28739

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	4.7		1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	mg/L	1
TOC		9060A	ND		1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/06/2016 1712	TML		28582

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		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1

TOC Range: 0.525 - 1.15

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

Client: TRC Companies, Inc.
Description: RMW-27B
Date Sampled: 12/01/2016 1720
Date Received: 12/05/2016

Laboratory ID: RL05030-003
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/06/2016 1712	TML		28582

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	160		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		91	70-130

Dissolved Gases

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		RSK - 175	1	12/07/2016 1746	JJG		28748

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethane	74-84-0	RSK - 175	ND		10	ug/L	1
Ethene	74-85-1	RSK - 175	ND		10	ug/L	1
Methane	74-82-8	RSK - 175	12		10	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"

Client: TRC Companies, Inc.
Description: RMW-27B
Date Sampled: 12/01/2016 1720
Date Received: 12/05/2016

Laboratory ID: RL05030-003
Matrix: Aqueous

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	3005A	6020B	1	12/14/2016 2348	MJI	12/06/2016 1724	28616

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	1800		400	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"

Client: TRC Companies, Inc.
Description: OW-03A
Date Sampled: 12/02/2016 1220
Date Received: 12/05/2016

Laboratory ID: RL05030-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	12/05/2016 2356	SLU		28536
1		(Sulfide) SM 4500-S2 F-2011	1	12/07/2016 1314	CLM		28925
1		(TOC) 9060A	1	12/08/2016 0249	DMA		28739

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	mg/L	1
TOC		9060A	ND		1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	12/06/2016 1755	TML		28582
2	5030B	8260B	10	12/10/2016 0138	ECP		28942

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		100	ug/L	1
Benzene	71-43-2	8260B	ND		25	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	ug/L	1
Bromoform	75-25-2	8260B	ND		25	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		50	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	ug/L	1
Chloroform	67-66-3	8260B	ND		25	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		25	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	ug/L	1

TOC Range: 0.449 - 0.512

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

Client: TRC Companies, Inc.
Description: OW-03A
Date Sampled: 12/02/2016 1220
Date Received: 12/05/2016

Laboratory ID: RL05030-004
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	12/06/2016 1755	TML		28582
2	5030B	8260B	10	12/10/2016 0138	ECP		28942

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		25	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	ug/L	1
Styrene	100-42-5	8260B	ND		25	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	ug/L	1
Tetrachloroethene	127-18-4	8260B	1300		50	ug/L	2
Toluene	108-88-3	8260B	ND		25	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	ug/L	1
Trichloroethene	79-01-6	8260B	ND		25	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
1,2-Dichloroethane-d4		93	70-130		89	70-130
Bromofluorobenzene		94	70-130		90	70-130
Toluene-d8		92	70-130		97	70-130

Dissolved Gases

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		RSK - 175	1	12/07/2016 1759	JJG		28748

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethane	74-84-0	RSK - 175	ND		10	ug/L	1
Ethene	74-85-1	RSK - 175	ND		10	ug/L	1
Methane	74-82-8	RSK - 175	ND		10	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"

Client: TRC Companies, Inc.
Description: OW-03A
Date Sampled: 12/02/2016 1220
Date Received: 12/05/2016

Laboratory ID: RL05030-004
Matrix: Aqueous

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	3005A	6020B	1	12/14/2016 2354	MJI	12/06/2016 1724	28616

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	810		400	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"

Client: TRC Companies, Inc.
Description: RMW-02
Date Sampled: 12/02/2016 1520
Date Received: 12/05/2016

Laboratory ID: RL05030-005
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	12/06/2016 0008	SLU		28536

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	9.2		5.0	mg/L	1

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

QC Summary

Inorganic non-metals - MB

Sample ID: RQ28536-001
Batch: 28536
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfate	ND		1	1.0	mg/L	12/05/2016 1954

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ28536-002
Batch: 28536
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	100	90-110	12/05/2016 2006

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

Inorganic non-metals - MS

Sample ID: RL05030-003MS
Batch: 28536
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	4.7	20	25		1	102	90-110	12/05/2016 2331

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

Inorganic non-metals - MSD

Sample ID: RL05030-003MD
Batch: 28536
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	4.7	20	25		1	101	0.28	90-110	20	12/05/2016 2344

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MB

Sample ID: RQ28739-001
Batch: 28739
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
TOC	ND		1	1.0	mg/L	12/08/2016 0041

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ28739-002
Batch: 28739
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	20	19		1	94	90-110	12/08/2016 0112

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

Inorganic non-metals - MB

Sample ID: RQ28855-001
Batch: 28855
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
TOC	ND		1	1.0	mg/L	12/09/2016 1816

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ28855-002
Batch: 28855
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	20	19		1	94	90-110	12/09/2016 1848

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

Inorganic non-metals - MB

Sample ID: RQ28925-001
Batch: 28925
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfide	ND		1	1.0	mg/L	12/07/2016 1314

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: RQ28925-002
Batch: 28925
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	10	9.1		1	91	80-120	12/07/2016 1314

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

Inorganic non-metals - MS

Sample ID: RL05030-004MS
Batch: 28925
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	ND	10	7.5		1	75	70-130	12/07/2016 1314

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MSD

Sample ID: RL05030-004MD
Batch: 28925
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfide	ND	10	7.8		1	78	3.3	70-130	20	12/07/2016 1314

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ28582-001
Batch: 28582
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	12/06/2016 1110
Benzene	ND		1	5.0	ug/L	12/06/2016 1110
Bromodichloromethane	ND		1	5.0	ug/L	12/06/2016 1110
Bromoform	ND		1	5.0	ug/L	12/06/2016 1110
Bromomethane (Methyl bromide)	ND		1	5.0	ug/L	12/06/2016 1110
2-Butanone (MEK)	ND		1	10	ug/L	12/06/2016 1110
Carbon disulfide	ND		1	5.0	ug/L	12/06/2016 1110
Carbon tetrachloride	ND		1	5.0	ug/L	12/06/2016 1110
Chlorobenzene	ND		1	5.0	ug/L	12/06/2016 1110
Chloroethane	ND		1	5.0	ug/L	12/06/2016 1110
Chloroform	ND		1	5.0	ug/L	12/06/2016 1110
Chloromethane (Methyl chloride)	ND		1	5.0	ug/L	12/06/2016 1110
Cyclohexane	ND		1	5.0	ug/L	12/06/2016 1110
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/L	12/06/2016 1110
Dibromochloromethane	ND		1	5.0	ug/L	12/06/2016 1110
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/L	12/06/2016 1110
1,2-Dichlorobenzene	ND		1	5.0	ug/L	12/06/2016 1110
1,4-Dichlorobenzene	ND		1	5.0	ug/L	12/06/2016 1110
1,3-Dichlorobenzene	ND		1	5.0	ug/L	12/06/2016 1110
Dichlorodifluoromethane	ND		1	5.0	ug/L	12/06/2016 1110
1,1-Dichloroethane	ND		1	5.0	ug/L	12/06/2016 1110
1,2-Dichloroethane	ND		1	5.0	ug/L	12/06/2016 1110
trans-1,2-Dichloroethene	ND		1	5.0	ug/L	12/06/2016 1110
1,1-Dichloroethene	ND		1	5.0	ug/L	12/06/2016 1110
cis-1,2-Dichloroethene	ND		1	5.0	ug/L	12/06/2016 1110
1,2-Dichloropropane	ND		1	5.0	ug/L	12/06/2016 1110
cis-1,3-Dichloropropene	ND		1	5.0	ug/L	12/06/2016 1110
trans-1,3-Dichloropropene	ND		1	5.0	ug/L	12/06/2016 1110
Ethylbenzene	ND		1	5.0	ug/L	12/06/2016 1110
2-Hexanone	ND		1	10	ug/L	12/06/2016 1110
Isopropylbenzene	ND		1	5.0	ug/L	12/06/2016 1110
Methyl acetate	ND		1	5.0	ug/L	12/06/2016 1110
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/L	12/06/2016 1110
4-Methyl-2-pentanone	ND		1	10	ug/L	12/06/2016 1110
Methylcyclohexane	ND		1	5.0	ug/L	12/06/2016 1110
Methylene chloride	ND		1	5.0	ug/L	12/06/2016 1110
Styrene	ND		1	5.0	ug/L	12/06/2016 1110
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/L	12/06/2016 1110
Tetrachloroethene	ND		1	5.0	ug/L	12/06/2016 1110
Toluene	ND		1	5.0	ug/L	12/06/2016 1110
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/L	12/06/2016 1110
1,2,4-Trichlorobenzene	ND		1	5.0	ug/L	12/06/2016 1110
1,1,2-Trichloroethane	ND		1	5.0	ug/L	12/06/2016 1110
1,1,1-Trichloroethane	ND		1	5.0	ug/L	12/06/2016 1110

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ28582-001
Batch: 28582
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/L	12/06/2016 1110
Trichlorofluoromethane	ND		1	5.0	ug/L	12/06/2016 1110
Vinyl chloride	ND		1	2.0	ug/L	12/06/2016 1110
Xylenes (total)	ND		1	5.0	ug/L	12/06/2016 1110

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		93	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ28582-002
Batch: 28582
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	130		1	135	60-140	12/06/2016 1013
Benzene	50	51		1	102	70-130	12/06/2016 1013
Bromodichloromethane	50	55		1	111	70-130	12/06/2016 1013
Bromoform	50	51		1	102	70-130	12/06/2016 1013
Bromomethane (Methyl bromide)	50	51		1	103	60-140	12/06/2016 1013
2-Butanone (MEK)	100	110		1	110	60-140	12/06/2016 1013
Carbon disulfide	50	56		1	112	60-140	12/06/2016 1013
Carbon tetrachloride	50	52		1	105	70-130	12/06/2016 1013
Chlorobenzene	50	53		1	106	70-130	12/06/2016 1013
Chloroethane	50	54		1	109	60-140	12/06/2016 1013
Chloroform	50	54		1	107	70-130	12/06/2016 1013
Chloromethane (Methyl chloride)	50	60		1	120	60-140	12/06/2016 1013
Cyclohexane	50	54		1	108	70-130	12/06/2016 1013
1,2-Dibromo-3-chloropropane (DBCP)	50	51		1	101	70-130	12/06/2016 1013
Dibromochloromethane	50	55		1	109	70-130	12/06/2016 1013
1,2-Dibromoethane (EDB)	50	51		1	103	70-130	12/06/2016 1013
1,2-Dichlorobenzene	50	53		1	107	70-130	12/06/2016 1013
1,4-Dichlorobenzene	50	52		1	104	70-130	12/06/2016 1013
1,3-Dichlorobenzene	50	53		1	105	70-130	12/06/2016 1013
Dichlorodifluoromethane	50	79	N	1	158	60-140	12/06/2016 1013
1,1-Dichloroethane	50	53		1	106	70-130	12/06/2016 1013
1,2-Dichloroethane	50	53		1	107	70-130	12/06/2016 1013
trans-1,2-Dichloroethene	50	51		1	102	70-130	12/06/2016 1013
1,1-Dichloroethene	50	52		1	104	70-130	12/06/2016 1013
cis-1,2-Dichloroethene	50	52		1	104	70-130	12/06/2016 1013
1,2-Dichloropropane	50	53		1	106	70-130	12/06/2016 1013
cis-1,3-Dichloropropene	50	53		1	106	70-130	12/06/2016 1013
trans-1,3-Dichloropropene	50	52		1	105	70-130	12/06/2016 1013
Ethylbenzene	50	50		1	101	70-130	12/06/2016 1013
2-Hexanone	100	100		1	104	60-140	12/06/2016 1013
Isopropylbenzene	50	52		1	104	70-130	12/06/2016 1013
Methyl acetate	50	44		1	87	60-140	12/06/2016 1013
Methyl tertiary butyl ether (MTBE)	50	50		1	99	70-130	12/06/2016 1013
4-Methyl-2-pentanone	100	110		1	106	60-140	12/06/2016 1013
Methylcyclohexane	50	53		1	106	70-130	12/06/2016 1013
Methylene chloride	50	49		1	98	70-130	12/06/2016 1013
Styrene	50	55		1	110	70-130	12/06/2016 1013
1,1,2,2-Tetrachloroethane	50	51		1	102	70-130	12/06/2016 1013
Tetrachloroethene	50	53		1	107	70-130	12/06/2016 1013
Toluene	50	51		1	102	70-130	12/06/2016 1013
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	52		1	104	70-130	12/06/2016 1013
1,2,4-Trichlorobenzene	50	55		1	109	70-130	12/06/2016 1013
1,1,2-Trichloroethane	50	52		1	105	70-130	12/06/2016 1013
1,1,1-Trichloroethane	50	52		1	103	70-130	12/06/2016 1013

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: RQ28582-002
Batch: 28582
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	50		1	101	70-130	12/06/2016 1013
Trichlorofluoromethane	50	60		1	120	70-130	12/06/2016 1013
Vinyl chloride	50	54		1	108	70-130	12/06/2016 1013
Xylenes (total)	100	110		1	109	70-130	12/06/2016 1013

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		93	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ28942-001
Batch: 28942
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Tetrachloroethene	ND		1	5.0	ug/L	12/09/2016 2002

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: RQ28942-002
Batch: 28942
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Tetrachloroethene	50	54		1	109	70-130	12/09/2016 1907

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Dissolved Gases - MB

Sample ID: RQ28748-001
Batch: 28748
Analytical Method: RSK - 175
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Ethane	ND		1	10	ug/L	12/07/2016 1702
Ethene	ND		1	10	ug/L	12/07/2016 1702
Methane	ND		1	10	ug/L	12/07/2016 1702

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Dissolved Gases - LCS

Sample ID: RQ28748-002
Batch: 28748
Analytical Method: RSK - 175
Matrix: Aqueous

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ethane	550	600		1	109	70-130	12/07/2016 1639
Ethene	520	570		1	110	70-130	12/07/2016 1639
Methane	300	290		1	100	70-130	12/07/2016 1639

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

Dissolved Gases - LCSD

Sample ID: RQ28748-003
Batch: 28748
Analytical Method: RSK - 175

Matrix: Aqueous

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ethane	550	570		1	104	4.7	70-130	30	12/07/2016 1650
Ethene	520	540		1	105	4.6	70-130	30	12/07/2016 1650
Methane	300	290		1	97	3.2	70-130	30	12/07/2016 1650

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

ICP-MS Metals - MB

Sample ID: RQ28616-001
Batch: 28616
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 12/06/2016 1724

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Potassium	ND		1	400	ug/L	12/10/2016 1829

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - LCS

Sample ID: RQ28616-002
Batch: 28616
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 12/06/2016 1724

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	1000	1000		1	103	80-120	12/10/2016 1835

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - MS

Sample ID: RL05030-002MS
Batch: 28616
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 12/06/2016 1724

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	5200	1000	6000		1	77	70-130	12/10/2016 1917

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - MSD

Sample ID: RL05030-002MD
Batch: 28616
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 12/06/2016 1724

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Potassium	5200	1000	6000		1	80	0.58	70-130	20	12/10/2016 1923

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Chain of Custody
and
Miscellaneous Documents

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

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 65426

Client: TRC	Report to Contact: Lisa Clark/Terry Hertz	Telephone No. / E-mail: (864) 281-0030	Quote No.
Address: 30 Patewood Dr	Sampler's Signature: x Bill Medlin	Analysis (Attach list if more space is needed)	Page 1 of 1
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Bill Medlin		RL05030
Project Name: WPH - Clemson			
Project No.: 226253.0000.0000.00005	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab / Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No of Containers by Preservative Type: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC's	TOC	SO4	Sulfide	Potassium	Diss Gases	Remarks / Cooler I.D.
TBLK - 16404	12-1-16	0800	G							2			2						
RMW-23B	12-1-16	1400	G				1	1	1	5	3		3	1	1	3	1	2	
RMW-27B	12-1-16	1720	G				1	1	1	5	3		3	1	1	3	1	2	
OW-03A	12-2-16	1220	G				1	1	1	5	3		3	1	1	3	1	2	
RMW-02	12-2-16	1520	G				1								1				

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Bill Medlin	12-5-16	0830	1. Received by: TRC Sample Storage	12-5-16	0830
2. Relinquished by:	12-5-16	1000	2. Received by:	12.5.16	1000
3. Relinquished by:	12.5.16	1235	3. Received by:	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by	12/5/16	1235

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack Receipt Temp. 2.4 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-07

Page 1 of 1
Effective Date: 11/29/2016
Expiry Date: 11/29/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: MAM/12/5/16 Lot #: 12L0580

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other				
Yes ☐	No ☑		1	Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2	If custody seals were present, were they intact and unbroken?
pH strip ID: Lot-152b, 15-1442 Cl strip ID:				
Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: 22/2.4 °C / / °C / / °C / / °C				
Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0.2 °C				
Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None				
Yes ☐	No ☐	NA ☑	3.	If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4.	Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5.	Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6.	Were sample IDs listed on the COC?
Yes ☑	No ☐		7.	Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8.	Was collection date & time listed on the COC?
Yes ☑	No ☐		9.	Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10.	Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11.	Were tests to be performed listed on the COC?
Yes ☑	No ☐		12.	Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13.	Was adequate sample volume available?
Yes ☐	No ☑		14.	Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15.	Were any samples containers missing/excess (circle one) samples Not listed on COC?
Yes ☐	No ☑	NA ☐	16.	Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17.	Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes ☑	No ☐	NA ☐	18.	Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19.	Were all applicable NH3/TKN/cyanide/phenol/BNA (<0.5mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20.	Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21.	Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22.	Was the quote number used taken from the container label?
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_2SO_4, HNO_3, HCl, NaOH) using SR # _____.				
Sample(s) _____ were received with bubbles >6 mm in diameter.				
Samples(s) _____ were received with TRC >0.5 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.				
SC Drinking Water Project Sample(s) pH verified to be < 2 by _____ Date: _____ Sample(s) _____ were Not received at a pH of < 2 and were adjusted accordingly using SR# _____				
Sample labels applied by: MAM Verified by: _____ Date: 12/5/16				

Comments: _____

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

February 1, 2017

Lisa Clark
TRC Environmental Corp.
30 Patewood Drive
Greenville, SC 29615

RE: **WPH CLEMSON/226253.0.0 P5**
Pace Workorder: 21599

Dear Lisa Clark:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, January 26, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lauren E McGrath

Lauren McGrath 02/01/2017
Lauren.McGrath@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email PAESfeedback@pacelabs.com.

Total Number of Pages 15

CERTIFICATE OF ANALYSIS

Laboratory Data Quality Review Notes

Project Name: Westpoint Home – Clemson, SC

Project Number: 226253.0000.0000.000005

Lab Report: TRC 21599 Pace Analytical Energy Services
Samples analyzed for dissolved gases

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Surrogates are not relevant to the analyses performed.

Method Blank: Method blank has no detections of targeted analytes.

Trip Blank: A trip blank was not collected with these samples.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS and LCSD recoveries are within QC Limits. LCS/LCSD RPDs are within QC Limits.

MS/MSD: MS/MSD analyses were performed on a batch QC sample not from this site. The results were not reviewed.

Duplicates: A field duplicate was not collected with these samples.

No flags assigned

Data review performed by Terry Hertz, TRC Environmental Corp. on 2/1/2017

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	West Virginia Department of Environmental Protection, Division of Water and Waste Management
Accreditation ID:	395
Scope:	Non-Potable Water
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 21599 WPH CLEMSON/226253.0.0 P5

Lab ID	Sample ID	Matrix	Date Collected	Date Received
215990001	RMW-28A	Water	1/20/2017 11:10	1/26/2017 10:45
215990002	OW-04	Water	1/20/2017 13:30	1/26/2017 10:45
215990003	OW-05	Water	1/20/2017 14:15	1/26/2017 10:45
215990004	RMW-27	Water	1/20/2017 15:45	1/26/2017 10:45
215990005	RMW-23B	Water	1/23/2017 13:05	1/26/2017 10:45

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21599 WPH CLEMSON/226253.0.0 P5

Lab ID: **215990001** Date Received: 1/26/2017 10:45 Matrix: Water

Sample ID: **RMW-28A** Date Collected: 1/20/2017 11:10

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**260**	ug/l	0.50	0.027	1	1/31/2017 04:52	TD	n
Ethane	**0.0098J**	ug/l	0.10	0.0070	1	1/31/2017 04:52	TD	n
Ethene	**0.074J**	ug/l	0.10	0.0090	1	1/31/2017 04:52	TD	n
Propane	**0.10 U**	ug/l	0.10	0.019	1	1/31/2017 04:52	TD	n
Propene	**0.10 U**	ug/l	0.10	0.020	1	1/31/2017 04:52	TD	n
iso-Butane	**0.20 U**	ug/l	0.20	0.027	1	1/31/2017 04:52	TD	n
n-Butane	**0.20 U**	ug/l	0.20	0.017	1	1/31/2017 04:52	TD	n
Acetylene	**0.50 U**	ug/l	0.50	0.048	1	1/31/2017 04:52	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21599 WPH CLEMSON/226253.0.0 P5

Lab ID: **215990002** Date Received: 1/26/2017 10:45 Matrix: Water

Sample ID: **OW-04** Date Collected: 1/20/2017 13:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**5.2**	ug/l	0.50	0.027	1	1/31/2017 05:05	TD	n
Ethane	**0.0071J**	ug/l	0.10	0.0070	1	1/31/2017 05:05	TD	n
Ethene	**0.10 U**	ug/l	0.10	0.0090	1	1/31/2017 05:05	TD	n
Propane	**0.10 U**	ug/l	0.10	0.019	1	1/31/2017 05:05	TD	n
Propene	**0.10 U**	ug/l	0.10	0.020	1	1/31/2017 05:05	TD	n
iso-Butane	**0.20 U**	ug/l	0.20	0.027	1	1/31/2017 05:05	TD	n
n-Butane	**0.20 U**	ug/l	0.20	0.017	1	1/31/2017 05:05	TD	n
Acetylene	**0.50 U**	ug/l	0.50	0.048	1	1/31/2017 05:05	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21599 WPH CLEMSON/226253.0.0 P5

Lab ID: **215990003** Date Received: 1/26/2017 10:45 Matrix: Water

Sample ID: **OW-05** Date Collected: 1/20/2017 14:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**3300**	ug/l	0.50	0.027	1	1/31/2017 05:18	TD	n
Ethane	**0.18**	ug/l	0.10	0.0070	1	1/31/2017 05:18	TD	n
Ethene	**0.093J**	ug/l	0.10	0.0090	1	1/31/2017 05:18	TD	n
Propane	**0.019J**	ug/l	0.10	0.019	1	1/31/2017 05:18	TD	n
Propene	**0.10 U**	ug/l	0.10	0.020	1	1/31/2017 05:18	TD	n
iso-Butane	**0.20 U**	ug/l	0.20	0.027	1	1/31/2017 05:18	TD	n
n-Butane	**0.20 U**	ug/l	0.20	0.017	1	1/31/2017 05:18	TD	n
Acetylene	**0.50 U**	ug/l	0.50	0.048	1	1/31/2017 05:18	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21599 WPH CLEMSON/226253.0.0 P5

Lab ID: **215990004** Date Received: 1/26/2017 10:45 Matrix: Water

Sample ID: **RMW-27** Date Collected: 1/20/2017 15:45

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**2000**	ug/l	0.50	0.027	1	1/31/2017 05:30	TD	n
Ethane	**0.60**	ug/l	0.10	0.0070	1	1/31/2017 05:30	TD	n
Ethene	**0.67**	ug/l	0.10	0.0090	1	1/31/2017 05:30	TD	n
Propane	**0.037J**	ug/l	0.10	0.019	1	1/31/2017 05:30	TD	n
Propene	**0.10 U**	ug/l	0.10	0.020	1	1/31/2017 05:30	TD	n
iso-Butane	**0.20 U**	ug/l	0.20	0.027	1	1/31/2017 05:30	TD	n
n-Butane	**0.20 U**	ug/l	0.20	0.017	1	1/31/2017 05:30	TD	n
Acetylene	**1.1**	ug/l	0.50	0.048	1	1/31/2017 05:30	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21599 WPH CLEMSON/226253.0.0 P5

Lab ID: **215990005** Date Received: 1/26/2017 10:45 Matrix: Water

Sample ID: **RMW-23B** Date Collected: 1/23/2017 13:05

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**19000**	ug/l	0.50	0.027	1	1/31/2017 05:45	TD	n
Ethane	**7.6**	ug/l	0.10	0.0070	1	1/31/2017 05:45	TD	n
Ethene	**14**	ug/l	0.10	0.0090	1	1/31/2017 05:45	TD	n
Propane	**0.39**	ug/l	0.10	0.019	1	1/31/2017 05:45	TD	n
Propene	**0.73**	ug/l	0.10	0.020	1	1/31/2017 05:45	TD	n
iso-Butane	**0.20 U**	ug/l	0.20	0.027	1	1/31/2017 05:45	TD	n
n-Butane	**0.21**	ug/l	0.20	0.017	1	1/31/2017 05:45	TD	n
Acetylene	**0.19J**	ug/l	0.50	0.048	1	1/31/2017 05:45	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS QUALIFIERS

Workorder: 21599 WPH CLEMSON/226253.0.0 P5

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 21599 WPH CLEMSON/226253.0.0 P5

QC Batch: DISG/5893 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 215990001, 215990002, 215990003, 215990004, 215990005

METHOD BLANK: 46768

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	0.50 U	0.50	n
Ethane	ug/l	0.10 U	0.10	n
Ethene	ug/l	0.10 U	0.10	n
Propane	ug/l	0.10 U	0.10	n
Propene	ug/l	0.10 U	0.10	n
iso-Butane	ug/l	0.20 U	0.20	n
n-Butane	ug/l	0.20 U	0.20	n
Acetylene	ug/l	0.50 U	0.50	n

LABORATORY CONTROL SAMPLE & LCSD: 46770 46772

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	700	690	94	93	80-120	1.1	20	n
Ethane	ug/l	38	40	39	104	103	80-120	0.97	20	n
Ethene	ug/l	35	37	37	106	105	80-120	0.95	20	n
Propane	ug/l	56	58	57	103	102	80-120	0.98	20	n
Propene	ug/l	53	51	50	95	93	80-120	2.1	20	n
iso-Butane	ug/l	73	74	74	102	101	80-120	0.99	20	n
n-Butane	ug/l	73	75	74	102	101	80-120	0.99	20	n
Acetylene	ug/l	33	35	34	106	103	80-120	2.9	20	n

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 46785 46786 Original: 215860004

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK											
Methane	ug/l	370	750	1100	1000	94	87	70-130	7.7	20	n
Ethane	ug/l	0.2	38	37	37	98	98	70-130	0	20	n
Ethene	ug/l	2.7	35	39	39	102	102	70-130	0	20	n
Propane	ug/l	0.0071	56	53	53	96	95	70-130	1	20	n
Propene	ug/l	0	53	47	48	89	90	70-130	1.1	20	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 21599 WPH CLEMSON/226253.0.0 P5

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 46785 46786 Original: 215860004

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
iso-Butane	ug/l	0	73	69	68	94	93	70-130	1.1	20	n
n-Butane	ug/l	0	73	68	68	92	94	70-130	2.2	20	n
Acetylene	ug/l	0	33	33	34	102	103	70-130	0.98	20	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA QUALIFIERS

Workorder: 21599 WPH CLEMSON/226253.0.0 P5

QUALITY CONTROL PARAMETER QUALIFIERS

n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 21599 WPH CLEMSON/226253.0.0 P5

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
215990001	RMW-28A			AM20GAX	DISG/5893
215990002	OW-04			AM20GAX	DISG/5893
215990003	OW-05			AM20GAX	DISG/5893
215990004	RMW-27			AM20GAX	DISG/5893
215990005	RMW-23B			AM20GAX	DISG/5893

Pace Analytical®
www.pacelabs.com

220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

007172

21599

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: TRC	Report To: Lisa Clark	Attention:
Address: 30 Patewood Dr Suite 300 Greenville, SC	Copy To:	Company Name:
Email To: Lisa Clark	Purchase Order No.:	Address:
Phone: (864) 420-8577 Fax:	Project Name: WPH Clemson	Pace Quote Reference:
Requested Due Date/TAT:	Project Number: 226253.0.0 P5	Pace Project Manager:
		Pace Profile #:

REGULATORY AGENCY

NPDES (GROUND WATER) DRINKING WATER

UST RCRA OTHER _____

Site Location STATE: SC

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Matrix Codes: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test Y/N	Analysis Test: Dissolved Gasses	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	RMW-28A		WT	G			1-20	1110		3					3					X	
2	OW-04		WT	G			1-20	1330		3					3					X	
3	OW-05		WT	G			1-20	1415		3					3					X	
4	RMW-27		WT	G			1-20	1545		3					3					X	
5	RMW-23B		WT	G			1-23	1305		3					3					X	
6	QR																				
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	TRC	1-24-17	1915	Fedex	1-24-17	1915				
				Lasse PACE	1/25/17	1045	5	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE: Benjamin Medlin

PRINT Name of SAMPLER: Benjamin Medlin

SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): 01-24-17

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Cooler Receipt Form

Client Name: FRC Project: WPH Clemson Lab Work Order: 21599

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 785401281120

Custody Seal on Cooler/Box Present: Yes (No) Seals Intact: Yes No

Cooler/Box Packing Material: (Bubble Wrap) Absorbent Foam Other:_____

Type of Ice: (Wet) Blue None Ice Intact: (Yes) Melted

Cooler Temperature: 5°C Radiation Screened: Yes (No) Chain of Custody Present: (Yes) No

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformance
Chain of Custody properly filled out	✓			
Chain of Custody relinquished	✓			
Sampler Name & Signature on COC	✓			
Containers intact	✓			
Were samples in separate bags	✓			
Sample container labels match COC Sample name/date and time collected	✓			
Sufficient volume provided	✓			
PAES containers used	✓			
Are containers properly preserved for the requested testing? (as labeled)	✓			
If an unknown preservation state, were containers checked? Exception: VOA's coliform			✓	If yes, see pH form.
Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container?			✓	

Comments:_____

Cooler contents examined/received by: CY Date: 1.25.17

Project Manager Review: JDM Date: 1/26/17

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0.0.5

Lot Number: SA25067

Date Completed: 02/05/2017

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: Westpoint Home - Clemson, SC

Project Number: 226253.0000.0000.000005

Lab Report: SA25067 Shealy Environmental Services
Samples analyzed for sulfate, sulfide, VOCs, TOC, and potassium

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Recoveries were within QC limits.

Method Blanks: Method blanks have no detections of targeted analytes.

Trip Blank: TBLK-17101 had no detections of targeted analytes.

Equipment Rinse Blank: Methylene chloride was detected in RBLK-17101 at 9.2 ug/L. Methylene chloride was not detected in the associated samples. Data qualifiers were not assigned.

LCS/LCSD: LCS recoveries are within QC Limits except for recoveries of chloromethane and dichlorodifluoromethane that are above the upper QC limit. These two analytes were not detected in project samples associated with this LCS. LCSD analyses were not performed. Data qualifiers were not assigned.

MS/MSD: Sample OW-04 was used for MS/MSD analyses of sulfate and sulfide. MS/MSD recoveries for sulfate in OW-04 were within QC limits as was the sulfate RPD. OW-04 sulfide MS and MSD recoveries were nominally below the lower QC limit while the RPD was within the QC limit. Sample RMW-27 was used for sulfate MS/MSD analyses. RMW-27 MS recovery was nominally below the lower QC limit while the MSD recovery and RPD were within QC limits. **A "uj" qualifier is assigned to sulfide in OW-04.**

Duplicates: A field duplicate was not collected with these samples.

Data review performed by Terry Hertz, TRC Environmental Corp. , 2/6/2017

Case Narrative
TRC Companies, Inc.
Lot Number: SA25067

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.

Sulfate by IC

Due to matrix interferences, samples -003, -005, -006, and -007 were all analyzed at a 5X dilution. Sample -007 is non-detect at the elevated detection limit.

Sulfide by IC

Due to suspected matrix interferences, the MS/MSD associated with batch 32793 recovered at 68% and 69% respectively for Sulfide analysis.

Sulfate by IC

Due to suspected matrix interferences, the MS associated with batch 33273 recovered marginally below method criteria at 88%. The MSD recovered marginally within method criteria at 90%.

VOCs by GC/MS

The LCS associated with batch 32653 recovered two compounds above method criteria. No corrective action is required as all associated samples are non-detect for these compounds.

Sample Summary
TRC Companies, Inc.
Lot Number: SA25067

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	RMW-28A	Aqueous	01/20/2017 1110	01/25/2017
002	OW-04	Aqueous	01/20/2017 1330	01/25/2017
003	OW-05	Aqueous	01/20/2017 1415	01/25/2017
004	RMW-27	Aqueous	01/20/2017 1545	01/25/2017
005	RMW-23B	Aqueous	01/23/2017 1305	01/25/2017
006	RMW-23	Aqueous	01/23/2017 1540	01/25/2017
007	RMW-23A	Aqueous	01/23/2017 1650	01/25/2017
008	RBLK-17101	Aqueous	01/24/2017 0945	01/25/2017
009	OW-03A	Aqueous	01/24/2017 1030	01/25/2017
010	OW-01	Aqueous	01/24/2017 1135	01/25/2017
011	RMW-20	Aqueous	01/24/2017 1405	01/25/2017
012	MG-05	Aqueous	01/24/2017 1505	01/25/2017
013	MG-05A	Aqueous	01/24/2017 1555	01/25/2017
014	RMW-17	Aqueous	01/24/2017 1655	01/25/2017
015	RMW-17A	Aqueous	01/24/2017 1725	01/25/2017
016	OW-02	Aqueous	01/24/2017 1220	01/25/2017
017	TBLK-17101	Aqueous	01/24/2017	01/25/2017

(17 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: SA25067

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	RMW-28A	Aqueous	Sulfate	300.0	11		mg/L	5
001	RMW-28A	Aqueous	Tetrachloroethene	8260B	150		ug/L	6
001	RMW-28A	Aqueous	Potassium	6020B	620		ug/L	6
002	OW-04	Aqueous	Sulfate	300.0	5.4		mg/L	7
002	OW-04	Aqueous	cis-1,2-Dichloroethene	8260B	5.7		ug/L	7
002	OW-04	Aqueous	Tetrachloroethene	8260B	120		ug/L	8
002	OW-04	Aqueous	Potassium	6020B	920		ug/L	8
003	OW-05	Aqueous	Sulfate	300.0	23		mg/L	9
003	OW-05	Aqueous	Sulfide	SM 4500-S2 F-	1.9		mg/L	9
003	OW-05	Aqueous	TOC	9060A	68		mg/L	9
003	OW-05	Aqueous	Acetone	8260B	26		ug/L	9
003	OW-05	Aqueous	2-Butanone (MEK)	8260B	140		ug/L	9
003	OW-05	Aqueous	cis-1,2-Dichloroethene	8260B	9.7		ug/L	9
003	OW-05	Aqueous	Tetrachloroethene	8260B	33		ug/L	10
003	OW-05	Aqueous	Trichloroethene	8260B	7.1		ug/L	10
003	OW-05	Aqueous	Potassium	6020B	3300		ug/L	10
004	RMW-27	Aqueous	Sulfate	300.0	37		mg/L	11
004	RMW-27	Aqueous	Tetrachloroethene	8260B	3300		ug/L	12
005	RMW-23B	Aqueous	Sulfate	300.0	5.6		mg/L	13
005	RMW-23B	Aqueous	TOC	9060A	35		mg/L	13
005	RMW-23B	Aqueous	2-Butanone (MEK)	8260B	210		ug/L	13
005	RMW-23B	Aqueous	cis-1,2-Dichloroethene	8260B	920		ug/L	13
005	RMW-23B	Aqueous	Tetrachloroethene	8260B	400		ug/L	14
005	RMW-23B	Aqueous	Vinyl chloride	8260B	14		ug/L	14
005	RMW-23B	Aqueous	Potassium	6020B	2800		ug/L	14
006	RMW-23	Aqueous	Sulfate	300.0	6.8		mg/L	15
008	RBLK-17101	Aqueous	Methylene chloride	8260B	9.2		ug/L	17
010	OW-01	Aqueous	Sulfate	300.0	170		mg/L	20
011	RMW-20	Aqueous	Sulfate	300.0	8.0		mg/L	21
012	MG-05	Aqueous	Sulfate	300.0	23		mg/L	22
014	RMW-17	Aqueous	Sulfate	300.0	21		mg/L	24
015	RMW-17A	Aqueous	Sulfate	300.0	35		mg/L	25
016	OW-02	Aqueous	Sulfate	300.0	130		mg/L	26

(33 detections)

Client: TRC Companies, Inc.
Description: RMW-28A
Date Sampled: 01/20/2017 1110
Date Received: 01/25/2017

Laboratory ID: SA25067-001
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	01/30/2017 0037	TAF		32247
1		(Sulfide) SM 4500-S2 F-2011	1	01/27/2017 0945	BWS		32793
1		(TOC) 9060A	1	01/27/2017 0350	DMA		32697

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	11		1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	mg/L	1
TOC		9060A	ND		1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	01/26/2017 1421	TML		32653

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		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1

TOC Range: 0.449 - 0.47

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

Client: TRC Companies, Inc.
Description: RMW-28A
Date Sampled: 01/20/2017 1110
Date Received: 01/25/2017

Laboratory ID: SA25067-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	01/26/2017 1421	TML		32653

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	150		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		110	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/02/2017 2005	DDD	01/26/2017 0910	32625

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	620		400	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"

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 01/20/2017 1330
Date Received: 01/25/2017

Laboratory ID: SA25067-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	01/30/2017 0101	TAF		32247
1		(Sulfide) SM 4500-S2 F-2011	1	01/27/2017 0945	BWS		32793
1		(TOC) 9060A	1	01/27/2017 0423	DMA		32697

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	5.4		1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	mg/L	1
TOC		9060A	ND		1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	01/26/2017 1444	TML		32653

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		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	5.7		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1

TOC Range: 0.745 - 0.772

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

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 01/20/2017 1330
Date Received: 01/25/2017

Laboratory ID: SA25067-002
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	01/26/2017 1444	TML		32653

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	120		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		105	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/02/2017 2010	DDD	01/26/2017 0910	32625

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	920		400	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"

Client: TRC Companies, Inc.
Description: OW-05
Date Sampled: 01/20/2017 1415
Date Received: 01/25/2017

Laboratory ID: SA25067-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	01/30/2017 0213	TAF		32247
1		(Sulfide) SM 4500-S2 F-2011	1	01/27/2017 0945	BWS		32793
1		(TOC) 9060A	1	01/27/2017 0456	DMA		32697

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	23		5.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	1.9		1.0	mg/L	1
TOC		9060A	68		1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	01/26/2017 1508	TML		32653

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	26		20	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	140		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	9.7		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1

TOC Range: 67.317 - 68.292

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

Client: TRC Companies, Inc.
Description: OW-05
Date Sampled: 01/20/2017 1415
Date Received: 01/25/2017

Laboratory ID: SA25067-003
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	01/26/2017 1508	TML		32653

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	33		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	7.1		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		104	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/02/2017 2016	DDD	01/26/2017 0910	32625

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	3300		400	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"

Client: TRC Companies, Inc.
Description: RMW-27
Date Sampled: 01/20/2017 1545
Date Received: 01/25/2017

Laboratory ID: SA25067-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Sulfate) 300.0	1	01/30/2017 1942	TAF		33273
1		(Sulfide) SM 4500-S2 F-2011	1	01/27/2017 0945	BWS		32793
1		(TOC) 9060A	1	01/27/2017 0528	DMA		32697

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	37		1.0	mg/L	2
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	mg/L	1
TOC		9060A	ND		1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	01/26/2017 1641	TML		32653
2	5030B	8260B	50	01/30/2017 1904	PAP		32975

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		200	ug/L	1
Benzene	71-43-2	8260B	ND		50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	ug/L	1
Bromoform	75-25-2	8260B	ND		50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		100	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	ug/L	1
Chloroform	67-66-3	8260B	ND		50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	ug/L	1

TOC Range: 0.786 - 0.93

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

Client: TRC Companies, Inc.
Description: RMW-27
Date Sampled: 01/20/2017 1545
Date Received: 01/25/2017

Laboratory ID: SA25067-004
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	01/26/2017 1641	TML		32653
2	5030B	8260B	50	01/30/2017 1904	PAP		32975

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	ug/L	1
Styrene	100-42-5	8260B	ND		50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	ug/L	1
Tetrachloroethene	127-18-4	8260B	3300		250	ug/L	2
Toluene	108-88-3	8260B	ND		50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	ug/L	1
Trichloroethene	79-01-6	8260B	ND		50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
1,2-Dichloroethane-d4		107	70-130		94	70-130
Bromofluorobenzene		101	70-130		96	70-130
Toluene-d8		107	70-130		96	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/02/2017 2022	DDD	01/26/2017 0910	32625

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	ND		400	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"

Client: TRC Companies, Inc.
Description: RMW-23B
Date Sampled: 01/23/2017 1305
Date Received: 01/25/2017

Laboratory ID: SA25067-005
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	01/30/2017 0301	TAF		32247
1		(Sulfide) SM 4500-S2 F-2011	1	01/27/2017 0945	BWS		32793
1		(TOC) 9060A	1	01/27/2017 0601	DMA		32697

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	5.6		5.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	mg/L	1
TOC		9060A	35		1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	01/26/2017 1704	TML		32653

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		100	ug/L	1
Benzene	71-43-2	8260B	ND		25	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	ug/L	1
Bromoform	75-25-2	8260B	ND		25	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	210		50	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	ug/L	1
Chloroform	67-66-3	8260B	ND		25	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	920		25	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	ug/L	1

TOC Range: 34.538 - 35.346

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

Client: TRC Companies, Inc.
Description: RMW-23B
Date Sampled: 01/23/2017 1305
Date Received: 01/25/2017

Laboratory ID: SA25067-005
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	01/26/2017 1704	TML		32653

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		25	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	ug/L	1
Styrene	100-42-5	8260B	ND		25	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	ug/L	1
Tetrachloroethene	127-18-4	8260B	400		25	ug/L	1
Toluene	108-88-3	8260B	ND		25	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	ug/L	1
Trichloroethene	79-01-6	8260B	ND		25	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	ug/L	1
Vinyl chloride	75-01-4	8260B	14		10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		106	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/02/2017 2028	DDD	01/26/2017 0910	32625

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Potassium	7440-09-7	6020B	2800		400	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"

Client: TRC Companies, Inc.
Description: RMW-23
Date Sampled: 01/23/2017 1540
Date Received: 01/25/2017

Laboratory ID: SA25067-006
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	01/30/2017 0325	TAF		32247

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	6.8		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-23A
Date Sampled: 01/23/2017 1650
Date Received: 01/25/2017

Laboratory ID: SA25067-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	01/30/2017 0438	TAF		32247

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RBLK-17101
Date Sampled: 01/24/2017 0945
Date Received: 01/25/2017

Laboratory ID: SA25067-008
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	01/26/2017 1114	TML		32653

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		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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	9.2		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	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"

Client: TRC Companies, Inc.
Description: RBLK-17101
Date Sampled: 01/24/2017 0945
Date Received: 01/25/2017

Laboratory ID: SA25067-008
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	01/26/2017 1114	TML		32653

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		106	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"

Client: TRC Companies, Inc.
Description: OW-03A
Date Sampled: 01/24/2017 1030
Date Received: 01/25/2017

Laboratory ID: SA25067-009
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	01/30/2017 0502	TAF		32247

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: OW-01
Date Sampled: 01/24/2017 1135
Date Received: 01/25/2017

Laboratory ID: SA25067-010
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	01/30/2017 0526	TAF		32247

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	170		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-20
Date Sampled: 01/24/2017 1405
Date Received: 01/25/2017

Laboratory ID: SA25067-011
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	01/30/2017 0550	TAF		32247

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	8.0		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: MG-05
Date Sampled: 01/24/2017 1505
Date Received: 01/25/2017

Laboratory ID: SA25067-012
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	01/30/2017 0614	TAF		32247

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	23		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: MG-05A
Date Sampled: 01/24/2017 1555
Date Received: 01/25/2017

Laboratory ID: SA25067-013
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	01/30/2017 2054	TAF		33273

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-17
Date Sampled: 01/24/2017 1655
Date Received: 01/25/2017

Laboratory ID: SA25067-014
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	01/30/2017 2118	TAF		33273

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	21		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-17A
Date Sampled: 01/24/2017 1725
Date Received: 01/25/2017

Laboratory ID: SA25067-015
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	01/30/2017 2142	TAF		33273

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	35		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: OW-02
Date Sampled: 01/24/2017 1220
Date Received: 01/25/2017

Laboratory ID: SA25067-016
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	01/30/2017 2206	TAF		33273

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	130		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: TBLK-17101
Date Sampled: 01/24/2017
Date Received: 01/25/2017

Laboratory ID: SA25067-017
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	01/26/2017 1137	TML		32653

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		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	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		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	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"

Client: TRC Companies, Inc.
Description: TBLK-17101
Date Sampled: 01/24/2017
Date Received: 01/25/2017

Laboratory ID: SA25067-017
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	01/26/2017 1137	TML		32653

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		104	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"

QC Summary

Inorganic non-metals - MB

Sample ID: SQ32247-001
Batch: 32247
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfate	ND		1	1.0	mg/L	01/29/2017 1837

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ32247-002
Batch: 32247
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	21		1	107	90-110	01/29/2017 1901

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

Inorganic non-metals - MS

Sample ID: SA25067-002MS
Batch: 32247
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	5.4	20	26		1	102	90-110	01/30/2017 0125

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

Inorganic non-metals - MSD

Sample ID: SA25067-002MD
Batch: 32247
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	5.4	20	26		1	104	1.2	90-110	20	01/30/2017 0149

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MB

Sample ID: SQ32697-001
Batch: 32697
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
TOC	ND		1	1.0	mg/L	01/26/2017 1842

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ32697-002
Batch: 32697
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	20	19		1	96	90-110	01/26/2017 1913

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MB

Sample ID: SQ32793-001
Batch: 32793
Analytical Method: SM 4500-S2 F-2011

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfide	ND		1	1.0	mg/L	01/27/2017 0945

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ32793-002
Batch: 32793
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	10	9.4		1	94	80-120	01/27/2017 0945

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MS

Sample ID: SA25067-002MS
Batch: 32793
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	ND	10	6.8	N	1	68	70-130	01/27/2017 0945

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MSD

Sample ID: SA25067-002MD
Batch: 32793
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfide	ND	10	6.9	N	1	69	1.3	70-130	20	01/27/2017 0945

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MB

Sample ID: SQ33273-001
Batch: 33273
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfate	ND		1	1.0	mg/L	01/30/2017 1918

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ33273-002
Batch: 33273
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	101	90-110	01/30/2017 1854

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

Inorganic non-metals - MS

Sample ID: SA25067-004MS
Batch: 33273
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	37	20	55	N	1	88	90-110	01/30/2017 2006

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

Inorganic non-metals - MSD

Sample ID: SA25067-004MD
Batch: 33273
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	37	20	55		1	90	0.73	90-110	20	01/30/2017 2030

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ32653-001
Batch: 32653
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	01/26/2017 1044
Benzene	ND		1	5.0	ug/L	01/26/2017 1044
Bromodichloromethane	ND		1	5.0	ug/L	01/26/2017 1044
Bromoform	ND		1	5.0	ug/L	01/26/2017 1044
Bromomethane (Methyl bromide)	ND		1	5.0	ug/L	01/26/2017 1044
2-Butanone (MEK)	ND		1	10	ug/L	01/26/2017 1044
Carbon disulfide	ND		1	5.0	ug/L	01/26/2017 1044
Carbon tetrachloride	ND		1	5.0	ug/L	01/26/2017 1044
Chlorobenzene	ND		1	5.0	ug/L	01/26/2017 1044
Chloroethane	ND		1	5.0	ug/L	01/26/2017 1044
Chloroform	ND		1	5.0	ug/L	01/26/2017 1044
Chloromethane (Methyl chloride)	ND		1	5.0	ug/L	01/26/2017 1044
Cyclohexane	ND		1	5.0	ug/L	01/26/2017 1044
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/L	01/26/2017 1044
Dibromochloromethane	ND		1	5.0	ug/L	01/26/2017 1044
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/L	01/26/2017 1044
1,4-Dichlorobenzene	ND		1	5.0	ug/L	01/26/2017 1044
1,3-Dichlorobenzene	ND		1	5.0	ug/L	01/26/2017 1044
1,2-Dichlorobenzene	ND		1	5.0	ug/L	01/26/2017 1044
Dichlorodifluoromethane	ND		1	5.0	ug/L	01/26/2017 1044
1,2-Dichloroethane	ND		1	5.0	ug/L	01/26/2017 1044
1,1-Dichloroethane	ND		1	5.0	ug/L	01/26/2017 1044
trans-1,2-Dichloroethene	ND		1	5.0	ug/L	01/26/2017 1044
1,1-Dichloroethene	ND		1	5.0	ug/L	01/26/2017 1044
cis-1,2-Dichloroethene	ND		1	5.0	ug/L	01/26/2017 1044
1,2-Dichloropropane	ND		1	5.0	ug/L	01/26/2017 1044
trans-1,3-Dichloropropene	ND		1	5.0	ug/L	01/26/2017 1044
cis-1,3-Dichloropropene	ND		1	5.0	ug/L	01/26/2017 1044
Ethylbenzene	ND		1	5.0	ug/L	01/26/2017 1044
2-Hexanone	ND		1	10	ug/L	01/26/2017 1044
Isopropylbenzene	ND		1	5.0	ug/L	01/26/2017 1044
Methyl acetate	ND		1	5.0	ug/L	01/26/2017 1044
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/L	01/26/2017 1044
4-Methyl-2-pentanone	ND		1	10	ug/L	01/26/2017 1044
Methylcyclohexane	ND		1	5.0	ug/L	01/26/2017 1044
Methylene chloride	ND		1	5.0	ug/L	01/26/2017 1044
Styrene	ND		1	5.0	ug/L	01/26/2017 1044
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/L	01/26/2017 1044
Tetrachloroethene	ND		1	5.0	ug/L	01/26/2017 1044
Toluene	ND		1	5.0	ug/L	01/26/2017 1044
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/L	01/26/2017 1044
1,2,4-Trichlorobenzene	ND		1	5.0	ug/L	01/26/2017 1044
1,1,2-Trichloroethane	ND		1	5.0	ug/L	01/26/2017 1044
1,1,1-Trichloroethane	ND		1	5.0	ug/L	01/26/2017 1044

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ32653-001
Batch: 32653
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/L	01/26/2017 1044
Trichlorofluoromethane	ND		1	5.0	ug/L	01/26/2017 1044
Vinyl chloride	ND		1	2.0	ug/L	01/26/2017 1044
Xylenes (total)	ND		1	5.0	ug/L	01/26/2017 1044

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ32653-002
Batch: 32653
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	93		1	93	60-140	01/26/2017 0947
Benzene	50	49		1	99	70-130	01/26/2017 0947
Bromodichloromethane	50	52		1	104	70-130	01/26/2017 0947
Bromoform	50	42		1	84	70-130	01/26/2017 0947
Bromomethane (Methyl bromide)	50	49		1	97	60-140	01/26/2017 0947
2-Butanone (MEK)	100	99		1	99	60-140	01/26/2017 0947
Carbon disulfide	50	53		1	107	60-140	01/26/2017 0947
Carbon tetrachloride	50	51		1	102	70-130	01/26/2017 0947
Chlorobenzene	50	50		1	100	70-130	01/26/2017 0947
Chloroethane	50	49		1	98	60-140	01/26/2017 0947
Chloroform	50	49		1	99	70-130	01/26/2017 0947
Chloromethane (Methyl chloride)	50	75	N	1	149	60-140	01/26/2017 0947
Cyclohexane	50	57		1	113	70-130	01/26/2017 0947
1,2-Dibromo-3-chloropropane (DBCP)	50	45		1	91	70-130	01/26/2017 0947
Dibromochloromethane	50	49		1	98	70-130	01/26/2017 0947
1,2-Dibromoethane (EDB)	50	46		1	93	70-130	01/26/2017 0947
1,4-Dichlorobenzene	50	48		1	95	70-130	01/26/2017 0947
1,3-Dichlorobenzene	50	48		1	97	70-130	01/26/2017 0947
1,2-Dichlorobenzene	50	48		1	96	70-130	01/26/2017 0947
Dichlorodifluoromethane	50	75	N	1	149	60-140	01/26/2017 0947
1,2-Dichloroethane	50	49		1	97	70-130	01/26/2017 0947
1,1-Dichloroethane	50	53		1	106	70-130	01/26/2017 0947
trans-1,2-Dichloroethene	50	50		1	100	70-130	01/26/2017 0947
1,1-Dichloroethene	50	52		1	105	70-130	01/26/2017 0947
cis-1,2-Dichloroethene	50	49		1	98	70-130	01/26/2017 0947
1,2-Dichloropropane	50	53		1	106	70-130	01/26/2017 0947
trans-1,3-Dichloropropene	50	52		1	104	70-130	01/26/2017 0947
cis-1,3-Dichloropropene	50	53		1	106	70-130	01/26/2017 0947
Ethylbenzene	50	50		1	99	70-130	01/26/2017 0947
2-Hexanone	100	94		1	94	60-140	01/26/2017 0947
Isopropylbenzene	50	50		1	101	70-130	01/26/2017 0947
Methyl acetate	50	47		1	93	60-140	01/26/2017 0947
Methyl tertiary butyl ether (MTBE)	50	46		1	91	70-130	01/26/2017 0947
4-Methyl-2-pentanone	100	99		1	99	60-140	01/26/2017 0947
Methylcyclohexane	50	53		1	106	70-130	01/26/2017 0947
Methylene chloride	50	51		1	102	70-130	01/26/2017 0947
Styrene	50	49		1	98	70-130	01/26/2017 0947
1,1,2,2-Tetrachloroethane	50	52		1	103	70-130	01/26/2017 0947
Tetrachloroethene	50	50		1	99	70-130	01/26/2017 0947
Toluene	50	50		1	99	70-130	01/26/2017 0947
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	54		1	108	70-130	01/26/2017 0947
1,2,4-Trichlorobenzene	50	39		1	79	70-130	01/26/2017 0947
1,1,2-Trichloroethane	50	50		1	99	70-130	01/26/2017 0947
1,1,1-Trichloroethane	50	49		1	98	70-130	01/26/2017 0947

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: SQ32653-002
Batch: 32653
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	48		1	97	70-130	01/26/2017 0947
Trichlorofluoromethane	50	48		1	96	70-130	01/26/2017 0947
Vinyl chloride	50	64		1	128	70-130	01/26/2017 0947
Xylenes (total)	100	100		1	102	70-130	01/26/2017 0947

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ32975-001
Batch: 32975
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Tetrachloroethene	ND		1	5.0	ug/L	01/30/2017 1518

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		91	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ32975-002
Batch: 32975
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Tetrachloroethene	50	53		1	106	70-130	01/30/2017 1418

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		94	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - MB

Sample ID: SQ32625-001
Batch: 32625
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 01/26/2017 910

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Potassium	ND		1	400	ug/L	02/02/2017 1802

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - LCS

Sample ID: SQ32625-002
Batch: 32625
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 01/26/2017 910

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	1000	920		1	92	80-120	02/02/2017 1808

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Chain of Custody
and
Miscellaneous Documents

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 68021

Client: TRC	Report to Contact: Lisa Clark	Telephone No. / E-mail: (864) 420-8577	Quote No.
Address: 30 Patewood Dr Suite	Sampler's Signature: X	Analysis (Attach list if more space is needed)	Page 1 of 2
City: Greenville	State: SC	Zip Code: 29615	Printed Name: Benjamin Medlin
Project Name: WPH Clemson			
Project No.: 226253.0.0 PS	P.O. No.		

SA25067

Sample ID / Description (Containers for each sample may be combined on one line.)	Date 2017	Time	Grab / Composite	Matrix: Aqueous	Soil	Non-aqueous	No. of Containers by Preservative Type: Unpres	H2SO4	HNO3	HCl	NaOH	SPEC HP	Voc	Toc	Sulfate	Sulfide	Potassium				
RMW-28A	1-20	1110	G	X			1	1	1	3	3		X	X	X	X	X				
OW-04	1-20	1330	G	X			1	1	1	3	3		X	X	X	X	X				
OW-05	1-20	1415	G	X			1	1	1	3	3		X	X	X	X	X				
RMW-27	1-20	1545	G	X			1	1	1	3	3		X	X	X	X	X				
RMW-23B	1-23	1305	G	X			1	1	1	3	3		X	X	X	X	X				
RMW-23	1-23	1540	G	X			1								X						
RMW-23A	1-23	1650	G	X			1								X						
RBLK-17101	1-24	0945	G	X						3			X								
OW-03A	1-24	1030	G	X			J								X						
OW-01	1-24	1135	G	X			1								X						

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	1-24-17	1905	1. Received by: TRC Sample Storage	1-24-17	1905
2. Relinquished by: TRC Sample Storage	1-25-17	1030	2. Received by: Rick Mayer	1-25-17	1030
3. Relinquished by: Rick Mayer	1-25-17	1030	3. Received by	1.25.17	1030
4. Relinquished by	1.25.17	1550	4. Laboratory received by	1-25-17	1550

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack — Receipt Temp 4.5, 2.3

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 68022

Client: TRC	Report to Contact: Lisa Clark	Telephone No. / E-mail:	Quote No.
Address: 30 Patewood Dr. Suite 300	Sampler's Signature: X	Analysis (Attach list if more space is needed)	Page 2 of 2
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Benjamin Medlin		SA25067
Project Name: WPH Clemson			
Project No.: 226253.0.0 P5	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date 2017	Time	Grab/Comp	Matrix: Aqueous	Soil	Non-Aqueous	No of Containers by Preservative Type: Unpres.	HCl	HNO3	NaOH	H2SO4	VOC	Toc	Sulfate	Sulfide	Potassium
RMW-20	1-24	1405	G	X			1							X		
MG-05	1-24	1505	G	X			1							X		
MG-05A	1-24	1555	G	X			1							X		
RMW-17	1-24	1655	G	X			1							X		
RMW-17A	1-24	1725	G	X			1							X		
OW-02	1-24	1220	G	X			1							X		
TBLK-17101	/	/		X					2			X				
7																

Turn Around Time Required (Prior lab approval required for expedited TAT.)
☐ Standard ☐ Rush (Specify)

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Relinquished by	Date	Time	Received by	Date	Time
1.		1.24.17	1905	TRC Sample Storage	1-24-17	1905
2.	TRC Sample Storage	1-25-17	1030	Rick Mayer	1-25-17	1030
3.	Rick Mayer	1-25-17	1030	Edward Hamm	1.25.17	1030
4.	Edward Hamm	1.25.17	1550	S. Elliott	1-25-17	1550

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack
Receipt Temp. 4.5 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: MF0018C-07

Page 1 of 1
Effective Date: 11/29/2016
Expiry Date: 11/29/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: SDE 1-25-17 Lot #: SA25067

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: 15-1448, 17-34 Cl strip ID:

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

14.5/4.5 °C 12.3/12.3 °C / / °C / / °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 10 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☐	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
Yes ☑	No ☐	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes ☑	No ☐	NA ☐	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA (<0.5mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?

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_2SO_4, HNO_3, HCl, NaOH) using SR # _____.

Sample(s) 07-21 were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.5 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be < 2 by _____ Date: _____

Sample(s) _____ were Not received at a pH of < 2 and were adjusted accordingly using SR# _____

Sample labels applied by: SDE Verified by: _____ Date: 1-25-17

Comments: _____

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0.0.5

Lot Number: SA30005

Date Completed: 02/08/2017

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: Westpoint Home - Clemson, SC

Project Number: 226253.0000.0000.000005

Lab Report: SA30005 Shealy Environmental Services
Samples analyzed for sulfate

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Surrogates are not applicable to the analyses performed.

Method Blanks: Method blanks have no sulfate detections.

Trip Blank: A trip blank was not collected with these samples.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS recoveries are within QC Limits. LCSD analyses were not performed.

MS/MSD: MS/MSD analyses were not performed using samples from this report.

Duplicates: A field duplicate was not collected with these samples.

No qualifiers were assigned.

Data review performed by Terry Hertz, TRC Environmental Corp. , 2/9/2017

Case Narrative
TRC Companies, Inc.
Lot Number: SA30005

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.

Sulfate by IC

Due to matrix interferences, samples -001 and -005 have been analyzed at a 50X and 10X dilution respectively. The target compound is non-detect at these dilutions.

Sample Summary
TRC Companies, Inc.
Lot Number: SA30005

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	RMW-27A	Aqueous	01/26/2017 1055	01/30/2017
002	RMW-27B	Aqueous	01/26/2017 1145	01/30/2017
003	RMW-21	Aqueous	01/26/2017 1250	01/30/2017
004	RMW-21A	Aqueous	01/26/2017 1325	01/30/2017
005	OW-06A	Aqueous	01/26/2017 1555	01/30/2017
006	RMW-18	Aqueous	01/27/2017 1020	01/30/2017
007	RMW-18A	Aqueous	01/27/2017 1105	01/30/2017
008	RMW-20A	Aqueous	01/27/2017 1155	01/30/2017
009	RMW-02	Aqueous	01/27/2017 1355	01/30/2017

(9 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: SA30005

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	RMW-27B	Aqueous	Sulfate	300.0	32		mg/L	6
003	RMW-21	Aqueous	Sulfate	300.0	26		mg/L	7
004	RMW-21A	Aqueous	Sulfate	300.0	45		mg/L	8
006	RMW-18	Aqueous	Sulfate	300.0	100		mg/L	10
007	RMW-18A	Aqueous	Sulfate	300.0	110		mg/L	11
009	RMW-02	Aqueous	Sulfate	300.0	9.3		mg/L	13

(6 detections)

Client: TRC Companies, Inc.
Description: RMW-27A
Date Sampled: 01/26/2017 1055
Date Received: 01/30/2017

Laboratory ID: SA30005-001
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	50	02/04/2017 0150	TAF		33586

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		50	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-27B
Date Sampled: 01/26/2017 1145
Date Received: 01/30/2017

Laboratory ID: SA30005-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/04/2017 0303	TAF		33586

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	32		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-21
Date Sampled: 01/26/2017 1250
Date Received: 01/30/2017

Laboratory ID: SA30005-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/04/2017 0327	TAF		33586

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	26		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-21A
Date Sampled: 01/26/2017 1325
Date Received: 01/30/2017

Laboratory ID: SA30005-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	02/04/2017 0351	TAF		33586

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	45		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: OW-06A
Date Sampled: 01/26/2017 1555
Date Received: 01/30/2017

Laboratory ID: SA30005-005
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	10	02/04/2017 0415	TAF		33586

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		10	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-18
Date Sampled: 01/27/2017 1020
Date Received: 01/30/2017

Laboratory ID: SA30005-006
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	02/04/2017 0439	TAF		33586

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	100		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-18A
Date Sampled: 01/27/2017 1105
Date Received: 01/30/2017

Laboratory ID: SA30005-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	02/04/2017 1845	TAF		33616

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	110		5.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-20A
Date Sampled: 01/27/2017 1155
Date Received: 01/30/2017

Laboratory ID: SA30005-008
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/04/2017 1909	TAF		33616

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	ND		1.0	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-02
Date Sampled: 01/27/2017 1355
Date Received: 01/30/2017

Laboratory ID: SA30005-009
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Sulfate) 300.0	1	02/06/2017 1142	TAF		33779

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Sulfate		300.0	9.3		1.0	mg/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"

QC Summary

Inorganic non-metals - MB

Sample ID: SQ33586-001
Batch: 33586
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfate	ND		1	1.0	mg/L	02/03/2017 1702

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ33586-002
Batch: 33586
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	21		1	103	90-110	02/03/2017 1726

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

Inorganic non-metals - MB

Sample ID: SQ33616-001
Batch: 33616
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfate	ND		1	1.0	mg/L	02/04/2017 1757

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ33616-002
Batch: 33616
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	102	90-110	02/04/2017 1821

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

Inorganic non-metals - MB

Sample ID: SQ33779-001
Batch: 33779
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Sulfate	ND		1	1.0	mg/L	02/06/2017 1054

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ33779-002
Batch: 33779
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	101	90-110	02/06/2017 1118

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

Chain of Custody
and
Miscellaneous Documents

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 68023

Client: TRC	Report to Contact: Lisa Clark	Telephone No. / E-mail: 864-420-8577
Address: 30 Patewood Dr Suite 300	Sampler's Signature: X [signature]	Quote No.
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Benjamin Medlin	Page 1 of 1
Project Name: WPH Clemson		
Project No.: 226253.0.0 PS	P.O. No.	

Analysis (Attach list if more space is needed)

SA30005

Sample ID / Description (Containers for each sample may be combined on one line.)	Date 2017	Time	G=Grab C=Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	NaOH+ZnAc	VOC	TOC	Sulfate	Sulfide	Potassium	Remarks / Cooler I.D.
RMW-27A	1-26	1055	G	X			1								X			
RMW-27B	1-26	1145	G	X			1								X			
RMW-21	1-26	1250	G	X			1								X			
RMW-21A	1-26	1325	G	X			1								X			
OW-06A	1-26	1555	G	X			1								X			
RMW-18	1-27	1020	G	X			1								X			
RMW-18A	1-27	1105	G	X			1								X			
RMW-20A	1-27	1155	G	X			1								X			
RMW-02	1-27	1355	G	X			1								X			

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time
1. Relinquished by [signature]	1-27-17	1610
2. Relinquished by TRC Sample Storage / DJS	1-30-17	0930
3. Relinquished by [signature]	1-30-17	1256
4. Relinquished by	Date	Time

	Date	Time
1. Received by TRC Sample Storage	1-27-17	1610
2. Received by [signature]	1-30-17	0930
3. Received by	Date	Time
4. Laboratory received by S. Elliott	1-30-17	1256

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) (Yes) No Ice Pack Receipt Temp. 1.4 °C TB

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-07

Page 1 of 1
Effective Date: 11/29/2016
Expiry Date: 11/29/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: SBE 11-30-17 Lot #: SA30005

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?
pH strip ID:			Cl strip ID:
Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: 1.4 / 1.4 °C / / °C / / °C / / °C			
Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C			
Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☐	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
Yes ☐	No ☐	NA ☑	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA (<0.5mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?

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_2SO_4, HNO_3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.5 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be < 2 by _____ Date: _____
Sample(s) _____ were Not received at a pH of < 2 and were adjusted accordingly using SR# _____

Sample labels applied by: SBE Verified by: _____ Date: 11-30-17

Comments: _____

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson - DPT Sampling

Project Number: 226253.0.0.13

Lot Number: SB20017

Date Completed: 02/27/2017

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: Westpoint Home - Clemson, SC

Project Number: 226253.0000.0000.000013

Lab Report: SB20017 Shealy Environmental Services
Samples analyzed for sulfate and VOCs

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: VOC surrogate recoveries were within QC limits.

Method Blanks: Method blanks have no VOC or sulfate detections.

Trip Blank: A trip blank was not collected with these samples.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS recoveries are within QC Limits. An LCSD analysis was only performed for VOC batch 35181 where recoveries and RPDs were within QC limits except for the RPD for acetone which was 3% above the QC limit. No qualifier was assigned.

MS/MSD: MS/MSD analyses were performed for sulfate using sample DP-03 and for VOCs using sample DP-06. Recoveries and RPDs were within QC limits except for the sulfate MS recovery which was 2% below the lower QC limit. The sulfate MSD recovery was within the QC limit. No qualifier was assigned.

Duplicates: A field duplicate was not collected with these samples.

No qualifiers were assigned.

Data review performed by Terry Hertz, TRC Environmental Corp. , 2/28/2017

Case Narrative
TRC Companies, Inc.
Lot Number: SB20017

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.

Sulfate by IC

The MS associated with batch 35367 recovered Sulfate marginally below method criteria at 88% likely due to matrix interferences. The MSD yielded a similar recovery of 91% further illustrating matrix interferences are impacting the spike recoveries.

VOCs by GC/MS

Sample -001 has been analyzed at a 5X dilution due to matrix interferences. The detection limits have been elevated accordingly.

The relative percent difference between the LCS/LCSD in batch 35181 was outside of method criteria for Acetone. No corrective action was taken as both the LCS and LCSD recoveries were within method criteria.

Sample Summary
TRC Companies, Inc.
Lot Number: SB20017

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	DP-05A	Aqueous	02/16/2017 1100	02/20/2017
002	DP-06	Aqueous	02/16/2017 1215	02/20/2017
003	DP-06A	Aqueous	02/16/2017 1320	02/20/2017
004	DP-07	Aqueous	02/16/2017 1500	02/20/2017
005	DP-07A	Aqueous	02/16/2017 1600	02/20/2017
006	DP-04	Aqueous	02/17/2017 0915	02/20/2017
007	DP-04A	Aqueous	02/17/2017 1045	02/20/2017
008	DP-03	Aqueous	02/17/2017 1200	02/20/2017
009	DP-03A	Aqueous	02/17/2017 1310	02/20/2017
010	DP-02	Aqueous	02/17/2017 1500	02/20/2017

(10 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: SB20017

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	DP-05A	Aqueous	Acetone	8260B	98	J	ug/L	5
001	DP-05A	Aqueous	2-Butanone (MEK)	8260B	59		ug/L	5
001	DP-05A	Aqueous	Methyl acetate	8260B	6.6	J	ug/L	5
001	DP-05A	Aqueous	Tetrachloroethene	8260B	6.5	J	ug/L	6
002	DP-06	Aqueous	Sulfate	300.0	95		mg/L	7
002	DP-06	Aqueous	cis-1,2-Dichloroethene	8260B	25	J	ug/L	7
002	DP-06	Aqueous	Tetrachloroethene	8260B	1200		ug/L	8
002	DP-06	Aqueous	Trichloroethene	8260B	17	J	ug/L	8
003	DP-06A	Aqueous	Acetone	8260B	7.8	J	ug/L	9
004	DP-07	Aqueous	Sulfate	300.0	66		mg/L	11
004	DP-07	Aqueous	Acetone	8260B	21		ug/L	11
004	DP-07	Aqueous	Bromomethane (Methyl	8260B	4.8	J	ug/L	11
004	DP-07	Aqueous	Chloromethane (Methyl	8260B	3.7	J	ug/L	11
004	DP-07	Aqueous	1,1-Dichloroethene	8260B	0.49	J	ug/L	11
004	DP-07	Aqueous	cis-1,2-Dichloroethene	8260B	1.2	J	ug/L	11
004	DP-07	Aqueous	Tetrachloroethene	8260B	170		ug/L	12
004	DP-07	Aqueous	Trichloroethene	8260B	4.4	J	ug/L	12
005	DP-07A	Aqueous	Acetone	8260B	5.2	J	ug/L	13
005	DP-07A	Aqueous	Tetrachloroethene	8260B	150		ug/L	14
006	DP-04	Aqueous	Sulfate	300.0	47		mg/L	15
006	DP-04	Aqueous	Acetone	8260B	52	J	ug/L	15
006	DP-04	Aqueous	Bromomethane (Methyl	8260B	2.1	J	ug/L	15
006	DP-04	Aqueous	cis-1,2-Dichloroethene	8260B	2.8	J	ug/L	15
006	DP-04	Aqueous	Tetrachloroethene	8260B	240		ug/L	16
006	DP-04	Aqueous	Trichloroethene	8260B	3.4	J	ug/L	16
007	DP-04A	Aqueous	Acetone	8260B	5.8	J	ug/L	17
007	DP-04A	Aqueous	Tetrachloroethene	8260B	1.3	J	ug/L	18
008	DP-03	Aqueous	Sulfate	300.0	81		mg/L	19
008	DP-03	Aqueous	Acetone	8260B	2.6	J	ug/L	19
008	DP-03	Aqueous	Tetrachloroethene	8260B	110		ug/L	20
008	DP-03	Aqueous	Trichloroethene	8260B	0.62	J	ug/L	20
009	DP-03A	Aqueous	Acetone	8260B	13	J	ug/L	21
009	DP-03A	Aqueous	Tetrachloroethene	8260B	0.55	J	ug/L	22
010	DP-02	Aqueous	Sulfate	300.0	90		mg/L	23
010	DP-02	Aqueous	Acetone	8260B	230		ug/L	23
010	DP-02	Aqueous	Bromomethane (Methyl	8260B	1.7	J	ug/L	23
010	DP-02	Aqueous	2-Butanone (MEK)	8260B	46		ug/L	23
010	DP-02	Aqueous	Carbon disulfide	8260B	4.1	J	ug/L	23
010	DP-02	Aqueous	Chloromethane (Methyl	8260B	1.5	J	ug/L	23
010	DP-02	Aqueous	cis-1,2-Dichloroethene	8260B	4.3	J	ug/L	23
010	DP-02	Aqueous	Methyl acetate	8260B	7.5		ug/L	23
010	DP-02	Aqueous	Tetrachloroethene	8260B	34		ug/L	24
010	DP-02	Aqueous	Trichloroethene	8260B	0.99	J	ug/L	24

(43 detections)

Client: TRC Companies, Inc.
Description: DP-05A
Date Sampled: 02/16/2017 1100
Date Received: 02/20/2017

Laboratory ID: SB20017-001
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Sulfate) 300.0	1	02/23/2017 0318	TAF		35484

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	2

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/21/2017 0546	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	98	J	100	10	ug/L	1
Benzene	71-43-2	8260B	ND		25	2.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	2.0	ug/L	1
Bromoform	75-25-2	8260B	ND		25	2.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	59		50	10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	2.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	2.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	2.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		25	2.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	2.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	2.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	2.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	2.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	2.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	2.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	2.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	2.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	2.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	2.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		25	2.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	2.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	2.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	2.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	2.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		25	2.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	2.0	ug/L	1
Methyl acetate	79-20-9	8260B	6.6	J	25	2.0	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-05A
Date Sampled: 02/16/2017 1100
Date Received: 02/20/2017

Laboratory ID: SB20017-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/21/2017 0546	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	2.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	2.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	2.0	ug/L	1
Styrene	100-42-5	8260B	ND		25	2.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	2.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	6.5	J	25	2.0	ug/L	1
Toluene	108-88-3	8260B	ND		25	2.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	2.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	2.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	2.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	2.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		25	2.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	2.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		96	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-06
Date Sampled: 02/16/2017 1215
Date Received: 02/20/2017

Laboratory ID: SB20017-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	02/21/2017 2027	TAF		35367

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	95		5.0	1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	02/21/2017 0609	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		200	20	ug/L	1
Benzene	71-43-2	8260B	ND		50	4.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	4.0	ug/L	1
Bromoform	75-25-2	8260B	ND		50	4.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	4.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		100	20	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	4.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	4.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	4.0	ug/L	1
Chloroform	67-66-3	8260B	ND		50	4.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	4.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	4.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	4.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	4.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	4.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	4.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	4.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	4.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	4.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	4.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	25	J	50	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	4.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	4.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	4.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	4.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		50	4.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	20	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		50	4.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	4.0	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-06
Date Sampled: 02/16/2017 1215
Date Received: 02/20/2017

Laboratory ID: SB20017-002
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	02/21/2017 0609	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	4.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	20	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	4.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	4.0	ug/L	1
Styrene	100-42-5	8260B	ND		50	4.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	4.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	1200		50	4.0	ug/L	1
Toluene	108-88-3	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	4.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	4.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	4.0	ug/L	1
Trichloroethene	79-01-6	8260B	17	J	50	4.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	4.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	4.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	4.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		99	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-06A
Date Sampled: 02/16/2017 1320
Date Received: 02/20/2017

Laboratory ID: SB20017-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/21/2017 2051	TAF		35367

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/21/2017 0239	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	7.8	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-06A
Date Sampled: 02/16/2017 1320
Date Received: 02/20/2017

Laboratory ID: SB20017-003
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/21/2017 0239	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		98	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-07
Date Sampled: 02/16/2017 1500
Date Received: 02/20/2017

Laboratory ID: SB20017-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/21/2017 2115	TAF		35367

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	66		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/21/2017 0459	ECP		35135
2	5030B	8260B	1	02/21/2017 1316	TML		35181

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	21		20	2.0	ug/L	2
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	2
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	2
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	2
Bromomethane (Methyl bromide)	74-83-9	8260B	4.8	J	5.0	0.40	ug/L	2
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	2
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	2
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	2
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	2
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	2
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	2
Chloromethane (Methyl chloride)	74-87-3	8260B	3.7	J	5.0	0.40	ug/L	2
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	2
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	2
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	2
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	2
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	2
1,1-Dichloroethene	75-35-4	8260B	0.49	J	5.0	0.40	ug/L	2
cis-1,2-Dichloroethene	156-59-2	8260B	1.2	J	5.0	0.40	ug/L	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	2
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	2
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	2
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	2
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-07
Date Sampled: 02/16/2017 1500
Date Received: 02/20/2017

Laboratory ID: SB20017-004
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/21/2017 0459	ECP		35135
2	5030B	8260B	1	02/21/2017 1316	TML		35181

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	2
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	2
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	2
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	2
Tetrachloroethene	127-18-4	8260B	170		25	2.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	2
Trichloroethene	79-01-6	8260B	4.4	J	5.0	0.40	ug/L	2
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	2
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	2
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130		93	70-130
Bromofluorobenzene		96	70-130		96	70-130
Toluene-d8		96	70-130		97	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-07A
Date Sampled: 02/16/2017 1600
Date Received: 02/20/2017

Laboratory ID: SB20017-005
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/21/2017 2139	TAF		35367

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/21/2017 0302	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	5.2	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-07A
Date Sampled: 02/16/2017 1600
Date Received: 02/20/2017

Laboratory ID: SB20017-005
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/21/2017 0302	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	150		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		97	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-04
Date Sampled: 02/17/2017 0915
Date Received: 02/20/2017

Laboratory ID: SB20017-006
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/21/2017 2203	TAF		35367

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	47		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/21/2017 0522	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	52	J	100	10	ug/L	1
Benzene	71-43-2	8260B	ND		25	2.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	2.0	ug/L	1
Bromoform	75-25-2	8260B	ND		25	2.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	2.1	J	25	2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		50	10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	2.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	2.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	2.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		25	2.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	2.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	2.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	2.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	2.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	2.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	2.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	2.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	2.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	2.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	2.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	2.8	J	25	2.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	2.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	2.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	2.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	2.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		25	2.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	2.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	2.0	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-04
Date Sampled: 02/17/2017 0915
Date Received: 02/20/2017

Laboratory ID: SB20017-006
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/21/2017 0522	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	2.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	2.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	2.0	ug/L	1
Styrene	100-42-5	8260B	ND		25	2.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	2.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	240		25	2.0	ug/L	1
Toluene	108-88-3	8260B	ND		25	2.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	2.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	2.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	2.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	2.0	ug/L	1
Trichloroethene	79-01-6	8260B	3.4	J	25	2.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	2.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		99	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-04A
Date Sampled: 02/17/2017 1045
Date Received: 02/20/2017

Laboratory ID: SB20017-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/21/2017 2227	TAF		35367

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/21/2017 0325	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	5.8	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-04A
Date Sampled: 02/17/2017 1045
Date Received: 02/20/2017

Laboratory ID: SB20017-007
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/21/2017 0325	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	1.3	J	5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-03
Date Sampled: 02/17/2017 1200
Date Received: 02/20/2017

Laboratory ID: SB20017-008
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/21/2017 2251	TAF		35367

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	81		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/21/2017 0349	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	2.6	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-03
Date Sampled: 02/17/2017 1200
Date Received: 02/20/2017

Laboratory ID: SB20017-008
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/21/2017 0349	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	110		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	0.62	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		97	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-03A
Date Sampled: 02/17/2017 1310
Date Received: 02/20/2017

Laboratory ID: SB20017-009
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/22/2017 0051	TAF		35367

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/21/2017 0412	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	13	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-03A
Date Sampled: 02/17/2017 1310
Date Received: 02/20/2017

Laboratory ID: SB20017-009
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/21/2017 0412	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	0.55	J	5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		98	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-02
Date Sampled: 02/17/2017 1500
Date Received: 02/20/2017

Laboratory ID: SB20017-010
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	02/22/2017 0115	TAF		35367

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	90		5.0	1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/21/2017 0436	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	230		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	1.7	J	5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	46		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	4.1	J	5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	1.5	J	5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	4.3	J	5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	7.5		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-02
Date Sampled: 02/17/2017 1500
Date Received: 02/20/2017

Laboratory ID: SB20017-010
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/21/2017 0436	ECP		35135

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	34		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	0.99	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		97	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 MDL
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"

QC Summary

Inorganic non-metals - MB

Sample ID: SQ35367-001
Batch: 35367
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.20	mg/L	02/21/2017 1915

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ35367-002
Batch: 35367
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	19		1	97	90-110	02/21/2017 1939

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 MDL
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

Inorganic non-metals - MS

Sample ID: SB20017-008MS
Batch: 35367
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	81	20	99	N	1	88	90-110	02/21/2017 2315

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 MDL
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

Inorganic non-metals - MSD

Sample ID: SB20017-008MD
Batch: 35367
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	81	20	99		1	91	0.60	90-110	20	02/22/2017 0027

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 MDL
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

Inorganic non-metals - MB

Sample ID: SQ35484-001
Batch: 35484
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.20	mg/L	02/22/2017 1629

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ35484-002
Batch: 35484
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	98	90-110	02/22/2017 1653

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 MDL
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: SQ35135-001
Batch: 35135
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	2.0	ug/L	02/20/2017 2234
Benzene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Bromodichloromethane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Bromoform	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Bromomethane (Methyl bromide)	ND		1	5.0	0.40	ug/L	02/20/2017 2234
2-Butanone (MEK)	ND		1	10	2.0	ug/L	02/20/2017 2234
Carbon disulfide	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Chlorobenzene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Chloroethane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Chloroform	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Chloromethane (Methyl chloride)	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Cyclohexane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Dibromochloromethane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,2-Dibromoethane (EDB)	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,2-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,3-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,4-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Dichlorodifluoromethane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,2-Dichloroethane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,1-Dichloroethane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
cis-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,1-Dichloroethene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,2-Dichloropropane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
trans-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
cis-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Ethylbenzene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
2-Hexanone	ND		1	10	2.0	ug/L	02/20/2017 2234
Isopropylbenzene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Methyl acetate	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/20/2017 2234
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	02/20/2017 2234
Methylcyclohexane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Methylene chloride	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Styrene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Tetrachloroethene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Toluene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,2,4-Trichlorobenzene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,1,2-Trichloroethane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
1,1,1-Trichloroethane	ND		1	5.0	0.40	ug/L	02/20/2017 2234

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 MDL
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: SQ35135-001
Batch: 35135
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Trichlorofluoromethane	ND		1	5.0	0.40	ug/L	02/20/2017 2234
Vinyl chloride	ND		1	2.0	0.40	ug/L	02/20/2017 2234
Xylenes (total)	ND		1	5.0	0.40	ug/L	02/20/2017 2234

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ35135-002
Batch: 35135
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	86		1	86	60-140	02/20/2017 2132
Benzene	50	47		1	93	70-130	02/20/2017 2132
Bromodichloromethane	50	50		1	100	70-130	02/20/2017 2132
Bromoform	50	51		1	102	70-130	02/20/2017 2132
Bromomethane (Methyl bromide)	50	54		1	109	60-140	02/20/2017 2132
2-Butanone (MEK)	100	100		1	105	60-140	02/20/2017 2132
Carbon disulfide	50	43		1	87	60-140	02/20/2017 2132
Carbon tetrachloride	50	48		1	96	70-130	02/20/2017 2132
Chlorobenzene	50	49		1	99	70-130	02/20/2017 2132
Chloroethane	50	51		1	103	60-140	02/20/2017 2132
Chloroform	50	48		1	95	70-130	02/20/2017 2132
Chloromethane (Methyl chloride)	50	50		1	100	60-140	02/20/2017 2132
Cyclohexane	50	46		1	93	70-130	02/20/2017 2132
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	96	70-130	02/20/2017 2132
Dibromochloromethane	50	50		1	99	70-130	02/20/2017 2132
1,2-Dibromoethane (EDB)	50	47		1	93	70-130	02/20/2017 2132
1,2-Dichlorobenzene	50	49		1	98	70-130	02/20/2017 2132
1,3-Dichlorobenzene	50	48		1	95	70-130	02/20/2017 2132
1,4-Dichlorobenzene	50	48		1	95	70-130	02/20/2017 2132
Dichlorodifluoromethane	50	47		1	95	60-140	02/20/2017 2132
1,2-Dichloroethane	50	45		1	91	70-130	02/20/2017 2132
1,1-Dichloroethane	50	49		1	97	70-130	02/20/2017 2132
cis-1,2-Dichloroethene	50	48		1	97	70-130	02/20/2017 2132
trans-1,2-Dichloroethene	50	49		1	97	70-130	02/20/2017 2132
1,1-Dichloroethene	50	47		1	93	70-130	02/20/2017 2132
1,2-Dichloropropane	50	49		1	99	70-130	02/20/2017 2132
trans-1,3-Dichloropropene	50	49		1	99	70-130	02/20/2017 2132
cis-1,3-Dichloropropene	50	52		1	103	70-130	02/20/2017 2132
Ethylbenzene	50	48		1	97	70-130	02/20/2017 2132
2-Hexanone	100	95		1	95	60-140	02/20/2017 2132
Isopropylbenzene	50	53		1	106	70-130	02/20/2017 2132
Methyl acetate	50	48		1	97	60-140	02/20/2017 2132
Methyl tertiary butyl ether (MTBE)	50	45		1	90	70-130	02/20/2017 2132
4-Methyl-2-pentanone	100	98		1	98	60-140	02/20/2017 2132
Methylcyclohexane	50	52		1	105	70-130	02/20/2017 2132
Methylene chloride	50	47		1	95	70-130	02/20/2017 2132
Styrene	50	51		1	101	70-130	02/20/2017 2132
1,1,2,2-Tetrachloroethane	50	47		1	94	70-130	02/20/2017 2132
Tetrachloroethene	50	49		1	98	70-130	02/20/2017 2132
Toluene	50	47		1	95	70-130	02/20/2017 2132
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	46		1	93	70-130	02/20/2017 2132
1,2,4-Trichlorobenzene	50	42		1	85	70-130	02/20/2017 2132
1,1,2-Trichloroethane	50	48		1	96	70-130	02/20/2017 2132
1,1,1-Trichloroethane	50	46		1	93	70-130	02/20/2017 2132

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 MDL
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: SQ35135-002
Batch: 35135
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	46		1	92	70-130	02/20/2017 2132
Trichlorofluoromethane	50	47		1	93	70-130	02/20/2017 2132
Vinyl chloride	50	53		1	105	70-130	02/20/2017 2132
Xylenes (total)	100	100		1	102	70-130	02/20/2017 2132

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		91	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MS

Sample ID: SB20017-002MS
Batch: 35135
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	ND	1000	860		10	86	60-140	02/21/2017 0633
Benzene	ND	500	470		10	94	70-130	02/21/2017 0633
Bromodichloromethane	ND	500	530		10	106	71-143	02/21/2017 0633
Bromoform	ND	500	560		10	112	65-131	02/21/2017 0633
Bromomethane (Methyl bromide)	ND	500	570		10	113	36-168	02/21/2017 0633
2-Butanone (MEK)	ND	1000	1100		10	111	60-140	02/21/2017 0633
Carbon disulfide	ND	500	430		10	87	60-140	02/21/2017 0633
Carbon tetrachloride	ND	500	480		10	95	37-166	02/21/2017 0633
Chlorobenzene	ND	500	530		10	107	78-129	02/21/2017 0633
Chloroethane	ND	500	540		10	108	60-140	02/21/2017 0633
Chloroform	ND	500	490		10	97	63-123	02/21/2017 0633
Chloromethane (Methyl chloride)	ND	500	520		10	103	20-158	02/21/2017 0633
Cyclohexane	ND	500	430		10	86	70-130	02/21/2017 0633
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	530		10	105	70-130	02/21/2017 0633
Dibromochloromethane	ND	500	540		10	108	74-134	02/21/2017 0633
1,2-Dibromoethane (EDB)	ND	500	500		10	100	70-130	02/21/2017 0633
1,2-Dichlorobenzene	ND	500	550		10	111	70-130	02/21/2017 0633
1,3-Dichlorobenzene	ND	500	550		10	109	70-130	02/21/2017 0633
1,4-Dichlorobenzene	ND	500	540		10	108	70-130	02/21/2017 0633
Dichlorodifluoromethane	ND	500	500		10	101	10-158	02/21/2017 0633
1,1-Dichloroethane	ND	500	490		10	97	69-132	02/21/2017 0633
1,2-Dichloroethane	ND	500	450		10	91	70-130	02/21/2017 0633
1,1-Dichloroethene	ND	500	480		10	96	50-132	02/21/2017 0633
cis-1,2-Dichloroethene	25	500	510		10	97	70-130	02/21/2017 0633
trans-1,2-Dichloroethene	ND	500	490		10	98	70-130	02/21/2017 0633
1,2-Dichloropropane	ND	500	510		10	102	71-126	02/21/2017 0633
cis-1,3-Dichloropropene	ND	500	520		10	104	69-130	02/21/2017 0633
trans-1,3-Dichloropropene	ND	500	510		10	102	73-131	02/21/2017 0633
Ethylbenzene	ND	500	520		10	105	70-130	02/21/2017 0633
2-Hexanone	ND	1000	1100		10	109	60-140	02/21/2017 0633
Isopropylbenzene	ND	500	560		10	113	70-130	02/21/2017 0633
Methyl acetate	ND	500	420		10	84	15-128	02/21/2017 0633
Methyl tertiary butyl ether (MTBE)	ND	500	410		10	82	70-130	02/21/2017 0633
4-Methyl-2-pentanone	ND	1000	1100		10	107	60-140	02/21/2017 0633
Methylcyclohexane	ND	500	490		10	99	70-130	02/21/2017 0633
Methylene chloride	ND	500	470		10	93	69-129	02/21/2017 0633
Styrene	ND	500	560		10	113	70-130	02/21/2017 0633
1,1,2,2-Tetrachloroethane	ND	500	540		10	108	60-155	02/21/2017 0633
Tetrachloroethene	1200	500	1600		10	97	70-130	02/21/2017 0633
Toluene	ND	500	490		10	98	70-130	02/21/2017 0633
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	500	490		10	98	70-130	02/21/2017 0633
1,2,4-Trichlorobenzene	ND	500	470		10	94	70-130	02/21/2017 0633
1,1,1-Trichloroethane	ND	500	470		10	94	77-132	02/21/2017 0633
1,1,2-Trichloroethane	ND	500	530		10	105	77-132	02/21/2017 0633

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 MDL
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 - MS

Sample ID: SB20017-002MS
Batch: 35135
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	17	500	490		10	95	73-124	02/21/2017 0633
Trichlorofluoromethane	ND	500	450		10	91	60-140	02/21/2017 0633
Vinyl chloride	ND	500	540		10	109	29-159	02/21/2017 0633
Xylenes (total)	ND	1000	1100		10	108	70-130	02/21/2017 0633

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		89	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

P = The RPD between two GC columns exceeds 40%

J = Estimated result < PQL and ≥ MDL

N = Recovery is out of criteria

+ = 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 - MSD

Sample ID: SB20017-002MD
Batch: 35135
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	1000	720		10	72	17	60-140	20	02/21/2017 0656
Benzene	ND	500	480		10	95	1.5	70-130	20	02/21/2017 0656
Bromodichloromethane	ND	500	540		10	107	1.5	71-143	20	02/21/2017 0656
Bromoform	ND	500	570		10	113	0.71	65-131	20	02/21/2017 0656
Bromomethane (Methyl bromide)	ND	500	620		10	125	9.7	36-168	20	02/21/2017 0656
2-Butanone (MEK)	ND	1000	1000		10	104	6.9	60-140	20	02/21/2017 0656
Carbon disulfide	ND	500	470		10	94	8.1	60-140	20	02/21/2017 0656
Carbon tetrachloride	ND	500	510		10	103	7.7	37-166	20	02/21/2017 0656
Chlorobenzene	ND	500	540		10	109	1.6	78-129	20	02/21/2017 0656
Chloroethane	ND	500	580		10	116	7.5	60-140	20	02/21/2017 0656
Chloroform	ND	500	500		10	100	2.2	63-123	20	02/21/2017 0656
Chloromethane (Methyl chloride)	ND	500	540		10	108	4.4	20-158	20	02/21/2017 0656
Cyclohexane	ND	500	490		10	99	14	70-130	20	02/21/2017 0656
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	550		10	110	4.4	70-130	20	02/21/2017 0656
Dibromochloromethane	ND	500	550		10	110	1.7	74-134	20	02/21/2017 0656
1,2-Dibromoethane (EDB)	ND	500	500		10	100	0.077	70-130	20	02/21/2017 0656
1,2-Dichlorobenzene	ND	500	550		10	110	0.89	70-130	20	02/21/2017 0656
1,3-Dichlorobenzene	ND	500	550		10	109	0.011	70-130	20	02/21/2017 0656
1,4-Dichlorobenzene	ND	500	540		10	107	0.30	70-130	20	02/21/2017 0656
Dichlorodifluoromethane	ND	500	520		10	105	3.9	10-158	20	02/21/2017 0656
1,1-Dichloroethane	ND	500	510		10	102	4.2	69-132	20	02/21/2017 0656
1,2-Dichloroethane	ND	500	450		10	90	0.41	70-130	20	02/21/2017 0656
1,1-Dichloroethene	ND	500	510		10	101	5.3	50-132	20	02/21/2017 0656
cis-1,2-Dichloroethene	25	500	520		10	100	2.9	70-130	20	02/21/2017 0656
trans-1,2-Dichloroethene	ND	500	510		10	101	3.6	70-130	20	02/21/2017 0656
1,2-Dichloropropane	ND	500	520		10	103	1.2	71-126	20	02/21/2017 0656
cis-1,3-Dichloropropene	ND	500	530		10	107	2.9	69-130	20	02/21/2017 0656
trans-1,3-Dichloropropene	ND	500	510		10	103	0.34	73-131	20	02/21/2017 0656
Ethylbenzene	ND	500	530		10	106	1.3	70-130	20	02/21/2017 0656
2-Hexanone	ND	1000	1100		10	109	0.67	60-140	20	02/21/2017 0656
Isopropylbenzene	ND	500	560		10	113	0.23	70-130	20	02/21/2017 0656
Methyl acetate	ND	500	380		10	75	10	15-128	20	02/21/2017 0656
Methyl tertiary butyl ether (MTBE)	ND	500	450		10	89	8.3	70-130	20	02/21/2017 0656
4-Methyl-2-pentanone	ND	1000	1100		10	106	1.1	60-140	20	02/21/2017 0656
Methylcyclohexane	ND	500	540		10	107	8.6	70-130	20	02/21/2017 0656
Methylene chloride	ND	500	480		10	96	3.1	69-129	20	02/21/2017 0656
Styrene	ND	500	560		10	113	0.22	70-130	20	02/21/2017 0656
1,1,2,2-Tetrachloroethane	ND	500	570		10	113	4.7	60-155	20	02/21/2017 0656
Tetrachloroethene	1200	500	1700		10	98	0.48	70-130	20	02/21/2017 0656
Toluene	ND	500	510		10	101	3.0	70-130	20	02/21/2017 0656
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	500	510		10	102	4.0	70-130	20	02/21/2017 0656
1,2,4-Trichlorobenzene	ND	500	470		10	93	0.56	70-130	20	02/21/2017 0656
1,1,1-Trichloroethane	ND	500	500		10	101	7.3	77-132	20	02/21/2017 0656
1,1,2-Trichloroethane	ND	500	530		10	106	0.81	77-132	20	02/21/2017 0656

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 MDL
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 - MSD

Sample ID: SB20017-002MD
Batch: 35135
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	17	500	500		10	96	0.80	73-124	20	02/21/2017 0656
Trichlorofluoromethane	ND	500	500		10	101	10	60-140	20	02/21/2017 0656
Vinyl chloride	ND	500	560		10	113	3.5	29-159	20	02/21/2017 0656
Xylenes (total)	ND	1000	1100		10	109	0.68	70-130	20	02/21/2017 0656

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ35181-001
Batch: 35181
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	2.0	ug/L	02/21/2017 1007
Benzene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Bromodichloromethane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Bromoform	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Bromomethane (Methyl bromide)	ND		1	5.0	0.40	ug/L	02/21/2017 1007
2-Butanone (MEK)	ND		1	10	2.0	ug/L	02/21/2017 1007
Carbon disulfide	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Chlorobenzene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Chloroethane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Chloroform	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Chloromethane (Methyl chloride)	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Cyclohexane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Dibromochloromethane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,2-Dibromoethane (EDB)	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,4-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,3-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,2-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Dichlorodifluoromethane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,2-Dichloroethane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,1-Dichloroethane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
cis-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,1-Dichloroethene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,2-Dichloropropane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
trans-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
cis-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Ethylbenzene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
2-Hexanone	ND		1	10	2.0	ug/L	02/21/2017 1007
Isopropylbenzene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Methyl acetate	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/21/2017 1007
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	02/21/2017 1007
Methylcyclohexane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Methylene chloride	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Styrene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Toluene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,2,4-Trichlorobenzene	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,1,2-Trichloroethane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
1,1,1-Trichloroethane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Trichloroethene	ND		1	5.0	0.40	ug/L	02/21/2017 1007

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 MDL
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: SQ35181-001
Batch: 35181
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichlorofluoromethane	ND		1	5.0	0.40	ug/L	02/21/2017 1007
Vinyl chloride	ND		1	2.0	0.40	ug/L	02/21/2017 1007
Xylenes (total)	ND		1	5.0	0.40	ug/L	02/21/2017 1007

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ35181-002
Batch: 35181
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	40	39		1	96	60-140	02/21/2017 0912
Benzene	20	18		1	89	70-130	02/21/2017 0912
Bromodichloromethane	20	20		1	100	70-130	02/21/2017 0912
Bromoform	20	22		1	110	70-130	02/21/2017 0912
Bromomethane (Methyl bromide)	20	23		1	114	60-140	02/21/2017 0912
2-Butanone (MEK)	40	45		1	113	60-140	02/21/2017 0912
Carbon disulfide	20	17		1	85	60-140	02/21/2017 0912
Carbon tetrachloride	20	18		1	89	70-130	02/21/2017 0912
Chlorobenzene	20	21		1	105	70-130	02/21/2017 0912
Chloroethane	20	19		1	96	60-140	02/21/2017 0912
Chloroform	20	19		1	93	70-130	02/21/2017 0912
Chloromethane (Methyl chloride)	20	20		1	99	60-140	02/21/2017 0912
Cyclohexane	20	17		1	87	70-130	02/21/2017 0912
1,2-Dibromo-3-chloropropane (DBCP)	20	22		1	110	70-130	02/21/2017 0912
Dibromochloromethane	20	21		1	104	70-130	02/21/2017 0912
1,2-Dibromoethane (EDB)	20	19		1	97	70-130	02/21/2017 0912
1,4-Dichlorobenzene	20	22		1	110	70-130	02/21/2017 0912
1,3-Dichlorobenzene	20	22		1	112	70-130	02/21/2017 0912
1,2-Dichlorobenzene	20	23		1	114	70-130	02/21/2017 0912
Dichlorodifluoromethane	20	19		1	94	60-140	02/21/2017 0912
1,2-Dichloroethane	20	18		1	89	70-130	02/21/2017 0912
1,1-Dichloroethane	20	18		1	91	70-130	02/21/2017 0912
trans-1,2-Dichloroethene	20	19		1	93	70-130	02/21/2017 0912
cis-1,2-Dichloroethene	20	19		1	93	70-130	02/21/2017 0912
1,1-Dichloroethene	20	18		1	89	70-130	02/21/2017 0912
1,2-Dichloropropane	20	19		1	97	70-130	02/21/2017 0912
trans-1,3-Dichloropropene	20	20		1	102	70-130	02/21/2017 0912
cis-1,3-Dichloropropene	20	21		1	103	70-130	02/21/2017 0912
Ethylbenzene	20	20		1	101	70-130	02/21/2017 0912
2-Hexanone	40	43		1	108	60-140	02/21/2017 0912
Isopropylbenzene	20	22		1	112	70-130	02/21/2017 0912
Methyl acetate	20	19		1	96	60-140	02/21/2017 0912
Methyl tertiary butyl ether (MTBE)	20	17		1	85	70-130	02/21/2017 0912
4-Methyl-2-pentanone	40	44		1	109	60-140	02/21/2017 0912
Methylcyclohexane	20	20		1	101	70-130	02/21/2017 0912
Methylene chloride	20	18		1	90	70-130	02/21/2017 0912
Styrene	20	22		1	108	70-130	02/21/2017 0912
1,1,2,2-Tetrachloroethane	20	23		1	113	70-130	02/21/2017 0912
Toluene	20	19		1	94	70-130	02/21/2017 0912
1,1,2-Trichloro-1,2,2-Trifluoroethane	20	17		1	87	70-130	02/21/2017 0912
1,2,4-Trichlorobenzene	20	19		1	93	70-130	02/21/2017 0912
1,1,2-Trichloroethane	20	21		1	103	70-130	02/21/2017 0912
1,1,1-Trichloroethane	20	18		1	91	70-130	02/21/2017 0912
Trichloroethene	20	18		1	90	70-130	02/21/2017 0912

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 MDL
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: SQ35181-002
Batch: 35181
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichlorofluoromethane	20	17		1	84	70-130	02/21/2017 0912
Vinyl chloride	20	21		1	103	70-130	02/21/2017 0912
Xylenes (total)	40	43		1	106	70-130	02/21/2017 0912

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		91	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ35181-003
Batch: 35181
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	40	31	+	1	76	23	60-140	20	02/21/2017 1339
Benzene	20	18		1	90	1.3	70-130	20	02/21/2017 1339
Bromodichloromethane	20	20		1	101	0.58	70-130	20	02/21/2017 1339
Bromoform	20	21		1	104	5.7	70-130	20	02/21/2017 1339
Bromomethane (Methyl bromide)	20	22		1	111	2.5	60-140	20	02/21/2017 1339
2-Butanone (MEK)	40	38		1	96	16	60-140	20	02/21/2017 1339
Carbon disulfide	20	16		1	81	4.7	60-140	20	02/21/2017 1339
Carbon tetrachloride	20	18		1	91	2.3	70-130	20	02/21/2017 1339
Chlorobenzene	20	21		1	104	0.45	70-130	20	02/21/2017 1339
Chloroethane	20	20		1	98	2.3	60-140	20	02/21/2017 1339
Chloroform	20	19		1	95	2.8	70-130	20	02/21/2017 1339
Chloromethane (Methyl chloride)	20	21		1	103	4.4	60-140	20	02/21/2017 1339
Cyclohexane	20	17		1	87	0.49	70-130	20	02/21/2017 1339
1,2-Dibromo-3-chloropropane (DBCP)	20	20		1	98	12	70-130	20	02/21/2017 1339
Dibromochloromethane	20	21		1	103	1.2	70-130	20	02/21/2017 1339
1,2-Dibromoethane (EDB)	20	19		1	94	2.9	70-130	20	02/21/2017 1339
1,4-Dichlorobenzene	20	21		1	105	4.9	70-130	20	02/21/2017 1339
1,3-Dichlorobenzene	20	21		1	107	4.9	70-130	20	02/21/2017 1339
1,2-Dichlorobenzene	20	22		1	109	4.1	70-130	20	02/21/2017 1339
Dichlorodifluoromethane	20	20		1	98	3.5	60-140	20	02/21/2017 1339
1,2-Dichloroethane	20	18		1	88	0.85	70-130	20	02/21/2017 1339
1,1-Dichloroethane	20	19		1	95	3.5	70-130	20	02/21/2017 1339
trans-1,2-Dichloroethene	20	18		1	92	1.1	70-130	20	02/21/2017 1339
cis-1,2-Dichloroethene	20	19		1	94	0.99	70-130	20	02/21/2017 1339
1,1-Dichloroethene	20	18		1	90	1.4	70-130	20	02/21/2017 1339
1,2-Dichloropropane	20	19		1	97	0.70	70-130	20	02/21/2017 1339
trans-1,3-Dichloropropene	20	19		1	96	5.7	70-130	20	02/21/2017 1339
cis-1,3-Dichloropropene	20	20		1	99	4.4	70-130	20	02/21/2017 1339
Ethylbenzene	20	20		1	100	1.2	70-130	20	02/21/2017 1339
2-Hexanone	40	39		1	99	8.9	60-140	20	02/21/2017 1339
Isopropylbenzene	20	22		1	109	3.0	70-130	20	02/21/2017 1339
Methyl acetate	20	17		1	83	14	60-140	20	02/21/2017 1339
Methyl tertiary butyl ether (MTBE)	20	17		1	84	1.3	70-130	20	02/21/2017 1339
4-Methyl-2-pentanone	40	40		1	100	8.7	60-140	20	02/21/2017 1339
Methylcyclohexane	20	19		1	95	5.9	70-130	20	02/21/2017 1339
Methylene chloride	20	18		1	91	0.90	70-130	20	02/21/2017 1339
Styrene	20	21		1	106	1.9	70-130	20	02/21/2017 1339
1,1,2,2-Tetrachloroethane	20	21		1	106	5.7	70-130	20	02/21/2017 1339
Toluene	20	19		1	94	0.11	70-130	20	02/21/2017 1339
1,1,2-Trichloro-1,2,2-Trifluoroethane	20	18		1	91	3.6	70-130	20	02/21/2017 1339
1,2,4-Trichlorobenzene	20	20		1	102	9.7	70-130	20	02/21/2017 1339
1,1,2-Trichloroethane	20	21		1	103	0.053	70-130	20	02/21/2017 1339
1,1,1-Trichloroethane	20	18		1	91	0.34	70-130	20	02/21/2017 1339
Trichloroethene	20	18		1	91	0.90	70-130	20	02/21/2017 1339

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 MDL
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: SQ35181-003
Batch: 35181
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichlorofluoromethane	20	17		1	85	0.67	70-130	20	02/21/2017 1339
Vinyl chloride	20	21		1	105	1.7	70-130	20	02/21/2017 1339
Xylenes (total)	40	42		1	104	2.1	70-130	20	02/21/2017 1339

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Chain of Custody
and
Miscellaneous Documents

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

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 69908

Client: ~~WPH~~ TRC	Report to Contact: Lisa Clark 864-420-2577	Telephone No. / E-mail: lclark@trcsolutions.com	Quote No.
Address: 30 Potewat Drive Suite 300	Sampler's Signature:	Analysis (Attach list if more space is needed)	Page ____ of ____
City: Greenville State: SC Zip Code: 29615	Printed Name: David J. Szymal		SB20017
Project Name: WPH Clemson			
Project No: 226253.0000.0000.13	P.O. No.		Remarks / Location

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab / Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-aqueous	No. of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	Na2S2O3	5035 kit	VOCs	Sulfate
DP-05A	2-16-17	1100	G	X						X			X	3	1
DP-06	2-16-17	1215	G	X						X			X	3	1
DP-06A	2-16-17	1320	G	X						X			X	3	1
DP-07	2-16-17	1500	G	X						X			X	3	1
DP-07A	2-16-17	1600	G	X						X			X	3	1
DP-04	2-17-17	0915	G	X						X			X	3	1
DP-04A	2-17-17	1045	G	X						X			X	3	1
DP-03	2-17-17	1200	G	X						X			X	3	1
DP-03A	2-17-17	1310	G	X						X			X	3	1
DP-02	2-17-17	1500	G	X						X			X	3	1

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☒ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☒ Disposal by Lab

Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: David Szymal	2-17-17	1800	1. Received by: TRC storage	2-17-17	1800
2. Relinquished by: Lisa M. Clark	2-20-17	1039	2. Received by: Edward Hamm	2.20.17	1039
3. Relinquished by: Edward Hamm	2.20.17	1426	3. Received by:	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by: Casey Lucas	2/20/17	1426

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) Yes No Ice Pack
Receipt Temp. 5.7 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-07

Page 1 of 1
Effective Date: 11/29/2016
Expiry Date: 11/29/2021

Sample Receipt Checklist (SRC)

Client: TTC Cooler Inspected by/date: CLT 2/20/17 Lot #: SB20017

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?
pH strip ID: NA Cl strip ID: NA Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: IS 15.7 °C / / °C / / °C / / °C Method: ☐ Temperature Blank ☑ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☑	No ☑	CLT 2/20/17	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA (<0.5mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?
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_2SO_4, HNO_3, HCl, NaOH) using SR # _____.			
Sample(s) _____ were received with bubbles >6 mm in diameter.			
Samples(s) _____ were received with TRC >0.5 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.			
SC Drinking Water Project Sample(s) pH verified to be < 2 by _____ Date: _____ Sample(s) _____ were Not received at a pH of < 2 and were adjusted accordingly using SR# _____			
Sample labels applied by: CLT Verified by: _____ Date: 2/20/17			

Comments: _____

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0.0.5

Lot Number: SB24048

Date Completed: 03/03/2017

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: Westpoint Home - Clemson, SC

Project Number: 226253.0000.0000.000005

Lab Report: SB24048 Shealy Environmental Services
Samples analyzed for sulfate, sulfide, TOC, potassium, and VOCs

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: VOC surrogate recoveries were within QC limits.

Method Blanks: Method blanks have no detections of target analytes.

Trip Blank: Trip blank TBLK-17113 does not have VOC detections.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS recoveries are within QC Limits. LCSD analyses were not performed.

MS/MSD: OW-01 was used for potassium MS/MSD analyses. RMW-17 and RMW-27B were used for sulfide MS/MSD analyses. RMW-27B was used for sulfate MS/MSD analyses. RMW-17A and RMW-18A were used for VOC MS/MSD analyses. Recoveries and RPDs were within QC limits except as follows:

- RMW-27B sulfide MSD recovery was 1% below the lower QC limit. The RMW-27B sulfide MS recovery was within QC limits. No qualifier was assigned.
- RMW-17A VOC MS/MSD analyses were diluted 50X and RMW-18A VOC MS/MSD analyses were diluted 200X. The VOC MS/MSD analyses were not evaluated because of the high dilution factors.

Duplicates: A field duplicate was not collected with these samples.

No data qualifiers were assigned.

Data review performed by Terry Hertz, TRC Environmental Corp. , 3/6/2017

Case Narrative
TRC Companies, Inc.
Lot Number: SB24048

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.

Sulfide

Due to matrix interferences, the MSD associated with batch 35711 recovered Sulfide marginally outside of method criteria at 69%. The MS recovered this compound marginally within method criteria at 76%.

VOCs by GC/MS

Due to matrix interferences, the MS/MSD associated with batch 35636 recovered multiple compounds outside of method criteria.

Sample Summary
TRC Companies, Inc.
Lot Number: SB24048

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	OW-01	Aqueous	02/20/2017 1250	02/24/2017
002	OW-02	Aqueous	02/20/2017 1345	02/24/2017
003	OW-03A	Aqueous	02/20/2017 1500	02/24/2017
004	RMW-20	Aqueous	02/21/2017 1040	02/24/2017
005	RMW-21	Aqueous	02/21/2017 1240	02/24/2017
006	RMW-21A	Aqueous	02/21/2017 1520	02/24/2017
007	RMW-17	Aqueous	02/22/2017 1120	02/24/2017
008	RMW-17A	Aqueous	02/22/2017 1415	02/24/2017
009	RMW-28A	Aqueous	02/22/2017 1505	02/24/2017
010	RMW-18	Aqueous	02/22/2017 1630	02/24/2017
011	RMW-27	Aqueous	02/22/2017 1655	02/24/2017
012	RMW-18A	Aqueous	02/22/2017 1725	02/24/2017
013	RMW-20A	Aqueous	02/23/2017 1300	02/24/2017
014	RMW-27B	Aqueous	02/23/2017 1340	02/24/2017
015	TBLK-17113	Aqueous	02/24/2017	02/24/2017

(15 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: SB24048

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	OW-01	Aqueous	Sulfate	300.0	130		mg/L	6
001	OW-01	Aqueous	Sulfide	SM 4500-S2 F-	1.1		mg/L	6
001	OW-01	Aqueous	TOC	9060A	3.9		mg/L	6
001	OW-01	Aqueous	Tetrachloroethene	8260B	1700		ug/L	7
001	OW-01	Aqueous	Trichloroethene	8260B	9.7	J	ug/L	7
001	OW-01	Aqueous	Potassium	6020B	780		ug/L	7
002	OW-02	Aqueous	Sulfate	300.0	130		mg/L	8
002	OW-02	Aqueous	Sulfide	SM 4500-S2 F-	0.83	J	mg/L	8
002	OW-02	Aqueous	TOC	9060A	1.8		mg/L	8
002	OW-02	Aqueous	Tetrachloroethene	8260B	1000		ug/L	9
002	OW-02	Aqueous	Potassium	6020B	790		ug/L	9
003	OW-03A	Aqueous	Sulfide	SM 4500-S2 F-	0.77	J	mg/L	10
003	OW-03A	Aqueous	TOC	9060A	0.36	J	mg/L	10
003	OW-03A	Aqueous	Tetrachloroethene	8260B	660		ug/L	11
003	OW-03A	Aqueous	Potassium	6020B	800		ug/L	11
004	RMW-20	Aqueous	Sulfate	300.0	10		mg/L	12
004	RMW-20	Aqueous	Sulfide	SM 4500-S2 F-	0.87	J	mg/L	12
004	RMW-20	Aqueous	TOC	9060A	0.92	J	mg/L	12
004	RMW-20	Aqueous	Tetrachloroethene	8260B	130		ug/L	13
004	RMW-20	Aqueous	Potassium	6020B	2500		ug/L	13
005	RMW-21	Aqueous	Sulfate	300.0	24		mg/L	14
005	RMW-21	Aqueous	TOC	9060A	0.94	J	mg/L	14
005	RMW-21	Aqueous	Tetrachloroethene	8260B	510		ug/L	15
005	RMW-21	Aqueous	Trichloroethene	8260B	2.8	J	ug/L	15
005	RMW-21	Aqueous	Potassium	6020B	410		ug/L	15
006	RMW-21A	Aqueous	Sulfate	300.0	74		mg/L	16
006	RMW-21A	Aqueous	TOC	9060A	1.2		mg/L	16
006	RMW-21A	Aqueous	Tetrachloroethene	8260B	6100		ug/L	17
006	RMW-21A	Aqueous	Potassium	6020B	2000		ug/L	17
007	RMW-17	Aqueous	Sulfate	300.0	22		mg/L	18
007	RMW-17	Aqueous	TOC	9060A	0.93	J	mg/L	18
007	RMW-17	Aqueous	cis-1,2-Dichloroethene	8260B	2.5	J	ug/L	18
007	RMW-17	Aqueous	Tetrachloroethene	8260B	880		ug/L	19
007	RMW-17	Aqueous	Trichloroethene	8260B	4.1	J	ug/L	19
007	RMW-17	Aqueous	Potassium	6020B	560		ug/L	19
008	RMW-17A	Aqueous	Sulfate	300.0	33		mg/L	20
008	RMW-17A	Aqueous	Sulfide	SM 4500-S2 F-	0.74	J	mg/L	20
008	RMW-17A	Aqueous	TOC	9060A	0.55	J	mg/L	20
008	RMW-17A	Aqueous	Tetrachloroethene	8260B	3500		ug/L	21
008	RMW-17A	Aqueous	Potassium	6020B	840		ug/L	21
009	RMW-28A	Aqueous	Sulfate	300.0	9.9		mg/L	22
009	RMW-28A	Aqueous	Sulfide	SM 4500-S2 F-	1.1		mg/L	22
009	RMW-28A	Aqueous	TOC	9060A	0.50	J	mg/L	22
009	RMW-28A	Aqueous	Chloroform	8260B	0.42	J	ug/L	22
009	RMW-28A	Aqueous	cis-1,2-Dichloroethene	8260B	1.5	J	ug/L	22

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
009	RMW-28A	Aqueous	Tetrachloroethene	8260B	150		ug/L	23
009	RMW-28A	Aqueous	1,1,2-Trichloro-1,2,2-	8260B	1.0	J	ug/L	23
009	RMW-28A	Aqueous	Trichloroethene	8260B	1.7	J	ug/L	23
009	RMW-28A	Aqueous	Potassium	6020B	640		ug/L	23
010	RMW-18	Aqueous	Sulfate	300.0	110		mg/L	24
010	RMW-18	Aqueous	Sulfide	SM 4500-S2 F-	0.91	J	mg/L	24
010	RMW-18	Aqueous	TOC	9060A	0.90	J	mg/L	24
010	RMW-18	Aqueous	cis-1,2-Dichloroethene	8260B	55	J	ug/L	24
010	RMW-18	Aqueous	Tetrachloroethene	8260B	4200		ug/L	25
010	RMW-18	Aqueous	Potassium	6020B	1300		ug/L	25
011	RMW-27	Aqueous	Sulfate	300.0	68		mg/L	26
011	RMW-27	Aqueous	Sulfide	SM 4500-S2 F-	0.73	J	mg/L	26
011	RMW-27	Aqueous	TOC	9060A	1.1		mg/L	26
011	RMW-27	Aqueous	Tetrachloroethene	8260B	2800		ug/L	27
011	RMW-27	Aqueous	Potassium	6020B	390	J	ug/L	27
012	RMW-18A	Aqueous	Sulfate	300.0	120		mg/L	28
012	RMW-18A	Aqueous	Sulfide	SM 4500-S2 F-	1.2		mg/L	28
012	RMW-18A	Aqueous	TOC	9060A	0.84	J	mg/L	28
012	RMW-18A	Aqueous	Tetrachloroethene	8260B	7600		ug/L	29
012	RMW-18A	Aqueous	Potassium	6020B	1500		ug/L	29
013	RMW-20A	Aqueous	Sulfide	SM 4500-S2 F-	0.73	J	mg/L	30
013	RMW-20A	Aqueous	TOC	9060A	0.35	J	mg/L	30
013	RMW-20A	Aqueous	Tetrachloroethene	8260B	6400		ug/L	31
013	RMW-20A	Aqueous	1,1,2-Trichloro-1,2,2-	8260B	49	J	ug/L	31
013	RMW-20A	Aqueous	Potassium	6020B	670		ug/L	31
014	RMW-27B	Aqueous	Sulfate	300.0	4.3		mg/L	32
014	RMW-27B	Aqueous	Sulfide	SM 4500-S2 F-	0.75	J	mg/L	32
014	RMW-27B	Aqueous	TOC	9060A	0.41	J	mg/L	32
014	RMW-27B	Aqueous	Tetrachloroethene	8260B	78		ug/L	33
014	RMW-27B	Aqueous	Potassium	6020B	1600		ug/L	33

(75 detections)

Client: TRC Companies, Inc.
Description: OW-01
Date Sampled: 02/20/2017 1250
Date Received: 02/24/2017

Laboratory ID: SB24048-001
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	03/02/2017 0343	TAF		35966
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/27/2017 1939	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	130		5.0	1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	1.1		1.0	0.62	mg/L	1
TOC		9060A	3.9		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	02/25/2017 1550	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		400	40	ug/L	1
Benzene	71-43-2	8260B	ND		100	8.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		100	8.0	ug/L	1
Bromoform	75-25-2	8260B	ND		100	8.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		100	8.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		200	40	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		100	8.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		100	8.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		100	8.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		100	8.0	ug/L	1
Chloroform	67-66-3	8260B	ND		100	8.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		100	8.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		100	8.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		100	8.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		100	8.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		100	8.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		100	8.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		100	8.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		100	8.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		100	8.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		100	8.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		100	8.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		100	8.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		100	8.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		100	8.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		100	8.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		100	8.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		100	8.0	ug/L	1

TOC Range: 3.883 - 3.929

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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-01
Date Sampled: 02/20/2017 1250
Date Received: 02/24/2017

Laboratory ID: SB24048-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	02/25/2017 1550	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		100	8.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		200	40	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		100	8.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		100	8.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		100	8.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		200	40	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		100	8.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		100	8.0	ug/L	1
Styrene	100-42-5	8260B	ND		100	8.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		100	8.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	1700		100	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		100	8.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		100	8.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		100	8.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		100	8.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		100	8.0	ug/L	1
Trichloroethene	79-01-6	8260B	9.7	J	100	8.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		100	8.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		40	8.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		100	8.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		84	70-130
Toluene-d8		80	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1525	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	780		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-02
Date Sampled: 02/20/2017 1345
Date Received: 02/24/2017

Laboratory ID: SB24048-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	03/02/2017 0407	TAF		35966
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/27/2017 2012	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	130		5.0	1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	0.83	J	1.0	0.62	mg/L	1
TOC		9060A	1.8		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	02/25/2017 1611	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		200	20	ug/L	1
Benzene	71-43-2	8260B	ND		50	4.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	4.0	ug/L	1
Bromoform	75-25-2	8260B	ND		50	4.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	4.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		100	20	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	4.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	4.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	4.0	ug/L	1
Chloroform	67-66-3	8260B	ND		50	4.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	4.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	4.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	4.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	4.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	4.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	4.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	4.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	4.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	4.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	4.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		50	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	4.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	4.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	4.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	4.0	ug/L	1

TOC Range: 1.737 - 1.784

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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-02
Date Sampled: 02/20/2017 1345
Date Received: 02/24/2017

Laboratory ID: SB24048-002
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	02/25/2017 1611	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		50	4.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	20	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		50	4.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	4.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	4.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	20	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	4.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	4.0	ug/L	1
Styrene	100-42-5	8260B	ND		50	4.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	4.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	1000		50	4.0	ug/L	1
Toluene	108-88-3	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	4.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	4.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	4.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		50	4.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	4.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	4.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	4.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		76	70-130
Bromofluorobenzene		82	70-130
Toluene-d8		78	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1555	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	790		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-03A
Date Sampled: 02/20/2017 1500
Date Received: 02/24/2017

Laboratory ID: SB24048-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 0919	TAF		36154
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/27/2017 2045	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	0.77	J	1.0	0.62	mg/L	1
TOC		9060A	0.36	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	02/25/2017 1633	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		200	20	ug/L	1
Benzene	71-43-2	8260B	ND		50	4.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	4.0	ug/L	1
Bromoform	75-25-2	8260B	ND		50	4.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	4.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		100	20	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	4.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	4.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	4.0	ug/L	1
Chloroform	67-66-3	8260B	ND		50	4.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	4.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	4.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	4.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	4.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	4.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	4.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	4.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	4.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	4.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	4.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		50	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	4.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	4.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	4.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	4.0	ug/L	1

TOC Range: 0.347 - 0.367

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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-03A
Date Sampled: 02/20/2017 1500
Date Received: 02/24/2017

Laboratory ID: SB24048-003
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	02/25/2017 1633	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		50	4.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	20	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		50	4.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	4.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	4.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	20	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	4.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	4.0	ug/L	1
Styrene	100-42-5	8260B	ND		50	4.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	4.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	660		50	4.0	ug/L	1
Toluene	108-88-3	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	4.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	4.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	4.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		50	4.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	4.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	4.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	4.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		82	70-130
Bromofluorobenzene		86	70-130
Toluene-d8		80	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1601	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	800		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-20
Date Sampled: 02/21/2017 1040
Date Received: 02/24/2017

Laboratory ID: SB24048-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 0943	TAF		36154
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/27/2017 2221	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	10		1.0	0.20	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	0.87	J	1.0	0.62	mg/L	1
TOC		9060A	0.92	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1445	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1

TOC Range: 0.894 - 0.933

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-20
Date Sampled: 02/21/2017 1040
Date Received: 02/24/2017

Laboratory ID: SB24048-004
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1445	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	130		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		82	70-130
Toluene-d8		79	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1619	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	2500		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Laboratory ID: SB24048-005
Description: RMW-21
Matrix: Aqueous
Date Sampled: 02/21/2017 1240
Date Received: 02/24/2017

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 1007	TAF		36154
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/27/2017 2254	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	24		1.0	0.20	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	0.62	mg/L	1
TOC		9060A	0.94	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/25/2017 1655	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		100	10	ug/L	1
Benzene	71-43-2	8260B	ND		25	2.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	2.0	ug/L	1
Bromoform	75-25-2	8260B	ND		25	2.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		50	10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	2.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	2.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	2.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		25	2.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	2.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	2.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	2.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	2.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	2.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	2.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	2.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	2.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	2.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	2.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		25	2.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	2.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	2.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	2.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	2.0	ug/L	1

TOC Range: 0.921 - 0.955

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-21
Date Sampled: 02/21/2017 1240
Date Received: 02/24/2017

Laboratory ID: SB24048-005
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/25/2017 1655	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		25	2.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	2.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	2.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	2.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	2.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	2.0	ug/L	1
Styrene	100-42-5	8260B	ND		25	2.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	2.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	510		25	2.0	ug/L	1
Toluene	108-88-3	8260B	ND		25	2.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	2.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	2.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	2.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	2.0	ug/L	1
Trichloroethene	79-01-6	8260B	2.8	J	25	2.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	2.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		79	70-130
Bromofluorobenzene		86	70-130
Toluene-d8		80	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1625	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	410		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-21A
Date Sampled: 02/21/2017 1520
Date Received: 02/24/2017

Laboratory ID: SB24048-006
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	03/02/2017 1031	TAF		36154
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/27/2017 2327	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	74		5.0	1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	0.62	mg/L	1
TOC		9060A	1.2		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1717	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		1000	100	ug/L	1
Benzene	71-43-2	8260B	ND		250	20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		250	20	ug/L	1
Bromoform	75-25-2	8260B	ND		250	20	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		250	20	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		500	100	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		250	20	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		250	20	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		250	20	ug/L	1
Chloroethane	75-00-3	8260B	ND		250	20	ug/L	1
Chloroform	67-66-3	8260B	ND		250	20	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		250	20	ug/L	1
Cyclohexane	110-82-7	8260B	ND		250	20	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		250	20	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		250	20	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		250	20	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		250	20	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		250	20	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		250	20	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		250	20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		250	20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		250	20	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		250	20	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		250	20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		250	20	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		250	20	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		250	20	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		250	20	ug/L	1

TOC Range: 1.226 - 1.254

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-21A
Date Sampled: 02/21/2017 1520
Date Received: 02/24/2017

Laboratory ID: SB24048-006
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1717	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		250	20	ug/L	1
2-Hexanone	591-78-6	8260B	ND		500	100	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		250	20	ug/L	1
Methyl acetate	79-20-9	8260B	ND		250	20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	20	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		500	100	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		250	20	ug/L	1
Methylene chloride	75-09-2	8260B	ND		250	20	ug/L	1
Styrene	100-42-5	8260B	ND		250	20	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		250	20	ug/L	1
Tetrachloroethene	127-18-4	8260B	6100		250	20	ug/L	1
Toluene	108-88-3	8260B	ND		250	20	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		250	20	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		250	20	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		250	20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		250	20	ug/L	1
Trichloroethene	79-01-6	8260B	ND		250	20	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		250	20	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		100	20	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		250	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		81	70-130
Bromofluorobenzene		86	70-130
Toluene-d8		81	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1631	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	2000		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-17
Date Sampled: 02/22/2017 1120
Date Received: 02/24/2017

Laboratory ID: SB24048-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 1055	TAF		36154
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/28/2017 0000	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	22		1.0	0.20	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	0.62	mg/L	1
TOC		9060A	0.93	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/25/2017 1738	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		100	10	ug/L	1
Benzene	71-43-2	8260B	ND		25	2.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	2.0	ug/L	1
Bromoform	75-25-2	8260B	ND		25	2.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		50	10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	2.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	2.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	2.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		25	2.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	2.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	2.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	2.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	2.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	2.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	2.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	2.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	2.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	2.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	2.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	2.5	J	25	2.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	2.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	2.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	2.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	2.0	ug/L	1

TOC Range: 0.919 - 0.947

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

Client: TRC Companies, Inc.
Description: RMW-17
Date Sampled: 02/22/2017 1120
Date Received: 02/24/2017

Laboratory ID: SB24048-007
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/25/2017 1738	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		25	2.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	2.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	2.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	2.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	2.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	2.0	ug/L	1
Styrene	100-42-5	8260B	ND		25	2.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	2.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	880		25	2.0	ug/L	1
Toluene	108-88-3	8260B	ND		25	2.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	2.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	2.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	2.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	2.0	ug/L	1
Trichloroethene	79-01-6	8260B	4.1	J	25	2.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	2.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		84	70-130
Bromofluorobenzene		85	70-130
Toluene-d8		80	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1637	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	560		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-17A
Date Sampled: 02/22/2017 1415
Date Received: 02/24/2017

Laboratory ID: SB24048-008
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 1119	TAF		36154
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/28/2017 0033	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	33		1.0	0.20	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	0.74	J	1.0	0.62	mg/L	1
TOC		9060A	0.55	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1800	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		1000	100	ug/L	1
Benzene	71-43-2	8260B	ND		250	20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		250	20	ug/L	1
Bromoform	75-25-2	8260B	ND		250	20	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		250	20	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		500	100	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		250	20	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		250	20	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		250	20	ug/L	1
Chloroethane	75-00-3	8260B	ND		250	20	ug/L	1
Chloroform	67-66-3	8260B	ND		250	20	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		250	20	ug/L	1
Cyclohexane	110-82-7	8260B	ND		250	20	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		250	20	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		250	20	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		250	20	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		250	20	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		250	20	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		250	20	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		250	20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		250	20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		250	20	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		250	20	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		250	20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		250	20	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		250	20	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		250	20	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		250	20	ug/L	1

TOC Range: 0.545 - 0.568

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-17A
Date Sampled: 02/22/2017 1415
Date Received: 02/24/2017

Laboratory ID: SB24048-008
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1800	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		250	20	ug/L	1
2-Hexanone	591-78-6	8260B	ND		500	100	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		250	20	ug/L	1
Methyl acetate	79-20-9	8260B	ND		250	20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	20	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		500	100	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		250	20	ug/L	1
Methylene chloride	75-09-2	8260B	ND		250	20	ug/L	1
Styrene	100-42-5	8260B	ND		250	20	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		250	20	ug/L	1
Tetrachloroethene	127-18-4	8260B	3500		250	20	ug/L	1
Toluene	108-88-3	8260B	ND		250	20	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		250	20	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		250	20	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		250	20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		250	20	ug/L	1
Trichloroethene	79-01-6	8260B	ND		250	20	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		250	20	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		100	20	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		250	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		79	70-130
Bromofluorobenzene		85	70-130
Toluene-d8		81	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1643	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	840		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-28A
Date Sampled: 02/22/2017 1505
Date Received: 02/24/2017

Laboratory ID: SB24048-009
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 1143	TAF		36154
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/28/2017 0106	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	9.9		1.0	0.20	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	1.1		1.0	0.62	mg/L	1
TOC		9060A	0.50	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/27/2017 1222	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	0.42	J	5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	1.5	J	5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1

TOC Range: 0.493 - 0.517

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

Client: TRC Companies, Inc.
Description: RMW-28A
Date Sampled: 02/22/2017 1505
Date Received: 02/24/2017

Laboratory ID: SB24048-009
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/27/2017 1222	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	150		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	1.0	J	5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	1.7	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		100	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1649	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	640		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-18
Date Sampled: 02/22/2017 1630
Date Received: 02/24/2017

Laboratory ID: SB24048-010
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	03/02/2017 1207	TAF		36154
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/28/2017 0138	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	110		5.0	1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	0.91	J	1.0	0.62	mg/L	1
TOC		9060A	0.90	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/27/2017 1637	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		1000	100	ug/L	1
Benzene	71-43-2	8260B	ND		250	20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		250	20	ug/L	1
Bromoform	75-25-2	8260B	ND		250	20	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		250	20	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		500	100	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		250	20	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		250	20	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		250	20	ug/L	1
Chloroethane	75-00-3	8260B	ND		250	20	ug/L	1
Chloroform	67-66-3	8260B	ND		250	20	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		250	20	ug/L	1
Cyclohexane	110-82-7	8260B	ND		250	20	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		250	20	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		250	20	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		250	20	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		250	20	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		250	20	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		250	20	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		250	20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		250	20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		250	20	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		250	20	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	55	J	250	20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		250	20	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		250	20	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		250	20	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		250	20	ug/L	1

TOC Range: 0.875 - 0.926

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-18
Date Sampled: 02/22/2017 1630
Date Received: 02/24/2017

Laboratory ID: SB24048-010
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/27/2017 1637	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		250	20	ug/L	1
2-Hexanone	591-78-6	8260B	ND		500	100	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		250	20	ug/L	1
Methyl acetate	79-20-9	8260B	ND		250	20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	20	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		500	100	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		250	20	ug/L	1
Methylene chloride	75-09-2	8260B	ND		250	20	ug/L	1
Styrene	100-42-5	8260B	ND		250	20	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		250	20	ug/L	1
Tetrachloroethene	127-18-4	8260B	4200		250	20	ug/L	1
Toluene	108-88-3	8260B	ND		250	20	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		250	20	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		250	20	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		250	20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		250	20	ug/L	1
Trichloroethene	79-01-6	8260B	ND		250	20	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		250	20	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		100	20	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		250	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		81	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		99	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1655	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	1300		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-27
Date Sampled: 02/22/2017 1655
Date Received: 02/24/2017

Laboratory ID: SB24048-011
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 1232	TAF		36154
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/28/2017 0211	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	68		1.0	0.20	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	0.73	J	1.0	0.62	mg/L	1
TOC		9060A	1.1		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/27/2017 1700	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		1000	100	ug/L	1
Benzene	71-43-2	8260B	ND		250	20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		250	20	ug/L	1
Bromoform	75-25-2	8260B	ND		250	20	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		250	20	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		500	100	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		250	20	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		250	20	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		250	20	ug/L	1
Chloroethane	75-00-3	8260B	ND		250	20	ug/L	1
Chloroform	67-66-3	8260B	ND		250	20	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		250	20	ug/L	1
Cyclohexane	110-82-7	8260B	ND		250	20	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		250	20	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		250	20	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		250	20	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		250	20	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		250	20	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		250	20	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		250	20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		250	20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		250	20	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		250	20	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		250	20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		250	20	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		250	20	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		250	20	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		250	20	ug/L	1

TOC Range: 1.055 - 1.078

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-27
Date Sampled: 02/22/2017 1655
Date Received: 02/24/2017

Laboratory ID: SB24048-011
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/27/2017 1700	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		250	20	ug/L	1
2-Hexanone	591-78-6	8260B	ND		500	100	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		250	20	ug/L	1
Methyl acetate	79-20-9	8260B	ND		250	20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	20	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		500	100	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		250	20	ug/L	1
Methylene chloride	75-09-2	8260B	ND		250	20	ug/L	1
Styrene	100-42-5	8260B	ND		250	20	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		250	20	ug/L	1
Tetrachloroethene	127-18-4	8260B	2800		250	20	ug/L	1
Toluene	108-88-3	8260B	ND		250	20	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		250	20	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		250	20	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		250	20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		250	20	ug/L	1
Trichloroethene	79-01-6	8260B	ND		250	20	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		250	20	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		100	20	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		250	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		84	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		98	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1701	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	390	J	400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-18A
Date Sampled: 02/22/2017 1725
Date Received: 02/24/2017

Laboratory ID: SB24048-012
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	03/02/2017 1344	TAF		36154
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/28/2017 0244	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	120		5.0	1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	1.2		1.0	0.62	mg/L	1
TOC		9060A	0.84	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	200	02/27/2017 1746	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		4000	400	ug/L	1
Benzene	71-43-2	8260B	ND		1000	80	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1000	80	ug/L	1
Bromoform	75-25-2	8260B	ND		1000	80	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		1000	80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		2000	400	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1000	80	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1000	80	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1000	80	ug/L	1
Chloroethane	75-00-3	8260B	ND		1000	80	ug/L	1
Chloroform	67-66-3	8260B	ND		1000	80	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1000	80	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1000	80	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1000	80	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1000	80	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1000	80	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1000	80	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1000	80	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1000	80	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		1000	80	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1000	80	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1000	80	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1000	80	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1000	80	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1000	80	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1000	80	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1000	80	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1000	80	ug/L	1

TOC Range: 0.832 - 0.854

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-18A
Date Sampled: 02/22/2017 1725
Date Received: 02/24/2017

Laboratory ID: SB24048-012
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	200	02/27/2017 1746	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		1000	80	ug/L	1
2-Hexanone	591-78-6	8260B	ND		2000	400	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1000	80	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1000	80	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1000	80	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		2000	400	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		1000	80	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1000	80	ug/L	1
Styrene	100-42-5	8260B	ND		1000	80	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1000	80	ug/L	1
Tetrachloroethene	127-18-4	8260B	7600		1000	80	ug/L	1
Toluene	108-88-3	8260B	ND		1000	80	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1000	80	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1000	80	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1000	80	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1000	80	ug/L	1
Trichloroethene	79-01-6	8260B	ND		1000	80	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1000	80	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		400	80	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1000	80	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		81	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		95	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1707	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	1500		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-20A
Date Sampled: 02/23/2017 1300
Date Received: 02/24/2017

Laboratory ID: SB24048-013
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 1408	TAF		36154
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1019	BWS		35709
1		(TOC) 9060A	1	02/28/2017 0317	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	0.73	J	1.0	0.62	mg/L	1
TOC		9060A	0.35	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	02/27/2017 1723	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		2000	200	ug/L	1
Benzene	71-43-2	8260B	ND		500	40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		500	40	ug/L	1
Bromoform	75-25-2	8260B	ND		500	40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		500	40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		1000	200	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		500	40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		500	40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		500	40	ug/L	1
Chloroethane	75-00-3	8260B	ND		500	40	ug/L	1
Chloroform	67-66-3	8260B	ND		500	40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		500	40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		500	40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		500	40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		500	40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		500	40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		500	40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		500	40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		500	40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		500	40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		500	40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		500	40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		500	40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		500	40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		500	40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		500	40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		500	40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		500	40	ug/L	1

TOC Range: 0.337 - 0.37

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-20A
Date Sampled: 02/23/2017 1300
Date Received: 02/24/2017

Laboratory ID: SB24048-013
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	02/27/2017 1723	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		500	40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		1000	200	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		500	40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		500	40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		500	40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		1000	200	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		500	40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		500	40	ug/L	1
Styrene	100-42-5	8260B	ND		500	40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		500	40	ug/L	1
Tetrachloroethene	127-18-4	8260B	6400		500	40	ug/L	1
Toluene	108-88-3	8260B	ND		500	40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	49	J	500	40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		500	40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		500	40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		500	40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		500	40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		500	40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		200	40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		500	40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		83	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		99	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1713	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	670		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-27B
Date Sampled: 02/23/2017 1340
Date Received: 02/24/2017

Laboratory ID: SB24048-014
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 1432	TAF		36154
1		(Sulfide) SM 4500-S2 F-2011	1	02/27/2017 1438	BWS		35711
1		(TOC) 9060A	1	02/28/2017 0453	DMA		35683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	4.3		1.0	0.20	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	0.75	J	1.0	0.62	mg/L	1
TOC		9060A	0.41	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/27/2017 1246	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1

TOC Range: 0.374 - 0.436

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

Client: TRC Companies, Inc.
Description: RMW-27B
Date Sampled: 02/23/2017 1340
Date Received: 02/24/2017

Laboratory ID: SB24048-014
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/27/2017 1246	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	78		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		84	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		95	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	02/27/2017 1731	BNW	02/27/2017 0827	35652

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	1600		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: TBLK-17113
Date Sampled: 02/24/2017
Date Received: 02/24/2017

Laboratory ID: SB24048-015
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/27/2017 1027	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: TBLK-17113
Date Sampled: 02/24/2017
Date Received: 02/24/2017

Laboratory ID: SB24048-015
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/27/2017 1027	ALL		35678

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		84	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		97	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 MDL
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"

QC Summary

Inorganic non-metals - MB

Sample ID: SQ35683-001
Batch: 35683
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
TOC	ND		1	1.0	0.20	mg/L	02/27/2017 1520

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ35683-002
Batch: 35683
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	20	19		1	97	90-110	02/27/2017 1551

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 MDL
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

Inorganic non-metals - MB

Sample ID: SQ35709-001
Batch: 35709
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfide	ND		1	1.0	0.62	mg/L	02/27/2017 1019

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ35709-002
Batch: 35709
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	10	9.8		1	98	80-120	02/27/2017 1019

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 MDL
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

Inorganic non-metals - MS

Sample ID: SB24048-007MS
Batch: 35709
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	ND	10	7.6		1	76	70-130	02/27/2017 1019

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 MDL
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

Inorganic non-metals - MSD

Sample ID: SB24048-007MD
Batch: 35709
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfide	ND	10	7.8		1	78	2.7	70-130	20	02/27/2017 1019

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MB

Sample ID: SQ35711-001
Batch: 35711
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfide	ND		1	1.0	0.62	mg/L	02/27/2017 1438

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ35711-002
Batch: 35711
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	10	9.7		1	97	80-120	02/27/2017 1438

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 MDL
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

Inorganic non-metals - MS

Sample ID: SB24048-014MS
Batch: 35711
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	0.75	10	8.3		1	76	70-130	02/27/2017 1438

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 MDL
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

Inorganic non-metals - MSD

Sample ID: SB24048-014MD
Batch: 35711
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfide	0.75	10	7.7	N	1	69	8.0	70-130	20	02/27/2017 1438

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 MDL
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

Inorganic non-metals - MB

Sample ID: SQ35966-001
Batch: 35966
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.20	mg/L	03/01/2017 1630

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ35966-002
Batch: 35966
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	100	90-110	03/01/2017 1654

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 MDL
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

Inorganic non-metals - MB

Sample ID: SQ36154-001
Batch: 36154
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.20	mg/L	03/02/2017 0831

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ36154-002
Batch: 36154
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	100	90-110	03/02/2017 0855

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 MDL
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

Inorganic non-metals - MS

Sample ID: SB24048-014MS
Batch: 36154
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	4.3	20	24		1	98	90-110	03/02/2017 1456

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 MDL
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

Inorganic non-metals - MSD

Sample ID: SB24048-014MD
Batch: 36154
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	4.3	20	24		1	96	1.3	90-110	20	03/02/2017 1520

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ35636-001
Batch: 35636
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	2.0	ug/L	02/25/2017 1034
Benzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Bromodichloromethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Bromoform	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Bromomethane (Methyl bromide)	ND		1	5.0	0.40	ug/L	02/25/2017 1034
2-Butanone (MEK)	ND		1	10	2.0	ug/L	02/25/2017 1034
Carbon disulfide	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Chlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Chloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Chloroform	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Chloromethane (Methyl chloride)	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Cyclohexane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Dibromochloromethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,2-Dibromoethane (EDB)	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,4-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,3-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,2-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Dichlorodifluoromethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,2-Dichloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,1-Dichloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
cis-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,1-Dichloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,2-Dichloropropane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
trans-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
cis-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Ethylbenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
2-Hexanone	ND		1	10	2.0	ug/L	02/25/2017 1034
Isopropylbenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Methyl acetate	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/25/2017 1034
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	02/25/2017 1034
Methylcyclohexane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Methylene chloride	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Styrene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Tetrachloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Toluene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,2,4-Trichlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,1,2-Trichloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,1,1-Trichloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034

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 MDL
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: SQ35636-001
Batch: 35636
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Trichlorofluoromethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Vinyl chloride	ND		1	2.0	0.40	ug/L	02/25/2017 1034
Xylenes (total)	ND		1	5.0	0.40	ug/L	02/25/2017 1034

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		87	70-130
1,2-Dichloroethane-d4		80	70-130
Toluene-d8		82	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ35636-002
Batch: 35636
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	111	60-140	02/25/2017 0939
Benzene	50	41		1	81	70-130	02/25/2017 0939
Bromodichloromethane	50	44		1	89	70-130	02/25/2017 0939
Bromoform	50	45		1	89	70-130	02/25/2017 0939
Bromomethane (Methyl bromide)	50	48		1	96	60-140	02/25/2017 0939
2-Butanone (MEK)	100	100		1	100	60-140	02/25/2017 0939
Carbon disulfide	50	45		1	89	60-140	02/25/2017 0939
Carbon tetrachloride	50	42		1	84	70-130	02/25/2017 0939
Chlorobenzene	50	45		1	91	70-130	02/25/2017 0939
Chloroethane	50	45		1	89	60-140	02/25/2017 0939
Chloroform	50	41		1	82	70-130	02/25/2017 0939
Chloromethane (Methyl chloride)	50	45		1	90	60-140	02/25/2017 0939
Cyclohexane	50	43		1	86	70-130	02/25/2017 0939
1,2-Dibromo-3-chloropropane (DBCP)	50	42		1	84	70-130	02/25/2017 0939
Dibromochloromethane	50	46		1	91	70-130	02/25/2017 0939
1,2-Dibromoethane (EDB)	50	44		1	89	70-130	02/25/2017 0939
1,4-Dichlorobenzene	50	45		1	90	70-130	02/25/2017 0939
1,3-Dichlorobenzene	50	45		1	90	70-130	02/25/2017 0939
1,2-Dichlorobenzene	50	46		1	93	70-130	02/25/2017 0939
Dichlorodifluoromethane	50	48		1	95	60-140	02/25/2017 0939
1,2-Dichloroethane	50	43		1	86	70-130	02/25/2017 0939
1,1-Dichloroethane	50	41		1	83	70-130	02/25/2017 0939
trans-1,2-Dichloroethene	50	44		1	88	70-130	02/25/2017 0939
cis-1,2-Dichloroethene	50	42		1	84	70-130	02/25/2017 0939
1,1-Dichloroethene	50	43		1	85	70-130	02/25/2017 0939
1,2-Dichloropropane	50	43		1	86	70-130	02/25/2017 0939
trans-1,3-Dichloropropene	50	44		1	88	70-130	02/25/2017 0939
cis-1,3-Dichloropropene	50	44		1	88	70-130	02/25/2017 0939
Ethylbenzene	50	44		1	87	70-130	02/25/2017 0939
2-Hexanone	100	81		1	81	60-140	02/25/2017 0939
Isopropylbenzene	50	45		1	89	70-130	02/25/2017 0939
Methyl acetate	50	40		1	81	60-140	02/25/2017 0939
Methyl tertiary butyl ether (MTBE)	50	40		1	80	70-130	02/25/2017 0939
4-Methyl-2-pentanone	100	85		1	85	60-140	02/25/2017 0939
Methylcyclohexane	50	46		1	92	70-130	02/25/2017 0939
Methylene chloride	50	42		1	84	70-130	02/25/2017 0939
Styrene	50	44		1	88	70-130	02/25/2017 0939
1,1,2,2-Tetrachloroethane	50	46		1	91	70-130	02/25/2017 0939
Tetrachloroethene	50	48		1	95	70-130	02/25/2017 0939
Toluene	50	44		1	87	70-130	02/25/2017 0939
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	43		1	85	70-130	02/25/2017 0939
1,2,4-Trichlorobenzene	50	43		1	86	70-130	02/25/2017 0939
1,1,2-Trichloroethane	50	44		1	89	70-130	02/25/2017 0939
1,1,1-Trichloroethane	50	41		1	82	70-130	02/25/2017 0939

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 MDL

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: SQ35636-002
Batch: 35636
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	43		1	87	70-130	02/25/2017 0939
Trichlorofluoromethane	50	49		1	97	70-130	02/25/2017 0939
Vinyl chloride	50	43		1	86	70-130	02/25/2017 0939
Xylenes (total)	100	90		1	90	70-130	02/25/2017 0939

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		84	70-130
1,2-Dichloroethane-d4		77	70-130
Toluene-d8		82	70-130

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

P = The RPD between two GC columns exceeds 40%

J = Estimated result < PQL and ≥ MDL

N = Recovery is out of criteria

+ = 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 - MS

Sample ID: SB24048-008MS
Batch: 35636
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	ND	5000	2900	N	50	58	60-140	02/25/2017 1821
Benzene	ND	2500	1400	N	50	56	70-130	02/25/2017 1821
Bromodichloromethane	ND	2500	1600	N	50	62	71-143	02/25/2017 1821
Bromoform	ND	2500	1400	N	50	55	65-131	02/25/2017 1821
Bromomethane (Methyl bromide)	ND	2500	1600		50	65	36-168	02/25/2017 1821
2-Butanone (MEK)	ND	5000	2900	N	50	58	60-140	02/25/2017 1821
Carbon disulfide	ND	2500	1300	N	50	53	60-140	02/25/2017 1821
Carbon tetrachloride	ND	2500	1400		50	54	37-166	02/25/2017 1821
Chlorobenzene	ND	2500	1400	N	50	57	78-129	02/25/2017 1821
Chloroethane	ND	2500	1500		50	60	60-140	02/25/2017 1821
Chloroform	ND	2500	1200	N	50	49	63-123	02/25/2017 1821
Chloromethane (Methyl chloride)	ND	2500	1600		50	66	20-158	02/25/2017 1821
Cyclohexane	ND	2500	1300	N	50	51	70-130	02/25/2017 1821
1,2-Dibromo-3-chloropropane (DBCP)	ND	2500	1300	N	50	51	70-130	02/25/2017 1821
Dibromochloromethane	ND	2500	1400	N	50	55	74-134	02/25/2017 1821
1,2-Dibromoethane (EDB)	ND	2500	1300	N	50	53	70-130	02/25/2017 1821
1,2-Dichlorobenzene	ND	2500	1400	N	50	55	70-130	02/25/2017 1821
1,3-Dichlorobenzene	ND	2500	1300	N	50	54	70-130	02/25/2017 1821
1,4-Dichlorobenzene	ND	2500	1300	N	50	53	70-130	02/25/2017 1821
Dichlorodifluoromethane	ND	2500	1800		50	73	10-158	02/25/2017 1821
1,1-Dichloroethane	ND	2500	1200	N	50	48	69-132	02/25/2017 1821
1,2-Dichloroethane	ND	2500	1500	N	50	59	70-130	02/25/2017 1821
1,1-Dichloroethene	ND	2500	1300		50	51	50-132	02/25/2017 1821
cis-1,2-Dichloroethene	ND	2500	1200	N	50	50	70-130	02/25/2017 1821
trans-1,2-Dichloroethene	ND	2500	1300	N	50	51	70-130	02/25/2017 1821
1,2-Dichloropropane	ND	2500	1400	N	50	58	71-126	02/25/2017 1821
cis-1,3-Dichloropropene	ND	2500	1400	N	50	58	69-130	02/25/2017 1821
trans-1,3-Dichloropropene	ND	2500	1300	N	50	52	73-131	02/25/2017 1821
Ethylbenzene	ND	2500	1300	N	50	54	70-130	02/25/2017 1821
2-Hexanone	ND	5000	2500	N	50	49	60-140	02/25/2017 1821
Isopropylbenzene	ND	2500	1400	N	50	56	70-130	02/25/2017 1821
Methyl acetate	ND	2500	1200		50	50	15-128	02/25/2017 1821
Methyl tertiary butyl ether (MTBE)	ND	2500	1100	N	50	44	70-130	02/25/2017 1821
4-Methyl-2-pentanone	ND	5000	2800	N	50	56	60-140	02/25/2017 1821
Methylcyclohexane	ND	2500	1700	N	50	66	70-130	02/25/2017 1821
Methylene chloride	ND	2500	1200	N	50	47	69-129	02/25/2017 1821
Styrene	ND	2500	1300	N	50	54	70-130	02/25/2017 1821
1,1,2,2-Tetrachloroethane	ND	2500	1300	N	50	52	60-155	02/25/2017 1821
Tetrachloroethene	3500	2500	5000	N	50	62	70-130	02/25/2017 1821
Toluene	ND	2500	1300	N	50	54	70-130	02/25/2017 1821
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2500	1400	N	50	57	70-130	02/25/2017 1821
1,2,4-Trichlorobenzene	ND	2500	1300	N	50	51	70-130	02/25/2017 1821
1,1,1-Trichloroethane	ND	2500	1200	N	50	49	77-132	02/25/2017 1821
1,1,2-Trichloroethane	ND	2500	1300	N	50	54	77-132	02/25/2017 1821

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 MDL
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 - MS

Sample ID: SB24048-008MS
Batch: 35636
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	2500	1500	N	50	60	73-124	02/25/2017 1821
Trichlorofluoromethane	ND	2500	1700		50	66	60-140	02/25/2017 1821
Vinyl chloride	ND	2500	1500		50	62	29-159	02/25/2017 1821
Xylenes (total)	ND	5000	2700	N	50	55	70-130	02/25/2017 1821

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		82	70-130
Bromofluorobenzene		81	70-130
Toluene-d8		78	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MSD

Sample ID: SB24048-008MD
Batch: 35636
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	5000	4300	+	50	86	38	60-140	20	02/25/2017 1843
Benzene	ND	2500	1700	N	50	67	19	70-130	20	02/25/2017 1843
Bromodichloromethane	ND	2500	1800		50	74	17	71-143	20	02/25/2017 1843
Bromoform	ND	2500	1800	+	50	73	29	65-131	20	02/25/2017 1843
Bromomethane (Methyl bromide)	ND	2500	1700		50	66	2.4	36-168	20	02/25/2017 1843
2-Butanone (MEK)	ND	5000	3700	+	50	73	24	60-140	20	02/25/2017 1843
Carbon disulfide	ND	2500	1800	+	50	70	29	60-140	20	02/25/2017 1843
Carbon tetrachloride	ND	2500	1800	+	50	74	30	37-166	20	02/25/2017 1843
Chlorobenzene	ND	2500	1900	N,+	50	75	27	78-129	20	02/25/2017 1843
Chloroethane	ND	2500	1600		50	63	5.1	60-140	20	02/25/2017 1843
Chloroform	ND	2500	1700	+	50	66	29	63-123	20	02/25/2017 1843
Chloromethane (Methyl chloride)	ND	2500	1700		50	69	4.8	20-158	20	02/25/2017 1843
Cyclohexane	ND	2500	1800	+	50	73	35	70-130	20	02/25/2017 1843
1,2-Dibromo-3-chloropropane (DBCP)	ND	2500	1700	N,+	50	68	28	70-130	20	02/25/2017 1843
Dibromochloromethane	ND	2500	1900	+	50	75	30	74-134	20	02/25/2017 1843
1,2-Dibromoethane (EDB)	ND	2500	1700	+	50	70	28	70-130	20	02/25/2017 1843
1,2-Dichlorobenzene	ND	2500	1800	+	50	72	28	70-130	20	02/25/2017 1843
1,3-Dichlorobenzene	ND	2500	1700	+	50	70	26	70-130	20	02/25/2017 1843
1,4-Dichlorobenzene	ND	2500	1800	+	50	72	30	70-130	20	02/25/2017 1843
Dichlorodifluoromethane	ND	2500	1900		50	74	1.6	10-158	20	02/25/2017 1843
1,1-Dichloroethane	ND	2500	1700	N,+	50	67	34	69-132	20	02/25/2017 1843
1,2-Dichloroethane	ND	2500	1800	+	50	74	21	70-130	20	02/25/2017 1843
1,1-Dichloroethene	ND	2500	1800	+	50	70	32	50-132	20	02/25/2017 1843
cis-1,2-Dichloroethene	ND	2500	1700	N,+	50	66	28	70-130	20	02/25/2017 1843
trans-1,2-Dichloroethene	ND	2500	1800	+	50	72	33	70-130	20	02/25/2017 1843
1,2-Dichloropropane	ND	2500	1700	N	50	70	20	71-126	20	02/25/2017 1843
cis-1,3-Dichloropropene	ND	2500	1700		50	70	19	69-130	20	02/25/2017 1843
trans-1,3-Dichloropropene	ND	2500	1700	N,+	50	70	28	73-131	20	02/25/2017 1843
Ethylbenzene	ND	2500	1800	+	50	71	28	70-130	20	02/25/2017 1843
2-Hexanone	ND	5000	3400	+	50	67	31	60-140	20	02/25/2017 1843
Isopropylbenzene	ND	2500	1900	+	50	75	29	70-130	20	02/25/2017 1843
Methyl acetate	ND	2500	1700	+	50	67	30	15-128	20	02/25/2017 1843
Methyl tertiary butyl ether (MTBE)	ND	2500	1600	N,+	50	63	34	70-130	20	02/25/2017 1843
4-Methyl-2-pentanone	ND	5000	3500	+	50	71	22	60-140	20	02/25/2017 1843
Methylcyclohexane	ND	2500	2000		50	79	18	70-130	20	02/25/2017 1843
Methylene chloride	ND	2500	1700	N,+	50	67	34	69-129	20	02/25/2017 1843
Styrene	ND	2500	1800	+	50	71	28	70-130	20	02/25/2017 1843
1,1,2,2-Tetrachloroethane	ND	2500	1800	+	50	71	31	60-155	20	02/25/2017 1843
Tetrachloroethene	3500	2500	5400		50	79	8.2	70-130	20	02/25/2017 1843
Toluene	ND	2500	1800	+	50	71	28	70-130	20	02/25/2017 1843
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2500	1900	+	50	74	27	70-130	20	02/25/2017 1843
1,2,4-Trichlorobenzene	ND	2500	1700	N,+	50	67	26	70-130	20	02/25/2017 1843
1,1,1-Trichloroethane	ND	2500	1800	N,+	50	71	37	77-132	20	02/25/2017 1843
1,1,2-Trichloroethane	ND	2500	1800	N,+	50	72	29	77-132	20	02/25/2017 1843

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 MDL
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 - MSD

Sample ID: SB24048-008MD
Batch: 35636
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	ND	2500	1800	N	50	72	18	73-124	20	02/25/2017 1843
Trichlorofluoromethane	ND	2500	1800		50	71	6.9	60-140	20	02/25/2017 1843
Vinyl chloride	ND	2500	1600		50	65	4.7	29-159	20	02/25/2017 1843
Xylenes (total)	ND	5000	3700	+	50	73	28	70-130	20	02/25/2017 1843

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		77	70-130
Bromofluorobenzene		83	70-130
Toluene-d8		80	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ35678-001
Batch: 35678
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	2.0	ug/L	02/27/2017 0958
Benzene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Bromodichloromethane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Bromoform	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Bromomethane (Methyl bromide)	ND		1	5.0	0.40	ug/L	02/27/2017 0958
2-Butanone (MEK)	ND		1	10	2.0	ug/L	02/27/2017 0958
Carbon disulfide	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Chlorobenzene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Chloroethane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Chloroform	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Chloromethane (Methyl chloride)	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Cyclohexane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Dibromochloromethane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,2-Dibromoethane (EDB)	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,3-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,2-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,4-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Dichlorodifluoromethane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,1-Dichloroethane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,2-Dichloroethane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
cis-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,1-Dichloroethene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,2-Dichloropropane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
cis-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
trans-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Ethylbenzene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
2-Hexanone	ND		1	10	2.0	ug/L	02/27/2017 0958
Isopropylbenzene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Methyl acetate	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/27/2017 0958
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	02/27/2017 0958
Methylcyclohexane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Methylene chloride	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Styrene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Tetrachloroethene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Toluene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,2,4-Trichlorobenzene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,1,1-Trichloroethane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
1,1,2-Trichloroethane	ND		1	5.0	0.40	ug/L	02/27/2017 0958

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 MDL
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: SQ35678-001
Batch: 35678
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Trichlorofluoromethane	ND		1	5.0	0.40	ug/L	02/27/2017 0958
Vinyl chloride	ND		1	2.0	0.40	ug/L	02/27/2017 0958
Xylenes (total)	ND		1	5.0	0.40	ug/L	02/27/2017 0958

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		84	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ35678-002
Batch: 35678
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	110	60-140	02/27/2017 0905
Benzene	50	48		1	95	70-130	02/27/2017 0905
Bromodichloromethane	50	49		1	98	70-130	02/27/2017 0905
Bromoform	50	51		1	103	70-130	02/27/2017 0905
Bromomethane (Methyl bromide)	50	51		1	102	60-140	02/27/2017 0905
2-Butanone (MEK)	100	120		1	124	60-140	02/27/2017 0905
Carbon disulfide	50	49		1	98	60-140	02/27/2017 0905
Carbon tetrachloride	50	47		1	93	70-130	02/27/2017 0905
Chlorobenzene	50	51		1	101	70-130	02/27/2017 0905
Chloroethane	50	43		1	87	60-140	02/27/2017 0905
Chloroform	50	47		1	94	70-130	02/27/2017 0905
Chloromethane (Methyl chloride)	50	42		1	84	60-140	02/27/2017 0905
Cyclohexane	50	43		1	85	70-130	02/27/2017 0905
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	96	70-130	02/27/2017 0905
Dibromochloromethane	50	51		1	102	70-130	02/27/2017 0905
1,2-Dibromoethane (EDB)	50	47		1	93	70-130	02/27/2017 0905
1,3-Dichlorobenzene	50	49		1	98	70-130	02/27/2017 0905
1,2-Dichlorobenzene	50	49		1	97	70-130	02/27/2017 0905
1,4-Dichlorobenzene	50	48		1	97	70-130	02/27/2017 0905
Dichlorodifluoromethane	50	36		1	72	60-140	02/27/2017 0905
1,1-Dichloroethane	50	50		1	100	70-130	02/27/2017 0905
1,2-Dichloroethane	50	43		1	85	70-130	02/27/2017 0905
cis-1,2-Dichloroethene	50	51		1	101	70-130	02/27/2017 0905
1,1-Dichloroethene	50	49		1	99	70-130	02/27/2017 0905
trans-1,2-Dichloroethene	50	51		1	103	70-130	02/27/2017 0905
1,2-Dichloropropane	50	50		1	99	70-130	02/27/2017 0905
cis-1,3-Dichloropropene	50	52		1	104	70-130	02/27/2017 0905
trans-1,3-Dichloropropene	50	49		1	99	70-130	02/27/2017 0905
Ethylbenzene	50	50		1	100	70-130	02/27/2017 0905
2-Hexanone	100	93		1	93	60-140	02/27/2017 0905
Isopropylbenzene	50	53		1	106	70-130	02/27/2017 0905
Methyl acetate	50	49		1	98	60-140	02/27/2017 0905
Methyl tertiary butyl ether (MTBE)	50	46		1	92	70-130	02/27/2017 0905
4-Methyl-2-pentanone	100	98		1	98	60-140	02/27/2017 0905
Methylcyclohexane	50	52		1	104	70-130	02/27/2017 0905
Methylene chloride	50	51		1	102	70-130	02/27/2017 0905
Styrene	50	51		1	103	70-130	02/27/2017 0905
1,1,2,2-Tetrachloroethane	50	51		1	102	70-130	02/27/2017 0905
Tetrachloroethene	50	48		1	97	70-130	02/27/2017 0905
Toluene	50	49		1	99	70-130	02/27/2017 0905
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	46		1	91	70-130	02/27/2017 0905
1,2,4-Trichlorobenzene	50	40		1	80	70-130	02/27/2017 0905
1,1,1-Trichloroethane	50	47		1	93	70-130	02/27/2017 0905
1,1,2-Trichloroethane	50	49		1	97	70-130	02/27/2017 0905

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 MDL
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: SQ35678-002
Batch: 35678
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	47		1	95	70-130	02/27/2017 0905
Trichlorofluoromethane	50	37		1	73	70-130	02/27/2017 0905
Vinyl chloride	50	45		1	89	70-130	02/27/2017 0905
Xylenes (total)	100	100		1	105	70-130	02/27/2017 0905

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		84	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MS

Sample ID: SB24048-012MS
Batch: 35678
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	ND	20000	20000		200	102	60-140	02/27/2017 1810
Benzene	ND	10000	11000		200	107	70-130	02/27/2017 1810
Bromodichloromethane	ND	10000	11000		200	106	71-143	02/27/2017 1810
Bromoform	ND	10000	11000		200	110	65-131	02/27/2017 1810
Bromomethane (Methyl bromide)	ND	10000	12000		200	121	36-168	02/27/2017 1810
2-Butanone (MEK)	ND	20000	24000		200	119	60-140	02/27/2017 1810
Carbon disulfide	ND	10000	10000		200	102	60-140	02/27/2017 1810
Carbon tetrachloride	ND	10000	11000		200	109	37-166	02/27/2017 1810
Chlorobenzene	ND	10000	11000		200	112	78-129	02/27/2017 1810
Chloroethane	ND	10000	11000		200	111	60-140	02/27/2017 1810
Chloroform	ND	10000	10000		200	101	63-123	02/27/2017 1810
Chloromethane (Methyl chloride)	ND	10000	10000		200	100	20-158	02/27/2017 1810
Cyclohexane	ND	10000	10000		200	100	70-130	02/27/2017 1810
1,2-Dibromo-3-chloropropane (DBCP)	ND	10000	9500		200	95	70-130	02/27/2017 1810
Dibromochloromethane	ND	10000	11000		200	110	74-134	02/27/2017 1810
1,2-Dibromoethane (EDB)	ND	10000	10000		200	102	70-130	02/27/2017 1810
1,2-Dichlorobenzene	ND	10000	10000		200	104	70-130	02/27/2017 1810
1,3-Dichlorobenzene	ND	10000	10000		200	103	70-130	02/27/2017 1810
1,4-Dichlorobenzene	ND	10000	10000		200	101	70-130	02/27/2017 1810
Dichlorodifluoromethane	ND	10000	8800		200	88	10-158	02/27/2017 1810
1,1-Dichloroethane	ND	10000	11000		200	106	69-132	02/27/2017 1810
1,2-Dichloroethane	ND	10000	9100		200	91	70-130	02/27/2017 1810
1,1-Dichloroethene	ND	10000	12000		200	115	50-132	02/27/2017 1810
cis-1,2-Dichloroethene	ND	10000	11000		200	108	70-130	02/27/2017 1810
trans-1,2-Dichloroethene	ND	10000	11000		200	115	70-130	02/27/2017 1810
1,2-Dichloropropane	ND	10000	11000		200	107	71-126	02/27/2017 1810
cis-1,3-Dichloropropene	ND	10000	11000		200	108	69-130	02/27/2017 1810
trans-1,3-Dichloropropene	ND	10000	10000		200	102	73-131	02/27/2017 1810
Ethylbenzene	ND	10000	11000		200	110	70-130	02/27/2017 1810
2-Hexanone	ND	20000	19000		200	94	60-140	02/27/2017 1810
Isopropylbenzene	ND	10000	12000		200	116	70-130	02/27/2017 1810
Methyl acetate	ND	10000	9200		200	92	15-128	02/27/2017 1810
Methyl tertiary butyl ether (MTBE)	ND	10000	9300		200	93	70-130	02/27/2017 1810
4-Methyl-2-pentanone	ND	20000	19000		200	97	60-140	02/27/2017 1810
Methylcyclohexane	ND	10000	12000		200	120	70-130	02/27/2017 1810
Methylene chloride	ND	10000	11000		200	108	69-129	02/27/2017 1810
Styrene	ND	10000	11000		200	113	70-130	02/27/2017 1810
1,1,2,2-Tetrachloroethane	ND	10000	10000		200	100	60-155	02/27/2017 1810
Tetrachloroethene	7600	10000	19000		200	115	70-130	02/27/2017 1810
Toluene	ND	10000	11000		200	109	70-130	02/27/2017 1810
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10000	12000		200	116	70-130	02/27/2017 1810
1,2,4-Trichlorobenzene	ND	10000	8400		200	84	70-130	02/27/2017 1810
1,1,1-Trichloroethane	ND	10000	11000		200	106	77-132	02/27/2017 1810
1,1,2-Trichloroethane	ND	10000	11000		200	106	77-132	02/27/2017 1810

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 MDL
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 - MS

Sample ID: SB24048-012MS
Batch: 35678
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	10000	11000		200	107	73-124	02/27/2017 1810
Trichlorofluoromethane	ND	10000	9300		200	93	60-140	02/27/2017 1810
Vinyl chloride	ND	10000	10000		200	104	29-159	02/27/2017 1810
Xylenes (total)	ND	20000	23000		200	115	70-130	02/27/2017 1810

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		80	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MSD

Sample ID: SB24048-012MD
Batch: 35678
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	20000	21000		200	106	4.6	60-140	20	02/27/2017 1833
Benzene	ND	10000	11000		200	107	0.27	70-130	20	02/27/2017 1833
Bromodichloromethane	ND	10000	11000		200	106	0.35	71-143	20	02/27/2017 1833
Bromoform	ND	10000	11000		200	111	1.5	65-131	20	02/27/2017 1833
Bromomethane (Methyl bromide)	ND	10000	11000		200	108	11	36-168	20	02/27/2017 1833
2-Butanone (MEK)	ND	20000	25000		200	123	3.2	60-140	20	02/27/2017 1833
Carbon disulfide	ND	10000	11000		200	109	6.5	60-140	20	02/27/2017 1833
Carbon tetrachloride	ND	10000	11000		200	111	1.7	37-166	20	02/27/2017 1833
Chlorobenzene	ND	10000	11000		200	113	1.2	78-129	20	02/27/2017 1833
Chloroethane	ND	10000	10000		200	100	11	60-140	20	02/27/2017 1833
Chloroform	ND	10000	10000		200	104	3.2	63-123	20	02/27/2017 1833
Chloromethane (Methyl chloride)	ND	10000	9700		200	97	3.5	20-158	20	02/27/2017 1833
Cyclohexane	ND	10000	10000		200	103	3.3	70-130	20	02/27/2017 1833
1,2-Dibromo-3-chloropropane (DBCP)	ND	10000	10000		200	100	5.6	70-130	20	02/27/2017 1833
Dibromochloromethane	ND	10000	11000		200	111	0.62	74-134	20	02/27/2017 1833
1,2-Dibromoethane (EDB)	ND	10000	10000		200	102	0.69	70-130	20	02/27/2017 1833
1,2-Dichlorobenzene	ND	10000	11000		200	110	5.6	70-130	20	02/27/2017 1833
1,3-Dichlorobenzene	ND	10000	11000		200	107	3.2	70-130	20	02/27/2017 1833
1,4-Dichlorobenzene	ND	10000	11000		200	105	3.9	70-130	20	02/27/2017 1833
Dichlorodifluoromethane	ND	10000	9300		200	93	5.5	10-158	20	02/27/2017 1833
1,1-Dichloroethane	ND	10000	11000		200	111	4.8	69-132	20	02/27/2017 1833
1,2-Dichloroethane	ND	10000	9200		200	92	0.54	70-130	20	02/27/2017 1833
1,1-Dichloroethene	ND	10000	12000		200	118	1.9	50-132	20	02/27/2017 1833
cis-1,2-Dichloroethene	ND	10000	11000		200	112	3.5	70-130	20	02/27/2017 1833
trans-1,2-Dichloroethene	ND	10000	12000		200	117	2.1	70-130	20	02/27/2017 1833
1,2-Dichloropropane	ND	10000	11000		200	108	1.1	71-126	20	02/27/2017 1833
cis-1,3-Dichloropropene	ND	10000	11000		200	109	1.1	69-130	20	02/27/2017 1833
trans-1,3-Dichloropropene	ND	10000	10000		200	103	0.56	73-131	20	02/27/2017 1833
Ethylbenzene	ND	10000	11000		200	113	2.8	70-130	20	02/27/2017 1833
2-Hexanone	ND	20000	19000		200	94	0.36	60-140	20	02/27/2017 1833
Isopropylbenzene	ND	10000	12000		200	120	2.8	70-130	20	02/27/2017 1833
Methyl acetate	ND	10000	9400		200	94	2.1	15-128	20	02/27/2017 1833
Methyl tertiary butyl ether (MTBE)	ND	10000	9500		200	95	2.4	70-130	20	02/27/2017 1833
4-Methyl-2-pentanone	ND	20000	20000		200	99	1.8	60-140	20	02/27/2017 1833
Methylcyclohexane	ND	10000	12000		200	124	3.5	70-130	20	02/27/2017 1833
Methylene chloride	ND	10000	11000		200	110	1.2	69-129	20	02/27/2017 1833
Styrene	ND	10000	12000		200	115	2.1	70-130	20	02/27/2017 1833
1,1,2,2-Tetrachloroethane	ND	10000	10000		200	102	2.1	60-155	20	02/27/2017 1833
Tetrachloroethene	7600	10000	19000		200	115	0.24	70-130	20	02/27/2017 1833
Toluene	ND	10000	11000		200	110	0.60	70-130	20	02/27/2017 1833
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10000	12000		200	118	2.4	70-130	20	02/27/2017 1833
1,2,4-Trichlorobenzene	ND	10000	9600		200	96	14	70-130	20	02/27/2017 1833
1,1,1-Trichloroethane	ND	10000	11000		200	107	0.89	77-132	20	02/27/2017 1833
1,1,2-Trichloroethane	ND	10000	11000		200	106	0.29	77-132	20	02/27/2017 1833

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 MDL
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 - MSD

Sample ID: SB24048-012MD
Batch: 35678
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	ND	10000	11000		200	109	1.1	73-124	20	02/27/2017 1833
Trichlorofluoromethane	ND	10000	9200		200	92	0.79	60-140	20	02/27/2017 1833
Vinyl chloride	ND	10000	11000		200	106	1.8	29-159	20	02/27/2017 1833
Xylenes (total)	ND	20000	23000		200	117	2.4	70-130	20	02/27/2017 1833

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		81	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - MB

Sample ID: SQ35652-001
Batch: 35652
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 02/27/2017 827

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Potassium	ND		1	400	50	ug/L	02/27/2017 1513

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - LCS

Sample ID: SQ35652-002
Batch: 35652
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 02/27/2017 827

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	1000	950		1	95	80-120	02/27/2017 1519

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 MDL
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

ICP-MS Metals - MS

Sample ID: SB24048-001MS
Batch: 35652
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 02/27/2017 827

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	780	1000	1700		1	90	70-130	02/27/2017 1531

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - MSD

Sample ID: SB24048-001MD
Batch: 35652
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 02/27/2017 827

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Potassium	780	1000	1700		1	93	2.0	70-130	20	02/27/2017 1537

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Chain of Custody
and
Miscellaneous Documents

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 69905

Client	Report to Contact	Telephone No. / E-mail	Quote No.
TRC	Lisa Clark		

Address	Sampler's Signature	Analysis (Attach list if more space is needed)	Page 1 of 2
30 Patewood Dr Suite 300	X		

City	State	Zip Code	Printed Name
Greenville	SC	29615	Benjamin Medlin

Project Name	Project No.	P.O. No.
WPH Clemson	226253.0.0.5	

Sample ID / Description (Containers for each sample may be combined on one line.)	Date 2017	Time	Grab/Comp	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No of Containers by Preservative Type: Unpres	H2SO4	HNO3	HCl	NaOH	Na2S2O3	VOCs	TOC	Sulfate	Sulfide	Potassium				
OW-01	2-20	1250	G	X			1	1	1	3	3		X	X	X	X	X				
OW-02	2-20	1345	G	X			1	1	1	3	3		X	X	X	X	X				
OW-03A	2-20	1500	G	X			1	1	1	3	3		X	X	X	X	X				
RMW-20	2-21	1040	G	X			1	1	1	3	3		X	X	X	X	X				
RMW-21	2-21	1240	G	X			1	1	1	3	3		X	X	X	X	X				
RMW-21A	2-21	1520	G	X			1	1	1	3	3		X	X	X	X	X				
RMW-17	2-22	1120	G	X			1	1	1	3	3		X	X	X	X	X				
RMW-17A	2-22	1415	G	X			1	1	1	3	3		X	X	X	X	X				
RMW-28A	2-22	1505	G	X			1	1	1	3	3		X	X	X	X	X				
RMW-18	2-22	1630	G	X			1	1	1	3	3		X	X	X	X	X				

SB24048

Remarks / Cooler I.D.

Turn Around Time Required (Prior lab approval required for expedited TAT.)
☐ Standard ☐ Rush (Specify)

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	2.23.17	1630	1. Received by: TRC Sample storage	2.23.17	1630
2. Relinquished by: TRC Storage / DJS	2-24-17	0900	2. Received by	2.24.17	0900
3. Relinquished by	2.24.17	1440	3. Received by	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by: Casey Trexler	2/24/17	1440

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack
Receipt Temp 2.2 °C + 2.3 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 06-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

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

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 69906

Client: TRC	Report to Contact: Lisa Clark / Terry Hertz	Telephone No. / E-mail:	Quote No.
Address: 30 Patewood Dr Suite 300	Sampler's Signature: X	Analysis (Attach list if more space is needed)	Page 2 of 2
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Benjamin Medlin		SB24048
Project Name: WPH - Clemson			
Project No.: 226253.0.0.5	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date 2017	Time	Grab / Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	SCAS KI	VOC's	TOC	Sulfate	Sulfide	Potassium	Remarks / Cooler I.D.
RMW-27	2-22-17	1655	G	X			1	1	1	3	3		X	X	X	X	X	
RMW-18A	2-22-17	1725	G	X			1	1	1	3	3		X	X	X	X	X	
RMW-20A	2-23-17	1300	G	X			1	1	1	3	3		X	X	X	X	X	
RMW-27B	2-23-17	1340	G	X			1	1	1	3	3		X	X	X	X	X	
TBLK-17113										2			X					

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	2-23-17	1630	1. Received by: TRC Sample Storage	2-23-17	1630
2. Relinquished by: TRC Storage / DJS	2-24-17	0900	2. Received by	2.24.17	0900
3. Relinquished by	2.24.17	1440	3. Received by		
4. Relinquished by			4. Laboratory received by: Casey Trexler	2/24/17	1440

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Circle) (Yes) No Ice Pack — Receipt Temp. 2.2 °C & 2.3 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc
Document Number: ME0018C-07

Page 1 of 1
Effective Date: 11/29/2016
Expiry Date: 11/29/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: CT 2/24/17 Lot #: SB24048

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other _____

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: 17-154 & 15-1448 Cl strip ID: 17-218

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

0.2/0.2 °C 2.3/2.3 °C / / °C / / °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
Yes ☑	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☐	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
Yes ☐	No ☐	NA ☐	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes ☐	No ☑	NA ☐	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☐	19. Were all applicable NH3/TKN/cyanide/phenol/BNA (<0.5mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?

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_2SO_4, HNO_3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.5 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be < 2 by _____ Date: _____

Sample(s) _____ were Not received at a pH of < 2 and were adjusted accordingly using SR# _____

Sample labels applied by: CT Verified by: _____ Date: 2/24/17

Comments: _____

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0.0.13

Lot Number: SB24043

Date Completed: 03/06/2017

Date Revised: 03/06/2017

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: Westpoint Home - Clemson, SC

Project Number: 226253.0000.0000.000013

Lab Report: SB24043 Shealy Environmental Services
Samples analyzed for sulfate and VOCs

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: VOC surrogate recoveries were within QC limits.

Method Blanks: Method blanks have no VOC or sulfate detections.

Trip Blank: A trip blank was not collected with these samples.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS recoveries are within QC Limits. LCSD analyses were not performed.

MS/MSD: MS/MSD analyses were performed for VOCs using sample DP-19A. The MS and MSD were analyzed with a 20-fold dilution. Recoveries and RPDs were within QC limits except as follows:

- Chlorobenzene, chloroethane, 1,2-dichloroethane, trans-1,3-dichloropropene, MTBE, 1,1,1-trichloroethane, and 1,1,2-trichloroethane had MS recoveries 1-6% below the lower QC limit.
- DBCP and 1,2-dichloroethane had MSD recoveries 1% below the lower QC limit.
- Acetone, bromomethane, and chloroethane had RPDs above the QC limit.
- The low recoveries are attributed to the sample dilution. No qualifiers were assigned.

Duplicates: A field duplicate was not collected with these samples.

No data qualifiers were assigned.

Data review performed by Terry Hertz, TRC Environmental Corp. , 3/6/2017

Case Narrative
TRC Companies, Inc.
Lot Number: SB24043

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.

VOCs by GC/MS

The MS/MSD associated with batch 35635 recovered multiple compounds outside of method criteria due to matrix interferences.

The continuing calibration verification (CCV) associated with samples -015 and -019 recovered 2-butanone (31%) above the upper control limit. The samples associated with this CCV were non-detect for the affected analytes; therefore, the data has been reported.

Sample Summary

TRC Companies, Inc.

Lot Number: SB24043

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	DP-02A	Aqueous	02/17/2017 1615	02/24/2017
002	DP-01	Aqueous	02/20/2017 0915	02/24/2017
003	DP-01A	Aqueous	02/20/2017 1040	02/24/2017
004	DP-08A	Aqueous	02/20/2017 1240	02/24/2017
005	DP-12	Aqueous	02/20/2017 1430	02/24/2017
006	DP-12A	Aqueous	02/20/2017 1520	02/24/2017
007	DP-14	Aqueous	02/21/2017 0900	02/24/2017
008	DP-14A	Aqueous	02/21/2017 0945	02/24/2017
009	DP-15	Aqueous	02/21/2017 1055	02/24/2017
010	DP-15A	Aqueous	02/21/2017 1400	02/24/2017
011	DP-17	Aqueous	02/21/2017 1500	02/24/2017
012	DP-17A	Aqueous	02/22/2017 0900	02/24/2017
013	DP-11	Aqueous	02/22/2017 1025	02/24/2017
014	DP-11A	Aqueous	02/22/2017 1130	02/24/2017
015	DP-18	Aqueous	02/22/2017 1245	02/24/2017
016	DP-18A	Aqueous	02/22/2017 1400	02/24/2017
017	DP-16	Aqueous	02/22/2017 1530	02/24/2017
018	DP-16A	Aqueous	02/23/2017 0900	02/24/2017
019	DP-19	Aqueous	02/23/2017 1010	02/24/2017
020	DP-19A	Aqueous	02/23/2017 1115	02/24/2017
021	DP-13	Aqueous	02/23/2017 1315	02/24/2017
022	DP-13A	Aqueous	02/23/2017 1420	02/24/2017
023	DP-09	Aqueous	02/23/2017 1600	02/24/2017

(23 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: SB24043

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	DP-02A	Aqueous	Sulfate	300.0	0.64	J	mg/L	6
001	DP-02A	Aqueous	Acetone	8260B	11	J	ug/L	6
001	DP-02A	Aqueous	2-Butanone (MEK)	8260B	3.9	J	ug/L	6
002	DP-01	Aqueous	Sulfate	300.0	67		mg/L	8
002	DP-01	Aqueous	cis-1,2-Dichloroethene	8260B	9.5	J	ug/L	8
002	DP-01	Aqueous	Tetrachloroethene	8260B	520		ug/L	9
002	DP-01	Aqueous	Trichloroethene	8260B	7.3	J	ug/L	9
003	DP-01A	Aqueous	Sulfate	300.0	1.4	J	mg/L	10
003	DP-01A	Aqueous	Acetone	8260B	120		ug/L	10
003	DP-01A	Aqueous	2-Butanone (MEK)	8260B	110		ug/L	10
003	DP-01A	Aqueous	Methyl acetate	8260B	15		ug/L	10
003	DP-01A	Aqueous	4-Methyl-2-pentanone	8260B	2.2	J	ug/L	11
003	DP-01A	Aqueous	Tetrachloroethene	8260B	1.4	J	ug/L	11
004	DP-08A	Aqueous	Acetone	8260B	5.4	J	ug/L	12
005	DP-12	Aqueous	Sulfate	300.0	8.4		mg/L	14
005	DP-12	Aqueous	Acetone	8260B	2.5	J	ug/L	14
005	DP-12	Aqueous	1,1-Dichloroethane	8260B	1.3	J	ug/L	14
005	DP-12	Aqueous	cis-1,2-Dichloroethene	8260B	14		ug/L	14
005	DP-12	Aqueous	Tetrachloroethene	8260B	39		ug/L	15
005	DP-12	Aqueous	Trichloroethene	8260B	1.5	J	ug/L	15
006	DP-12A	Aqueous	Tetrachloroethene	8260B	3700		ug/L	17
007	DP-14	Aqueous	Sulfate	300.0	72		mg/L	18
007	DP-14	Aqueous	1,1-Dichloroethane	8260B	0.43	J	ug/L	18
007	DP-14	Aqueous	cis-1,2-Dichloroethene	8260B	4.7	J	ug/L	18
007	DP-14	Aqueous	Tetrachloroethene	8260B	9.3		ug/L	19
007	DP-14	Aqueous	Trichloroethene	8260B	0.62	J	ug/L	19
008	DP-14A	Aqueous	Acetone	8260B	11	J	ug/L	20
008	DP-14A	Aqueous	2-Butanone (MEK)	8260B	7.5	J	ug/L	20
008	DP-14A	Aqueous	1,1-Dichloroethane	8260B	1.2	J	ug/L	20
008	DP-14A	Aqueous	cis-1,2-Dichloroethene	8260B	13		ug/L	20
008	DP-14A	Aqueous	Tetrachloroethene	8260B	87		ug/L	21
008	DP-14A	Aqueous	Trichloroethene	8260B	1.6	J	ug/L	21
009	DP-15	Aqueous	cis-1,2-Dichloroethene	8260B	13	J	ug/L	22
009	DP-15	Aqueous	Tetrachloroethene	8260B	860		ug/L	23
009	DP-15	Aqueous	Trichloroethene	8260B	56		ug/L	23
010	DP-15A	Aqueous	Tetrachloroethene	8260B	4700		ug/L	25
011	DP-17	Aqueous	Tetrachloroethene	8260B	930		ug/L	27
012	DP-17A	Aqueous	Tetrachloroethene	8260B	4200		ug/L	29
013	DP-11	Aqueous	cis-1,2-Dichloroethene	8260B	8.3	J	ug/L	30
013	DP-11	Aqueous	Tetrachloroethene	8260B	420		ug/L	31
013	DP-11	Aqueous	Trichloroethene	8260B	4.0	J	ug/L	31
014	DP-11A	Aqueous	Sulfate	300.0	1.1		mg/L	32
014	DP-11A	Aqueous	Tetrachloroethene	8260B	1900		ug/L	33
015	DP-18	Aqueous	Sulfate	300.0	9.0		mg/L	34
015	DP-18	Aqueous	Benzene	8260B	0.40	J	ug/L	34

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
015	DP-18	Aqueous	cis-1,2-Dichloroethene	8260B	1.6	J	ug/L	34
015	DP-18	Aqueous	Tetrachloroethene	8260B	190		ug/L	35
015	DP-18	Aqueous	Trichloroethene	8260B	2.6	J	ug/L	35
016	DP-18A	Aqueous	Tetrachloroethene	8260B	510		ug/L	37
017	DP-16	Aqueous	Sulfate	300.0	28		mg/L	38
017	DP-16	Aqueous	1,1-Dichloroethane	8260B	1.0	J	ug/L	38
017	DP-16	Aqueous	cis-1,2-Dichloroethene	8260B	14		ug/L	38
017	DP-16	Aqueous	Tetrachloroethene	8260B	33		ug/L	39
017	DP-16	Aqueous	Trichloroethene	8260B	1.2	J	ug/L	39
018	DP-16A	Aqueous	Sulfate	300.0	0.86	J	mg/L	40
018	DP-16A	Aqueous	cis-1,2-Dichloroethene	8260B	50	J	ug/L	40
018	DP-16A	Aqueous	Tetrachloroethene	8260B	3600		ug/L	41
019	DP-19	Aqueous	Sulfate	300.0	53		mg/L	42
019	DP-19	Aqueous	1,1-Dichloroethane	8260B	1.6	J	ug/L	42
019	DP-19	Aqueous	cis-1,2-Dichloroethene	8260B	52		ug/L	42
019	DP-19	Aqueous	Tetrachloroethene	8260B	150		ug/L	43
019	DP-19	Aqueous	Trichloroethene	8260B	4.7	J	ug/L	43
020	DP-19A	Aqueous	Sulfate	300.0	5.4		mg/L	44
020	DP-19A	Aqueous	cis-1,2-Dichloroethene	8260B	28	J	ug/L	44
020	DP-19A	Aqueous	Tetrachloroethene	8260B	1500		ug/L	45
021	DP-13	Aqueous	Sulfate	300.0	58		mg/L	46
021	DP-13	Aqueous	1,1-Dichloroethane	8260B	0.92	J	ug/L	46
021	DP-13	Aqueous	cis-1,2-Dichloroethene	8260B	10		ug/L	46
021	DP-13	Aqueous	Tetrachloroethene	8260B	28		ug/L	47
021	DP-13	Aqueous	Trichloroethene	8260B	0.87	J	ug/L	47
022	DP-13A	Aqueous	cis-1,2-Dichloroethene	8260B	22	J	ug/L	48
022	DP-13A	Aqueous	Tetrachloroethene	8260B	1200		ug/L	49
023	DP-09	Aqueous	Sulfate	300.0	130		mg/L	50
023	DP-09	Aqueous	Tetrachloroethene	8260B	2800		ug/L	51
023	DP-09	Aqueous	Trichloroethene	8260B	20	J	ug/L	51

(75 detections)

Client: TRC Companies, Inc.
Description: DP-02A
Date Sampled: 02/17/2017 1615
Date Received: 02/24/2017

Laboratory ID: SB24043-001
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/25/2017 0243	TAF		34683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	0.64	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1055	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	11	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	3.9	J	10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-02A
Date Sampled: 02/17/2017 1615
Date Received: 02/24/2017

Laboratory ID: SB24043-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1055	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		97	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-01
Date Sampled: 02/20/2017 0915
Date Received: 02/24/2017

Laboratory ID: SB24043-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/25/2017 0307	TAF		34683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	67		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/25/2017 1339	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		100	10	ug/L	1
Benzene	71-43-2	8260B	ND		25	2.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	2.0	ug/L	1
Bromoform	75-25-2	8260B	ND		25	2.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		50	10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	2.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	2.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	2.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		25	2.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	2.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	2.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	2.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	2.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	2.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	2.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	2.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	2.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	2.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	2.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	9.5	J	25	2.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	2.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	2.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	2.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	2.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		25	2.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	2.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	2.0	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-01
Date Sampled: 02/20/2017 0915
Date Received: 02/24/2017

Laboratory ID: SB24043-002
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/25/2017 1339	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	2.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	2.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	2.0	ug/L	1
Styrene	100-42-5	8260B	ND		25	2.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	2.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	520		25	2.0	ug/L	1
Toluene	108-88-3	8260B	ND		25	2.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	2.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	2.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	2.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	2.0	ug/L	1
Trichloroethene	79-01-6	8260B	7.3	J	25	2.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	2.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		97	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-01A
Date Sampled: 02/20/2017 1040
Date Received: 02/24/2017

Laboratory ID: SB24043-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	02/25/2017 0331	TAF		34683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	1.4	J	5.0	1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1118	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	120		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	110		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	15		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-01A
Date Sampled: 02/20/2017 1040
Date Received: 02/24/2017

Laboratory ID: SB24043-003
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1118	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	2.2	J	10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	1.4	J	5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-08A
Date Sampled: 02/20/2017 1240
Date Received: 02/24/2017

Laboratory ID: SB24043-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/25/2017 0355	TAF		34683

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1142	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	5.4	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-08A
Date Sampled: 02/20/2017 1240
Date Received: 02/24/2017

Laboratory ID: SB24043-004
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1142	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		97	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-12
Date Sampled: 02/20/2017 1430
Date Received: 02/24/2017

Laboratory ID: SB24043-005
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/28/2017 2024	TAF		35950

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	8.4		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1205	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	2.5	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	1.3	J	5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	14		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-12
Date Sampled: 02/20/2017 1430
Date Received: 02/24/2017

Laboratory ID: SB24043-005
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1205	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	39		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	1.5	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		99	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-12A
Date Sampled: 02/20/2017 1520
Date Received: 02/24/2017

Laboratory ID: SB24043-006
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/28/2017 2048	TAF		35950

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1402	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		1000	100	ug/L	1
Benzene	71-43-2	8260B	ND		250	20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		250	20	ug/L	1
Bromoform	75-25-2	8260B	ND		250	20	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		250	20	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		500	100	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		250	20	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		250	20	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		250	20	ug/L	1
Chloroethane	75-00-3	8260B	ND		250	20	ug/L	1
Chloroform	67-66-3	8260B	ND		250	20	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		250	20	ug/L	1
Cyclohexane	110-82-7	8260B	ND		250	20	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		250	20	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		250	20	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		250	20	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		250	20	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		250	20	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		250	20	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		250	20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		250	20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		250	20	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		250	20	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		250	20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		250	20	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		250	20	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		250	20	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		250	20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		250	20	ug/L	1
2-Hexanone	591-78-6	8260B	ND		500	100	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		250	20	ug/L	1
Methyl acetate	79-20-9	8260B	ND		250	20	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-12A
Date Sampled: 02/20/2017 1520
Date Received: 02/24/2017

Laboratory ID: SB24043-006
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1402	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	20	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		500	100	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		250	20	ug/L	1
Methylene chloride	75-09-2	8260B	ND		250	20	ug/L	1
Styrene	100-42-5	8260B	ND		250	20	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		250	20	ug/L	1
Tetrachloroethene	127-18-4	8260B	3700		250	20	ug/L	1
Toluene	108-88-3	8260B	ND		250	20	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		250	20	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		250	20	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		250	20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		250	20	ug/L	1
Trichloroethene	79-01-6	8260B	ND		250	20	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		250	20	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		100	20	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		250	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-14
Date Sampled: 02/21/2017 0900
Date Received: 02/24/2017

Laboratory ID: SB24043-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/28/2017 2112	TAF		35950

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	72		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1229	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	0.43	J	5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	4.7	J	5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-14
Date Sampled: 02/21/2017 0900
Date Received: 02/24/2017

Laboratory ID: SB24043-007
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1229	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	9.3		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	0.62	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		84	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		95	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-14A
Date Sampled: 02/21/2017 0945
Date Received: 02/24/2017

Laboratory ID: SB24043-008
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/28/2017 2136	TAF		35950

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1252	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	11	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	7.5	J	10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	1.2	J	5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	13		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-14A
Date Sampled: 02/21/2017 0945
Date Received: 02/24/2017

Laboratory ID: SB24043-008
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1252	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	87		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	1.6	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		84	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		97	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-15
Date Sampled: 02/21/2017 1055
Date Received: 02/24/2017

Laboratory ID: SB24043-009
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/28/2017 2248	TAF		35950

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	02/25/2017 1426	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		200	20	ug/L	1
Benzene	71-43-2	8260B	ND		50	4.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	4.0	ug/L	1
Bromoform	75-25-2	8260B	ND		50	4.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	4.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		100	20	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	4.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	4.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	4.0	ug/L	1
Chloroform	67-66-3	8260B	ND		50	4.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	4.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	4.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	4.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	4.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	4.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	4.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	4.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	4.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	4.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	4.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	13	J	50	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	4.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	4.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	4.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	4.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		50	4.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	20	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		50	4.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	4.0	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-15
Date Sampled: 02/21/2017 1055
Date Received: 02/24/2017

Laboratory ID: SB24043-009
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	02/25/2017 1426	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	4.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	20	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	4.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	4.0	ug/L	1
Styrene	100-42-5	8260B	ND		50	4.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	4.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	860		50	4.0	ug/L	1
Toluene	108-88-3	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	4.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	4.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	4.0	ug/L	1
Trichloroethene	79-01-6	8260B	56		50	4.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	4.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	4.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	4.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		99	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-15A
Date Sampled: 02/21/2017 1400
Date Received: 02/24/2017

Laboratory ID: SB24043-010
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/28/2017 2312	TAF		35950

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1449	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		1000	100	ug/L	1
Benzene	71-43-2	8260B	ND		250	20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		250	20	ug/L	1
Bromoform	75-25-2	8260B	ND		250	20	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		250	20	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		500	100	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		250	20	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		250	20	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		250	20	ug/L	1
Chloroethane	75-00-3	8260B	ND		250	20	ug/L	1
Chloroform	67-66-3	8260B	ND		250	20	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		250	20	ug/L	1
Cyclohexane	110-82-7	8260B	ND		250	20	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		250	20	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		250	20	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		250	20	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		250	20	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		250	20	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		250	20	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		250	20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		250	20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		250	20	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		250	20	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		250	20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		250	20	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		250	20	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		250	20	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		250	20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		250	20	ug/L	1
2-Hexanone	591-78-6	8260B	ND		500	100	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		250	20	ug/L	1
Methyl acetate	79-20-9	8260B	ND		250	20	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-15A
Date Sampled: 02/21/2017 1400
Date Received: 02/24/2017

Laboratory ID: SB24043-010
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1449	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	20	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		500	100	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		250	20	ug/L	1
Methylene chloride	75-09-2	8260B	ND		250	20	ug/L	1
Styrene	100-42-5	8260B	ND		250	20	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		250	20	ug/L	1
Tetrachloroethene	127-18-4	8260B	4700		250	20	ug/L	1
Toluene	108-88-3	8260B	ND		250	20	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		250	20	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		250	20	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		250	20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		250	20	ug/L	1
Trichloroethene	79-01-6	8260B	ND		250	20	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		250	20	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		100	20	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		250	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-17
Date Sampled: 02/21/2017 1500
Date Received: 02/24/2017

Laboratory ID: SB24043-011
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	02/28/2017 2336	TAF		35950

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	02/25/2017 1513	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		200	20	ug/L	1
Benzene	71-43-2	8260B	ND		50	4.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	4.0	ug/L	1
Bromoform	75-25-2	8260B	ND		50	4.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	4.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		100	20	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	4.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	4.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	4.0	ug/L	1
Chloroform	67-66-3	8260B	ND		50	4.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	4.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	4.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	4.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	4.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	4.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	4.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	4.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	4.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	4.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	4.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		50	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	4.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	4.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	4.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	4.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		50	4.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	20	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		50	4.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	4.0	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-17
Date Sampled: 02/21/2017 1500
Date Received: 02/24/2017

Laboratory ID: SB24043-011
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	02/25/2017 1513	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	4.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	20	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	4.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	4.0	ug/L	1
Styrene	100-42-5	8260B	ND		50	4.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	4.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	930		50	4.0	ug/L	1
Toluene	108-88-3	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	4.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	4.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	4.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		50	4.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	4.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	4.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	4.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		97	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-17A
Date Sampled: 02/22/2017 0900
Date Received: 02/24/2017

Laboratory ID: SB24043-012
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/01/2017 0001	TAF		35950

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1536	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		1000	100	ug/L	1
Benzene	71-43-2	8260B	ND		250	20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		250	20	ug/L	1
Bromoform	75-25-2	8260B	ND		250	20	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		250	20	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		500	100	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		250	20	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		250	20	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		250	20	ug/L	1
Chloroethane	75-00-3	8260B	ND		250	20	ug/L	1
Chloroform	67-66-3	8260B	ND		250	20	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		250	20	ug/L	1
Cyclohexane	110-82-7	8260B	ND		250	20	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		250	20	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		250	20	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		250	20	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		250	20	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		250	20	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		250	20	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		250	20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		250	20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		250	20	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		250	20	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		250	20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		250	20	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		250	20	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		250	20	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		250	20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		250	20	ug/L	1
2-Hexanone	591-78-6	8260B	ND		500	100	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		250	20	ug/L	1
Methyl acetate	79-20-9	8260B	ND		250	20	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-17A
Date Sampled: 02/22/2017 0900
Date Received: 02/24/2017

Laboratory ID: SB24043-012
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1536	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	20	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		500	100	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		250	20	ug/L	1
Methylene chloride	75-09-2	8260B	ND		250	20	ug/L	1
Styrene	100-42-5	8260B	ND		250	20	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		250	20	ug/L	1
Tetrachloroethene	127-18-4	8260B	4200		250	20	ug/L	1
Toluene	108-88-3	8260B	ND		250	20	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		250	20	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		250	20	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		250	20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		250	20	ug/L	1
Trichloroethene	79-01-6	8260B	ND		250	20	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		250	20	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		100	20	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		250	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		97	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-11
Date Sampled: 02/22/2017 1025
Date Received: 02/24/2017

Laboratory ID: SB24043-013
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/01/2017 0025	TAF		35950

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/25/2017 1600	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		100	10	ug/L	1
Benzene	71-43-2	8260B	ND		25	2.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		25	2.0	ug/L	1
Bromoform	75-25-2	8260B	ND		25	2.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		25	2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		50	10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		25	2.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		25	2.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		25	2.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		25	2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		25	2.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		25	2.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		25	2.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		25	2.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		25	2.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		25	2.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		25	2.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		25	2.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		25	2.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		25	2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		25	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		25	2.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		25	2.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	8.3	J	25	2.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		25	2.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		25	2.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		25	2.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		25	2.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		25	2.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		50	10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		25	2.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		25	2.0	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-11
Date Sampled: 02/22/2017 1025
Date Received: 02/24/2017

Laboratory ID: SB24043-013
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/25/2017 1600	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		25	2.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		50	10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		25	2.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		25	2.0	ug/L	1
Styrene	100-42-5	8260B	ND		25	2.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		25	2.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	420		25	2.0	ug/L	1
Toluene	108-88-3	8260B	ND		25	2.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		25	2.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		25	2.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		25	2.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		25	2.0	ug/L	1
Trichloroethene	79-01-6	8260B	4.0	J	25	2.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		25	2.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		10	2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		25	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		84	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		96	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-11A
Date Sampled: 02/22/2017 1130
Date Received: 02/24/2017

Laboratory ID: SB24043-014
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/01/2017 2230	TAF		35966

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	1.1		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	02/25/2017 1623	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		400	40	ug/L	1
Benzene	71-43-2	8260B	ND		100	8.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		100	8.0	ug/L	1
Bromoform	75-25-2	8260B	ND		100	8.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		100	8.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		200	40	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		100	8.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		100	8.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		100	8.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		100	8.0	ug/L	1
Chloroform	67-66-3	8260B	ND		100	8.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		100	8.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		100	8.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		100	8.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		100	8.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		100	8.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		100	8.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		100	8.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		100	8.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		100	8.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		100	8.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		100	8.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		100	8.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		100	8.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		100	8.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		100	8.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		100	8.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		100	8.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		100	8.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		200	40	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		100	8.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		100	8.0	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-11A
Date Sampled: 02/22/2017 1130
Date Received: 02/24/2017

Laboratory ID: SB24043-014
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	02/25/2017 1623	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		100	8.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		200	40	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		100	8.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		100	8.0	ug/L	1
Styrene	100-42-5	8260B	ND		100	8.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		100	8.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	1900		100	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		100	8.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		100	8.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		100	8.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		100	8.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		100	8.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		100	8.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		100	8.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		40	8.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		100	8.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		84	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		96	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-18
Date Sampled: 02/22/2017 1245
Date Received: 02/24/2017

Laboratory ID: SB24043-015
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/01/2017 2254	TAF		35966

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	9.0		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/25/2017 1646	TML		35635
2	5030B	8260B	1	02/27/2017 2308	ECP		35737

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	2
Benzene	71-43-2	8260B	0.40	J	5.0	0.40	ug/L	2
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	2
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	2
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	2
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	2
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	2
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	2
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	2
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	2
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	2
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	2
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	2
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	2
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	2
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	2
cis-1,2-Dichloroethene	156-59-2	8260B	1.6	J	5.0	0.40	ug/L	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	2
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	2
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	2
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	2
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-18
Date Sampled: 02/22/2017 1245
Date Received: 02/24/2017

Laboratory ID: SB24043-015
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	02/25/2017 1646	TML		35635
2	5030B	8260B	1	02/27/2017 2308	ECP		35737

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	2
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	2
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	2
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	2
Tetrachloroethene	127-18-4	8260B	190		25	2.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	2
Trichloroethene	79-01-6	8260B	2.6	J	5.0	0.40	ug/L	2
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	2
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	2
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130		80	70-130
Bromofluorobenzene		99	70-130		94	70-130
Toluene-d8		102	70-130		96	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-18A
Date Sampled: 02/22/2017 1400
Date Received: 02/24/2017

Laboratory ID: SB24043-016
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/01/2017 2319	TAF		35966

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	02/25/2017 1710	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		200	20	ug/L	1
Benzene	71-43-2	8260B	ND		50	4.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	4.0	ug/L	1
Bromoform	75-25-2	8260B	ND		50	4.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	4.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		100	20	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	4.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	4.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	4.0	ug/L	1
Chloroform	67-66-3	8260B	ND		50	4.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	4.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	4.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	4.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	4.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	4.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	4.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	4.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	4.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	4.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	4.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		50	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	4.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	4.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	4.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	4.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		50	4.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	20	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		50	4.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	4.0	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-18A
Date Sampled: 02/22/2017 1400
Date Received: 02/24/2017

Laboratory ID: SB24043-016
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	02/25/2017 1710	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	4.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	20	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	4.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	4.0	ug/L	1
Styrene	100-42-5	8260B	ND		50	4.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	4.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	510		50	4.0	ug/L	1
Toluene	108-88-3	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	4.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	4.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	4.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		50	4.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	4.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	4.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	4.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		97	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-16
Date Sampled: 02/22/2017 1530
Date Received: 02/24/2017

Laboratory ID: SB24043-017
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/01/2017 2343	TAF		35966

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	28		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1316	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	1.0	J	5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	14		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-16
Date Sampled: 02/22/2017 1530
Date Received: 02/24/2017

Laboratory ID: SB24043-017
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1316	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	33		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	1.2	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		98	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-16A
Date Sampled: 02/23/2017 0900
Date Received: 02/24/2017

Laboratory ID: SB24043-018
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 0007	TAF		35966

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	0.86	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1733	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		1000	100	ug/L	1
Benzene	71-43-2	8260B	ND		250	20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		250	20	ug/L	1
Bromoform	75-25-2	8260B	ND		250	20	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		250	20	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		500	100	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		250	20	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		250	20	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		250	20	ug/L	1
Chloroethane	75-00-3	8260B	ND		250	20	ug/L	1
Chloroform	67-66-3	8260B	ND		250	20	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		250	20	ug/L	1
Cyclohexane	110-82-7	8260B	ND		250	20	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		250	20	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		250	20	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		250	20	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		250	20	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		250	20	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		250	20	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		250	20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		250	20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		250	20	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		250	20	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	50	J	250	20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		250	20	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		250	20	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		250	20	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		250	20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		250	20	ug/L	1
2-Hexanone	591-78-6	8260B	ND		500	100	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		250	20	ug/L	1
Methyl acetate	79-20-9	8260B	ND		250	20	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-16A
Date Sampled: 02/23/2017 0900
Date Received: 02/24/2017

Laboratory ID: SB24043-018
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1733	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	20	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		500	100	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		250	20	ug/L	1
Methylene chloride	75-09-2	8260B	ND		250	20	ug/L	1
Styrene	100-42-5	8260B	ND		250	20	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		250	20	ug/L	1
Tetrachloroethene	127-18-4	8260B	3600		250	20	ug/L	1
Toluene	108-88-3	8260B	ND		250	20	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		250	20	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		250	20	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		250	20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		250	20	ug/L	1
Trichloroethene	79-01-6	8260B	ND		250	20	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		250	20	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		100	20	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		250	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-19
Date Sampled: 02/23/2017 1010
Date Received: 02/24/2017

Laboratory ID: SB24043-019
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 0031	TAF		35966

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	53		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	02/27/2017 2331	ECP		35737

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	2
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	2
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	2
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	2
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	2
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	2
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	2
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	2
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	2
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	2
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	2
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	2
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	2
1,1-Dichloroethane	75-34-3	8260B	1.6	J	5.0	0.40	ug/L	2
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	2
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	2
cis-1,2-Dichloroethene	156-59-2	8260B	52		5.0	0.40	ug/L	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	2
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	2
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	2
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	2
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	2
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-19
Date Sampled: 02/23/2017 1010
Date Received: 02/24/2017

Laboratory ID: SB24043-019
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	02/27/2017 2331	ECP		35737

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	2
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	2
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	2
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	2
Tetrachloroethene	127-18-4	8260B	150		5.0	0.40	ug/L	2
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	2
Trichloroethene	79-01-6	8260B	4.7	J	5.0	0.40	ug/L	2
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	2
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	2
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		81	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		96	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-19A
Date Sampled: 02/23/2017 1115
Date Received: 02/24/2017

Laboratory ID: SB24043-020
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 0055	TAF		35966

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	5.4		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	02/25/2017 1820	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		400	40	ug/L	1
Benzene	71-43-2	8260B	ND		100	8.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		100	8.0	ug/L	1
Bromoform	75-25-2	8260B	ND		100	8.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		100	8.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		200	40	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		100	8.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		100	8.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		100	8.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		100	8.0	ug/L	1
Chloroform	67-66-3	8260B	ND		100	8.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		100	8.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		100	8.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		100	8.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		100	8.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		100	8.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		100	8.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		100	8.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		100	8.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		100	8.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		100	8.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		100	8.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		100	8.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	28	J	100	8.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		100	8.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		100	8.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		100	8.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		100	8.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		100	8.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		200	40	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		100	8.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		100	8.0	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-19A
Date Sampled: 02/23/2017 1115
Date Received: 02/24/2017

Laboratory ID: SB24043-020
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	02/25/2017 1820	TML		35635

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		100	8.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		200	40	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		100	8.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		100	8.0	ug/L	1
Styrene	100-42-5	8260B	ND		100	8.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		100	8.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	1500		100	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		100	8.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		100	8.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		100	8.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		100	8.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		100	8.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		100	8.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		100	8.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		40	8.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		100	8.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		99	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-13
Date Sampled: 02/23/2017 1315
Date Received: 02/24/2017

Laboratory ID: SB24043-021
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 0119	TAF		35966

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	58		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1423	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	0.92	J	5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	10		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-13
Date Sampled: 02/23/2017 1315
Date Received: 02/24/2017

Laboratory ID: SB24043-021
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/25/2017 1423	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	28		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	0.87	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	70-130
Bromofluorobenzene		89	70-130
Toluene-d8		81	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-13A
Date Sampled: 02/23/2017 1420
Date Received: 02/24/2017

Laboratory ID: SB24043-022
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/02/2017 0231	TAF		35966

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	02/25/2017 1506	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		400	40	ug/L	1
Benzene	71-43-2	8260B	ND		100	8.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		100	8.0	ug/L	1
Bromoform	75-25-2	8260B	ND		100	8.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		100	8.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		200	40	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		100	8.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		100	8.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		100	8.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		100	8.0	ug/L	1
Chloroform	67-66-3	8260B	ND		100	8.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		100	8.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		100	8.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		100	8.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		100	8.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		100	8.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		100	8.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		100	8.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		100	8.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		100	8.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		100	8.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		100	8.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		100	8.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	22	J	100	8.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		100	8.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		100	8.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		100	8.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		100	8.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		100	8.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		200	40	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		100	8.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		100	8.0	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-13A
Date Sampled: 02/23/2017 1420
Date Received: 02/24/2017

Laboratory ID: SB24043-022
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	02/25/2017 1506	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		100	8.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		200	40	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		100	8.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		100	8.0	ug/L	1
Styrene	100-42-5	8260B	ND		100	8.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		100	8.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	1200		100	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		100	8.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		100	8.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		100	8.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		100	8.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		100	8.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		100	8.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		100	8.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		40	8.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		100	8.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		86	70-130
Toluene-d8		82	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-09
Date Sampled: 02/23/2017 1600
Date Received: 02/24/2017

Laboratory ID: SB24043-023
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	03/02/2017 0255	TAF		35966

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	130		5.0	1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1528	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		1000	100	ug/L	1
Benzene	71-43-2	8260B	ND		250	20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		250	20	ug/L	1
Bromoform	75-25-2	8260B	ND		250	20	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		250	20	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		500	100	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		250	20	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		250	20	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		250	20	ug/L	1
Chloroethane	75-00-3	8260B	ND		250	20	ug/L	1
Chloroform	67-66-3	8260B	ND		250	20	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		250	20	ug/L	1
Cyclohexane	110-82-7	8260B	ND		250	20	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		250	20	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		250	20	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		250	20	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		250	20	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		250	20	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		250	20	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		250	20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		250	20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		250	20	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		250	20	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		250	20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		250	20	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		250	20	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		250	20	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		250	20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		250	20	ug/L	1
2-Hexanone	591-78-6	8260B	ND		500	100	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		250	20	ug/L	1
Methyl acetate	79-20-9	8260B	ND		250	20	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 MDL
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"

Client: TRC Companies, Inc.
Description: DP-09
Date Sampled: 02/23/2017 1600
Date Received: 02/24/2017

Laboratory ID: SB24043-023
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	02/25/2017 1528	TML		35636

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	20	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		500	100	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		250	20	ug/L	1
Methylene chloride	75-09-2	8260B	ND		250	20	ug/L	1
Styrene	100-42-5	8260B	ND		250	20	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		250	20	ug/L	1
Tetrachloroethene	127-18-4	8260B	2800		250	20	ug/L	1
Toluene	108-88-3	8260B	ND		250	20	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		250	20	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		250	20	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		250	20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		250	20	ug/L	1
Trichloroethene	79-01-6	8260B	20	J	250	20	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		250	20	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		100	20	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		250	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Bromofluorobenzene		84	70-130
Toluene-d8		81	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 MDL
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"

QC Summary

Inorganic non-metals - MB

Sample ID: SQ34683-001
Batch: 34683
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.20	mg/L	02/24/2017 1618

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ34683-002
Batch: 34683
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	19		1	97	90-110	02/24/2017 1642

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 MDL
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

Inorganic non-metals - MB

Sample ID: SQ35950-001
Batch: 35950
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.20	mg/L	02/28/2017 1247

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ35950-002
Batch: 35950
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	102	90-110	02/28/2017 1311

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 MDL
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

Inorganic non-metals - MB

Sample ID: SQ35966-001
Batch: 35966
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.20	mg/L	03/01/2017 1630

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ35966-002
Batch: 35966
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	100	90-110	03/01/2017 1654

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 MDL
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: SQ35635-001
Batch: 35635
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	2.0	ug/L	02/25/2017 1024
Benzene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Bromodichloromethane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Bromoform	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Bromomethane (Methyl bromide)	ND		1	5.0	0.40	ug/L	02/25/2017 1024
2-Butanone (MEK)	ND		1	10	2.0	ug/L	02/25/2017 1024
Carbon disulfide	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Chlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Chloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Chloroform	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Chloromethane (Methyl chloride)	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Cyclohexane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Dibromochloromethane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,2-Dibromoethane (EDB)	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,4-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,3-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,2-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Dichlorodifluoromethane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,2-Dichloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,1-Dichloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
cis-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,1-Dichloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,2-Dichloropropane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
trans-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
cis-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Ethylbenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
2-Hexanone	ND		1	10	2.0	ug/L	02/25/2017 1024
Isopropylbenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Methyl acetate	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/25/2017 1024
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	02/25/2017 1024
Methylcyclohexane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Methylene chloride	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Styrene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Tetrachloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Toluene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,2,4-Trichlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,1,2-Trichloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
1,1,1-Trichloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 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 MDL
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: SQ35635-001
Batch: 35635
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Trichlorofluoromethane	ND		1	5.0	0.40	ug/L	02/25/2017 1024
Vinyl chloride	ND		1	2.0	0.40	ug/L	02/25/2017 1024
Xylenes (total)	ND		1	5.0	0.40	ug/L	02/25/2017 1024

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ35635-002
Batch: 35635
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	82		1	82	60-140	02/25/2017 0932
Benzene	50	48		1	97	70-130	02/25/2017 0932
Bromodichloromethane	50	51		1	102	70-130	02/25/2017 0932
Bromoform	50	52		1	105	70-130	02/25/2017 0932
Bromomethane (Methyl bromide)	50	56		1	112	60-140	02/25/2017 0932
2-Butanone (MEK)	100	100		1	102	60-140	02/25/2017 0932
Carbon disulfide	50	46		1	92	60-140	02/25/2017 0932
Carbon tetrachloride	50	49		1	97	70-130	02/25/2017 0932
Chlorobenzene	50	51		1	102	70-130	02/25/2017 0932
Chloroethane	50	52		1	104	60-140	02/25/2017 0932
Chloroform	50	47		1	95	70-130	02/25/2017 0932
Chloromethane (Methyl chloride)	50	48		1	95	60-140	02/25/2017 0932
Cyclohexane	50	46		1	91	70-130	02/25/2017 0932
1,2-Dibromo-3-chloropropane (DBCP)	50	50		1	101	70-130	02/25/2017 0932
Dibromochloromethane	50	51		1	103	70-130	02/25/2017 0932
1,2-Dibromoethane (EDB)	50	48		1	95	70-130	02/25/2017 0932
1,4-Dichlorobenzene	50	51		1	101	70-130	02/25/2017 0932
1,3-Dichlorobenzene	50	52		1	103	70-130	02/25/2017 0932
1,2-Dichlorobenzene	50	51		1	103	70-130	02/25/2017 0932
Dichlorodifluoromethane	50	42		1	84	60-140	02/25/2017 0932
1,2-Dichloroethane	50	44		1	88	70-130	02/25/2017 0932
1,1-Dichloroethane	50	50		1	100	70-130	02/25/2017 0932
trans-1,2-Dichloroethene	50	50		1	100	70-130	02/25/2017 0932
cis-1,2-Dichloroethene	50	50		1	101	70-130	02/25/2017 0932
1,1-Dichloroethene	50	49		1	98	70-130	02/25/2017 0932
1,2-Dichloropropane	50	51		1	101	70-130	02/25/2017 0932
trans-1,3-Dichloropropene	50	50		1	101	70-130	02/25/2017 0932
cis-1,3-Dichloropropene	50	53		1	107	70-130	02/25/2017 0932
Ethylbenzene	50	50		1	101	70-130	02/25/2017 0932
2-Hexanone	100	96		1	96	60-140	02/25/2017 0932
Isopropylbenzene	50	53		1	105	70-130	02/25/2017 0932
Methyl acetate	50	43		1	86	60-140	02/25/2017 0932
Methyl tertiary butyl ether (MTBE)	50	46		1	92	70-130	02/25/2017 0932
4-Methyl-2-pentanone	100	98		1	98	60-140	02/25/2017 0932
Methylcyclohexane	50	55		1	110	70-130	02/25/2017 0932
Methylene chloride	50	50		1	99	70-130	02/25/2017 0932
Styrene	50	52		1	103	70-130	02/25/2017 0932
1,1,2,2-Tetrachloroethane	50	54		1	109	70-130	02/25/2017 0932
Tetrachloroethene	50	50		1	101	70-130	02/25/2017 0932
Toluene	50	50		1	99	70-130	02/25/2017 0932
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	48		1	96	70-130	02/25/2017 0932
1,2,4-Trichlorobenzene	50	42		1	83	70-130	02/25/2017 0932
1,1,2-Trichloroethane	50	49		1	98	70-130	02/25/2017 0932
1,1,1-Trichloroethane	50	47		1	94	70-130	02/25/2017 0932

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 MDL
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: SQ35635-002
Batch: 35635
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	48		1	97	70-130	02/25/2017 0932
Trichlorofluoromethane	50	45		1	89	70-130	02/25/2017 0932
Vinyl chloride	50	49		1	98	70-130	02/25/2017 0932
Xylenes (total)	100	100		1	104	70-130	02/25/2017 0932

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MS

Sample ID: SB24043-020MS
Batch: 35635
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	ND	2000	1700		20	86	60-140	02/25/2017 1844
Benzene	ND	1000	750		20	75	70-130	02/25/2017 1844
Bromodichloromethane	ND	1000	750		20	75	71-143	02/25/2017 1844
Bromoform	ND	1000	750		20	75	65-131	02/25/2017 1844
Bromomethane (Methyl bromide)	ND	1000	650		20	65	36-168	02/25/2017 1844
2-Butanone (MEK)	ND	2000	1700		20	87	60-140	02/25/2017 1844
Carbon disulfide	ND	1000	660		20	66	60-140	02/25/2017 1844
Carbon tetrachloride	ND	1000	740		20	74	37-166	02/25/2017 1844
Chlorobenzene	ND	1000	770	N	20	77	78-129	02/25/2017 1844
Chloroethane	ND	1000	550	N	20	55	60-140	02/25/2017 1844
Chloroform	ND	1000	720		20	72	63-123	02/25/2017 1844
Chloromethane (Methyl chloride)	ND	1000	710		20	71	20-158	02/25/2017 1844
Cyclohexane	ND	1000	710		20	71	70-130	02/25/2017 1844
1,2-Dibromo-3-chloropropane (DBCP)	ND	1000	740		20	74	70-130	02/25/2017 1844
Dibromochloromethane	ND	1000	740		20	74	74-134	02/25/2017 1844
1,2-Dibromoethane (EDB)	ND	1000	700		20	70	70-130	02/25/2017 1844
1,2-Dichlorobenzene	ND	1000	770		20	77	70-130	02/25/2017 1844
1,3-Dichlorobenzene	ND	1000	730		20	73	70-130	02/25/2017 1844
1,4-Dichlorobenzene	ND	1000	720		20	72	70-130	02/25/2017 1844
Dichlorodifluoromethane	ND	1000	680		20	68	10-158	02/25/2017 1844
1,1-Dichloroethane	ND	1000	770		20	77	69-132	02/25/2017 1844
1,2-Dichloroethane	ND	1000	670	N	20	67	70-130	02/25/2017 1844
1,1-Dichloroethene	ND	1000	820		20	82	50-132	02/25/2017 1844
cis-1,2-Dichloroethene	28	1000	800		20	78	70-130	02/25/2017 1844
trans-1,2-Dichloroethene	ND	1000	810		20	81	70-130	02/25/2017 1844
1,2-Dichloropropane	ND	1000	760		20	76	71-126	02/25/2017 1844
cis-1,3-Dichloropropene	ND	1000	740		20	74	69-130	02/25/2017 1844
trans-1,3-Dichloropropene	ND	1000	690	N	20	69	73-131	02/25/2017 1844
Ethylbenzene	ND	1000	770		20	77	70-130	02/25/2017 1844
2-Hexanone	ND	2000	1300		20	67	60-140	02/25/2017 1844
Isopropylbenzene	ND	1000	830		20	83	70-130	02/25/2017 1844
Methyl acetate	ND	1000	660		20	66	15-128	02/25/2017 1844
Methyl tertiary butyl ether (MTBE)	ND	1000	660	N	20	66	70-130	02/25/2017 1844
4-Methyl-2-pentanone	ND	2000	1400		20	71	60-140	02/25/2017 1844
Methylcyclohexane	ND	1000	860		20	86	70-130	02/25/2017 1844
Methylene chloride	ND	1000	750		20	75	69-129	02/25/2017 1844
Styrene	ND	1000	790		20	79	70-130	02/25/2017 1844
1,1,2,2-Tetrachloroethane	ND	1000	710		20	71	60-155	02/25/2017 1844
Tetrachloroethene	1500	1000	2300		20	76	70-130	02/25/2017 1844
Toluene	ND	1000	750		20	75	70-130	02/25/2017 1844
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1000	810		20	81	70-130	02/25/2017 1844
1,2,4-Trichlorobenzene	ND	1000	820		20	82	70-130	02/25/2017 1844
1,1,1-Trichloroethane	ND	1000	710	N	20	71	77-132	02/25/2017 1844
1,1,2-Trichloroethane	ND	1000	740	N	20	74	77-132	02/25/2017 1844

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 MDL
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 - MS

Sample ID: SB24043-020MS
Batch: 35635
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	1000	750		20	75	73-124	02/25/2017 1844
Trichlorofluoromethane	ND	1000	600		20	60	60-140	02/25/2017 1844
Vinyl chloride	ND	1000	770		20	77	29-159	02/25/2017 1844
Xylenes (total)	ND	2000	1600		20	79	70-130	02/25/2017 1844

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MSD

Sample ID: SB24043-020MD
Batch: 35635
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	2000	1200	+	20	60	34	60-140	20	02/25/2017 1907
Benzene	ND	1000	800		20	80	7.0	70-130	20	02/25/2017 1907
Bromodichloromethane	ND	1000	810		20	81	7.8	71-143	20	02/25/2017 1907
Bromoform	ND	1000	780		20	78	3.5	65-131	20	02/25/2017 1907
Bromomethane (Methyl bromide)	ND	1000	820	+	20	82	22	36-168	20	02/25/2017 1907
2-Butanone (MEK)	ND	2000	1600		20	78	11	60-140	20	02/25/2017 1907
Carbon disulfide	ND	1000	780		20	78	16	60-140	20	02/25/2017 1907
Carbon tetrachloride	ND	1000	830		20	83	12	37-166	20	02/25/2017 1907
Chlorobenzene	ND	1000	830		20	83	7.4	78-129	20	02/25/2017 1907
Chloroethane	ND	1000	740	+	20	74	30	60-140	20	02/25/2017 1907
Chloroform	ND	1000	780		20	78	7.5	63-123	20	02/25/2017 1907
Chloromethane (Methyl chloride)	ND	1000	710		20	71	0.64	20-158	20	02/25/2017 1907
Cyclohexane	ND	1000	780		20	78	9.0	70-130	20	02/25/2017 1907
1,2-Dibromo-3-chloropropane (DBCP)	ND	1000	690	N	20	69	6.7	70-130	20	02/25/2017 1907
Dibromochloromethane	ND	1000	780		20	78	5.8	74-134	20	02/25/2017 1907
1,2-Dibromoethane (EDB)	ND	1000	730		20	73	3.7	70-130	20	02/25/2017 1907
1,2-Dichlorobenzene	ND	1000	800		20	80	4.8	70-130	20	02/25/2017 1907
1,3-Dichlorobenzene	ND	1000	800		20	80	9.1	70-130	20	02/25/2017 1907
1,4-Dichlorobenzene	ND	1000	780		20	78	8.6	70-130	20	02/25/2017 1907
Dichlorodifluoromethane	ND	1000	640		20	64	6.1	10-158	20	02/25/2017 1907
1,1-Dichloroethane	ND	1000	820		20	82	5.9	69-132	20	02/25/2017 1907
1,2-Dichloroethane	ND	1000	690	N	20	69	3.4	70-130	20	02/25/2017 1907
1,1-Dichloroethene	ND	1000	870		20	87	6.0	50-132	20	02/25/2017 1907
cis-1,2-Dichloroethene	28	1000	870		20	84	7.7	70-130	20	02/25/2017 1907
trans-1,2-Dichloroethene	ND	1000	870		20	87	7.5	70-130	20	02/25/2017 1907
1,2-Dichloropropane	ND	1000	810		20	81	6.6	71-126	20	02/25/2017 1907
cis-1,3-Dichloropropene	ND	1000	790		20	79	6.9	69-130	20	02/25/2017 1907
trans-1,3-Dichloropropene	ND	1000	740		20	74	6.6	73-131	20	02/25/2017 1907
Ethylbenzene	ND	1000	820		20	82	7.0	70-130	20	02/25/2017 1907
2-Hexanone	ND	2000	1300		20	66	0.96	60-140	20	02/25/2017 1907
Isopropylbenzene	ND	1000	870		20	87	4.4	70-130	20	02/25/2017 1907
Methyl acetate	ND	1000	630		20	63	4.9	15-128	20	02/25/2017 1907
Methyl tertiary butyl ether (MTBE)	ND	1000	700		20	70	5.1	70-130	20	02/25/2017 1907
4-Methyl-2-pentanone	ND	2000	1400		20	69	3.4	60-140	20	02/25/2017 1907
Methylcyclohexane	ND	1000	950		20	95	9.4	70-130	20	02/25/2017 1907
Methylene chloride	ND	1000	810		20	81	8.0	69-129	20	02/25/2017 1907
Styrene	ND	1000	820		20	82	4.5	70-130	20	02/25/2017 1907
1,1,2,2-Tetrachloroethane	ND	1000	750		20	75	6.3	60-155	20	02/25/2017 1907
Tetrachloroethene	1500	1000	2400		20	84	3.7	70-130	20	02/25/2017 1907
Toluene	ND	1000	810		20	81	7.6	70-130	20	02/25/2017 1907
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1000	880		20	88	8.9	70-130	20	02/25/2017 1907
1,2,4-Trichlorobenzene	ND	1000	740		20	74	11	70-130	20	02/25/2017 1907
1,1,1-Trichloroethane	ND	1000	800		20	80	12	77-132	20	02/25/2017 1907
1,1,2-Trichloroethane	ND	1000	780		20	78	5.0	77-132	20	02/25/2017 1907

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 MDL
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 - MSD

Sample ID: SB24043-020MD
Batch: 35635
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	ND	1000	810		20	81	8.3	73-124	20	02/25/2017 1907
Trichlorofluoromethane	ND	1000	630		20	63	5.0	60-140	20	02/25/2017 1907
Vinyl chloride	ND	1000	750		20	75	3.2	29-159	20	02/25/2017 1907
Xylenes (total)	ND	2000	1700		20	84	6.1	70-130	20	02/25/2017 1907

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		81	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ35636-001
Batch: 35636
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	2.0	ug/L	02/25/2017 1034
Benzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Bromodichloromethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Bromoform	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Bromomethane (Methyl bromide)	ND		1	5.0	0.40	ug/L	02/25/2017 1034
2-Butanone (MEK)	ND		1	10	2.0	ug/L	02/25/2017 1034
Carbon disulfide	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Chlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Chloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Chloroform	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Chloromethane (Methyl chloride)	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Cyclohexane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Dibromochloromethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,2-Dibromoethane (EDB)	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,4-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,3-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,2-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Dichlorodifluoromethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,2-Dichloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,1-Dichloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
cis-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,1-Dichloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,2-Dichloropropane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
trans-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
cis-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Ethylbenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
2-Hexanone	ND		1	10	2.0	ug/L	02/25/2017 1034
Isopropylbenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Methyl acetate	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/25/2017 1034
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	02/25/2017 1034
Methylcyclohexane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Methylene chloride	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Styrene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Tetrachloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Toluene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,2,4-Trichlorobenzene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,1,2-Trichloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
1,1,1-Trichloroethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034

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 MDL
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: SQ35636-001
Batch: 35636
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Trichlorofluoromethane	ND		1	5.0	0.40	ug/L	02/25/2017 1034
Vinyl chloride	ND		1	2.0	0.40	ug/L	02/25/2017 1034
Xylenes (total)	ND		1	5.0	0.40	ug/L	02/25/2017 1034

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		87	70-130
1,2-Dichloroethane-d4		80	70-130
Toluene-d8		82	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ35636-002
Batch: 35636
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	111	60-140	02/25/2017 0939
Benzene	50	41		1	81	70-130	02/25/2017 0939
Bromodichloromethane	50	44		1	89	70-130	02/25/2017 0939
Bromoform	50	45		1	89	70-130	02/25/2017 0939
Bromomethane (Methyl bromide)	50	48		1	96	60-140	02/25/2017 0939
2-Butanone (MEK)	100	100		1	100	60-140	02/25/2017 0939
Carbon disulfide	50	45		1	89	60-140	02/25/2017 0939
Carbon tetrachloride	50	42		1	84	70-130	02/25/2017 0939
Chlorobenzene	50	45		1	91	70-130	02/25/2017 0939
Chloroethane	50	45		1	89	60-140	02/25/2017 0939
Chloroform	50	41		1	82	70-130	02/25/2017 0939
Chloromethane (Methyl chloride)	50	45		1	90	60-140	02/25/2017 0939
Cyclohexane	50	43		1	86	70-130	02/25/2017 0939
1,2-Dibromo-3-chloropropane (DBCP)	50	42		1	84	70-130	02/25/2017 0939
Dibromochloromethane	50	46		1	91	70-130	02/25/2017 0939
1,2-Dibromoethane (EDB)	50	44		1	89	70-130	02/25/2017 0939
1,4-Dichlorobenzene	50	45		1	90	70-130	02/25/2017 0939
1,3-Dichlorobenzene	50	45		1	90	70-130	02/25/2017 0939
1,2-Dichlorobenzene	50	46		1	93	70-130	02/25/2017 0939
Dichlorodifluoromethane	50	48		1	95	60-140	02/25/2017 0939
1,2-Dichloroethane	50	43		1	86	70-130	02/25/2017 0939
1,1-Dichloroethane	50	41		1	83	70-130	02/25/2017 0939
trans-1,2-Dichloroethene	50	44		1	88	70-130	02/25/2017 0939
cis-1,2-Dichloroethene	50	42		1	84	70-130	02/25/2017 0939
1,1-Dichloroethene	50	43		1	85	70-130	02/25/2017 0939
1,2-Dichloropropane	50	43		1	86	70-130	02/25/2017 0939
trans-1,3-Dichloropropene	50	44		1	88	70-130	02/25/2017 0939
cis-1,3-Dichloropropene	50	44		1	88	70-130	02/25/2017 0939
Ethylbenzene	50	44		1	87	70-130	02/25/2017 0939
2-Hexanone	100	81		1	81	60-140	02/25/2017 0939
Isopropylbenzene	50	45		1	89	70-130	02/25/2017 0939
Methyl acetate	50	40		1	81	60-140	02/25/2017 0939
Methyl tertiary butyl ether (MTBE)	50	40		1	80	70-130	02/25/2017 0939
4-Methyl-2-pentanone	100	85		1	85	60-140	02/25/2017 0939
Methylcyclohexane	50	46		1	92	70-130	02/25/2017 0939
Methylene chloride	50	42		1	84	70-130	02/25/2017 0939
Styrene	50	44		1	88	70-130	02/25/2017 0939
1,1,2,2-Tetrachloroethane	50	46		1	91	70-130	02/25/2017 0939
Tetrachloroethene	50	48		1	95	70-130	02/25/2017 0939
Toluene	50	44		1	87	70-130	02/25/2017 0939
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	43		1	85	70-130	02/25/2017 0939
1,2,4-Trichlorobenzene	50	43		1	86	70-130	02/25/2017 0939
1,1,2-Trichloroethane	50	44		1	89	70-130	02/25/2017 0939
1,1,1-Trichloroethane	50	41		1	82	70-130	02/25/2017 0939

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 MDL

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: SQ35636-002
Batch: 35636
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	43		1	87	70-130	02/25/2017 0939
Trichlorofluoromethane	50	49		1	97	70-130	02/25/2017 0939
Vinyl chloride	50	43		1	86	70-130	02/25/2017 0939
Xylenes (total)	100	90		1	90	70-130	02/25/2017 0939

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		84	70-130
1,2-Dichloroethane-d4		77	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 MDL

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: SQ35737-001
Batch: 35737
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	2.0	ug/L	02/27/2017 2056
Benzene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Bromodichloromethane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Bromoform	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Bromomethane (Methyl bromide)	ND		1	5.0	0.40	ug/L	02/27/2017 2056
2-Butanone (MEK)	ND		1	10	2.0	ug/L	02/27/2017 2056
Carbon disulfide	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Chlorobenzene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Chloroethane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Chloroform	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Chloromethane (Methyl chloride)	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Cyclohexane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Dibromochloromethane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,2-Dibromoethane (EDB)	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,2-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,3-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,4-Dichlorobenzene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Dichlorodifluoromethane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,1-Dichloroethane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,2-Dichloroethane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,1-Dichloroethene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
cis-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,2-Dichloropropane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
cis-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
trans-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Ethylbenzene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
2-Hexanone	ND		1	10	2.0	ug/L	02/27/2017 2056
Isopropylbenzene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Methyl acetate	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/27/2017 2056
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	02/27/2017 2056
Methylcyclohexane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Methylene chloride	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Styrene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Tetrachloroethene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Toluene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,2,4-Trichlorobenzene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,1,2-Trichloroethane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
1,1,1-Trichloroethane	ND		1	5.0	0.40	ug/L	02/27/2017 2056

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 MDL
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: SQ35737-001
Batch: 35737
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Trichlorofluoromethane	ND		1	5.0	0.40	ug/L	02/27/2017 2056
Vinyl chloride	ND		1	2.0	0.40	ug/L	02/27/2017 2056
Xylenes (total)	ND		1	5.0	0.40	ug/L	02/27/2017 2056

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		82	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ35737-002
Batch: 35737
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	100	60-140	02/27/2017 2003
Benzene	50	50		1	101	70-130	02/27/2017 2003
Bromodichloromethane	50	51		1	102	70-130	02/27/2017 2003
Bromoform	50	54		1	107	70-130	02/27/2017 2003
Bromomethane (Methyl bromide)	50	56		1	112	60-140	02/27/2017 2003
2-Butanone (MEK)	100	120		1	123	60-140	02/27/2017 2003
Carbon disulfide	50	50		1	100	60-140	02/27/2017 2003
Carbon tetrachloride	50	49		1	99	70-130	02/27/2017 2003
Chlorobenzene	50	53		1	105	70-130	02/27/2017 2003
Chloroethane	50	50		1	100	60-140	02/27/2017 2003
Chloroform	50	48		1	96	70-130	02/27/2017 2003
Chloromethane (Methyl chloride)	50	44		1	88	60-140	02/27/2017 2003
Cyclohexane	50	45		1	91	70-130	02/27/2017 2003
1,2-Dibromo-3-chloropropane (DBCP)	50	50		1	101	70-130	02/27/2017 2003
Dibromochloromethane	50	53		1	106	70-130	02/27/2017 2003
1,2-Dibromoethane (EDB)	50	49		1	99	70-130	02/27/2017 2003
1,2-Dichlorobenzene	50	52		1	104	70-130	02/27/2017 2003
1,3-Dichlorobenzene	50	52		1	105	70-130	02/27/2017 2003
1,4-Dichlorobenzene	50	51		1	102	70-130	02/27/2017 2003
Dichlorodifluoromethane	50	39		1	78	60-140	02/27/2017 2003
1,1-Dichloroethane	50	50		1	100	70-130	02/27/2017 2003
1,2-Dichloroethane	50	44		1	88	70-130	02/27/2017 2003
1,1-Dichloroethene	50	53		1	107	70-130	02/27/2017 2003
cis-1,2-Dichloroethene	50	52		1	104	70-130	02/27/2017 2003
trans-1,2-Dichloroethene	50	53		1	106	70-130	02/27/2017 2003
1,2-Dichloropropane	50	52		1	103	70-130	02/27/2017 2003
cis-1,3-Dichloropropene	50	55		1	110	70-130	02/27/2017 2003
trans-1,3-Dichloropropene	50	51		1	102	70-130	02/27/2017 2003
Ethylbenzene	50	52		1	103	70-130	02/27/2017 2003
2-Hexanone	100	94		1	94	60-140	02/27/2017 2003
Isopropylbenzene	50	54		1	108	70-130	02/27/2017 2003
Methyl acetate	50	49		1	98	60-140	02/27/2017 2003
Methyl tertiary butyl ether (MTBE)	50	47		1	93	70-130	02/27/2017 2003
4-Methyl-2-pentanone	100	99		1	99	60-140	02/27/2017 2003
Methylcyclohexane	50	57		1	114	70-130	02/27/2017 2003
Methylene chloride	50	52		1	104	70-130	02/27/2017 2003
Styrene	50	53		1	106	70-130	02/27/2017 2003
1,1,2,2-Tetrachloroethane	50	54		1	108	70-130	02/27/2017 2003
Tetrachloroethene	50	52		1	103	70-130	02/27/2017 2003
Toluene	50	51		1	102	70-130	02/27/2017 2003
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	53		1	105	70-130	02/27/2017 2003
1,2,4-Trichlorobenzene	50	43		1	86	70-130	02/27/2017 2003
1,1,2-Trichloroethane	50	51		1	102	70-130	02/27/2017 2003
1,1,1-Trichloroethane	50	47		1	95	70-130	02/27/2017 2003

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 MDL
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: SQ35737-002
Batch: 35737
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	50		1	100	70-130	02/27/2017 2003
Trichlorofluoromethane	50	42		1	83	70-130	02/27/2017 2003
Vinyl chloride	50	47		1	94	70-130	02/27/2017 2003
Xylenes (total)	100	110		1	107	70-130	02/27/2017 2003

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		82	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

P = The RPD between two GC columns exceeds 40%

J = Estimated result < PQL and ≥ MDL

N = Recovery is out of criteria

+ = 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

Chain of Custody
and
Miscellaneous Documents

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

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 69909

Client: TRC	Report to Contact: Lisa Clark 864-420-8577	Telephone No. / E-mail: Lclark@trcsolutions.com	Quote No.
Address: 30 Patewood Drive Suite 300 Suite 1	Sampler's Signature:	Analysis (Attach list if more space is needed)	Page ____ of ____
City: Greenville State: SC Zip Code: 29615	Printed Name: David J. Szynal		
Project Name: WPH Clemson			SB24043
Project No.: 226253.0000.0000.13	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab/Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No. of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc NaOH	Na2S2O3	VOCs	Sulfate	Remarks / Cooler I.D.
DP-02A	2-17-17	1615	G	X						X			X	3	1	
DP-01	2-20-17	0915	G	X						X			X	3	1	
DP-01A	2-20-17	1040	G	X						X			X	3	1	
DP-08A	2-20-17	1240	G	X						X			X	3	1	
DP-12	2-20-17	1430	G	X						X			X	3	1	
DP-12A	2-20-17	1520	G	X						X			X	3	1	
DP-14	2-21-17	0900	G	X						X			X	3	1	
DP-14A	2-21-17	0945	G	X						X			X	3	1	
DP-15	2-21-17	1055	G	X						X			X	3	1	
DP-15A	2-21-17	1400	G	X						X			X	3	1	

Turn Around Time Required (Prior lab approval required for expedited TAT.): [X] Standard [ ] Rush (Specify)

Sample Disposal: [ ] Return to Client [X] Disposal by Lab

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison [ ] Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: David Szynal	2-24-17	0900	1. Received by: TRC Storage	2-24-17	0900
2. Relinquished by: TRC Storage / DJS	2-24-17	0900	2. Received by:	2.24.17	0900
3. Relinquished by:	2.24.17	1440	3. Received by:	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by:	Date 2/24/17	Time 1440

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack Receipt Temp. 4.2 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

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

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 69910

Client TRC	**Report to Contact** Lisa Clark 864-420-8577	**Telephone No. / E-mail** Lclark@trcsolutions.com	**Quote No.**
Address 30 Patewood Drive Suite 300 Building 1	**Sampler's Signature** X	**Analysis (Attach list if more space is needed)**	**Page** ____ of ____
City Greenville **State** SC **Zip Code** 29615	**Printed Name** David J. Szymal		SB24043
Project Name DWPH Clemson			

Project No.	P.O. No.				Matrix			No of Containers by Preservative Type						VOCs	Sulfate								Remarks / Cooler I.D.
226253.0000.0000.13																							
Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Aqueous	Solid	Non-Aqueous	Unpres	H_2SO_4	HNO3	HCl	NaOH	S_2O_3 Na	SO_4										
DP-17	2-21-17	1500	G	X						X			X	3	1								
DP-17A	2-22-17	0900	G	X						X			X	3	1								
DP-11	2-22-17	1025	G	X						X			X	3	1								
DP-11A	2-22-17	1130	G	X						X			X	3	1								
DP-18	2-22-17	1245	G	X						X			X	3	1								
DP-18A	2-22-17	1400	G	X						X			X	3	1								
DP-16	2-22-17	1530	G	X						X			X	3	1								
DP-16A	2-23-17	0900	G	X						X			X	3	1								
DP-19	2-23-17	1010	G	X						X			X	3	1								
DP-19A	2-23-17	1115	G	X						X			X	3	1								

Turn Around Time Required (Prior lab approval required for expedited TAT.)
☒ Standard ☐ Rush (Specify)

Sample Disposal
☐ Return to Client ☒ Disposal by Lab

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by David Szymal	2-24-17	0900	1. Received by TRC Storage	2-24-17	0900
2. Relinquished by TRC Storage 1055	2-24-17	0900	2. Received by	2.24.17	0900
3. Relinquished by	2.24.17	1740	3. Received by	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by	2/24/17	1440

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) (Yes) No Ice Pack
Receipt Temp. 4.2 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

SHEALY ENVIRONMENTAL SERVICES, INC.

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

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 69911

Client TRC	**Report to Contact** Lisa Clark 864-420-8577	**Telephone No. / E-mail** Lclark@trcsolutions.com	**Quote No.**
Address 30 Patewood Drive Suite 300 Building L	**Sampler's Signature** X Dal Szyn	**Analysis (Attach list if more space is needed)**	**Page** ____ of ____
City Greenville **State** SC **Zip Code** 29615	**Printed Name** David J. Szynal		SB24043
Project Name WPH Clemson			
Project No. 226253.0000.0000.13	**P.O. No.**		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab / Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No. of Containers by Preservative Type: Unpres	H2SO4	HNO3	HCl	NaOH	Zn Ac / NaOH	Na2S2O3	VOCs	Sulfate	Remarks / Cooler I.D.
DP-13	2-23-17	1315	G	X						X			X	3	1	
DP-13A	2-23-17	1420	G	X						X			X	3	1	
DP-09	2-23-17	1600	G	X						X			X	3	1	

Turn Around Time Required (Prior lab approval required for expedited TAT.) X Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client X Disposal by Lab

Possible Hazard Identification X Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: David Szynal	2-24-17	0900	1. Received by: TRC Storage	2-24-17	0900
2. Relinquished by: TR Storage / DK	2-24-17	0900	2. Received by:	2.24.17	0900
3. Relinquished by:	2.24.17	1440	3. Received by:	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by	2/24/17	1440

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) Yes No Ice Pack Receipt Temp. 4.2 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C407

Page 1 of 1
Effective Date: 11/29/2016
Expiry Date: 11/29/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: mcm/022417 Lot #: SB240413

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?
pH strip ID: Cl strip ID:			
Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:			
4.2/4.2 °C / / °C / / °C / / °C			
Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C			
Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
mcm 2/24/17 Yes ☑	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA (<0.5mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?

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_2SO_4, HNO_3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.5 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be < 2 by _____ Date: _____
Sample(s) _____ were Not received at a pH of < 2 and were adjusted accordingly using SR# _____

Sample labels applied by: mcm Verified by: _____ Date: 2/24/17

Comments: _____

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0.0.5

Lot Number: SC01038

Date Completed: 03/08/2017

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: Westpoint Home - Clemson, SC

Project Number: 226253.0000.0000.000005

Lab Report: SC01038 Shealy Environmental Services
Samples analyzed for sulfide

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Surrogate recoveries are not applicable to the analyses performed.

Method Blanks: Sulfide was not detected in the method blank.

Trip Blank: A trip blank was not collected with these samples.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS recovery is within QC Limits. LCSD analysis was not performed.

MS/MSD: RMW-02 was used for sulfide MS/MSD analyses. Recoveries and RPD were within QC limits.

Duplicates: A field duplicate was not collected with these samples.

No data qualifiers were assigned.

Data review performed by Terry Hertz, TRC Environmental Corp. , 3/9/2017

Case Narrative
TRC Companies, Inc.
Lot Number: SC01038

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.

Sample Summary
TRC Companies, Inc.
Lot Number: SC01038

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	MG-05	Aqueous	02/24/2017 1000	03/01/2017
002	OW-04	Aqueous	02/24/2017 1115	03/01/2017
003	OW-05	Aqueous	02/24/2017 1335	03/01/2017
004	MG-05A	Aqueous	02/24/2017 1340	03/01/2017
005	RMW-23	Aqueous	02/27/2017 1630	03/01/2017
006	OW-06A	Aqueous	02/28/2017 1515	03/01/2017
007	RMW-23A	Aqueous	02/28/2017 1725	03/01/2017
008	RMW-02	Aqueous	02/28/2017 1800	03/01/2017

(8 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: SC01038

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	MG-05	Aqueous	Sulfide	SM 4500-S2 F-	1.7		mg/L	5
002	OW-04	Aqueous	Sulfide	SM 4500-S2 F-	0.64	J	mg/L	6

(2 detections)

Client: TRC Companies, Inc.
Description: MG-05
Date Sampled: 02/24/2017 1000
Date Received: 03/01/2017

Laboratory ID: SC01038-001
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	(Sulfide)	SM 4500-S2 F-2011	1	03/03/2017 0826	BWS		36187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfide	18496-25-8	SM 4500-S2	1.7		1.0	0.62	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 02/24/2017 1115
Date Received: 03/01/2017

Laboratory ID: SC01038-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	(Sulfide)	SM 4500-S2 F-2011	1	03/03/2017 0826	BWS		36187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfide	18496-25-8	SM 4500-S2	0.64	J	1.0	0.62	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-05
Date Sampled: 02/24/2017 1335
Date Received: 03/01/2017

Laboratory ID: SC01038-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	(Sulfide)	SM 4500-S2 F-2011	1	03/03/2017 0826	BWS		36187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	0.62	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: MG-05A
Date Sampled: 02/24/2017 1340
Date Received: 03/01/2017

Laboratory ID: SC01038-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	(Sulfide)	SM 4500-S2 F-2011	1	03/03/2017 0826	BWS		36187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	0.62	mg/L	1

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

Client: TRC Companies, Inc.
Description: RMW-23
Date Sampled: 02/27/2017 1630
Date Received: 03/01/2017

Laboratory ID: SC01038-005
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	(Sulfide)	SM 4500-S2 F-2011	1	03/03/2017 0826	BWS		36187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	0.62	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-06A
Date Sampled: 02/28/2017 1515
Date Received: 03/01/2017

Laboratory ID: SC01038-006
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	(Sulfide)	SM 4500-S2 F-2011	1	03/03/2017 0826	BWS		36187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	0.62	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-23A
Date Sampled: 02/28/2017 1725
Date Received: 03/01/2017

Laboratory ID: SC01038-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	(Sulfide)	SM 4500-S2 F-2011	1	03/03/2017 0826	BWS		36187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	0.62	mg/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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-02
Date Sampled: 02/28/2017 1800
Date Received: 03/01/2017

Laboratory ID: SC01038-008
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	(Sulfide)	SM 4500-S2 F-2011	1	03/03/2017 0826	BWS		36187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	0.62	mg/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 MDL
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"

QC Summary

Inorganic non-metals - MB

Sample ID: SQ36187-001
Batch: 36187
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfide	ND		1	1.0	0.62	mg/L	03/03/2017 0826

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ36187-002
Batch: 36187
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	10	9.7		1	97	80-120	03/03/2017 0826

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 MDL
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

Inorganic non-metals - MS

Sample ID: SC01038-008MS
Batch: 36187
Analytical Method: SM 4500-S2 F-2011

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	ND	10	7.0		1	70	70-130	03/03/2017 0826

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 MDL
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

Inorganic non-metals - MSD

Sample ID: SC01038-008MD
Batch: 36187
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfide	ND	10	7.2		1	72	2.1	70-130	20	03/03/2017 0826

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Chain of Custody
and
Miscellaneous Documents

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

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 57423

Client: TRC	Report to Contact: Lisa Clark / Kerry Hertz	Telephone No. / E-mail:	Quote No.
Address: 30 Patewood Dr.	Sampler's Signature: x Bill Medlin	Analysis (Attach list if more space is needed):	Page 1 of 1
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Bill Medlin		SC01038
Project Name: WPH - Clemson			
Project No.: 226253.0.0.5	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date 2017	Time	G=Grab C=Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	5035 Kit	Analysis	Remarks / Cooler I.D.
MG-05	2-24	1000	G	X							3 X		X	
OW-04	2-24	1115	G	X							3 X		X	
OW-05	2-24	1335	G	X							3 X		X	
MG-05A	2-24	1340	G	X							3 X		X	
RMW-23	2-27	1630	G	X							3 X		X	
OW-06A	2-28	1515	G	X							3 X		X	
RMW-23A	2-28	1725	G	X							3 X		X	
RMW-02	2-28	1800	G	X							3 X		X	

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Bill Medlin	2-28-17	1930	1. Received by: TRC Sample Storage	2-28-17	1930
2. Relinquished by:	3-1-17	0915	2. Received by: Edward Hamby	3.1.17	0915
3. Relinquished by: Edward Hamby	3.1.17	1430	3. Received by:	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by: Casey Tuepker	3/1/17	1430

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) (Yes) No Ice Pack Receipt Temp. 2.6 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc
Document Number: ME0018C-07

Page 1 of 1
Effective Date: 11/29/2016
Expiry Date: 11/29/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: CCT/ 3/1/17 Lot #: SC01038

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: 15-1448 Cl strip ID:

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

2.6/2.6 °C ___/___/___ °C ___/___/___ °C ___/___/___ °C

Method: ☐ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☐	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
Yes ☐	No ☐	NA ☑	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes ☑	No ☐	NA ☐	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA (<0.5mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?

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_2SO_4, HNO_3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.5 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be < 2 by _____ Date: _____

Sample(s) _____ were Not received at a pH of < 2 and were adjusted accordingly using SR# _____

Sample labels applied by: CCT Verified by: _____ Date: 3/1/17

Comments: _____

Report of Analysis

TRC Companies, Inc.
Patewood Plaza One, Suite 300
30 Patewood Drive
Greenville, SC 29615-3535
Attention: Lisa Clark

Project Name: WPH Clemson

Project Number: 226253.0.0.5

Lot Number: SC02069

Date Completed: 03/09/2017

Lucas Odom
Project Manager

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

Laboratory Data Quality Review Notes

Project Name: Westpoint Home - Clemson, SC

Project Number: 226253.0000.0000.000005

Lab Report: SC02069 Shealy Environmental Services
Samples analyzed for sulfate, sulfide, TOC, potassium, and VOCs

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: VOC surrogate recoveries were within QC limits.

Method Blanks: Targeted analytes were not detected in the method blanks.

Trip Blank: Trip blank TBLK17114 did not have VOC detections.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: Rinsate blank RBLK-17113 had detections of TOC at 0.53 J mg/L and methylene chloride at 5.5 ug/L. Methylene chloride and TOC were not detected in samples collected using a decontaminated pump at concentrations comparable to those in the RBLK-17113. No qualifiers were assigned.

LCS/LCSD: LCS recoveries were within QC Limits. LCSD analyses were not performed.

MS/MSD: MG-05 was used for TOC and potassium MS/MSD analyses. OW-04 and OW-06A were also used for TOC MS/MSD analyses. RMW-23B was used for VOC and sulfate MS/MSD analyses. Recoveries and RPDs were within QC limits except as follows:

- MTBE in RMW-23B MS had a recovery 4% below the lower QC limit. The recovery of MTBE in RMW-23B MSD was within the QC limit. MTBE was not detected in the unspiked parent sample. No data qualifier was assigned.

Duplicates: A field duplicate was not collected with these samples.

No data qualifiers were assigned.

Data review performed by Terry Hertz, TRC Environmental Corp. , 3/10/2017

Case Narrative
TRC Companies, Inc.
Lot Number: SC02069

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.

Sulfate by IC

Due to matrix interferences, samples -005, -006, -007, and -011 have all been analyzed at a 5X dilution. The target compound is non-detect at this dilution.

VOCs by GC/MS

Due to suspected matrix interferences, the MS associated with batch 36140 recovered MTBE marginally below method criteria at 66%. The MSD recovered this compound marginally within method criteria at 73%.

Sample Summary
TRC Companies, Inc.
Lot Number: SC02069

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	MG-05	Aqueous	02/24/2017 1000	03/02/2017
002	OW-04	Aqueous	02/24/2017 1115	03/02/2017
003	OW-05	Aqueous	02/24/2017 1335	03/02/2017
004	MG-05A	Aqueous	02/24/2017 1340	03/02/2017
005	RMW-23	Aqueous	02/27/2017 1630	03/02/2017
006	OW-06A	Aqueous	02/28/2017 1515	03/02/2017
007	RMW23A	Aqueous	02/28/2017 1725	03/02/2017
008	RMW-02	Aqueous	02/28/2017 1800	03/02/2017
009	RMW-23B	Aqueous	03/01/2017 1305	03/02/2017
010	RBLK-17113	Aqueous	03/01/2017 1405	03/02/2017
011	RMW-27A	Aqueous	03/01/2017 1700	03/02/2017
012	TBLK-17114	Aqueous	03/01/2017	03/02/2017

(12 samples)

Executive Summary

TRC Companies, Inc.

Lot Number: SC02069

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	MG-05	Aqueous	Sulfate	300.0	19		mg/L	6
001	MG-05	Aqueous	TOC	9060A	0.97	J	mg/L	6
001	MG-05	Aqueous	cis-1,2-Dichloroethene	8260B	0.64	J	ug/L	6
001	MG-05	Aqueous	Tetrachloroethene	8260B	16		ug/L	7
001	MG-05	Aqueous	Trichloroethene	8260B	0.46	J	ug/L	7
001	MG-05	Aqueous	Potassium	6020B	490		ug/L	7
002	OW-04	Aqueous	Sulfate	300.0	1.6		mg/L	8
002	OW-04	Aqueous	TOC	9060A	1.2		mg/L	8
002	OW-04	Aqueous	Acetone	8260B	3.3	J	ug/L	8
002	OW-04	Aqueous	cis-1,2-Dichloroethene	8260B	5.0		ug/L	8
002	OW-04	Aqueous	Tetrachloroethene	8260B	100		ug/L	9
002	OW-04	Aqueous	Trichloroethene	8260B	0.71	J	ug/L	9
002	OW-04	Aqueous	Potassium	6020B	910		ug/L	9
003	OW-05	Aqueous	Sulfate	300.0	5.7		mg/L	10
003	OW-05	Aqueous	TOC	9060A	51		mg/L	10
003	OW-05	Aqueous	Acetone	8260B	12	J	ug/L	10
003	OW-05	Aqueous	2-Butanone (MEK)	8260B	60		ug/L	10
003	OW-05	Aqueous	cis-1,2-Dichloroethene	8260B	5.8		ug/L	10
003	OW-05	Aqueous	Tetrachloroethene	8260B	31		ug/L	11
003	OW-05	Aqueous	Trichloroethene	8260B	3.2	J	ug/L	11
003	OW-05	Aqueous	Potassium	6020B	4200		ug/L	11
004	MG-05A	Aqueous	TOC	9060A	0.46	J	mg/L	12
004	MG-05A	Aqueous	Tetrachloroethene	8260B	790		ug/L	13
004	MG-05A	Aqueous	Potassium	6020B	750		ug/L	13
005	RMW-23	Aqueous	TOC	9060A	330		mg/L	14
005	RMW-23	Aqueous	Acetone	8260B	120		ug/L	14
005	RMW-23	Aqueous	2-Butanone (MEK)	8260B	290		ug/L	14
005	RMW-23	Aqueous	cis-1,2-Dichloroethene	8260B	1.0	J	ug/L	14
005	RMW-23	Aqueous	2-Hexanone	8260B	7.3	J	ug/L	14
005	RMW-23	Aqueous	Methyl acetate	8260B	1.9	J	ug/L	15
005	RMW-23	Aqueous	Tetrachloroethene	8260B	0.51	J	ug/L	15
005	RMW-23	Aqueous	Potassium	6020B	39000		ug/L	15
006	OW-06A	Aqueous	TOC	9060A	130		mg/L	16
006	OW-06A	Aqueous	Acetone	8260B	16	J	ug/L	16
006	OW-06A	Aqueous	2-Butanone (MEK)	8260B	22		ug/L	16
006	OW-06A	Aqueous	1,1-Dichloroethane	8260B	1.2	J	ug/L	16
006	OW-06A	Aqueous	cis-1,2-Dichloroethene	8260B	6.2		ug/L	16
006	OW-06A	Aqueous	Methyl acetate	8260B	1.8	J	ug/L	17
006	OW-06A	Aqueous	Methylene chloride	8260B	0.49	J	ug/L	17
006	OW-06A	Aqueous	Tetrachloroethene	8260B	16		ug/L	17
006	OW-06A	Aqueous	Trichloroethene	8260B	1.1	J	ug/L	17
006	OW-06A	Aqueous	Potassium	6020B	36000		ug/L	17
007	RMW23A	Aqueous	TOC	9060A	500		mg/L	18
007	RMW23A	Aqueous	Acetone	8260B	25		ug/L	18
007	RMW23A	Aqueous	2-Butanone (MEK)	8260B	200		ug/L	18

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
007	RMW23A	Aqueous	cis-1,2-Dichloroethene	8260B	2.5	J	ug/L	18
007	RMW23A	Aqueous	Methyl acetate	8260B	7.7		ug/L	19
007	RMW23A	Aqueous	4-Methyl-2-pentanone	8260B	3.9	J	ug/L	19
007	RMW23A	Aqueous	Tetrachloroethene	8260B	64		ug/L	19
007	RMW23A	Aqueous	Trichloroethene	8260B	4.5	J	ug/L	19
007	RMW23A	Aqueous	Potassium	6020B	34000		ug/L	19
008	RMW-02	Aqueous	Sulfate	300.0	8.9		mg/L	20
008	RMW-02	Aqueous	TOC	9060A	7.9		mg/L	20
008	RMW-02	Aqueous	Ethylbenzene	8260B	7900		ug/L	20
008	RMW-02	Aqueous	Xylenes (total)	8260B	25000		ug/L	21
008	RMW-02	Aqueous	Potassium	6020B	32000		ug/L	21
009	RMW-23B	Aqueous	Sulfide	SM 4500-S2 F-	1.2		mg/L	22
009	RMW-23B	Aqueous	TOC	9060A	7.8		mg/L	22
009	RMW-23B	Aqueous	Acetone	8260B	22	J	ug/L	22
009	RMW-23B	Aqueous	2-Butanone (MEK)	8260B	46	J	ug/L	22
009	RMW-23B	Aqueous	cis-1,2-Dichloroethene	8260B	330		ug/L	22
009	RMW-23B	Aqueous	Tetrachloroethene	8260B	720		ug/L	23
009	RMW-23B	Aqueous	Trichloroethene	8260B	15	J	ug/L	23
009	RMW-23B	Aqueous	Potassium	6020B	1700		ug/L	23
010	RBLK-17113	Aqueous	TOC	9060A	0.53	J	mg/L	24
010	RBLK-17113	Aqueous	Methylene chloride	8260B	5.5		ug/L	25
011	RMW-27A	Aqueous	TOC	9060A	340		mg/L	26
011	RMW-27A	Aqueous	Acetone	8260B	31		ug/L	26
011	RMW-27A	Aqueous	2-Butanone (MEK)	8260B	250		ug/L	26
011	RMW-27A	Aqueous	Methyl acetate	8260B	7.9		ug/L	27
011	RMW-27A	Aqueous	Tetrachloroethene	8260B	5.6		ug/L	27
011	RMW-27A	Aqueous	Trichloroethene	8260B	2.6	J	ug/L	27
011	RMW-27A	Aqueous	Potassium	6020B	16000		ug/L	27

(73 detections)

Client: TRC Companies, Inc.
Description: MG-05
Date Sampled: 02/24/2017 1000
Date Received: 03/02/2017

Laboratory ID: SC02069-001
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/03/2017 2120	TAF		36202
1		(TOC) 9060A	1	03/03/2017 2231	DMA		36166

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	19		1.0	0.20	mg/L	1
TOC		9060A	0.97	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1757	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	0.64	J	5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1

TOC Range: 0.952 - 0.982

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 MDL
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"

Client: TRC Companies, Inc.
Description: MG-05
Date Sampled: 02/24/2017 1000
Date Received: 03/02/2017

Laboratory ID: SC02069-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1757	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	16		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	0.46	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		78	70-130
Bromofluorobenzene		84	70-130
Toluene-d8		77	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	03/06/2017 2248	BNW	03/03/2017 0919	36100

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	490		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 02/24/2017 1115
Date Received: 03/02/2017

Laboratory ID: SC02069-002
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/03/2017 2144	TAF		36202
1		(TOC) 9060A	1	03/04/2017 0009	DMA		36166

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	1.6		1.0	0.20	mg/L	1
TOC		9060A	1.2		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1735	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	3.3	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	5.0		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1

TOC Range: 1.14 - 1.176

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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-04
Date Sampled: 02/24/2017 1115
Date Received: 03/02/2017

Laboratory ID: SC02069-002
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1735	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	100		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	0.71	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		75	70-130
Bromofluorobenzene		82	70-130
Toluene-d8		77	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	03/06/2017 2318	BNW	03/03/2017 0919	36100

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	910		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-05
Date Sampled: 02/24/2017 1335
Date Received: 03/02/2017

Laboratory ID: SC02069-003
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/03/2017 2208	TAF		36202
1		(TOC) 9060A	1	03/04/2017 0147	DMA		36166

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	5.7		1.0	0.20	mg/L	1
TOC		9060A	51		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1443	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	12	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	60		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	5.8		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1

TOC Range: 51.122 - 51.607

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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-05
Date Sampled: 02/24/2017 1335
Date Received: 03/02/2017

Laboratory ID: SC02069-003
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1443	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	31		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	3.2	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		82	70-130
Bromofluorobenzene		86	70-130
Toluene-d8		79	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	03/06/2017 2324	BNW	03/03/2017 0919	36100

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	4200		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: MG-05A
Date Sampled: 02/24/2017 1340
Date Received: 03/02/2017

Laboratory ID: SC02069-004
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/03/2017 2232	TAF		36202
1		(TOC) 9060A	1	03/04/2017 0220	DMA		36166

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1
TOC		9060A	0.46	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	03/03/2017 1631	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		200	20	ug/L	1
Benzene	71-43-2	8260B	ND		50	4.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	4.0	ug/L	1
Bromoform	75-25-2	8260B	ND		50	4.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	4.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		100	20	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	4.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	4.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	4.0	ug/L	1
Chloroform	67-66-3	8260B	ND		50	4.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	4.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	4.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	4.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	4.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	4.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	4.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	4.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	4.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	4.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	4.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		50	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	4.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	4.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	4.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	4.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		50	4.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	20	ug/L	1

TOC Range: 0.393 - 0.543

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 MDL
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"

Client: TRC Companies, Inc.
Description: MG-05A
Date Sampled: 02/24/2017 1340
Date Received: 03/02/2017

Laboratory ID: SC02069-004
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	03/03/2017 1631	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		50	4.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	4.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	4.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	20	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	4.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	4.0	ug/L	1
Styrene	100-42-5	8260B	ND		50	4.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	4.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	790		50	4.0	ug/L	1
Toluene	108-88-3	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	4.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	4.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	4.0	ug/L	1
Trichloroethene	79-01-6	8260B	ND		50	4.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	4.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	4.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	4.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		77	70-130
Bromofluorobenzene		86	70-130
Toluene-d8		79	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	03/06/2017 2330	BNW	03/03/2017 0919	36100

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	750		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-23
Date Sampled: 02/27/2017 1630
Date Received: 03/02/2017

Laboratory ID: SC02069-005
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	03/03/2017 2344	TAF		36202
2		(TOC) 9060A	10	03/06/2017 2309	DMA		36354

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		5.0	1.0	mg/L	1
TOC		9060A	330		10	2.0	mg/L	2

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1505	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	120		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	290		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	1.0	J	5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	7.3	J	10	2.0	ug/L	1

TOC Range: 32.854 - 33.211

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-23
Date Sampled: 02/27/2017 1630
Date Received: 03/02/2017

Laboratory ID: SC02069-005
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1505	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	1.9	J	5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	0.51	J	5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		82	70-130
Bromofluorobenzene		89	70-130
Toluene-d8		79	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	03/07/2017 1630	BNW	03/03/2017 0919	36100

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	39000		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: OW-06A
Date Sampled: 02/28/2017 1515
Date Received: 03/02/2017

Laboratory ID: SC02069-006
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	03/04/2017 0008	TAF		36202
2		(TOC) 9060A	5	03/06/2017 2342	DMA		36354

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		5.0	1.0	mg/L	1
TOC		9060A	130		5.0	1.0	mg/L	2

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1526	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	16	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	22		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	1.2	J	5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	6.2		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1

TOC Range: 25.014 - 25.3

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

Client: TRC Companies, Inc.
Description: OW-06A
Date Sampled: 02/28/2017 1515
Date Received: 03/02/2017

Laboratory ID: SC02069-006
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1526	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	1.8	J	5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	0.49	J	5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	16		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	1.1	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		81	70-130
Bromofluorobenzene		88	70-130
Toluene-d8		81	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	03/07/2017 1636	BNW	03/03/2017 0919	36100

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	36000		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW23A
Date Sampled: 02/28/2017 1725
Date Received: 03/02/2017

Laboratory ID: SC02069-007
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	03/04/2017 0032	TAF		36202
2		(TOC) 9060A	20	03/07/2017 0120	DMA		36354

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		5.0	1.0	mg/L	1
TOC		9060A	500		20	4.0	mg/L	2

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1548	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	25		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	200		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	2.5	J	5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1

TOC Range: 24.81 - 24.897

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

Client: TRC Companies, Inc.
Description: RMW23A
Date Sampled: 02/28/2017 1725
Date Received: 03/02/2017

Laboratory ID: SC02069-007
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1548	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	7.7		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	3.9	J	10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	64		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	4.5	J	5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		78	70-130
Bromofluorobenzene		86	70-130
Toluene-d8		78	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	03/07/2017 1641	BNW	03/03/2017 0919	36100

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	34000		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-02
Date Sampled: 02/28/2017 1800
Date Received: 03/02/2017

Laboratory ID: SC02069-008
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Sulfate) 300.0	1	03/08/2017 0018	TAF		36576
1		(TOC) 9060A	1	03/04/2017 0534	DMA		36166

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	8.9		1.0	0.20	mg/L	2
TOC		9060A	7.9		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	200	03/03/2017 1652	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		4000	400	ug/L	1
Benzene	71-43-2	8260B	ND		1000	80	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1000	80	ug/L	1
Bromoform	75-25-2	8260B	ND		1000	80	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		1000	80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		2000	400	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1000	80	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1000	80	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1000	80	ug/L	1
Chloroethane	75-00-3	8260B	ND		1000	80	ug/L	1
Chloroform	67-66-3	8260B	ND		1000	80	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1000	80	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1000	80	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1000	80	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1000	80	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1000	80	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1000	80	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1000	80	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1000	80	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		1000	80	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1000	80	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1000	80	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1000	80	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1000	80	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1000	80	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1000	80	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1000	80	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1000	80	ug/L	1
Ethylbenzene	100-41-4	8260B	7900		1000	80	ug/L	1
2-Hexanone	591-78-6	8260B	ND		2000	400	ug/L	1

TOC Range: 7.34 - 8.849

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-02
Date Sampled: 02/28/2017 1800
Date Received: 03/02/2017

Laboratory ID: SC02069-008
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	200	03/03/2017 1652	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Isopropylbenzene	98-82-8	8260B	ND		1000	80	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1000	80	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1000	80	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		2000	400	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		1000	80	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1000	80	ug/L	1
Styrene	100-42-5	8260B	ND		1000	80	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1000	80	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1000	80	ug/L	1
Toluene	108-88-3	8260B	ND		1000	80	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1000	80	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1000	80	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1000	80	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1000	80	ug/L	1
Trichloroethene	79-01-6	8260B	ND		1000	80	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1000	80	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		400	80	ug/L	1
Xylenes (total)	1330-20-7	8260B	25000		1000	80	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		80	70-130
Bromofluorobenzene		87	70-130
Toluene-d8		81	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	03/07/2017 1646	BNW	03/03/2017 0919	36100

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	32000		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-23B
Date Sampled: 03/01/2017 1305
Date Received: 03/02/2017

Laboratory ID: SC02069-009
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/06/2017 2305	TAF		36430
1		(Sulfide) SM 4500-S2 F-2011	1	03/03/2017 0826	BWS		36187
1		(TOC) 9060A	1	03/04/2017 0606	DMA		36166

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	1.2		1.0	0.62	mg/L	1
TOC		9060A	7.8		1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	03/03/2017 1714	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	22	J	200	20	ug/L	1
Benzene	71-43-2	8260B	ND		50	4.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		50	4.0	ug/L	1
Bromoform	75-25-2	8260B	ND		50	4.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		50	4.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	46	J	100	20	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		50	4.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		50	4.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		50	4.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		50	4.0	ug/L	1
Chloroform	67-66-3	8260B	ND		50	4.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		50	4.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		50	4.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		50	4.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		50	4.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		50	4.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		50	4.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		50	4.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		50	4.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		50	4.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	4.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		50	4.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	330		50	4.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		50	4.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		50	4.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		50	4.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		50	4.0	ug/L	1

TOC Range: 7.714 - 7.893

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-23B
Date Sampled: 03/01/2017 1305
Date Received: 03/02/2017

Laboratory ID: SC02069-009
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	03/03/2017 1714	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		50	4.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		100	20	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		50	4.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		50	4.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	4.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		100	20	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		50	4.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		50	4.0	ug/L	1
Styrene	100-42-5	8260B	ND		50	4.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		50	4.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	720		50	4.0	ug/L	1
Toluene	108-88-3	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		50	4.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		50	4.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		50	4.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		50	4.0	ug/L	1
Trichloroethene	79-01-6	8260B	15	J	50	4.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		50	4.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	4.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		50	4.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		78	70-130
Bromofluorobenzene		89	70-130
Toluene-d8		80	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	03/07/2017 1652	BNW	03/03/2017 0919	36100

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	1700		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RBLK-17113
Date Sampled: 03/01/2017 1405
Date Received: 03/02/2017

Laboratory ID: SC02069-010
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	1	03/07/2017 0106	TAF		36430
1		(Sulfide) SM 4500-S2 F-2011	1	03/03/2017 0826	BWS		36187
1		(TOC) 9060A	1	03/04/2017 0638	DMA		36166

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		1.0	0.20	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	0.62	mg/L	1
TOC		9060A	0.53	J	1.0	0.20	mg/L	1

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1150	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1

TOC Range: 0.453 - 0.592

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 MDL
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"

Client: TRC Companies, Inc.
Description: RBLK-17113
Date Sampled: 03/01/2017 1405
Date Received: 03/02/2017

Laboratory ID: SC02069-010
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1150	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	5.5		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		81	70-130
Bromofluorobenzene		89	70-130
Toluene-d8		81	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	03/07/2017 1657	BNW	03/03/2017 0919	36100

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	ND		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-27A
Date Sampled: 03/01/2017 1700
Date Received: 03/02/2017

Laboratory ID: SC02069-011
Matrix: Aqueous

Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Sulfate) 300.0	5	03/07/2017 0130	TAF		36430
1		(Sulfide) SM 4500-S2 F-2011	1	03/03/2017 0826	BWS		36187
2		(TOC) 9060A	10	03/07/2017 0151	DMA		36354

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Sulfate		300.0	ND		5.0	1.0	mg/L	1
Sulfide	18496-25-8	SM 4500-S2	ND		1.0	0.62	mg/L	1
TOC		9060A	340		10	2.0	mg/L	2

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	03/06/2017 1348	JM1		36300

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	31		20	2.0	ug/L	2
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	2
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	2
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	2
2-Butanone (MEK)	78-93-3	8260B	250		10	2.0	ug/L	2
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	2
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	2
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	2
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	2
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	2
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	2
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	2
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	2
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	2
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	2
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	2
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	2

TOC Range: 33.538 - 33.942

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 MDL
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"

Client: TRC Companies, Inc.
Description: RMW-27A
Date Sampled: 03/01/2017 1700
Date Received: 03/02/2017

Laboratory ID: SC02069-011
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	03/06/2017 1348	JM1		36300

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	2
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	2
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	2
Methyl acetate	79-20-9	8260B	7.9		5.0	0.40	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	2
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	2
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	2
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	2
Tetrachloroethene	127-18-4	8260B	5.6		5.0	0.40	ug/L	2
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	2
Trichloroethene	79-01-6	8260B	2.6	J	5.0	0.40	ug/L	2
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	2
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	2
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		82	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		96	70-130

ICP-MS Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	03/07/2017 1553	BNW	03/03/2017 0919	36100

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Potassium	7440-09-7	6020B	16000		400	50	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 MDL
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"

Client: TRC Companies, Inc.
Description: TBLK-17114
Date Sampled: 03/01/2017
Date Received: 03/02/2017

Laboratory ID: SC02069-012
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1212	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	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 MDL
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"

Client: TRC Companies, Inc.
Description: TBLK-17114
Date Sampled: 03/01/2017
Date Received: 03/02/2017

Laboratory ID: SC02069-012
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/03/2017 1212	JM1		36140

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		78	70-130
Bromofluorobenzene		83	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 MDL
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"

QC Summary

Inorganic non-metals - MB

Sample ID: SQ36166-001
Batch: 36166
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
TOC	ND		1	1.0	0.20	mg/L	03/03/2017 2128

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ36166-002
Batch: 36166
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	20	19		1	97	90-110	03/03/2017 2200

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 MDL
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

Inorganic non-metals - MS

Sample ID: SC02069-001MS
Batch: 36166
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	0.97	20	21		1	99	70-130	03/03/2017 2304

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 MDL
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

Inorganic non-metals - MSD

Sample ID: SC02069-001MD
Batch: 36166
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
TOC	0.97	20	21		1	99	0.20	70-130	20	03/03/2017 2336

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 MDL
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

Inorganic non-metals - MS

Sample ID: SC02069-002MS
Batch: 36166
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	1.2	20	20		1	95	70-130	03/04/2017 0042

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 MDL
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

Inorganic non-metals - MSD

Sample ID: SC02069-002MD
Batch: 36166
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
TOC	1.2	20	20		1	95	0.35	70-130	20	03/04/2017 0115

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 MDL
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

Inorganic non-metals - MB

Sample ID: SQ36187-001
Batch: 36187
Analytical Method: SM 4500-S2 F-2011

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfide	ND		1	1.0	0.62	mg/L	03/03/2017 0826

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ36187-002
Batch: 36187
Analytical Method: SM 4500-S2 F-2011
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	10	9.7		1	97	80-120	03/03/2017 0826

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 MDL
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

Inorganic non-metals - MB

Sample ID: SQ36202-001
Batch: 36202
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.20	mg/L	03/03/2017 1343

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 MDL
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

Inorganic non-metals - LCS

Sample ID: SQ36202-002
Batch: 36202
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	99	90-110	03/03/2017 1407

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 MDL
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

Inorganic non-metals - MB

Sample ID: SQ36354-001
Batch: 36354
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
TOC	ND		1	1.0	0.20	mg/L	03/06/2017 2206

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ36354-002
Batch: 36354
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	20	19		1	96	90-110	03/06/2017 2238

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 MDL
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

Inorganic non-metals - MS

Sample ID: SC02069-006MS
Batch: 36354
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TOC	130	100	230		5	104	70-130	03/07/2017 0015

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 MDL
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

Inorganic non-metals - MSD

Sample ID: SC02069-006MD
Batch: 36354
Analytical Method: 9060A
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
TOC	130	100	220		5	96	3.5	70-130	20	03/07/2017 0047

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 MDL
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

Inorganic non-metals - MB

Sample ID: SQ36430-001
Batch: 36430
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.20	mg/L	03/06/2017 1929

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ36430-002
Batch: 36430
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	99	90-110	03/06/2017 1953

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 MDL
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

Inorganic non-metals - MS

Sample ID: SC02069-009MS
Batch: 36430
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	ND	20	19		1	94	90-110	03/06/2017 2329

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - MSD

Sample ID: SC02069-009MD
Batch: 36430
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	ND	20	18		1	92	1.5	90-110	20	03/07/2017 0041

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 MDL
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

Inorganic non-metals - MB

Sample ID: SQ36576-001
Batch: 36576
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.20	mg/L	03/07/2017 1905

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Inorganic non-metals - LCS

Sample ID: SQ36576-002
Batch: 36576
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	102	90-110	03/07/2017 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 MDL
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: SQ36140-001
Batch: 36140
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	2.0	ug/L	03/03/2017 1052
Benzene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Bromodichloromethane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Bromoform	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Bromomethane (Methyl bromide)	ND		1	5.0	0.40	ug/L	03/03/2017 1052
2-Butanone (MEK)	ND		1	10	2.0	ug/L	03/03/2017 1052
Carbon disulfide	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Chlorobenzene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Chloroethane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Chloroform	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Chloromethane (Methyl chloride)	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Cyclohexane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Dibromochloromethane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,2-Dibromoethane (EDB)	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,4-Dichlorobenzene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,2-Dichlorobenzene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,3-Dichlorobenzene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Dichlorodifluoromethane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,2-Dichloroethane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,1-Dichloroethane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,1-Dichloroethene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
cis-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,2-Dichloropropane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
trans-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
cis-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Ethylbenzene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
2-Hexanone	ND		1	10	2.0	ug/L	03/03/2017 1052
Isopropylbenzene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Methyl acetate	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	03/03/2017 1052
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	03/03/2017 1052
Methylcyclohexane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Methylene chloride	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Styrene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Tetrachloroethene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Toluene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,2,4-Trichlorobenzene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,1,1-Trichloroethane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
1,1,2-Trichloroethane	ND		1	5.0	0.40	ug/L	03/03/2017 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 MDL
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: SQ36140-001
Batch: 36140
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Trichlorofluoromethane	ND		1	5.0	0.40	ug/L	03/03/2017 1052
Vinyl chloride	ND		1	2.0	0.40	ug/L	03/03/2017 1052
Xylenes (total)	ND		1	5.0	0.40	ug/L	03/03/2017 1052

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		85	70-130
1,2-Dichloroethane-d4		82	70-130
Toluene-d8		80	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ36140-002
Batch: 36140
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	120		1	125	60-140	03/03/2017 0955
Benzene	50	42		1	85	70-130	03/03/2017 0955
Bromodichloromethane	50	46		1	93	70-130	03/03/2017 0955
Bromoform	50	48		1	96	70-130	03/03/2017 0955
Bromomethane (Methyl bromide)	50	45		1	89	60-140	03/03/2017 0955
2-Butanone (MEK)	100	100		1	100	60-140	03/03/2017 0955
Carbon disulfide	50	47		1	94	60-140	03/03/2017 0955
Carbon tetrachloride	50	43		1	86	70-130	03/03/2017 0955
Chlorobenzene	50	47		1	95	70-130	03/03/2017 0955
Chloroethane	50	41		1	81	60-140	03/03/2017 0955
Chloroform	50	39		1	78	70-130	03/03/2017 0955
Chloromethane (Methyl chloride)	50	43		1	86	60-140	03/03/2017 0955
Cyclohexane	50	43		1	86	70-130	03/03/2017 0955
1,2-Dibromo-3-chloropropane (DBCP)	50	43		1	86	70-130	03/03/2017 0955
Dibromochloromethane	50	47		1	94	70-130	03/03/2017 0955
1,2-Dibromoethane (EDB)	50	46		1	91	70-130	03/03/2017 0955
1,4-Dichlorobenzene	50	45		1	89	70-130	03/03/2017 0955
1,2-Dichlorobenzene	50	46		1	91	70-130	03/03/2017 0955
1,3-Dichlorobenzene	50	44		1	88	70-130	03/03/2017 0955
Dichlorodifluoromethane	50	47		1	95	60-140	03/03/2017 0955
1,2-Dichloroethane	50	46		1	92	70-130	03/03/2017 0955
1,1-Dichloroethane	50	40		1	80	70-130	03/03/2017 0955
1,1-Dichloroethene	50	43		1	85	70-130	03/03/2017 0955
trans-1,2-Dichloroethene	50	44		1	88	70-130	03/03/2017 0955
cis-1,2-Dichloroethene	50	40		1	80	70-130	03/03/2017 0955
1,2-Dichloropropane	50	43		1	87	70-130	03/03/2017 0955
trans-1,3-Dichloropropene	50	45		1	90	70-130	03/03/2017 0955
cis-1,3-Dichloropropene	50	45		1	90	70-130	03/03/2017 0955
Ethylbenzene	50	45		1	90	70-130	03/03/2017 0955
2-Hexanone	100	84		1	84	60-140	03/03/2017 0955
Isopropylbenzene	50	47		1	94	70-130	03/03/2017 0955
Methyl acetate	50	45		1	90	60-140	03/03/2017 0955
Methyl tertiary butyl ether (MTBE)	50	39		1	77	70-130	03/03/2017 0955
4-Methyl-2-pentanone	100	89		1	89	60-140	03/03/2017 0955
Methylcyclohexane	50	49		1	99	70-130	03/03/2017 0955
Methylene chloride	50	41		1	81	70-130	03/03/2017 0955
Styrene	50	45		1	89	70-130	03/03/2017 0955
1,1,2,2-Tetrachloroethane	50	46		1	92	70-130	03/03/2017 0955
Tetrachloroethene	50	51		1	103	70-130	03/03/2017 0955
Toluene	50	45		1	91	70-130	03/03/2017 0955
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	46		1	92	70-130	03/03/2017 0955
1,2,4-Trichlorobenzene	50	45		1	91	70-130	03/03/2017 0955
1,1,1-Trichloroethane	50	42		1	84	70-130	03/03/2017 0955
1,1,2-Trichloroethane	50	45		1	91	70-130	03/03/2017 0955

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 MDL
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: SQ36140-002
Batch: 36140
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	45		1	91	70-130	03/03/2017 0955
Trichlorofluoromethane	50	48		1	97	70-130	03/03/2017 0955
Vinyl chloride	50	40		1	80	70-130	03/03/2017 0955
Xylenes (total)	100	92		1	92	70-130	03/03/2017 0955

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		83	70-130
1,2-Dichloroethane-d4		79	70-130
Toluene-d8		83	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MS

Sample ID: SC02069-009MS
Batch: 36140
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	22	1000	720		10	70	60-140	03/03/2017 1841
Benzene	ND	500	420		10	83	70-130	03/03/2017 1841
Bromodichloromethane	ND	500	450		10	89	71-143	03/03/2017 1841
Bromoform	ND	500	440		10	87	65-131	03/03/2017 1841
Bromomethane (Methyl bromide)	ND	500	380		10	76	36-168	03/03/2017 1841
2-Butanone (MEK)	46	1000	840		10	79	60-140	03/03/2017 1841
Carbon disulfide	ND	500	420		10	84	60-140	03/03/2017 1841
Carbon tetrachloride	ND	500	430		10	85	37-166	03/03/2017 1841
Chlorobenzene	ND	500	460		10	92	78-129	03/03/2017 1841
Chloroethane	ND	500	370		10	75	60-140	03/03/2017 1841
Chloroform	ND	500	360		10	73	63-123	03/03/2017 1841
Chloromethane (Methyl chloride)	ND	500	430		10	85	20-158	03/03/2017 1841
Cyclohexane	ND	500	430		10	86	70-130	03/03/2017 1841
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	370		10	73	70-130	03/03/2017 1841
Dibromochloromethane	ND	500	440		10	88	74-134	03/03/2017 1841
1,2-Dibromoethane (EDB)	ND	500	420		10	84	70-130	03/03/2017 1841
1,2-Dichlorobenzene	ND	500	420		10	84	70-130	03/03/2017 1841
1,3-Dichlorobenzene	ND	500	420		10	84	70-130	03/03/2017 1841
1,4-Dichlorobenzene	ND	500	420		10	84	70-130	03/03/2017 1841
Dichlorodifluoromethane	ND	500	470		10	94	10-158	03/03/2017 1841
1,1-Dichloroethane	ND	500	370		10	74	69-132	03/03/2017 1841
1,2-Dichloroethane	ND	500	430		10	85	70-130	03/03/2017 1841
1,1-Dichloroethene	ND	500	410		10	82	50-132	03/03/2017 1841
cis-1,2-Dichloroethene	330	500	690		10	73	70-130	03/03/2017 1841
trans-1,2-Dichloroethene	ND	500	400		10	81	70-130	03/03/2017 1841
1,2-Dichloropropane	ND	500	410		10	82	71-126	03/03/2017 1841
cis-1,3-Dichloropropene	ND	500	420		10	83	69-130	03/03/2017 1841
trans-1,3-Dichloropropene	ND	500	430		10	85	73-131	03/03/2017 1841
Ethylbenzene	ND	500	450		10	90	70-130	03/03/2017 1841
2-Hexanone	ND	1000	810		10	81	60-140	03/03/2017 1841
Isopropylbenzene	ND	500	470		10	94	70-130	03/03/2017 1841
Methyl acetate	ND	500	320		10	64	15-128	03/03/2017 1841
Methyl tertiary butyl ether (MTBE)	ND	500	330	N	10	66	70-130	03/03/2017 1841
4-Methyl-2-pentanone	ND	1000	770		10	77	60-140	03/03/2017 1841
Methylcyclohexane	ND	500	490		10	99	70-130	03/03/2017 1841
Methylene chloride	ND	500	350		10	70	69-129	03/03/2017 1841
Styrene	ND	500	440		10	88	70-130	03/03/2017 1841
1,1,2,2-Tetrachloroethane	ND	500	380		10	76	60-155	03/03/2017 1841
Tetrachloroethene	720	500	1300		10	109	70-130	03/03/2017 1841
Toluene	ND	500	450		10	90	70-130	03/03/2017 1841
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	500	440		10	88	70-130	03/03/2017 1841
1,2,4-Trichlorobenzene	ND	500	390		10	77	70-130	03/03/2017 1841
1,1,1-Trichloroethane	ND	500	410		10	83	77-132	03/03/2017 1841
1,1,2-Trichloroethane	ND	500	430		10	85	77-132	03/03/2017 1841

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 MDL
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 - MS

Sample ID: SC02069-009MS
Batch: 36140
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	15	500	460		10	90	73-124	03/03/2017 1841
Trichlorofluoromethane	ND	500	460		10	93	60-140	03/03/2017 1841
Vinyl chloride	ND	500	380		10	76	29-159	03/03/2017 1841
Xylenes (total)	ND	1000	900		10	90	70-130	03/03/2017 1841

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		71	70-130
Bromofluorobenzene		83	70-130
Toluene-d8		80	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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 - MSD

Sample ID: SC02069-009MD
Batch: 36140
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	22	1000	790		10	77	9.0	60-140	20	03/03/2017 1902
Benzene	ND	500	430		10	85	2.6	70-130	20	03/03/2017 1902
Bromodichloromethane	ND	500	470		10	95	6.1	71-143	20	03/03/2017 1902
Bromoform	ND	500	460		10	93	5.7	65-131	20	03/03/2017 1902
Bromomethane (Methyl bromide)	ND	500	410		10	82	6.9	36-168	20	03/03/2017 1902
2-Butanone (MEK)	46	1000	840		10	80	0.35	60-140	20	03/03/2017 1902
Carbon disulfide	ND	500	440		10	88	5.4	60-140	20	03/03/2017 1902
Carbon tetrachloride	ND	500	430		10	86	1.3	37-166	20	03/03/2017 1902
Chlorobenzene	ND	500	470		10	95	2.7	78-129	20	03/03/2017 1902
Chloroethane	ND	500	390		10	78	4.4	60-140	20	03/03/2017 1902
Chloroform	ND	500	400		10	80	9.9	63-123	20	03/03/2017 1902
Chloromethane (Methyl chloride)	ND	500	440		10	88	2.9	20-158	20	03/03/2017 1902
Cyclohexane	ND	500	420		10	83	2.8	70-130	20	03/03/2017 1902
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	410		10	83	12	70-130	20	03/03/2017 1902
Dibromochloromethane	ND	500	460		10	93	5.4	74-134	20	03/03/2017 1902
1,2-Dibromoethane (EDB)	ND	500	450		10	91	7.7	70-130	20	03/03/2017 1902
1,2-Dichlorobenzene	ND	500	440		10	88	4.7	70-130	20	03/03/2017 1902
1,3-Dichlorobenzene	ND	500	430		10	86	2.1	70-130	20	03/03/2017 1902
1,4-Dichlorobenzene	ND	500	430		10	86	2.4	70-130	20	03/03/2017 1902
Dichlorodifluoromethane	ND	500	480		10	95	0.64	10-158	20	03/03/2017 1902
1,1-Dichloroethane	ND	500	400		10	79	6.7	69-132	20	03/03/2017 1902
1,2-Dichloroethane	ND	500	470		10	93	8.9	70-130	20	03/03/2017 1902
1,1-Dichloroethene	ND	500	430		10	85	3.7	50-132	20	03/03/2017 1902
cis-1,2-Dichloroethene	330	500	730		10	80	5.0	70-130	20	03/03/2017 1902
trans-1,2-Dichloroethene	ND	500	420		10	85	5.0	70-130	20	03/03/2017 1902
1,2-Dichloropropane	ND	500	440		10	87	6.8	71-126	20	03/03/2017 1902
cis-1,3-Dichloropropene	ND	500	440		10	88	5.4	69-130	20	03/03/2017 1902
trans-1,3-Dichloropropene	ND	500	440		10	89	3.7	73-131	20	03/03/2017 1902
Ethylbenzene	ND	500	450		10	90	0.27	70-130	20	03/03/2017 1902
2-Hexanone	ND	1000	820		10	82	0.31	60-140	20	03/03/2017 1902
Isopropylbenzene	ND	500	470		10	94	0.60	70-130	20	03/03/2017 1902
Methyl acetate	ND	500	360		10	73	13	15-128	20	03/03/2017 1902
Methyl tertiary butyl ether (MTBE)	ND	500	360		10	73	9.8	70-130	20	03/03/2017 1902
4-Methyl-2-pentanone	ND	1000	820		10	82	6.3	60-140	20	03/03/2017 1902
Methylcyclohexane	ND	500	470		10	95	3.8	70-130	20	03/03/2017 1902
Methylene chloride	ND	500	380		10	76	9.3	69-129	20	03/03/2017 1902
Styrene	ND	500	450		10	91	2.6	70-130	20	03/03/2017 1902
1,1,2,2-Tetrachloroethane	ND	500	410		10	82	7.1	60-155	20	03/03/2017 1902
Tetrachloroethene	720	500	1300		10	110	0.13	70-130	20	03/03/2017 1902
Toluene	ND	500	460		10	91	1.6	70-130	20	03/03/2017 1902
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	500	450		10	89	0.67	70-130	20	03/03/2017 1902
1,2,4-Trichlorobenzene	ND	500	420		10	84	8.2	70-130	20	03/03/2017 1902
1,1,1-Trichloroethane	ND	500	430		10	86	3.8	77-132	20	03/03/2017 1902
1,1,2-Trichloroethane	ND	500	450		10	89	4.3	77-132	20	03/03/2017 1902

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 MDL
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 - MSD

Sample ID: SC02069-009MD
Batch: 36140
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	15	500	480		10	93	3.4	73-124	20	03/03/2017 1902
Trichlorofluoromethane	ND	500	480		10	97	4.0	60-140	20	03/03/2017 1902
Vinyl chloride	ND	500	410		10	81	7.1	29-159	20	03/03/2017 1902
Xylenes (total)	ND	1000	920		10	92	2.2	70-130	20	03/03/2017 1902

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		75	70-130
Bromofluorobenzene		87	70-130
Toluene-d8		81	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ36300-001
Batch: 36300
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	2.0	ug/L	03/06/2017 0944
Benzene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Bromodichloromethane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Bromoform	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Bromomethane (Methyl bromide)	ND		1	5.0	0.40	ug/L	03/06/2017 0944
2-Butanone (MEK)	ND		1	10	2.0	ug/L	03/06/2017 0944
Carbon disulfide	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Chlorobenzene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Chloroethane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Chloroform	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Chloromethane (Methyl chloride)	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Cyclohexane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Dibromochloromethane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,2-Dibromoethane (EDB)	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,4-Dichlorobenzene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,2-Dichlorobenzene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,3-Dichlorobenzene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Dichlorodifluoromethane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,2-Dichloroethane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,1-Dichloroethane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
cis-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,1-Dichloroethene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,2-Dichloropropane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
cis-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
trans-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Ethylbenzene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
2-Hexanone	ND		1	10	2.0	ug/L	03/06/2017 0944
Isopropylbenzene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Methyl acetate	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	03/06/2017 0944
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	03/06/2017 0944
Methylcyclohexane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Methylene chloride	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Styrene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Tetrachloroethene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Toluene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,2,4-Trichlorobenzene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,1,1-Trichloroethane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
1,1,2-Trichloroethane	ND		1	5.0	0.40	ug/L	03/06/2017 0944

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 MDL
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: SQ36300-001
Batch: 36300
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Trichlorofluoromethane	ND		1	5.0	0.40	ug/L	03/06/2017 0944
Vinyl chloride	ND		1	2.0	0.40	ug/L	03/06/2017 0944
Xylenes (total)	ND		1	5.0	0.40	ug/L	03/06/2017 0944

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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: SQ36300-002
Batch: 36300
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	120		1	118	60-140	03/06/2017 0845
Benzene	50	49		1	98	70-130	03/06/2017 0845
Bromodichloromethane	50	53		1	105	70-130	03/06/2017 0845
Bromoform	50	49		1	98	70-130	03/06/2017 0845
Bromomethane (Methyl bromide)	50	61		1	121	60-140	03/06/2017 0845
2-Butanone (MEK)	100	120		1	116	60-140	03/06/2017 0845
Carbon disulfide	50	54		1	109	60-140	03/06/2017 0845
Carbon tetrachloride	50	54		1	108	70-130	03/06/2017 0845
Chlorobenzene	50	51		1	101	70-130	03/06/2017 0845
Chloroethane	50	51		1	102	60-140	03/06/2017 0845
Chloroform	50	51		1	102	70-130	03/06/2017 0845
Chloromethane (Methyl chloride)	50	50		1	100	60-140	03/06/2017 0845
Cyclohexane	50	52		1	104	70-130	03/06/2017 0845
1,2-Dibromo-3-chloropropane (DBCP)	50	49		1	98	70-130	03/06/2017 0845
Dibromochloromethane	50	49		1	97	70-130	03/06/2017 0845
1,2-Dibromoethane (EDB)	50	48		1	97	70-130	03/06/2017 0845
1,4-Dichlorobenzene	50	49		1	99	70-130	03/06/2017 0845
1,2-Dichlorobenzene	50	50		1	100	70-130	03/06/2017 0845
1,3-Dichlorobenzene	50	51		1	102	70-130	03/06/2017 0845
Dichlorodifluoromethane	50	53		1	107	60-140	03/06/2017 0845
1,2-Dichloroethane	50	47		1	95	70-130	03/06/2017 0845
1,1-Dichloroethane	50	53		1	106	70-130	03/06/2017 0845
cis-1,2-Dichloroethene	50	52		1	105	70-130	03/06/2017 0845
1,1-Dichloroethene	50	55		1	110	70-130	03/06/2017 0845
trans-1,2-Dichloroethene	50	54		1	108	70-130	03/06/2017 0845
1,2-Dichloropropane	50	50		1	101	70-130	03/06/2017 0845
cis-1,3-Dichloropropene	50	55		1	109	70-130	03/06/2017 0845
trans-1,3-Dichloropropene	50	48		1	96	70-130	03/06/2017 0845
Ethylbenzene	50	49		1	99	70-130	03/06/2017 0845
2-Hexanone	100	99		1	99	60-140	03/06/2017 0845
Isopropylbenzene	50	52		1	104	70-130	03/06/2017 0845
Methyl acetate	50	50		1	99	60-140	03/06/2017 0845
Methyl tertiary butyl ether (MTBE)	50	52		1	104	70-130	03/06/2017 0845
4-Methyl-2-pentanone	100	100		1	103	60-140	03/06/2017 0845
Methylcyclohexane	50	50		1	101	70-130	03/06/2017 0845
Methylene chloride	50	52		1	103	70-130	03/06/2017 0845
Styrene	50	50		1	101	70-130	03/06/2017 0845
1,1,2,2-Tetrachloroethane	50	48		1	96	70-130	03/06/2017 0845
Tetrachloroethene	50	51		1	102	70-130	03/06/2017 0845
Toluene	50	49		1	98	70-130	03/06/2017 0845
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	55		1	109	70-130	03/06/2017 0845
1,2,4-Trichlorobenzene	50	51		1	103	70-130	03/06/2017 0845
1,1,1-Trichloroethane	50	50		1	101	70-130	03/06/2017 0845
1,1,2-Trichloroethane	50	49		1	98	70-130	03/06/2017 0845

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 MDL
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: SQ36300-002
Batch: 36300
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	50		1	99	70-130	03/06/2017 0845
Trichlorofluoromethane	50	51		1	101	70-130	03/06/2017 0845
Vinyl chloride	50	50		1	100	70-130	03/06/2017 0845
Xylenes (total)	100	100		1	102	70-130	03/06/2017 0845

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		82	70-130
Toluene-d8		95	70-130

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

P = The RPD between two GC columns exceeds 40%

J = Estimated result < PQL and ≥ MDL

N = Recovery is out of criteria

+ = 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

ICP-MS Metals - MB

Sample ID: SQ36100-001
Batch: 36100
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 03/03/2017 919

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Potassium	ND		1	400	50	ug/L	03/06/2017 2236

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

ICP-MS Metals - LCS

Sample ID: SQ36100-002
Batch: 36100
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 03/03/2017 919

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	1000	1000		1	100	80-120	03/06/2017 2242

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 MDL
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

ICP-MS Metals - MS

Sample ID: SC02069-001MS
Batch: 36100
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 03/03/2017 919

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Potassium	490	1000	1500		1	102	70-130	03/06/2017 2254

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 MDL
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

ICP-MS Metals - MSD

Sample ID: SC02069-001MD
Batch: 36100
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 03/03/2017 919

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Potassium	490	1000	1500		1	101	0.60	70-130	20	03/06/2017 2300

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = 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

Chain of Custody
and
Miscellaneous Documents

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

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 65425

Client: TRC	Report to Contact: Lisa Clark / Terry Hertz	Telephone No. / E-mail:	Quote No.
Address: 30 Patewood Dr	Sampler's Signature: x	Analysis (Attach list if more space is needed)	Page 1 of 2
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Benjamin Medlin		SC02069
Project Name: WPH - Clemson			
Project No.: 226253.0000.0000.000005	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date 2017	Time	Grab / Composite	Matrix: Aqueous	Solid	Non-Aqueous	No of Containers by Preservative Type: Unpres	HSO4	HNO3	HCl	NaOH	SAPO	VOC's	TOC	Sulfate	Potassium	Sulfide				Remarks / Cooler I.D.
MG-05	2-24	1000	G	X			1	1	1	3			X	X	X	X					
OW-04	2-24	1115	G	X			1	1	1	3			X	X	X	X					
OW-05	2-24	1335	G	X			1	1	1	3			X	X	X	X					
MG-05A	2-24	1340	G	X			1	1	1	3			X	X	X	X					
RMW-23	2-27	1630	G	X			1	1	1	3			X	X	X	X					
OW-06A	2-28	1515	G	X			1	1	1	3			X	X	X	X					
RMW-23A	2-28	1725	G	X			1	1	1	3			X	X	X	X					
RMW-02	2-28	1800	G	X			1	1	1	3			X	X	X	X					
RMW-23B	3-1	1305	G	X			1	1	1	3	3		X	X	X	X	X				
RBLK-17113	3-1	1405	G	X			1	1	1	1	3		X	X	X	X	X				

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	3-1-17	1855	1. Received by: TRC Sample Storage	3-1-17	1855
2. Relinquished by	3/2/17	1118	2. Received by	3.2.17	1114
3. Relinquished by	3.2.17	15:15	3. Received by	3-2-17	15:15
4. Relinquished by	3-2-17	15:55	4. Laboratory received by	3-2-17	1555

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) Yes No Ice Pack
Receipt Temp. 2.4 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Chain of Custody Record

Number 58806

Client: TRC	Report to Contact: Lisa Clark/Terry Hertz	Telephone No. / E-mail:	Quote No.
Address: 30 Patewood Dr.	Sampler's Signature: X	Analysis (Attach list if more space is needed)	Page 2 of 2
City: Greenville / State: SC / Zip Code: 29615	Printed Name: Benjamin Medlin		
Project Name: WPH - Clemson			SC02069
Project No.: 226253.0.0.5	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date: 2017	Time	Sample Type: Grab / Composite	Matrix: Aqueous / Solid / Non-Aqueous	No. of Containers by Preservative Type: Unpres / H2SO4 / HNO3 / HCl / NaOH / Soils Kit	VOC's	TOC	Sulfate	Sulfide	Potassium
RMW-27A	3-1	1700	G	N	1 / 1 / 1 / 3 / 3	X	X	X	X	X
TB4K-17114					2	X				

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	3-1-17	1855	1. Received by: TRC Sample Storage	3-1-17	1855
2. Relinquished by: Terry Hertz	3/2/17	1117	2. Received by	3-2-17	1117
3. Relinquished by	3-2-17	15:15	3. Received by	3-2-17	15:15
4. Relinquished by	3-2-17	1555	4. Laboratory received by	3-2-17	1555

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) Yes No Ice Pack
Receipt Temp. 2.4 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc
Document Number: ME0018C-07

Page 1 of 1
Effective Date: 11/29/2016
Expiry Date: 11/29/2021

Sample Receipt Checklist (SRC)

Client: TRC Cooler Inspected by/date: SDE 13-2-17 Lot #: SC02069

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: 15-1448, 17-154 Cl strip ID:

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

12.4 / 2.4 °C / / °C / / °C / / °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 4 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☐	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes ☑	No ☐	NA ☐	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA (<0.5mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☐	No ☑		22. Was the quote number used taken from the container label?

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_2SO_4, HNO_3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.5 mg/L. (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be < 2 by _____ Date: _____

Sample(s) _____ were Not received at a pH of < 2 and were adjusted accordingly using SR# _____

Sample labels applied by: SDE Verified by: _____ Date: 3-2-17

Comments: _____

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

March 16, 2017

Lisa Clark
TRC Environmental Corp.
30 Patewood Drive
Greenville, SC 29615

RE: **WPH CLEMSON/ 6 Month Sampling**
Pace Workorder: 21903

Dear Lisa Clark:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, March 06, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lauren E McGrath

Lauren McGrath 03/16/2017
Lauren.McGrath@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email PAESfeedback@pacelabs.com.

Total Number of Pages 20

CERTIFICATE OF ANALYSIS

Laboratory Data Quality Review Notes

Project Name: Westpoint Home - Clemson, SC

Project Number: 226253.0000.0000.000005

Lab Report: 21903 Pace Analytical Energy Services
Hydrocarbon gases: methane, ethane, ethene

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Surrogates not applicable to the analyses reported.

Method Blank: The method blank has no detections of target analytes.

Trip Blank: A trip blank was not collected with these samples.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: RBLK-17113 had no detections of target analytes.

LCS/LCSD: LCS/LCSD recoveries and RPDs are within QC Limits.

MS/MSD: MS/MSD analyses were not performed.

Duplicate: A field duplicate was not collected with these samples.

Other: Note that the AM20GAX for hydrocarbon gases analytical method is not NELAP accredited.

No qualifiers were assigned.

Data review performed by Terry Hertz, TRC Environmental Corp. , 3/17/2017

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	West Virginia Department of Environmental Protection, Division of Water and Waste Management
Accreditation ID:	395
Scope:	Non-Potable Water
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID	Sample ID	Matrix	Date Collected	Date Received
219030001	MG-05	Water	2/24/2017 10:00	3/6/2017 13:30
219030002	OW-04	Water	2/24/2017 11:15	3/6/2017 13:30
219030003	OW-05	Water	2/24/2017 13:35	3/6/2017 13:30
219030004	MG-05A	Water	2/24/2017 13:40	3/6/2017 13:30
219030005	RMW-23	Water	2/27/2017 16:30	3/6/2017 13:30
219030006	OW-06A	Water	2/28/2017 15:15	3/6/2017 13:30
219030007	RMW-23A	Water	2/28/2017 17:25	3/6/2017 13:30
219030008	RMW-02	Water	2/28/2017 18:00	3/6/2017 13:30
219030009	RMW-23B	Water	3/1/2017 13:05	3/6/2017 13:30
219030010	RBLK-17113	Water	3/1/2017 14:05	3/6/2017 13:30
219030011	RMW-27A	Water	3/1/2017 17:00	3/6/2017 13:30

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID: **219030001** Date Received: 3/6/2017 13:30 Matrix: Water

Sample ID: **MG-05** Date Collected: 2/24/2017 10:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/10/2017 09:09	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/10/2017 09:09	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/10/2017 09:09	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID: **219030002** Date Received: 3/6/2017 13:30 Matrix: Water

Sample ID: **OW-04** Date Collected: 2/24/2017 11:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**3.3**	ug/l	0.50	0.027	1	3/10/2017 09:21	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/10/2017 09:21	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/10/2017 09:21	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID: **219030003** Date Received: 3/6/2017 13:30 Matrix: Water

Sample ID: **OW-05** Date Collected: 2/24/2017 13:35

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**3700**	ug/l	0.50	0.027	1	3/10/2017 09:31	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/10/2017 09:31	BW	n
Ethene	**0.10**	ug/l	0.10	0.0010	1	3/10/2017 09:31	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID: **219030004** Date Received: 3/6/2017 13:30 Matrix: Water

Sample ID: **MG-05A** Date Collected: 2/24/2017 13:40

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/10/2017 09:42	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/10/2017 09:42	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/10/2017 09:42	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID: **219030005** Date Received: 3/6/2017 13:30 Matrix: Water

Sample ID: **RMW-23** Date Collected: 2/27/2017 16:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**19000**	ug/l	0.50	0.027	1	3/10/2017 09:52	BW	n
Ethane	**0.22**	ug/l	0.10	0.0030	1	3/10/2017 09:52	BW	n
Ethene	**0.33**	ug/l	0.10	0.0010	1	3/10/2017 09:52	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID: **219030006** Date Received: 3/6/2017 13:30 Matrix: Water

Sample ID: **OW-06A** Date Collected: 2/28/2017 15:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**7600**	ug/l	0.50	0.027	1	3/10/2017 10:01	BW	n
Ethane	**3.0**	ug/l	0.10	0.0030	1	3/10/2017 10:01	BW	n
Ethene	**1.3**	ug/l	0.10	0.0010	1	3/10/2017 10:01	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID: **219030007** Date Received: 3/6/2017 13:30 Matrix: Water

Sample ID: **RMW-23A** Date Collected: 2/28/2017 17:25

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**6300**	ug/l	0.50	0.027	1	3/10/2017 10:21	BW	n
Ethane	**12**	ug/l	0.10	0.0030	1	3/10/2017 10:21	BW	n
Ethene	**2.2**	ug/l	0.10	0.0010	1	3/10/2017 10:21	BW	n

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID: **219030008** Date Received: 3/6/2017 13:30 Matrix: Water

Sample ID: **RMW-02** Date Collected: 2/28/2017 18:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**3700**	ug/l	0.50	0.027	1	3/10/2017 10:32	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/10/2017 10:32	BW	n
Ethene	**0.22**	ug/l	0.10	0.0010	1	3/10/2017 10:32	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID: **219030009** Date Received: 3/6/2017 13:30 Matrix: Water

Sample ID: **RMW-23B** Date Collected: 3/1/2017 13:05

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**8600**	ug/l	0.50	0.027	1	3/10/2017 10:50	BW	n
Ethane	**1.9**	ug/l	0.10	0.0030	1	3/10/2017 10:50	BW	n
Ethene	**3.5**	ug/l	0.10	0.0010	1	3/10/2017 10:50	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID: **219030010** Date Received: 3/6/2017 13:30 Matrix: Water

Sample ID: **RBLK-17113** Date Collected: 3/1/2017 14:05

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/10/2017 11:02	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/10/2017 11:02	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/10/2017 11:02	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID: **219030011** Date Received: 3/6/2017 13:30 Matrix: Water

Sample ID: **RMW-27A** Date Collected: 3/1/2017 17:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**14000**	ug/l	0.50	0.027	1	3/10/2017 11:19	BW	n
Ethane	**1.0**	ug/l	0.10	0.0030	1	3/10/2017 11:19	BW	n
Ethene	**0.88**	ug/l	0.10	0.0010	1	3/10/2017 11:19	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS QUALIFIERS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

QC Batch: DISG/5959 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 219030001, 219030002, 219030003, 219030004, 219030005, 219030006, 219030007, 219030008, 219030009, 219030010, 219030011

METHOD BLANK: 47407

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	<0.50	0.50	n
Ethane	ug/l	<0.10	0.10	n
Ethene	ug/l	<0.10	0.10	n

LABORATORY CONTROL SAMPLE & LCSD: 47409 47411

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	770	760	104	101	80-120	2.9	20	n
Ethane	ug/l	38	40	39	104	102	80-120	1.9	20	n
Ethene	ug/l	35	37	36	105	103	80-120	1.9	20	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA QUALIFIERS

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

QUALITY CONTROL PARAMETER QUALIFIERS

n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 21903 WPH CLEMSON/ 6 Month Sampling

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
219030001	MG-05			AM20GAX	DISG/5959
219030002	OW-04			AM20GAX	DISG/5959
219030003	OW-05			AM20GAX	DISG/5959
219030004	MG-05A			AM20GAX	DISG/5959
219030005	RMW-23			AM20GAX	DISG/5959
219030006	OW-06A			AM20GAX	DISG/5959
219030007	RMW-23A			AM20GAX	DISG/5959
219030008	RMW-02			AM20GAX	DISG/5959
219030009	RMW-23B			AM20GAX	DISG/5959
219030010	RBLK-17113			AM20GAX	DISG/5959
219030011	RMW-27A			AM20GAX	DISG/5959

Pace Analytical®
www.pacelabs.com

220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245

CHAIN-OF-CUSTODY / Analy... ...est Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

21903

Page: 1 of 1

007416

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: TRC	Report To: Lisa Clark	Attention:
Address: 30 Patewood Dr Greenville, SC 29615	Copy To: Terry Hertz	Company Name:
Email To:	Purchase Order No.:	Address:
Phone: Fax:	Project Name: WPH - Clemson	Pace Quote Reference:
Requested Due Date/TAT:	Project Number: 226253.0000.0000.000005	Pace Project Manager:
		Pace Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER _____

Site Location STATE: _____

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE)

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Ground water

ITEM #	Section D: SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test Y/N	ethene ethane	methane	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MG-05	OT	G			2-24	1000		3					X					X			
2	OW-04	OT	G			2-24	1115		3					X					X			
3	GW-05	OT	G			2-24	1335		3					X					X			
4	MG-05A	OT	G			2-24	1340		3					X					X			
5	RMW-23	OT	G			2-27	1630		3					X					X			
6	OW-06A	OT	G			2-28	1515		3					X					X			
7	RMW-23A	OT	G			2-28	1725		3					X					X			
8	RMW-02	OT	G			2-28	1800		3					X					X			
9	RMW-23B	OT	G			3-1	1305		3					1					X			
10	RBLK-17113	OT	G			3-1	1405		3					X					X			
11	RMW-27A	OT	G			3-1	1700		3					1					X			
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	TRC	3-1-17	1900	TRC Sample Storage	3-1-17	1900				
	TRC	3.2.17	0840	Fedex	3.2.17	0840				
				Leon PACE	3.6.17	1330	4	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Bill Medlin

SIGNATURE of SAMPLER: Bill Medlin

DATE Signed (MM/DD/YY): 3-1-17

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Cooler Receipt Form

Client Name: TRC Project: WPH Clemson Lab Work Order: 21903

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 785775806576

Custody Seal on Cooler/Box Present: Yes (No) Seals Intact: Yes No

Cooler/Box Packing Material: (Bubble Wrap) Absorbent Foam Other:_____

Type of Ice: (Wet) Blue None Ice Intact: (Yes) Melted

Cooler Temperature: 4°C Radiation Screened: Yes (No) Chain of Custody Present: (Yes) No

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformance
Chain of Custody properly filled out	✓			
Chain of Custody relinquished	✓			
Sampler Name & Signature on COC	✓			
Containers intact	✓			
Were samples in separate bags	✓			
Sample container labels match COC Sample name/date and time collected	✓			
Sufficient volume provided	✓			
PAES containers used	✓			
Are containers properly preserved for the requested testing? (as labeled)	✓			
If an unknown preservation state, were containers checked? Exception: VOA's coliform			✓	If yes, see pH form.
Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container?			✓	

Comments:_____

Cooler contents examined/received by: LG Date: 3.6.17

Project Manager Review: JEM Date: 3/6/17

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

March 2, 2017

Lisa Clark
TRC Environmental Corp.
30 Patewood Drive
Greenville, SC 29615

RE: **WPH-CLEMSON**

Pace Workorder: 21818

Dear Lisa Clark:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, February 24, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lauren E McGrath

Lauren McGrath 03/02/2017
Lauren.McGrath@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email PAESfeedback@pacelabs.com.

Total Number of Pages 20

CERTIFICATE OF ANALYSIS

Laboratory Data Quality Review Notes

Project Name: Westpoint Home - Clemson, SC

Project Number: 226253.0000.0000.000013

Lab Report: 21818 Pace Analytical Energy Services
Hydrocarbon gases: methane, ethane, ethene

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Surrogates not relevant to the analyses reported.

Method Blank: Method blank has no hydrocarbon gas detections.

Trip Blank: A trip blank was not collected with these samples.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS/LCSD recoveries and RPDs are within QC Limits.

MS/MSD: MS/MSD analyses were not performed.

Duplicate: A field duplicate was not collected with these samples.

Other: Note that the AM20GAX for hydrocarbon gases analytical method is not NELAP accredited.

No qualifiers were assigned.

Data review performed by Terry Hertz, TRC Environmental Corp. , 3/3/2017

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	West Virginia Department of Environmental Protection, Division of Water and Waste Management
Accreditation ID:	395
Scope:	Non-Potable Water
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 21818 WPH-CLEMSON

Lab ID	Sample ID	Matrix	Date Collected	Date Received
218180001	DP-05A	Water	2/16/2017 11:00	2/24/2017 12:40
218180002	DP-06	Water	2/16/2017 12:15	2/24/2017 12:40
218180003	DP-06A	Water	2/16/2017 13:20	2/24/2017 12:40
218180004	DP-07	Water	2/16/2017 15:00	2/24/2017 12:40
218180005	DP-07A	Water	2/16/2017 16:00	2/24/2017 12:40
218180006	DP-04	Water	2/17/2017 09:15	2/24/2017 12:40
218180007	DP-04A	Water	2/17/2017 10:45	2/24/2017 12:40
218180008	DP-03	Water	2/17/2017 12:00	2/24/2017 12:40
218180009	DP-03A	Water	2/17/2017 13:10	2/24/2017 12:40
218180010	DP-02	Water	2/17/2017 15:00	2/24/2017 12:40
218180011	DP-02A	Water	2/17/2017 16:15	2/24/2017 12:40

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21818 WPH-CLEMSON

Lab ID: **218180001** Date Received: 2/24/2017 12:40 Matrix: Water

Sample ID: **DP-05A** Date Collected: 2/16/2017 11:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**3400**	ug/l	0.50	0.027	1	3/1/2017 05:36	TD	n
Ethane	**0.87**	ug/l	0.10	0.0070	1	3/1/2017 05:36	TD	n
Ethene	**0.71**	ug/l	0.10	0.0090	1	3/1/2017 05:36	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21818 WPH-CLEMSON

Lab ID: **218180002** Date Received: 2/24/2017 12:40 Matrix: Water

Sample ID: **DP-06** Date Collected: 2/16/2017 12:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**550**	ug/l	0.50	0.027	1	3/1/2017 05:48	TD	n
Ethane	**1.6**	ug/l	0.10	0.0070	1	3/1/2017 05:48	TD	n
Ethene	**1.4**	ug/l	0.10	0.0090	1	3/1/2017 05:48	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21818 WPH-CLEMSON

Lab ID: **218180003** Date Received: 2/24/2017 12:40 Matrix: Water

Sample ID: **DP-06A** Date Collected: 2/16/2017 13:20

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**24**	ug/l	0.50	0.027	1	3/1/2017 06:02	TD	n
Ethane	**0.91**	ug/l	0.10	0.0070	1	3/1/2017 06:02	TD	n
Ethene	**<0.10**	ug/l	0.10	0.0090	1	3/1/2017 06:02	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21818 WPH-CLEMSON

Lab ID: **218180004** Date Received: 2/24/2017 12:40 Matrix: Water

Sample ID: **DP-07** Date Collected: 2/16/2017 15:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**2100**	ug/l	0.50	0.027	1	3/1/2017 06:14	TD	n
Ethane	**0.66**	ug/l	0.10	0.0070	1	3/1/2017 06:14	TD	n
Ethene	**0.44**	ug/l	0.10	0.0090	1	3/1/2017 06:14	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21818 WPH-CLEMSON

Lab ID: **218180005** Date Received: 2/24/2017 12:40 Matrix: Water

Sample ID: **DP-07A** Date Collected: 2/16/2017 16:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/1/2017 06:27	TD	n
Ethane	**0.12**	ug/l	0.10	0.0070	1	3/1/2017 06:27	TD	n
Ethene	**<0.10**	ug/l	0.10	0.0090	1	3/1/2017 06:27	TD	n

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21818 WPH-CLEMSON

Lab ID: **218180006** Date Received: 2/24/2017 12:40 Matrix: Water

Sample ID: **DP-04** Date Collected: 2/17/2017 09:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**2700**	ug/l	0.50	0.027	1	3/1/2017 06:49	TD	n
Ethane	**2.1**	ug/l	0.10	0.0070	1	3/1/2017 06:49	TD	n
Ethene	**1.4**	ug/l	0.10	0.0090	1	3/1/2017 06:49	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21818 WPH-CLEMSON

Lab ID: **218180007** Date Received: 2/24/2017 12:40 Matrix: Water

Sample ID: **DP-04A** Date Collected: 2/17/2017 10:45

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**1.6**	ug/l	0.50	0.027	1	3/1/2017 07:05	TD	n
Ethane	**0.12**	ug/l	0.10	0.0070	1	3/1/2017 07:05	TD	n
Ethene	**<0.10**	ug/l	0.10	0.0090	1	3/1/2017 07:05	TD	n

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21818 WPH-CLEMSON

Lab ID: **218180008** Date Received: 2/24/2017 12:40 Matrix: Water

Sample ID: **DP-03** Date Collected: 2/17/2017 12:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**1.6**	ug/l	0.50	0.027	1	3/1/2017 07:20	TD	n
Ethane	**<0.10**	ug/l	0.10	0.0070	1	3/1/2017 07:20	TD	n
Ethene	**<0.10**	ug/l	0.10	0.0090	1	3/1/2017 07:20	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21818 WPH-CLEMSON

Lab ID: **218180009** Date Received: 2/24/2017 12:40 Matrix: Water

Sample ID: **DP-03A** Date Collected: 2/17/2017 13:10

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**11000**	ug/l	0.50	0.027	1	3/1/2017 07:32	TD	n
Ethane	**1.4**	ug/l	0.10	0.0070	1	3/1/2017 07:32	TD	n
Ethene	**0.33**	ug/l	0.10	0.0090	1	3/1/2017 07:32	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21818 WPH-CLEMSON

Lab ID: **218180010** Date Received: 2/24/2017 12:40 Matrix: Water

Sample ID: **DP-02** Date Collected: 2/17/2017 15:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**2000**	ug/l	0.50	0.027	1	3/1/2017 07:47	TD	n
Ethane	**2.5**	ug/l	0.10	0.0070	1	3/1/2017 07:47	TD	n
Ethene	**3.2**	ug/l	0.10	0.0090	1	3/1/2017 07:47	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21818 WPH-CLEMSON

Lab ID: **218180011** Date Received: 2/24/2017 12:40 Matrix: Water

Sample ID: **DP-02A** Date Collected: 2/17/2017 16:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**2400**	ug/l	0.50	0.027	1	3/1/2017 07:59	TD	n
Ethane	**0.76**	ug/l	0.10	0.0070	1	3/1/2017 07:59	TD	n
Ethene	**0.45**	ug/l	0.10	0.0090	1	3/1/2017 07:59	TD	n

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS QUALIFIERS

Workorder: 21818 WPH-CLEMSON

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 21818 WPH-CLEMSON

QC Batch: DISG/5940 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 218180001, 218180002, 218180003, 218180004, 218180005, 218180006, 218180007, 218180008, 218180009, 218180010, 218180011

METHOD BLANK: 47279

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	<0.50	0.50	n
Ethane	ug/l	<0.10	0.10	n
Ethene	ug/l	<0.10	0.10	n

LABORATORY CONTROL SAMPLE & LCSD: 47281 47283

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	780	790	104	105	80-120	0.96	20	n
Ethane	ug/l	38	38	37	100	97	80-120	3	20	n
Ethene	ug/l	35	36	35	101	98	80-120	3	20	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA QUALIFIERS

Workorder: 21818 WPH-CLEMSON

QUALITY CONTROL PARAMETER QUALIFIERS

n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 21818 WPH-CLEMSON

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
218180001	DP-05A			AM20GAX	DISG/5940
218180002	DP-06			AM20GAX	DISG/5940
218180003	DP-06A			AM20GAX	DISG/5940
218180004	DP-07			AM20GAX	DISG/5940
218180005	DP-07A			AM20GAX	DISG/5940
218180006	DP-04			AM20GAX	DISG/5940
218180007	DP-04A			AM20GAX	DISG/5940
218180008	DP-03			AM20GAX	DISG/5940
218180009	DP-03A			AM20GAX	DISG/5940
218180010	DP-02			AM20GAX	DISG/5940
218180011	DP-02A			AM20GAX	DISG/5940

Pace Analytical®
www.pacelabs.com

220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

21818

Page: of

007420

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: TRC	Report To:	Attention:
Address: 30 Portewood Drive Building 1 suite 300	Copy To:	Company Name:
		Address:
Email To: Lclark@trcsolutions.com	Purchase Order No.:	Pace Quote Reference:
Phone: 864-420-8577 Fax:	Project Name:	Pace Project Manager:
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER _____

Site Location STATE: _____

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE)

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test Y/N	Dissolved Gases	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DP-05A	WT	G	2-16-17	1100	—	—		3					X				X	X		
2	DP-06	WT	G	2-16-17	1215	—	—		3					X				X	X		
3	DP-06A	WT	G	2-16-17	1320	—	—		3					X				X	X		
4	DP-07	WT	G	2-16-17	1500	—	—		3					X				X	X		
5	DP-07A	WT	G	2-16-17	1600	—	—		3					X				X	X		
6	DP-04	WT	G	2-17-17	0915	—	—		3					X				X	X		
7	DP-04A	WT	G	2-17-17	1045	—	—		3					X				X	X		
8	DP-03	WT	G	2-17-17	1200	—	—		3					X				X	X		
9	DP-03A	WT	G	2-17-17	1310	—	—		3					X				X	X		
10	DP-02	WT	G	2-17-17	1500	—	—		3					X				X	X		
11	DP-02A	WT	G	2-17-17	1615	—	—		3					X				X	X		
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	David Szymal	2-17-17	1800	TRC Storage	2-17-17	1800	
	TRC Storage	2-23-17	0930	Grant Wilsterman	2-23-17	0930	
	Grant Wilsterman	2-23-17	09:45	Fed EX	2-24-17		
				Lasze PACE	2 24	1240	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Cooler Receipt Form

Client Name: TRC Project: WPH Lab Work Order: 21818

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 778496668246

Custody Seal on Cooler/Box Present: Yes (No) Seals Intact: Yes No

Cooler/Box Packing Material: (Bubble Wrap) Absorbent Foam Other:_____

Type of Ice: (Wet) Blue None Ice Intact: (Yes) Melted

Cooler Temperature: 5°C Radiation Screened: Yes (No) Chain of Custody Present: (Yes) No

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformance
Chain of Custody properly filled out	✓			
Chain of Custody relinquished	✓			
Sampler Name & Signature on COC			✓	
Containers intact	✓			
Were samples in separate bags	✓			
Sample container labels match COC Sample name/date and time collected	✓			
Sufficient volume provided	✓			
PAES containers used	✓			
Are containers properly preserved for the requested testing? (as labeled)	✓			
If an unknown preservation state, were containers checked? Exception: VOA's coliform			✓	If yes, see pH form.
Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container?			✓	

Comments:_____

Cooler contents examined/received by: LY Date: 2.24.17

Project Manager Review: LEM Date: 2/24/17

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

March 2, 2017

Lisa Clark
TRC Environmental Corp.
30 Patewood Drive
Greenville, SC 29615

RE: **WPH CLEMSON**

Pace Workorder: 21814

Dear Lisa Clark:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, February 24, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lauren E McGrath

Lauren McGrath 03/02/2017
Lauren.McGrath@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email PAESfeedback@pacelabs.com.

Total Number of Pages 24

CERTIFICATE OF ANALYSIS

Laboratory Data Quality Review Notes

Project Name: Westpoint Home - Clemson, SC

Project Number: 226253.0000.0000.000005

Lab Report: 21814 Pace Analytical Energy Services
Hydrocarbon gases: methane, ethane, ethene

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Surrogates not relevant to the analyses reported.

Method Blank: Method blank has no hydrocarbon gas detections.

Trip Blank: A trip blank was not collected with these samples.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS/LCSD recoveries and RPDs are within QC Limits.

MS/MSD: MS/MSD analyses were not performed.

Duplicate: A field duplicate was not collected with these samples.

Other: Note that the AM20GAX for hydrocarbon gases analytical method is not NELAP accredited.

No qualifiers were assigned.

Data review performed by Terry Hertz, TRC Environmental Corp. , 3/3/2017

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	West Virginia Department of Environmental Protection, Division of Water and Waste Management
Accreditation ID:	395
Scope:	Non-Potable Water
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 21814 WPH CLEMSON

Lab ID	Sample ID	Matrix	Date Collected	Date Received
218140001	OW-01	Water	2/20/2017 12:50	2/24/2017 11:30
218140002	OW-02	Water	2/20/2017 13:45	2/24/2017 11:30
218140003	OW-03A	Water	2/20/2017 15:00	2/24/2017 11:30
218140004	RMW-20	Water	2/21/2017 10:40	2/24/2017 11:30
218140005	RMW-21	Water	2/21/2017 12:40	2/24/2017 11:30
218140006	RMW-21A	Water	2/21/2017 15:20	2/24/2017 11:30
218140007	RMW-17	Water	2/22/2017 11:20	2/24/2017 11:30
218140008	RMW-17A	Water	2/22/2017 14:15	2/24/2017 11:30
218140009	RMW-28A	Water	2/22/2017 15:05	2/24/2017 11:30
218140010	RMW-18	Water	2/22/2017 16:30	2/24/2017 11:30
218140011	RMW-27	Water	2/22/2017 16:55	2/24/2017 11:30
218140012	RMW-18A	Water	2/22/2017 17:25	2/24/2017 11:30
218140013	RMW-20A	Water	2/23/2017 13:00	2/24/2017 11:30
218140014	RMW-27B	Water	2/23/2017 13:40	2/24/2017 11:30

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140001** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **OW-01** Date Collected: 2/20/2017 12:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**720**	ug/l	0.50	0.027	1	3/1/2017 09:31	BW	n
Ethane	**0.33**	ug/l	0.10	0.0030	1	3/1/2017 09:31	BW	n
Ethene	**0.14**	ug/l	0.10	0.0010	1	3/1/2017 09:31	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140002** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **OW-02** Date Collected: 2/20/2017 13:45

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**62**	ug/l	0.50	0.027	1	3/1/2017 09:42	BW	n
Ethane	**0.15**	ug/l	0.10	0.0030	1	3/1/2017 09:42	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/1/2017 09:42	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140003** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **OW-03A** Date Collected: 2/20/2017 15:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/1/2017 10:01	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/1/2017 10:01	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/1/2017 10:01	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140004** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **RMW-20** Date Collected: 2/21/2017 10:40

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/1/2017 10:12	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/1/2017 10:12	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/1/2017 10:12	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140005** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **RMW-21** Date Collected: 2/21/2017 12:40

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/1/2017 10:25	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/1/2017 10:25	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/1/2017 10:25	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140006** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **RMW-21A** Date Collected: 2/21/2017 15:20

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/1/2017 10:37	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/1/2017 10:37	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/1/2017 10:37	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140007** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **RMW-17** Date Collected: 2/22/2017 11:20

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**320**	ug/l	0.50	0.027	1	3/1/2017 10:50	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/1/2017 10:50	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/1/2017 10:50	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140008** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **RMW-17A** Date Collected: 2/22/2017 14:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**0.99**	ug/l	0.50	0.027	1	3/1/2017 10:59	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/1/2017 10:59	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/1/2017 10:59	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140009** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **RMW-28A** Date Collected: 2/22/2017 15:05

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**190**	ug/l	0.50	0.027	1	3/1/2017 11:45	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/1/2017 11:45	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/1/2017 11:45	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140010** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **RMW-18** Date Collected: 2/22/2017 16:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**14**	ug/l	0.50	0.027	1	3/1/2017 11:56	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/1/2017 11:56	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/1/2017 11:56	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140011** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **RMW-27** Date Collected: 2/22/2017 16:55

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**1600**	ug/l	0.50	0.027	1	3/1/2017 12:06	BW	n
Ethane	**0.60**	ug/l	0.10	0.0030	1	3/1/2017 12:06	BW	n
Ethene	**0.54**	ug/l	0.10	0.0010	1	3/1/2017 12:06	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140012** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **RMW-18A** Date Collected: 2/22/2017 17:25

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/1/2017 12:16	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/1/2017 12:16	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/1/2017 12:16	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140013** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **RMW-20A** Date Collected: 2/23/2017 13:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/1/2017 12:26	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/1/2017 12:26	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/1/2017 12:26	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21814 WPH CLEMSON

Lab ID: **218140014** Date Received: 2/24/2017 11:30 Matrix: Water

Sample ID: **RMW-27B** Date Collected: 2/23/2017 13:40

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**0.88**	ug/l	0.50	0.027	1	3/1/2017 12:36	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/1/2017 12:36	BW	n
Ethene	**0.45**	ug/l	0.10	0.0010	1	3/1/2017 12:36	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS QUALIFIERS

Workorder: 21814 WPH CLEMSON

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 21814 WPH CLEMSON

QC Batch: DISG/5938 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 218140001, 218140002, 218140003, 218140004, 218140005, 218140006, 218140007, 218140008, 218140009, 218140010, 218140011, 218140012, 218140013, 218140014

METHOD BLANK: 47263

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	<0.50	0.50	n
Ethane	ug/l	<0.10	0.10	n
Ethene	ug/l	<0.10	0.10	n

LABORATORY CONTROL SAMPLE & LCSD: 47264 47265

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	740	750	99	101	80-120	2	20	n
Ethane	ug/l	38	39	39	102	103	80-120	0.98	20	n
Ethene	ug/l	35	36	37	102	104	80-120	1.9	20	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA QUALIFIERS

Workorder: 21814 WPH CLEMSON

QUALITY CONTROL PARAMETER QUALIFIERS

n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 21814 WPH CLEMSON

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
218140001	OW-01			AM20GAX	DISG/5938
218140002	OW-02			AM20GAX	DISG/5938
218140003	OW-03A			AM20GAX	DISG/5938
218140004	RMW-20			AM20GAX	DISG/5938
218140005	RMW-21			AM20GAX	DISG/5938
218140006	RMW-21A			AM20GAX	DISG/5938
218140007	RMW-17			AM20GAX	DISG/5938
218140008	RMW-17A			AM20GAX	DISG/5938
218140009	RMW-28A			AM20GAX	DISG/5938
218140010	RMW-18			AM20GAX	DISG/5938
218140011	RMW-27			AM20GAX	DISG/5938
218140012	RMW-18A			AM20GAX	DISG/5938
218140013	RMW-20A			AM20GAX	DISG/5938
218140014	RMW-27B			AM20GAX	DISG/5938

Pace Analytical®
www.pacelabs.com

220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

21814

Page: 1 of 2

007417

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: TRC	Report To: Lisa Clark	Attention:
Address: 30 Patewood Dr Greenville S.C. 29615	Copy To: Terry Hertz	Company Name:
		Address:
Email To:	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: WPH- Clemson	Pace Project Manager:
Requested Due Date/TAT:	Project Number: 226253.0000.0000.00005	Pace Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER _____

Site Location STATE: _____

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Y/N	Analysis Test: ethene, ethane, methane											Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	OW-01	Ground Water	OT	G			2-20	1250		3										X												
2	OW-02		OT	G			2-20	1345		3										X												
3	OW-03A		OT	G			2-20	1500		3										X												
4	RMW-20		OT	G			2-21	1040		3										X												
5	RMW-21		OT	G			2-21	1240		3										X												
6	RMW-21A		OT	G			2-21	1520		3										X												
7	RMW-17		OT	G			2-22	1120		3										X												
8	RMW-17A		OT	G			2-22	1415		3										X												
9	RMW-28A		OT	G			2-22	1505		3										X												
10	RMW-18		OT	G			2-22	1630		3										X												
11	RMW-27		OT	G			2-22	1655		3										X												
12	RMW-18A		OT	G			2-22	1725		3										X												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	TRC	2-23-17	1645	Fedex	2-23-17		
				PACE	2-24	1130	1 Y N

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Benjamin Medlin

SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): 02/23/17

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245

21814

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

007418

Section A Required Client Information:

Company: TRC	
Address: 30 Ketswood Dr Greenville SC 29615	
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To: Lisa Clark	
Copy To: Terry Hertz	
Purchase Order No.:	
Project Name: WPH - Clemson	
Project Number: 226253.10000.0000.00005	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER _____

Site Location STATE: _____

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Groundwater

Requested Analysis Filtered (Y/N)

ITEM #	Sample ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test Y/N: ethene, ethane, methane	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	RMW-20A	OT	G			2-23	1300		3					X				X		
2	RMW-27B	OT	G			2-23	1340		3					X				X		
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	TRC	2-23-17	1645	Fedex	2-23-17					
				Lab Pace	224	1130	1	Y	N	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Benjamin Medlin

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 02-23-17

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Cooler Receipt Form

Client Name: TRC Project: WPH Clemson Lab Work Order: 21814

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 785707924493

Custody Seal on Cooler/Box Present: Yes (No) Seals Intact: Yes No

Cooler/Box Packing Material: (Bubble Wrap) Absorbent Foam Other:_____

Type of Ice: (Wet) Blue None Ice Intact: (Yes) Melted

Cooler Temperature: 1°C Radiation Screened: Yes (No) Chain of Custody Present: (Yes) No

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformance
Chain of Custody properly filled out	✓			
Chain of Custody relinquished	✓			
Sampler Name & Signature on COC	✓			
Containers intact	✓			
Were samples in separate bags	✓			
Sample container labels match COC Sample name/date and time collected	✓			
Sufficient volume provided	✓			
PAES containers used	✓			
Are containers properly preserved for the requested testing? (as labeled)	✓			
If an unknown preservation state, were containers checked? Exception: VOA's coliform			✓	If yes, see pH form.
Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container?			✓	

Comments:_____

Cooler contents examined/received by: CJ Date: 2.24.17

Project Manager Review: JBM Date: 2/24/17

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

March 7, 2017

Lisa Clark
TRC Environmental Corp.
30 Patewood Drive
Greenville, SC 29615

RE: **WPH CLEMSON**
Pace Workorder: 21843

Dear Lisa Clark:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, February 28, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lauren E McGrath

Lauren McGrath 03/07/2017
Lauren.McGrath@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email PAESfeedback@pacelabs.com.

Total Number of Pages 34

CERTIFICATE OF ANALYSIS

Laboratory Data Quality Review Notes

Project Name: Westpoint Home - Clemson, SC

Project Number: 226253.0000.0000.0000013

Lab Report: 21843 Pace Analytical Energy Services
Hydrocarbon gases: methane, ethane, ethene

Chain of Custody, Sample Temperature, Sample Preservation: Chain of custody (CoC) signed; sample temperature <6 ^{o}C upon arrival at the laboratory; samples were preserved properly.

Hold Time: Samples analyzed within hold time.

Surrogates: Surrogates not relevant to the analyses reported.

Method Blanks: Method blanks have no hydrocarbon gas detections.

Trip Blank: A trip blank was not collected with these samples.

Field Blank: A field blank was not collected with these samples.

Equipment Rinse Blank: A rinsate blank was not collected with these samples.

LCS/LCSD: LCS/LCSD recoveries and RPDs are within QC Limits.

MS/MSD: MS/MSD analyses were not performed.

Duplicate: A field duplicate was not collected with these samples.

Other: Note that the AM20GAX for hydrocarbon gases analytical method is not NELAP accredited.

No qualifiers were assigned.

Data review performed by Terry Hertz, TRC Environmental Corp. , 3/7/2017

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	West Virginia Department of Environmental Protection, Division of Water and Waste Management
Accreditation ID:	395
Scope:	Non-Potable Water
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 21843 WPH CLEMSON

Lab ID	Sample ID	Matrix	Date Collected	Date Received
218430001	DP-01	Water	2/20/2017 09:15	2/28/2017 11:00
218430002	DP-01A	Water	2/20/2017 10:40	2/28/2017 11:00
218430003	DP-08A	Water	2/20/2017 12:40	2/28/2017 11:00
218430004	DP-12	Water	2/20/2017 14:30	2/28/2017 11:00
218430005	DP-12A	Water	2/20/2017 15:20	2/28/2017 11:00
218430006	DP-14	Water	2/21/2017 09:00	2/28/2017 11:00
218430007	DP-14A	Water	2/21/2017 09:45	2/28/2017 11:00
218430008	DP-15	Water	2/21/2017 10:55	2/28/2017 11:00
218430009	DP-15A	Water	2/21/2017 14:00	2/28/2017 11:00
218430010	DP-17	Water	2/21/2017 15:00	2/28/2017 11:00
218430011	DP-17A	Water	2/22/2017 09:00	2/28/2017 11:00
218430012	DP-11	Water	2/22/2017 10:25	2/28/2017 11:00
218430013	DP-11A	Water	2/22/2017 11:30	2/28/2017 11:00
218430014	DP-18	Water	2/22/2017 12:45	2/28/2017 11:00
218430015	DP-18A	Water	2/22/2017 14:00	2/28/2017 11:00
218430016	DP-16	Water	2/22/2017 15:30	2/28/2017 11:00
218430017	DP-16A	Water	2/23/2017 09:00	2/28/2017 11:00
218430018	DP-19	Water	2/23/2017 10:10	2/28/2017 11:00
218430019	DP-19A	Water	2/23/2017 11:15	2/28/2017 11:00
218430020	DP-13	Water	2/23/2017 13:15	2/28/2017 11:00
218430021	DP-13A	Water	2/23/2017 14:20	2/28/2017 11:00
218430022	DP-09	Water	2/23/2017 16:00	2/28/2017 11:00

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

PROJECT SUMMARY

Workorder: 21843 WPH CLEMSON

Workorder Comments

The container pH for samples 21843 (0002) were measured as below the expected pH (< 10) for those samples preserved with trisodium phosphate, as assigned to PAES method AM20GAx.

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430001** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-01** Date Collected: 2/20/2017 09:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**6400**	ug/l	0.50	0.027	1	3/4/2017 09:15	TD	n
Ethane	**5.9**	ug/l	0.10	0.0070	1	3/4/2017 09:15	TD	n
Ethene	**8.0**	ug/l	0.10	0.0090	1	3/4/2017 09:15	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430002** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-01A** Date Collected: 2/20/2017 10:40

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**830**	ug/l	0.50	0.027	1	3/4/2017 09:27	TD	n
Ethane	**1.7**	ug/l	0.10	0.0070	1	3/4/2017 09:27	TD	n
Ethene	**1.5**	ug/l	0.10	0.0090	1	3/4/2017 09:27	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430003** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-08A** Date Collected: 2/20/2017 12:40

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/4/2017 09:40	TD	n
Ethane	**<0.10**	ug/l	0.10	0.0070	1	3/4/2017 09:40	TD	n
Ethene	**<0.10**	ug/l	0.10	0.0090	1	3/4/2017 09:40	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430004** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-12** Date Collected: 2/20/2017 14:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**2700**	ug/l	0.50	0.027	1	3/4/2017 09:52	TD	n
Ethane	**0.22**	ug/l	0.10	0.0070	1	3/4/2017 09:52	TD	n
Ethene	**0.18**	ug/l	0.10	0.0090	1	3/4/2017 09:52	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430005** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-12A** Date Collected: 2/20/2017 15:20

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**48**	ug/l	0.50	0.027	1	3/4/2017 10:05	TD	n
Ethane	**11**	ug/l	0.10	0.0070	1	3/4/2017 10:05	TD	n
Ethene	**1.9**	ug/l	0.10	0.0090	1	3/4/2017 10:05	TD	n

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430006** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-14** Date Collected: 2/21/2017 09:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**7900**	ug/l	0.50	0.027	1	3/4/2017 10:19	TD	n
Ethane	**0.57**	ug/l	0.10	0.0070	1	3/4/2017 10:19	TD	n
Ethene	**0.21**	ug/l	0.10	0.0090	1	3/4/2017 10:19	TD	n

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430007** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-14A** Date Collected: 2/21/2017 09:45

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**260**	ug/l	0.50	0.027	1	3/4/2017 10:33	TD	n
Ethane	**2.8**	ug/l	0.10	0.0070	1	3/4/2017 10:33	TD	n
Ethene	**0.75**	ug/l	0.10	0.0090	1	3/4/2017 10:33	TD	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430008** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-15** Date Collected: 2/21/2017 10:55

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**28**	ug/l	0.50	0.027	1	3/4/2017 10:46	TD	n
Ethane	**0.19**	ug/l	0.10	0.0070	1	3/4/2017 10:46	TD	n
Ethene	**0.10**	ug/l	0.10	0.0090	1	3/4/2017 10:46	TD	n

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430009** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-15A** Date Collected: 2/21/2017 14:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**2.3**	ug/l	0.50	0.027	1	3/6/2017 08:48	BW	n
Ethane	**3.4**	ug/l	0.10	0.0030	1	3/6/2017 08:48	BW	n
Ethene	**0.66**	ug/l	0.10	0.0010	1	3/6/2017 08:48	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430010** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-17** Date Collected: 2/21/2017 15:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**1.5**	ug/l	0.50	0.027	1	3/6/2017 08:59	BW	n
Ethane	**0.39**	ug/l	0.10	0.0030	1	3/6/2017 08:59	BW	n
Ethene	**0.32**	ug/l	0.10	0.0010	1	3/6/2017 08:59	BW	n

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430011** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-17A** Date Collected: 2/22/2017 09:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/6/2017 09:10	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/6/2017 09:10	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/6/2017 09:10	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430012** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-11** Date Collected: 2/22/2017 10:25

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**770**	ug/l	0.50	0.027	1	3/6/2017 09:25	BW	n
Ethane	**0.71**	ug/l	0.10	0.0030	1	3/6/2017 09:25	BW	n
Ethene	**0.64**	ug/l	0.10	0.0010	1	3/6/2017 09:25	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430013** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-11A** Date Collected: 2/22/2017 11:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**13**	ug/l	0.50	0.027	1	3/6/2017 09:35	BW	n
Ethane	**1.2**	ug/l	0.10	0.0030	1	3/6/2017 09:35	BW	n
Ethene	**0.84**	ug/l	0.10	0.0010	1	3/6/2017 09:35	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430014** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-18** Date Collected: 2/22/2017 12:45

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**24**	ug/l	0.50	0.027	1	3/6/2017 09:45	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/6/2017 09:45	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/6/2017 09:45	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430015** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-18A** Date Collected: 2/22/2017 14:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**<0.50**	ug/l	0.50	0.027	1	3/6/2017 09:55	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/6/2017 09:55	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/6/2017 09:55	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430016** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-16** Date Collected: 2/22/2017 15:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**520**	ug/l	0.50	0.027	1	3/6/2017 10:04	BW	n
Ethane	**0.69**	ug/l	0.10	0.0030	1	3/6/2017 10:04	BW	n
Ethene	**0.42**	ug/l	0.10	0.0010	1	3/6/2017 10:04	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430017** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-16A** Date Collected: 2/23/2017 09:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**8.5**	ug/l	0.50	0.027	1	3/6/2017 10:16	BW	n
Ethane	**1.5**	ug/l	0.10	0.0030	1	3/6/2017 10:16	BW	n
Ethene	**1.1**	ug/l	0.10	0.0010	1	3/6/2017 10:16	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430018** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-19** Date Collected: 2/23/2017 10:10

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**1800**	ug/l	0.50	0.027	1	3/6/2017 11:08	BW	n
Ethane	**0.50**	ug/l	0.10	0.0030	1	3/6/2017 11:08	BW	n
Ethene	**0.23**	ug/l	0.10	0.0010	1	3/6/2017 11:08	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430019** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-19A** Date Collected: 2/23/2017 11:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**12**	ug/l	0.50	0.027	1	3/6/2017 11:19	BW	n
Ethane	**1.6**	ug/l	0.10	0.0030	1	3/6/2017 11:19	BW	n
Ethene	**1.3**	ug/l	0.10	0.0010	1	3/6/2017 11:19	BW	n

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430020** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-13** Date Collected: 2/23/2017 13:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**1.1**	ug/l	0.50	0.027	1	3/6/2017 11:29	BW	n
Ethane	**<0.10**	ug/l	0.10	0.0030	1	3/6/2017 11:29	BW	n
Ethene	**<0.10**	ug/l	0.10	0.0010	1	3/6/2017 11:29	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430021** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-13A** Date Collected: 2/23/2017 14:20

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**0.90**	ug/l	0.50	0.027	1	3/6/2017 11:40	BW	n
Ethane	**0.25**	ug/l	0.10	0.0030	1	3/6/2017 11:40	BW	n
Ethene	**0.24**	ug/l	0.10	0.0010	1	3/6/2017 11:40	BW	n

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 21843 WPH CLEMSON

Lab ID: **218430022** Date Received: 2/28/2017 11:00 Matrix: Water

Sample ID: **DP-09** Date Collected: 2/23/2017 16:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**1200**	ug/l	0.50	0.027	1	3/6/2017 11:49	BW	n
Ethane	**1.4**	ug/l	0.10	0.0030	1	3/6/2017 11:49	BW	n
Ethene	**4.2**	ug/l	0.10	0.0010	1	3/6/2017 11:49	BW	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS QUALIFIERS

Workorder: 21843 WPH CLEMSON

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 21843 WPH CLEMSON

QC Batch: DISG/5946 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 218430001, 218430002, 218430003, 218430004, 218430005, 218430006, 218430007, 218430008

METHOD BLANK: 47342

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	<0.50	0.50	n
Ethane	ug/l	<0.10	0.10	n
Ethene	ug/l	<0.10	0.10	n

LABORATORY CONTROL SAMPLE & LCSD: 47344 47346

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	810	750	108	101	80-120	6.7	20	n
Ethane	ug/l	38	39	38	103	101	80-120	2	20	n
Ethene	ug/l	35	37	36	104	101	80-120	2.9	20	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 21843 WPH CLEMSON

QC Batch: DISG/5947 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 218430009, 218430010, 218430011, 218430012, 218430013, 218430014, 218430015, 218430016, 218430017, 218430018, 218430019, 218430020, 218430021, 218430022

METHOD BLANK: 47348

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	<0.50	0.50	n
Ethane	ug/l	<0.10	0.10	n
Ethene	ug/l	<0.10	0.10	n

LABORATORY CONTROL SAMPLE & LCSD: 47350 47352

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	710	720	95	96	80-120	1	20	n
Ethane	ug/l	38	37	37	98	99	80-120	1	20	n
Ethene	ug/l	35	34	35	98	99	80-120	1	20	n

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA QUALIFIERS

Workorder: 21843 WPH CLEMSON

QUALITY CONTROL PARAMETER QUALIFIERS

n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 21843 WPH CLEMSON

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
218430001	DP-01			AM20GAX	DISG/5946
218430002	DP-01A			AM20GAX	DISG/5946
218430003	DP-08A			AM20GAX	DISG/5946
218430004	DP-12			AM20GAX	DISG/5946
218430005	DP-12A			AM20GAX	DISG/5946
218430006	DP-14			AM20GAX	DISG/5946
218430007	DP-14A			AM20GAX	DISG/5946
218430008	DP-15			AM20GAX	DISG/5946
218430009	DP-15A			AM20GAX	DISG/5947
218430010	DP-17			AM20GAX	DISG/5947
218430011	DP-17A			AM20GAX	DISG/5947
218430012	DP-11			AM20GAX	DISG/5947
218430013	DP-11A			AM20GAX	DISG/5947
218430014	DP-18			AM20GAX	DISG/5947
218430015	DP-18A			AM20GAX	DISG/5947
218430016	DP-16			AM20GAX	DISG/5947
218430017	DP-16A			AM20GAX	DISG/5947
218430018	DP-19			AM20GAX	DISG/5947
218430019	DP-19A			AM20GAX	DISG/5947
218430020	DP-13			AM20GAX	DISG/5947
218430021	DP-13A			AM20GAX	DISG/5947
218430022	DP-09			AM20GAX	DISG/5947

Pace Analytical®
www.pacelabs.com

220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

21843

Page: of

007422

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: TRC	Report To:	Attention:
Address: 30 Patewood Drive	Copy To:	Company Name:
Building 1 suite 300	Greenville SC 29615	Address:
Email To: LClark@trcsolutions.com	Purchase Order No.:	Pace Quote Reference:
Phone: 864-420-8577 Fax:	Project Name:	Pace Project Manager:
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER _____

Site Location STATE: _____

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test Y/N: Dissolved Gases	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DP-01	WT	G	2-20-17	0915	—	—		3					X				X		
2	DP-01A	WT	G	2-20-17	1040	—	—		3					X				X		
3	DP-08A	WT	G	2-20-17	1240	—	—		3					X				X		
4	DP-12	WT	G	2-20-17	1430	—	—		3					X				X		
5	DP-12A	WT	G	2-20-17	1520	—	—		3					X				X		
6	DP-14	WT	G	2-21-17	0900	—	—		3					X				X		
7	DP-14A	WT	G	2-21-17	0945	—	—		3					X				X		
8	DP-15	WT	G	2-21-17	1055	—	—		3					X				X		
9	DP-15A	WT	G	2-21-17	1400	—	—		3					X				X		
10	DP-17	WT	G	2-21-17	1500	—	—		3					X				X		
11	DP-17A	WT	G	2-22-17	0900	—	—		3					X				X		
12	DP-11	WT	G	2-22-17	1025	—	—		3					X				X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	David Szymal	2-24-17	0900	TRC Storage	2-24-17	0900	
	TRC Storage/DJS	2-27-17	1530	Fedex	2-27-17	1530	
				Lab PAS	2/28/17	1100	2.2 Y N Y

ORIGINAL

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:					
SIGNATURE of SAMPLER:	DATE Signed (MM/DD/YY):				

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

21843

Page: of

007421

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: TRC	Report To:	Attention:
Address: 30 Patewood Drive	Copy To:	Company Name:
Building 1 suite 300	Greenville SC 29615	Address:
Email To: cclark@trcsolutions.com	Purchase Order No.:	Pace Quote Reference:
Phone: 864-420-8577 Fax:	Project Name:	Pace Project Manager:
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER _____

Site Location STATE: _____

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE)

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test Y/N	Dissolved Gases	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DP-11A	WT	G	2-22-17	1130	—	—		3					X					X		
2	DP-18	WT	G	2-22-17	1245	—	—		3					X					X		
3	DP-18A	WT	G	2-22-17	1400	—	—		3					X					X		
4	DP-16	WT	G	2-22-17	1530	—	—		3					X					X		
5	DP-16A	WT	G	2-23-17	0900	—	—		3					X					X		
6	DP-19	WT	G	2-23-17	1010	—	—		3					X					X		
7	DP-19A	WT	G	2-23-17	1115	—	—		3					X					X		
8	DP-13	WT	G	2-23-17	1315	—	—		3					X					X		
9	DP-13A	WT	G	2-23-17	1420	—	—		3					X					X		
10	DP-09	WT	G	2-23-17	1600	—	—		3					X					X		
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	David Szymal	2-24-17	0900	TRC Storage	2-24-17	0900	
	TRC Storage/DDS	2-27-17	1530	Fedex	2-27-17	1530	
				LOGS PAS	2/28/17	1100	2 J N Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Cooler Receipt Form

Client Name: TRC Project: _____ Lab Work Order: 21843

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 7785 2568 7506

Custody Seal on Cooler/Box Present: Yes (No) Seals Intact: Yes No

Cooler/Box Packing Material: (Bubble Wrap) Absorbent Foam Other:_____

Type of Ice: (Wet) Blue None Ice Intact: (Yes) Melted

Cooler Temperature: 2.2°C Radiation Screened: Yes (No) Chain of Custody Present: (Yes) No

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformance
Chain of Custody properly filled out	✓			
Chain of Custody relinquished	✓			
Sampler Name & Signature on COC		✓		
Containers intact	✓			
Were samples in separate bags	✓			
Sample container labels match COC Sample name/date and time collected	✓			
Sufficient volume provided	✓			
PAES containers used	✓			
Are containers properly preserved for the requested testing? (as labeled)	✓			
If an unknown preservation state, were containers checked? Exception: VOA's coliform			✓	If yes, see pH form.
Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container?			✓	

Comments:_____

Cooler contents examined/received by: LY Date: 2.28.17

Project Manager Review: JM Date: 2/28/17