



1111 Broadway, Suite 1800
 Oakland, CA 94607
 510.844.2800 Tel
 510.844.2900 Fax
www.itron.com

November 09, 2015

RECEIVED

Ms. Carol Crooks

NOV 13 2015

South Carolina Department of Health & Environmental Control
 Bureau of Land and Waste Management
 2600 Bull Street
 Columbia, South Carolina 29201

SITE ASSESSMENT,
 REMEDIATION &
 REVITALIZATION

Re: Supplemental Remedial Investigation (RI) Report (VCC Contract # 13-6078-RP; Itron Site, Greenwood County)

Dear Ms. Crooks:

Enclosed are two (2) copies of the Supplemental RI Report for the above referenced site prepared by URS and one digital copy on a CD. We are pleased that with this report we have been able to completely delineate the plume and address comments in your March 05, 2015 letter following the RI report submitted in October 2015.

If you have any questions, do not hesitate to contact me at 510-844-2882 or email me at pad.kemmanahalli@itron.com

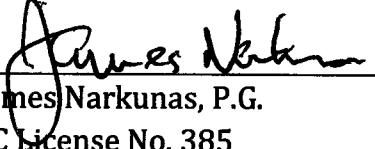
Sincerely,

Pad Kemmanahalli

Corporate Senior Director HSE & Sustainability

Endorsement Page

This Supplemental Remedial Investigation (SRI) Report was prepared under my direction or supervision in accordance with a system designed such that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.


James Narkunas, P.G.
SC License No. 385



RECEIVED

NOV 13 2015

**SITE ASSESSMENT,
REMEDIATION &
REVITALIZATION**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	vi
1.0 INTRODUCTION	1
1.1 Overview	1
1.2 Purpose of Report	1
1.3 Report Organization	1
2.0 SITE BACKGROUND.....	3
2.1 Site Description	3
2.2 Site History	3
2.3 Previous Investigations	4
3.0 SUPPLEMENTAL REMEDIAL INVESTIGATION FIELD ACTIVITIES.....	5
3.1 RotoSonic Drilling, Soil Sampling and Monitoring Well Installation	5
3.2 Monitoring Well Development.....	6
3.3 Groundwater Monitoring	7
3.4 Investigative Derived Waste (IDW) Management	8
4.0 SITE GEOLOGY AND HYDROGEOLOGY.....	9
4.1 Site Geology	9
4.2 Site Hydrogeology	11
5.0 NATURE AND EXTENT OF CONTAMINATION	14
5.1 Chemicals of Concern (COCs)	14
<i>5.1.1 Soil</i>	15
<i>5.1.2 Groundwater</i>	15
5.2 Soil Results	16
5.3 Groundwater Results	16
6.0 CONCLUSIONS.....	18
6.1 Summary of Groundwater Data.....	18
6.2 Summary of Hydrogeology	19
6.3 Summary Contaminant Fate and Transport.....	20
7.0 REFERENCES	22

TABLES

- Table 1: Previous Investigations
- Table 2: Chronological Summary of Supplement RI Field Activities
- Table 3: Groundwater Monitoring Well Construction Details
- Table 4: Current and Historical Groundwater Monitoring Well Elevations
- Table 5: Vertical Hydraulic Gradients
- Table 6: Current and Historical Groundwater Analytical Results

FIGURES

- Figure 1: Topographic Map
- Figure 2: Site Vicinity Map
- Figure 3: Monitoring Well Location Map
- Figure 4: Trace of Geologic Cross Sections
- Figure 5: Geologic Cross Section E-E'
- Figure 6: Geologic Cross Section F-F'
- Figure 7: Geologic Cross Section G-G'
- Figure 8: Geologic Cross Section H-H'
- Figure 9: Geologic Cross Section I-I'
- Figure 10: Geologic Cross Section J-J'
- Figure 11: Potentiometric Surface Map (Upper Regolith) – July 2015
- Figure 12: Potentiometric Surface Map (Lower Regolith) – July 2015
- Figure 13: Distribution of COCs in Upper Regolith Groundwater – July 2015
- Figure 14: Distribution of COCs in Lower Regolith Groundwater – July 2015

APPENDICES

- Appendix A: Photo Log
- Appendix B: Well Boring Logs
- Appendix C: SCDHEC Water Well Records and Monitoring Well Approval

Appendix D: Survey Report

Appendix E: Well Development Logs

Appendix F: Groundwater Sampling Logs

Appendix G: Data Quality Review Memoranda

Appendix H: IDW Waste Manifests

Appendix I: Analytical Summary Tables and Laboratory Reports

List of Acronyms

BDL – below detection limits

bgs – below ground surface

cm/sec – centimeters per second

cDCE – cis-1,2-Dichloroethene

COCs – chemicals of concern

CSM – Conceptual Site Model

DNAPL – dense non-aqueous phase liquid

DO – dissolved oxygen

EPA – Environmental Protection Agency

ESA – environmental site assessment

IDW – investigative derived waste

MCL – maximum contaminant level

mg/kg – milligrams per kilogram

MSL – mean sea level

ORP – oxidation reduction potential

PAHs – polynuclear aromatic hydrocarbons

PCE – tetrachloroethene

PID – photoionization detector

PPM – parts per million

PSL – preliminary screening level

PVC – polyvinyl chloride

QA/QC – quality assurance/quality control

QAPP – quality assurance project plan

RBCA – risk-based corrective action

RBSL – risk-based screening level

RI – remedial investigation

RPVCC – responsible party voluntary cleanup contract

RSL – regional screening level

SCDHEC – South Carolina Department of Health and Environmental Control

SES – Shealy Environmental Services, Inc.

SSL – soil screening level

SRI – supplemental remedial investigation

TCE - trichloroethene

µg/L – micrograms per liter

USCS – Unified Soil Classification System

USDA – United States Department of Agriculture

USGS – United States Geological Survey

UST – underground storage tank

VC – vinyl chloride

VOCs – volatile organic compounds

EXECUTIVE SUMMARY

A Supplemental Remedial Investigation (SRI) was conducted at the Itron, Inc. (Itron) facility located at 1310 Emerald Road in Greenwood, South Carolina (the “Site”) in July 2015 as a follow-up investigation to further delineate the horizontal and vertical extent of chlorinated solvents, primarily tetrachloroethene (PCE), in Site groundwater. The work was conducted per the request of the South Carolina Department of Health and Environmental Control (SCDHEC) in a letter dated March 3, 2015, which contained comments on the Remedial Investigation (RI) Report submitted to the department in October 2014 (URS 2014). A Supplemental Work Plan for Continued Groundwater Investigation was submitted to SCDHEC on April 27, 2015 (URS, 2015) and subsequently approved by the department in a letter dated May 14, 2015 (SCDHEC, 2015). All assessment work at the site is being performed in conjunction with a Responsible Party Voluntary Cleanup Contract (RPVCC) 13-6078-RP entered into by Itron and SCDHEC on October 2, 2013.

The Site occupies approximately 24 acres in a mixed-use area of Greenwood County, approximately 3 miles northeast of the town of Greenwood and is developed with a 130,000 square-foot building (the “Building”) used to manufacture flow meters for industrial and municipal purposes.

There are no perennial surface water features or wetlands located at the Site. Wilson Creek is located approximately $\frac{1}{2}$ mile south of the Site and two intermittent streams that are unnamed tributaries to Wilson Creek are located east and west of the Site.

The collective results of previous investigations have indicated the presence of three potential source areas including the steel sump area located on the southeast side of the Building, the cardboard storage room located east of the Building, and an area near the northeast corner of the Building where four underground storage tanks (USTs) and a gasoline dispenser were formerly located. PCE is the primary chemical of concern (COC) at the Site while lower concentrations of degradation products [i.e.

trichloroethene [TCE] and cis-1,2-dichloroethene (cDCE)] were also detected. PCE exceeded preliminary screening levels (PSLs) in soil and groundwater samples collected from all three source areas, with the highest concentrations being detected in the vicinity of the steel sump and cardboard storage room areas. Although ancillary in nature, in comparison to PCE detected at the Site, petroleum hydrocarbons and polynuclear aromatic hydrocarbons (PAHs) were also detected.

Groundwater samples collected from 22 groundwater monitoring wells during RI activities in June 2014, indicated that PCE concentrations in 12 of the sampled wells exceeded the maximum contaminant level (MCL) of 5 micrograms per liter ($\mu\text{g}/\text{L}$). The highest PCE concentration (97,000 $\mu\text{g}/\text{L}$) was detected in a sample from well MW-7 which is located in the steel sump area. Impacts in the shallow groundwater extend at least 500 feet downgradient of the source area. The orientation of the plume is generally consistent with the easterly and southeasterly flow of groundwater across the Site.

During a previous investigation, four monitoring wells were installed at greater depths to assess the vertical extent of the PCE plume. In comparison to the results in the shallower wells, concentrations in the deeper wells are several orders of magnitude lower, most likely due to the low permeability of soils and upward hydraulic gradients at some locations.

To further assess the distribution of COCs in groundwater at the Site, the following scope of work was conducted during the SRI:

- Monitoring well MW-10R was installed to replace well MW-10, which was constructed differently than the other wells;

- Intermediate depth well MW-10I was clustered with MW-10R and MW-10D to assess the groundwater chemistry in the interval between MW-10R and MW-10D;

- Monitoring well MW-15R was installed to replace MW-15, which was determined to be too shallow;
- Wells MW-19, MW-20 and MW-21 were installed to assess the horizontal distribution of PCE in groundwater near the property line, south, west and east of the source areas, respectively.
- Deep monitoring well MW-22D was installed to assess the vertical distribution of PCE near the east property boundary of the Site.
- Additional field activities conducted during the SRI included collecting groundwater samples from 27 monitoring wells and analyzing them for volatile organic compounds (VOCs). In addition, the groundwater samples collected from monitoring well MW-3 were also analyzed for polynuclear aromatic hydrocarbons (PAHs) due to past detections of naphthalene at concentrations above the PSL.

Relatively low concentrations of PCE detected in the shallow downgradient wells, south and west of the source areas, indicate PCE has not migrated off-site in the upper regolith. PCE (360 µg/L) was detected in newly installed monitoring well MW-20, located near the east property boundary, at an intermediate depth within the regolith.

PCE concentrations are significantly lower in the deeper portion of the regolith. Concentrations in the deeper wells are below the MCL for PCE with the exception of well MW-16D, which exhibited a PCE concentration of 30 µg/L. Well MW-16D is centrally located on the Site.

1.0 INTRODUCTION

1.1 Overview

This report presents the results of the SRI conducted for the Itron Inc. (Itron) facility located at 1310 Emerald Road in Greenwood, South Carolina, hereafter known as the “Site” (Figure 1). Previous environmental investigations conducted at the Site between 2011 and 2013 (URS, 2013a) detected PCE and other hazardous substances in soil and groundwater at concentrations exceeding applicable screening levels. A summary of the previous investigations is provided in Table 1. Due to the nature and extent of the contamination encountered, Itron and SCDHEC entered into a RPVCC 13-6078-RP, dated October 2, 2013, which required Itron to complete a Remedial Investigation (RI). Following review of the RI report, SCDHEC requested a work plan to complete the groundwater investigation portion of the RI in a letter dated March 3, 2015. A Supplemental Work Plan for Continued Groundwater Investigation was submitted to SCDHEC on April 27, 2015 (URS, 2015) and subsequently approved by the department in a letter dated May 14, 2015 (SCDHEC, 2015).

1.2 Purpose of the SRI

The primary objectives of the investigation were to:

- Install additional groundwater monitoring wells to define the extent of chemicals of concern (COCs) in groundwater;
- Replace well MW-10 with a new well that is constructed in a manner similar to other Site wells;
- Install a deeper well adjacent to well MW-10 to refine the understanding of this area of the Site and monitor contaminant transport; and
- Replace well MW-15, which barely intercepts the water table, with a deeper well screened further into the water table.

This SRI Report present the results of the additional groundwater investigation in combination with the relevant data obtained during previous investigations. The report

includes an update of the site geological and hydrogeological conditions, and the Conceptual Site Model (CSM).

1.3 Report Organization

The remainder of this report is organized as follows:

Section 2 summarizes the Site background including site description, site history and previous investigations.

Section 3 describes the methods and procedures used during SRI field activities.

Section 4 describes site geology, hydrogeology and hydrostratigraphic units in addition to groundwater occurrence and movement.

Section 5 describes the nature and extent of contamination identified on the Site.

Applicable screening criteria for soil and groundwater are documented and compared to concentrations of various COCs identified in soil and groundwater at the Site.

Section 6 includes the conclusions developed based on the data obtained during the SRI.

Section 7 includes references utilized in the preparation of this SRI Report.

Tables and figures are included in separate sections following Section 7. Nine appendices (A through I) follow the figures and provide supporting information.

2.0 SITE BACKGROUND

2.1 Site Description

The Site currently consists of a 130,000 square-foot building (the “Building”) on a 24.04-acre parcel of property located at 1310 Emerald Road, Greenwood, South Carolina. The facility manufactures flow meters for industrial and municipal uses. As part of the manufacturing process, the facility stores pre-formed brass, stainless steel, steel and aluminum parts on site. Additional materials manufactured at the facility include electronic circuit boards, wiring, casings and other smaller components. A site vicinity map is included as Figure 2 which identifies the approximate property boundary of the Site, surrounding properties, roads and streets, streams, ponds, nearby potential private water supply wells and a railroad line. Features at the Site include office space, a parking area, production areas, loading docks, an oil-water separator, a maintenance shop and shipping and receiving areas.

2.2 Site History

Prior to 1972, the Site was reportedly used for agricultural purposes. The current Building was constructed in 1972 for flow meter manufacturing by Neptune Carolina, Inc. In April 1972, Neptune Carolina, Inc. transferred ownership of the property to Greenwood County. While the property was owned by Greenwood County for nearly 30 years, flow meter manufacturing continued under the operation of Allied Signal, Wheelabrator Frye and Schlumberger Industries. In September 2001, the ownership of the property reverted from Greenwood County to Schlumberger Industries. Schlumberger transferred ownership of the Site to Actaris U.S. Liquid Measurement on October 26, 2001. Itron, Inc. acquired Actaris in 2008. In 2012, Itron sold the operations at the facility (i.e., Itron’s Liquid Measurement Business) to Measurement Technology Group, Inc., which is now doing business at the facility as Red Seal Measurement. Itron is currently leasing the facility to Red Seal Measurement, and retained ownership of the Building and the property.

2.3 Previous Investigations

An overview of the scope of work completed during previous phases of investigations at the Site is included on Table 1. Qualitative summaries of the investigation results are also included.

The collective results of previous investigations has indicated the presence of three potential source areas including the steel sump area located on the southeast side of the Building, the cardboard storage room area located east of the Building, and an area near the northeast corner of the Building where four underground storage tanks (USTs) and a gasoline dispenser were formerly located. PCE is the primary COC at the Site while lower concentrations of degradation products [i.e. TCE and cis-1,2-dichloroethene (cDCE)] were also detected. PCE exceeded PSLs in soil and groundwater samples collected from all three source areas, with the highest concentrations being detected in the vicinity of the steel sump and cardboard storage room areas. Although ancillary in nature, in comparison to PCE detected at the Site, petroleum hydrocarbons and polynuclear aromatic hydrocarbons (PAHs) were also detected.

Groundwater samples collected from 22 groundwater monitoring wells during RI activities in June 2014, indicated that PCE concentrations in 12 of the sampled wells exceeded the maximum contaminant level (MCL) of 5 micrograms per liter ($\mu\text{g}/\text{L}$). The highest PCE concentration (97,000 $\mu\text{g}/\text{L}$) was detected in a sample from well MW-7 which is located in the steel sump area. Impacts in the shallow groundwater extend at least 500 feet downgradient of the source area. The orientation of the plume in the shallow regolith is generally consistent with the easterly and southeasterly flow of groundwater across the Site. Sample results in the four deeper wells were several orders of magnitude lower than the shallow wells, most likely due to the low permeability of soils and upward hydraulic gradients at some locations.

3.0 SUPPLEMENTAL REMEDIAL INVESTIGATION FIELD ACTIVITIES

This section describes field activities that were implemented during the SRI. The activities were performed according to the technical approach described in the Supplemental Work Plan for Continued Groundwater Investigation (URS, 2015) and the methods and procedures described in the RI Work Plan (URS, 2013a). Field activities also conformed to the procedures discussed in the Site health and safety plan (URS, 2013b). Photographs of field activities are included in Appendix A. No significant deviations from the plans were made during SRI field activities.

Table 2 is a chronological summary of the field activities that describes the work performed and its purpose. The table also identifies the newly installed monitoring wells and various field screening methods and procedures.

For all phases of field activities, sampling and screening equipment were calibrated according to the manufacturer's instructions prior to use each day, and throughout the day as necessary. In addition, non-disposable equipment was decontaminated with a Liquinox® soap solution and rinsed with distilled water before use at each sampling point or location. Drilling tools were first cleaned by scrubbing to remove the larger amounts of soil residues followed by the application of heated wash-water through a high pressure jet.

3.1 RotoSonic Drilling, Soil Sampling and Monitoring Well Installation

AECOM retained Terrasonic International (Terrasonic), a licensed well drilling contractor from Aiken, South Carolina to install five shallow monitoring wells (MW-10R, MW-15R, MW-19, MW-20 and MW-21), one intermediate monitoring well (MW-10I) and one deep monitoring well (MW-22D). A track-mounted rotosonic drilling rig was used to advance the borings. The well installation was completed between July 13 and 17, 2015. Monitoring well locations are shown on Figure 3.

During drilling, soil was collected for field screening purposes and potential chemical analysis. The drill core was continuously logged to select the more permeable units for well screen placement and the soil was screened for VOCs using a photo-ionization detector

(PID). Soil descriptions and PID screening results are included on the monitoring well logs in Appendix B. South Carolina water well records (Form 1903) and the monitoring well approval from SCDHEC are included in Appendix C.

The criteria for collecting soil samples during monitoring well installation was documented in the Supplemental Work Plan (URS, 2015). Soil recovered from each borehole was screened every 5 feet using a PID. If a PID reading greater than 100 parts per million (ppm) was measured during the soil screening process, then screening was conducted every 1-foot until the readings decreased below 100 ppm. If PID readings exceeded 100 ppm, then the soil sample exhibiting the highest PID reading was collected and analyzed for VOCs by EPA Method 5035A/8260B as described in Section 7.2.1 and Appendix B Field Sampling and Analysis Plan (FSAP) of the RI work plan (URS 2013a). A single soil sample collected from well MW-10I was submitted to the laboratory and was analyzed for VOCs by EPA Method 8260B.

Upon reaching the target drilling depth, as determined from the lithology encountered, a two-inch diameter polyvinyl chloride (PVC) monitoring well was installed at each of the monitoring well locations. Well construction information is included on the monitoring well logs in Appendix B and SCDHEC water well records in Appendix C. Construction information for the new and pre-existing wells is also summarized in Table 3.

Subsequently, the location and measuring point elevation of each monitoring well was determined by a licensed surveyor. The locations of all monitoring wells are depicted on Figure 3 and the surveyor's report for the newly installed wells is included in Appendix D.

3.2 Monitoring Well Development

All newly installed monitoring wells (MW-10R, MW-10I, MW-15R, MW-19, MW-20, MW-21 and MW-22D) were developed on July 22 and 23, 2015 by alternately pumping and surging each well. Development continued until the pump discharge was clear or until further improvement in the turbidity of the discharge water was no longer feasible. Likely due to the low permeability soils identified across the Site, monitoring wells MW-10R and MW-21

pumped dry numerous times during the development process. Although turbidity improved during the development process, neither well produced a large amount of water. Groundwater quality parameters such as pH, oxidation reduction potential (ORP), specific conductivity, dissolved oxygen (DO), temperature and turbidity were monitored and recorded on well development logs that are included in Appendix E.

3.3 Groundwater Monitoring

Groundwater monitoring was performed on July 28 and 29, 2015 and included collecting water samples from 27 monitoring wells (MW-1 through MW-9, MW-10R, MW-10I, MW-11 through MW-14, MW-15R, MW-16 through MW-21 plus MW-5D, MW-9D, MW-10D, MW-16D and MW-22D). The monitoring well locations are shown on Figure 3 and monitoring well construction details are summarized in Table 3. Prior to sample collection, water levels in the monitoring wells were measured with an electronic water level meter. Water levels measured in the wells on July 28, 2015 are summarized in Table 4.

In preparing for sampling, wells were purged following low-flow/minimal drawdown sampling procedures. A low-flow submersible pump fitted with new polyethylene tubing was utilized. The pump discharged to an in-line water quality meter that monitored field parameters until they stabilized indicating that sampling could commence. Groundwater sampling logs are included in Appendix F. Prior to collection of the samples, the dedicated tubing for each well was disconnected from the water quality meter. Samples were then collected in preserved, laboratory-provided bottles, labeled with unique sample identifiers, logged on a chain-of-custody record and stored on wet ice in a cooler until transported to Shealy Environmental Services, Inc. (SES). Field and QA/QC samples submitted for fixed laboratory chemical analysis, the specific analyses requested, and the analytical methods used are identified in the data quality review memoranda included in Appendix G. All groundwater samples were analyzed for VOCs by EPA Method 8260B. The sample from MW-3 was also analyzed for PAHs by EPA Method 8270D.

3.4 Investigative Derived Waste (IDW) Management

Field activities conducted as part of the SRI resulted in the generation of IDW in the form of soil cuttings, decontamination fluids, monitoring well development and purge waters. All IDW was stored in 55-gallon drums, labeled with a “pending analysis” label including date of generation, generator name, monitoring well numbers, type of media and contact information for AECOM. All drums were staged at a designated location on site. A total of 26 drums (8 soil and 18 liquid) were removed from the Site by Univar USA, Inc. and disposed of offsite at permitted disposal facilities as hazardous waste. Waste manifests are provided in Appendix H.

4.0 SITE GEOLOGY AND HYDROGEOLOGY

This section describes geological and hydrogeological conditions at the site. The description is based on borings and wells drilled during the RI as well as those drilled during earlier investigations. Drilling information is supplemented by hydraulic head data and hydraulic conductivity data collected during well gauging and slug testing, respectively. Overall, geologic and hydrogeologic conditions observed or measured during the SRI were consistent with the results of previous investigations.

The locations of geologic cross-section lines prepared for the SRI are shown on Figure 4. Corresponding geologic cross sections E-E', F-F', G-G', H-H', I-I', and J-J' showing the generalized lithology across the site are included in this report as Figures 5 through 10, respectively. Geologic cross sections A-A' through D-D' were prepared following the completion of the RI and are included in the RI report (URS, 2014).

4.1 Site Geology

The Site is located on the south slope of a southeast – northwest trending ridge with the center of the Site at an approximate elevation of 550 feet above MSL (Figure 1). The axis of the ridge slopes downward from the Site for approximately one-half mile to Wilson Creek, an eastward flowing perennial stream, where the elevation is approximately 470 feet msl. Two, intermittent, unnamed tributaries (UT) to Wilson Creek flow southeastward within moderately incised ravines located approximately 500 feet east of, and approximately 2,100 feet west of the Site.

The predominant soils at the Site are mapped as Cecil sandy loam and Cecil sandy clay loam, each occurring on slopes of 2 to 6 percent and 6 to 10 percent [United States Department of Agriculture (USDA), 2014]. These soils are approximately equivalent to silty sand (SM) and clayey sand (SC), respectively in the Unified Soil Classification System (USCS). Cecil series soils are formed in the residuum of felsic, igneous, and high-grade metamorphic rocks and typically occur on ridges and the sides of upland slopes. The soils are well drained and exhibit a moderately high to high capacity to transmit water.

The Site is located in the Southern Appalachian Piedmont physiographic province within the Charlotte thrust sheet. As shown on the cross-sections (see Figures 5 through 10), three geologic units have been identified beneath the soil layer. They are near-surface fill, most likely placed during site development; the regolith, which is composed entirely of saprolite at the Site; and the underlying bedrock.

Based on the Geologic Map of the Greenville 1X2 Quadrangle, Georgia, South Carolina, and North Carolina (Nelson et al., 1998), bedrock underlying the Site is granitic to dioritic gneiss of Mississippian age. The gneiss is light to dark gray, medium to coarse-grained, with xenomorphic granular to porphyritic texture, and contains varying amounts of quartz, plagioclase, biotite, hornblende, epidote, titanite, and zircon.

Micaceous silt and sandy silt are the principal components of the regolith underlying the Site. Interlayered with the silts are lesser amounts of silty sand and sand. The layering appears to alternate randomly suggesting a high degree of variation over short distances, examples of which are evident in the lithologic descriptions of boring logs for wells installed in clusters. The silty sand and sand occur most commonly in relatively thin, nearly flat-lying seams and layers that typically are between one and five feet thick but occasionally exceed ten feet in thickness. Minor amounts of sandy clay and clay are also present, but are rare.

The color of the regolith varies widely across the Site. Generally, however, the silts are brown to reddish brown east of the Building and some variation of brown, gray, or olive south of the Building and in the central part of the property. Throughout the Site, the sands are typically white in color but, occasionally, may be light gray or light brown. Clays, like the silts, typically exhibit some variation of brown, gray, or olive.

The thickness of the regolith is a function of the depth to bedrock and is highly variable ranging from approximately 24 feet near the northern corner of the Building to approximately 105 feet at well MW-5D (see Figure 9). The collective soil boring data suggest that the bedrock surface attains a maximum elevation near the northeast corner of

the Building and, consequently, the regolith thickness is lowest here. Inspection of this area on earlier topographic maps indicates that grading performed during plant construction removed as much as 10 feet of the regolith.

4.2 Site Hydrogeology

Groundwater at the Site occurs within a two-layer system that includes the regolith and the underlying bedrock as component hydrostratigraphic units. The regolith, which is directly connected to fractures in the bedrock, serves as a reservoir that provides water to the fractured bedrock. Groundwater is unconfined with the water table located within the regolith beneath most of the Site. However, near the northeast corner of the Building, where the top of bedrock appears shallowest, the regolith is dry and the water table occurs in the bedrock.

As seen in Table 4, the water table is generally between 15 and 35 feet below land surface. Potentiometric surface contour maps based on July 28, 2015 depth-to-water measurements (summarized in Table 4) are depicted on Figures 11 and 12, and illustrate the potentiometric surface in the upper and lower parts of the regolith, respectively. Both maps show that groundwater flow across the Site is primarily to the east and southeast toward the UT to Wilson Creek located approximately 500 feet east of the Site. The water-level contours also suggest a flow component toward the east in the area north of monitoring well MW-7. This interpretation is in general agreement with historical interpretations of groundwater flow. It also agrees with the principal joint direction in bedrock estimated from the orientation of stream channels in the area. However, as discussed in the RI report, PCE migration also exhibits a southerly component suggesting that the actual groundwater flow direction may vary from that interpreted from the water-level measurements.

At the time of sampling, the average horizontal hydraulic gradient in the upper regolith was 0.032feet per foot (ft/ft). The gradient varied with location ranging from 0.021 near the western property line south of well MW-12, increasing to 0.051 east of the Building. The

horizontal hydraulic gradient in the lower part of the regolith also varied with location at the time of sampling ranging from 0.025 east of well MW-10D to 0.040 north of well MW-22D. The horizontal hydraulic gradient in the lower part of the regolith averaged 0.01.

The K value of the regolith, which is a function of the degree of weathering, is notably consistent and occurs over a relatively narrow range of values. The results of multiple rising-head and falling-head slug tests performed during the RI range from 1.3E-05 centimeters per second (cm/sec) at well MW-5D to 4.1E-04 cm/sec at well MW-16D. Average K values for silt, silt and clay, and silty sand are 5.3E-05, 5.7E-05, and 1.0E-04 cm/sec, respectively. These values are consistent with values cited in the literature for clayey sand, silt, silty sand, and fine sand (Fetter, 1980) but are lower (by less than an order-of-magnitude) than K attributed to saprolite in the Piedmont region by Heath (1980).

Average groundwater velocity in the upper regolith was approximately 19 feet per year, based on a gradient of 0.038 between the source areas and well MW-13, an effective porosity of 0.2, and a K of 1.0E-04 cm/sec or 0.28 feet/day. This K value is characteristic of the silty sands at the Site through which groundwater would be expected to flow preferentially.

Vertical hydraulic gradients are summarized in Table 5 and indicate that upward gradients were measured at wells MW-5D and MW-9D and downward gradients were measured at MW-10D and MW-16D. These results are consistent with those observed during the RI. As noted in the RI report, the upward gradients were unexpected as the Site appears to be located on an interfluve, which typically is a groundwater recharge area and characterized by downward gradients throughout. However, the data suggest that while downward gradients occur in the central part of the facility, areas located farther east may be influenced by the UT to Wilson Creek. Installation of an intermediate well at the MW-10R/10D pair, revealed that the gradient from the intermediate interval is both upward and downward. Although unusual in occurrence it is not unheard of and may reflect the different soil textures that the wells are screened in.

Consistent with the slope aquifer concept described in the RI report, the groundwater flow regime occurs within a closely-spaced stream network. Water enters the system on interfluvial recharge areas, percolates to the saturated zone, where it flows toward the streams and discharges as baseflow. Consequently, groundwater flow paths through the Site are relatively short. They are restricted to the area of the slope extending from the ridge top northwest of the Site to Wilson Creek, a distance of approximately 9,000 feet. Flow path length from the Site to Wilson Creek is approximately 3,000 feet. The lateral extent, along the topographic slope, is bounded by a perennial tributary to Wilson Creek located approximately 4,000 feet west of the Site and Coronaca Creek located approximately 6,100 feet east of the Site. However, if the upward hydraulic gradients measured at wells MW-5D and MW-9D are due to groundwater discharging to the UT located east of the Site, the location of the eastern boundary of the groundwater compartment is reduced to only 500 feet from the Site.

5.0 NATURE AND EXTENT OF CONTAMINATION

This section describes the nature and extent of contamination detected in soil and groundwater at the Site. The data presented in this section and the associated discussion include results from the SRI in addition to previous phases of investigation at the Site completed by URS in 2011, 2012 and 2014 (URS, 2012a; URS, 2012c; URS, 2012d; URS 2014). The soil and groundwater samples collected during the SRI were analyzed by Shealy Environmental Services (SES) in accordance with the methods described in the quality assurance project plan (QAPP) (URS, 2013a). The analytical laboratory reports for the samples collected during the SRI are included in Appendix I.

Data collected during the SRI were validated in accordance with the procedures discussed in the Supplemental Work Plan (URS, 2015) and outlined in the QAPP (URS, 2013a). Data quality review memoranda are included in Appendix D. Groundwater analytical results of constituents detected during the SRI and previous phases of investigation are summarized in Table 6. The results presented in this table include data qualifiers added during the data quality review. As described in more detail in the data quality review memoranda, the data as qualified are considered useable for meeting project objectives.

5.1 Chemicals of Concern (COCs)

This section identifies the screening criteria for COCs that have been detected in soil and groundwater during SRI activities and previous phases of investigation at the Site. Analytical results for VOC and PAH analyses were compared to the preliminary screening levels (PSLs) for soil and groundwater. The PSLs, developed as part of the RI Work Plan (URS, 2013a), consider potentially applicable pathways including direct contact (i.e., ingestion, dermal contact, and inhalation) and cross-media transfer pathways (i.e., leaching to groundwater) and different land use scenarios (i.e., residential and industrial). VOCs and PAHs that exceed the PSLs are considered to be COCs at the Site.

The PSLs are based on the EPA's Region IV Regional Screening Levels (RSLs) (EPA, 2015) and risk-based screening levels (RBSLs) developed by SCDHEC (2001). PSLs for soil and

groundwater are included in the RI Report (URS, 2014). Results from the SRI and previous investigations are described in the context of these screening levels later in this section of the SRI Report.

5.1.1 Soil

Three potentially applicable soil screening levels (SSLs) are included in the EPA RSLs: 1) MCL-based for Protection of Groundwater SSLs; 2) Resident Soil SSLs; and 3) Industrial Soil SSLs (EPA, 2015). Other potentially applicable SSLs are the RBSLs listed in the SCDHEC's Risk-Based Corrective Action (RBCA) guidance document (SCDHEC, 2001). Based on comparison of the soil analytical results to the SSLs, the following COCs have been identified in soil at the Site:

- PCE
- TCE
- cDCE
- 1,1-Dichloroethene
- 1,1,2-Trichloroethane
- Dibromochloromethane
- Methylene Chloride
- Naphthalene
- Ethylbenzene
- Xylenes
- Benzo(a)pyrene
- Benzo(b)fluoranthene

5.1.2 Groundwater

The screening levels for groundwater are based on the EPA's Region IV MCLs, which are based on National Primary Drinking Water Standards (EPA, 2015) and the RBSLs, established by SCDHEC and listed in the RBCA guidance document (SCDHEC, 2001). Based on comparison of the groundwater analytical results to the MCLs and RBSLs, the following

COCs that have been identified in groundwater at the Site:

- PCE
- TCE
- cDCE
- Benzene
- Naphthalene
- 1,2-Dichloropropane
- Vinyl Chloride

5.2 Soil Results

As part of the SRI, a single soil sample was collected from 49 to 50 feet bgs from the boring of groundwater monitoring well MW-10I. PCE was detected in the soil sample at a concentration of 0.17 milligrams per kilogram (mg/kg), which exceeds the protection of groundwater SSL of 0.0023 mg/kg.

5.3 Groundwater Results

For the SRI, groundwater samples were collected from monitoring wells MW-1 through MW-9, MW-10R, MW-10I, MW-11 through MW-14, MW-15R, MW-16 through MW-21, MW-5D, MW-9D, MW-10D, MW-16D and MW-22D. All samples were analyzed for VOCs and the sample from well MW-3 was also analyzed for PAHs. Groundwater analytical results are summarized in Table 6 and on Figures 11 and 12.

VOCs and/or PAHs were detected in 26 of the 27 groundwater monitoring wells sampled. Detected compounds included PCE, TCE, cDCE, and benzene. Results exceeding the MCL and RBSL are listed below:

- Concentrations of PCE exceeding the EPA MCL of 5 µg/l were detected in wells MW-1 (7.7 µg/L), MW-3 (13 µg/L), MW-5 (4,000 µg/L), MW-6 (9,600 µg/L), MW-7 (100,000 µg/L), MW-8 (20,000 µg/L), MW-10R (2,900 µg/L), MW-10I (15,000 µg/L), MW-12 (4,800 µg/L), MW-14 (150 µg/L), MW-16 (110 µg/L), MW-17 (690 µg/L),

MW-20 (360 µg/L) and MW-16D (30 µg/L).

- The TCE concentrations in monitoring wells MW-5 (10 µg/L) and MW-17 (8.3 µg/L) exceeded the MCL of 5 µg/L.
- The cDCE concentrations in monitoring wells MW-3 (280 µg/L) and MW-5D (130 µg/L) exceeded the MCL of 70 µg/L.
- Benzene was detected in MW-3 at a concentration of 10 µg/L, which exceeded the MCL of 5 µg/L.
- Naphthalene was detected at well MW-3 at a concentration of 190 µg/L which exceeded the RBSL of 25 µg/L. There is no established MCL for naphthalene.

6.0 CONCLUSIONS

Presented below are conclusions based on an evaluation of data collected during previous investigations and the recently conducted SRI field activities.

6.1 Summary of Groundwater Data

Groundwater analytical data indicates that the MCL of 5 µg/L for PCE was exceeded in 14 of the 27 groundwater monitoring wells sampled during recent SRI field activities. PCE degradation products including TCE, cDCE were detected at concentrations exceeding MCLs in 4 of the 27 wells. Benzene and naphthalene exceeded the MCL or RBSL in one well, which was MW-3.

The steel sump source area had the most significant impact of PCE in the shallow zone with a concentration of 100,000 µg/L at MW-7. Nearby wells MW-6 and MW-8 had PCE concentrations of 9,600 µg/L and 20,000 µg/L, respectively. Monitoring wells MW-10I, MW-10R and MW-14, all located more than 400 feet south of the steel sump area, had PCE concentrations of 15,000 µg/L, 2,900 µg/L and 150 µg/L, respectively. PCE was not detected above the reporting limit in well MW-15R, located near the south property boundary of the Site and the PCE concentrations in well MW-19 near the southwest corner of the Site was below the MCL, indicating the plume is well defined in this direction. The western edge of the PCE plume also appears to be well defined with detections in wells MW-11, MW-18, and MW-21 all below the MCL.

Based on the detected PCE concentrations in monitoring wells MW-5, MW-12 and MW-20 of 4,000 µg/L, 4,800 µg/L and 360 µg/L, respectively, the impacts in the shallow and intermediate zones are migrating from the cardboard storage room area and potentially the steel sump source area toward the east property boundary. Monitoring well MW-20 is located approximately 50 feet from the east property boundary. Monitoring well MW-17, located beneath the Building on the Site had a PCE concentration of 690 µg/L, which is likely attributed to releases at the cardboard storage room source area.

Benzene and naphthalene were detected in monitoring well MW-3 located near the UST source area. Both constituents exceeded PSLs. Benzene was detected at a concentration of 10 µg/L, which exceeded the MCL of 5 µg/L and naphthalene was detected at a concentration of 190 µg/L, which exceeded the RBSL of 25 µg/L.

The groundwater data from the five deep monitoring wells on the Site indicates that PCE impacts are primarily confined to the wells screened in the shallow and intermediate zones of the aquifer. Monitoring well MW-16D, located approximately 150 feet south of the steel sump source area, had a PCE concentration of 30 µg/L, exceeding the MCL. Remaining monitoring wells MW-5D, MW-9D and MW-10D had slight detections of PCE below the MCL while PCE was not detected above the reporting limit in newly installed well MW-22D.

6.2 Summary of Hydrogeology

The Site is located within a groundwater compartment that is bounded by a Wilson Creek, a perennial stream, to the south and a ridgeline to the north. Consequently, groundwater flow paths are relatively short as groundwater rarely underflows a perennial stream for a more distant stream. The lateral extent, along the slope, is less distinct, but may be formed by tributaries to Wilson Creek.

The water table occurs at a depth of approximately 24 to 34 feet bgs within the upper portion of the regolith, which consists of saprolite that is composed primarily of silt and sandy silt. Water levels have fluctuated seasonally as much as eight feet since monitoring wells were installed in 2012.

The Site is located along a ridge top and shallow groundwater east of the Building flows to the east, and south of the Building it flows to the southeast. Hydraulic conductivity may be higher parallel to the alignment of relict structures (foliation, bedding planes, fractures, and joints) within the saprolite that appear to be aligned northwest-southeast. While this is consistent with the groundwater flow direction interpreted from water-level elevation contour maps, the configuration of the PCE plume suggests a more southerly or southwesterly flow direction than inferred from the groundwater elevation contours.

The hydraulic conductivity of the saprolite ranges from approximately 1.3E-05 to 4.1E-04 cm/sec. Groundwater is expected to preferentially flow through the coarser and less weathered portions of the saprolite (e.g., silty sands and sandy silts).

Vertical hydraulic gradients vary at the Site with downward gradients occurring in the central part of the facility, and upward gradients located farther east, which are possibly influenced by potential discharge of groundwater to the UT to Wilson Creek.

6.3 Summary Contaminant Fate and Transport

Releases of PCE, benzene and naphthalene in the identified source areas, combined with the infiltration of precipitation, have resulted in the migration of these COCs, and their degradation products downward through the soil and saprolite and into the shallow groundwater. On the eastern side of the Building, releases of PCE, benzene and naphthalene have migrated to the east and southeast toward the unnamed tributary of Wilson Creek. The benzene and naphthalene released from the UST system appear to attenuate naturally over relatively short distances, while PCE released near the cardboard storage room appears to migrate downgradient to wells MW-12, MW-5, and MW-20. These three wells are located east of the cardboard storage room and the easterly groundwater flow direction would appear to transport the PCE contamination toward these wells. The concentrations in this area decrease to levels below the PSL in well MW-13, approximately 500 feet to the southeast of the release. The release(s) at the steel sump area have migrated through shallow groundwater to the south, with elevated concentrations detected downgradient at wells MW-10R, MW-10I and MW-14. Concentrations attenuate to levels below the PSL further downgradient at wells MW-15R and MW-19 located approximately 600 feet and 700 feet downgradient of the steel sump area, respectively.

The relatively low permeability of the saprolite and the upward hydraulic gradient at some locations appears to have limited the downward movement of PCE affected groundwater to the deeper wells. This is evidenced by concentrations in deeper wells typically being 1 to 3 orders of magnitude less than the concentrations in their paired shallow wells. For

example, the PCE concentration in shallow well MW-10R was 2,900 µg/L, while the concentration in the deeper paired well MW-10D was 2.2 µg/L. However, the PCE concentration of 15,000 µg/L in monitoring well MW-10I, which is screened between MW-10R and MW-10D, indicates that elevated concentrations of COCs are present within the intermediate zone of the regolith. Elevated concentrations of COCs have also been detected in the other wells screened in portions of the regolith that appear to correspond to this intermediate zone (i.e., MW-12 and MW-20).

PCE degradation products including TCE, cDCE, and VC were detected in 7 of the 22 shallow wells and 1 of the 5 deeper wells. The concentrations of the degradation products were generally two or more orders of magnitude less than the PCE concentrations, suggesting limited reductive dehalogenation, with the exception of wells MW-3 and MW-5D where the cDCE concentration was higher than the PCE concentration. It should also be noted that the PCE and naphthalene plumes are collocated at MW-3.

Low concentrations of PCE are widely detected in vadose zone soil overlying the PCE plume in the shallow water bearing zone. Beyond the immediate vicinity of the identified source areas, these low concentrations appear to be related to dissolution of the PCE in the shallow groundwater from the dissolved phase into the vapor phase and then adsorption onto the soil. Higher concentrations of PCE detected in soil below the water table, within the zone of water table fluctuation, or in capillary fringe are attributed to dissolved phase transport in the groundwater from the source areas.

7.0 REFERENCES

- Greenwood County website, Greenwood County, South Carolina (www.greenwoodsc.gov). July 22, 2014.
- Fetter, C.W., 1980. Applied Hydrogeology: Charles E. Merrill Publishing Co.
- Heath, R.C., 1980. Basic Elements of Ground-water Hydrology with Reference to Conditions in North Carolina: OFR 80-44. United States Geological Survey.
- Nelson, A.E. et al., 1998. Geologic Map of the Greenville 1X2 Quadrangle, Georgia, South Carolina, and North Carolina: Miscellaneous Investigations Series Map I-2175.
- United States Department of Agriculture, 2014. Natural Resources Conservation Service,. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/>. Accessed April 16, 2014.
- South Carolina Department of Health and Environmental Control, 2001. South Carolina Risk-Based Corrective Action for Petroleum Releases. May 15.
- South Carolina Department of Health and Environmental Control, 2015. Supplemental *Work Plan for Continued Groundwater Investigation Approval Letter*. May 14.
- URS France, 2007. *Phase I Environmental Site Assessment Update, Actaris Liquid Measurement, LLC, 1310 Emerald Road, Greenwood, South Carolina*. February.
- URS, 2011. *Phase I Environmental Site Assessment. Itron, Inc., 1310 Emerald Road, Greenwood, South Carolina*. URS Corporation, Greenville, South Carolina. December 13.
- URS, 2012a. *Phase II Environmental Assessment Report, Itron, Inc., 1310 Emerald Road, Greenwood, South Carolina*. URS Corporation, Greenville, South Carolina. January 25.
- URS, 2012c. *Soil and Groundwater Assessment Report, Itron, Inc., 1310 Emerald Road, Greenwood, South Carolina*. URS Corporation, Greenville, South Carolina. June 13.
- URS, 2012d. *Groundwater Monitoring Report, Itron, Inc., 1310 Emerald Road, Greenwood, South Carolina*. URS Corporation, Greenville, South Carolina. September 21.
- URS, 2013a. *Remedial Investigation Work Plan, Itron, Inc., 1310 Emerald Road, Greenwood, South Carolina*. URS Corporation, Greenville, South Carolina. November.

URS, 2013b. *Health and Safety Plan, Itron, Inc., 1310 Emerald Road, Greenwood, South Carolina.* URS Corporation, Greenville, South Carolina. November.

URS, 2014. *Remedial Investigation Report, Itron, Inc., 1310 Emerald Road, Greenwood, South Carolina.* URS Corporation, Greenville, South Carolina. October.

URS, 2015. *Supplemental Work Plan for Continued Groundwater Investigation, Itron, Inc., 1310 Emerald Road, Greenwood, South Carolina.* URS Corporation, Greenville, South Carolina. April 27.

US EPA (Environmental Protection Agency), 2015. *Region IV Regional Screening Level (RSL) Table.* June.

USGS (United States Geological Survey), 1978. 7.5-Minute Series Topographic Map, Ninety Six Quadrangle, South Carolina.

Tables

Table 1 - Previous Investigations

**Itron, Inc.,
Greenwood, South Carolina**

Previous Investigation	Date	Investigation Activities and Qualitative Results
Phase I Environmental Site Assessment (ESA)	December 2011	<p>A Phase I ESA was performed using readily available information to identify Recognized Environmental Conditions (RECs). The ESA included a reconnaissance of the site, a drive-by survey of the surrounding area, review of company records and publicly available information, and interviews with plant personnel and representatives of regulatory and other public agencies. URS reviewed information in the radius map report provided by Environmental Data Resources (EDR), a previous Phase I ESA conducted by URS France in 2007, a UST removal report from Jones & Frank of Greenville, South Carolina documenting removal of four (4) USTs in September 1987 and a hazardous material spill incident report from Actaris US Liquid Measurement from January 31, 2004.</p> <p><u>Three RECs were identified:</u></p> <ul style="list-style-type: none">1) Four former petroleum USTs that were removed from the northeast side of the plant building in 1987.2) An oil-water separator (OWS) and associated piping located near the southwest corner of the plant building.3) An area near the paint booth where facility personnel reportedly used tetrachloroethene (PCE) to clean paint guns in 1978. <p>Based on these findings, a Phase II ESA was recommended.</p> <p><u>Four Historic RECs were identified:</u></p> <ul style="list-style-type: none">1) Leaking Underground Storage Tank (LUST) incident reported August 28, 2009.2) A 10-gallon waste oil/coolant release on July 17, 1992.3) A spill of approximately 13 gallons of mineral spirits outside the test room on the east side of the building on April 29, 2009.4) A spill of approximately 5,162 gallons of mineral spirits 66 in a test room on site on January 31, 2004. <p>The Historic RECs appear to have all been resolved with the appropriate agencies.</p>

Previous Investigation	Date	Investigation Activities and Qualitative Results
Phase II Environmental Site Assessment	January 2012	A Phase II ESA was performed to address the RECs identified during the Phase I ESA to determine if soil and groundwater had been affected by historic activities at the site. The Phase II ESA included collecting 19 soil samples from 11 borings and collecting a groundwater sample from each of nine temporary monitoring wells. PCE was detected in soil and groundwater along the eastern, southeastern and northeastern sides of the plant building. Trichloroethene (TCE) and cis-1,2-dichloroethene (cDCE), degradation products of PCE, were also detected in the soil at concentrations exceeding preliminary screening levels. Benzene and naphthalene were detected in soil and/or groundwater near the former location of the USTs at concentrations exceeding preliminary screening levels. No impacts to soil and groundwater were detected near the OWS. Based on the results on the southeastern, eastern and northeastern sides of the plant building, further assessment of soil and groundwater was recommended.
Soil & Groundwater Site Assessment	March – April 2012	Soil and groundwater were sampled to assess the sources and extent of PCE in soil and shallow groundwater. The assessment included screening soil and groundwater with a membrane interface probe (MIP), soil borings, installing monitoring wells, and collecting and analyzing soil and groundwater samples. Eleven soil borings were advanced and 23 soil samples were collected. Eleven monitoring wells were installed and sampled. Two potential source areas of PCE were identified: one along the northeast side of the plant building near boring SB-3 and the other near the steel sump located on the southeast side of the plant building. The distribution of PCE in groundwater was partially delineated and found to extend at least 400 feet southeast of the suspected source areas. In addition, benzene was detected in groundwater along the northeast side of plant building at concentrations exceeding preliminary screening levels. Based on the results, further characterization was recommended.
Indoor Air Quality Investigation	March – April 2012	Indoor air quality samples were collected from the plant building during closed door and open door testing events. PCE and TCE exceeded screening levels at one location during the closed door test. No screening levels were exceeded during the open door test. Subsequent testing was performed by fitting employees with individual sampling devices. Based on these results, no further measures related to indoor air quality were considered necessary.
Groundwater Sampling	August 2012	Groundwater samples were collected from the 11 monitoring wells to confirm the results of sampling performed in April. Results were comparable with PCE, cDCE, and benzene being reported at concentrations above preliminary screening levels.

Previous Investigation	Date	Investigation Activities and Qualitative Results
Remedial Investigation (RI)	March – July 2014	<p>The Remedial Investigation (RI) included the advancement of soil borings located within and adjacent to the Building and near a debris pile located in a wooded area east of the Building, installation of shallow and deep groundwater monitoring wells and investigation of a suspected drain line associated with a steel sump on the south side of the Building. Soil and/or groundwater samples were collected from 41 soil borings, 7 shallow monitoring wells and 4 deep monitoring wells. Groundwater samples were also collected from 11 existing shallow monitoring wells. The drain line investigation was terminated when it was determined there was no drain line connected to the steel sump.</p> <p>The subsurface investigations identified three geologic units beneath a thin soil layer at the Site. They are near-surface fill, most likely placed during site development; the regolith which is composed entirely of saprolite; and the underlying bedrock. The groundwater table occurs at a depth of approximately 20 to 30 feet below ground surface (bgs) within the upper portion of the saprolite, which primarily consists of silt and sandy silt. The Site is located along a ridge top and shallow groundwater east of the Building flows to the east and south of the Building flows to the south.</p> <p>The collective results of the previous investigations and the RI indicate the presence of three potential source areas including the steel sump area located near the southeast corner of the Building, the cardboard storage room area located east of the Building, and an area near the northeast corner of the Building where four underground storage tanks (USTs) and a gasoline dispenser were formerly located. Results for soil samples collected beneath the Building and near the debris pile located east of the Building indicate that these areas are not significant sources. PCE is the primary chemical of concern (COC) at the Site while lower concentrations of degradation products (i.e., TCE and cDCE) were also detected. PCE exceeded Preliminary Screening Levels (PSLs) in soil and groundwater samples collected from all three source areas, with the highest concentrations being detected in the vicinity of the steel sump and cardboard storage room areas. Field screening of soil samples using hydrophobic dye and gauging of wells with the highest concentrations of PCE with an interface probe did not detect dense non-aqueous phase liquid (DNAPL) at the Site.</p> <p>Petroleum hydrocarbons and polynuclear aromatic hydrocarbons (PAHs) were also detected at the Site. Benzene, naphthalene, ethylbenzene, xylenes, benzo(a)pyrene, and benzo(b)fluoranthene exceeded PSLs in soil and/or groundwater samples collected in the vicinity of the former UST and gasoline dispenser and cardboard storage room areas.</p>

Table 2
Chronological Summary of Remedial Investigation Field Activities

Itron, Inc.,
Greenwood, South Carolina

Date	Task	Purpose
7/13/15 – 7/17/15	Locate underground utilities for all proposed monitoring well locations.	Prevent damage to underground utilities and avoid injury to personnel working onsite.
	Construct temporary fence with blinder material near Northeast corner of the building and build secondary containment area.	Provide area to stage Investigative Derived Waste (IDW) from remedial investigation activities.
	Install monitoring wells MW-10I, MW-10R, MW-15R, MW-19 through MW-21 and MW-22D using a sonic drill rig. Screen soil cuttings for volatile organic vapor using a PID. Use dye-shake testing to screen all soil samples exhibiting PID readings greater than 100 ppm for DNAPL. Collect soil samples from various depths for laboratory analysis. Containerize soil cuttings and water/fluids used during the drilling process.	Classify soils, assess hydrogeologic conditions and further delineate the nature and extent of contaminants across the site.
7/22/15 – 7/23/15	Develop monitoring wells MW-10I, MW-10R, MW-15R, MW-19 through MW-21 and MW-22D.	Remove a sufficient amount of water to flush the filter pack in each well and allow proper groundwater movement into the wells.
	Conduct survey of all newly installed monitoring wells onsite including MW-10I, MW-10R, MW-15R, MW-19 through MW-21 and MW-22D.	Determine top of casing and ground surface elevations and horizontal coordinates for all newly installed monitoring wells.

Table 2
Chronological Summary of Remedial Investigation Field Activities

Itron, Inc.,
Greenwood, South Carolina

Date	Task	Purpose
7/28/15 – 7/29/15	Measure water levels and collect groundwater samples from all monitoring wells (MW-1 through MW-9, MW-10R, MW-10I, MW-11 through MW14, MW-15R, MW-16 through MW-21, MW-5D, MW-9D, MW-10D, MW-16D and MW-22D).	Obtain data to prepare potentiometric surface contour maps and calculate vertical gradients as well as determine groundwater quality conditions across the site.
9/1/15	Twenty-six (26) drums of IDW (e.g., soil cuttings, purge water, development water, and decontamination fluids) generated during field activities in July 2015 were picked up and transported offsite for disposal.	Document proper disposal of IDW generated during Remedial Investigation.

Table 3
Groundwater Monitoring Well Construction Details

Itron, Inc.
Greenwood, South Carolina

Monitoring Well	Well Diameter	Depth of Well	Screen Length	Screen Interval	Stratigraphic Unit	Top of Well Casing Elevation	Ground Surface Elevation	Screen Interval Elevation	Coordinates	
	inches	feet bgs	feet	feet bgs		feet above msl	feet above msl	feet above msl	Northing	Easting
MW-1	2	31.5	10	21.5 - 31.5	Shallow Regolith	557.74	558.15	526.6 - 536.6	869224.644	1667988.237
MW-2	2	34.8	10	24.8 - 34.8	Shallow Regolith	562.30	562.62	527.8 - 537.8	869207.038	1668204.679
MW-3	2	47.0	10	37.0 - 47.0	Shallow Regolith	561.84	562.14	515.1 - 525.1	869104.002	1668261.237
MW-4	2	46.8	10	36.8 - 46.8	Shallow Regolith	558.86	555.46	508.6 - 518.6	868958.364	1668477.977
MW-5	2	47.9	10	37.9 - 47.9	Shallow Regolith	552.86	549.36	501.4 - 511.4	868892.212	1668553.549
MW-6	2	38.0	10	28.0 - 38.0	Shallow Regolith	559.43	559.71	521.7 - 531.7	868936.457	1668319.405
MW-7	2	37.4	10	27.4 - 37.4	Shallow Regolith	560.33	560.62	523.2 - 533.2	868894.361	1668279.797
MW-8	2	55.6	10	45.6 - 55.6	Shallow Regolith	557.19	557.55	501.9 - 511.9	868870.317	1668410.386
MW-9	2	52.3	10	42.3 - 52.3	Shallow Regolith	553.65	553.90	501.6 - 511.6	868681.764	1668650.676
MW-10	1	35.1	5	30.1 - 35.1	Shallow Regolith	551.07	551.42	516.3 - 521.3	868593.655	1668484.530
MW-10R	2	35.1	10	25.1 - 35.1	Shallow Regolith	551.03	551.20	511.3 - 521.3	868588.385	1668490.999
MW-11	2	40.4	10	30.4 - 40.4	Shallow Regolith	560.17	560.45	520.0 - 530.0	868712.965	1668117.285
MW-12	2	68.3	10	58.3 - 68.3	Intermediate Regolith	565.93	562.93	494.6 - 504.6	869049.750	1668419.153
MW-13	2	40.0	10	30.0 - 40.0	Shallow Regolith	550.17	547.07	507.0 - 517.0	868815.677	1668779.111
MW-14	2	46.0	10	36.0 - 46.0	Shallow Regolith	549.95	550.36	504.3 - 514.3	868458.767	1668332.200
MW-15	2	38.0	10	28.0 - 38.0	Shallow Regolith	557.20	554.10	516.1 - 526.1	868370.465	1668655.810
MW-15R	2	49.5	10	39.5 - 49.5	Shallow Regolith	556.96	553.89	504.4 - 514.4	868379.662	1668655.571
MW-16	2	36.3	10	26.3 - 36.3	Shallow Regolith	556.51	556.92	520.6 - 530.6	868782.253	1668386.285
MW-17	2	45.3	15	35.3 - 45.3	Shallow Regolith	561.75	562.05	516.7 - 531.7	869005.623	1668192.860
MW-18	2	39.0	10	29.0 - 39.0	Shallow Regolith	556.76	556.96	517.9 - 527.9	869009.841	1667664.807
MW-19	2	49.2	10	39.2 - 49.2	Shallow Regolith	548.37	545.41	496.2 - 506.2	868198.167	1668401.225
MW-20	2	59.0	10	49.0 - 59.0	Intermediate Regolith	545.47	542.50	483.5 - 493.5	868910.129	1668743.381
MW-21	2	42.5	10	32.5 - 42.5	Shallow Regolith	548.80	548.90	506.4 - 516.4	868425.395	1668091.680
MW-10I	2	57.9	10	47.9 - 57.9	Intermediate Regolith	551.10	551.30	493.4 - 503.4	868601.768	1668468.066
MW-5D	2	74.0	5	69.0 - 74.0	Deep Regolith	554.14	551.24	477.2 - 482.2	868879.078	1668537.552
MW-9D	2	76.5	5	71.5 - 76.5	Deep Regolith	553.77	554.15	477.6 - 482.6	868671.574	1668643.253
MW-10D	2	76.0	5	71.0 - 76.0	Deep Regolith	550.85	549.95	473.9 - 478.9	868586.308	1668469.047
MW-16D	2	75.8	5	70.8 - 75.8	Deep Regolith	556.78	557.25	481.4 - 486.4	868776.648	1668370.548
MW-22D	2	79.0	5	74.0 - 79.0	Deep Regolith	549.27	546.32	472.3 - 477.3	868855.353	1668766.548

Notes:

1. bgs = below ground surface
2. msl = mean sea level
3. MW-15R - "R" indicates replacement well.

Table 4
Groundwater Monitoring Well Elevations
Current (July 2015) and Historical

Itron, Inc.
Greenwood, South Carolina

Monitoring Well	Well Diameter	Depth of Well	Screen Length	Screen Interval	Top of Well Casing Elevation	7/28/2015		6/4/2014		8/23/2012		4/19/2012	
						Depth to Water	Groundwater Elevation						
	inches	feet bgs	feet	feet bgs	feet above msl	feet below toc	feet above msl	feet below toc	feet above msl	feet below toc	feet above msl	feet below toc	feet above msl
MW-1	2	31.5	10	21.5 - 31.5	557.74	22.89	534.85	22.08	535.66	26.88	530.86	26.06	531.68
MW-2	2	34.8	10	24.8 - 34.8	562.30	29.49	532.81	28.63	533.67	33.42	528.88	32.62	529.68
MW-3	2	47.0	10	37.0 - 47.0	561.84	27.50	534.34	27.80	534.04	32.43	529.41	34.23	527.61
MW-4	2	46.8	10	36.8 - 46.8	558.86	30.14	528.72	27.90	530.96	30.50	524.63	28.93	526.20
MW-5	2	47.9	10	37.9 - 47.9	552.86	28.34	524.52	25.99	526.87	29.12	520.00	27.11	522.01
MW-6	2	38.0	10	28.0 - 38.0	559.43	25.56	533.87	25.33	534.10	29.45	529.98	28.52	530.91
MW-7	2	37.4	10	27.4 - 37.4	560.33	26.02	534.31	26.12	534.21	29.89	530.44	28.96	531.37
MW-8	2	55.6	10	45.6 - 55.6	557.19	27.41	529.78	25.18	532.01	31.94	525.25	30.37	526.82
MW-9	2	52.3	10	42.3 - 52.3	553.65	33.99	519.66	33.35	520.30	39.51	514.14	39.10	514.55
MW-10	1	35.1	5	30.1 - 35.1	551.07	25.28	525.79	22.59	528.48	30.60	520.47	27.56	523.51
MW-10R	2	35.1	10	25.1 - 35.1	551.03	25.55	525.48	--	--	--	--	--	--
MW-11	2	40.4	10	30.4 - 40.4	560.17	26.05	534.12	25.19	534.98	29.82	530.35	28.23	531.94
MW-12	2	68.3	10	58.3 - 68.3	565.93	38.19	527.74	36.50	529.43	--	--	--	--
MW-13	2	40.0	10	30.0 - 40.0	550.17	32.19	517.98	31.65	518.52	--	--	--	--
MW-14	2	46.0	10	36.0 - 46.0	549.95	22.25	527.70	20.43	529.52	--	--	--	--
MW-15	2	38.0	10	28.0 - 38.0	557.20	37.50	519.70	36.76	520.44	--	--	--	--
MW-15R	2	49.5	10	39.5 - 49.5	556.96	37.28	519.68	--	--	--	--	--	--
MW-16	2	36.3	10	26.3 - 36.3	556.51	24.44	532.07	22.79	533.72	--	--	--	--
MW-17	2	45.3	15	35.3 - 45.3	561.75	27.29	534.46	27.62	534.13	--	--	--	--
MW-18	2	39.0	10	29.0 - 39.0	556.76	21.15	535.61	20.49	536.27	--	--	--	--
MW-19	2	49.2	10	39.2 - 49.2	548.37	27.76	520.61	--	--	--	--	--	--
MW-20	2	59.0	10	49.0 - 59.0	545.47	28.02	517.45	--	--	--	--	--	--
MW-21	2	42.5	10	32.5 - 42.5	548.80	17.32	531.48	--	--	--	--	--	--
MW-10I	2	57.9	10	47.9 - 57.9	551.10	24.32	526.78	--	--	--	--	--	--
MW-5D	2	74.0	5	69.0 - 74.0	554.14	29.56	524.58	27.21	526.93	--	--	--	--
MW-9D	2	76.5	5	71.5 - 76.5	553.77	33.56	520.21	32.88	520.89	--	--	--	--
MW-10D	2	76.0	5	71.0 - 76.0	550.85	26.60	524.25	24.93	525.92	--	--	--	--
MW-16D	2	75.8	5	70.8 - 75.8	556.78	28.96	527.82	26.30	530.48	--	--	--	--
MW-22D	2	79.0	5	74.0 - 79.0	549.27	32.27	517.00	--	--	--	--	--	--

Notes:

1. bgs = below ground surface
2. msl = mean sea level
3. toc = top of casing
4. -- Well was not installed at time of gauging event.

Table 5
Vertical Hydraulic Gradients

Ittron, Inc.
Greenwood, South Carolina

Monitoring Well Pairs	Top of Well Casing Elevation	Ground Surface Elevation	Screen Length	Screen Interval	Screen Interval Elevation	Screen Interval Midpoint	Difference in Screen Midpoint (Shallow - Deep)	7/28/2015		Difference in Groundwater Elevation (Shallow - Deep)	Vertical Gradient
	feet above msl	feet above msl	feet	feet bgs	feet above msl	feet above msl		feet above msl	feet below toc	feet above msl	
MW-5	552.86	549.36	10	37.9 - 47.9	501.4 - 511.4	506.46	26.72	28.34	524.52	-0.06	-0.0022
MW-5D	554.14	551.24	5	69.0 - 74.0	477.2 - 482.2	479.74		29.56	524.58		
MW-9	553.65	553.90	10	42.3 - 52.3	501.6 - 511.6	506.60	26.50	33.99	519.66	-0.55	-0.0208
MW-9D	553.77	554.15	5	71.5 - 76.5	477.6 - 482.6	480.10		33.56	520.21		
MW-10R	551.03	551.20	10	25.1 - 35.1	511.3 - 521.3	516.30	39.85	25.55	525.48	1.23	0.0309
MW-10D	550.85	549.95	5	71.0 - 76.0	473.9 - 478.9	476.45		26.60	524.25		
MW-10I	551.10	551.30	10	47.9 - 57.9	493.4 - 503.4	498.40	21.95	24.32	526.78	2.53	0.1153
MW-10D	550.85	549.95	5	71.0 - 76.0	473.9 - 478.9	476.45		26.60	524.25		
MW-10R	551.03	551.20	10	25.1 - 35.1	511.3 - 521.3	516.30	17.90	25.55	525.48	-1.30	-0.0726
MW-10I	551.10	551.30	10	47.9 - 57.9	493.4 - 503.4	498.40		24.32	526.78		
MW-16	556.51	556.92	10	26.3 - 36.3	520.6 - 530.6	525.62	41.67	24.44	532.07	4.25	0.1020
MW-16D	556.78	557.25	5	70.8 - 75.8	481.4 - 486.4	483.95		28.96	527.82		

Notes:

1. bgs - below ground surface
2. msl - mean sea level
3. toc - top of casing

Table 6
Groundwater Analytical Results
Current (July 2015) and Historical

Itron, Inc.
Greenwood, South Carolina

Compounds	MCLs	RBSLs	Monitoring Wells																
			MW-1				MW-2				MW-3				MW-4				
			4/19/2012	8/23/2012	6/5/2014	7/28/2015	4/19/2012	8/23/2012	6/4/2014	7/28/2015	4/19/2012	8/23/2012	6/4/2014	7/29/2015	4/19/2012	8/23/2012	6/5/2014	7/29/2015	
Volatile Organic Compounds (EPA Method 8260)																			
Benzene	5	5	<5.0	<5.0	<5.0	<5.0	8.2	<5.0	<5.0	0.54 J	12	15.1	17 J	10 J	<5.0	<5.0	<5.0	<5.0	
Bromodichloromethane	80	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<25.0	<25.0	<5.0	<5.0	<5.0	<5.0	
2-Butanone (MEK)	NSL	NSL	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	30	<20.0	33 J	<50.0	<10.0	<10.0	<10.0	<10.0	
Chloroform	80	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<25.0	<25.0	<5.0	<5.0	<5.0	<5.0	
1,2-Dichloroethane	5	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1.2 J	1.2 J	<5.0	<10.0	<25.0	<25.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	70	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	280	389	440	280	<5.0	<5.0	0.39 J	0.23 J	
1,2-Dichloropropane	5	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	11	<5.0	<5.0	<25.0	<25.0	<5.0	<5.0	<5.0	<5.0	
Ethylbenzene	700	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	11	<10.0	16 J	6.9 J	<5.0	<5.0	<5.0	<5.0	
2-Hexanone	NSL	NSL	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	11	<20.0	10 J	4.6 J	<10.0	<10.0	<10.0	<10.0	
Isopropylbenzene	NSL	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.52 J	9.5	19.5	26	17 J	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	NSL	NSL	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	10	<20.0	6.9 J	2.6 J	<10.0	<10.0	<10.0	<10.0	
Methylcyclohexane	NSL	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	5.1 J	4.5 J	<5.0	<5.0	<5.0	<5.0	
Tetrachloroethene	5	NSL	<5.0	<5.0	0.80 J	7.7	<5.0	<5.0	0.86 J	1.1 J	50	<10.0	21 J	13 J	<5.0	<5.0	2.4 J	3.0 J	
Trichloroethene	5	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	43	<10.0	<25.0	0.81 J	5.8	<5.0	<5.0	<5.0	<5.0
Vinyl Chloride	2	NSL	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<10.0	<10.0	<2.0	<2.0	0.42 J	<2.0	
Xylenes (total)	10,000	10,000	<5.0	<5.0	<5.0	<5.0	10	<5.0	<5.0	3.4 J	41	41.5	110	56	<5.0	<5.0	<5.0	<5.0	
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																			
Benzo(a)anthracene	NSL	10	NA	NA	<0.20	NA	NA	NA	0.042 J	NA	NA	NA	<100	<40.0	NA	NA	<0.20	NA	
Benzo(a)pyrene	0.20	NSL	NA	NA	<0.20	NA	NA	NA	0.050 J	NA	NA	NA	<100	<40.0	NA	NA	<0.20	NA	
Benzo(b)fluoranthene	NSL	10	NA	NA	<0.20	NA	NA	NA	0.11 J	NA	NA	NA	<100	<40.0	NA	NA	<0.20	NA	
Chrysene	NSL	10	NA	NA	<0.20	NA	NA	NA	0.077 J	NA	NA	NA	<100	<40.0	NA	NA	<0.20	NA	
Fluoranthene	NSL	NSL	NA	NA	<0.20	NA	NA	NA	0.15 J	NA	NA	NA	<100	<40.0	NA	NA	<0.20	NA	
Fluorene	NSL	NSL	NA	NA	<0.20	NA	NA	NA	0.063 J	NA	NA	NA	<100	<40.0	NA	NA	0.028 J	NA	
Naphthalene	NSL	25	NA	NA	<0.20	NA	NA	NA	1.1	NA	NA	NA	200	190	NA	NA	0.14 J	NA	
Phenathrene	NSL	NSL	NA	NA	<0.20	NA	NA	NA	0.15 J	NA	NA	NA	<100	<40.0	NA	NA	<0.20	NA	
Pyrene	NSL	NSL	NA	NA	<0.20	NA	NA	NA	0.13 J	NA	NA	NA	<100	<40.0	NA	NA	<0.20	NA	

Notes:

1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina, except for August 2012.
2. Sample analysis for the August 2012 sampling event was performed by Gulf Coast Analytical Laboratories, Inc. of Baton Rouge, Louisiana.
3. RBSL - Risk Based Screening Level based on South Carolina Department of Health and Environmental Control (SCDHEC) Risk Based Corrective Action (RBCA) for Petroleum Releases (May 15, 2001).
4. MCL - Maximum Contaminant Level established by Environmental Protection Agency (EPA) Regional Screening Level (RSL) Summary Table (June 2015).
5. All concentrations are in micrograms per liter (ug/L).
6. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected in any of the samples.
7. A bold value indicates a detected concentration.
8. A bold and highlighted value indicates a detected concentration which exceeds the MCL or RBSL.
9. NSL = No Screening Level Listed.
10. A bold and italicized value indicates detected value with no established MCL or RBSL.
11. NA = Not analyzed or not applicable
12. J - Estimated Value
13. < - Indicates less than

Table 6
Groundwater Analytical Results
Current (July 2015) and Historical

Itron, Inc.
Greenwood, South Carolina

Compounds	MCLs	RBSLs	Monitoring Wells														
			MW-5				MW-5D			MW-6				MW-7			
			4/19/2012	8/23/2012	6/5/2014	7/29/2015	6/5/2014	7/28/2015	4/19/2012	8/23/2012	6/4/2014	7/29/2015	4/20/2012	8/23/2012	6/4/2014	7/29/2015	
Volatile Organic Compounds (EPA Method 8260)																	
Benzene	5	5	<100	<200	<250	<250	<5.0	0.27 J	<1,000	<500	<1,000	<1,000	<500	<4,000	<5,000	<10,000	
Bromodichloromethane	80	NSL	<100	<200	<250	<250	<5.0	<5.0	<1,000	<500	<1,000	<1,000	<500	<4,000	<5,000	<10,000	
2-Butanone (MEK)	NSL	NSL	<200	<400	<500	<500	<10.0	<10.0	<2,000	<1,000	<2,000	<2,000	<1,000	<8,000	<10,000	<20,000	
Chloroform	80	NSL	<100	<200	<250	<250	<5.0	<5.0	<1,000	<500	<1,000	<1,000	<500	<4,000	<5,000	<10,000	
1,2-Dichloroethane	5	NSL	<100	<200	<250	<250	<5.0	<5.0	<1,000	<500	<1,000	<1,000	<500	<4,000	<5,000	<10,000	
cis-1,2-Dichloroethene	70	NSL	<100	<200	46 J	15 J	<5.0	130	<1,000	<500	<1,000	<1,000	<500	<4,000	<5,000	<10,000	
1,2-Dichloropropane	5	NSL	<100	<200	<250	<250	<5.0	<5.0	<1,000	<500	<1,000	<1,000	<500	<4,000	<5,000	<10,000	
Ethylbenzene	700	NSL	<100	<200	<250	<250	<5.0	<5.0	<1,000	<500	<1,000	<1,000	<500	<4,000	<5,000	<10,000	
2-Hexanone	NSL	NSL	<200	<400	<500	<500	<10.0	<10.0	<2,000	<1,000	<2,000	<2,000	<1,000	<8,000	<10,000	<20,000	
Isopropylbenzene	NSL	NSL	<100	<200	<250	<250	<5.0	<5.0	<1,000	<500	<1,000	<1,000	<500	<4,000	<5,000	<10,000	
4-Methyl-2-pentanone	NSL	NSL	<100	<400	<500	<500	<10.0	<10.0	<2,000	<1,000	<2,000	<2,000	<1,000	<8,000	<10,000	<20,000	
Methylcyclohexane	NSL	NSL	<100	<200	<250	<250	<5.0	<5.0	<1,000	<500	<1,000	<1,000	<500	<4,000	<5,000	<10,000	
Tetrachloroethylene	5	NSL	3,900	4,290	3,700	4,000	190	0.96 J	12,000	14,400	14,000	9,600	7,000	56,900	97,000	100,000	
Trichloroethylene	5	NSL	<100	<200	15 J	10 J	0.56 J	0.22 J	<1,000	<500	<1,000	<1,000	<500	<4,000	<5,000	<10,000	
Vinyl Chloride	2	NSL	<40.0	<80.0	38 J	<100	<2.0	<2.0	<400	<200	<400	<400	<200	<1,600	<2,000	<4,000	
Xylenes (total)	10,000	10,000	<100	<200	<250	<250	<5.0	<5.0	<1,000	<500	<1,000	<1,000	<500	<4,000	<5,000	<10,000	
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																	
Benzo(a)anthracene	NSL	10	NA	NA	<0.20	NA	<0.20	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	
Benzo(a)pyrene	0.20	NSL	NA	NA	<0.20	NA	<0.20	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	
Benzo(b)fluoranthene	NSL	10	NA	NA	<0.20	NA	<0.20	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	
Chrysene	NSL	10	NA	NA	<0.20	NA	<0.20	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	
Fluoranthene	NSL	NSL	NA	NA	<0.20	NA	<0.20	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	
Fluorene	NSL	NSL	NA	NA	<0.20	NA	<0.20	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	
Naphthalene	NSL	25	NA	NA	<0.20	NA	0.10 J	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	
Phenanthrene	NSL	NSL	NA	NA	<0.20	NA	<0.20	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	
Pyrene	NSL	NSL	NA	NA	<0.20	NA	<0.20	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	

Notes:

1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina, except for August 2012.
2. Sample analysis for the August 2012 sampling event was performed by Gulf Coast Analytical Laboratories, Inc. of Baton Rouge, Louisiana.
3. RBSL - Risk Based Screening Level based on South Carolina Department of Health and Environmental Control (SCDHEC) Risk Based Corrective Action (RBCA) for Petroleum Releases (May 15, 2001).
4. MCL - Maximum Contaminant Level established by Environmental Protection Agency (EPA) Regional Screening Level (RSL) Summary Table (June 2015).
5. All concentrations are in micrograms per liter (ug/L).
6. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected in any of the samples.
7. A bold value indicates a detected concentration.
8. A bold and highlighted value indicates a detected concentration which exceeds the MCL or RBSL.
9. NSL = No Screening Level Listed.
10. A bold and italicized value indicates detected value with no established MCL or RBSL.
11. NA = Not analyzed or not applicable
12. J - Estimated Value
13. < - Indicates less than

Table 6
Groundwater Analytical Results
Current (July 2015) and Historical

Itron, Inc.
Greenwood, South Carolina

Compounds	MCLs	RBSLs	Monitoring Wells														
			MW-8				MW-9				MW-9D			MW-10			
			4/19/2012	8/23/2012	6/4/2014	7/29/2015	4/19/2012	8/23/2012	6/4/2014	7/28/2015	6/4/2014	7/28/2015	4/19/2012	8/23/2012	6/4/2014		
Volatile Organic Compounds (EPA Method 8260)																	
Benzene	5	5	<2,000	<1,000	<2500	<2500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<500	<500	<5.0	<5.0
Bromodichloromethane	80	NSL	<2,000	<1,000	<2500	<2500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<500	<500	<5.0	<5.0
2-Butanone (MEK)	NSL	NSL	<4,000	<2,000	<5000	<5000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	<1,000	<1,000	<10.0	<10.0
Chloroform	80	NSL	<2,000	<1,000	<2500	<2500	<5.0	<5.0	<5.0	<5.0	<5.0	1.8 J	<5.0	<500	<500	<5.0	<5.0
1,2-Dichloroethane	5	NSL	<2,000	<1,000	<2500	<2500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<500	<500	<5.0	<5.0
cis-1,2-Dichloroethene	70	NSL	<2,000	<1,000	<2500	<2500	<5.0	<5.0	<5.0	<5.0	<5.0	0.26 J	<5.0	<500	<500	0.46 J	<5.0
1,2-Dichloropropane	5	NSL	<2,000	<1,000	<2500	<2500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<500	<500	<5.0	<5.0
Ethylbenzene	700	NSL	<2,000	<1,000	<2500	<2500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<500	<500	<5.0	<5.0
2-Hexanone	NSL	NSL	<4,000	<2,000	<5000	<5000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	<1,000	<1,000	<10.0	<10.0
Isopropylbenzene	NSL	NSL	<2,000	<1,000	<2500	<2500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<500	<500	<5.0	<5.0
4-Methyl-2-pentanone	NSL	NSL	<4,000	<2,000	<5000	<5000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	<1,000	<1,000	<10.0	<10.0
Methylcyclohexane	NSL	NSL	<2,000	<1,000	<2500	<2500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<500	<500	<5.0	<5.0
Tetrachloroethylene	5	NSL	19,000	25,200	21,000	20,000	10	<5.0	1.4 J	1.8 J	<5.0	0.73 J	12,000	15,200	1,500		
Trichloroethylene	5	NSL	<2,000	<1,000	<2500	<2500	54	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<500	<500	1.3 J	
Vinyl Chloride	2	NSL	<800	<400	<1000	<1000	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<200	<200	<2.0	
Xylenes (total)	10,000	10,000	<2,000	<1,000	<2,500	<2,500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<500	<500	<5.0	
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																	
Benzo(a)anthracene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	0.20	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NSL	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina, except for August 2012.
2. Sample analysis for the August 2012 sampling event was performed by Gulf Coast Analytical Laboratories, Inc. of Baton Rouge, Louisiana.
3. RBSL - Risk Based Screening Level based on South Carolina Department of Health and Environmental Control (SCDHEC) Risk Based Corrective Action (RBCA) for Petroleum Releases (May 15, 2001).
4. MCL - Maximum Contaminant Level established by Environmental Protection Agency (EPA) Regional Screening Level (RSL) Summary Table (June 2015).
5. All concentrations are in micrograms per liter (ug/L).
6. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected in any of the samples.
7. A bold value indicates a detected concentration.
8. A bold and highlighted value indicates a detected concentration which exceeds the MCL or RBSL.
9. NSL = No Screening Level Listed.
10. A bold and italicized value indicates detected value with no established MCL or RBSL.
11. NA = Not analyzed or not applicable
12. J - Estimated Value
13. < - Indicates less than

Table 6
Groundwater Analytical Results
Current (July 2015) and Historical

Itron, Inc.
Greenwood, South Carolina

Compounds	MCLs	RBSLs	Monitoring Wells											
			MW-10R		MW-10I		MW-10D		MW-11				MW-12	
			7/28/2015	7/28/2015	6/4/2014	7/28/2015	4/19/2012	8/23/2012	6/4/2014	7/29/2015	6/5/2014	7/28/2015	6/5/2014	7/28/2015
Volatile Organic Compounds (EPA Method 8260)														
Benzene	5	5	<100	<1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<250	<250	<5.0	<5.0
Bromodichloromethane	80	NSL	<100	<1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<250	<250	<5.0	<5.0
2-Butanone (MEK)	NSL	NSL	<200	<2,000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<500	<500	<10.0	<10.0
Chloroform	80	NSL	5.8J	<1,000	2.5J	0.48J	<5.0	<5.0	<5.0	<5.0	<250	<250	2.8J	<5.0
1,2-Dichloroethane	5	NSL	<100	<1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<250	<250	<5.0	<5.0
cis-1,2-Dichloroethene	70	NSL	<100	<1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<250	<250	<5.0	<5.0
1,2-Dichloropropane	5	NSL	<100	<1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<250	<250	<5.0	<5.0
Ethylbenzene	700	NSL	<100	<1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<250	<250	<5.0	<5.0
2-Hexanone	NSL	NSL	<200	<2,000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<500	<500	<10.0	<10.0
Isopropylbenzene	NSL	NSL	<100	<1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<250	<250	<5.0	<5.0
4-Methyl-2-pentanone	NSL	NSL	<100	<2,000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<500	<500	<10.0	<10.0
Methylcyclohexane	NSL	NSL	<100	<1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<250	<250	<5.0	<5.0
Tetrachloroethylene	5	NSL	2,900	15,000	1.8J	2.2J	<5.0	<5.0	37	2.8J	4,500	4,800	0.82J	<5.0
Trichloroethylene	5	NSL	5.1J	<1,000	<5.0	<5.0	5.2	<5.0	<5.0	<5.0	<250	<250	<5.0	<5.0
Vinyl Chloride	2	NSL	<40.0	<400	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<100	<100	<2.0	<2.0
Xylenes (total)	10,000	10,000	<100	<1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)														
Benzo(a)anthracene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Benzo(a)pyrene	0.20	NSL	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Benzo(b)fluoranthene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Chrysene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Fluoranthene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Fluorene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Naphthalene	NSL	25	NA	NA	NA	NA	NA	NA	NA	NA	0.039J	NA	NA	NA
Phenanthrene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Pyrene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA

Notes:

1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina, except for August 2012.
2. Sample analysis for the August 2012 sampling event was performed by Gulf Coast Analytical Laboratories, Inc. of Baton Rouge, Louisiana.
3. RBSL - Risk Based Screening Level based on South Carolina Department of Health and Environmental Control (SCDHEC) Risk Based Corrective Action (RBCA) for Petroleum Releases (May 15, 2001).
4. MCL - Maximum Contaminant Level established by Environmental Protection Agency (EPA) Regional Screening Level (RSL) Summary Table (June 2015).
5. All concentrations are in micrograms per liter (ug/L).
6. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected in any of the samples.
7. A bold value indicates a detected concentration.
8. A bold and highlighted value indicates a detected concentration which exceeds the MCL or RBSL.
9. NSL = No Screening Level Listed.
10. An italicized value indicates detected value with no established MCL or RBSL.
11. NA = Not analyzed or not applicable
12. J - Estimated Value
13. < - Indicates less than

Table 6
Groundwater Analytical Results
Current (July 2015) and Historical

Itron, Inc.
Greenwood, South Carolina

Compounds	MCLs	RBSLS	Monitoring Wells											
			MW-14		MW-15		MW-15 R		MW-16		MW-16D		MW-17	
			6/4/2014	7/28/2015	6/5/2014	7/28/2015	6/5/2014	7/28/2015	6/4/2014	7/28/2015	6/5/2014	7/28/2015	6/5/2014	7/28/2015
Volatile Organic Compounds (EPA Method 8260)														
Benzene	5	5	<5.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromodichloromethane	80	NSL	<5.0	<25.0	<5.0	2.9 J	<5.0	<5.0	<5.0	<5.0	3.2 J	<5.0	<5.0	<5.0
2-Butanone (MEK)	NSL	NSL	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Chloroform	80	NSL	2.3 J	<25.0	3.9 J	5.5	<5.0	<5.0	<5.0	<5.0	8.6	<5.0	<5.0	<5.0
1,2-Dichloroethane	5	NSL	<5.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	70	NSL	0.24 J	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	5	NSL	<5.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	700	NSL	<5.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Hexanone	NSL	NSL	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Isopropylbenzene	NSL	NSL	<5.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	NSL	NSL	<10.0	<50.0	<10.0	0.84 J	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Methylcyclohexane	NSL	NSL	<5.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5	NSL	78	150	0.60 J	<5.0	160	110	18	30	75	690	0.78 J	0.90 J
Trichloroethene	5	NSL	<5.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.79 J	8.3 J	<5.0	<5.0
Vinyl Chloride	2	NSL	<2.0	<10.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes (total)	10,000	10,000	<5.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)														
Benzo(a)anthracene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	<0.20	NA
Benzo(a)pyrene	0.20	NSL	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	<0.20	NA
Benzo(b)fluoranthene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	<0.20	NA
Chrysene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	<0.20	NA
Fluoranthene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	<0.20	NA
Fluorene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	<0.20	NA
Naphthalene	NSL	25	NA	NA	NA	NA	NA	NA	NA	NA	0.033 J	NA	0.038 J	NA
Phenathrene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	0.043 J	NA	<0.20	NA
Pyrene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	<0.20	NA

Notes:

1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina, except for August 2012.
2. Sample analysis for the August 2012 sampling event was performed by Gulf Coast Analytical Laboratories, Inc. of Baton Rouge, Louisiana.
3. RBSL - Risk Based Screening Level based on South Carolina Department of Health and Environmental Control (SCDHEC) Risk Based Corrective Action (RBCA) for Petroleum Releases (May 15, 2001).
4. MCL - Maximum Contaminant Level established by Environmental Protection Agency (EPA) Regional Screening Level (RSL) Summary Table (June 2015).
5. All concentrations are in micrograms per liter (ug/L).
6. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected in any of the samples.
7. A bold value indicates a detected concentration.
8. A bold and highlighted value indicates a detected concentration which exceeds the MCL or RBSL.
9. NSL = No Screening Level Listed.
10. An italicized value indicates detected value with no established MCL or RBSL.
11. NA = Not analyzed or not applicable
12. J - Estimated Value
13. < - Indicates less than

Table 6
Groundwater Analytical Results
Current (July 2015) and Historical

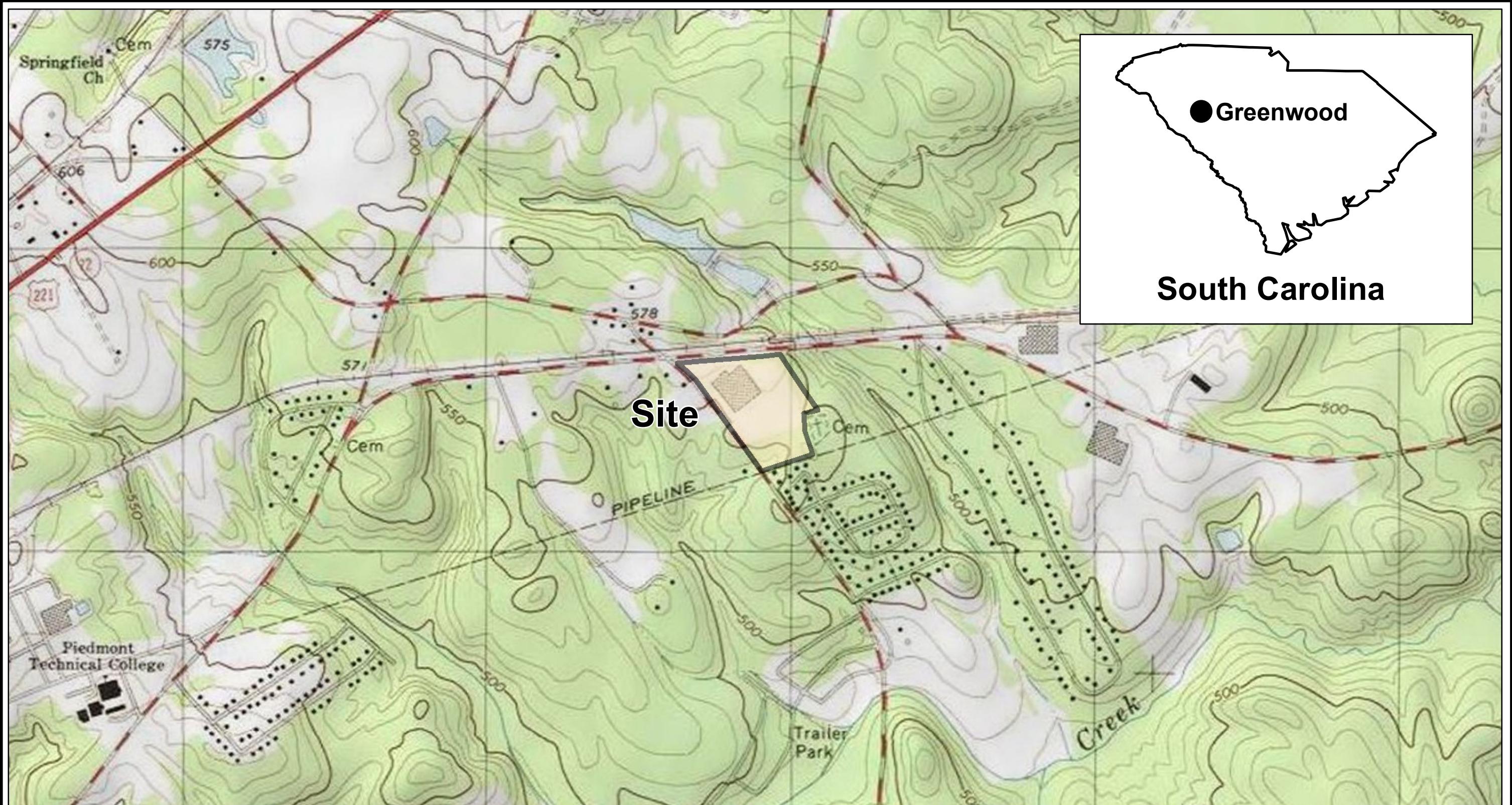
Itron, Inc.
Greenwood, South Carolina

Compounds	MCLs	RBSLs	Monitoring Wells			
			MW-19	MW-20	MW-21	MW-22D
			7/28/2015	7/28/2015	7/29/2015	7/28/2015
Volatile Organic Compounds (EPA Method 8260)						
Benzene	5	5	<5.0	<5.0	<5.0	<5.0
Bromodichloromethane	80	NSL	0.27 J	<5.0	<5.0	0.31 J
2-Butanone (MEK)	NSL	NSL	<10.0	<10.0	<10.0	<10.0
Chloroform	80	NSL	0.77 J	2.9 J	<5.0	1.3 J
1,2-Dichloroethane	5	NSL	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	70	NSL	<5.0	3.8 J	<5.0	<5.0
1,2-Dichloropropane	5	NSL	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	700	NSL	<5.0	<5.0	<5.0	<5.0
2-Hexanone	NSL	NSL	<10.0	<10.0	<10.0	<10.0
Isopropylbenzene	NSL	NSL	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	NSL	NSL	<10.0	<10.0	<10.0	<10.0
Methylcyclohexane	NSL	NSL	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5	NSL	1.2 J	360	1.7 J	<5.0
Trichloroethene	5	NSL	<5.0	4.3 J	<5.0	<5.0
Vinyl Chloride	2	NSL	<2.0	<2.0	<2.0	<2.0
Xylenes (total)	10,000	10,000	<5.0	<5.0	<5.0	<5.0
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)						
Benzo(a)anthracene	NSL	10	NA	NA	NA	NA
Benzo(a)pyrene	0.20	NSL	NA	NA	NA	NA
Benzo(b)fluoranthene	NSL	10	NA	NA	NA	NA
Chrysene	NSL	10	NA	NA	NA	NA
Fluoranthene	NSL	NSL	NA	NA	NA	NA
Fluorene	NSL	NSL	NA	NA	NA	NA
Naphthalene	NSL	25	NA	NA	NA	NA
Phenathrene	NSL	NSL	NA	NA	NA	NA
Pyrene	NSL	NSL	NA	NA	NA	NA

Notes:

1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina, except for August 2012.
2. Sample analysis for the August 2012 sampling event was performed by Gulf Coast Analytical Laboratories, Inc. of Baton Rouge, Louisiana.
3. RBSL - Risk Based Screening Level based on South Carolina Department of Health and Environmental Control (SCDHEC) Risk Based Corrective Action (RBCA) for Petroleum Releases (May 15, 2001).
4. MCL - Maximum Contaminant Level established by Environmental Protection Agency (EPA) Regional Screening Level (RSL) Summary Table (June 2015).
5. All concentrations are in micrograms per liter (ug/L).
6. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected in any of the samples.
7. A bold value indicates a detected concentration.
8. A bold and highlighted value indicates a detected concentration which exceeds the MCL or RBSL.
9. NSL = No Screening Level Listed.
10. An italicized value indicates detected value with no established MCL or RBSL.
11. NA = Not analyzed or not applicable
12. J - Estimated Value
13. < - Indicates less than

Figures



Legend

Itron Property Line (Approximate)

Source: USGS 7.5-minute topographic quadrangle, Ninety Six, South Carolina, 1978

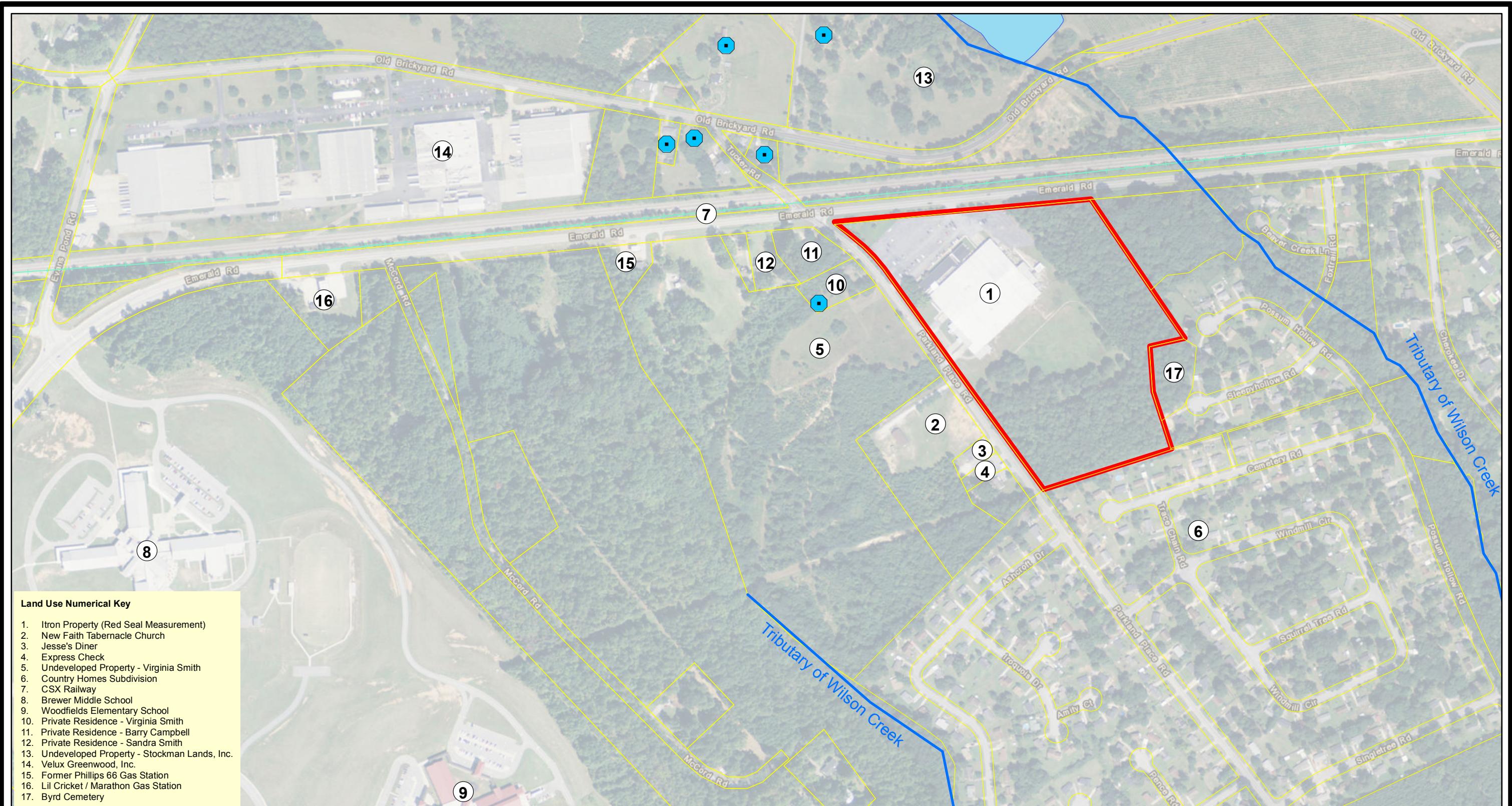


0 0.125 0.25 0.5 Miles

AECOM



Figure 1
Topographic Map



AECOM

Itron

Figure 2
Site Vicinity Map



Legend

- ◆ Shallow Monitoring Well
- ◆ Intermediate Monitoring Well
- ◆ Deep Monitoring Well
- Itron Property Line (Approximate)



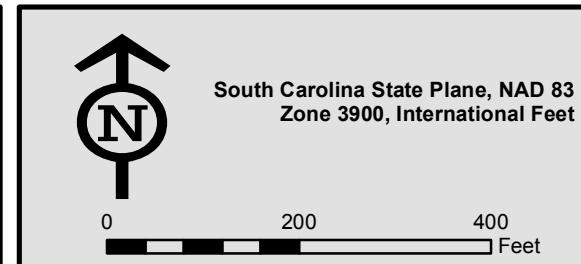
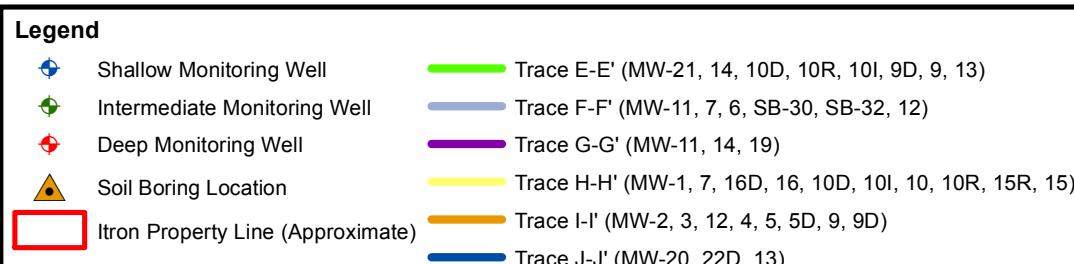
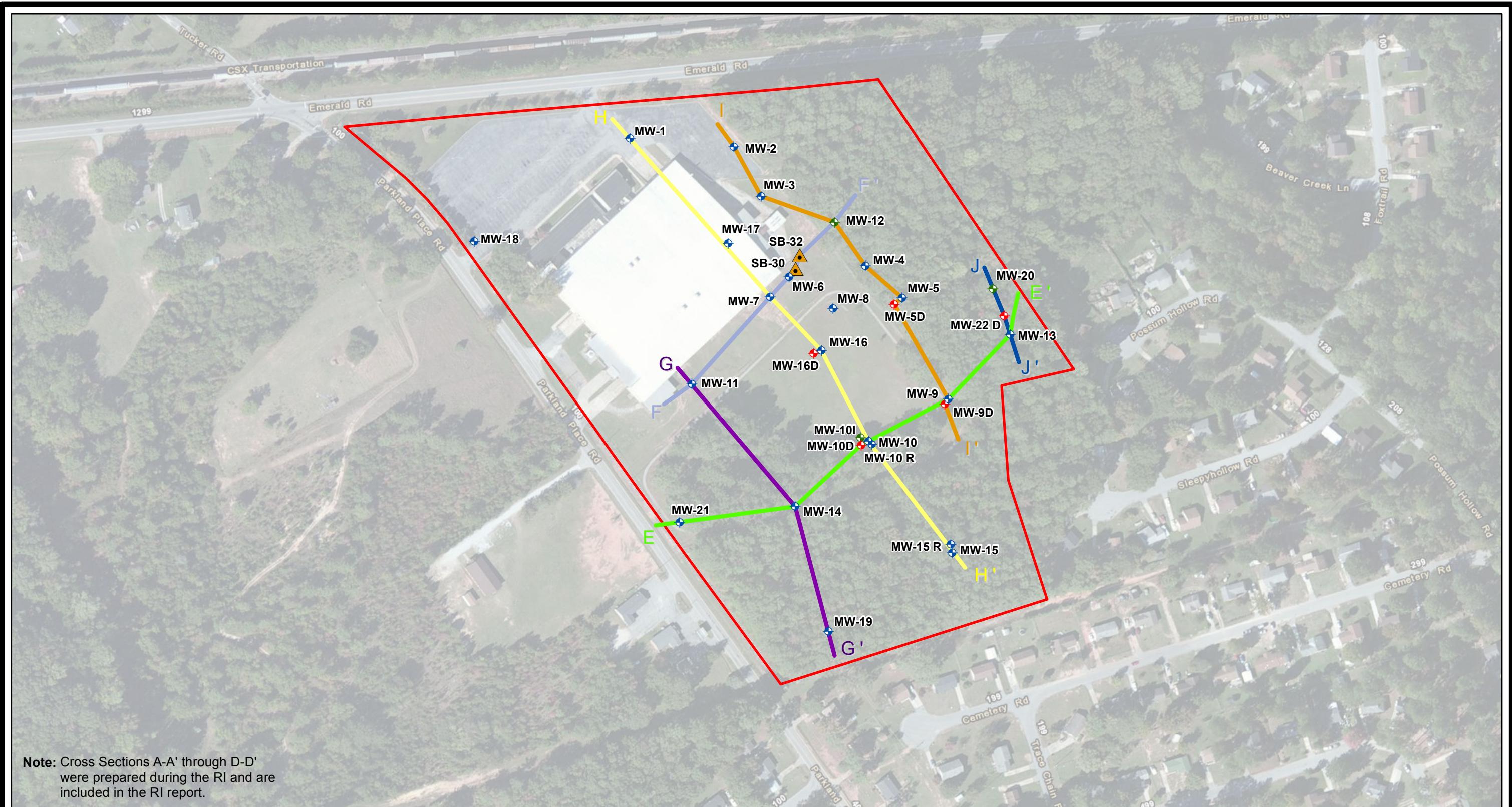
South Carolina State Plane, NAD 83
Zone 3900, International Feet

0 200 400
Feet

AECOM



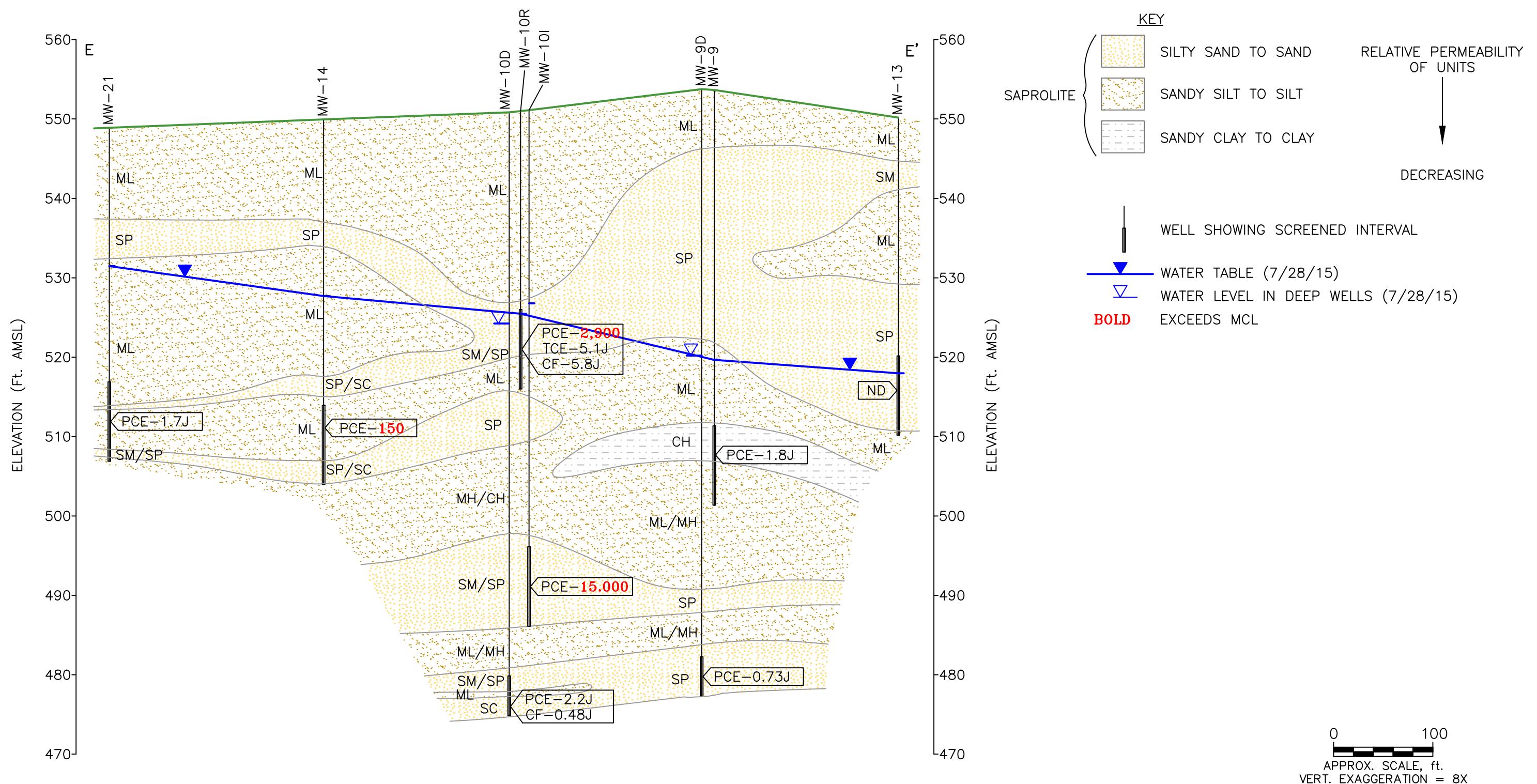
Figure 3
Monitoring Well Location Map



AECOM



Figure 4
Trace of Geologic Cross Sections



Legend

J - Estimated Value
 PCE - Tetrachloroethene
 TCE - Trichloroethene
 CF - Chloroform
 ND - Not Detected

All groundwater results reported in ug/L (micrograms per liter).

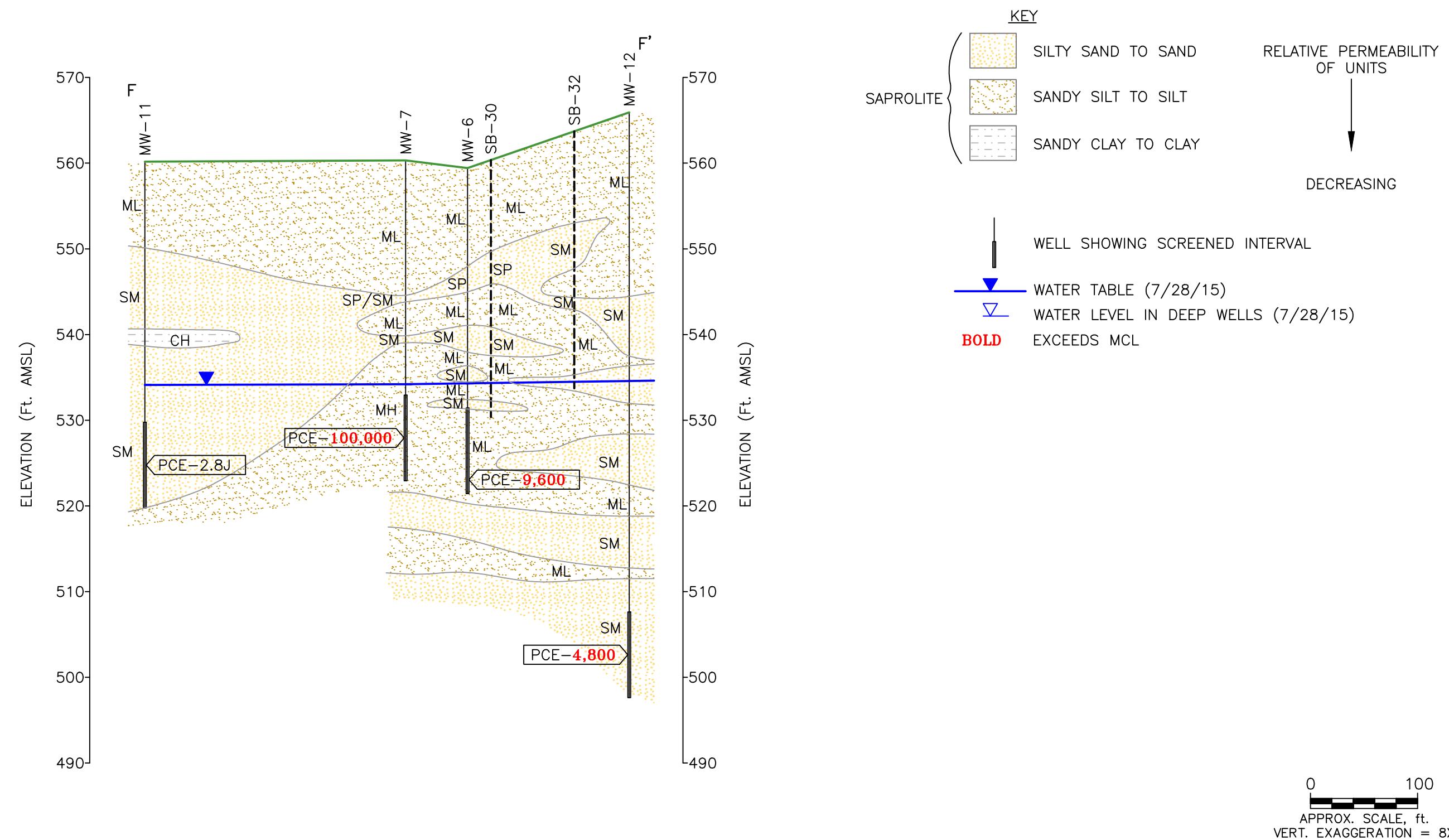
SP - Sand, Poorly Graded
 SM - Silty Sand
 SC - Sandy Clay
 ML - Sandy Silt
 MH - Silt
 CH - Clay

Red indicates concentrations above Maximum Contaminant Levels (MCLs).
 Surface layer and thin seams within the predominant soil units are not differentiated.

AECOM



Figure 5
Geologic Cross Section
E-E'



Legend

J - Estimated Value
PCE - Tetrachloroethene

All groundwater results
reported in ug/L (micrograms
per liter).

SP - Sand, Poorly Graded
SM - Silty Sand
ML - Sandy Silt
MH - Silt
CH - Clay

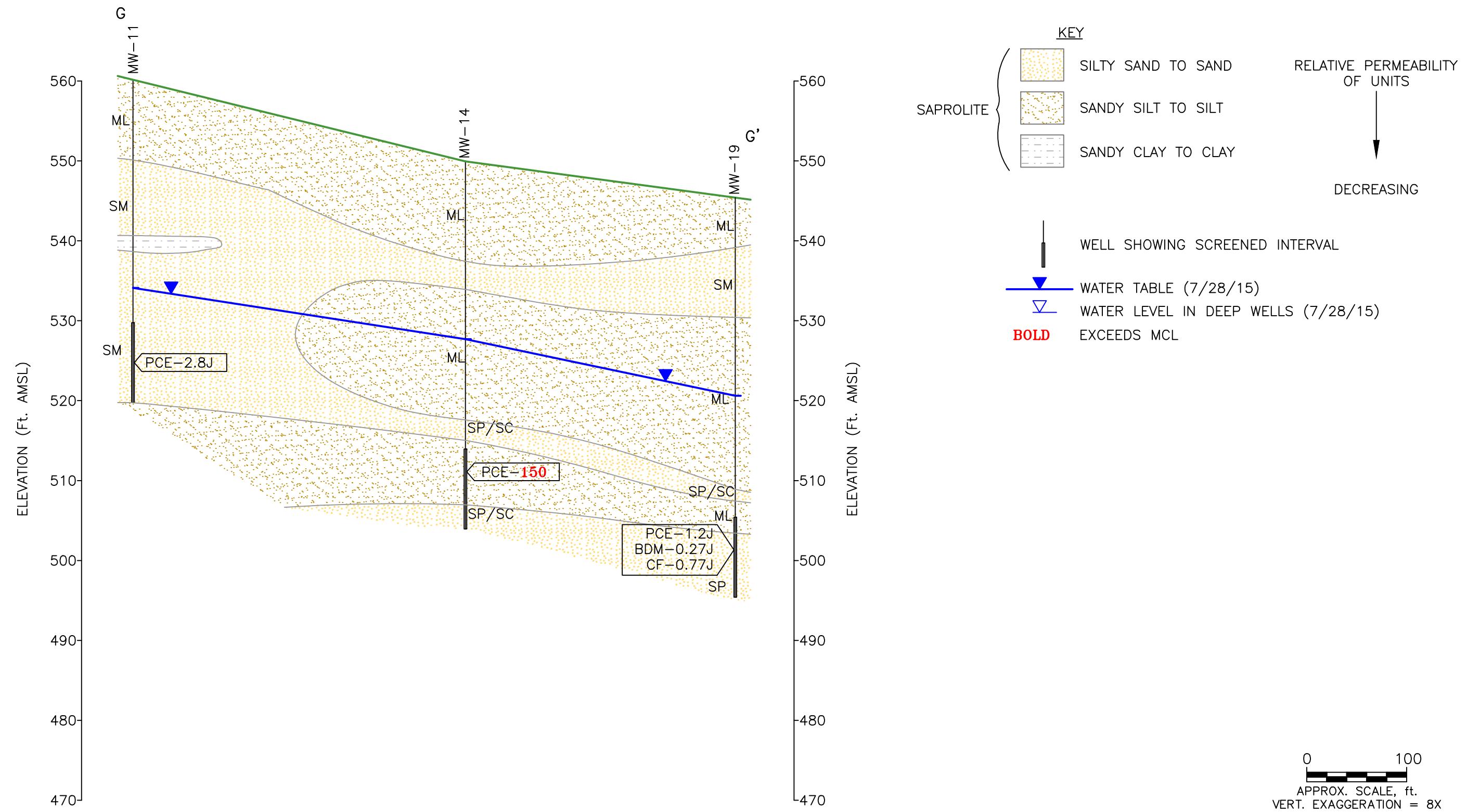
Red indicates concentrations
above Maximum Contaminant Levels
(MCLs).

Surface layer and thin seams
within the predominant soil units
are not differentiated.

AECOM



Figure 6
Geologic Cross Section
F-F'



Legend

J - Estimated Value
PCE - Tetrachloroethene
BDM - Bromodichloromethane
CF - Chloroform

All groundwater results reported in ug/L (micrograms per liter).

SP - Sand, Poorly Graded
SM - Silty Sand
SC - Sandy Clay
ML - Sandy Silt

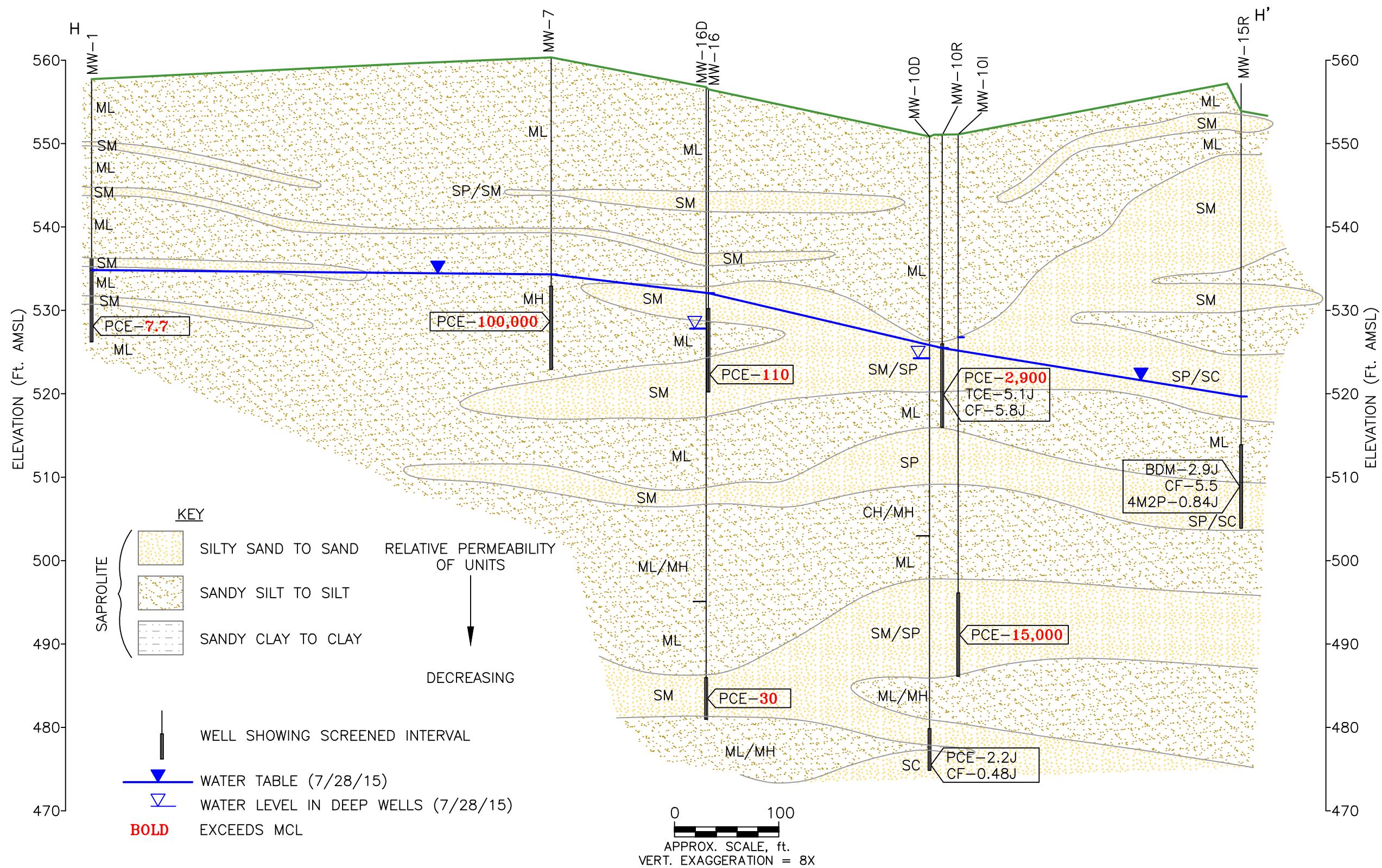
Red indicates concentrations above Maximum Contaminant Levels (MCLs).

Surface layer and thin seams within the predominant soil units are not differentiated.

AECOM



Figure 7
Geologic Cross Section
G-G'



Legend

J - Estimated Value
 PCE - Tetrachloroethene
 TCE - Trichloroethene
 BDM - Bromodichloromethane
 CF - Chloroform
 4M2P - 4 - Methyl - 2 - Pentanone

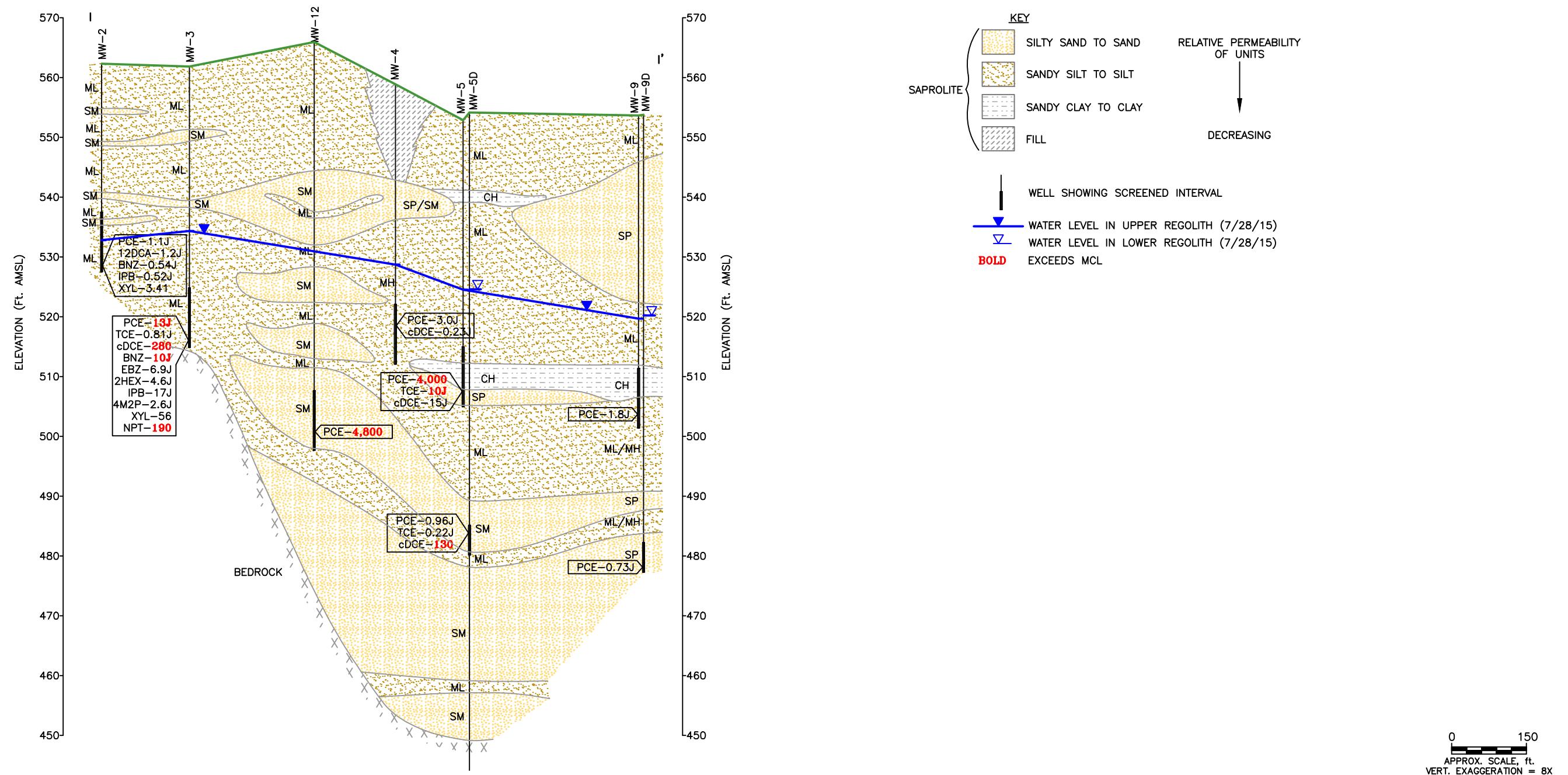
SP - Sand, Poorly Graded
 SM - Silty Sand
 SC - Sandy Clay
 ML - Sandy Silt
 MH - Silt
 CH - Clay

Red indicates concentrations above Maximum Contaminant Levels (MCLs).
 Surface layer and thin seams within the predominant soil units are not differentiated.
 All groundwater results reported in ug/L (micrograms per liter).

AECOM



Figure 8
Geologic Cross Section
H-H'



Legend

J - Estimated Value
PCE - Tetrachloroethene
TCE - Trichloroethene
cDCE - cis - 1,2 Dichloroethene
12 DCA - 1,2 Dichloroethane

All groundwater results reported in ug/L (micrograms per liter).

EBZ - Ethylbenzene
2HEX - 2 - Hexanone
IPB - Isopropylbenzene
4M2P - 4 - Methyl - 2 - Pentanone
XYL - Xylene
NPT - Naphthalene
BNZ - Benzene

SP - Sand, Poorly Graded
SM - Silty Sand
ML - Sandy Silt
MH - Silt
CH - Clay

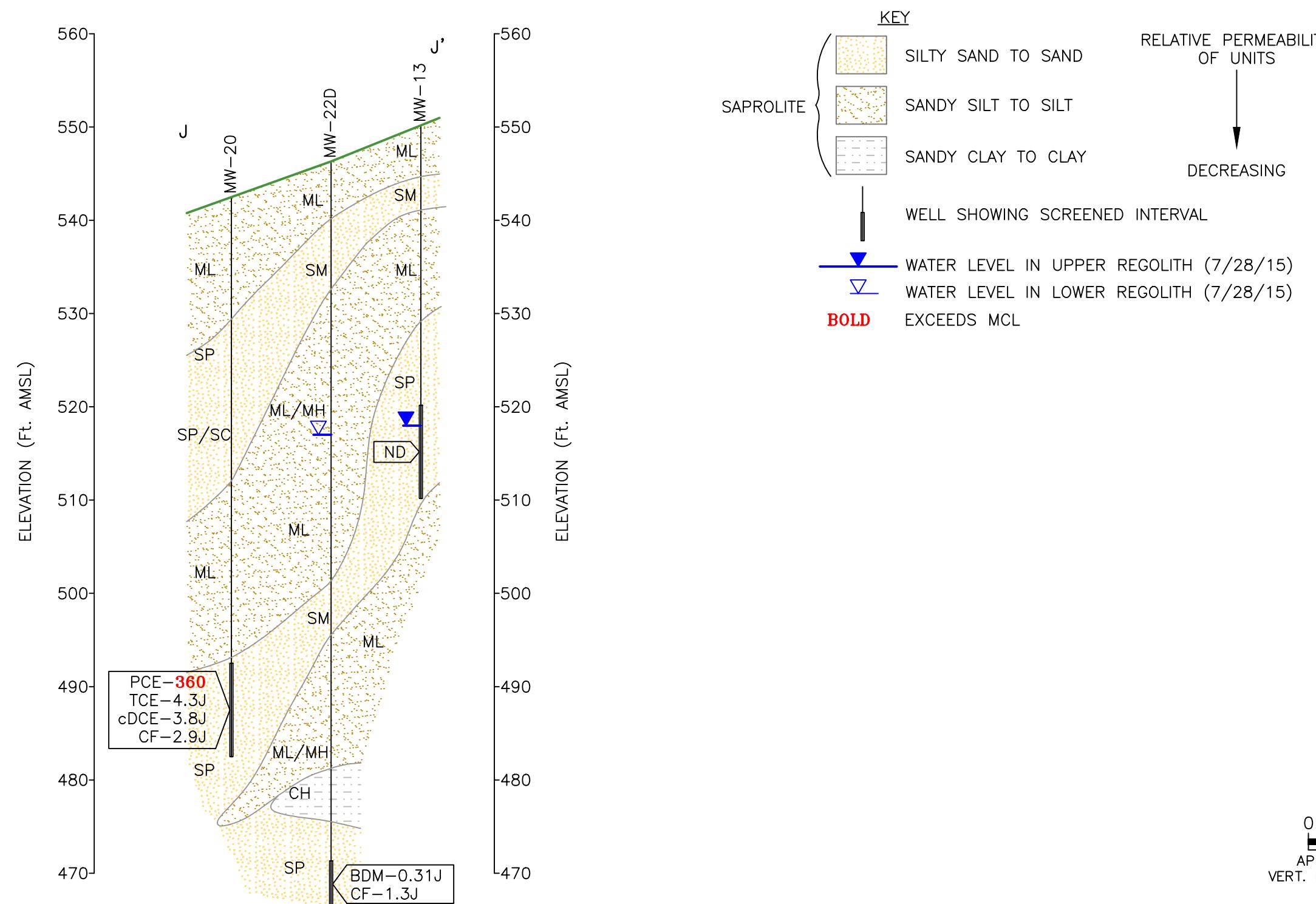
Red indicates concentrations above Maximum Contaminant Levels (MCLs) or Risk Based Screening Levels (RBSLs).

Surface layer and thin seams within the predominant soil units are not differentiated.

AECOM



Figure 9 Geologic Cross Section I-I'



Legend

J - Estimated Value
 PCE - Tetrachloroethene
 TCE - Trichloroethene
 cDCE - cis - 1,2 Dichloroethene
 All groundwater results reported in ug/L (micrograms per liter).

BDM - Bromodichloromethane
 CF - Chloroform
 ND - Not Detected

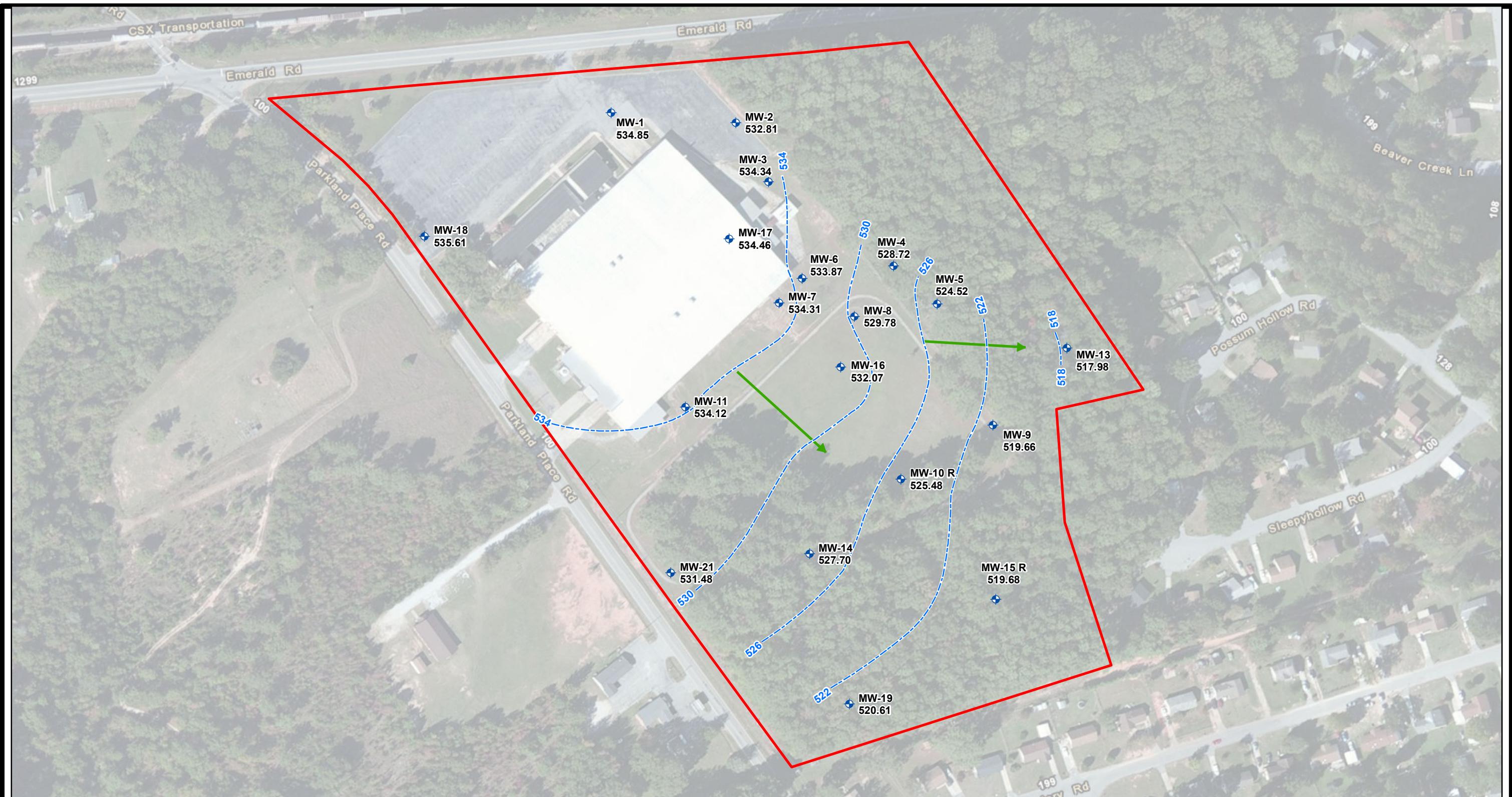
SP - Sand, Poorly Graded
 SM - Silty Sand
 SC - Sandy Clay
 ML - Sandy Silt
 MH - Silt
 CH - Clay

Red indicates concentrations above Maximum Contaminant Levels (MCLs).
 Surface layer and thin seams within the predominant soil units are not differentiated.

AECOM



Figure 10
Geologic Cross Section
J-J'



Legend

- ◆ Shallow Monitoring Well
- 522 ----- Potentiometric Surface Contours (feet above MSL)
- Approximate Groundwater Flow Direction
- Itron Property Line (Approximate)

MSL - Mean Sea Level

534.85 - Water Elevation (feet above MSL)

Water levels measured July 28, 2015



South Carolina State Plane, NAD 83
Zone 3900, International Feet

0 200 400
Feet

AECOM



Figure 11
Potentiometric Surface Map (Upper Regolith) - July 2015



Legend

- ◆ Deep Monitoring Well
- 522 ----- Potentiometric Surface Contours (feet above MSL)
- Approximate Groundwater Flow Direction
- Itron Property Line (Approximate)

MSL - Mean Sea Level

524.58 - Water Elevation (feet above MSL)

Water levels measured July 28, 2015



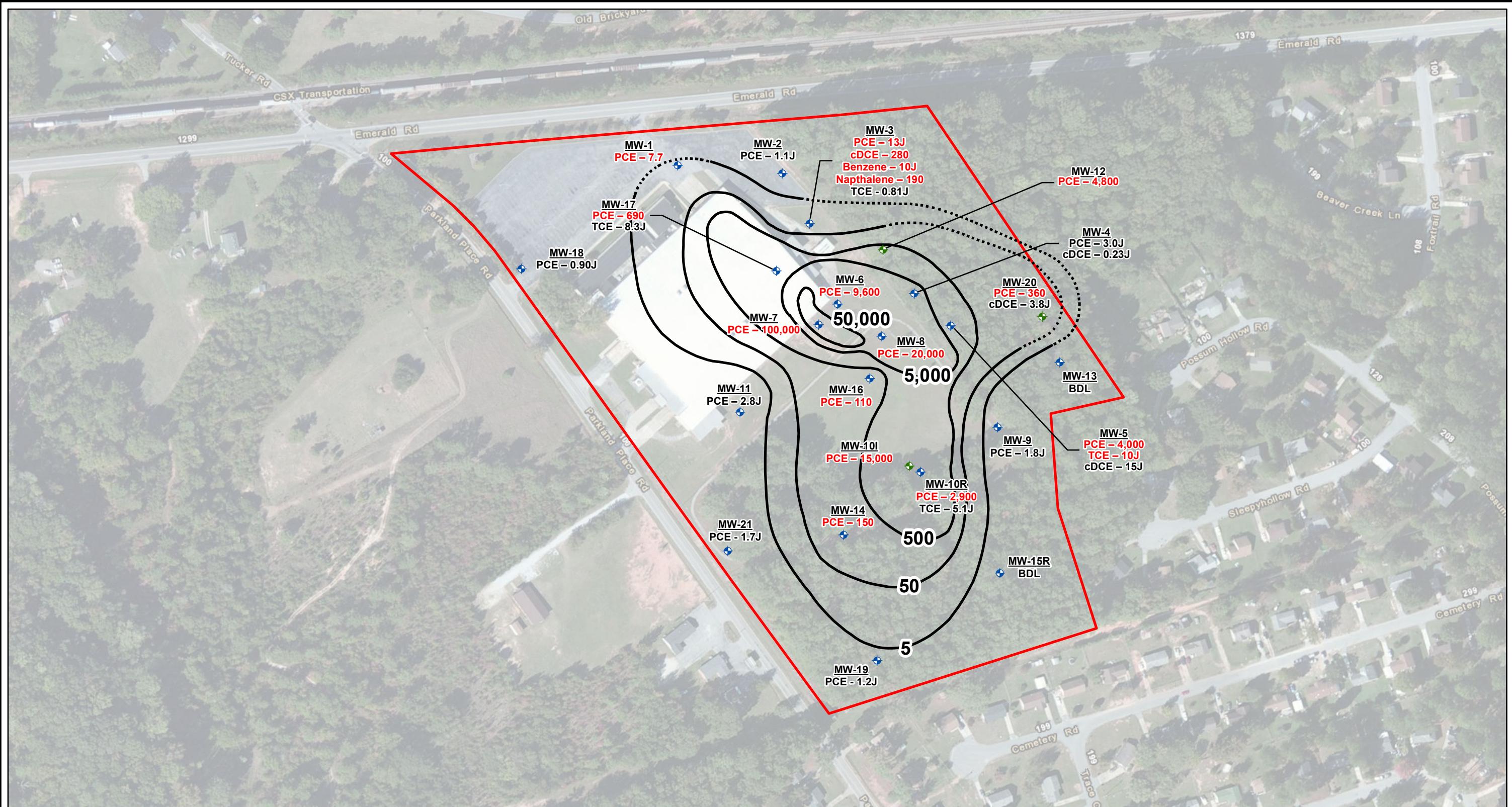
South Carolina State Plane, NAD 83
Zone 3900, International Feet

0 200 400
Feet

AECOM



Figure 12
Potentiometric Surface Map (Lower Regolith) -
July 2015



Legend

- ◆ Shallow Monitoring Well
- ◆ Intermediate Monitoring Well
- PCE Isoconcentration Contours ($\mu\text{g}/\text{L}$)
- PCE Isoconcentration Contours ($\mu\text{g}/\text{L}$)
- Estimated
- Itron Property Line (Approximate)

NOTES:

Red indicates concentrations above Maximum Contaminant Levels (MCLs).

All results reported in $\mu\text{g}/\text{l}$ (micrograms per liter).

Only Chemicals of Concern (COCs) detected above laboratory detection limit included. Other COCs included in Table 6 of the Supplemental Remedial Investigation (SRI) Report.

Sample Date: July 28 - 29, 2015

The result for MW-4 was anomalously low (due possibly to low permeability silt in which the screen was set) and, therefore, was not used in preparing the map.

- BDL – Below Detection Limits
- J – Estimated Value
- PCE – Tetrachloroethene
- TCE – Trichloroethene
- cDCE – cis-1,2-Dichloroethene



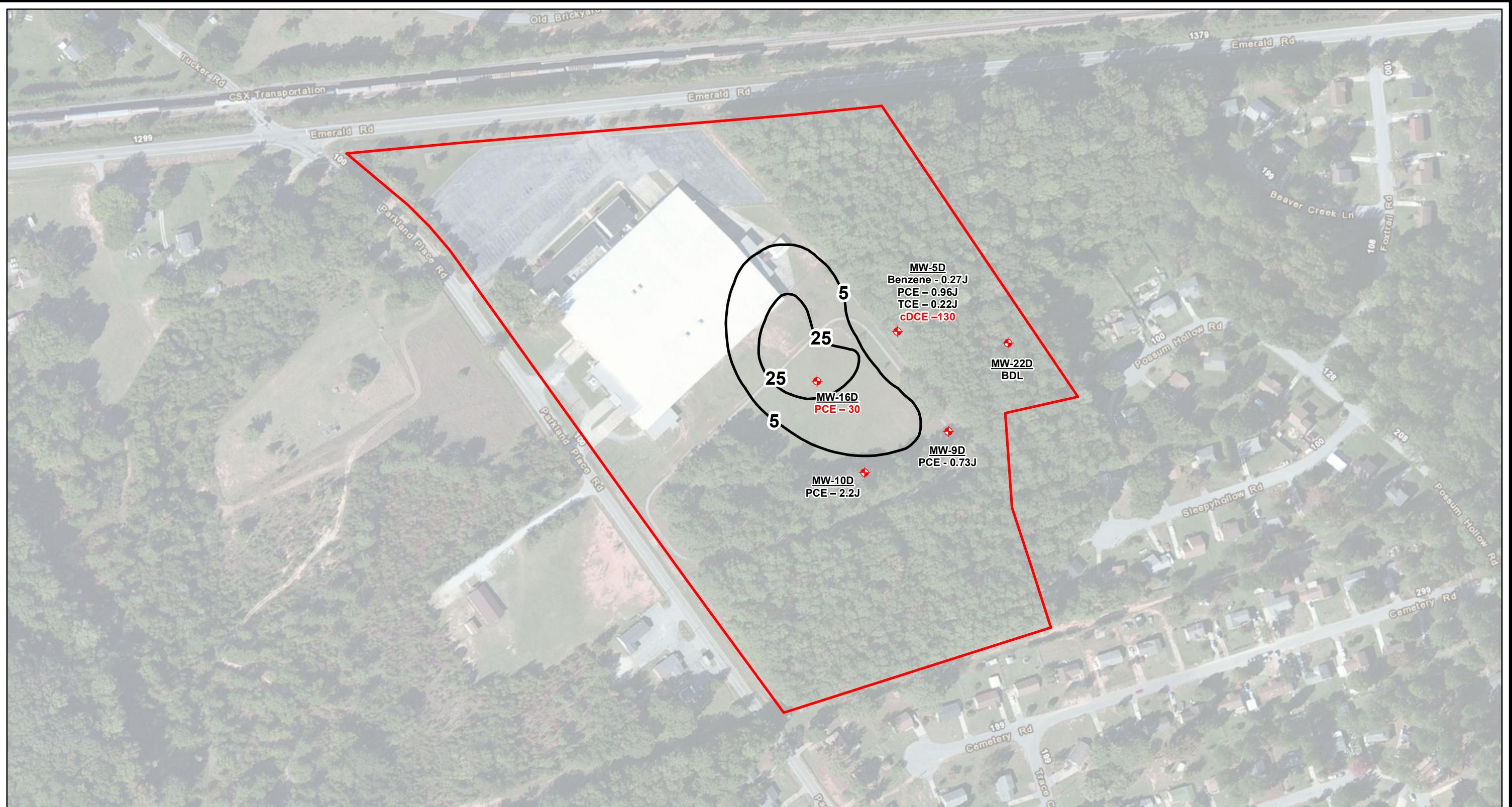
South Carolina State Plane, NAD 83
Zone 3900, International Feet

0 200 400
Feet

AECOM



Figure 13
Distribution of COCs in
Upper Regolith - Groundwater
July 2015



Legend

- Deep Monitoring Well
- PCE Isoconcentration Contours ($\mu\text{g/L}$)
- Itron Property Line (Approximate)

NOTES:
Red indicates concentrations above Maximum Contaminant Levels (MCLs).

All results reported in $\mu\text{g/l}$ (micrograms per liter).
- BDL - Below Detection Limits
- J - Estimated Value
- PCE - Tetrachloroethene
- TCE - Trichloroethene
- cDCE - cis-1,2-Dichloroethene

Only Chemicals of Concern (COCs) detected above laboratory detection limit included. Other COCs included in Table 6 of the Supplemental Remedial Investigation (SRI) Report.

Sample Date: July 28 - 29, 2015

South Carolina State Plane, NAD 83
Zone 3900, International Feet

0 200 400 Feet

AECOM



Figure 14
Distribution of COCs in Lower Regolith - Groundwater
July 2015

Appendix A: Photo Log

Client Name: Itron, Inc.	Site Location: 1310 Emerald Road, Greenwood, South Carolina	Project No. 60429584
-----------------------------	--	-------------------------



Client Name: Itron, Inc.	Site Location: 1310 Emerald Road, Greenwood, South Carolina	Project No. 60429584
------------------------------------	---	--------------------------------



Client Name:

Itron, Inc.

Site Location:

1310 Emerald Road, Greenwood, South Carolina

Project No.

60429584

Photo No. 5View Direction of Photo:
Southwest**Date of Photo:**
07/14/2015**Description:**

Inside of temporary fence compound located near northeast corner of the property. Compound was utilized as a staging area for Investigative Derived Waste Drums (IDW) during the course of the Supplemental Remedial Investigation (RI).

**Photo No. 6**View Direction of Photo:
North**Date of Photo:**
07/15/2015**Description:**

View of drill crew set up at monitoring well location MW-20 near the eastern property boundary on the site.



Client Name: Itron, Inc.	Site Location: 1310 Emerald Road, Greenwood, South Carolina	Project No. 60429584
------------------------------------	---	--------------------------------



Client Name:
Itron, Inc.

Site Location:
1310 Emerald Road, Greenwood, South Carolina

Project No.
60429584

Photo No. 9
View Direction of Photo: South
Date of Photo: 07/22/2015
Description: Development pump set up at well location MW-15R near the south property boundary on the site.



Photo No. 10
View Direction of Photo: Northwest
Date of Photo: 07/17/2015
Description: Inside of temporary fence compound located near northeast corner of the property.



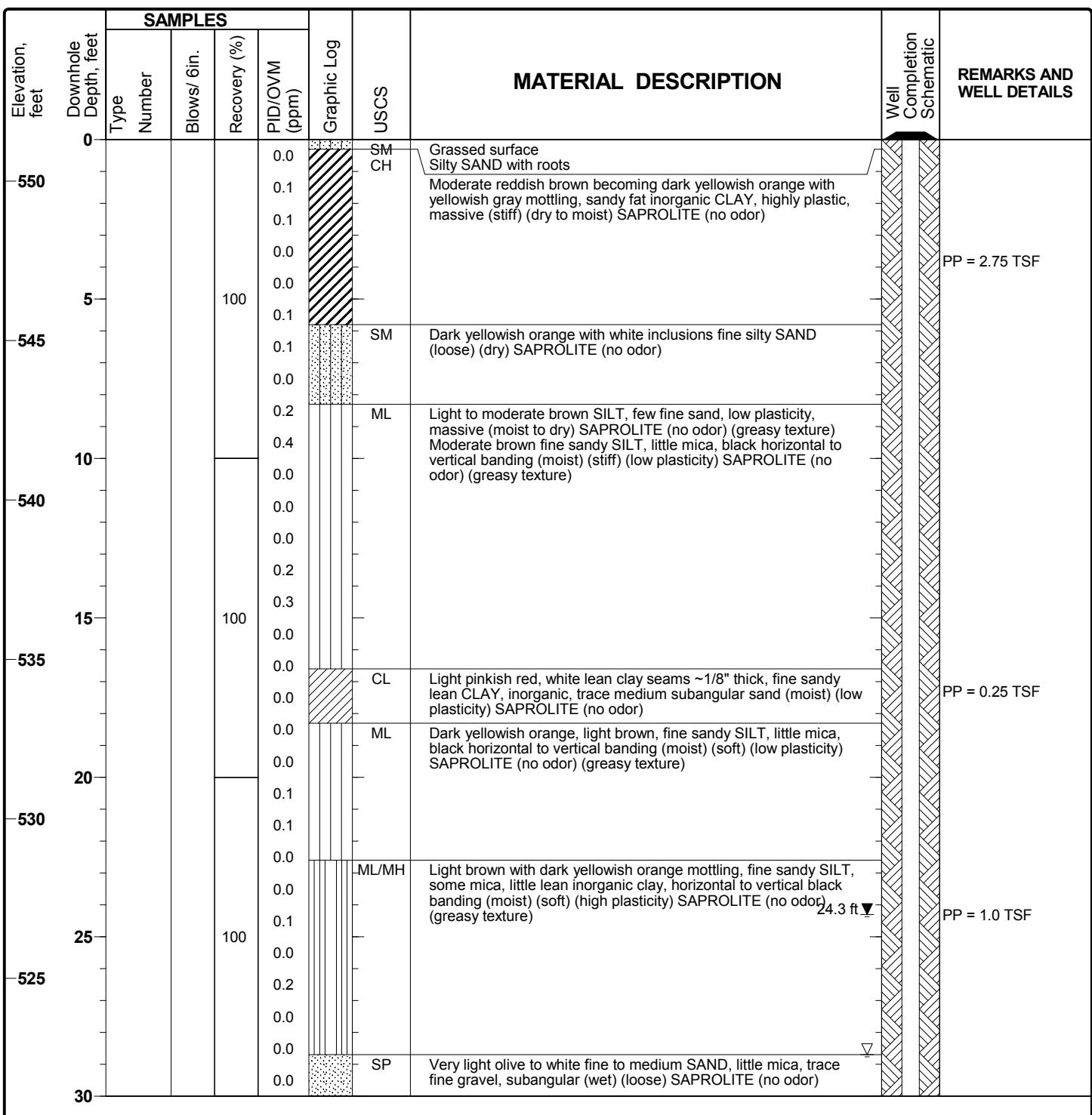
Appendix B: Well Boring Logs

Project: Supplemental RI
Project Location: Greenwood, SC
Project Number: 60429584

Log of Boring MW-10I

Sheet 1 of 3

Date(s) Drilled	7/13/15	Logged By	R. Paulling	Checked By	JN/AC
Drilling Method	Rotosonic	Drilling Contractor	Terrasonic	Total Depth of Borehole	65 feet bgs
Drill Rig Type	Terrasonic 150 cc	Drill Bit Size/Type	4"	Ground Surface Elevation (feet MSL)	551.3
Groundwater Level	24.3 ft bgs at 0920 7/14/15	Sampling Method	Sonic Coring	Hammer Data	NA
Borehole Backfill	Hole Plug to 69'	Location	~25' N of MW-10		



Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION		REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)					
30					0.0		ML	Dark yellowish orange to light olive fine sandy SILT, little mica, yellowish gray mottling, black banding (moist) (soft) (low plasticity) SAPROLITE (no odor) (greasy texture)		
520					0.1					PP = 0.75 TSF
35					0.3					
515					0.0					
					0.2					
					5.7	SP		White fine to medium SAND seam (wet)		
					6.3	ML		Dark yellowish orange to light olive fine sandy SILT, white inclusions (soft) (moist) SAPROLITE (no odor) (greasy texture)		
					7.1					
40					11.0	SP		Yellowish gray silty fine to coarse SAND, little mica, dark yellowish orange mottling (wet) (medium dense) (non-plastic) SAPROLITE (no odor)		
510					11.1					
					20.9					
					32.1					
					21.5					
					19.0					
					16.2					
505					10.2	ML		Moderate brown and yellowish gray fine sandy SILT, black banding at 45° (wet) (stiff) (low plasticity) SAPROLITE (no odor)		
					7.0					
					92.3					
					107.4					
500					34.7					PP = 1.0 TSF
					17.2					
					18.4					
					24.2					
					26.3					
					14.2					
495					0.0	SM/SP		Light olive, white with black inclusions, silty fine to coarse SAND, little mica, dark yellowish orange banding (wet) (medium dense) SAPROLITE (no odor)		
					0.5					
					9.2					
					0.0					
490					0.0	ML		Dark yellowish orange to moderate yellowish brown with dark grayish olive banding, fine sandy SILT, little mica (moist) (very stiff) (low plasticity)		
					0.0					
					0.0					
65										

Project: Supplemental RI
 Project Location: Greenwood, SC
 Project Number: 60429584

Log of Boring MW-10I

Sheet 3 of 3

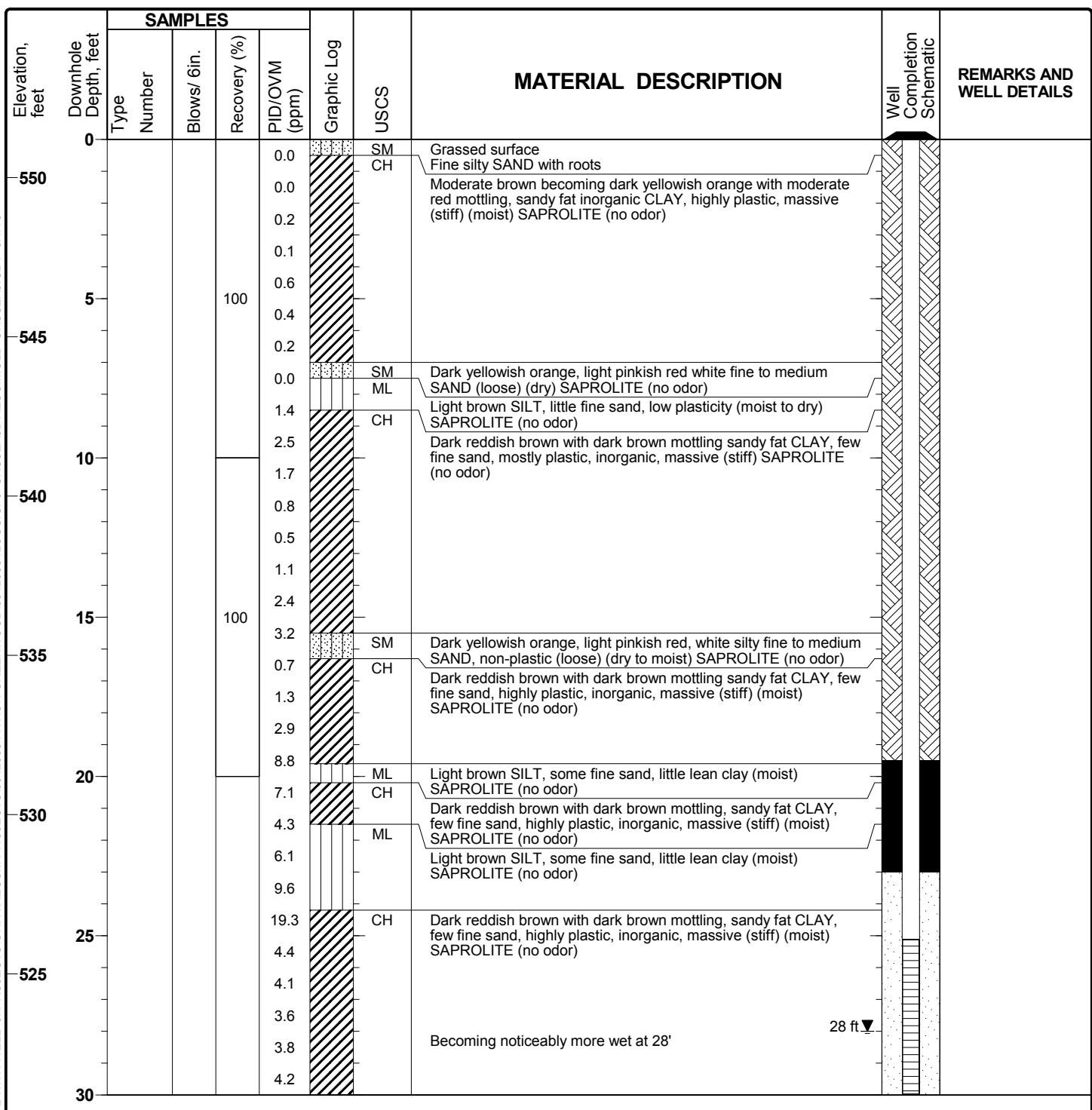
Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/ 6in.	Recovery (%)				
65								Boring was completed to 65' bgs. Groundwater was encountered at 28.7 ft bgs, while drilling. Boring was completed as monitoring well: 0-47.9 ft bgs 2" schedule 40 flush threaded PVC casing 47.9-57.9 ft bgs 2" schedule 40 PVC screen #10 slot 0.010" PVC screen 0-41.7 ft bgs Neat cement grout 41.7-44.4 ft bgs Bentonite seal 44.4-65.0 ft bgs Filter pack Flush mount monument	
485									
70									
480									
75									
475									
80									
470									
85									
465									
90									
460									
95									
455									
100									

Project: Supplemental RI
Project Location: Greenwood, SC
Project Number: 60429584

Log of Boring MW-10R

Sheet 1 of 2

Date(s) Drilled	7/14/15	Logged By	R. Paulling	Checked By	JN/AC
Drilling Method	Rotosonic	Drilling Contractor	Terrasonic	Total Depth of Borehole	35 feet bgs
Drill Rig Type	Terrasonic 150 cc	Drill Bit Size/Type	4"	Ground Surface Elevation (feet MSL)	551.2
Groundwater Level	28 ft bgs WD	Sampling Method	Sonic Coring	Hammer Data	NA
Borehole Backfill	NA	Location	~12' S of MW-10		



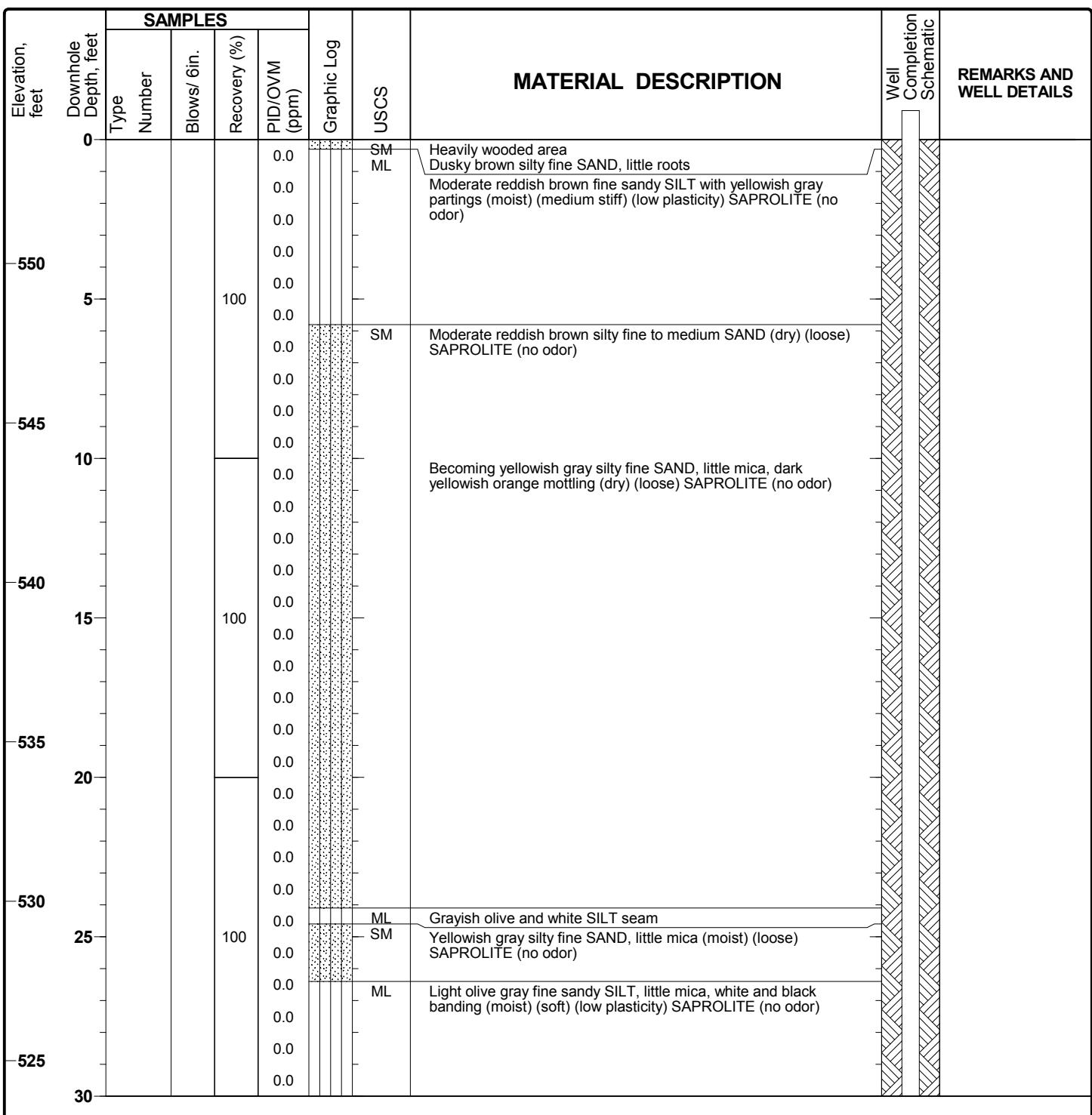
Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION		REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)					
30					5.1 6.7 0.8 5.3 8.4	SP/SM		Light brown poorly graded fine to medium SAND and SILT with yellowish gray mottling and black inclusions, few lean clay (loose) (wet) SAPROLITE (no odor)		
520										
35								Boring was completed to 35' bgs. Groundwater was encountered at 28.0 ft bgs. Boring was completed as monitoring well: 0-25.1 ft bgs 2" schedule 40 flush threaded PVC casing 25.1-35.1 ft bgs 2" schedule 40 PVC screen #10 slot 0.010" PVC screen 0-19.5 ft bgs Neat cement grout 19.5-23.0 ft bgs Bentonite seal 23.0-35.4 ft bgs Filter pack Flush mount monument		
515										
40										
510										
45										
505										
500										
55										
495										
60										
490										
65										

Project: Supplemental RI
Project Location: Greenwood, SC
Project Number: 60429584

Log of Boring MW-15R

Sheet 1 of 2

Date(s) Drilled	7/16/15	Logged By	R. Paulling	Checked By	JN/AC
Drilling Method	Rotosonic	Drilling Contractor	Terrasonic	Total Depth of Borehole	50 feet bgs
Drill Rig Type	Terrasonic 150 cc	Drill Bit Size/Type	4"	Ground Surface Elevation (feet MSL)	553.89
Groundwater Level	35 ft bgs WD	Sampling Method	Sonic Coring	Hammer Data	NA
Borehole Backfill	NA	Location	8' N of MW-15 in heavily wooded area		



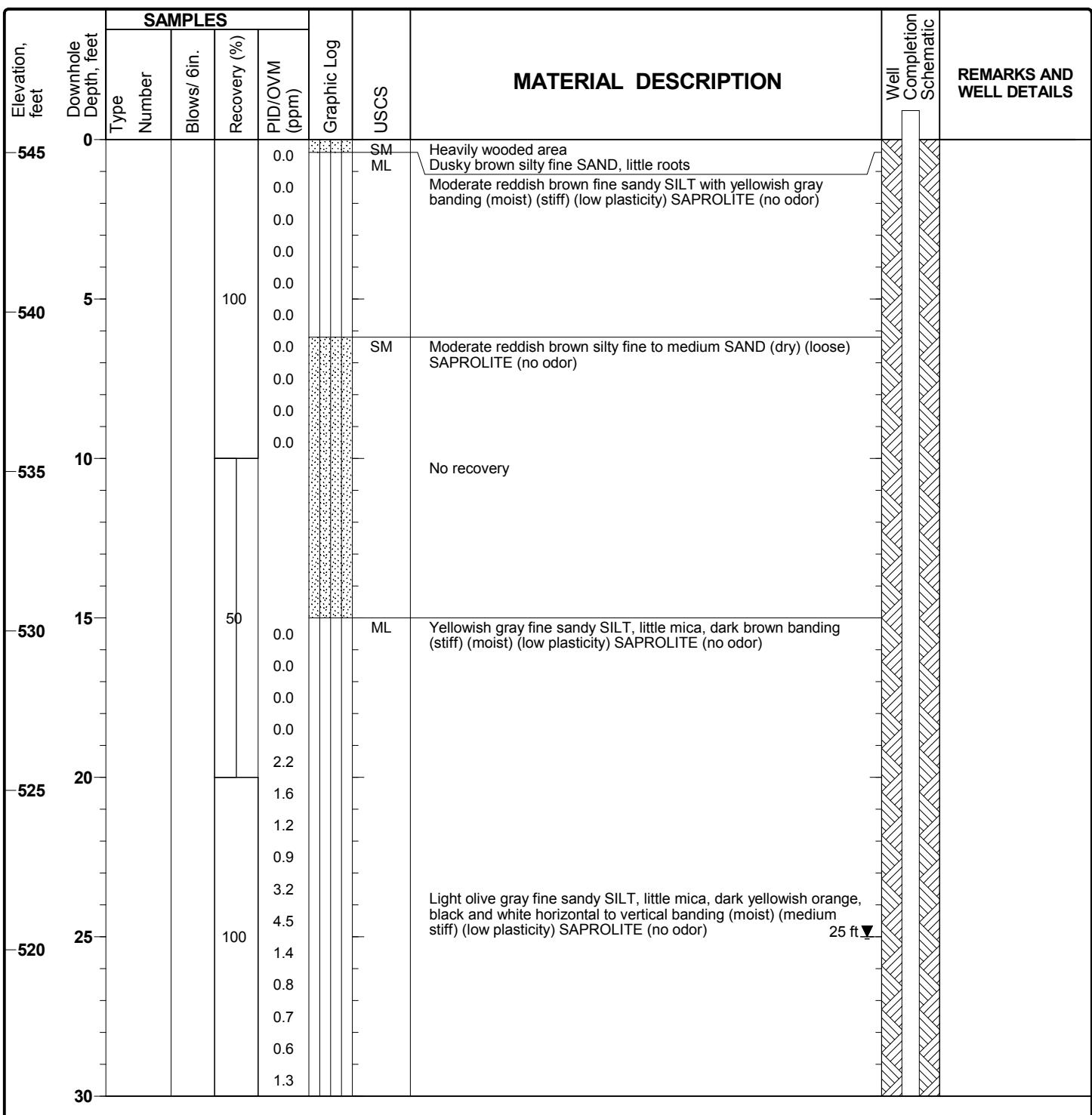
Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION		REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)					
30					0.0 0.0 0.0 0.0	ML		Light olive gray fine sandy SILT, little mica, white and black banding (moist) (medium stiff) (low plasticity) SAPROLITE (no odor)		
520					0.0 0.0 0.0 0.0	SP/SC		Dark yellowish orange silty fine to coarse SAND, little mica, lean inorganic clay, white banding (wet) (loose) SAPROLITE (no odor)	35 ft ▼	
35					0.0 0.0 0.0 0.0	ML		Dark yellowish orange fine sandy SILT, few mica with light olive and white mottling and black vertical and horizontal banding (wet) (very stiff) (low plasticity) SAPROLITE (no odor)		
515					0.0 0.0 0.0 0.0	SP/SC		Dark yellowish orange fine to coarse SAND, with white quartz veins at 45°, little mica and lean inorganic clay (wet) (dense) SAPROLITE (no odor)		
40					0.0 0.0 0.0 0.0					
510					0.0 0.0 0.0 0.0					
45					0.0 0.0 0.0 0.0					
505					0.0 0.0 0.0 0.0					
50								Boring was completed to 50' bgs. Groundwater was encountered at 35 ft bgs. Boring was completed as monitoring well: 0-39.2 ft bgs 2" schedule 40 flush threaded PVC casing 39.2-49.2 ft bgs 2" schedule 40 PVC screen #10 slot 0.010" PVC screen 0-33.0 ft bgs Neat cement grout 33.0-37.4 ft bgs Bentonite seal 37.4-50.0 ft bgs Filter pack Stickup monument		
500										
55										
495										
60										
490										
65										

Project: Supplemental RI
Project Location: Greenwood, SC
Project Number: 60429584

Log of Boring MW-19

Sheet 1 of 2

Date(s) Drilled	7/17/15	Logged By	A. Council	Checked By	JN/AC
Drilling Method	Rotosonic	Drilling Contractor	Terrasonic	Total Depth of Borehole	50 feet bgs
Drill Rig Type	Terrasonic 150 cc	Drill Bit Size/Type	4"	Ground Surface Elevation (feet MSL)	545.41
Groundwater Level	25 ft bgs WD	Sampling Method	Sonic Coring	Hammer Data	NA
Borehole Backfill	NA	Location	SW corner of property near gas line right of way		



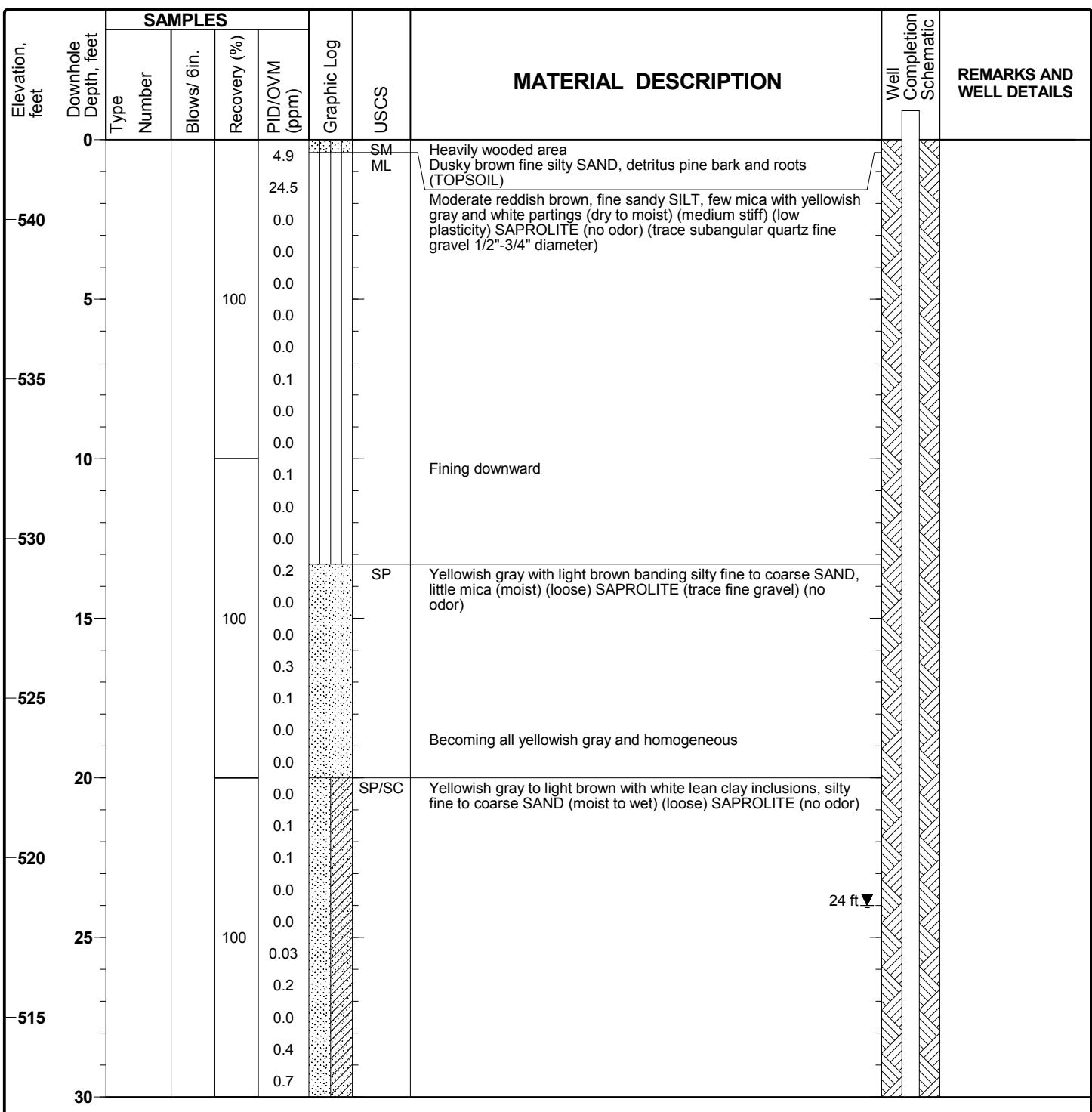
Elevation, feet	Downhole Depth, feet	SAMPLES				MATERIAL DESCRIPTION		REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)			
					Graphic Log	USCS		
515	30				1.2 0.6 0.6 1.6 3.9 1.8	ML	Light olive gray fine sandy SILT, little mica, dark yellowish orange, black and white horizontal to vertical banding (moist) (medium stiff) (low plasticity) SAPROLITE (no odor)	
510	35				1.4 1.2	SP/SC	Dark yellowish orange silty fine to coarse SAND, little mica, lean inorganic clay, white banding (moist) (loose) SAPROLITE (no odor)	
505	40				1.0 0.8 0.2 0.5	ML	White to yellowish gray, fine to coarse sandy SILT, little mica, black horizontal to vertical banding (wet) (stiff) (low plasticity) SAPROLITE (no odor)	
500	45				0.9 0.8 2.3 1.4 1.2 1.6 1.7	SP	Light gray fine to coarse SAND, non plastic (wet) (medium dense) SAPROLITE (no odor)	
495	50						Boring was completed to 50' bgs. Groundwater was encountered at 25 ft bgs. Boring was completed as monitoring well: 0-39.2 ft bgs 2" schedule 40 flush threaded PVC casing 39.2-49.2 ft bgs 2" schedule 40 PVC screen #10 slot 0.010" PVC screen 0-34.0 ft bgs Neat cement grout 34.0-36.9 ft bgs Bentonite seal 36.9-50 ft bgs Filter pack Stickup monument	
490	55							
485	60							
480	65							

Project: Supplemental RI
Project Location: Greenwood, SC
Project Number: 60429584

Log of Boring MW-20

Sheet 1 of 2

Date(s) Drilled	7/15/15	Logged By	R. Paulling	Checked By	JN/AC
Drilling Method	Rotosonic	Drilling Contractor	Terrasonic	Total Depth of Borehole	60 feet bgs
Drill Rig Type	Terrasonic 150 cc	Drill Bit Size/Type	4"	Ground Surface Elevation (feet MSL)	542.5
Groundwater Level	24 ft bgs WD	Sampling Method	Sonic Coring	Hammer Data	NA
Borehole Backfill	NA	Location	Heavily wooded area east of facility		



Project: Supplemental RI
 Project Location: Greenwood, SC
 Project Number: 60429584

Log of Boring MW-20

Sheet 2 of 2

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION		REMARKS AND WELL DETAILS			
		Type	Number	Blows/ 6in.	Recovery (%)								
30						0.6	ML	Yellowish gray to dark yellowish orange fine sandy SILT, little mica, 45° white quartz seams 1" thick, horizontal to vertical black banding (wet) (stiff) (low to moderate plasticity) SAPROLITE (no odor) (greasy texture)					
510						0.0							
35						1.1							
505						1.4							
40						2.3							
500						0.8							
45						0.0							
495						0.0							
50						0.1							
490						0.0							
55						0.2							
485						0.0							
60						0.1							
480						0.0							
65						0.0							
								Boring was completed to 60' bgs. Groundwater was encountered at 24.0 ft bgs. Boring was completed as monitoring well: 0-49.0 ft bgs 2" schedule 40 flush threaded PVC casing 49.0-59.0 ft bgs 2" schedule 40 PVC screen #10 slot 0-41.4 ft bgs Neat cement grout 41.4-46.7 ft bgs Bentonite seal 46.7-60.0 ft bgs Filter pack Stickup monument					

Project: Supplemental RI
Project Location: Greenwood, SC
Project Number: 60429584

Log of Boring MW-21

Sheet 1 of 2

Date(s) Drilled	7/14/15	Logged By	R. Paulling	Checked By	JN/AC
Drilling Method	Rotosonic	Drilling Contractor	Terrasonic	Total Depth of Borehole	42 feet bgs
Drill Rig Type	Terrasonic 150 cc	Drill Bit Size/Type	4"	Ground Surface Elevation (feet MSL)	548.9
Groundwater Level	24 ft bgs WD	Sampling Method	Sonic Coring	Hammer Data	NA
Borehole Backfill	NA	Location	SW corner of fenced-in area of facility		



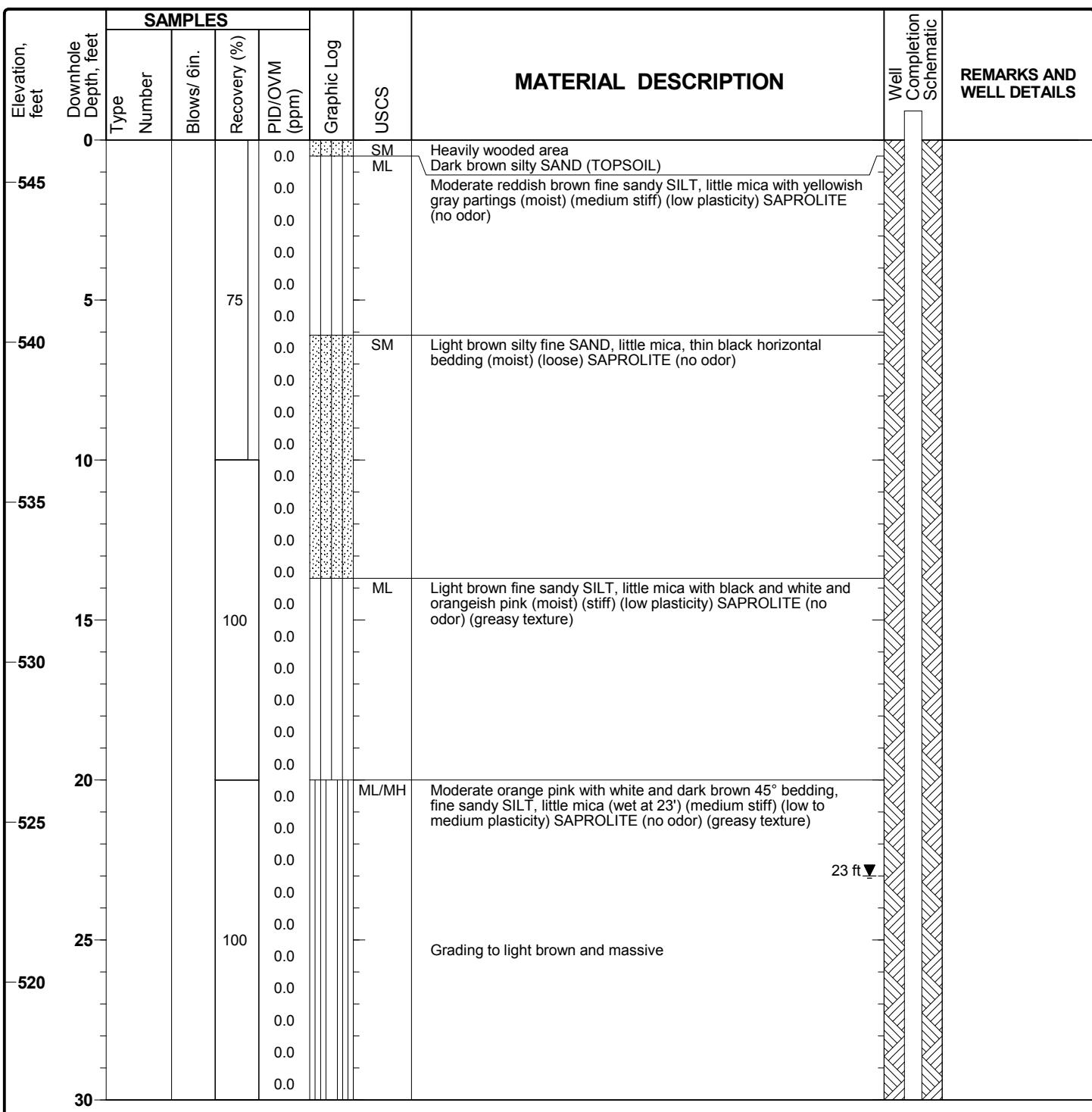
Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION		REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)					
30					0.1 0.0 0.1 0.0 0.0		ML	Light olive gray fine sandy SILT, few mica, few medium sand, dark yellowish orange horizontal to vertical banding (wet) (medium stiff) (low plasticity) SAPROLITE (no odor)		
515					0.3 0.0 0.0 0.0 0.0 0.2 0.1 0.0	SM/SP ML	White, yellowish gray, silty fine to coarse SAND, little mica, fine gravel (wet) (dense) SAPROLITE (no odor) Olive fine to medium sandy SILT, little mica, black horizontal to vertical banding (wet) (stiff) (low plasticity) SAPROLITE (no odor)			
510					0.0 0.0	SP SM	White to yellowish gray fine to coarse SAND, few fine gravel, non-plastic (wet) (medium dense) SAPROLITE (no odor) Light gray silty fine SAND, homogeneous (wet) (loose) SAPROLITE (no odor)			
40								Boring was completed to 42' bgs. Groundwater was encountered at 24 ft bgs. Boring was completed as monitoring well: 0-32.5 ft bgs 2" schedule 40 flush threaded PVC casing 32.5-42.5 ft bgs 2" schedule 40 PVC screen #10 slot 0.010" PVC screen 0-26.1 ft bgs Neat cement grout 26.1-29.8 ft bgs Bentonite seal 29.8-42.8 ft bgs Filter pack Flush mount monument		
505										
45										
500										
495										
55										
490										
60										
485										
65										

Project: Supplemental RI
Project Location: Greenwood, SC
Project Number: 60429584

Log of Boring MW-22D

Sheet 1 of 3

Date(s) Drilled	7/16/16	Logged By	R. Paulling	Checked By	JN/AC
Drilling Method	Rotosonic	Drilling Contractor	Terrasonic	Total Depth of Borehole	80 feet bgs
Drill Rig Type	Terrasonic 150 cc	Drill Bit Size/Type	4"	Ground Surface Elevation (feet MSL)	546.32
Groundwater Level	23 ft bgs WD	Sampling Method	Sonic Coring	Hammer Data	NA
Borehole Backfill	NA	Location	Heavily wooded area SE of facility ~50' N of MW-13		



Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION		REMARKS AND WELL DETAILS
		Type	Number	Blows/ 6in.	Recovery (%)					
30						0.0				
515						0.0				
35						0.0				
510						0.0				
40						0.0				
505						0.0				
45						0.0				
500						0.0				
50						0.0				
495						0.0				
55						0.0				
490						0.0				
60						0.0				
485						0.0				
65						0.0				

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION		REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)					
65										
480										
70										
475										
75										
470										
80										
465										
85										
460										
90										
455										
95										
450										
100										

Appendix C: SCDHEC Water Well Records and Monitoring Well Approval



Water Well Record

Bureau of Water

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

1. WELL OWNER INFORMATION: Name: Pad Kemmanahalli (last) (first) Address: 1111 Broadway, Suite 1800 City: Oakland State: CA Zip: 94607 Telephone: Work: 510.844.2882 Home: 2. LOCATION OF WELL: COUNTY: Greenwood Name: Red Scal Measurement Street Address: 1310 Emerald Road City: Greenwood Zip: 29646 Latitude: Longitude:		7. PERMIT NUMBER: 8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement	
		9. WELL DEPTH (completed) Date Started: 7/13/2015 58 ft. Date Completed: 7/13/2015 10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 2" Type: <input type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other 0 in. to 48 ft. depth in. to ft. depth 11. SCREEN: Type: PVC Diam.: 2" Slot/Gauge: .010 Length: 10 Set Between: 48 ft. and 58 ft. NOTE: MULTIPLE SCREENS ft. and ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No	
		12. STATIC WATER LEVEL ft. below land surface after 24 hours 13. PUMPING LEVEL Below Land Surface. ft. after hrs. Pumping G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No Yield:	
		14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please enclose lab results.	
		15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 58 ft. to 46 ft. Effective size 20/30 Uniformity Coefficient	
		16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other Depth: From 44 ft. to 0 ft.	
		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction Type Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: Amount:	
		18. PUMP: Date installed: Not installed <input checked="" type="checkbox"/> Mfr. Name: Model No.: H.P. Volts Length of drop pipe ft. Capacity gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal	
		19. WELL DRILLER: Blake Cabit CERT. NO.: 963 Address: (Print) Level: A B C D (circle one) 825 South Main Street ✓ New Ellenton, SC 29809 Telephone No.: 803.652.1790 Fax No.: 803.652.1790	
		20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.	
		Signed: <u>Blake Cabit</u> Date: <u>8/3/15</u> Well Driller	
		If D Level Driller, provide supervising driller's name:	
5. REMARKS: MW-101		6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Other	



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

1. WELL OWNER INFORMATION: Name: Pad Kemmanahalli (last) (first) Address: 1111 Broadway, Suite 1800 City: Oakland State: CA Zip: 94607 Telephone: Work: 510.844.2882 Home: 2. LOCATION OF WELL: COUNTY: Greenwood Name: Red Scal Measurement Street Address: 1310 Emerald Road City: Greenwood Zip: 29646 Latitude: Longitude:		7. PERMIT NUMBER: 8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement 9. WELL DEPTH (completed) Date Started: 7/14/2015 35 ft. Date Completed: 7/14/2015 10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 2" Height: Above/Below Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized Surface _____ ft. <input type="checkbox"/> Steel <input type="checkbox"/> Other Weight _____ lb./ft. 0 in. to 25 ft. depth Drive Shoe? <input type="checkbox"/> Yes <input type="checkbox"/> No in. to _____ ft. depth	
3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER: 4. ABANDONMENT: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Give Details Below Grouted Depth: from _____ ft. to _____ ft.			
Formation Description *Thickness of Stratum Depth to Bottom of Stratum		11. SCREEN: Type: PVC Diam.: 2" Slot/Gauge: .010 Length: 10 Set Between: 35 ft. and 45 ft. NOTE: MULTIPLE SCREENS ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No	
12. STATIC WATER LEVEL ft. below land surface after 24 hours			
13. PUMPING LEVEL Below Land Surface. ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No Yield: _____			
14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please enclose lab results.			
15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 35 ft. to 23 ft. Effective size 20/30 Uniformity Coefficient _____			
16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other _____ Depth: From 21 ft. to 0 ft.			
17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: _____ Amount: _____			
18. PUMP: Date installed: _____ Not installed <input checked="" type="checkbox"/> Mr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal			
19. WELL DRILLER: Blake Cabit CERT. NO.: 963 Address: (Print) _____ 825 South Main Street New Ellenton, SC 29809 Telephone No.: 803.652.1790 Fax No.: 803.652.1793			
20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.			
5. REMARKS: MW-10R		Signed: <u>Blake Cabit</u> Date: <u>8/3/15</u> Well Driller	
6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Other		If D Level Driller, provide supervising driller's name: _____	



Water Well Record

Bureau of Water

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

1. WELL OWNER INFORMATION: Name: Pad Kemmanahalli (last) (first) Address: 1111 Broadway, Suite 1800 City: Oakland State: CA Zip: 94607 Telephone: Work: 510.844.2882 Home:		7. PERMIT NUMBER: 8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement	
2. LOCATION OF WELL: COUNTY: Greenwood Name: Red Scal Measurement Street Address: 1310 Emerald Road City: Greenwood Zip: 29646 Latitude: Longitude:		9. WELL DEPTH (completed) Date Started: 7/17/2015 49 ft. Date Completed: 7/17/2015 10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 2" Height: Above/Below Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized Surface 2.5 ft. <input type="checkbox"/> Steel <input type="checkbox"/> Other Weight _____ lb./ft. 0 in. to 39 ft. depth Drive Shoe? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No _____ in. to _____ ft. depth	
3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:		11. SCREEN: Type: PVC Diam.: 2" Slot/Gauge: .010 Length: Set Between: 39 ft. and 49 ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No	
4. ABANDONMENT: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Give Details Below Grouted Depth: from _____ ft. to _____ ft.		12. STATIC WATER LEVEL ft. below land surface after 24 hours	
13. PUMPING LEVEL Below Land Surface. ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No Yield:		14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Bacterial Analysis <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Please enclose lab results.	
15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 49 ft. to 37 ft. Effective size 20/30 Uniformity Coefficient _____		16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other _____ Depth: From 35 ft. to 0 ft.	
17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: _____ Amount: _____		18. PUMP: Date installed: _____ Not installed <input checked="" type="checkbox"/> Mfr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal	
19. WELL DRILLER: Blake Cabit CERT. NO.: 963 Address: (Print) 825 South Main Street Level: A B C D (circle one) New Ellenton, SC 29809 Telephone No.: 803.652.1790 Fax No.: 803.652.1793		20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.	
5. REMARKS: MW 15R		Signed: <u>Blake Cabit</u> Date: <u>8/3/15</u> <small>Well Driller</small> If D Level Driller, provide supervising driller's name:	
6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Other			



Water Well Record

Bureau of Water

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

1. WELL OWNER INFORMATION: Name: Pad Kemmanahalli (last) (first) Address: 1111 Broadway, Suite 1800 City: Oakland State: CA Zip: 94607 Telephone: Work: 510.844.2882 Home:		7. PERMIT NUMBER:	
2. LOCATION OF WELL: COUNTY: Greenwood Name: Rcd Scal Measurement Street Address: 1310 Emerald Road City: Greenwood Zip: 29646 Latitude: Longitude:		8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement	
3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:		9. WELL DEPTH (completed) Date Started: 7/17/2015 49 ft. Date Completed: 7/17/2015	
4. ABANDONMENT: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Give Details Below Grouted Depth: from _____ ft. to _____ ft.		10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 2" Height: Above/Below _____ Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized Surface _____ ft. <input type="checkbox"/> Steel <input type="checkbox"/> Other Weight _____ lb./ft. 0 in. to 39 ft. depth Drive Shoe? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No in. to _____ ft. depth	
		11. SCREEN: Type: PVC Diam.: 2" Slot/Gauge: .010 Length: 10 Set Between: 39 ft. and 49 ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No	
		12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours	
		13. PUMPING LEVEL Below Land Surface. ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No Yield: _____	
		14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please enclose lab results.	
		15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 49 ft. to 37 ft. Effective size 20/30 Uniformity Coefficient _____	
		16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other Depth: From 35 ft. to 0 ft.	
		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: _____ Amount: _____	
		18. PUMP: Date installed: _____ Not installed <input checked="" type="checkbox"/> Mr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal	
		19. WELL DRILLER: Blake Cabit CERT. NO.: 963 Address: (Print) _____ 825 South Main Street New Ellenton, SC 29809 Telephone No.: 803.652.1790 Level: A B C D (circle one) Fax No.: 803.652.1790	
		20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.	
		Signed: <u>Blake Cabit</u> Date: <u>8/3/15</u> Well Driller	
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		If D Level Driller, provide supervising driller's name:	
5. REMARKS: MW-19			
6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Other			



Water Well Record

Bureau of Water

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

1. WELL OWNER INFORMATION: Name: Pad Kemmanahalli (last) (first) Address: 1111 Broadway, Suite 1800 City: Oakland State: CA Zip: 94607 Telephone: Work: 510.844.2882 Home:		7. PERMIT NUMBER: 8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement	
2. LOCATION OF WELL: COUNTY: Greenwood Name: Red Seal Measurement Street Address: 1310 Emerald Road City: Greenwood Zip: 29646 Latitude: Longitude:		9. WELL DEPTH (completed) Date Started: 7/15/2015 59 ft. Date Completed: 7/15/2015 10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 2" Height: Above/Below Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized Surface 2.5 ft. <input type="checkbox"/> Steel <input type="checkbox"/> Other Weight _____ lb./ft. 0 in. to 49 ft. depth Drive Shoe? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No _____ in. to _____ ft. depth	
3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:		11. SCREEN: Type: PVC Diam.: 2" Slot/Gauge: .010 Length: 10 Set Between: 49 ft. and 59 ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No	
4. ABANDONMENT: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Give Details Below Grouted Depth: from _____ ft. to _____ ft.		12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours	
Formation Description		*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		13. PUMPING LEVEL Below Land Surface. _____ ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No Yield: _____	
5. REMARKS: MW 20		14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please enclose lab results.	
		15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 59 ft. to 47 ft. Effective size 20/30 Uniformity Coefficient _____	
		16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other _____ Depth: From 45 ft. to 0 ft.	
		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: _____ Amount: _____	
		18. PUMP: Date installed: _____ Not installed <input checked="" type="checkbox"/> Mfr. Name: _____ Model No: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal	
		19. WELL DRILLER: Blake Cabit CERT. NO.: 963 Address: (Print) 825 South Main Street Level: A B C D (circle one) New Ellenton, SC 29809 Telephone No.: 803.652.1790 Fax No.: 803.652.1793	
20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.		Signed: <u>Blake Cabit</u> Date: <u>8/3/15</u> Well Driller	
6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Other		If D Level Driller, provide supervising driller's name: _____	



Water Well Record

Bureau of Water

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

1. WELL OWNER INFORMATION: Name: Pad Kemmanahalli (last) (first) Address: 1111 Broadway, Suite 1800 City: Oakland State: CA Zip: 94607 Telephone: Work: 510.844.2882 Home: 2. LOCATION OF WELL: COUNTY: Greenwood Name: Red Seal Measurement Street Address: 1310 Emerald Road City: Greenwood Zip: 29646 Latitude: Longitude:		7. PERMIT NUMBER: 8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement	
		9. WELL DEPTH (completed) Date Started: 7/16/2015 42.5 ft. Date Completed: 7/16/2015 10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 2" Height: Above/Below Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized Surface <input type="checkbox"/> Steel <input type="checkbox"/> Other Weight _____ lb./ft. 0 in. to 32.5 ft. depth Drive Shoe? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No In to _____ ft. depth	
		11. SCREEN: Type: PVC Diam.: 2" Slot/Gauge: .010 Length: 10 Set Between: 32.5 ft. and 42.5 ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No	
		12. STATIC WATER LEVEL ft. below land surface after 24 hours	
		13. PUMPING LEVEL Below Land Surface. ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No Yield:	
		14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please enclose lab results.	
		15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 42.5 ft. to 30.5 ft. Effective size 20/30 Uniformity Coefficient	
		16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other Depth: From 28.5 ft. to 0 ft.	
		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: _____ Amount: _____	
		18. PUMP: Date installed: _____ Not installed <input checked="" type="checkbox"/> Mfr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal	
		19. WELL DRILLER: Blake Cabit CERT. NO.: 963 Address: (Print) _____ 825 South Main Street New Ellenton, SC 29809 Telephone No.: 803.652.1790 Fax No.: 803.652.1793 20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.	
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		Signed: <u>Blake Cabit</u> Date: <u>8/3/15</u> Well Driller	
5. REMARKS: MW-21		If D Level Driller, provide supervising driller's name:	
6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Other			



Water Well Record

Bureau of Water

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

1. WELL OWNER INFORMATION: Name: Pad Kemmanahalli (last) (first) Address: 1111 Broadway, Suite 1800 City: Oakland State: CA Zip: 94607 Telephone: Work. 510.844.2882 Home:		7. PERMIT NUMBER: 8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement	
2. LOCATION OF WELL: COUNTY: Greenwood Name: Red Seal Measurement Street Address: 1310 Emerald Road City: Greenwood Zip: 29646 Latitude: Longitude:		9. WELL DEPTH (completed) Date Started 7/16/2015 79 ft. Date Completed 7/16/2015 10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam. 2" Height: Above/Below Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized Surface _____ ft. <input type="checkbox"/> Steel <input type="checkbox"/> Other Weight _____ lb./ft. 0 in. to 74 ft. depth Drive Shoe? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No in. to _____ ft. depth	
3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:		11. SCREEN: Type: PVC Diam.: 2" Slo/Gauge. .010 Length: 5 Set Between: 74 ft. and 79 ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No	
4. ABANDONMENT: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Give Details Below Grouted Depth from _____ ft. to _____ ft.		12. STATIC WATER LEVEL ft. below land surface after 24 hours	
		13. PUMPING LEVEL Below Land Surface _____ ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No Yield _____	
		14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please enclose lab results	
		15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 79 ft. to 72 ft. Effective size 20/30 Uniformity Coefficient _____	
		16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other _____ Depth From 70 ft. to 0 ft.	
		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: _____ Amount: _____	
		18. PUMP: Date installed _____ Not installed <input checked="" type="checkbox"/> Mfr Name: _____ Model No: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal	
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		19. WELL DRILLER: Blake Cabit CERT. NO.: 963 Address: (Print) _____ 825 South Main Street New Ellenton, SC 29809 Telephone No.: 803.652.1793 Fax No.: 803.652.1793 20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief	
5. REMARKS: MW-22D		Signed: <u>Blake Cabit</u> Date <u>8/3/15</u> Well Driller	
6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Other		If D Level Driller, provide supervising driller's name:	



W. Marshall Taylor Jr., Acting Director
Promoting and protecting the health of the public and the environment

Monitoring Well Approval

Date of Issuance: May 14, 2015

Approval #: MW-10145

Approval is hereby granted to: Aaron Council, URS/AECOM
10 Patewood Drive, Building 6, Suite 500
Greenville, South Carolina 29615

Facility: Itron Site
VCC 13-6078-RP
Greenwood County

This approval is for the installation of seven (7) permanent groundwater monitoring wells. The wells will be installed in the locations as illustrated in Figure 1 and constructed per the details included in the Supplemental Work Plan for Continued Groundwater Investigation dated April 27, 2015. All wells are to be installed following the applicable requirements of R.61-71.

Please note that R.61-71 requires the following:

1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.
2. All wells shall be properly developed per R.61-71.H.2.d. A Water Well Record Form or other form provided or approved by the Department shall be completed and submitted within 30 days after well completion or abandonment unless another schedule has been approved by the Department. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f
3. All analytical data and water levels obtained from each monitoring well shall be submitted to the Project Manager (Carol Crooks) within 30 days of receipt of laboratory results unless another schedule has been approved by the Department as required by R.61-71.H.1.d.
4. All monitoring wells shall be labeled as required by R.61-71.H.2.c.
5. If any of the information provided to the Department changes, including the proposed drilling date, the Project Manager (Carol Crooks) shall be notified at least twenty-four (24) hours prior to well construction as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards and Regulations, dated April 26, 2002.

Carol L. Crooks, Hydrogeologist
Division of Site Assessment, Remediation and Revitalization
Bureau of Land and Waste Management

Appendix D: Survey Report

<u>Well No.</u>	<u>Northing</u>	<u>Easting</u>	<u>Top of PVC</u>	<u>Gnd. Elev.</u>
10 I	868601.7675	1668468.0656	551.10	551.30
10 R	868588.3849	1668490.9996	551.03	551.20
15 R	868379.6621	1668655.5707	556.96	553.89
19	868198.1671	1668401.2254	548.37	545.41
20	868910.1291	1668743.3812	545.47	542.50
21	868425.3954	1668091.6803	548.80	548.90
22 D	868855.3533	1668766.5480	549.27	546.32

Appendix E: Well Development Logs

Monitoring Well Development Log

Page 1 of 1

Date Started: <u>7/22/15</u>	Date Completed: <u>7/22/15</u>
Field Personnel: AC & PC	
Site Name: Itron - Greenwood	
Project Number: 604Z9584	
Well ID #: MW-101	
<input type="checkbox"/> Upgradient <input checked="" type="checkbox"/> Downgradient	
Weather Conditions: Sunny	
Air Temperature: 75 °F	

Total Well Depth (TWD): (1/100 ft)	<u>58</u>
Depth to Groundwater (DGW): (1/100 ft)	<u>23.69</u>
Length of Water Column (LWC) = TWD - DGW = <u>34.31</u> (1/100 ft)	
1 Casing Volume (OCV) = LWC x 0.163 = <u>5.6</u> gallons	
5 Casing Volumes = <u>28</u> gallons	
Method of Well Development <u>HydroLift II Waterera</u>	
<u>Pumping and Surging</u>	
Total Volume of Water Removed: <u>38</u> gallons	

Date/Time	Discharge Rate (gpm)	Volume Purged (gallons)	Water Level (ftoc)	Water Temp. (C)	pH	ORP Eh (mV)	Specific Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
7/22/15 0937	0.5	Initial	23.69	21.39	11.24	57	0.538	>1000	5.67
7/22/15 0942	1	5	44.97	19.67	10.86	46	0.347	801	2.99
7/22/15 0952	0.5	10	46.96	19.71	9.71	-16	0.191	272	2.77
7/22/15 1002	0.5	15	48.34	19.39	8.75	6	0.147	607	3.00
7/22/15 1032	0.5	18	39.61	19.68	9.09	0	0.142	186	4.44
7/22/15 1037	1	23	46.95	19.00	8.38	45	0.117	134	4.37
7/22/15 1047	0.5	28	48.49	19.10	7.48	40	0.107	82.1	4.35
7/22/15 1057	0.5	33	48.40	19.25	7.10	60	0.098	117	4.79
7/22/15 1107	0.5	38	48.50	19.18	6.83	87	0.091	485	8.83

COMMENTS/OBSERVATIONS: Pumped dry @ 1012 (18 gallons) Restart @ 1032

Monitoring Well Development Log

Page 1 of 1

Date Started: <u>7/22/15</u>	Date Completed: <u>7/23/15</u>
Field Personnel: <u>AC & PC</u>	
Site Name: <u>Itron - Greenwood</u>	
Project Number: <u>60429584</u>	
Well ID #: <u>MW-10R</u>	
<input type="checkbox"/> Upgradient <input checked="" type="checkbox"/> Downgradient	
Weather Conditions: <u>Sunny</u>	
Air Temperature: <u>75</u> °F	

Total Well Depth (TWD): <u>(1/100 ft)</u>	<u>35</u>
Depth to Groundwater (DGW): <u>(1/100 ft)</u>	<u>75.35</u>
Length of Water Column (LWC) = TWD - DGW = <u>9.65</u> (1/100 ft)	
1 Casing Volume (OCV) = LWC x 0.163 = <u>1.5</u> gallons	
5 Casing Volumes = 7.5 gallons <u>7.5</u>	
Method of Well Development <u>HydroLift II Water</u> <u>Pumping and surging</u>	
Total Volume of Water Removed: <u>7.5</u> gallons	

Date/Time	Discharge Rate (gpm)	Volume Purged (gallons)	Water Level (btoc)	Water Temp. (C)	pH	ORP Eh (mV)	Specific Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
7/22/15 0913	1.5	Initial	25.35	24.96	7.37	140	0.273	>1000	3.70
7/22/15 0920	1.5	5	32.65	20.23	8.08	98	0.162	>1000	5.28
7/22/15 1113	0.5	5.5	DRY	22.75	7.49	99	0.179	>1000	6.35
7/23/15 1241	0.5	7	25.50	22.02	6.54	110	0.150	754	5.79
7/23/15 1346	0.5	7.5	34.50	25.51	5.80	184	0.099	216	7.74

COMMENTS/OBSERVATIONS: Pumped dry @ 0916. Restart @ 0919; Dry @ 0920. Restart @ 0925; Dry @ 0926; Restart @ 1014; Dry @ 1015 (DTW = 33.17); Restart @ 1113. Dry after 0.5 gals. Restart @ 1241 on 7/23/15. Dry after 1.5 gals.

Monitoring Well Development Log

Page 1 of 1

Date Started: <u>7/23/15</u>	Date Completed: <u>7/23/15</u>
Field Personnel: <u>AC & PC</u>	
Site Name: <u>ITron - Greenwood</u>	
Project Number: <u>60429584</u>	
Well ID #: <u>MW - 15R</u>	
<input type="checkbox"/> Upgradient <input checked="" type="checkbox"/> Downgradient	
Weather Conditions: <u>Cloudy</u>	
Air Temperature: <u>82 °F</u>	

Total Well Depth (TWD): <u>(1/100 ft)</u>	<u>49</u>
Depth to Groundwater (DGW): <u>(1/100 ft)</u>	<u>37.15</u>
Length of Water Column (LWC) = TWD - DGW = <u>11.85(1/100 ft)</u>	
1 Casing Volume (OCV) = LWC x $\pi \cdot 0.163$ = <u>1.9</u> gallons	
5 Casing Volumes = <u>9.5</u> gallons	
Method of Well Development <u>HydroLift II Waterra</u> <u>Pumping and surging</u>	
Total Volume of Water Removed: <u>15</u> gallons	

Date/Time	Discharge Rate (gpm)	Volume Purged (gallons)	Water Level (btoc)	Water Temp. (C)	pH	ORP Eh (mV)	Specific Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
7/23/15 1103	0.5	Initial	37.15	23.51	6.75	258	0.150	723	9.28
7/23/15 1121	0.25	5	45.55	21.64	6.33	159	0.125	517	4.13
7/23/15 1145	0.35	10	47.81	21.28	5.95	101	0.109	241	4.95
7/23/15 1211	0.20	15	49.00	21.42	5.92	102	0.099	87	5.23

COMMENTS/OBSERVATIONS:

Monitoring Well Development Log

 Page 1 of 1

Date Started: <u>7/23/15</u>	Date Completed: <u>7/23/15</u>
Field Personnel: <u>AC & PC</u>	
Site Name: <u>ITron - Greenwood</u>	
Project Number: <u>60429584</u>	
Well ID #: <u>MW-19</u>	
<input type="checkbox"/> Upgradient <input checked="" type="checkbox"/> Downgradient	
Weather Conditions: <u>Sunny</u>	
Air Temperature: <u>75</u> °F	

Total Well Depth (TWD): <u>(1/100 ft) 49.5</u>
Depth to Groundwater (DGW): <u>(1/100 ft) 25.71</u>
Length of Water Column (LWC) = TWD - DGW = <u>23.79(1/100 ft)</u>
1 Casing Volume (OCV) = LWC x 0.163 = <u>3.9</u> gallons
5 Casing Volumes = <u>19.5</u> gallons
Method of Well Development <u>Hydrolift II Waterra</u>
Pumping and surging
Total Volume of Water Removed: <u>25</u> gallons

Date/Time	Discharge Rate (gpm)	Volume Purged (gallons)	Water Level (btoc)	Water Temp. (C)	pH	ORP Eh (mV)	Specific Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
7/23/15 0907	0.5	Initial	25.71	21.36	8.02	109	0.182	>1000	6.61
7/23/15 0919	0.4	5	22.94	20.61	6.88	96	0.144	745	4.44
7/23/15 0929	0.5	10	29.70	19.68	6.67	76	0.138	609	4.38
7/23/15 0939	0.5	15	29.91	19.47	6.62	66	0.121	425	4.34
7/23/15 0949	0.5	20	29.53	19.60	6.34	75	0.107	117	3.84
7/23/15 0959	0.5	25	29.76	19.46	6.23	84	0.098	86	4.29

COMMENTS/OBSERVATIONS:

Monitoring Well Development LogPage 1 of 1

Date Started: <u>7/22/15</u>	Date Completed: <u>7/22/15</u>
Field Personnel: <u>AC & PC</u>	
Site Name: <u>Itron - Greenwood</u>	
Project Number: <u>60429584</u>	
Well ID #: <u>MW-20</u>	
<input type="checkbox"/> Upgradient <input checked="" type="checkbox"/> Downgradient	
Weather Conditions: <u>Sunny</u>	
Air Temperature: <u>90 °F</u>	

Total Well Depth (TWD): <u>59</u> (1/100 ft)
Depth to Groundwater (DGW): <u>(1/100 ft) 27.61</u>
Length of Water Column (LWC) = TWD - DGW = <u>31.39</u> (1/100 ft)
1 Casing Volume (OCV) = LWC x 0.163 = <u>5.11</u> gallons
5 Casing Volumes = <u>25.5</u> gallons
Method of Well Development <u>Hydrolift II Waterra</u>
Pumping and Surging
Total Volume of Water Removed: <u>30</u> gallons

Date/Time	Discharge Rate (gpm)	Volume Purged (gallons)	Water Level (ftoc)	Water Temp. (C)	pH	ORP Eh (mV)	Specific Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
7/22/15 1501	0.7	Initial	27.61	24.50	7.44	90	0.262	344	6.30
7/22/15 1508	0.7	5	47.11	22.23	7.09	354	0.200	212	8.79
7/22/15 1518	0.5	10	52.46	20.51	6.64	409	0.209	189	3.73
7/22/15 1532	0.4	15	49.14	19.84	6.19	257	0.175	154	4.14
7/22/15 1545	0.4	20	49.55	19.94	5.90	131	0.148	136	3.59
7/22/15 1605	0.25	25	47.39	20.27	6.00	113	0.132	62	3.69
7/22/15 1618	0.4	30	44.09	19.69	6.12	101	0.120	81	7.86

COMMENTS/OBSERVATIONS:

Monitoring Well Development Log

Date Started: 7/22/15 Date Completed: 7/23/15
 Field Personnel: AC & PC
 Site Name: Itron - Greenwood
 Project Number: 60429584
 Well ID #: MW-21
 Upgradient Downgradient
 Weather Conditions: Sunny
 Air Temperature: 82 °F

Total Well Depth (TWD): (1/100 ft) 42
 Depth to Groundwater (DGW): (1/100 ft) 16.91
 Length of Water Column (LWC) = TWD - DGW = 25.09 (1/100 ft)
 1 Casing Volume (OCV) = LWC x 0.163 = 4.1 gallons
 5 Casing Volumes = 20.5 gallons
 Method of Well Development HydroLift II Waterra
 Pumping and surging
 Total Volume of Water Removed: 18 gallons

Date/Time	Discharge Rate (gpm)	Volume Purged (gallons)	Water Level (btoc)	Water Temp. (C)	pH	ORP Eh (mV)	Specific Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
7/22/15 1132	1	Initial	16.91	22.69	7.25	100	0.102	598	3.93
7/22/15 1137	1	5	31.81	20.70	6.14	116	0.090	445	2.19
7/22/15 1305	0.1	6	16.95	22.34	5.66	85	0.042	805	5.19
7/22/15 1311	0.5	9	41.51	21.53	5.17	149	0.043	427	6.63
7/22/15 1330	0.1	10	31.27	21.80	5.03	114	0.043	56	4.96
7/22/15 1335	0.1	12	40.44	21.09	4.72	165	0.043	164	6.91
7/22/15 1345	0.1	13	35.28	21.61	4.45	174	0.043	147	6.37
7/23/15 1406	—	13	16.99	22.48	6.41	122	0.046	74.6	6.42
7/23/15 1410	1	18	39.34	21.31	5.84	145	0.056	112	6.06

COMMENTS/OBSERVATIONS: Dry @ 1140 (8 gals); Restart @ 1305; Dry @ 1311 (DTW=41.51) Restart @ 1330;
 Dry @ 1335; Restart @ 1345; Dry @ 1348. Restart on 7/23/15 @ 1406. Dry @ 1413.

Monitoring Well Development Log

Date Started:	7/22/15	Date Completed:	7/22/15
Field Personnel:	AC & PC		
Site Name:	Itron - Greenwood		
Project Number:	60429584		
Well ID #:	MW-22D		
<input type="checkbox"/> Upgradient <input checked="" type="checkbox"/> Downgradient			
Weather Conditions:	Sunny		
Air Temperature:	90 °F		

Total Well Depth (TWD):	(1/100 ft)	80
Depth to Groundwater (DGW):	(1/100 ft)	31.90
Length of Water Column (LWC) = TWD - DGW = 48.1 (1/100 ft)		
1 Casing Volume (OCV) = LWC x 0.163 = 7.8 gallons		
5 Casing Volumes = 39 gallons		
Method of Well Development	Hydrolift II Waterjet	
Pumping and surging		
Total Volume of Water Removed: 20 gallons		

Date/Time	Discharge Rate (gpm)	Volume Purged (gallons)	Water Level (btoc)	Water Temp. (C)	pH	ORP Eh (mV)	Specific Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
7/22/15 1430	0.5	Initial	31.90	26.42	6.93	162	0.196	683	6.93
7/22/15 1440	0.5	5	49.70	24.90	7.60	191	0.185	809	7.53
7/22/15 1450	0.5	10	65.31	22.87	8.38	201	0.168	372	5.94
7/22/15 1500	0.5	15	73.33	22.52	8.33	46	0.160	425	4.68
7/22/15 1510	0.5	20	79.13	24.38	8.68	25	0.112	261	4.57

COMMENTS/OBSERVATIONS:

Appendix F: Groundwater Sampling Logs

Field Data Information Log for Groundwater Sampling

Well ID # MW-1
 Site Name Itron - Greenwood, SC
 Date 7-28-15
 Field Personnel PETER COONTRY
 Job # 60429584
 Weather Conditions Partly Cloudy
 Air Temperature 84 °F
 Total Well Depth (TWD) 31.50 1/100 ft
 Depth to Ground Water (DGW) 22.89 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~ 1.1 gallons

Casing Diameter	2.0	Inches	
Casing Material	PVC		
Measuring Point Elevation		1/100 ft	
Land Surface Elevation		1/100 ft	
Screened Interval	21.5 - 31.5	1/100 ft	
Dedicated Pump or Bailer	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/> X Type _____	
Locking Cap	YES <input checked="" type="checkbox"/> X	NO <input type="checkbox"/>	
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/> X	NO <input type="checkbox"/>	
Well Yield	LOW <input checked="" type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
Remarks			

FIELD ANALYSES

VOLUME PURGED (gallons)	0	0.6	1.1				
TIME (military)	1018	1021	1024 1035	1027			
PH (S.U.)	5.92	5.13	5.07				
Sp. Cond. (units: $\mu\text{s/cm}$)	0.025	0.019	0.024				
Water Temp. (°C)	25.02	24.01	24.01				
TURBIDITY (ntu)	328	583	216				
ORP (mV)	247	251	260				
Dissolved Oxygen (mg/L)	7.45	6.89	8.36				
Salinity							

COMMENTS/OBSERVATIONS: DRY @ 1 gal : 1022 SAMPLE TIME : 1038

Field Data Information Log for Groundwater Sampling

Well ID # MW - 2
 Site Name Itron - Greenwood, SC
 Date 7/28/15
 Field Personnel M. Lain
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 78 °F
 Total Well Depth (TWD) 35 1/100 ft
 Depth to Ground Water (DGW) 24.49 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~1.1 gallons

Casing Diameter 2.0 Inches
 Casing Material PVC
 Measuring Point Elevation 1/100 ft
 Land Surface Elevation 1/100 ft
 Screened Interval 25 - 35 1/100 ft
 Dedicated Pump or Bailer YES NO X Type _____
 Locking Cap YES X NO _____
 Well Integrity Satisfactory YES X NO _____
 Well Yield LOW MODERATE HIGH _____
 Remarks Sampled @ 1058 for VOCs
slightly turbid with mica flakes

FIELD ANALYSES

VOLUME PURGED (gallons)	<u>Initial 0</u>	<u>0.75</u>	<u>1052</u>	<u>1058</u>			
TIME (military)	<u>1043</u>	<u>1048</u>					
PH (S.U.)	<u>5.90</u>	<u>5.33</u>					
Sp. Cond. (units: $\mu\text{S}/\text{cm}$)	<u>0.076</u>	<u>0.065</u>					
Water Temp. (°C)	<u>24.80</u>	<u>25.80</u>	<u>Dry</u>				
TURBIDITY (ntu)	<u>379</u>	<u>311</u>					
ORP (mV)	<u>174</u>	<u>212</u>					
Dissolved Oxygen (mg/L)	<u>3.47</u>	<u>2.58</u>					
Salinity	<u>-</u>	<u>-</u>	<u>=</u>				

COMMENTS/OBSERVATIONS: Pump 1.1 gallons

Field Data Information Log for Groundwater Sampling

Well ID # MW-3
 Site Name Itron - Greenwood, SC
 Date 7/29/15
 Field Personnel AC
 Job # 60429584
 Weather Conditions Partly Cloudy
 Air Temperature 74 °F
 Total Well Depth (TWD) 47 1/100 ft
 Depth to Ground Water (DGW) 22.50 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~ 2 gallons

Casing Diameter 2.0 Inches
 Casing Material PVC
 Measuring Point Elevation 1/100 ft
 Land Surface Elevation 1/100 ft
 Screened Interval 37-41 1/100 ft
 Dedicated Pump or Bailer YES NO Type _____
 Locking Cap YES NO _____
 Well Integrity Satisfactory YES NO _____
 Well Yield LOW MODERATE HIGH
 Remarks Sample collected @ 0855
 VOCs, SVOCs
 MS/MSD collected @ 0855

FIELD ANALYSES

VOLUME PURGED (gallons)
 TIME (military)
 PH (S.U.)
 Sp. Cond. (units: $\mu\text{S}/\text{cm.}$)
 Water Temp. (°C)
 TURBIDITY (ntu)
 ORP (mV)
 Dissolved Oxygen (mg/L)
 Salinity

0	0.5	1	1.5	2		
0839	0842	0845	0848	0851		
5.62	5.49	5.38	5.37	5.36		
0.159	0.158	0.158	0.157	0.157		
20.76	20.94	21.30	21.36	21.41		
161	83	75	87	82		
157	166	167	166	172		
2.03	1.68	1.50	1.43	1.22		
—	—	—	—	—		

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MW-4
 Site Name Itron - Greenwood, SC
 Date 7/29/15
 Field Personnel M. Lew
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 85 °F
 Total Well Depth (TWD) 47 1/100 ft
 Depth to Ground Water (DGW) 30.14 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump low flow
 Method of Sample Collection Submersible Pump low flow
 Total Volume of Water Removed ~ 1.5 gallons

Casing Diameter 2.0 Inches
 Casing Material PVC
 Measuring Point Elevation 1/100 ft
 Land Surface Elevation 1/100 ft
 Screened Interval 37 - 47 1/100 ft
 Dedicated Pump or Bailer YES NO X Type _____
 Locking Cap YES X NO _____
 Well Integrity Satisfactory YES X NO _____
 Well Yield LOW MODERATE X HIGH _____
 Remarks Sampled @ 100 ft for VOCs
* pump water is tan & Silty

FIELD ANALYSES

VOLUME PURGED (gallons)

Initial	~1.0	~1.25	~1.5			
1041	1046	1051	1056			
5.85	5.69	5.46	5.44			
0.160	0.143	0.141	0.139			
19.86	19.91	19.94	19.92			
9.9 *	> 800 *	324 *	227 *			
171	165	171	173			
0.78	0.45	0.39	0.37			
-	-	-	-			

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MW-5
 Site Name Itron - Greenwood, SC
 Date 7/28/15
 Field Personnel M. Law
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 85 °F
 Total Well Depth (TWD) 47 1/100 ft
 Depth to Ground Water (DGW) 28.34 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low flow
 Method of Sample Collection Submersible Pump Low flow
 Total Volume of Water Removed ~5.0 gallons

Casing Diameter 2.0 Inches
 Casing Material PVC
 Measuring Point Elevation 1/100 ft
 Land Surface Elevation 1/100 ft
 Screened Interval 37 - 47 1/100 ft
 Dedicated Pump or Bailer YES NO Type _____
 Locking Cap YES NO _____
 Well Integrity Satisfactory YES NO _____
 Well Yield LOW MODERATE HIGH _____
 Remarks Sampled C 1400 for UAC's

FIELD ANALYSES

VOLUME PURGED (gallons)	Initial	1.2	2.5	5			
TIME (military)	1341	1346	1351	1356			
PH (S.U.)	7.02	6.97	5.81	5.92			
Sp. Cond. (units: $\mu\text{S/cm.}$)	0.077	0.074	0.076	0.081			
Water Temp. (°C)	23.09	20.48	20.43	20.12			
TURBIDITY (ntu)	121	64.8	35.8	28.8			
ORP (mV)	74	153	170	206			
Dissolved Oxygen (mg/L)	8.1	4.44	4.23	3.83			
Salinity	-	-	-	-			

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MW-5 □

Site Name Itron - Greenwood, SC

Date 7-28-15

Field Personnel PETER COMPTY

Job # 60429584

Weather Conditions CLEPR

Air Temperature 91° °F

Total Well Depth (TWD) 47.90 1/100 ft

Depth to Ground Water (DGW) 29.56 1/100 ft

Length of Water Column (LWC) = TWD - DGW 1/100 ft

1 Casing Volume = LWC x 0.163 = gal

3 Casing Volumes gal = Standard Evacuation Volume

Method of Well Excavation Submersible Pump Low Flow

Method of Sample Collection Submersible Pump Low Flow

Total Volume of Water Removed ~ 3 gallons

Casing Diameter	2.0	Inches
Casing Material	PVC	
Measuring Point Elevation		1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	37.9 - 47.9	1/100 ft
Dedicated Pump or Bailer	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> X Type _____	
Locking Cap	YES <input checked="" type="checkbox"/> X NO <input type="checkbox"/>	
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Well Yield	LOW <input type="checkbox"/> MODERATE <input checked="" type="checkbox"/> HIGH <input type="checkbox"/>	
Remarks		

FIELD ANALYSES

VOLUME PURGED (gallons)	0	0.8	1.6	2.4	3.0		
TIME (military)	1342	1345	1348	1351	1354		
PH (S.U.)	6.60	6.71	6.60	6.56	6.62		
Sp. Cond. (units: μ s/cm)	0.165	0.158	0.158	0.158	0.157		
Water Temp. (°C)	20.17	21.47	19.92	19.82	20.16		
TURBIDITY (ntu)	804	418	172	133	144		
ORP (mV)	-149	-156	-148	-143	-145		
Dissolved Oxygen (mg/L)	0.00	0.00	0.00	0.00	0.00		
Salinity							

COMMENTS/OBSERVATIONS: SAMPLE TIME: 1358

Field Data Information Log for Groundwater Sampling

Well ID # MW-6
 Site Name Itron - Greenwood, SC
 Date 7/29/15
 Field Personnel AC
 Job # 60429584
 Weather Conditions Cloudy
 Air Temperature 74 °F
 Total Well Depth (TWD) 38 1/100 ft
 Depth to Ground Water (DGW) 25.56 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~ 1.5 gallons

Casing Diameter	2.0	Inches
Casing Material	PVC	
Measuring Point Elevation		1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	28 - 38	1/100 ft
Dedicated Pump or Bailer	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/> X Type _____
Locking Cap	YES <input checked="" type="checkbox"/> X	NO <input type="checkbox"/>
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/> X	NO <input type="checkbox"/>
Well Yield	LOW <input type="checkbox"/>	MODERATE <input checked="" type="checkbox"/> X HIGH <input type="checkbox"/>
Remarks	Sample collected @ 1030 VOCs	

FIELD ANALYSES

VOLUME PURGED (gallons)	0	0.5	1	1.5			
TIME (military)	1018	1021	1024	1027			
PH (S.U.)	5.83	5.75	5.71	5.65			
Sp. Cond. (units: $\mu\text{S/cm}$)	0.036	0.033	0.033	0.033			
Water Temp. (°C)	22.51	20.99	21.26	20.78			
TURBIDITY (ntu)	109	68.5	37.9	9.5			
ORP (mV)	195	211	221	229			
Dissolved Oxygen (mg/L)	7.06	6.07	5.41	5.51			
Salinity	-	-	-	-			

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MW-7
 Site Name Itron - Greenwood, SC
 Date 7/29/15
 Field Personnel AC
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 84 °F
 Total Well Depth (TWD) 37.40 1/100 ft
 Depth to Ground Water (DGW) 26.02 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~ 2.5 gallons

Casing Diameter	2.0	Inches
Casing Material	PVC	
Measuring Point Elevation		1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	27.4 - 37.4	1/100 ft
Dedicated Pump or Bailer	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> X Type _____	
Locking Cap	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Well Yield	LOW <input type="checkbox"/> MODERATE <input checked="" type="checkbox"/> HIGH <input type="checkbox"/>	
Remarks	Sample collected @ 115 VOCs	

FIELD ANALYSES

VOLUME PURGED (gallons)	0	0.75	1.5	2	2.5		
TIME (military)	1058	1101	1104	1107	1110		
PH (S.U.)	5.57	5.50	5.44	5.44	5.42		
Sp. Cond. (units: $\mu\text{S/cm}$)	0.046	0.044	0.043	0.043	0.043		
Water Temp. (°C)	22.43	21.80	22.26	22.47	22.56		
TURBIDITY (ntu)	301	262	94.3	36.5	31.2		
ORP (mV)	220	237	246	248	249		
Dissolved Oxygen (mg/L)	9.07	7.86	7.20	7.05	6.99		
Salinity	-	-	-	-	-		

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MW-8
 Site Name Itron - Greenwood, SC
 Date 7/29/15
 Field Personnel M. Low
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 88 °F
 Total Well Depth (TWD) 57 1/100 ft
 Depth to Ground Water (DGW) 27.41 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump low flow
 Method of Sample Collection Submersible Pump low flow
 Total Volume of Water Removed ~ 1.75 gallons

Casing Diameter	2.0	Inches	
Casing Material	PVC		
Measuring Point Elevation		1/100 ft	
Land Surface Elevation		1/100 ft	
Screened Interval	<u>42 - 57</u>	1/100 ft	
Dedicated Pump or Bailer	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/> X	Type _____
Locking Cap	YES <input checked="" type="checkbox"/> X	NO <input type="checkbox"/>	
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/> X	NO <input type="checkbox"/>	
Well Yield	LOW <input type="checkbox"/>	MODERATE <input type="checkbox"/>	HIGH <input type="checkbox"/>
Remarks	<u># Sampled c 1200 for VOCs</u> <u>purge after is slightly salty!</u>		

FIELD ANALYSES

VOLUME PURGED (gallons)
 TIME (military)
 PH (S.U.)
 Sp. Cond. (units: μs/cm)
 Water Temp. (°C)
 TURBIDITY (ntu)
 ORP (mV)
 Dissolved Oxygen (mg/L)
 Salinity

0	~1.25	~1.5	~1.75			
1140	1145	1150	1155			
6.36	6.01	6.04	5.98			
0.051	0.053	0.054	0.053			
20.59	20.47	20.84	20.14			
526	204	304	82.4			
169	182	186	198			
—	5.64	5.87	5.59			
—	—	—	—			

COMMENTS/OBSERVATIONS: _____

Field Data Information Log for Groundwater Sampling

Well ID # MW-9
 Site Name Itron - Greenwood, SC
 Date 7-28-15
 Field Personnel PETER CONNELL
 Job #
 Weather Conditions Partly Cloudy
 Air Temperature 84 °F
 Total Well Depth (TWD) 52.3 1/100 ft
 Depth to Ground Water (DGW) 33.99 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed 2.0 gallons

Casing Diameter	2.0	Inches
Casing Material	PVC	
Measuring Point Elevation		1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	42.3 - 52.3	1/100 ft
Dedicated Pump or Bailer	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> X Type _____	
Locking Cap	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Well Yield	LOW <input type="checkbox"/> MODERATE <input checked="" type="checkbox"/> HIGH <input type="checkbox"/>	
Remarks	Sampled collected @ 0945	

FIELD ANALYSES

VOLUME PURGED (gallons)	0	0.2	0.6	1.0	1.5	1.9	
TIME (military)	1228	1131	1134	1137	1140	1143	
PH (S.U.)	5.40	6.24	4.44	4.41	4.39	4.30	
Sp. Cond. (units: $\mu\text{S}/\text{cm}^{-1}$)	0.024	0.023	0.023	0.022	0.023	0.021	
Water Temp. (°C)	26.67	25.29	23.72	24.15	23.48	23.50	
TURBIDITY (ntu)	23.9	13.9	18.4	24.2	30.8	41.0	
ORP (mV)	252	282	279	290	303	314	
Dissolved Oxygen (mg/L)	7.25	6.24	6.19	5.57	5.69	5.06	
Salinity							

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MW-9D
 Site Name Itron - Greenwood, SC
 Date 7/28/15
 Field Personnel M. Lee
 Job # 604429584
 Weather Conditions Sunny
 Air Temperature 84 °F
 Total Well Depth (TWD) 76 1/100 ft
 Depth to Ground Water (DGW) 33.56 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 42.44 1/100 ft
 1 Casing Volume = LWC x 0.163 = 68.3 gal
 3 Casing Volumes 204.9 gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low flow
 Method of Sample Collection Submersible Pump Low flow
 Total Volume of Water Removed ~3 gallons

Casing Diameter 2.0 Inches
 Casing Material PVC
 Measuring Point Elevation 1142 1/100 ft
 Land Surface Elevation 1142 1/100 ft
 Screened Interval 71 - 76 1/100 ft
 Dedicated Pump or Bailer YES NO X Type _____
 Locking Cap YES NO
 Well Integrity Satisfactory YES NO
 Well Yield LOW MODERATE HIGH
 Remarks Sample @ 1145 ft VOC

FIELD ANALYSES

VOLUME PURGED (gallons)	<u>Initial 0</u>	<u>~1.25</u>	<u>~2.25</u>	<u>~3</u>		
TIME (military)	<u>12:27</u>	<u>1152</u>	<u>1137</u>	<u>1142</u>	<u>1147</u>	
PH (S.U.)	<u>6.12</u>	<u>6.46</u>	<u>6.44</u>	<u>6.40</u>		
Sp. Cond. (units: <u>µs/cm</u>)	<u>0.150</u>	<u>0.149</u>	<u>0.149</u>	<u>0.149</u>		
Water Temp. (°C)	<u>22.06</u>	<u>20.06</u>	<u>20.23</u>	<u>20.90</u>		
TURBIDITY (ntu)	<u>553</u>	<u>178</u>	<u>163</u>	<u>177</u>		
ORP (mV)	<u>-84</u>	<u>6</u>	<u>-12</u>	<u>2</u>		
Dissolved Oxygen (mg/L)	<u>0.79</u>	<u>0.54</u>	<u>0.48</u>	<u>0.53</u>		
Salinity	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>		

COMMENTS/OBSERVATIONS: _____

Field Data Information Log for Groundwater Sampling

Page ____ of ____

Well ID # MW-10R
 Site Name Itron - Greenwood, SC
 Date 7/28/15
 Field Personnel AC
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 78 °F
 Total Well Depth (TWD) 35 1/100 ft
 Depth to Ground Water (DGW) 25.55 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~ 4.5 gallons

Casing Diameter 2.0 Inches
 Casing Material PVC
 Measuring Point Elevation 1/100 ft
 Land Surface Elevation 1/100 ft
 Screened Interval 1/100 ft
 Dedicated Pump or Bailer YES NO X Type
 Locking Cap YES X NO
 Well Integrity Satisfactory YES X NO
 Well Yield LOW MODERATE HIGH
 Remarks
 Sample collected @ 0925
 VOCs

FIELD ANALYSES

VOLUME PURGED (gallons)
 TIME (military)
 PH (S.U.)
 Sp. Cond. (units: $\mu\text{S}/\text{cm}$)
 Water Temp. (°C)
 TURBIDITY (ntu)
 ORP (mV)
 Dissolved Oxygen (mg/L)
 Salinity

	0	2	4	4.5			
	0853	0857	0900	0918			
	6.05	6.05	5.83	6.34			
	0.114	0.100	0.088	0.098			
	18.08	18.38	18.59	18.62			
	741	439	264	292			
	189	153	179	215			
	10.95	9.39	8.76	8.64			
	—	—	—	—			

COMMENTS/OBSERVATIONS: Dry @ 4 gallons @ 0900. Restart @ 0918

Field Data Information Log for Groundwater Sampling

Well ID #	MW-101		
Site Name	Itron - Greenwood, SC		
Date	7-28-15		
Field Personnel	PETER CONNELL		
Job #	60429584		
Weather Conditions	Partly Cloudy		
Air Temperature	84 °F		
Total Well Depth (TWD)	58.2	1/100 ft	
Depth to Ground Water (DGW)	24.32	1/100 ft	
Length of Water Column (LWC) = TWD - DGW		1/100 ft	
1 Casing Volume = LWC x	0.163	=	gal
3 Casing Volumes		gal	= Standard Evacuation Volume
Method of Well Excavation	Submersible Pump	Low Flow	
Method of Sample Collection	Submersible Pump	Low Flow	
Total Volume of Water Removed	2.4	gallons	

FIELD ANALYSES				
VOLUME PURGED (gallons)	0	0.8	1.6	2.4
TIME (military)	0927	0930	0933	0936
PH (S.U.)	6.36	6.28	6.27	6.29
Sp. Cond. (units: <u>Ms/cm</u>)	0.098	0.094	0.094	0.094
Water Temp. (°C)	19.15	19.14	19.25	19.35
TURBIDITY (ntu)	763	315	350	343
ORP (mV)	151	161	166	163
Dissolved Oxygen (mg/L)	6.44	5.40	4.59	4.33
Salinity				

COMMENTS/OBSERVATIONS: SAMPLE TIME: 0938

Field Data Information Log for Groundwater Sampling

Well ID # MW-101
 Site Name Itron - Greenwood, SC
 Date 7/28/15
 Field Personnel M. Law
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 75 °F
 Total Well Depth (TWD) 76 1/100 ft
 Depth to Ground Water (DGW) 26.60 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump low flow
 Method of Sample Collection Submersible Pump low flow
 Total Volume of Water Removed ~1.5 gallons

Casing Diameter 2.0 Inches
 Casing Material PVC
 Measuring Point Elevation 1/100 ft
 Land Surface Elevation 1/100 ft
 Screened Interval 71 - 76' 1/100 ft
 Dedicated Pump or Bailer YES NO Type _____
 Locking Cap YES NO _____
 Well Integrity Satisfactory YES NO _____
 Well Yield LOW MODERATE HIGH _____
 Remarks Sayre @ 0925
VOC's
grayish color to pale water

FIELD ANALYSES

VOLUME PURGED (gallons)	<u>Initial 0</u>	<u>0.50</u>	<u>0.78</u>	<u>1.25</u>			
TIME (military)	<u>0908</u>	<u>0913</u>	<u>0918</u>	<u>0923</u>			
PH (S.U.)	<u>6.09</u>	<u>5.91</u>	<u>5.89</u>	<u>5.91</u>			
Sp. Cond. (units: <u>μs/cm</u>)	<u>0.124</u>	<u>0.114</u>	<u>0.114</u>	<u>0.113</u>			
Water Temp. (°C)	<u>21.35</u>	<u>21.06</u>	<u>21.02</u>	<u>21.09</u>			
TURBIDITY (ntu)	<u>0.0</u>	<u>497</u>	<u>401</u>	<u>348</u>			
ORP (mV)	<u>118</u>	<u>57</u>	<u>52</u>	<u>48.</u>			
Dissolved Oxygen (mg/L)	<u>1.19</u>	<u>0.85</u>	<u>0.77</u>	<u>0.75</u>			
Salinity	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>			

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MW-11
 Site Name Itron - Greenwood, SC
 Date 7/29/15
 Field Personnel M. Law
 Job # 60929584
 Weather Conditions Sunny
 Air Temperature 78 °F
 Total Well Depth (TWD) 40 1/100 ft
 Depth to Ground Water (DGW) 26.05 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~1.25 gallons

Casing Diameter	2.0	Inches
Casing Material	PVC	
Measuring Point Elevation		1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	<u>30 - 40</u> <u>ft</u>	1/100 ft
Dedicated Pump or Bailer	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> X Type _____	
Locking Cap	YES <input checked="" type="checkbox"/> X NO <input type="checkbox"/>	
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Well Yield	LOW <input type="checkbox"/> MODERATE <input type="checkbox"/> HIGH <input type="checkbox"/>	
Remarks	<u>Sample C 0940 for VOCs</u> <u>Field Dps taken "Dap-a"</u>	

FIELD ANALYSES

VOLUME PURGED (gallons)
 TIME (military)
 PH (S.U.)
 Sp. Cond. (units: μs/cm)
 Water Temp. (°C)
 TURBIDITY (ntu)
 ORP (mV)
 Dissolved Oxygen (mg/L)
 Salinity

Initial	~ 0.5	~ 0.75	~ 1.0			
0920	0925	0930	0935			
5.16	4.86	5.10	4.88			
0.037	0.037	0.036	0.032			
20.77	20.79	21.96	21.79			
627	162	165	105			
245	267	255	234			
6.28	5.23	5.88	5.76			
~	~	~	~			

COMMENTS/OBSERVATIONS: _____

Field Data Information Log for Groundwater Sampling

Well ID # MW-12
 Site Name Itron - Greenwood, SC
 Date 7/29/15
 Field Personnel M. Low
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 81 °F
 Total Well Depth (TWD) 68 1/100 ft
 Depth to Ground Water (DGW) 38.19 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump low flow
 Method of Sample Collection Submersible Pump low flow
 Total Volume of Water Removed ~ 1.5 gallons

Casing Diameter 2.0 Inches
 Casing Material PVC
 Measuring Point Elevation 1/100 ft
 Land Surface Elevation 1/100 ft
 Screened Interval 58 - 68 1/100 ft
 Dedicated Pump or Bailer YES NO Type _____
 Locking Cap YES NO _____
 Well Integrity Satisfactory YES NO _____
 Well Yield LOW MODERATE HIGH
 Remarks Sampled @ 1020 for VOCs
* purge water is tan & slightly

FIELD ANALYSES

VOLUME PURGED (gallons)
 TIME (military)
 PH (S.U.)
 Sp. Cond. (units: μs/cm.)
 Water Temp. (°C)
 TURBIDITY (ntu)
 ORP (mV)
 Dissolved Oxygen (mg/L)
 Salinity

Initial	0	~ 1.0	~ 1.25	~ 1.50			
1003	1008	1013	1018				
5.80	5.20	5.04	4.99				
0.120	0.123	0.123	0.128				
21.23	21.17	20.85	20.17				
0.0 *	0.0 *	0.0 *	> 800 *				
221	218	220	186				
4.44	4.10	3.73	3.91				
-	-	-	-				

COMMENTS/OBSERVATIONS: _____

Field Data Information Log for Groundwater Sampling

Well ID # Mw-13
 Site Name Itron - Greenwood, SC
 Date 7-28-15
 Field Personnel PETER CONNITY
 Job # 60429584
 Weather Conditions Cloudy
 Air Temperature 88 °F
 Total Well Depth (TWD) 40 1/100 ft
 Depth to Ground Water (DGW) 32.19 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~ 2 gallons

Casing Diameter	2.0	Inches
Casing Material	PVC	
Measuring Point Elevation		1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	<u>30-40</u>	1/100 ft
Dedicated Pump or Bailer	YES	NO <input checked="" type="checkbox"/> X Type _____
Locking Cap	YES <input checked="" type="checkbox"/>	NO _____
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/>	NO _____
Well Yield	LOW	MODERATE <input checked="" type="checkbox"/> HIGH _____
Remarks		

FIELD ANALYSES

VOLUME PURGED (gallons)
 TIME (military)
 PH (S.U.)
 Sp. Cond. (units: μs/cm)
 Water Temp. (°C)
 TURBIDITY (ntu)
 ORP (mV)
 Dissolved Oxygen (mg/L)
 Salinity

0	1.0	1.5	2.0				
<u>1546</u>	<u>1549</u>	<u>1552</u>	<u>1555</u>				
<u>5.25</u>	<u>4.23</u>	<u>3.97</u>	<u>3.96</u>				
<u>0.018</u>	<u>0.017</u>	<u>0.017</u>	<u>0.017</u>				
<u>20.93</u>	<u>19.01</u>	<u>18.97</u>	<u>19.18</u>				
<u>>1000</u>	<u>341</u>	<u>215</u>	<u>213</u>				
<u>161</u>	<u>221</u>	<u>243</u>	<u>185</u>				
<u>8.93</u>	<u>7.39</u>	<u>6.82</u>	<u>6.48</u>				

COMMENTS/OBSERVATIONS: SAMPLE TIME : 1557

Field Data Information Log for Groundwater Sampling

Well ID # MW-14
 Site Name Itron - Greenwood, SC
 Date 7/28/15
 Field Personnel AC
 Job # 60429584
 Weather Conditions Partly Cloudy
 Air Temperature 80 °F
 Total Well Depth (TWD) 46 1/100 ft
 Depth to Ground Water (DGW) 22.25 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~ 2.5 gallons

Casing Diameter	2.0	Inches
Casing Material	PVC	
Measuring Point Elevation		1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	36 - 46	1/100 ft
Dedicated Pump or Bailer	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/> X Type _____
Locking Cap	YES <input checked="" type="checkbox"/> X	NO <input type="checkbox"/>
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/> X	NO <input type="checkbox"/>
Well Yield	LOW <input type="checkbox"/>	MODERATE <input checked="" type="checkbox"/> X HIGH <input type="checkbox"/>
Remarks	Sample collected @ 1140 VOCs DUP-1 @ 1140	

FIELD ANALYSES

VOLUME PURGED (gallons)
 TIME (military)
 PH (S.U.)
 Sp. Cond. (units: $\mu\text{s/cm}$)
 Water Temp. (°C)
 TURBIDITY (ntu)
 ORP (mV)
 Dissolved Oxygen (mg/L)
 Salinity

0	1	1.5	2	2.5		
1127	1130	1133	1136	1139		
5.66	5.15	4.85	4.83	4.81		
0.061	0.051	0.049	0.049	0.049		
19.85	18.60	18.65	18.96	19.24		
136	94	151	50.8	40.4		
133	179	195	200	199		
7.37	5.12	4.11	3.69	3.55		
—	—	—	—	—		

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MN-15R
 Site Name Itron - Greenwood, SC
 Date 7-28-15
 Field Personnel PETER CONNELL
 Job # 60429584
 Weather Conditions Partly Cloudy
 Air Temperature 88° °F
 Total Well Depth (TWD) 49.2 1/100 ft
 Depth to Ground Water (DGW) 37.28 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 12.0 1/100 ft
 1 Casing Volume = LWC x 0.163 = 2.0 gal
 3 Casing Volumes 6.09 gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed 4 gallons

Casing Diameter	2.0	Inches	
Casing Material	PVC		
Measuring Point Elevation		1/100 ft	
Land Surface Elevation		1/100 ft	
Screened Interval	<u>39.2 - 49.2</u>	1/100 ft	
Dedicated Pump or Bailer	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/> X	Type _____
Locking Cap	YES <input checked="" type="checkbox"/> X	NO <input type="checkbox"/>	
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/> X	NO <input type="checkbox"/>	
Well Yield	LOW <input type="checkbox"/>	MODERATE <input type="checkbox"/>	HIGH <input checked="" type="checkbox"/> X
Remarks	<hr/> <hr/> <hr/> <hr/> <hr/>		

FIELD ANALYSES

VOLUME PURGED (gallons)	0	1.0	1.5	2.0	2.5		
TIME (military)	1455	1458	1501	1504	1507		
PH (S.U.)	6.27	5.64	5.38	5.16	5.10		
Sp. Cond. (units: $\mu\text{S/cm.}$)	0.062	0.063	0.064	0.064	0.063		
Water Temp. (°C)	22.43	22.59	22.58	21.64	21.48		
TURBIDITY (ntu)	160	131	125	129	126		
ORP (mV)	87	99	102	108	114		
Dissolved Oxygen (mg/L)	5.37	4.64	4.44	4.61	4.82		
Salinity							

COMMENTS/OBSERVATIONS: Sample TIME: 1509

Field Data Information Log for Groundwater Sampling

Well ID # MW-16
 Site Name Itron - Greenwood, SC
 Date 7-28-15
 Field Personnel PETER CONDTY
 Job # 60429584
 Weather Conditions Pt. CLOUDY
 Air Temperature 85 °F
 Total Well Depth (TWD) 36.3 1/100 ft
 Depth to Ground Water (DGW) 24.44 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed 4.5 gallons

Casing Diameter	2.0	Inches
Casing Material	PVC	
Measuring Point Elevation		1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	26.3 - 36.3	1/100 ft
Dedicated Pump or Bailer	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> X Type _____	
Locking Cap	YES <input checked="" type="checkbox"/> X NO <input type="checkbox"/>	
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/> X NO <input type="checkbox"/>	
Well Yield	LOW <input type="checkbox"/> MODERATE <input checked="" type="checkbox"/> X HIGH <input type="checkbox"/>	
Remarks		

FIELD ANALYSES

VOLUME PURGED (gallons)	0	1.5	2.5	3.0				
TIME (military)	1623	1626	1629	1632				
PH (S.U.)	5.36	4.93	4.90	4.85				
Sp. Cond. (units: Ms/cm.)	0.035	0.036	0.036	0.035				
Water Temp. (°C)	20.38	19.10	19.15	19.31				
TURBIDITY (ntu)	471	350	279	150				
ORP (mV)	172	214	223	226				
Dissolved Oxygen (mg/L)	7.85	6.39	6.12	5.99				
Salinity								

COMMENTS/OBSERVATIONS: Sample Time: 1635

Field Data Information Log for Groundwater Sampling

Well ID # NW-16D
 Site Name Itron - Greenwood, SC
 Date 7/28/15
 Field Personnel M. Law
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 88 °F
 Total Well Depth (TWD) 75.8 1/100 ft
 Depth to Ground Water (DGW) 28.96 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~4 gallons

Casing Diameter	2.0	Inches
Casing Material	PVC	
Measuring Point Elevation		1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	70.5 - 75.8	1/100 ft
Dedicated Pump or Bailer	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/> X Type _____
Locking Cap	YES <input checked="" type="checkbox"/> X	NO <input type="checkbox"/>
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/> X	NO <input type="checkbox"/>
Well Yield	LOW <input type="checkbox"/>	MODERATE <input checked="" type="checkbox"/> X HIGH <input type="checkbox"/>
Remarks	Sight @ 1650	

FIELD ANALYSES

VOLUME PURGED (gallons)
 TIME (military)
 PH (S.U.)
 Sp. Cond. (units: Ms/cm.)
 Water Temp. (°C)
 TURBIDITY (ntu)
 ORP (mV)
 Dissolved Oxygen (mg/L)
 Salinity

Initial 0	-1.25	2.5	4			
1631	1636	1641	1646			
6.24	6.01	5.94	5.96			
0.076	0.079	0.081	0.082			
22.03	20.58	20.67	20.69			
31.2	28.1	23.5	17.0			
176	168	193	204			
4.50	4.41	4.35	4.32			
-	-	-	-			

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MW-17
 Site Name Itron - Greenwood, SC
 Date 7/28/15
 Field Personnel AC
 Job # 600429584
 Weather Conditions Sunny
 Air Temperature 94 °F
 Total Well Depth (TWD) 45.3 1/100 ft
 Depth to Ground Water (DGW) 27.29 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~3 gallons

Casing Diameter 2.0 Inches
 Casing Material PVC
 Measuring Point Elevation 1/100 ft
 Land Surface Elevation 1/100 ft
 Screened Interval 35.3 - 45.3 1/100 ft
 Dedicated Pump or Bailer YES NO X Type
 Locking Cap YES X NO
 Well Integrity Satisfactory YES X NO
 Well Yield LOW MODERATE HIGH X
 Remarks Sample collected @ 1640
 VOCs
 MS/MSD

FIELD ANALYSES

VOLUME PURGED (gallons)	0	0.5	1.5	2	3		
TIME (military)	1626	1629	1632	1635	1638		
PH (S.U.)	6.55	5.44	5.42	5.28	5.21		
Sp. Cond. (units: <u>Ms/cm</u>)	0.066	0.067	0.065	0.065	0.064		
Water Temp. (°C)	22.59	22.34	21.88	21.96	21.87		
TURBIDITY (ntu)	395	289	201	171	152		
ORP (mV)	205	233	223	220	225		
Dissolved Oxygen (mg/L)	6.27	5.58	5.66	5.81	5.55		
Salinity	—	—	—	—	—		

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MW-18
 Site Name Itron - Greenwood, SC
 Date 7/28/15
 Field Personnel AC
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 78 °F
 Total Well Depth (TWD) 39 1/100 ft
 Depth to Ground Water (DGW) 21.15 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~ 2 gallons

Casing Diameter	2.0	Inches
Casing Material	PVC	
Measuring Point Elevation		1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	29-39	1/100 ft
Dedicated Pump or Bailer	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> X Type _____	
Locking Cap	YES <input checked="" type="checkbox"/> X NO <input type="checkbox"/>	
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Well Yield	LOW <input type="checkbox"/> MODERATE <input checked="" type="checkbox"/> HIGH <input type="checkbox"/>	
Remarks	Sample collected @ 1043 VOCs	

FIELD ANALYSES

VOLUME PURGED (gallons)	0	0.75	1	1.5	2		
TIME (military)	1029	1032	1035	1038	1041		
PH (S.U.)	5.59	5.16	5.01	4.98	4.98		
Sp. Cond. (units: $\mu\text{S}/\text{cm.}$)	0.060	0.053	0.052	0.052	0.052		
Water Temp. (°C)	22.82	23.36	23.71	22.99	23.24		
TURBIDITY (ntu)	316	112	38	22	19		
ORP (mV)	146	182	214	248	252		
Dissolved Oxygen (mg/L)	6.33	4.93	4.62	4.24	4.16		
Salinity	—	—	—				

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MW-19
 Site Name Itron - Greenwood, SC
 Date 7/28/15
 Field Personnel M. Law
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 88 °F
 Total Well Depth (TWD) 49.5 1/100 ft
 Depth to Ground Water (DGW) 27.76 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 21.74 1/100 ft
 1 Casing Volume = LWC x 0.163 = 3.46 gal
 3 Casing Volumes 3.46 gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~3.0 gallons

Casing Diameter 2.0 Inches
 Casing Material PVC
 Measuring Point Elevation 1/100 ft
 Land Surface Elevation 1/100 ft
 Screened Interval 39.5 - 49.5 1/100 ft
 Dedicated Pump or Bailer YES NO Type _____
 Locking Cap YES NO _____
 Well Integrity Satisfactory YES NO _____
 Well Yield LOW MODERATE HIGH _____
 Remarks Sampled @ 1500 ft for VOCs
*Phuge water is tan and Silty

FIELD ANALYSES

VOLUME PURGED (gallons)

Initial 0	~1.25	~1.75	- 2.5			
1443	1448	1453	1458			
6.28	6.33	6.19	6.23			
0.091	0.073	0.076	0.077			
20.96	20.67	20.04	20.28			
Def Turb. cl *	0.0 *	0.0 *	0.0 *			
143	119	121	128			
4.87	4.46	4.45	4.43			
-	-	-	-			

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MW-20
 Site Name Itron - Greenwood, SC
 Date 7/28/15
 Field Personnel AC
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 87 °F
 Total Well Depth (TWD) 59 1/100 ft
 Depth to Ground Water (DGW) 28.02 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~3 gallons

Casing Diameter 2.0 Inches
 Casing Material PVC
 Measuring Point Elevation 1/100 ft
 Land Surface Elevation 1/100 ft
 Screened Interval 49-59 1/100 ft
 Dedicated Pump or Bailer YES NO Type
 Locking Cap YES NO
 Well Integrity Satisfactory YES NO
 Well Yield LOW MODERATE HIGH
 Remarks Sample collected @ 1400
 VOCs

FIELD ANALYSES

VOLUME PURGED (gallons)
 TIME (military)
 PH (S.U.)
 Sp. Cond. (units: μs/cm)
 Water Temp. (°C)
 TURBIDITY (ntu)
 ORP (mV)
 Dissolved Oxygen (mg/L)
 Salinity

	0	1	1.5	2	2.5	3	
TIME (military)	1344	1347	1350	1353	1356	1359	
PH (S.U.)	6.20	6.22	6.03	5.90	5.84	5.79	
Sp. Cond. (units: <u>μs/cm</u>)	0.150	0.153	0.148	0.144	0.141	0.140	
Water Temp. (°C)	20.82	18.39	18.75	19.00	19.07	18.87	
TURBIDITY (ntu)	275	294	386	264	250	197	
ORP (mV)	198	179	165	158	151	145	
Dissolved Oxygen (mg/L)	4.66	2.76	2.51	2.51	2.46	2.50	
Salinity	—	—	—	—	—	—	

COMMENTS/OBSERVATIONS:

Field Data Information Log for Groundwater Sampling

Well ID # MW-21
 Site Name Itron - Greenwood, SC
 Date 7/29/15
 Field Personnel M. Law
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 78 °F
 Total Well Depth (TWD) 42.5 1/100 ft
 Depth to Ground Water (DGW) 17.32 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 25.18 1/100 ft
 1 Casing Volume = LWC x 0.163 = 4.05 gal
 3 Casing Volumes 12.15 gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed 22.25 gallons

Casing Diameter 2.0 Inches
 Casing Material PVC
 Measuring Point Elevation 1/100 ft
 Land Surface Elevation 1/100 ft
 Screened Interval 32.5 - 42.5 1/100 ft
 Dedicated Pump or Bailer YES NO Type _____
 Locking Cap YES NO _____
 Well Integrity Satisfactory YES NO _____
 Well Yield LOW MODERATE HIGH _____
 Remarks Sampled @ 0905 for VACG
Light gray purple water

FIELD ANALYSES

VOLUME PURGED (gallons)
 TIME (military)
 PH (S.U.)
 Sp. Cond. (units: μs/cm)
 Water Temp. (°C)
 TURBIDITY (ntu)
 ORP (mV)
 Dissolved Oxygen (mg/L)
 Salinity

Initial	0	~1.25	~1.5	~1.75	~2.0		
08140	0845	0850	0855	0900			
5.63	5.32	4.83	4.30	4.25			
0.043	0.040	0.039	0.038	0.037			
20.40	20.26	20.54	20.57	20.65			
581	407	328	145	87.0			
223	238	275	293	276			
6.40	5.96	5.57	5.46	5.34			
-	-	-	-	-			

COMMENTS/OBSERVATIONS: _____

Field Data Information Log for Groundwater Sampling

Well ID # MW-22D
 Site Name Itron - Greenwood, SC
 Date 7/28/15
 Field Personnel AC
 Job # 60429584
 Weather Conditions Sunny
 Air Temperature 91 °F
 Total Well Depth (TWD) 79.9 1/100 ft
 Depth to Ground Water (DGW) 32.27 1/100 ft
 Length of Water Column (LWC) = TWD - DGW 1/100 ft
 1 Casing Volume = LWC x 0.163 = gal
 3 Casing Volumes gal = Standard Evacuation Volume
 Method of Well Excavation Submersible Pump Low Flow
 Method of Sample Collection Submersible Pump Low Flow
 Total Volume of Water Removed ~ 2.5 gallons

Casing Diameter	2.0	Inches	
Casing Material	PVC		
Measuring Point Elevation		1/100 ft	
Land Surface Elevation		1/100 ft	
Screened Interval	69.9 - 79.9	1/100 ft	
Dedicated Pump or Bailer	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	Type _____
Locking Cap	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
Well Integrity Satisfactory	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
Well Yield	LOW <input type="checkbox"/>	MODERATE <input checked="" type="checkbox"/>	HIGH <input type="checkbox"/>
Remarks	Sample collected @ 1508		

FIELD ANALYSES

VOLUME PURGED (gallons)	0	1	1.5	2	2.5		
TIME (military)	1454	1457	1500	1503	1506		
PH (S.U.)	9.14	8.31	7.86	7.75	7.80		
Sp. Cond. (units: $\mu\text{S}/\text{cm.}$)	0.146	0.131	0.130	0.130	0.131		
Water Temp. (°C)	20.44	19.68	19.13	19.20	19.08		
TURBIDITY (ntu)	362	206	194	176	134		
ORP (mV)	103	75	56	39	22		
Dissolved Oxygen (mg/L)	4.73	4.85	3.97	5.30	5.02		
Salinity	—	—	—				

COMMENTS/OBSERVATIONS:

Appendix G: Data Quality Review Memoranda

Memo



Century Square

1501 4th Avenue, Suite 1400

Seattle, Washington 98101

206.438.2700 Telephone

206.438.2699 Fax

To: James Flynn, Project Manager **Info:** FINAL

From: Lucy Panteleeff, Chemist
Jennifer B. Garner, Chemist **Date:** August 20, 2014

RE: QA/QC Data Summary Review
Groundwater Sampling (July 2015)
Itron – Greenwood, South Carolina

The data quality review of 29 groundwater samples, 2 equipment rinsate blanks, and 2 trip blanks collected between July 28 and July 29, 2015 has been completed. The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B and/or polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270D modified by selected ion monitoring (SIM) by Shealy Environmental Services, Inc. (SES) located in West Columbia, South Carolina. Samples were analyzed for the chemical constituents as described in *Remedial Investigation Work Plan, Itron – Greenwood, South Carolina Facility*, dated November 2013.

The analyses were performed in general accordance with methods specified in EPA's *Test Methods for Evaluating Solid Waste (SW-846)*. The laboratory provided a summary report containing sample results and associated quality assurance and quality control (QA/QC) data. The following samples are associated with SES laboratory group QG30034:

Sample ID	Laboratory ID	Requested Analyses
MW-1	QG30034-001	VOCs
MW-2	QG30034-002	VOCs
MW-3	QG30034-003	VOCs, PAHs
MW-4	QG30034-004	VOCs
MW-5	QG30034-005	VOCs
MW-5D	QG30034-006	VOCs
MW-6	QG30034-007	VOCs
TRIP BLANK 1	QG30034-008	VOCs
DUP-1 (Duplicate of MW-14)	QG30034-009	VOCs
EB-1 (Equipment rinsate blank)	QG30034-010	VOCs
MW-7	QG30034-011	VOCs
MW-8	QG30034-012	VOCs
MW-9	QG30034-013	VOCs
MW-9D	QG30034-014	VOCs
MW-10R	QG30034-015	VOCs
MW-10I	QG30034-016	VOCs
MW-10D	QG30034-017	VOCs
MW-11	QG30034-018	VOCs
MW-12	QG30034-019	VOCs
MW-13	QG30034-020	VOCs
MW-14	QG30034-021	VOCs
MW-15R	QG30034-022	VOCs
MW-16	QG30034-023	VOCs
MW-16D	QG30034-024	VOCs

QA/QC Data Summary Review
Groundwater Sampling (July 2015)
Itron – Greenwood, South Carolina

Sample ID	Laboratory ID	Requested Analyses
MW-17	QG30034-025	VOCs
TRIP BLANK 2	QG30034-026	VOCs
MW-18	QG30034-027	VOCs
MW-19	QG30034-028	VOCs
MW-20	QG30034-029	VOCs
MW-21	QG30034-030	VOCs
MW-22D	QG30034-031	VOCs
DUP-2 (Duplicate of MW-11)	QG30034-032	VOCs
EB-2 (Equipment rinsate blank)	QG30034-033	VOCs

The following comments refer to SES's performance in meeting the quality control specifications described in the analytical methods. Data were qualified based on the method criteria and guidance provided in the EPA documents *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*, June 2008. Data qualifiers assigned to this sample set are included in Table 1. Data qualifiers that may be assigned to data from these laboratory groups include:

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. A '+' or '-' may be assigned to the 'J' flag to indicate high or low bias, respectively.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- DNR - Do Not Report. Multiple results reported from different analytical dates and/or dilutions. Value from another analysis should be used.

Sample Receipt

Upon receipt by SES, the sample jar information was compared to the associated chain-of-custody (COC) and the cooler temperatures were recorded. The coolers were received at temperatures within the EPA-recommended limits of greater than 0°C and less than or equal to 6°C.

Organic Analyses

Samples were analyzed for VOCs and/or PAHs by the methods identified in the introduction to this report.

1. Holding Times – Acceptable
2. Blanks – Acceptable
3. Surrogates – Acceptable except as noted below:

PAHs by Method 8270D SIM – The percent recoveries for fluoranthene-d10 and 2-methylnaphthalene-d10 in three samples were outside the control limits as noted below:

QA/QC Data Summary Review
 Groundwater Sampling (July 2015)
 Itron – Greenwood, South Carolina

Sample ID	Fluoranthene-d10 (23-154%)	2-Methylnaphthalene-d10 (15-139%)
MW-3	0%	1,360%
MW-3 (MS)	0%	1,350%
MW-3 (MSD)	0%	1,450%

MS – matrix spike MSD – matrix spike duplicate

Due to the large dilution required to quantitate naphthalene present in MW-3 and the MS/MSD performed using MW-3, the surrogates were diluted out and the recoveries could not be accurately quantified. Data were not qualified based on the surrogate recoveries.

4. Laboratory Control Sample (LCS) – Acceptable
5. Matrix Spike/Matrix Spike Duplicate (MS/MSD) – Acceptable except as noted below:

VOCs by Method 8260B – An MS/MSD was performed using MW-3. Results were acceptable.

An MS/MSD was performed using MW-17. The percent recoveries for tetrachloroethene were below the control limits of 70-130% in the MS (68%) and MSD (58%). The result for tetrachloroethene in MW-17 was qualified as estimated and flagged ‘J’ based on these MS/MSD recoveries.

PAHs by Method 8270D – An MS/MSD was performed using MW-3. The percent recoveries for the following compounds were outside the control limits:

Analyte	MS	MSD	Control Limits
Acenaphthene	0%	0%	41-120%
Acenaphthylene	0%	0%	33-93%
Anthracene	0%	0%	13-122%
Benzo(a)anthracene	0%	0%	38-126%
Benzo(a)pyrene	0%	0%	15-115%
Benzo(b)fluoranthene	0%	0%	35-145%
Benzo(g,h,i)perylene	0%	0%	34-142%
Benzo(k)fluoranthene	0%	0%	36-146%
Chrysene	0%	0%	40-135%
Dibenzo(a,h)anthracene	0%	0%	33-144%
Fluoranthene	0%	0%	26-148%
Fluorene	1,680%	1,620%	34-126%
Indeno(1,2,3-cd)pyrene	0%	0%	36-141%
Naphthalene	6,340%	7,800%	21-148%
Phenanthrene	3,850%	3,270%	29-136%
Pyrene	0%	0%	36-128%

ok – result acceptable

Due to the large dilution required to quantitate high concentrations of naphthalene present in MW-3, the spiked compounds were diluted out and the PAH recoveries could not be accurately quantified; therefore, data were not qualified based on these MS/MSD recoveries.

6. Field Duplicates (applicable to VOCs only) – Acceptable

Field duplicates were submitted for MW-14 and MW-11 and identified as DUP-1 and DUP-2, respectively. Results were comparable.

7. Reporting Limits – Acceptable except as noted below:

General – Analyte concentrations detected between the MDL and the reporting limit are reported by the laboratory with an ‘J’ flag. One or more results were flagged ‘J’ by the laboratory in several samples. Laboratory ‘J’-flagged results are considered estimated results. As the result is between the method

QA/QC Data Summary Review
Groundwater Sampling (July 2015)
Itron – Greenwood, South Carolina

detection limit and the reporting limit, there is a greater level of uncertainty associated with the numerical result. Laboratory assigned J-flags were designated on the data tables with an asterisk (*).

VOCs by Method 8260B – The reporting limits for one or more VOCs were elevated in several samples due to dilution for high target analyte concentrations. The elevated reporting limits may affect the usability of the data for regulatory comparison.

PAHs by Method 8270D – The reporting limits for PAHs in MW-3 were elevated due to dilution for high concentrations of naphthalene. The elevated reporting limits may affect the usability of the data for regulatory comparison.

8. Type of Review – Summary

Overall Assessment of Data

The data reported in this laboratory group, as qualified, are considered to be usable for meeting project objectives. The completeness for laboratory group QG30034 is 100%.

Table 1 – Summary of Qualified Data

Sample ID	Lab ID	Analyte	Result	Units	Final Result
MW-17	QG30034-025	Tetrachloroethene	690	ug/L	690 J

Memo



Century Square
1501 4th Avenue, Suite 1400
Seattle, Washington 98101
206.438.2700 Telephone
206.438.2699 Fax

To: James Flynn, Project Manager **Info:** FINAL
From: Lucy Panteleeff, Chemist
Jennifer B. Garner, Chemist **Date:** August 21, 2015
RE: QA/QC Data Summary Review
Soil Sampling (July 2015)
Itron – Greenwood, South Carolina

The data quality review of 1 soil sample collected on July 13, 2015 has been completed. The sample was analyzed for volatile organic compounds (VOCs) by EPA Method 8260B by Shealy Environmental Services, Inc. (SES) located in West Columbia, South Carolina. The sample was analyzed for the chemical constituents as described in *Remedial Investigation Work Plan, Itron – Greenwood, South Carolina Facility*, dated November 2013.

The analysis was performed in general accordance with the method specified in EPA's *Test Methods for Evaluating Solid Waste (SW-846)*. The laboratory provided a summary report containing sample results and associated quality assurance and quality control (QA/QC) data. The following sample is associated with SES laboratory group QG17027:

Sample ID	Laboratory ID
MW-10I (49-50')	QG17027-001

The following comments refer to SES's performance in meeting the quality control specifications described in the analytical methods. Data were qualified based on the method criteria and guidance provided in the EPA document *USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review*, June 2008. Data qualifiers that may be assigned to data from these laboratory groups include:

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. A '+' or '-' may be assigned to the 'J' flag to indicate high or low bias, respectively.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- DNR - Do Not Report. Multiple results reported from different analytical dates and/or dilutions. Value from another analysis should be used.

Sample Receipt

Upon receipt by SES, the sample jar information was compared to the chain-of-custody (COC) and the cooler temperature was recorded. The cooler was received at a temperature within the EPA-recommended limits of greater than 0°C and less than or equal to 6°C.

Organic Analyses

The sample was analyzed for VOCs by Method 8260B.

1. Holding Times – Acceptable
2. Blanks – Acceptable except as noted below:

Acetone (7.6 ug/kg) was detected at a concentration less than the reporting limit and greater than the method detection limit (MDL) in the method blank analyzed on July 22, 2015. Acetone was not detected in MW-10I(49-50'); therefore, the result for acetone was not qualified based on this method blank result.

3. Surrogates – Acceptable
4. Laboratory Control Sample (LCS) – Acceptable
5. Matrix Spike (MS)

An MS was not performed in association with this analysis. Accuracy was assessed using the LCS results.

6. Duplicate

A duplicate was not performed in association with this analysis. Precision was not assessed.

7. Reporting Limits – Acceptable except as noted below:

Analyte concentrations detected between the MDL and the reporting limit are reported by the laboratory with an 'J' flag. The result for toluene in MW-10I(49-50') was flagged 'J' by the laboratory. Laboratory 'J'-flagged results are considered estimated results. As the result is between the method detection limit and the reporting limit, there is a greater level of uncertainty associated with the numerical result. Laboratory assigned J-flags were designated on the data tables with an asterisk (*).

The reporting limits for one or more VOCs were elevated in MW-10I(49-50') due to moisture content. The elevated reporting limits may affect the usability of the data for regulatory comparison.

8. Type of Review – Summary

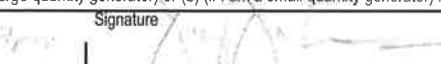
Overall Assessment of Data

The data reported in this laboratory group, as qualified, are considered to be usable for meeting project objectives. The completeness for laboratory group QG17027 is 100%.

Table 1 – Summary of Qualified Data

Sample ID	Lab ID	Analyte	Result	Units	Final Result
No data were qualified in QG17027 based on this data validation.					

Appendix H: IDW Waste Manifests

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number SCD053612721	2. Page 1 of 1	3. Emergency Response Phone 800-535-3653	4. Manifest Tracking Number 008205359 FLE						
5. Generator's Name and Mailing Address SPRING, INC. ATTN: REVENGEON FAB REAMMENHALL II 200 NORTH HOLLOW ROAD, LIBERTY LAKE, WA 99344		Generator's Site Address (if different than mailing address) SPRING, INC. 100 E. ENGLEWOOD ROAD SPRINGFIELD, MA 01102									
Generator's Phone: 800-715-0701											
6. Transporter 1 Company Name INTERSTATE INC.		U.S. EPA ID Number MAN 00835977									
7. Transporter 2 Company Name DC INDUSTRIAL SERVICES		U.S. EPA ID Number MIC 429042742									
8. Designated Facility Name and Site Address CO. INDUSTRIAL SERVICES INDUSTRIAL CENTER 4TH COUNTY LINE DRIVE, NE 2001 BENTONVILLE, AR 72701		U.S. EPA ID Number 500724021									
Facility's Phone:											
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) 1. DANGEROUS WASTE, GROWING R.Q.S. 2. DANGEROUS WASTE, GROWING R.Q.S. 3. DANGEROUS WASTE, GROWING R.Q.S. 4. DANGEROUS WASTE, GROWING R.Q.S.	10. Containers <table border="1"><tr><th>No.</th><th>Type</th></tr><tr><td>03</td><td>BIN</td></tr></table>		No.	Type	03	BIN	11. Total Quantity 4950 P	12. Unit Wt./Vol.	13. Waste Codes
	No.	Type									
	03	BIN									
14. Special Handling Instructions and Additional Information 1. DRIVERS REQUIRED BY CARRIER, SHIPPER, RECIPIENT 2. DRIVERS REQUIRED BY CARRIER, SHIPPER, RECIPIENT 3. DRIVERS REQUIRED BY CARRIER, SHIPPER, RECIPIENT											
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.											
Generator's/Officer's Printed/Typed Name JAY JONES & DAVID H. BROWN		Signature 		Month 11	Day 12	Year 1995					
TRANSPORTER INT'L	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: _____		Date leaving U.S.: _____						
	Transporter signature (for exports only): BOBBY SMITH										
	Transporter 1 Printed/Typed Name BOBBY SMITH		Signature 		Month 11	Day 12	Year 1995				
DESIGNATED FACILITY	17. Transporter Acknowledgment of Receipt of Materials BOBBY SMITH		Signature 		Month 11	Day 12	Year 1995				
	Transporter 2 Printed/Typed Name BOBBY SMITH		Signature 		Month 11	Day 12	Year 1995				
	18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection		Manifest Reference Number: _____								
18b. Alternate Facility (or Generator) Facility's Phone: 18c. Signature of Alternate Facility (or Generator)		U.S. EPA ID Number Month Day Year									
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. 2. 3. 4.											
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name Signature Month Day Year											

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number SCD059612721	2. Page 1 of 1	3. Emergency Response Phone 000-535-5053	4. Manifest Tracking Number 008205365 FLE						
5. Generator's Name and Mailing Address ITEM, INC. 2221 WILSON BOULEVARD, SUITE 100 2323 NORTH FRANCIS ROAD, LIBERTY LAKE, WA 99349		Generator's Site Address (if different than mailing address) ITEM, INC. 1210 BNAIRAL ROAD SPRINGFIELD, VA 22161									
Generator's Phone: 051-716-0700											
6. Transporter 1 Company Name WILLIAMS TRUCKING		U.S. EPA ID Number QAD980845972									
7. Transporter 2 Company Name EQ INDUSTRIAL SERVICES		U.S. EPA ID Number MLK435642742									
8. Designated Facility Name and Site Address CH DISTRICT 1225 FREDERICK STREET DETROIT, MI 48226 Facility's Phone: 313-267-4500		U.S. EPA ID Number MKD98091666									
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) 1. NATURE, HAZARDOUS WASTE, LIQUID, HAZ. S, (TERPENICLICARBOYLIC ACID), PG 311, (ERG 171)	10. Containers <table border="1"><thead><tr><th>No.</th><th>Type</th></tr></thead><tbody><tr><td>18</td><td>R M</td></tr></tbody></table>		No.	Type	18	R M	11. Total Quantity 7650	12. Unit Wt./Vol. P	13. Waste Codes 1210
	No.	Type									
	18	R M									
14. Special Handling Instructions and Additional Information 1. GIGA TANKS TRANSPORT PROVIDED BY CARRIER/SHIPPER YES/NO DRIVER SIGNATURE TAXI OR CALLER MUST IDENTIFY OWNER USA AS REGISTRANT (CONTACT # 675693 3333)											
15. GENERATOR/S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.											
Generator's/Officer's Printed/Typed Name JAY JONES		Signature JAY JONES		Month 1	Day 2	Year 15					
TRANSPORTER INT'L	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: _____ Date leaving U.S.: _____								
	Transporter signature (for exports only): Bobby Smith										
	Transporter 1 Printed/Typed Name Bobby Smith		Signature Bobby Smith		Month 1	Day 2	Year 15				
DESIGNATED FACILITY	17. Transporter Acknowledgment of Receipt of Materials Bobby Smith		Signature Bobby Smith								
	Transporter 2 Printed/Typed Name 		Signature 		Month 1	Day 2	Year 15				
	18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection		Manifest Reference Number: 								
18b. Alternate Facility (or Generator) Facility's Phone: 		U.S. EPA ID Number 									
18c. Signature of Alternate Facility (or Generator) Printed/Typed Name 		Signature 		Month 1	Day 2	Year 15					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. 2. 3. 4.											
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name 											

Appendix I: Analytical Summary Tables and Laboratory Reports

Table
Summary of VOCs in Groundwater
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Sample Date: Other:	SCREENING CRITERIA (ug/L)		MW-1		MW-2		MW-3		MW-4		MW-5		MW-5D	
	US EPA MCL (Drinking Water)	SCDHEC RBSL	06/05/2014	7/28/2015	06/04/2014	7/28/2015	06/04/2014	7/28/2015	06/05/2014	7/29/2015	06/05/2014	7/28/2015	06/05/2014	7/28/2015
Volatile Organic Compounds (ug/L)														
Acetone	NSL	NSL	20 U	20 U	20 U	20 U	100 U	10 J*	20 U	20 U	1,000 U	1,000 U	20 U	7.6 J*
Benzene	5	5	5.0 U	5.0 U	5.0 U	5.0 U	0.54 J*	10 J*	5.0 U	5.0 U	250 U	250 U	5.0 U	0.27 J*
Bromodichloromethane	80	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Bromoform	80	80	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
2-Butanone (MEK)	NSL	NSL	10 U	10 U	10 U	10 U	33 J*	50 U	10 U	500 U	500 U	10 U	10 U	
Carbon disulfide	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Carbon tetrachloride	5	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Chlorobenzene	100	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Chloroethane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Chloroform	80	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Cyclohexane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	0.2	NSL	5.0 U DNR	5.0 U	5.0 U DNR	5.0 U	25 U DNR	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Dibromochloromethane	80	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
1,2-Dibromoethane (EDB)	0.05	0.05	5.0 U DNR	5.0 U	5.0 U DNR	5.0 U	25 U DNR	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
1,2-Dichlorobenzene	600	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
1,3-Dichlorobenzene	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
1,4-Dichlorobenzene	75	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Dichlorodifluoromethane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
1,1-Dichloroethane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
1,2-Dichloroethane	5	NSL	5.0 U	5.0 U	1.2 J*	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
1,1-Dichloroethene	7	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	70	NSL	5.0 U	5.0 U	5.0 U	5.0 U	440	280	0.39 J*	0.23 J*	46 J*	15 J*	5.0 U	130
trans-1,2-Dichloroethene	100	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
1,2-Dichloropropane	5	NSL	5.0 U	5.0 U	11	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Ethylbenzene	700	700	5.0 U	5.0 U	5.0 U	5.0 U	16 J*	6.9 J*	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
2-Hexanone	NSL	NSL	10 U	10 U	10 U	10 U	10 J*	4.6 J*	10 U	10 U	500 U	500 U	10 U	10 U
Isopropylbenzene	NSL	NSL	5.0 U	5.0 U	0.52 J*	26	17 J*	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	
Methyl acetate	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Methyl tertiary butyl ether (MTBE)	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
4-Methyl-2-pentanone	NSL	NSL	10 U	10 U	10 U	10 U	6.9 J*	2.6 J*	10 U	10 U	500 U	500 U	10 U	10 U
Methylcyclohexane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	4.5 J*	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	
Methylene chloride	5	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	0.60 J*
Styrene	100	NSL	5.0 U	5.0 U	5.0 U	5.0 U	0.81 J*	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	
1,1,2,2-Tetrachloroethane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Tetrachloroethene	5	NSL	0.80 J*	7.7	5.0 U	1.1 J*	25 U	13 J*	2.4 J*	3.0 J*	3,700	4,000	190	0.96 J*
Toluene	1,000	1,000	0.27 J*	5.0 U	0.47 J*	25 U	2.9 J*	5.0 U	5.0 U	250 U	250 U	5.0 U	0.55 J*	
1,1,2-Trichloro-1,2,2-Trifluoroethane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	
1,2,4-Trichlorobenzene	70	70	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	
1,1,1-Trichloroethane	200	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	
1,1,2-Trichloroethane	5	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	
Trichloroethene	5	NSL	5.0 U	5.0 U	5.0 U	5.0 U	0.81 J*	5.0 U	5.0 U	15 J*	10 J*	0.56 J*	0.22 J*	
Trichlorofluoromethane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	
Vinyl chloride	2	NSL	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	0.42 J*	2.0 U	38 J*	100 U	2.0 U	2.0 U
Xylenes (total)	10,000	10,000	5.0 U	5.0 U	5.0 U	3.4 J*	110	56	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U
Low-level Volatile Organic Compounds (ug/L)														

Table
Summary of VOCs in Groundwater
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Sample Date: Other:	SCREENING CRITERIA (ug/L)		MW-6		MW-7		MW-8		MW-9		MW-10D		MW-10	
	US EPA MCL (Drinking Water)	SCDHEC RBSL	06/04/2014	7/29/2015	06/04/2014	7/29/2015	06/04/2014	7/29/2015	06/04/2014	7/28/2015	06/04/2014	7/28/2015	06/04/2014	7/28/2015
Volatile Organic Compounds (ug/L)														
Acetone	NSL	NSL	4,000 U	4,000 U	20,000 U	40,000 U	10,000 U	20 U	20 U	2.7 J*	20 U	20 U	20 U	20 U
Benzene	5	5	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	80	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	80	80	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (MEK)	NSL	NSL	2,000 U	2,000 U	10,000 U	20,000 U	5,000 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	1.7 J*	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	5	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	100	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	80	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	1.8 J*	5.0 U	5.0 U	2.5 J*	0.48 J*
Chloromethane (Methyl chloride)	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	0.2	NSL	1,000 U DNR	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	80	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (EDB)	0.05	0.05	1,000 U DNR	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	600	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	75	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	5	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	7	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	70	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	0.26 J*	5.0 U	0.46 J*	5.0 U	5.0 U
trans-1,2-Dichloroethene	100	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	5	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	700	700	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	NSL	NSL	2,000 U	2,000 U	10,000 U	20,000 U	2,500 U	5.0 U	10 U	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tertiary butyl ether (MTBE)	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	NSL	NSL	2,000 U	2,000 U	10,000 U	20,000 U	5,000 U	2,500 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylcyclohexane	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	100	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	5	NSL	14,000	9,600	97,000	100,000	21,000	20,000	5.0 U	1.8 J*	5.0 U	0.73 J*	1,500	2.2 J*
Toluene	1,000	1,000	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	0.39 J*	5.0 U	0.31 J*	5.0 U	0.52 J*	
1,1,2-Trichloro-1,2,2-Trifluoroethane	NSL	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	70	70	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	200	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	5	NSL	1,000 U	1,000 U	5,000 U	10,000 U	2,500 U	5.0 U	5.0 U	5.0 U	5.0 U			

Table
Summary of VOCs in Groundwater
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Sample Date: Other:	SCREENING CRITERIA (ug/L)		MW-10I 7/28/2015	MW-10R 7/28/2015	06/04/2014	MW-11 7/29/2015	7/29/2015 (DUP)	06/05/2014	MW-12 7/29/2015	06/05/2014	MW-13 7/28/2015	06/04/2014	MW-14 7/28/2015	7/28/2015 (DUP)	MW-15 06/05/2014	MW-15R 7/28/2015	06/04/2014	MW-16 7/28/2015
	US EPA MCL (Drinking Water)	SCDHEC RBSL																
Volatile Organic Compounds (ug/L)																		
Acetone	NSL	NSL	4,000 U	400 U	20 U	20 U	1,000 U	1,000 U	20 U	20 U	20 U	20 U	100 U	20 U	4.7 J*	20 U	20 U	
Benzene	5	5	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Bromodichloromethane	80	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	2.9 J*	5.0 U	5.0 U	
Bromoform	80	80	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	1.1 J*	5.0 U	5.0 U	
Bromomethane (Methyl bromide)	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
2-Butanone (MEK)	NSL	NSL	2,000 U	200 U	10 U	10 U	500 U	500 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U	
Carbon disulfide	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Carbon tetrachloride	5	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Chlorobenzene	100	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Chloroethane	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Chloroform	80	NSL	1,000 U	5.8 J*	5.0 U	5.0 U	250 U	250 U	2.8 J*	5.0 U	2.3 J*	5.0 U	5.0 U	3.9 J*	5.5	5.0 U	5.0 U	
Chloromethane (Methyl chloride)	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Cyclohexane	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,2-Dibromo-3-chloropropane (DBCP)	0.2	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U DNR	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	1.8 J*	5.0 U	5.0 U	
Dibromochloromethane	80	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,2-Dibromoethane (EDB)	0.05	0.05	1,000 U	100 U	5.0 U	5.0 U	250 U DNR	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,2-Dichlorobenzene	600	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,3-Dichlorobenzene	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,4-Dichlorobenzene	75	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Dichlorodifluoromethane	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,1-Dichloroethane	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	0.60 J*	5.0 U	5.0 U	
1,2-Dichloroethane	5	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,1-Dichloroethene	7	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
cis-1,2-Dichloroethene	70	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	0.24 J*	25 U	0.27 J*	5.0 U	5.0 U	5.0 U	5.0 U	
trans-1,2-Dichloroethene	100	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,2-Dichloropropane	5	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
cis-1,3-Dichloropropene	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
trans-1,3-Dichloropropene	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Ethylbenzene	700	700	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
2-Hexanone	NSL	NSL	2,000 U	200 U	10 U	10 U	500 U	500 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U	
Isopropylbenzene	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Methyl acetate	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Methyl tertiary butyl ether (MTBE)	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
4-Methyl-2-pentanone	NSL	NSL	2,000 U	200 U	10 U	10 U	500 U	500 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	0.84 J*	10 U	
Methylcyclohexane	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Methylene chloride	5	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Styrene	100	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,1,2,2-Tetrachloroethane	NSL	NSL	1,000 U	100 U	5.0 U	5.0 U	250 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	
Tetrachloroethene	5	NSL	15,000	2,900	37	2.8 J*	2.5 J*	4,500	4,800									

Table
Summary of VOCs in Groundwater
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Sample Date: Other:	SCREENING CRITERIA (ug/L)		MW-16D		MW-17		MW-18		MW-19		MW-20		MW-21		MW-22D	
	US EPA MCL (Drinking Water)	SCDHEC RBSL	06/04/2014	7/28/2015 (DUP)	06/05/2014	7/28/2015 (DUP)	06/05/2014	7/28/2015	06/05/2014	7/28/2015	7/28/2015	7/29/2015	7/28/2015	7/29/2015	7/28/2015	
Volatile Organic Compounds (ug/L)																
Acetone	NSL	NSL	20 U	20 U	20 U	20 U	100 U	20 U	20 U	100 U	20 U	20 U	2.9 J*			
Benzene	5	5	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Bromodichloromethane	80	NSL	5.0 U	5.0 U	3.2 J*	3.1 J*	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	0.31 J*			
Bromoform	80	80	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Bromomethane (Methyl bromide)	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
2-Butanone (MEK)	NSL	NSL	10 U	10 U	10 U	10 U	50 U	10 U	10 U	50 U	10 U	10 U	10 U			
Carbon disulfide	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Carbon tetrachloride	5	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Chlorobenzene	100	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Chloroethane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Chloroform	80	NSL	5.0 U	5.0 U	8.6	8.5	25 U	5.0 U	5.0 U	0.77 J*	2.9 J*	5.0 U	1.3 J*			
Chloromethane (Methyl chloride)	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Cyclohexane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,2-Dibromo-3-chloropropane (DBCP)	0.2	NSL	5.0 U	5.0 U	5.0 U DNR	5.0 U DNR	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Dibromochloromethane	80	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,2-Dibromoethane (EDB)	0.05	0.05	5.0 U	5.0 U	5.0 U DNR	5.0 U DNR	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,2-Dichlorobenzene	600	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,3-Dichlorobenzene	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,4-Dichlorobenzene	75	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Dichlorodifluoromethane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,1-Dichloroethane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,2-Dichloroethane	5	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,1-Dichloroethene	7	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
cis-1,2-Dichloroethene	70	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	3.8 J*	5.0 U	5.0 U	5.0 U			
trans-1,2-Dichloroethene	100	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,2-Dichloropropane	5	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
cis-1,3-Dichloropropene	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
trans-1,3-Dichloropropene	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Ethylbenzene	700	700	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
2-Hexanone	NSL	NSL	10 U	10 U	10 U	10 U	50 U	10 U	10 U	50 U	10 U	10 U	10 U			
Isopropylbenzene	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Methyl acetate	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Methyl tertiary butyl ether (MTBE)	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
4-Methyl-2-pentanone	NSL	NSL	10 U	10 U	10 U	10 U	50 U	10 U	10 U	50 U	10 U	10 U	10 U			
Methylcyclohexane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Methylene chloride	5	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Styrene	100	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,1,2,2-Tetrachloroethane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Tetrachloroethene	5	NSL	18	18	75	73	690 J	0.78 J*	0.90 J*	1.2 J*	360	1.7 J*	5.0 U			
Toluene	1,000	1,000	5.0 U	0.30 J*	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	0.25 J*	0.34 J*			
1,1,2-Trichloro-1,2,2-Trifluoroethane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,2,4-Trichlorobenzene	70	70	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,1,1-Trichloroethane	200	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
1,1,2-Trichloroethane	5	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Trichloroethene	5	NSL	5.0 U	5.0 U	0.79 J*	0.71 J*	8.3 J*	5.0 U	5.0 U	4.3 J*	5.0 U	5.0 U	5.0 U			
Trichlorofluoromethane	NSL	NSL	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U			
Vinyl chloride	2	NSL	2.0 U	2.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U			
Xylenes (total)	10,000	10,000	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U							

Table
Summary of PAHs in Groundwater
Itron - Greenwood
Greenwood, South Carolina

Sample ID: Sample Date: Other:	SCREENING CRITERIA (ug/L)		MW-1 06/05/2014	MW-2 06/04/2014	MW-3		MW-4 06/05/2014	MW-5 06/05/2014	MW-5D 06/05/2014	MW-6 06/04/2014	MW-7 06/04/2014	MW-8 06/04/2014	MW-9 06/04/2014	MW-9D 06/04/2014
	US EPA MCL (Drinking Water)	SCDHEC RBSL			06/04/2014	7/29/2015								
Polycyclic Aromatic Hydrocarbons (ug/L)														
Acenaphthene	NSL	NSL	0.20 U	0.40 U	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Acenaphthylene	NSL	NSL	0.20 U	0.40 U	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Anthracene	NSL	NSL	0.20 U	0.40 U	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Benzo(a)anthracene	NSL	NSL	0.20 U	0.042 J*	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Benzo(a)pyrene	0.2	NSL	0.20 U	0.050 J*	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Benzo(b)fluoranthene	NSL	NSL	0.20 U	0.11 J*	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Benzo(g,h,i)perylene	NSL	NSL	0.20 U	0.40 U	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Benzo(k)fluoranthene	NSL	NSL	0.20 U	0.40 U	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Chrysene	NSL	NSL	0.20 U	0.077 J*	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Dibenz(a,h)anthracene	NSL	NSL	0.20 U	0.40 U	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Fluoranthene	NSL	NSL	0.20 U	0.15 J*	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Fluorene	NSL	NSL	0.20 U	0.063 J*	100 U	40 U	0.028 J*	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Indeno(1,2,3-c,d)pyrene	NSL	NSL	0.20 U	0.40 U	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Naphthalene	NSL	25	0.20 U	1.1	200	190	0.14 J*	0.20 U	0.10 J*	0.20 U	NA	NA	NA	NA
Phenanthrene	NSL	NSL	0.20 U	0.15 J*	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA
Pyrene	NSL	NSL	0.20 U	0.13 J*	100 U	40 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA

Notes:

Values in bold font indicate that the result reported exceeds the most stringent screening criteria.

DUP - field duplicate

J - estimated value

J* - laboratory assigned J-flag indicating a result greater than the method detection limit and less than the reporting limit

MCL - maximum contaminant level

NA - not analyzed or not applicable

NSL - no screening level listed

PAH - polycyclic aromatic hydrocarbon

RBSL - Risk-Based Screening Levels based on SCDHEC Risk Based Corrective Action (RBCA), 2001

SCDHEC - South Carolina Department of Health and Environmental Control

U - Compound was analyzed for but not detected above the reporting limit shown.

ug/L - microgram per liter

US EPA - United States Environmental Protection Agency

Table
Summary of PAHs in Groundwater
Itron - Greenwood
Greenwood, South Carolina

Sample ID: Sample Date: Other:	SCREENING CRITERIA (ug/L)		MW-10 06/04/2014	MW-10D 06/04/2014	MW-11 06/04/2014	MW-12 06/05/2014	MW-13 06/05/2014	MW-14 06/04/2014	MW-15 06/05/2014	MW-16 06/04/2014	MW-16D 06/04/2014 (DUP)	MW-17 06/05/2014 (DUP)	MW-18 06/05/2014
Polycyclic Aromatic Hydrocarbons (ug/L)													
Acenaphthene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Acenaphthylene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Anthracene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Benzo(a)anthracene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Benzo(a)pyrene	0.2	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Benzo(b)fluoranthene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Benzo(g,h,i)perylene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Benzo(k)fluoranthene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Chrysene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Dibenz(a,h)anthracene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Fluoranthene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Fluorene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Indeno(1,2,3-c,d)pyrene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U
Naphthalene	NSL	25	NA	NA	NA	0.039 J*	NA	NA	NA	NA	NA	0.033 J*	0.071 J*
Phenanthrene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.043 J*	0.040 J*
Pyrene	NSL	NSL	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	0.20 U	0.20 U

Notes:

Values in bold font indicate that the result reported exceeds the most stringent screening criteria.

DUP - field duplicate

US EPA - United States Environmental Protection Agency

J - estimated value

J* - laboratory assigned J-flag indicating a result greater than the method detection limit and less than the reporting limit

MCL - maximum contaminant level

NA - not analyzed or not applicable

NSL - no screening level listed

PAH - polycyclic aromatic hydrocarbon

RBSL - Risk-Based Screening Levels based on South Carolina Department of Health and Environmental Control (SCDHEC) Risk Based Corrective Action (RBCA), 2001

SCDHEC - South Carolina Department of Health and Environmental Control

U - Compound was analyzed for but not detected above the reporting limit shown.

ug/L - microgram per liter

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA				SB-19			SB-20			SB-21			SB-22		SB-22A	
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	0-1' 05/10/2014	3-4' 05/10/2014	18-19' 05/10/2014	0-1' 05/10/2014	10-11' 05/10/2014	23-24' 05/10/2014	0-1' 05/10/2014	8-9' 05/10/2014	27-28' 05/10/2014 (DUP)	27-28' 03/31/2014	29-30' 03/31/2014	0-1' 04/01/2014	
Volatile Organic Compounds (mg/kg)																	
Acetone	NSL	61,000	630,000	NSL	0.033 U	0.031 U	0.022 U	0.024 U	0.019 U	0.028 U	0.022 U	0.026 U	0.025 U	0.019 U	0.024 U	0.22 U	0.19 U
Benzene	0.0026	1.1	5.4	0.007	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Bromodichloromethane	0.022	0.27	1.4	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Bromoform	0.021	62	220	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.017 U	0.015 U	0.011 U	0.012 U	0.0095 U	0.014 U	0.011 U	0.013 U	0.012 U	0.0093 U	0.012 U	0.11 U	0.096 U
Carbon disulfide	0.0019	820	3,700	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Carbon tetrachloride	0.0019	0.61	3	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Chlorobenzene	0.068	290	1,400	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Chloroethane	NSL	NSL	NSL	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Chloroform	0.022	0.29	1.5	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Cyclohexane	NSL	7,000	29,000	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Dibromochloromethane	0.021	0.68	3.3	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
1,1-Dichloroethane	NSL	3.3	17	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.0042 J*	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
1,2-Dichloropropane	0.0017	0.94	4.7	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
trans-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Ethylbenzene	0.78	5.4	27	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
2-Hexanone	NSL	210	1400	NSL	0.017 U	0.015 U	0.012 U	0.014 U	0.0095 U	0.011 U	0.012 U	0.013 U	0.011 U	0.0093 U	0.012 U	0.11 U	0.096 U
Isopropylbenzene	NSL	NSL	NSL	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047 U	0.0069 U	0.0055 U	0.0065 U	0.0062 U	0.0046 U	0.0060 U	0.055 U	0.048 U
Methyl acetate	NSL	78,000	1,000,000	NSL	0.0084 U	0.0077 U	0.0055 U	0.0059 U	0.0047								

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA				SB-23		SB-23A		SB-24		SB-25		SB-25A		SB-26			
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	25-26' 03/31/2014	29-30' 03/31/2014	4-5' 04/01/2014	3-4' 03/31/2014	24-25' 03/31/2014	27-28' 03/31/2014	28-29' 03/31/2014 (DUP)	0-1' 04/01/2014	1-2' 03/31/2014	2-3' 03/31/2014	3-4' 03/31/2014	29-30' 03/31/2014		
Volatile Organic Compounds (mg/kg)																		
Acetone	NSL	61,000	630,000	NSL	0.023 U	0.023 U	0.022 U	0.033 U	0.025 U	0.026 U	1.3 U	1.2 U	1.1 U	4.3 U	1,200 U	2.2 U	1.1 U	
Benzene	0.0026	1.1	5.4	0.007	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Bromodichloromethane	0.022	0.27	1.4	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Bromoform	0.021	62	220	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.012 U	0.011 U	0.017 U	0.013 U	0.013 U	0.013 U	0.64 U	0.59 U	0.57 U	2.2 U	600 U	1.1 U	0.55 U	
Carbon disulfide	0.0019	820	3,700	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Carbon tetrachloride	0.0019	0.61	3	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Chlorobenzene	0.068	290	1,400	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Chloroethane	NSL	NSL	NSL	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Chloroform	0.022	0.29	1.5	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.00201*	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Cyclohexane	NSL	7,000	29,000	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Dibromochloromethane	0.021	0.68	3.3	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
1,1-Dichloroethane	NSL	3.3	17	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
1,2-Dichloropropane	0.0017	0.94	4.7	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
trans-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Ethylbenzene	0.78	5.4	27	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
2-Hexanone	NSL	210	1400	NSL	0.012 U	0.011 U	0.011 U	0.017 U	0.013 U	0.013 U	0.64 U	0.59 U	0.57 U	2.2 U	600 U	1.1 U	0.55 U	
Isopropylbenzene	NSL	NSL	NSL	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Methyl acetate	NSL	78,000	1,000,000	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
Methyl tertiary butyl ether (MTBE)	NSL	43	220	NSL	0.0058 U	0.0057 U	0.0054 U	0.0083 U	0.0064 U	0.0065 U	0.32 U	0.29 U	0.29 U	1.1 U	300 U	0.54 U	0.27 U	
4-Methyl-1-pentanone	NSL	5,300	53,000	NSL	0.012 U	0.011 U	0.011 U	0.017 U	0									

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA			SB-26A		SB-27		SB-28			SB-29		SB-29A		SB-30	
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	0-1' 04/01/2014	7-8' 04/01/2014	29-30' 04/01/2014	14-15' 04/01/2014	26-27' 04/01/2014	29-30' 04/01/2014	22-23' 04/01/2014	27-28' 04/01/2014	3-4' 04/02/2014	14-15' 04/02/2014	6-7' 04/01/2014 (DUP)	19-20' 04/01/2014
Volatile Organic Compounds (mg/kg)																
Acetone	NSL	61,000	630,000	NSL	0.97 U	0.020 U	0.020 U	0.022 U	1.0 U	0.017 U	0.028	0.021 U	1.1 U	0.021 U	0.022 U	0.024 U
Benzene	0.0026	1.1	5.4	0.007	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
Bromodichloromethane	0.022	0.27	1.4	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
Bromoform	0.021	62	220	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.48 U	0.010 U	0.010 U	0.011 U	0.5 U	0.0087 U	0.0064 J*	0.011 U	0.57 U	0.57 U	0.010 U	0.011 U
Carbon disulfide	0.0019	820	3,700	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
Carbon tetrachloride	0.0019	0.61	3	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
Chlorobenzene	0.068	290	1,400	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
Chloroethane	NSL	NSL	NSL	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
Chloroform	0.022	0.29	1.5	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0015 J*	0.0095 J*	0.0035 J*	0.28 U	0.29 U	0.0052 U	0.0054 U
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
Cyclohexane	NSL	7,000	29,000	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0060 U
Dibromochloromethane	0.021	0.68	3.3	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
1,1-Dichloroethane	NSL	3.3	17	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0016 J*	0.28 U	0.29 U	0.0052 U	0.0060 U
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
1,2-Dichloropropene	0.0017	0.94	4.7	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
trans-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
Ethylbenzene	0.78	5.4	27	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0060 U
2-Hexanone	NSL	210	1400	NSL	0.48 U	0.010 U	0.010 U	0.011 U	0.5 U	0.0087 U	0.010 U	0.011 U	0.57 U	0.57 U	0.010 U	0.011 U
Isopropylbenzene	NSL	NSL	NSL	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
Methyl acetate	NSL	78,000	1,000,000	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
Methyl tertiary butyl ether (MTBE)	NSL	43	220	NSL	0.24 U	0.0051 U	0.0050 U	0.0056 U	0.25 U	0.0044 U	0.0051 U	0.0053 U	0.28 U	0.29 U	0.0052 U	0.0054 U
4-Methyl-2-pentanone	NSL	5,300	53,000	NSL	0.48 U	0.010 U	0.010 U	0.011 U	0.5 U	0.0087 U	0.010 U	0.011 U	0.57 U	0.57 U	0.010 U	0.011 U
Methylcyclohexane	NSL	NSL	NSL	NSL	0.24 U	0.0051 U</td										

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA				SB-31		SB-32			SB-33		SB-33A		SB-34		
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	6-7' 04/01/2014	25-26' 04/01/2014	7-8' 04/02/2014	15-16' 04/02/2014	20-21' 04/02/2014	2-3' 04/01/2014	8-9' 04/01/2014	17-18' 04/02/2014	22-23' 04/02/2014	6-7' 04/02/2014	17-18' 04/02/2014	25-26' 04/02/2014
Volatile Organic Compounds (mg/kg)																
Acetone	NSL	61,000	630,000	NSL	0.021 U	0.023 U	0.028 U	0.024 U	0.021 U	0.0085 J*	0.019 U	1.3 U	0.023 U	0.025 U	0.026 U	1.2 UJ
Benzene	0.0026	1.1	5.4	0.007	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ
Bromodichloromethane	0.022	0.27	1.4	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Bromoform	0.021	62	220	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.010 U	0.012 U	0.014 U	0.012 U	0.010 U	0.0096 U	0.67 U	0.012 U	0.013 U	0.012 U	0.61 UJ	
Carbon disulfide	0.0019	820	3,700	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Carbon tetrachloride	0.0019	0.61	3	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Chlorobenzene	0.068	290	1,400	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Chloroethane	NSL	NSL	NSL	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Chloroform	0.022	0.29	1.5	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Cyclohexane	NSL	7,000	29,000	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Dibromochloromethane	0.021	0.68	3.3	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
1,1-Dichloroethane	NSL	3.3	17	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
1,2-Dichloropropane	0.0017	0.94	4.7	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
trans-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Ethylbenzene	0.78	5.4	27	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
2-Hexanone	NSL	210	1400	NSL	0.010 U	0.012 U	0.014 U	0.012 U	0.010 U	0.0096 U	0.67 U	0.012 U	0.013 U	0.012 U	0.61 UJ	
Isopropylbenzene	NSL	NSL	NSL	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Methyl acetate	NSL	78,000	1,000,000	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Methyl tertiary butyl ether (MTBE)	NSL	43	220	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
4-Methyl-2-pentanone	NSL	5,300	53,000	NSL	0.010 U	0.012 U	0.014 U	0.012 U	0.010 U	0.0096 U	0.67 U	0.012 U	0.013 U	0.012 U	0.61 UJ	
Methylcyclohexane	NSL	NSL	NSL	NSL	0.0052 U	0.0058 U	0.0070 U	0.0059 U	0.0052 U	0.0048 U	0.34 U	0.0058 U	0.0062 U	0.0066 U	0.30 UJ	
Methylene chloride	0.00															

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA				SB-35			SB-36			SB-37		SB-38		
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	7-8' 04/02/2014	17-18' 04/02/2014	25-26' 04/02/2014	5-6' 04/02/2014	18-19' 04/02/2014	26-27' 04/02/2014	4-5' 04/08/2014	23-24' 04/08/2014	0-1' 04/08/2014	16-17' 04/08/2014	24-25' 04/08/2014
Volatile Organic Compounds (mg/kg)															
Acetone	NSL	61,000	630,000	NSL	0.026 U	1.3 U	1.2 U	0.026 U	0.025 U	0.022 U	0.45 J*	1.6 UJ	0.024 U	0.027 U	0.021 U
Benzene	0.0026	1.1	5.4	0.007	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Bromodichloromethane	0.022	0.27	1.4	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Bromoform	0.021	62	220	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.013 U	0.65 U	0.61 U	0.013 U	0.011 U	0.63 U	0.81 UJ	0.012 U	0.013 U	0.010 U	
Carbon disulfide	0.0019	820	3,700	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Carbon tetrachloride	0.0019	0.61	3	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Chlorobenzene	0.068	290	1,400	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Chloroethane	NSL	NSL	NSL	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Chloroform	0.022	0.29	1.5	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Cyclohexane	NSL	7,000	29,000	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Dibromochloromethane	0.021	0.68	3.3	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
1,1-Dichloroethane	NSL	3.3	17	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
1,2-Dichloropropane	0.0017	0.94	4.7	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
trans-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Ethylbenzene	0.78	5.4	27	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.58 J	0.0059 U	0.0067 U	0.0052 U
2-Hexanone	NSL	210	1400	NSL	0.013 U	0.65 U	0.61 U	0.013 U	0.011 U	0.63 U	0.81 UJ	0.012 U	0.013 U	0.010 U	
Isopropylbenzene	NSL	NSL	NSL	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	1.6 J	0.0059 U	0.0067 U	0.0052 J*
Methyl acetate	NSL	78,000	1,000,000	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Methyl tertiary butyl ether (MTBE)	NSL	43	220	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
4-Methyl-2-pentanone	NSL	5,300	53,000	NSL	0.013 U	0.65 U	0.61 U	0.013 U	0.011 U	0.63 U	0.81 UJ	0.012 U	0.013 U	0.010 U	
Methylcyclohexane	NSL	NSL	NSL	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.42 J	0.0059 U	0.0067 U	0.0052 U
Methylene chloride	0.0013	56	960	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
Styrene	0.11	6,300	36,000	NSL	0.0064 U	0.32 U	0.31 U	0.0065 U	0.0064 U	0.0055 U	0.31 U	0.4 UJ	0.0059 U	0.0067 U	0.0052 U
1,1,2-Tetrachloroethane	NSL	0.56	2												

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA				SB-39			SB-40		SB-41			SB-42		
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	5'-6' 04/08/2014	14-15' 04/08/2014	22-23' 04/08/2014	17-18' 04/08/2014	23-24' 04/08/2014	1-2' 04/08/2014	14-15' 04/08/2014	23-24' 04/08/2014	0-1' 04/09/2014	14-15' 04/09/2014	23-24' 04/09/2014
Volatile Organic Compounds (mg/kg)															
Acetone	NSL	61,000	630,000	NSL	1.1 U	1.5 U	2.4 U	1.3 U	1.2 U	0.023 U	1.3 UJ	1.3 UJ	1.2 UJ	0.028 U	1.4 U
Benzene	0.0026	1.1	5.4	0.007	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Bromodichloromethane	0.022	0.27	1.4	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Bromoform	0.021	62	220	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.54 U	0.75 U	1.2 U	0.64 U	0.58 U	0.011 U	0.66 UJ	0.63 UJ	0.59 UJ	0.014 U	0.71 U
Carbon disulfide	0.0019	820	3,700	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Carbon tetrachloride	0.0019	0.61	3	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Chlorobenzene	0.068	290	1,400	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Chloroethane	NSL	NSL	NSL	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Chloroform	0.022	0.29	1.5	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Cyclohexane	NSL	7,000	29,000	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Dibromochloromethane	0.021	0.68	3.3	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
1,1-Dichloroethane	NSL	3.3	17	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.20 J*
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
1,2-Dichloropropane	0.0017	0.94	4.7	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
trans-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Ethylbenzene	0.78	5.4	27	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.22 J*
2-Hexanone	NSL	210	1400	NSL	0.54 U	0.75 U	1.2 U	0.64 U	4.0	0.011 U	0.66 UJ	0.63 UJ	0.59 UJ	0.014 U	0.71 U
Isopropylbenzene	NSL	NSL	NSL	NSL	0.054 J*	2.7	4.6	0.11 J*	2.7	0.0057 U	1.8 J*	1.4 J	0.29 UJ	0.0070 U	2.0
Methyl acetate	NSL	78,000	1,000,000	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Methyl tertiary butyl ether (MTBE)	NSL	43	220	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
4-Methyl-2-pentanone	NSL	5,300	53,000	NSL	0.54 U	0.75 U	1.2 U	0.64 U	0.58 U	0.011 U	0.66 UJ	0.63 UJ	0.59 UJ	0.014 U	0.71 U
Methylcyclohexane	NSL	NSL	NSL	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.12 J*	0.14 J*	0.29 UJ	0.0070 U	0.4
Methylene chloride	0.0013	56	960	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Styrene	0.11	6,300	36,000	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
1,1,2-Tetrachloroethane	NSL	0.56	2.8	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	0.0057 U	0.33 UJ	0.32 UJ	0.29 UJ	0.0070 U	0.35 U
Tetrachloroethene	0.0023	22	110	NSL	0.27 U	0.37 U	0.59 U	0.32 U	0.29 U	2.3	0.034	2.2 J	0.79 J	22 J	0.0020 J*
Toluene	0.69</														

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA				SB-43			SB-44		SB-45			
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	7-8'	10-11'	19-20'	11-12'	24-25'	0-1'	3-4'	15-16'	21-22'
					04/09/2014	04/09/2014	04/09/2014 (DUP)	04/03/2014	04/03/2014	04/03/2014	04/03/2014	04/03/2014 (DUP)	04/03/2014
Volatile Organic Compounds (mg/kg)													
Acetone	NSL	61,000	630,000	NSL	1.1 UJ	1.2 UJ	1.3 U	1.2 U	0.012 J	45 U	0.075	260 U	35 U
Benzene	0.0026	1.1	5.4	0.007	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Bromodichloromethane	0.022	0.27	1.4	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Bromoform	0.021	62	220	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.57 UJ	0.60 UJ	0.63 U	0.60 U	0.0099 U	22 U	0.010 J*	130 U	18 U
Carbon disulfide	0.0019	820	3,700	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Carbon tetrachloride	0.0019	0.61	3	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Chlorobenzene	0.068	290	1,400	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Chloroethane	NSL	NSL	NSL	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Chloroform	0.022	0.29	1.5	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Cyclohexane	NSL	7,000	29,000	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Dibromochloromethane	0.021	0.68	3.3	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,1-Dichloroethane	NSL	3.3	17	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.077 J*	0.21 J*	0.17 J*	0.17 J*	0.0050 U	11 U	0.0068 U	66 U	8.8 U
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,2-Dichloropropane	0.0017	0.94	4.7	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
trans-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Ethylbenzene	0.78	5.4	27	1.15	0.29 UJ	0.15 J*	1.3	1.1	0.0050 U	11 U	0.0068 U	66 U	8.8 U
2-Hexanone	NSL	210	1400	NSL	0.57 UJ	0.60 UJ	0.63 U	0.60 U	0.0099 U	22 U	0.014 U	130 U	18 U
Isopropylbenzene	NSL	NSL	NSL	NSL	0.072 J*	0.47 J	6.8	4.4	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Methyl acetate	NSL	78,000	1,000,000	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Methyl tertiary butyl ether (MTBE)	NSL	43	220	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
4-Methyl-2-pentanone	NSL	5,300	53,000	NSL	0.57 UJ	0.60 UJ	0.63 U	0.30 U	0.0099 U	22 U	0.014 U	130 U	18 U
Methylcyclohexane	NSL	NSL	NSL	NSL	0.065 J*	0.32 J	0.93	0.73	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Methylene chloride	0.0013	56	960	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Styrene	0.11	6,300	36,000	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,1,2-Tetrachloroethane	NSL	0.56	2.8	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Tetrachloroethene	0.0023	22	110	NSL	32 J	71 J	61	67	0.0038 J*	220	18	1,300	6,300
Toluene	0.69	5,000	45,000	1.45	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NSL	43,000	180,000	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,2,4-Trichlorobenzene	0.07	22	99	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,1,1-Trichloroethane	0.07	8,700	38,000	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
1,1,2-Trichloroethane	0.0011	1.1	5.3	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Trichloroethene	0.0018	0.91	6.4	NSL	0.42 J	0.86 J	0.32	0.25 J*	0.0050 U	11 U	0.017	66 U	8.8 U
Trichlorofluoromethane	NSL	790	3,400	NSL	0.29 UJ	0.30 UJ	0.32 U	0.30 U	0.0050 U	11 U	0.0068 U	66 U	8.8 U
Vin													

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA				SB-46			SB-47			SB-48			SB-49			
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	3-4' 04/03/2014	15-16' 04/03/2014	25-26' 04/03/2014	0-1' 04/03/2014	6-7' 04/03/2014	24-25' 04/03/2014	2-3' 04/03/2014	14-15' 04/03/2014	25-26' 04/03/2014	3-4' 04/03/2014	12-13' 04/03/2014	23-24' 04/03/2014	
Volatile Organic Compounds (mg/kg)																	
Acetone	NSL	61,000	630,000	NSL	1.3 U	14 UJ	12 U	0.022 U	0.028 U	1.3 U	1.0 U	1.2 U	0.022 U	1.0 U	0.027 U	0.024	
Benzene	0.0026	1.1	5.4	0.007	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Bromodichloromethane	0.022	0.27	1.4	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Bromoform	0.021	62	220	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.64 U	7.2 UJ	6.1 U	0.011 U	0.014 U	0.63 U	0.52 U	0.59 U	0.011 U	0.52 U	0.013 U	0.012 U	
Carbon disulfide	0.0019	820	3,700	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Carbon tetrachloride	0.0019	0.61	3	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Chlorobenzene	0.068	290	1,400	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Chloroethane	NSL	NSL	NSL	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Chloroform	0.022	0.29	1.5	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Cyclohexane	NSL	7,000	29,000	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Dibromochloromethane	0.021	0.68	3.3	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
1,1-Dichloroethane	NSL	3.3	17	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
1,2-Dichloropropane	0.0017	0.94	4.7	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
trans-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Ethylbenzene	0.78	5.4	27	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
2-Hexanone	NSL	210	1400	NSL	0.64 U	7.2 UJ	6.1 U	0.011 U	0.014 U	0.63 U	0.52 U	0.59 U	0.011 U	0.52 U	0.013 U	0.012 U	
Isopropylbenzene	NSL	NSL	NSL	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Methyl acetate	NSL	78,000	1,000,000	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
Methyl tertiary butyl ether (MTBE)	NSL	43	220	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
4-Methyl-2-pentanone	NSL	5,300	53,000	NSL	0.64 U	7.2 UJ	6.1 U	0.011 U	0.014 U	0.63 U	0.52 U	0.59 U	0.011 U	0.52 U	0.013 U	0.012 U	
Methylcyclohexane	NSL	NSL	NSL	NSL	0.32 U	3.6 UJ	3.0 U	0.41 J*	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U
Methylene chloride	0.0013	56	960	NSL	0.32 U	3.6 UJ	3.0 U	0.0055 U	0.0070 U	0.32 U	0.26 U	0.30 U	0.0054 U	0.26 U	0.0067 U	0.0059 U	
St																	

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA				SB-50			SB-51			SB-52			SB-53		SB-54	
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	0-1' 04/09/2014	10-11' 04/09/2014	19-20' 04/09/2014	2-3' 04/03/2014	9-10' 04/03/2014	23-24' 04/03/2014	6-7' 04/04/2014	9-10' 04/04/2014	18-19' 04/04/2014	1-2' 04/02/2014	24-25' 04/02/2014	1-2' 04/04/2014	24-25' 04/04/2014
Volatile Organic Compounds (mg/kg)																	
Acetone	NSL	61,000	630,000	NSL	0.018 U	0.027 U	0.021 U	0.021 U	0.024 U	0.028 U	0.022 U	0.021 U	0.031 U	0.025 U	0.019 U	0.029 U	0.021 U
Benzene	0.0026	1.1	5.4	0.007	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
Bromodichloromethane	0.022	0.27	1.4	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
Bromoform	0.021	62	220	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.0088 U	0.014 U	0.011 U	0.012 U	0.014 U	0.011 U	0.016 U	0.013 U	0.0094 U	0.015 U	0.010 U		
Carbon disulfide	0.0019	820	3,700	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
Carbon tetrachloride	0.0019	0.61	3	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
Chlorobenzene	0.068	290	1,400	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
Chloroethane	NSL	NSL	NSL	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
Chloroform	0.022	0.29	1.5	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
Cyclohexane	NSL	7,000	29,000	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
Dibromochloromethane	0.021	0.68	3.3	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
1,1-Dichloroethane	NSL	3.3	17	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
1,2-Dichloropropane	0.0017	0.94	4.7	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
trans-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
Ethylbenzene	0.78	5.4	27	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
2-Hexanone	NSL	210	1400	NSL	0.0088 U	0.014 U	0.011 U	0.010 U	0.012 U	0.014 U	0.011 U	0.011 U	0.016 U	0.013 U	0.0094 U	0.015 U	0.010 U
Isopropylbenzene	NSL	NSL	NSL	NSL	0.0044 U	0.0068 U	0.0053 U	0.0052 U	0.0061 U	0.0069 U	0.0056 U	0.0054 U	0.0078 U	0.0063 U	0.0047 U	0.0074 U	0.0052 U
M																	

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA				SB-55		SB-56				SB-57			SB-58			
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	11-12' 04/04/2014	24-25' 04/04/2014 (DUP)	0-1' 04/08/2014	13-14' 04/08/2014	28-29' 04/08/2014 (DUP)	0-1' 05/10/2014	4-5' 05/10/2014	9-10' 05/10/2014	4-5' 04/08/2014	9-10' 04/08/2014	23-24' 04/08/2014		
Volatile Organic Compounds (mg/kg)																	
Acetone	NSL	61,000	630,000	NSL	0.025 UJ	1.1 U	1.1 U	0.021 U	1.4 U	2.4 U	1.2 U	0.030 U	0.024 U	0.024 U	0.023 U	0.021 U	1.1 U
Benzene	0.0026	1.1	5.4	0.007	0.0063 UJ	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Bromodichloromethane	0.022	0.27	1.4	NSL	0.0063 UJ	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Bromoform	0.021	62	220	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.013 U	0.57 U	0.55 U	0.010 U	0.70 U	1.2 U	0.62 U	0.015 U	0.012 U	0.012 U	0.010 U	0.010 U	0.56 U
Carbon disulfide	0.0019	820	3,700	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Carbon tetrachloride	0.0019	0.61	3	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Chlorobenzene	0.068	290	1,400	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Chloroethane	NSL	NSL	NSL	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Chloroform	0.022	0.29	1.5	NSL	0.0063 UJ	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Cyclohexane	NSL	7,000	29,000	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Dibromochloromethane	0.021	0.68	3.3	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.0063 UJ	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
1,1-Dichloroethane	NSL	3.3	17	NSL	0.0063 UJ	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.0063 UJ	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
1,2-Dichloropropane	0.0017	0.94	4.7	NSL	0.0063 UJ	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
trans-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0063 UJ	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Ethylbenzene	0.78	5.4	27	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.42 J	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
2-Hexanone	NSL	210	1400	NSL	0.013 U	0.57 U	0.55 U	0.010 U	0.70 U	1.2 U	0.62 U	0.015 U	0.012 U	0.012 U	0.010 U	0.010 U	0.56 U
Isopropylbenzene	NSL	NSL	NSL	NSL	0.0063 U	1.5 J	0.75 J	0.0052 U	0.55 J	2.7 J	0.042 J*	0.0074 U	0.0060 U	0.0059 U	0.0020 J*	0.0052 U	0.28 U
Methyl acetate	NSL	78,000	1,000,000	NSL	0.0063 U	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U
Methyl tertiary butyl ether (MTBE)	NSL	43	220	NSL	0.0063 UJ	0.29 U	0.28 U	0.0052 U	0.35 U	0.60 U	0.31 U	0.0074 U	0.0060 U	0.0059 U	0.0059 U	0.0052 U	0.28 U

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA				SB-59		SB-60		MW-5D		MW-9D		MW-10D		MW-10I		MW-12								
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	05/19/2014	05/19/2014	3-4'	4-5'	05/13/2014	05/13/2014	1-2'	21-22'	05/14/2014	05/14/2014	15-16'	64-65'	05/14/2014	05/15/2014	7-8'	22-23'	05/15/2014	05/15/2014	49-50'	0-1'	33-34'
Volatile Organic Compounds (mg/kg)																									
Acetone	NSL	61,000	630,000	NSL	0.030 J*	0.086	0.011 J*	0.020 U	0.019 U	0.026 U	0.030 U	0.023 U	NA	0.026 U	0.026 U	0.027 U	0.080 J	0.022 U							
Benzene	0.0026	1.1	5.4	0.007	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
Bromodichloromethane	0.022	0.27	1.4	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
Bromoform	0.021	62	220	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.016 U	0.013 U	0.015 U	0.010 U	0.0093 U	0.013 U	0.015 U	0.012 U	NA	0.013 U	0.013 U	0.014 U	0.013 U	0.011 U							
Carbon disulfide	0.0019	820	3,700	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
Carbon tetrachloride	0.0019	0.61	3	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
Chlorobenzene	0.068	290	1,400	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
Chloroethane	NSL	NSL	NSL	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
Chloroform	0.022	0.29	1.5	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
Cyclohexane	NSL	7,000	29,000	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
Dibromochloromethane	0.021	0.68	3.3	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
1,1-Dichloroethane	NSL	3.3	17	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
1,2-Dichloropropane	0.0017	0.94	4.7	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U	0.0054 U							
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0079 U	0.0065 U	0.0074 U	0.0051 U	0.0047 U	0.0066 U	0.0075 U	0.0058 U	NA	0.0065 U	0.0066 U	0.0068 U	0.0064 U</								

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA				MW-13			MW-14			MW-15			
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	05/15/2014	25-26' 05/15/2014	36-37' 05/15/2014	13-14' 05/14/2014	20-21' 05/14/2014	44-45' 05/14/2014	7-8' 05/14/2014	16-17' 05/14/2014 (DUP)	23-24' 05/14/2014	31-32' 05/14/2014
Volatile Organic Compounds (mg/kg)														
Acetone	NSL	61,000	630,000	NSL	0.018 J*	0.023 U	NA	0.025 U	0.020 U	NA	0.024 U	0.026 U	0.024 U	0.028 U
Benzene	0.0026	1.1	5.4	0.007	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Bromodichloromethane	0.022	0.27	1.4	NSL	0.0064 U	0.0056 U	NA	0.0063 UJ	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Bromoform	0.021	62	220	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.013 U	0.011 U	NA	0.013 U	0.010 U	NA	0.012 U	0.013 U	0.012 U	0.014 U
Carbon disulfide	0.0019	820	3,700	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Carbon tetrachloride	0.0019	0.61	3	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Chlorobenzene	0.068	290	1,400	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Chloroethane	NSL	NSL	NSL	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Chloroform	0.022	0.29	1.5	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Cyclohexane	NSL	7,000	29,000	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Dibromochloromethane	0.021	0.68	3.3	NSL	0.0064 U	0.0056 U	NA	0.0063 UJ	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.0064 U	0.0056 U	NA	0.0063 UJ	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
1,1-Dichloroethane	NSL	3.3	17	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.0064 U	0.0056 U	NA	0.0063 UJ	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
1,2-Dichloropropane	0.0017	0.94	4.7	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
trans-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Ethylbenzene	0.78	5.4	27	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
2-Hexanone	NSL	210	1400	NSL	0.013 U	0.011 U	NA	0.013 U	0.010 U	NA	0.012 U	0.013 U	0.012 U	0.014 U
Isopropylbenzene	NSL	NSL	NSL	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Methyl acetate	NSL	78,000	1,000,000	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Methyl tertiary butyl ether (MTBE)	NSL	43	220	NSL	0.0064 U	0.0056 U	NA	0.0063 UJ	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
4-Methyl-2-pentanone	NSL	5,300	53,000	NSL	0.013 U	0.011 U	NA	0.013 U	0.010 U	NA	0.012 U	0.013 U	0.012 U	0.014 U
Methylcyclohexane	NSL	NSL	NSL	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Methylene chloride	0.0013	56	960	NSL	0.0064 U	0.0056 U	NA	0.0063 UJ	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Styrene	0.11	6,300	36,000	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
1,1,2-Tetrachloroethane	NSL	0.56	2.8	NSL	0.0064 U	0.0056 U	NA	0.0063 UJ	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
Tetrachloroethene	0.0023	22	110	NSL	0.0028 J*	0.0020 J*	NA	0.0021 J*	0.0024 J*	NA	0.0022 J*	0.0030 J*	0.0018 J*	0.0034 J*
Toluene	0.69	5,000	45,000	1.45	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NSL	43,000	180,000	NSL	0.0064 U	0.0056 U	NA	0.0063 U	0.0051 U	NA	0.0059 U	0.0065 U	0.0059 U	0.0069 U
1,2,4-Trichlorobenzene	0.07	22	99	NSL	0.0064 U	0.0056 U	NA</							

Table
Summary of VOCs in Soil
Iron - Greenwood
Greenwood, South Carolina

Sample ID: Depth (feet bgs): Sample Date: Other:	SCREENING CRITERIA				MW-16		MW-16D		MW-17			MW-18		
	EPA SSL for Protection of Groundwater	Resident Soil RSL	Industrial Soil RSL	SCDHEC RBSL	(3-4') 05/20/2014	(19-20') 05/20/2014 (DUP)	6-7' 05/19/2014	22-23' 05/19/2014	0-1' 05/10/2014	4-5' 05/10/2014	23-24' 05/10/2014	4-5' 05/12/2014	12-13' 05/12/2014	38-39' 05/12/2014
Volatile Organic Compounds (mg/kg)														
Acetone	NSL	61,000	630,000	NSL	0.023 U	0.020 U	0.021 U	0.025 U	0.017 U	0.021 U	0.020 U	0.019 U	0.024 U	0.023 U
Benzene	0.0026	1.1	5.4	0.007	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Bromodichloromethane	0.022	0.27	1.4	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Bromoform	0.021	62	220	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Bromomethane (Methyl bromide)	NSL	7.3	32	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
2-Butanone (MEK)	NSL	28,000	200,000	NSL	0.011 U	0.0099 U	0.011 U	0.013 U	0.0083 U	0.010 U	0.0096 U	0.012 U	0.011 U	NA
Carbon disulfide	0.0019	820	3,700	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Carbon tetrachloride	0.0019	0.61	3	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Chlorobenzene	0.068	290	1,400	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Chloroethane	NSL	NSL	NSL	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Chloroform	0.022	0.29	1.5	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Chloromethane (Methyl chloride)	NSL	120	500	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Cyclohexane	NSL	7,000	29,000	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
1,2-Dibromo-3-chloropropane (DBCP)	0.00086	0.0054	0.069	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Dibromo-chloromethane	0.021	0.68	3.3	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
1,2-Dibromoethane (EDB)	0.00014	0.034	0.17	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
1,2-Dichlorobenzene	0.58	1,900	9,800	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
1,3-Dichlorobenzene	NSL	NSL	NSL	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
1,4-Dichlorobenzene	0.072	2.4	12	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Dichlorodifluoromethane	0.021	0.68	3.3	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
1,1-Dichloroethane	NSL	3.3	17	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
1,2-Dichloroethane	0.0014	0.43	2.2	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
1,1-Dichloroethene	0.0025	240	1,100	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
cis-1,2-Dichloroethene	0.021	160	2,000	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
trans-1,2-Dichloroethene	0.029	150	690	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
1,2-Dichloropropane	0.0017	0.94	4.7	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
cis-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
trans-1,3-Dichloropropene	NSL	NSL	NSL	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Ethylbenzene	0.78	5.4	27	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
2-Hexanone	NSL	210	1400	NSL	0.011 U	0.0099 U	0.011 U	0.013 U	0.0083 U	0.010 U	0.0096 U	0.012 U	0.011 U	NA
Isopropylbenzene	NSL	NSL	NSL	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Methyl acetate	NSL	78,000	1,000,000	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Methyl tertiary butyl ether (MTBE)	NSL	43	220	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
4-Methyl-2-pentanone	NSL	5,300	53,000	NSL	0.011 U	0.0099 U	0.011 U	0.013 U	0.0083 U	0.010 U	0.0096 U	0.012 U	0.011 U	NA
Methylcyclohexane	NSL	NSL	NSL	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Methylene chloride	0.0013	56	960	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Styrene	0.11	6,300	36,000	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
1,1,2-Tetrachloroethane	NSL	0.56	2.8	NSL	0.0056 U	0.0049 U	0.0054 U	0.0063 U	0.0042 U	0.0052 U	0.0050 U	0.0048 U	0.0061 U	0.0057 U
Tetrachloroethene	0.0023	22	110	NSL	0.0012 J*	0.0011 J*	0.0012 J*	0.0018 J*	0.0012 J*	0.0018 J*</				

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

AECOM

10 Patewood Drive
Building 6, Suite 500
Greenville, SC 29615
Attention: Aaron Council

Project Name: **Itron - Greenwood**

Project Number: **60429584.04000**

Lot Number: **QG30034**

Date Completed: **08/10/2015**



Lucas Odom
Project Manager



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

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

SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative AECOM Lot Number: QG30034

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.

SVOCs by GC/MS

Due to a large detection of Naphthalene, sample -003 has been analyzed at a 200X dilution. This large dilution has caused both surrogates to recover outside of method criteria. In addition, the large dilution has impacted the associated MS/MSD recoveries. No corrective action is necessary as it is known that dilutions of 5X and greater may impact surrogate recoveries.

VOCs by GC/MS

The MS/MSD associated with batch 81363 recovered Tetrachloroethene marginally outside of method criteria. All other associated QC recovered within limits illustrating that matrix interferences impacted the spike recovery.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Summary

AECOM

Lot Number: QG30034

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	MW-1	Aqueous	07/28/2015 1038	07/30/2015
002	MW-2	Aqueous	07/28/2015 1058	07/30/2015
003	MW-3	Aqueous	07/29/2015 0855	07/30/2015
004	MW-4	Aqueous	07/29/2015 1100	07/30/2015
005	MW-5	Aqueous	07/29/2015 1401	07/30/2015
006	MW-5D	Aqueous	07/28/2015 1358	07/30/2015
007	MW-6	Aqueous	07/29/2015 1030	07/30/2015
008	TRIP BLANK 1	Aqueous	07/28/2015	07/30/2015
009	DUP-1	Aqueous	07/29/2015 1140	07/30/2015
010	EB-1	Aqueous	07/29/2015 0810	07/30/2015
011	MW-7	Aqueous	07/29/2015 1115	07/30/2015
012	MW-8	Aqueous	07/29/2015 1200	07/30/2015
013	MW-9	Aqueous	07/28/2015 1145	07/30/2015
014	MW-9D	Aqueous	07/28/2015 1145	07/30/2015
015	MW-10R	Aqueous	07/28/2015 0925	07/30/2015
016	MW-10I	Aqueous	07/28/2015 0938	07/30/2015
017	MW-10D	Aqueous	07/28/2015 0925	07/30/2015
018	MW-11	Aqueous	07/29/2015 0940	07/30/2015
019	MW-12	Aqueous	07/29/2015 1020	07/30/2015
020	MW-13	Aqueous	07/28/2015 1357	07/30/2015
021	MW-14	Aqueous	07/28/2015 1140	07/30/2015
022	MW-15R	Aqueous	07/28/2015 1509	07/30/2015
023	MW-16	Aqueous	07/28/2015 1635	07/30/2015
024	MW-16D	Aqueous	07/28/2015 1650	07/30/2015
025	MW-17	Aqueous	07/28/2015 1640	07/30/2015
026	TRIP BLANK 2	Aqueous	07/28/2015	07/30/2015
027	MW-18	Aqueous	07/28/2015 1043	07/30/2015
028	MW-19	Aqueous	07/28/2015 1500	07/30/2015
029	MW-20	Aqueous	07/28/2015 1400	07/30/2015
030	MW-21	Aqueous	07/29/2015 0905	07/30/2015
031	MW-22D	Aqueous	07/28/2015 1508	07/30/2015
032	DUP-2	Aqueous	07/29/2015 0940	07/30/2015
033	EB-2	Aqueous	07/29/2015 1040	07/30/2015

(33 samples)

SHEALY ENVIRONMENTAL SERVICES, INC.

Executive Summary

AECOM

Lot Number: QG30034

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	MW-1	Aqueous	Tetrachloroethene	8260B	7.7		ug/L	6
001	MW-1	Aqueous	Toluene	8260B	0.27	J	ug/L	6
002	MW-2	Aqueous	Benzene	8260B	0.54	J	ug/L	8
002	MW-2	Aqueous	Isopropylbenzene	8260B	0.52	J	ug/L	8
002	MW-2	Aqueous	Tetrachloroethene	8260B	1.1	J	ug/L	8
002	MW-2	Aqueous	Toluene	8260B	0.47	J	ug/L	8
002	MW-2	Aqueous	Xylenes (total)	8260B	3.4	J	ug/L	9
003	MW-3	Aqueous	Acetone	8260B	10	J	ug/L	10
003	MW-3	Aqueous	Benzene	8260B	10	J	ug/L	10
003	MW-3	Aqueous	cis-1,2-Dichloroethene	8260B	280		ug/L	10
003	MW-3	Aqueous	Ethylbenzene	8260B	6.9	J	ug/L	10
003	MW-3	Aqueous	2-Hexanone	8260B	4.6	J	ug/L	10
003	MW-3	Aqueous	Isopropylbenzene	8260B	17	J	ug/L	10
003	MW-3	Aqueous	4-Methyl-2-pentanone	8260B	2.6	J	ug/L	10
003	MW-3	Aqueous	Methylcyclohexane	8260B	4.5	J	ug/L	10
003	MW-3	Aqueous	Styrene	8260B	0.81	J	ug/L	10
003	MW-3	Aqueous	Tetrachloroethene	8260B	13	J	ug/L	10
003	MW-3	Aqueous	Toluene	8260B	2.9	J	ug/L	10
003	MW-3	Aqueous	Trichloroethene	8260B	0.81	J	ug/L	11
003	MW-3	Aqueous	Xylenes (total)	8260B	56		ug/L	11
003	MW-3	Aqueous	Naphthalene	8270D (SIM)	190		ug/L	11
004	MW-4	Aqueous	cis-1,2-Dichloroethene	8260B	0.23	J	ug/L	13
004	MW-4	Aqueous	Tetrachloroethene	8260B	3.0	J	ug/L	13
005	MW-5	Aqueous	cis-1,2-Dichloroethene	8260B	15	J	ug/L	15
005	MW-5	Aqueous	Tetrachloroethene	8260B	4000		ug/L	15
005	MW-5	Aqueous	Trichloroethene	8260B	10	J	ug/L	16
006	MW-5D	Aqueous	Acetone	8260B	7.6	J	ug/L	17
006	MW-5D	Aqueous	Benzene	8260B	0.27	J	ug/L	17
006	MW-5D	Aqueous	cis-1,2-Dichloroethene	8260B	130		ug/L	17
006	MW-5D	Aqueous	Methylene chloride	8260B	0.60	J	ug/L	17
006	MW-5D	Aqueous	Tetrachloroethene	8260B	0.96	J	ug/L	17
006	MW-5D	Aqueous	Toluene	8260B	0.55	J	ug/L	17
006	MW-5D	Aqueous	Trichloroethene	8260B	0.22	J	ug/L	18
007	MW-6	Aqueous	Tetrachloroethene	8260B	9600		ug/L	19
009	DUP-1	Aqueous	1,1-Dichloroethane	8260B	0.60	J	ug/L	23
009	DUP-1	Aqueous	cis-1,2-Dichloroethene	8260B	0.27	J	ug/L	23
009	DUP-1	Aqueous	Tetrachloroethene	8260B	180		ug/L	23
009	DUP-1	Aqueous	Trichloroethene	8260B	0.83	J	ug/L	24
011	MW-7	Aqueous	Tetrachloroethene	8260B	100000		ug/L	27
012	MW-8	Aqueous	Tetrachloroethene	8260B	20000		ug/L	29
013	MW-9	Aqueous	Tetrachloroethene	8260B	1.8	J	ug/L	31
013	MW-9	Aqueous	Toluene	8260B	0.39	J	ug/L	31
014	MW-9D	Aqueous	Acetone	8260B	2.7	J	ug/L	33
014	MW-9D	Aqueous	Carbon disulfide	8260B	1.7	J	ug/L	33
014	MW-9D	Aqueous	Tetrachloroethene	8260B	0.73	J	ug/L	33

Executive Summary (Continued)

Lot Number: QG30034

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
014	MW-9D	Aqueous	Toluene	8260B	0.31	J	ug/L	33
015	MW-10R	Aqueous	Chloroform	8260B	5.8	J	ug/L	35
015	MW-10R	Aqueous	Tetrachloroethene	8260B	2900		ug/L	35
015	MW-10R	Aqueous	Trichloroethene	8260B	5.1	J	ug/L	36
016	MW-10I	Aqueous	Tetrachloroethene	8260B	15000		ug/L	37
017	MW-10D	Aqueous	Chloroform	8260B	0.48	J	ug/L	39
017	MW-10D	Aqueous	Tetrachloroethene	8260B	2.2	J	ug/L	39
017	MW-10D	Aqueous	Toluene	8260B	0.52	J	ug/L	39
018	MW-11	Aqueous	Tetrachloroethene	8260B	2.8	J	ug/L	41
018	MW-11	Aqueous	Toluene	8260B	0.30	J	ug/L	41
019	MW-12	Aqueous	Tetrachloroethene	8260B	4800		ug/L	43
021	MW-14	Aqueous	Tetrachloroethene	8260B	150		ug/L	47
022	MW-15R	Aqueous	Acetone	8260B	4.7	J	ug/L	49
022	MW-15R	Aqueous	Bromodichloromethane	8260B	2.9	J	ug/L	49
022	MW-15R	Aqueous	Bromoform	8260B	1.1	J	ug/L	49
022	MW-15R	Aqueous	Chloroform	8260B	5.5		ug/L	49
022	MW-15R	Aqueous	Dibromochloromethane	8260B	1.8	J	ug/L	49
022	MW-15R	Aqueous	4-Methyl-2-pentanone	8260B	0.84	J	ug/L	49
022	MW-15R	Aqueous	Toluene	8260B	0.27	J	ug/L	49
023	MW-16	Aqueous	Tetrachloroethene	8260B	110		ug/L	51
024	MW-16D	Aqueous	Tetrachloroethene	8260B	30		ug/L	53
024	MW-16D	Aqueous	Toluene	8260B	0.30	J	ug/L	53
025	MW-17	Aqueous	Tetrachloroethene	8260B	690		ug/L	55
025	MW-17	Aqueous	Trichloroethene	8260B	8.3	J	ug/L	56
027	MW-18	Aqueous	Tetrachloroethene	8260B	0.90	J	ug/L	59
028	MW-19	Aqueous	Bromodichloromethane	8260B	0.27	J	ug/L	61
028	MW-19	Aqueous	Chloroform	8260B	0.77	J	ug/L	61
028	MW-19	Aqueous	Tetrachloroethene	8260B	1.2	J	ug/L	61
029	MW-20	Aqueous	Chloroform	8260B	2.9	J	ug/L	63
029	MW-20	Aqueous	cis-1,2-Dichloroethene	8260B	3.8	J	ug/L	63
029	MW-20	Aqueous	Tetrachloroethene	8260B	360		ug/L	63
029	MW-20	Aqueous	Trichloroethene	8260B	4.3	J	ug/L	64
030	MW-21	Aqueous	Tetrachloroethene	8260B	1.7	J	ug/L	65
030	MW-21	Aqueous	Toluene	8260B	0.25	J	ug/L	65
031	MW-22D	Aqueous	Acetone	8260B	2.9	J	ug/L	67
031	MW-22D	Aqueous	Bromodichloromethane	8260B	0.31	J	ug/L	67
031	MW-22D	Aqueous	Chloroform	8260B	1.3	J	ug/L	67
031	MW-22D	Aqueous	Toluene	8260B	0.34	J	ug/L	67
032	DUP-2	Aqueous	Tetrachloroethene	8260B	2.5	J	ug/L	69
032	DUP-2	Aqueous	Toluene	8260B	0.29	J	ug/L	69

(85 detections)

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst 1132 SES	Prep Date	Batch 81323		
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	7.7		5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	0.27	J	5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq 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

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015	1132 SES		81323			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		90		70-130						
Bromofluorobenzene		92		70-130						
Toluene-d8		101		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst 1156 SES	Prep Date	Batch 81323		
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	0.54	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	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	0.52	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	1.1	J	5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	0.47	J	5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015 1156	SES		81323			
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	3.4	J	5.0	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		90		70-130						
Bromofluorobenzene		91		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 5	Analysis Date 08/04/2015	Analyst 1722 SES	Prep Date	Batch 81416		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B	10	J	100	8.1	ug/L	1
Benzene		71-43-2	8260B	10	J	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	280		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	6.9	J	25	1.1	ug/L	1
2-Hexanone		591-78-6	8260B	4.6	J	50	1.3	ug/L	1
Isopropylbenzene		98-82-8	8260B	17	J	25	0.70	ug/L	1
Methyl acetate		79-20-9	8260B	ND		25	1.2	ug/L	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B	ND		25	1.2	ug/L	1
4-Methyl-2-pentanone		108-10-1	8260B	2.6	J	50	1.5	ug/L	1
Methylcyclohexane		108-87-2	8260B	4.5	J	25	0.80	ug/L	1
Methylene chloride		75-09-2	8260B	ND		25	2.1	ug/L	1
Styrene		100-42-5	8260B	0.81	J	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	13	J	25	1.1	ug/L	1
Toluene		108-88-3	8260B	2.9	J	25	1.2	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	5	08/04/2015	1722 SES		81416		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
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	0.81	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	56		25	8.5	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits					
1,2-Dichloroethane-d4		92		70-130					
Bromofluorobenzene		92		70-130					
Toluene-d8		99		70-130					

Semivolatile Organic Compounds by GC/MS (SIM)

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3520C	8270D (SIM)	200	08/08/2015	1839 RBH	08/04/2015	1350	81425	
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene		83-32-9	8270D (SIM)	ND		40	4.2	ug/L	1
Acenaphthylene		208-96-8	8270D (SIM)	ND		40	4.8	ug/L	1
Anthracene		120-12-7	8270D (SIM)	ND		40	3.2	ug/L	1
Benzo(a)anthracene		56-55-3	8270D (SIM)	ND		40	3.8	ug/L	1
Benzo(a)pyrene		50-32-8	8270D (SIM)	ND		40	4.0	ug/L	1
Benzo(b)fluoranthene		205-99-2	8270D (SIM)	ND		40	3.8	ug/L	1
Benzo(g,h,i)perylene		191-24-2	8270D (SIM)	ND		40	12	ug/L	1
Benzo(k)fluoranthene		207-08-9	8270D (SIM)	ND		40	4.8	ug/L	1
Chrysene		218-01-9	8270D (SIM)	ND		40	4.2	ug/L	1
Dibenzo(a,h)anthracene		53-70-3	8270D (SIM)	ND		40	8.0	ug/L	1
Fluoranthene		206-44-0	8270D (SIM)	ND		40	3.6	ug/L	1
Fluorene		86-73-7	8270D (SIM)	ND		40	4.4	ug/L	1
Indeno(1,2,3-c,d)pyrene		193-39-5	8270D (SIM)	ND		40	10	ug/L	1
Naphthalene		91-20-3	8270D (SIM)	190		40	6.0	ug/L	1
Phenanthrene		85-01-8	8270D (SIM)	ND		40	4.6	ug/L	1
Pyrene		129-00-0	8270D (SIM)	ND		40	3.4	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Client: AECOM

Laboratory ID: QG30034-003

Description: MW-3

Matrix: Aqueous

Date Sampled: 07/29/2015 0855

Date Received: 07/30/2015

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Fluoranthene-d10	N	0.00	23-154
2-Methylnaphthalene-d10	N	1360	15-139

PQL = Practical quantitation limit

B = Detected 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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst 1220 SES	Prep Date	Batch 81323		
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	0.23	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	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	3.0	J	5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	ND		5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015	1220 SES		81323			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		90		70-130						
Bromofluorobenzene		92		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 50	Analysis Date 08/04/2015	Analyst JJG	Prep Date	Batch 81363		
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	15	J	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
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	4000		250	11	ug/L	1
Toluene		108-88-3	8260B	ND		250	12	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	50	08/04/2015	JJG		81363		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
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	10	J	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	85	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		92	70-130						
Bromofluorobenzene		91	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst 1244 SES	Prep Date	Batch 81323		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B	7.6	J	20	1.6	ug/L	1
Benzene		71-43-2	8260B	0.27	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	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	130		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	0.60	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	0.96	J	5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	0.55	J	5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Date Sampled: 07/28/2015 1358

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015	1244 SES		81323			
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	0.22	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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			90	70-130						
Bromofluorobenzene			92	70-130						
Toluene-d8			101	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 200	Analysis Date 08/03/2015	Analyst 1555 SES	Prep Date	Batch 81323		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B	ND		4000	320	ug/L	1
Benzene		71-43-2	8260B	ND		1000	42	ug/L	1
Bromodichloromethane		75-27-4	8260B	ND		1000	46	ug/L	1
Bromoform		75-25-2	8260B	ND		1000	70	ug/L	1
Bromomethane (Methyl bromide)		74-83-9	8260B	ND		1000	38	ug/L	1
2-Butanone (MEK)		78-93-3	8260B	ND		2000	360	ug/L	1
Carbon disulfide		75-15-0	8260B	ND		1000	90	ug/L	1
Carbon tetrachloride		56-23-5	8260B	ND		1000	62	ug/L	1
Chlorobenzene		108-90-7	8260B	ND		1000	40	ug/L	1
Chloroethane		75-00-3	8260B	ND		1000	56	ug/L	1
Chloroform		67-66-3	8260B	ND		1000	42	ug/L	1
Chloromethane (Methyl chloride)		74-87-3	8260B	ND		1000	38	ug/L	1
Cyclohexane		110-82-7	8260B	ND		1000	60	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)		96-12-8	8260B	ND		1000	110	ug/L	1
Dibromochloromethane		124-48-1	8260B	ND		1000	46	ug/L	1
1,2-Dibromoethane (EDB)		106-93-4	8260B	ND		1000	34	ug/L	1
1,2-Dichlorobenzene		95-50-1	8260B	ND		1000	92	ug/L	1
1,3-Dichlorobenzene		541-73-1	8260B	ND		1000	38	ug/L	1
1,4-Dichlorobenzene		106-46-7	8260B	ND		1000	38	ug/L	1
Dichlorodifluoromethane		75-71-8	8260B	ND		1000	170	ug/L	1
1,1-Dichloroethane		75-34-3	8260B	ND		1000	38	ug/L	1
1,2-Dichloroethane		107-06-2	8260B	ND		1000	46	ug/L	1
1,1-Dichloroethene		75-35-4	8260B	ND		1000	62	ug/L	1
cis-1,2-Dichloroethene		156-59-2	8260B	ND		1000	40	ug/L	1
trans-1,2-Dichloroethene		156-60-5	8260B	ND		1000	66	ug/L	1
1,2-Dichloropropane		78-87-5	8260B	ND		1000	58	ug/L	1
cis-1,3-Dichloropropene		10061-01-5	8260B	ND		1000	60	ug/L	1
trans-1,3-Dichloropropene		10061-02-6	8260B	ND		1000	44	ug/L	1
Ethylbenzene		100-41-4	8260B	ND		1000	42	ug/L	1
2-Hexanone		591-78-6	8260B	ND		2000	52	ug/L	1
Isopropylbenzene		98-82-8	8260B	ND		1000	28	ug/L	1
Methyl acetate		79-20-9	8260B	ND		1000	48	ug/L	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B	ND		1000	46	ug/L	1
4-Methyl-2-pentanone		108-10-1	8260B	ND		2000	58	ug/L	1
Methylcyclohexane		108-87-2	8260B	ND		1000	32	ug/L	1
Methylene chloride		75-09-2	8260B	ND		1000	84	ug/L	1
Styrene		100-42-5	8260B	ND		1000	26	ug/L	1
1,1,2,2-Tetrachloroethane		79-34-5	8260B	ND		1000	26	ug/L	1
Tetrachloroethene		127-18-4	8260B	9600		1000	44	ug/L	1
Toluene		108-88-3	8260B	ND		1000	48	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Date Sampled: 07/29/2015 1030

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	200	08/03/2015 1555	SES		81323			
Parameter		CAS Number		Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane		76-13-1		8260B	ND		1000	60	ug/L	1
1,2,4-Trichlorobenzene		120-82-1		8260B	ND		1000	26	ug/L	1
1,1,1-Trichloroethane		71-55-6		8260B	ND		1000	48	ug/L	1
1,1,2-Trichloroethane		79-00-5		8260B	ND		1000	44	ug/L	1
Trichloroethene		79-01-6		8260B	ND		1000	32	ug/L	1
Trichlorofluoromethane		75-69-4		8260B	ND		1000	150	ug/L	1
Vinyl chloride		75-01-4		8260B	ND		400	100	ug/L	1
Xylenes (total)		1330-20-7		8260B	ND		1000	340	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			91	70-130						
Bromofluorobenzene			93	70-130						
Toluene-d8			101	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/28/2015

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst 1044 SES	Prep Date	Batch 81323		
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

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Date Sampled: 07/28/2015

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015	1044 SES		81323			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			89	70-130						
Bromofluorobenzene			93	70-130						
Toluene-d8			101	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/29/2015 1140

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst JJG	Prep Date	Batch 81363		
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	0.60	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	ND		5.0	0.31	ug/L	1
cis-1,2-Dichloroethene		156-59-2	8260B	0.27	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	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	180		5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	ND		5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Date Sampled: 07/29/2015 1140

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015 2302	JJG		81363			
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	0.83	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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			88	70-130						
Bromofluorobenzene			90	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/29/2015 0810

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst 1108 SES	Prep Date	Batch 81323		
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

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

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

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

Date Sampled: 07/29/2015 0810

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015	1108 SES		81323			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			90	70-130						
Bromofluorobenzene			93	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/29/2015 1115

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 2000	Analysis Date 08/03/2015	Analyst 1507 SES	Prep Date	Batch 81323		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B	ND		40000	3200	ug/L	1
Benzene		71-43-2	8260B	ND		10000	420	ug/L	1
Bromodichloromethane		75-27-4	8260B	ND		10000	460	ug/L	1
Bromoform		75-25-2	8260B	ND		10000	700	ug/L	1
Bromomethane (Methyl bromide)		74-83-9	8260B	ND		10000	380	ug/L	1
2-Butanone (MEK)		78-93-3	8260B	ND		20000	3600	ug/L	1
Carbon disulfide		75-15-0	8260B	ND		10000	900	ug/L	1
Carbon tetrachloride		56-23-5	8260B	ND		10000	620	ug/L	1
Chlorobenzene		108-90-7	8260B	ND		10000	400	ug/L	1
Chloroethane		75-00-3	8260B	ND		10000	560	ug/L	1
Chloroform		67-66-3	8260B	ND		10000	420	ug/L	1
Chloromethane (Methyl chloride)		74-87-3	8260B	ND		10000	380	ug/L	1
Cyclohexane		110-82-7	8260B	ND		10000	600	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)		96-12-8	8260B	ND		10000	1100	ug/L	1
Dibromochloromethane		124-48-1	8260B	ND		10000	460	ug/L	1
1,2-Dibromoethane (EDB)		106-93-4	8260B	ND		10000	340	ug/L	1
1,2-Dichlorobenzene		95-50-1	8260B	ND		10000	920	ug/L	1
1,3-Dichlorobenzene		541-73-1	8260B	ND		10000	380	ug/L	1
1,4-Dichlorobenzene		106-46-7	8260B	ND		10000	380	ug/L	1
Dichlorodifluoromethane		75-71-8	8260B	ND		10000	1700	ug/L	1
1,1-Dichloroethane		75-34-3	8260B	ND		10000	380	ug/L	1
1,2-Dichloroethane		107-06-2	8260B	ND		10000	460	ug/L	1
1,1-Dichloroethene		75-35-4	8260B	ND		10000	620	ug/L	1
cis-1,2-Dichloroethene		156-59-2	8260B	ND		10000	400	ug/L	1
trans-1,2-Dichloroethene		156-60-5	8260B	ND		10000	660	ug/L	1
1,2-Dichloropropane		78-87-5	8260B	ND		10000	580	ug/L	1
cis-1,3-Dichloropropene		10061-01-5	8260B	ND		10000	600	ug/L	1
trans-1,3-Dichloropropene		10061-02-6	8260B	ND		10000	440	ug/L	1
Ethylbenzene		100-41-4	8260B	ND		10000	420	ug/L	1
2-Hexanone		591-78-6	8260B	ND		20000	520	ug/L	1
Isopropylbenzene		98-82-8	8260B	ND		10000	280	ug/L	1
Methyl acetate		79-20-9	8260B	ND		10000	480	ug/L	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B	ND		10000	460	ug/L	1
4-Methyl-2-pentanone		108-10-1	8260B	ND		20000	580	ug/L	1
Methylcyclohexane		108-87-2	8260B	ND		10000	320	ug/L	1
Methylene chloride		75-09-2	8260B	ND		10000	840	ug/L	1
Styrene		100-42-5	8260B	ND		10000	260	ug/L	1
1,1,2,2-Tetrachloroethane		79-34-5	8260B	ND		10000	260	ug/L	1
Tetrachloroethene		127-18-4	8260B	100000		10000	440	ug/L	1
Toluene		108-88-3	8260B	ND		10000	480	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/29/2015 1115

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 2000	Analysis Date 08/03/2015	Analyst 1507 SES	Prep Date	Batch 81323		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane		76-13-1	8260B	ND		10000	600	ug/L	1
1,2,4-Trichlorobenzene		120-82-1	8260B	ND		10000	260	ug/L	1
1,1,1-Trichloroethane		71-55-6	8260B	ND		10000	480	ug/L	1
1,1,2-Trichloroethane		79-00-5	8260B	ND		10000	440	ug/L	1
Trichloroethene		79-01-6	8260B	ND		10000	320	ug/L	1
Trichlorofluoromethane		75-69-4	8260B	ND		10000	1500	ug/L	1
Vinyl chloride		75-01-4	8260B	ND		4000	1000	ug/L	1
Xylenes (total)		1330-20-7	8260B	ND		10000	3400	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		90	70-130						
Bromofluorobenzene		93	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 500	Analysis Date 08/03/2015	Analyst 1532 SES	Prep Date	Batch 81323		
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	ND		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
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	20000		2500	110	ug/L	1
Toluene		108-88-3	8260B	ND		2500	120	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

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

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

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	500	08/03/2015 1532	SES		81323			
Parameter		CAS Number		Analytical Method	Result	Q	PQL	MDL	Units	Run
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	ND		2500	850	ug/L	1
Surrogate	Q	Run 1 % Recovery		Acceptance Limits						
1,2-Dichloroethane-d4		90		70-130						
Bromofluorobenzene		92		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst 1307 SES	Prep Date	Batch 81323		
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	1.8	J	5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	0.39	J	5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015	1307 SES		81323			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			91	70-130						
Bromofluorobenzene			92	70-130						
Toluene-d8			101	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst 1332 SES	Prep Date	Batch 81323		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B	2.7	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	1.7	J	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	0.73	J	5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	0.31	J	5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Date Sampled: 07/28/2015 1145

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015 1332	SES		81323			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			92	70-130						
Bromofluorobenzene			93	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/28/2015 0925

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 20	Analysis Date 08/04/2015	Analyst JJG	Prep Date	Batch 81363		
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	5.8	J	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
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

PQL = Practical quantitation limit

B = Detected 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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Client: AECOM

Laboratory ID: QG30034-015

Description: MW-10R

Matrix: Aqueous

Date Sampled: 07/28/2015 0925

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	20	08/04/2015 0458	JJG		81363		
Parameter		CAS Number		Analytical Method	Result Q	PQL	MDL	Units	Run
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	5.1 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	34	ug/L	1
Surrogate	Q	Run 1 % Recovery		Acceptance Limits					
1,2-Dichloroethane-d4		90		70-130					
Bromofluorobenzene		91		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 200	Analysis Date 08/03/2015	Analyst 1619 SES	Prep Date	Batch 81323		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B	ND		4000	320	ug/L	1
Benzene		71-43-2	8260B	ND		1000	42	ug/L	1
Bromodichloromethane		75-27-4	8260B	ND		1000	46	ug/L	1
Bromoform		75-25-2	8260B	ND		1000	70	ug/L	1
Bromomethane (Methyl bromide)		74-83-9	8260B	ND		1000	38	ug/L	1
2-Butanone (MEK)		78-93-3	8260B	ND		2000	360	ug/L	1
Carbon disulfide		75-15-0	8260B	ND		1000	90	ug/L	1
Carbon tetrachloride		56-23-5	8260B	ND		1000	62	ug/L	1
Chlorobenzene		108-90-7	8260B	ND		1000	40	ug/L	1
Chloroethane		75-00-3	8260B	ND		1000	56	ug/L	1
Chloroform		67-66-3	8260B	ND		1000	42	ug/L	1
Chloromethane (Methyl chloride)		74-87-3	8260B	ND		1000	38	ug/L	1
Cyclohexane		110-82-7	8260B	ND		1000	60	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)		96-12-8	8260B	ND		1000	110	ug/L	1
Dibromochloromethane		124-48-1	8260B	ND		1000	46	ug/L	1
1,2-Dibromoethane (EDB)		106-93-4	8260B	ND		1000	34	ug/L	1
1,2-Dichlorobenzene		95-50-1	8260B	ND		1000	92	ug/L	1
1,3-Dichlorobenzene		541-73-1	8260B	ND		1000	38	ug/L	1
1,4-Dichlorobenzene		106-46-7	8260B	ND		1000	38	ug/L	1
Dichlorodifluoromethane		75-71-8	8260B	ND		1000	170	ug/L	1
1,1-Dichloroethane		75-34-3	8260B	ND		1000	38	ug/L	1
1,2-Dichloroethane		107-06-2	8260B	ND		1000	46	ug/L	1
1,1-Dichloroethene		75-35-4	8260B	ND		1000	62	ug/L	1
cis-1,2-Dichloroethene		156-59-2	8260B	ND		1000	40	ug/L	1
trans-1,2-Dichloroethene		156-60-5	8260B	ND		1000	66	ug/L	1
1,2-Dichloropropane		78-87-5	8260B	ND		1000	58	ug/L	1
cis-1,3-Dichloropropene		10061-01-5	8260B	ND		1000	60	ug/L	1
trans-1,3-Dichloropropene		10061-02-6	8260B	ND		1000	44	ug/L	1
Ethylbenzene		100-41-4	8260B	ND		1000	42	ug/L	1
2-Hexanone		591-78-6	8260B	ND		2000	52	ug/L	1
Isopropylbenzene		98-82-8	8260B	ND		1000	28	ug/L	1
Methyl acetate		79-20-9	8260B	ND		1000	48	ug/L	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B	ND		1000	46	ug/L	1
4-Methyl-2-pentanone		108-10-1	8260B	ND		2000	58	ug/L	1
Methylcyclohexane		108-87-2	8260B	ND		1000	32	ug/L	1
Methylene chloride		75-09-2	8260B	ND		1000	84	ug/L	1
Styrene		100-42-5	8260B	ND		1000	26	ug/L	1
1,1,2,2-Tetrachloroethane		79-34-5	8260B	ND		1000	26	ug/L	1
Tetrachloroethene		127-18-4	8260B	15000		1000	44	ug/L	1
Toluene		108-88-3	8260B	ND		1000	48	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Date Sampled: 07/28/2015 0938

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	200	08/03/2015	1619 SES		81323			
Parameter		CAS Number		Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloro-1,2,2-Trifluoroethane		76-13-1		8260B	ND		1000	60	ug/L	1
1,2,4-Trichlorobenzene		120-82-1		8260B	ND		1000	26	ug/L	1
1,1,1-Trichloroethane		71-55-6		8260B	ND		1000	48	ug/L	1
1,1,2-Trichloroethane		79-00-5		8260B	ND		1000	44	ug/L	1
Trichloroethene		79-01-6		8260B	ND		1000	32	ug/L	1
Trichlorofluoromethane		75-69-4		8260B	ND		1000	150	ug/L	1
Vinyl chloride		75-01-4		8260B	ND		400	100	ug/L	1
Xylenes (total)		1330-20-7		8260B	ND		1000	340	ug/L	1
Surrogate	Q	Run 1 % Recovery		Acceptance Limits						
1,2-Dichloroethane-d4		91		70-130						
Bromofluorobenzene		90		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst 1357 SES	Prep Date	Batch 81323		
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	0.48	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	2.2	J	5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	0.52	J	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/28/2015 0925

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015 1357	SES		81323			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			89	70-130						
Bromofluorobenzene			91	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst 1420 SES	Prep Date	Batch 81323		
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	2.8	J	5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	0.30	J	5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

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

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

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015	1420 SES		81323			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			91	70-130						
Bromofluorobenzene			92	70-130						
Toluene-d8			101	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 50	Analysis Date 08/04/2015	Analyst JJG	Prep Date	Batch 81363		
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
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	4800		250	11	ug/L	1
Toluene		108-88-3	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	50	08/04/2015 0435	JJG		81363			
Parameter		CAS Number		Analytical Method	Result	Q	PQL	MDL	Units	Run
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	85	ug/L	1
Surrogate	Q	Run 1 % Recovery		Acceptance Limits						
1,2-Dichloroethane-d4		90		70-130						
Bromofluorobenzene		91		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst JJG	Prep Date	Batch 81363		
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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/28/2015 1357

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015 2325	JJG		81363			
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	1.7	ug/L	1
Surrogate	Q	Run 1 % Recovery		Acceptance Limits						
1,2-Dichloroethane-d4		90		70-130						
Bromofluorobenzene		91		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 5	Analysis Date 08/04/2015	Analyst JJG	Prep Date	Batch 81363		
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
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	150		25	1.1	ug/L	1
Toluene		108-88-3	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/28/2015 1140

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	5	08/04/2015 0522	JJG		81363			
Parameter		CAS Number		Analytical Method	Result	Q	PQL	MDL	Units	Run
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	ND		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	8.5	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			89	70-130						
Bromofluorobenzene			90	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst 2349 JJG	Prep Date	Batch 81363		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B	4.7	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	2.9	J	5.0	0.23	ug/L	1
Bromoform		75-25-2	8260B	1.1	J	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	5.5		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	1.8	J	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	0.84	J	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	0.27	J	5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/28/2015 1509

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015 2349	JJG		81363			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		90		70-130						
Bromofluorobenzene		90		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/04/2015	Analyst JJG	Prep Date	Batch 81363		
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	110		5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	ND		5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/04/2015	0013 JJG		81363			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		92		70-130						
Bromofluorobenzene		92		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/28/2015 1650

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/04/2015	Analyst JJG	Prep Date	Batch 81363		
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	30		5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	0.30	J	5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Date Sampled: 07/28/2015 1650

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/04/2015	0036 JJG		81363			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		90		70-130						
Bromofluorobenzene		90		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 5	Analysis Date 08/04/2015	Analyst JJG	Prep Date	Batch 81363		
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
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	690		25	1.1	ug/L	1
Toluene		108-88-3	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	5	08/04/2015	0546 JJG		81363			
Parameter		CAS Number		Analytical Method	Result	Q	PQL	MDL	Units	Run
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	8.3	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	8.5	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			91	70-130						
Bromofluorobenzene			90	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/28/2015

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/03/2015	Analyst JJG	Prep Date	Batch 81363		
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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/28/2015

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/03/2015	2238	JJG	81363			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		90		70-130						
Bromofluorobenzene		92		70-130						
Toluene-d8		101		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/04/2015	Analyst JJG	Prep Date	Batch 81363		
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	0.90	J	5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	ND		5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq 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

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/04/2015	0100 JJG		81363			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			91	70-130						
Bromofluorobenzene			90	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/04/2015	Analyst JJG	Prep Date	Batch 81363		
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	0.27	J	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	0.77	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	1.2	J	5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	ND		5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/04/2015 0123	JJG		81363			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		90		70-130						
Bromofluorobenzene		92		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 5	Analysis Date 08/04/2015	Analyst JJG	Prep Date	Batch 81363		
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	2.9	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	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	3.8	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
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	360		25	1.1	ug/L	1
Toluene		108-88-3	8260B	ND		25	1.2	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	5	08/04/2015	0610 JJG		81363			
Parameter		CAS Number		Analytical Method	Result	Q	PQL	MDL	Units	Run
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	4.3	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	8.5	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			93	70-130						
Bromofluorobenzene			91	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/04/2015	Analyst 1038 SES	Prep Date	Batch 81416		
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	1.7	J	5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	0.25	J	5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

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

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

Date Sampled: 07/29/2015 0905

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/04/2015	1038 SES		81416			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			91	70-130						
Bromofluorobenzene			91	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/28/2015 1508

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/04/2015	Analyst JJG	Prep Date	Batch 81363		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B	2.9	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	0.31	J	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	1.3	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	ND		5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	0.34	J	5.0	0.24	ug/L	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

N = Recovery is out of criteria

Date Sampled: 07/28/2015 1508

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/04/2015 0147	JJG		81363			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			91	70-130						
Bromofluorobenzene			89	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/29/2015 0940

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/04/2015	Analyst 1101 SES	Prep Date	Batch 81416		
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	2.5	J	5.0	0.22	ug/L	1
Toluene		108-88-3	8260B	0.29	J	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Date Sampled: 07/29/2015 0940

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/04/2015	1101 SES		81416			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		90		70-130						
Bromofluorobenzene		91		70-130						
Toluene-d8		101		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 \geq MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Volatile Organic Compounds by GC/MS

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 08/04/2015	Analyst 1125 SES	Prep Date	Batch 81416		
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

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and \geq MDL

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

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

Date Sampled: 07/29/2015 1040

Date Received: 07/30/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	08/04/2015	1125 SES		81416			
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	1.7	ug/L	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4			89	70-130						
Bromofluorobenzene			90	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 \geq MDL

P = The RPD between two GC columns exceeds 40%

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: QQ81323-001

Batch: 81323

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	08/03/2015 1021
Benzene	ND		1	5.0	0.21	ug/L	08/03/2015 1021
Bromodichloromethane	ND		1	5.0	0.23	ug/L	08/03/2015 1021
Bromoform	ND		1	5.0	0.35	ug/L	08/03/2015 1021
Bromomethane (Methyl bromide)	ND		1	5.0	0.19	ug/L	08/03/2015 1021
2-Butanone (MEK)	ND		1	10	1.8	ug/L	08/03/2015 1021
Carbon disulfide	ND		1	5.0	0.45	ug/L	08/03/2015 1021
Carbon tetrachloride	ND		1	5.0	0.31	ug/L	08/03/2015 1021
Chlorobenzene	ND		1	5.0	0.20	ug/L	08/03/2015 1021
Chloroethane	ND		1	5.0	0.28	ug/L	08/03/2015 1021
Chloroform	ND		1	5.0	0.21	ug/L	08/03/2015 1021
Chloromethane (Methyl chloride)	ND		1	5.0	0.19	ug/L	08/03/2015 1021
Cyclohexane	ND		1	5.0	0.30	ug/L	08/03/2015 1021
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.57	ug/L	08/03/2015 1021
Dibromochloromethane	ND		1	5.0	0.23	ug/L	08/03/2015 1021
1,2-Dibromoethane (EDB)	ND		1	5.0	0.17	ug/L	08/03/2015 1021
1,4-Dichlorobenzene	ND		1	5.0	0.19	ug/L	08/03/2015 1021
1,3-Dichlorobenzene	ND		1	5.0	0.19	ug/L	08/03/2015 1021
1,2-Dichlorobenzene	ND		1	5.0	0.46	ug/L	08/03/2015 1021
Dichlorodifluoromethane	ND		1	5.0	0.85	ug/L	08/03/2015 1021
1,2-Dichloroethane	ND		1	5.0	0.23	ug/L	08/03/2015 1021
1,1-Dichloroethane	ND		1	5.0	0.19	ug/L	08/03/2015 1021
trans-1,2-Dichloroethene	ND		1	5.0	0.33	ug/L	08/03/2015 1021
cis-1,2-Dichloroethene	ND		1	5.0	0.20	ug/L	08/03/2015 1021
1,1-Dichloroethene	ND		1	5.0	0.31	ug/L	08/03/2015 1021
1,2-Dichloropropane	ND		1	5.0	0.29	ug/L	08/03/2015 1021
trans-1,3-Dichloropropene	ND		1	5.0	0.22	ug/L	08/03/2015 1021
cis-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	08/03/2015 1021
Ethylbenzene	ND		1	5.0	0.21	ug/L	08/03/2015 1021
2-Hexanone	ND		1	10	0.26	ug/L	08/03/2015 1021
Isopropylbenzene	ND		1	5.0	0.14	ug/L	08/03/2015 1021
Methyl acetate	ND		1	5.0	0.24	ug/L	08/03/2015 1021
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.23	ug/L	08/03/2015 1021
4-Methyl-2-pentanone	ND		1	10	0.29	ug/L	08/03/2015 1021
Methylcyclohexane	ND		1	5.0	0.16	ug/L	08/03/2015 1021
Methylene chloride	ND		1	5.0	0.42	ug/L	08/03/2015 1021
Styrene	ND		1	5.0	0.13	ug/L	08/03/2015 1021
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.13	ug/L	08/03/2015 1021
Tetrachloroethene	ND		1	5.0	0.22	ug/L	08/03/2015 1021
Toluene	ND		1	5.0	0.24	ug/L	08/03/2015 1021
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.30	ug/L	08/03/2015 1021
1,2,4-Trichlorobenzene	ND		1	5.0	0.13	ug/L	08/03/2015 1021
1,1,2-Trichloroethane	ND		1	5.0	0.22	ug/L	08/03/2015 1021
1,1,1-Trichloroethane	ND		1	5.0	0.24	ug/L	08/03/2015 1021

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: QQ81323-001

Matrix: Aqueous

Batch: 81323

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.16	ug/L	08/03/2015 1021
Trichlorofluoromethane	ND		1	5.0	0.74	ug/L	08/03/2015 1021
Vinyl chloride	ND		1	2.0	0.50	ug/L	08/03/2015 1021
Xylenes (total)	ND		1	5.0	1.7	ug/L	08/03/2015 1021
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		91	70-130				
1,2-Dichloroethane-d4		88	70-130				
Toluene-d8		98	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: QQ81323-002

Batch: 81323

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	84		1	84	60-140	08/03/2015 0916
Benzene	50	51		1	102	70-130	08/03/2015 0916
Bromodichloromethane	50	50		1	101	70-130	08/03/2015 0916
Bromoform	50	50		1	99	70-130	08/03/2015 0916
Bromomethane (Methyl bromide)	50	50		1	100	60-140	08/03/2015 0916
2-Butanone (MEK)	100	82		1	82	60-140	08/03/2015 0916
Carbon disulfide	50	52		1	105	60-140	08/03/2015 0916
Carbon tetrachloride	50	48		1	97	70-130	08/03/2015 0916
Chlorobenzene	50	51		1	102	70-130	08/03/2015 0916
Chloroethane	50	44		1	88	42-163	08/03/2015 0916
Chloroform	50	44		1	88	70-130	08/03/2015 0916
Chloromethane (Methyl chloride)	50	43		1	87	60-140	08/03/2015 0916
Cyclohexane	50	44		1	88	70-130	08/03/2015 0916
1,2-Dibromo-3-chloropropane (DBCP)	50	43		1	86	70-130	08/03/2015 0916
Dibromochloromethane	50	50		1	100	70-130	08/03/2015 0916
1,2-Dibromoethane (EDB)	50	51		1	103	70-130	08/03/2015 0916
1,4-Dichlorobenzene	50	49		1	99	70-130	08/03/2015 0916
1,3-Dichlorobenzene	50	51		1	101	70-130	08/03/2015 0916
1,2-Dichlorobenzene	50	50		1	101	70-130	08/03/2015 0916
Dichlorodifluoromethane	50	41		1	82	60-140	08/03/2015 0916
1,2-Dichloroethane	50	49		1	97	70-130	08/03/2015 0916
1,1-Dichloroethane	50	45		1	91	70-130	08/03/2015 0916
trans-1,2-Dichloroethene	50	49		1	98	70-130	08/03/2015 0916
cis-1,2-Dichloroethene	50	49		1	97	70-130	08/03/2015 0916
1,1-Dichloroethene	50	50		1	101	70-130	08/03/2015 0916
1,2-Dichloropropane	50	50		1	99	70-130	08/03/2015 0916
trans-1,3-Dichloropropene	50	51		1	102	70-130	08/03/2015 0916
cis-1,3-Dichloropropene	50	52		1	103	70-130	08/03/2015 0916
Ethylbenzene	50	52		1	103	70-130	08/03/2015 0916
2-Hexanone	100	86		1	86	60-140	08/03/2015 0916
Isopropylbenzene	50	52		1	104	70-130	08/03/2015 0916
Methyl acetate	50	41		1	82	60-140	08/03/2015 0916
Methyl tertiary butyl ether (MTBE)	50	50		1	99	70-130	08/03/2015 0916
4-Methyl-2-pentanone	100	90		1	90	60-140	08/03/2015 0916
Methylcyclohexane	50	46		1	91	70-130	08/03/2015 0916
Methylene chloride	50	46		1	93	70-130	08/03/2015 0916
Styrene	50	51		1	103	70-130	08/03/2015 0916
1,1,2,2-Tetrachloroethane	50	47		1	95	70-130	08/03/2015 0916
Tetrachloroethene	50	50		1	100	70-130	08/03/2015 0916
Toluene	50	51		1	102	70-130	08/03/2015 0916
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	47		1	94	70-130	08/03/2015 0916
1,2,4-Trichlorobenzene	50	51		1	102	70-130	08/03/2015 0916
1,1,2-Trichloroethane	50	50		1	100	70-130	08/03/2015 0916
1,1,1-Trichloroethane	50	49		1	99	70-130	08/03/2015 0916

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: QQ81323-002

Batch: 81323

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	08/03/2015 0916
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		93	70-130				
1,2-Dichloroethane-d4		90	70-130				
Toluene-d8		100	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: QQ81363-001

Batch: 81363

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	08/03/2015 2202
Benzene	ND		1	5.0	0.21	ug/L	08/03/2015 2202
Bromodichloromethane	ND		1	5.0	0.23	ug/L	08/03/2015 2202
Bromoform	ND		1	5.0	0.35	ug/L	08/03/2015 2202
Bromomethane (Methyl bromide)	ND		1	5.0	0.19	ug/L	08/03/2015 2202
2-Butanone (MEK)	ND		1	10	1.8	ug/L	08/03/2015 2202
Carbon disulfide	ND		1	5.0	0.45	ug/L	08/03/2015 2202
Carbon tetrachloride	ND		1	5.0	0.31	ug/L	08/03/2015 2202
Chlorobenzene	ND		1	5.0	0.20	ug/L	08/03/2015 2202
Chloroethane	ND		1	5.0	0.28	ug/L	08/03/2015 2202
Chloroform	ND		1	5.0	0.21	ug/L	08/03/2015 2202
Chloromethane (Methyl chloride)	ND		1	5.0	0.19	ug/L	08/03/2015 2202
Cyclohexane	ND		1	5.0	0.30	ug/L	08/03/2015 2202
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.57	ug/L	08/03/2015 2202
Dibromochloromethane	ND		1	5.0	0.23	ug/L	08/03/2015 2202
1,2-Dibromoethane (EDB)	ND		1	5.0	0.17	ug/L	08/03/2015 2202
1,3-Dichlorobenzene	ND		1	5.0	0.19	ug/L	08/03/2015 2202
1,2-Dichlorobenzene	ND		1	5.0	0.46	ug/L	08/03/2015 2202
1,4-Dichlorobenzene	ND		1	5.0	0.19	ug/L	08/03/2015 2202
Dichlorodifluoromethane	ND		1	5.0	0.85	ug/L	08/03/2015 2202
1,1-Dichloroethane	ND		1	5.0	0.19	ug/L	08/03/2015 2202
1,2-Dichloroethane	ND		1	5.0	0.23	ug/L	08/03/2015 2202
cis-1,2-Dichloroethene	ND		1	5.0	0.20	ug/L	08/03/2015 2202
1,1-Dichloroethene	ND		1	5.0	0.31	ug/L	08/03/2015 2202
trans-1,2-Dichloroethene	ND		1	5.0	0.33	ug/L	08/03/2015 2202
1,2-Dichloropropane	ND		1	5.0	0.29	ug/L	08/03/2015 2202
cis-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	08/03/2015 2202
trans-1,3-Dichloropropene	ND		1	5.0	0.22	ug/L	08/03/2015 2202
Ethylbenzene	ND		1	5.0	0.21	ug/L	08/03/2015 2202
2-Hexanone	ND		1	10	0.26	ug/L	08/03/2015 2202
Isopropylbenzene	ND		1	5.0	0.14	ug/L	08/03/2015 2202
Methyl acetate	ND		1	5.0	0.24	ug/L	08/03/2015 2202
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.23	ug/L	08/03/2015 2202
4-Methyl-2-pentanone	ND		1	10	0.29	ug/L	08/03/2015 2202
Methylcyclohexane	ND		1	5.0	0.16	ug/L	08/03/2015 2202
Methylene chloride	ND		1	5.0	0.42	ug/L	08/03/2015 2202
Styrene	ND		1	5.0	0.13	ug/L	08/03/2015 2202
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.13	ug/L	08/03/2015 2202
Tetrachloroethene	ND		1	5.0	0.22	ug/L	08/03/2015 2202
Toluene	ND		1	5.0	0.24	ug/L	08/03/2015 2202
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.30	ug/L	08/03/2015 2202
1,2,4-Trichlorobenzene	ND		1	5.0	0.13	ug/L	08/03/2015 2202
1,1,2-Trichloroethane	ND		1	5.0	0.22	ug/L	08/03/2015 2202
1,1,1-Trichloroethane	ND		1	5.0	0.24	ug/L	08/03/2015 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 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: QQ81363-001

Matrix: Aqueous

Batch: 81363

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.16	ug/L	08/03/2015 2202
Trichlorofluoromethane	ND		1	5.0	0.74	ug/L	08/03/2015 2202
Vinyl chloride	ND		1	2.0	0.50	ug/L	08/03/2015 2202
Xylenes (total)	ND		1	5.0	1.7	ug/L	08/03/2015 2202
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		91	70-130				
1,2-Dichloroethane-d4		90	70-130				
Toluene-d8		101	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: QQ81363-002

Batch: 81363

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	08/03/2015 2114
Benzene	50	52		1	104	70-130	08/03/2015 2114
Bromodichloromethane	50	51		1	103	70-130	08/03/2015 2114
Bromoform	50	49		1	99	70-130	08/03/2015 2114
Bromomethane (Methyl bromide)	50	56		1	112	60-140	08/03/2015 2114
2-Butanone (MEK)	100	89		1	89	60-140	08/03/2015 2114
Carbon disulfide	50	55		1	111	60-140	08/03/2015 2114
Carbon tetrachloride	50	52		1	103	70-130	08/03/2015 2114
Chlorobenzene	50	52		1	104	70-130	08/03/2015 2114
Chloroethane	50	49		1	98	42-163	08/03/2015 2114
Chloroform	50	46		1	92	70-130	08/03/2015 2114
Chloromethane (Methyl chloride)	50	49		1	98	60-140	08/03/2015 2114
Cyclohexane	50	49		1	97	70-130	08/03/2015 2114
1,2-Dibromo-3-chloropropane (DBCP)	50	43		1	86	70-130	08/03/2015 2114
Dibromochloromethane	50	52		1	103	70-130	08/03/2015 2114
1,2-Dibromoethane (EDB)	50	51		1	102	70-130	08/03/2015 2114
1,3-Dichlorobenzene	50	51		1	103	70-130	08/03/2015 2114
1,2-Dichlorobenzene	50	51		1	102	70-130	08/03/2015 2114
1,4-Dichlorobenzene	50	50		1	101	70-130	08/03/2015 2114
Dichlorodifluoromethane	50	53		1	106	60-140	08/03/2015 2114
1,1-Dichloroethane	50	48		1	96	70-130	08/03/2015 2114
1,2-Dichloroethane	50	49		1	99	70-130	08/03/2015 2114
cis-1,2-Dichloroethene	50	50		1	101	70-130	08/03/2015 2114
1,1-Dichloroethene	50	54		1	109	70-130	08/03/2015 2114
trans-1,2-Dichloroethene	50	51		1	102	70-130	08/03/2015 2114
1,2-Dichloropropane	50	49		1	99	70-130	08/03/2015 2114
cis-1,3-Dichloropropene	50	52		1	104	70-130	08/03/2015 2114
trans-1,3-Dichloropropene	50	51		1	102	70-130	08/03/2015 2114
Ethylbenzene	50	52		1	104	70-130	08/03/2015 2114
2-Hexanone	100	84		1	84	60-140	08/03/2015 2114
Isopropylbenzene	50	54		1	109	70-130	08/03/2015 2114
Methyl acetate	50	42		1	84	60-140	08/03/2015 2114
Methyl tertiary butyl ether (MTBE)	50	51		1	102	70-130	08/03/2015 2114
4-Methyl-2-pentanone	100	89		1	89	60-140	08/03/2015 2114
Methylcyclohexane	50	49		1	97	70-130	08/03/2015 2114
Methylene chloride	50	48		1	97	70-130	08/03/2015 2114
Styrene	50	53		1	106	70-130	08/03/2015 2114
1,1,2,2-Tetrachloroethane	50	49		1	98	70-130	08/03/2015 2114
Tetrachloroethene	50	50		1	101	70-130	08/03/2015 2114
Toluene	50	51		1	103	70-130	08/03/2015 2114
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	52		1	104	70-130	08/03/2015 2114
1,2,4-Trichlorobenzene	50	53		1	106	70-130	08/03/2015 2114
1,1,2-Trichloroethane	50	50		1	100	70-130	08/03/2015 2114
1,1,1-Trichloroethane	50	52		1	104	70-130	08/03/2015 2114

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: QQ81363-002

Matrix: Aqueous

Batch: 81363

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	54		1	107	70-130	08/03/2015 2114
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		93	70-130				
1,2-Dichloroethane-d4		91	70-130				
Toluene-d8		101	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - MS

Sample ID: QG30034-025MS

Batch: 81363

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	390		5	78	60-140	08/04/2015 0634
Benzene	ND	250	260		5	103	70-130	08/04/2015 0634
Bromodichloromethane	ND	250	260		5	103	71-143	08/04/2015 0634
Bromoform	ND	250	240		5	95	65-131	08/04/2015 0634
Bromomethane (Methyl bromide)	ND	250	310		5	125	36-168	08/04/2015 0634
2-Butanone (MEK)	ND	500	410		5	81	60-140	08/04/2015 0634
Carbon disulfide	ND	250	270		5	107	60-140	08/04/2015 0634
Carbon tetrachloride	ND	250	240		5	95	37-166	08/04/2015 0634
Chlorobenzene	ND	250	250		5	98	78-129	08/04/2015 0634
Chloroethane	ND	250	260		5	106	60-140	08/04/2015 0634
Chloroform	ND	250	230		5	93	63-123	08/04/2015 0634
Chloromethane (Methyl chloride)	ND	250	270		5	107	20-158	08/04/2015 0634
Cyclohexane	ND	250	190		5	76	70-130	08/04/2015 0634
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	200		5	79	70-130	08/04/2015 0634
Dibromochloromethane	ND	250	250		5	99	74-134	08/04/2015 0634
1,2-Dibromoethane (EDB)	ND	250	250		5	102	70-130	08/04/2015 0634
1,2-Dichlorobenzene	ND	250	240		5	97	70-130	08/04/2015 0634
1,3-Dichlorobenzene	ND	250	240		5	96	70-130	08/04/2015 0634
1,4-Dichlorobenzene	ND	250	230		5	93	70-130	08/04/2015 0634
Dichlorodifluoromethane	ND	250	230		5	92	10-158	08/04/2015 0634
1,1-Dichloroethane	ND	250	240		5	96	69-132	08/04/2015 0634
1,2-Dichloroethane	ND	250	250		5	99	70-130	08/04/2015 0634
1,1-Dichloroethene	ND	250	260		5	103	50-132	08/04/2015 0634
cis-1,2-Dichloroethene	ND	250	250		5	101	70-130	08/04/2015 0634
trans-1,2-Dichloroethene	ND	250	250		5	100	70-130	08/04/2015 0634
1,2-Dichloropropane	ND	250	250		5	99	71-126	08/04/2015 0634
cis-1,3-Dichloropropene	ND	250	250		5	100	69-130	08/04/2015 0634
trans-1,3-Dichloropropene	ND	250	240		5	96	73-131	08/04/2015 0634
Ethylbenzene	ND	250	240		5	96	70-130	08/04/2015 0634
2-Hexanone	ND	500	400		5	81	60-140	08/04/2015 0634
Isopropylbenzene	ND	250	240		5	96	70-130	08/04/2015 0634
Methyl acetate	ND	250	200		5	79	15-128	08/04/2015 0634
Methyl tertiary butyl ether (MTBE)	ND	250	250		5	101	70-130	08/04/2015 0634
4-Methyl-2-pentanone	ND	500	430		5	87	60-140	08/04/2015 0634
Methylcyclohexane	ND	250	180		5	74	70-130	08/04/2015 0634
Methylene chloride	ND	250	250		5	98	69-129	08/04/2015 0634
Styrene	ND	250	250		5	99	70-130	08/04/2015 0634
1,1,2,2-Tetrachloroethane	ND	250	240		5	95	60-155	08/04/2015 0634
Tetrachloroethene	690	250	860	N	5	68	70-130	08/04/2015 0634
Toluene	ND	250	250		5	99	70-130	08/04/2015 0634
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	250	210		5	82	70-130	08/04/2015 0634
1,2,4-Trichlorobenzene	ND	250	240		5	95	70-130	08/04/2015 0634
1,1,1-Trichloroethane	ND	250	250		5	102	77-132	08/04/2015 0634
1,1,2-Trichloroethane	ND	250	250		5	99	77-132	08/04/2015 0634

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: QG30034-025MS

Matrix: Aqueous

Batch: 81363

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	8.3	250	260	5	102	73-124	08/04/2015 0634	
Trichlorofluoromethane	ND	250	240	5	97	60-140	08/04/2015 0634	
Vinyl chloride	ND	250	290	5	116	29-159	08/04/2015 0634	
Xylenes (total)	ND	500	490	5	98	70-130	08/04/2015 0634	
Surrogate	Q	% Rec	Acceptance Limit					
1,2-Dichloroethane-d4		90	70-130					
Bromofluorobenzene		92	70-130					
Toluene-d8		100	70-130					

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - MSD

Sample ID: QG30034-025MD

Batch: 81363

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	420		5	84	8.2	60-140	20	08/04/2015 0657
Benzene	ND	250	280		5	111	7.2	70-130	20	08/04/2015 0657
Bromodichloromethane	ND	250	280		5	111	7.8	71-143	20	08/04/2015 0657
Bromoform	ND	250	260		5	104	8.4	65-131	20	08/04/2015 0657
Bromomethane (Methyl bromide)	ND	250	310		5	126	0.83	36-168	20	08/04/2015 0657
2-Butanone (MEK)	ND	500	440		5	87	7.6	60-140	20	08/04/2015 0657
Carbon disulfide	ND	250	300		5	118	10	60-140	20	08/04/2015 0657
Carbon tetrachloride	ND	250	270		5	106	11	37-166	20	08/04/2015 0657
Chlorobenzene	ND	250	270		5	109	10	78-129	20	08/04/2015 0657
Chloroethane	ND	250	270		5	108	1.7	60-140	20	08/04/2015 0657
Chloroform	ND	250	250		5	100	7.3	63-123	20	08/04/2015 0657
Chloromethane (Methyl chloride)	ND	250	280		5	111	3.7	20-158	20	08/04/2015 0657
Cyclohexane	ND	250	210		5	85	10	70-130	20	08/04/2015 0657
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	220		5	88	10	70-130	20	08/04/2015 0657
Dibromochloromethane	ND	250	270		5	107	7.9	74-134	20	08/04/2015 0657
1,2-Dibromoethane (EDB)	ND	250	270		5	108	6.6	70-130	20	08/04/2015 0657
1,2-Dichlorobenzene	ND	250	270		5	106	9.5	70-130	20	08/04/2015 0657
1,3-Dichlorobenzene	ND	250	260		5	106	10	70-130	20	08/04/2015 0657
1,4-Dichlorobenzene	ND	250	260		5	104	10	70-130	20	08/04/2015 0657
Dichlorodifluoromethane	ND	250	240		5	95	4.0	10-158	20	08/04/2015 0657
1,1-Dichloroethane	ND	250	260		5	104	7.7	69-132	20	08/04/2015 0657
1,2-Dichloroethane	ND	250	260		5	104	4.9	70-130	20	08/04/2015 0657
1,1-Dichloroethene	ND	250	290		5	115	11	50-132	20	08/04/2015 0657
cis-1,2-Dichloroethene	ND	250	270		5	109	7.8	70-130	20	08/04/2015 0657
trans-1,2-Dichloroethene	ND	250	280		5	112	11	70-130	20	08/04/2015 0657
1,2-Dichloropropane	ND	250	270		5	107	7.4	71-126	20	08/04/2015 0657
cis-1,3-Dichloropropene	ND	250	270		5	106	6.5	69-130	20	08/04/2015 0657
trans-1,3-Dichloropropene	ND	250	260		5	104	7.7	73-131	20	08/04/2015 0657
Ethylbenzene	ND	250	270		5	107	9.9	70-130	20	08/04/2015 0657
2-Hexanone	ND	500	430		5	87	7.3	60-140	20	08/04/2015 0657
Isopropylbenzene	ND	250	270		5	106	9.8	70-130	20	08/04/2015 0657
Methyl acetate	ND	250	220		5	87	10	15-128	20	08/04/2015 0657
Methyl tertiary butyl ether (MTBE)	ND	250	270		5	109	7.4	70-130	20	08/04/2015 0657
4-Methyl-2-pentanone	ND	500	460		5	92	5.4	60-140	20	08/04/2015 0657
Methylcyclohexane	ND	250	190		5	77	4.7	70-130	20	08/04/2015 0657
Methylene chloride	ND	250	260		5	104	5.7	69-129	20	08/04/2015 0657
Styrene	ND	250	270		5	109	9.4	70-130	20	08/04/2015 0657
1,1,2,2-Tetrachloroethane	ND	250	260		5	103	7.7	60-155	20	08/04/2015 0657
Tetrachloroethene	690	250	830	N	5	58	3.2	70-130	20	08/04/2015 0657
Toluene	ND	250	270		5	109	9.2	70-130	20	08/04/2015 0657
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	250	220		5	89	8.4	70-130	20	08/04/2015 0657
1,2,4-Trichlorobenzene	ND	250	260		5	106	11	70-130	20	08/04/2015 0657
1,1,1-Trichloroethane	ND	250	280		5	112	9.8	77-132	20	08/04/2015 0657
1,1,2-Trichloroethane	ND	250	270		5	106	7.0	77-132	20	08/04/2015 0657

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: QG30034-025MD

Matrix: Aqueous

Batch: 81363

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	8.3	250	290	5	112	9.2	73-124	20	08/04/2015 0657	
Trichlorofluoromethane	ND	250	250	5	99	2.6	60-140	20	08/04/2015 0657	
Vinyl chloride	ND	250	300	5	119	2.4	29-159	20	08/04/2015 0657	
Xylenes (total)	ND	500	540	5	107	8.7	70-130	20	08/04/2015 0657	
Surrogate	Q	% Rec	Acceptance Limit							
1,2-Dichloroethane-d4		89	70-130							
Bromofluorobenzene		92	70-130							
Toluene-d8		100	70-130							

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: QQ81416-001

Batch: 81416

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	08/04/2015 1000
Benzene	ND		1	5.0	0.21	ug/L	08/04/2015 1000
Bromodichloromethane	ND		1	5.0	0.23	ug/L	08/04/2015 1000
Bromoform	ND		1	5.0	0.35	ug/L	08/04/2015 1000
Bromomethane (Methyl bromide)	ND		1	5.0	0.19	ug/L	08/04/2015 1000
2-Butanone (MEK)	ND		1	10	1.8	ug/L	08/04/2015 1000
Carbon disulfide	ND		1	5.0	0.45	ug/L	08/04/2015 1000
Carbon tetrachloride	ND		1	5.0	0.31	ug/L	08/04/2015 1000
Chlorobenzene	ND		1	5.0	0.20	ug/L	08/04/2015 1000
Chloroethane	ND		1	5.0	0.28	ug/L	08/04/2015 1000
Chloroform	ND		1	5.0	0.21	ug/L	08/04/2015 1000
Chloromethane (Methyl chloride)	ND		1	5.0	0.19	ug/L	08/04/2015 1000
Cyclohexane	ND		1	5.0	0.30	ug/L	08/04/2015 1000
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.57	ug/L	08/04/2015 1000
Dibromochloromethane	ND		1	5.0	0.23	ug/L	08/04/2015 1000
1,2-Dibromoethane (EDB)	ND		1	5.0	0.17	ug/L	08/04/2015 1000
1,4-Dichlorobenzene	ND		1	5.0	0.19	ug/L	08/04/2015 1000
1,2-Dichlorobenzene	ND		1	5.0	0.46	ug/L	08/04/2015 1000
1,3-Dichlorobenzene	ND		1	5.0	0.19	ug/L	08/04/2015 1000
Dichlorodifluoromethane	ND		1	5.0	0.85	ug/L	08/04/2015 1000
1,2-Dichloroethane	ND		1	5.0	0.23	ug/L	08/04/2015 1000
1,1-Dichloroethane	ND		1	5.0	0.19	ug/L	08/04/2015 1000
cis-1,2-Dichloroethene	ND		1	5.0	0.20	ug/L	08/04/2015 1000
trans-1,2-Dichloroethene	ND		1	5.0	0.33	ug/L	08/04/2015 1000
1,1-Dichloroethene	ND		1	5.0	0.31	ug/L	08/04/2015 1000
1,2-Dichloropropane	ND		1	5.0	0.29	ug/L	08/04/2015 1000
trans-1,3-Dichloropropene	ND		1	5.0	0.22	ug/L	08/04/2015 1000
cis-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	08/04/2015 1000
Ethylbenzene	ND		1	5.0	0.21	ug/L	08/04/2015 1000
2-Hexanone	ND		1	10	0.26	ug/L	08/04/2015 1000
Isopropylbenzene	ND		1	5.0	0.14	ug/L	08/04/2015 1000
Methyl acetate	ND		1	5.0	0.24	ug/L	08/04/2015 1000
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.23	ug/L	08/04/2015 1000
4-Methyl-2-pentanone	ND		1	10	0.29	ug/L	08/04/2015 1000
Methylcyclohexane	ND		1	5.0	0.16	ug/L	08/04/2015 1000
Methylene chloride	ND		1	5.0	0.42	ug/L	08/04/2015 1000
Styrene	ND		1	5.0	0.13	ug/L	08/04/2015 1000
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.13	ug/L	08/04/2015 1000
Tetrachloroethene	ND		1	5.0	0.22	ug/L	08/04/2015 1000
Toluene	ND		1	5.0	0.24	ug/L	08/04/2015 1000
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.30	ug/L	08/04/2015 1000
1,2,4-Trichlorobenzene	ND		1	5.0	0.13	ug/L	08/04/2015 1000
1,1,2-Trichloroethane	ND		1	5.0	0.22	ug/L	08/04/2015 1000
1,1,1-Trichloroethane	ND		1	5.0	0.24	ug/L	08/04/2015 1000

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: QQ81416-001

Batch: 81416

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	08/04/2015 1000
Trichlorofluoromethane	ND		1	5.0	0.74	ug/L	08/04/2015 1000
Vinyl chloride	ND		1	2.0	0.50	ug/L	08/04/2015 1000
Xylenes (total)	ND		1	5.0	1.7	ug/L	08/04/2015 1000
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		91	70-130				
1,2-Dichloroethane-d4		90	70-130				
Toluene-d8		100	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: QQ81416-002

Batch: 81416

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	81		1	81	60-140	08/04/2015 0903
Benzene	50	53		1	105	70-130	08/04/2015 0903
Bromodichloromethane	50	53		1	105	70-130	08/04/2015 0903
Bromoform	50	51		1	102	70-130	08/04/2015 0903
Bromomethane (Methyl bromide)	50	54		1	109	60-140	08/04/2015 0903
2-Butanone (MEK)	100	86		1	86	60-140	08/04/2015 0903
Carbon disulfide	50	56		1	113	60-140	08/04/2015 0903
Carbon tetrachloride	50	51		1	102	70-130	08/04/2015 0903
Chlorobenzene	50	53		1	107	70-130	08/04/2015 0903
Chloroethane	50	48		1	96	42-163	08/04/2015 0903
Chloroform	50	47		1	94	70-130	08/04/2015 0903
Chloromethane (Methyl chloride)	50	47		1	95	60-140	08/04/2015 0903
Cyclohexane	50	49		1	99	70-130	08/04/2015 0903
1,2-Dibromo-3-chloropropane (DBCP)	50	45		1	90	70-130	08/04/2015 0903
Dibromochloromethane	50	52		1	104	70-130	08/04/2015 0903
1,2-Dibromoethane (EDB)	50	53		1	106	70-130	08/04/2015 0903
1,4-Dichlorobenzene	50	52		1	105	70-130	08/04/2015 0903
1,2-Dichlorobenzene	50	54		1	108	70-130	08/04/2015 0903
1,3-Dichlorobenzene	50	54		1	107	70-130	08/04/2015 0903
Dichlorodifluoromethane	50	50		1	100	60-140	08/04/2015 0903
1,2-Dichloroethane	50	51		1	101	70-130	08/04/2015 0903
1,1-Dichloroethane	50	48		1	96	70-130	08/04/2015 0903
cis-1,2-Dichloroethene	50	51		1	102	70-130	08/04/2015 0903
trans-1,2-Dichloroethene	50	52		1	104	70-130	08/04/2015 0903
1,1-Dichloroethene	50	54		1	107	70-130	08/04/2015 0903
1,2-Dichloropropane	50	51		1	101	70-130	08/04/2015 0903
trans-1,3-Dichloropropene	50	53		1	107	70-130	08/04/2015 0903
cis-1,3-Dichloropropene	50	53		1	107	70-130	08/04/2015 0903
Ethylbenzene	50	54		1	108	70-130	08/04/2015 0903
2-Hexanone	100	87		1	87	60-140	08/04/2015 0903
Isopropylbenzene	50	54		1	109	70-130	08/04/2015 0903
Methyl acetate	50	43		1	86	60-140	08/04/2015 0903
Methyl tertiary butyl ether (MTBE)	50	52		1	104	70-130	08/04/2015 0903
4-Methyl-2-pentanone	100	92		1	92	60-140	08/04/2015 0903
Methylcyclohexane	50	49		1	97	70-130	08/04/2015 0903
Methylene chloride	50	49		1	97	70-130	08/04/2015 0903
Styrene	50	54		1	108	70-130	08/04/2015 0903
1,1,2,2-Tetrachloroethane	50	51		1	102	70-130	08/04/2015 0903
Tetrachloroethene	50	52		1	104	70-130	08/04/2015 0903
Toluene	50	53		1	106	70-130	08/04/2015 0903
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	51		1	102	70-130	08/04/2015 0903
1,2,4-Trichlorobenzene	50	55		1	110	70-130	08/04/2015 0903
1,1,2-Trichloroethane	50	52		1	104	70-130	08/04/2015 0903
1,1,1-Trichloroethane	50	53		1	106	70-130	08/04/2015 0903

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: QQ81416-002

Matrix: Aqueous

Batch: 81416

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	54		1	108	70-130	08/04/2015 0903
Trichlorofluoromethane	50	48		1	96	70-130	08/04/2015 0903
Vinyl chloride	50	51		1	102	70-130	08/04/2015 0903
Xylenes (total)	100	110		1	108	70-130	08/04/2015 0903
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		94	70-130				
1,2-Dichloroethane-d4		88	70-130				
Toluene-d8		100	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - MS

Sample ID: QG30034-003MS

Batch: 81416

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	10	500	420	5	83	60-140	08/04/2015 1833	
Benzene	10	250	270	5	104	70-130	08/04/2015 1833	
Bromodichloromethane	ND	250	260	5	102	71-143	08/04/2015 1833	
Bromoform	ND	250	230	5	93	65-131	08/04/2015 1833	
Bromomethane (Methyl bromide)	ND	250	300	5	120	36-168	08/04/2015 1833	
2-Butanone (MEK)	ND	500	430	5	86	60-140	08/04/2015 1833	
Carbon disulfide	ND	250	260	5	105	60-140	08/04/2015 1833	
Carbon tetrachloride	ND	250	240	5	97	37-166	08/04/2015 1833	
Chlorobenzene	ND	250	250	5	101	78-129	08/04/2015 1833	
Chloroethane	ND	250	260	5	103	60-140	08/04/2015 1833	
Chloroform	ND	250	240	5	94	63-123	08/04/2015 1833	
Chloromethane (Methyl chloride)	ND	250	260	5	105	20-158	08/04/2015 1833	
Cyclohexane	ND	250	200	5	81	70-130	08/04/2015 1833	
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	210	5	84	70-130	08/04/2015 1833	
Dibromochloromethane	ND	250	250	5	99	74-134	08/04/2015 1833	
1,2-Dibromoethane (EDB)	ND	250	260	5	103	70-130	08/04/2015 1833	
1,2-Dichlorobenzene	ND	250	250	5	100	70-130	08/04/2015 1833	
1,3-Dichlorobenzene	ND	250	250	5	99	70-130	08/04/2015 1833	
1,4-Dichlorobenzene	ND	250	240	5	97	70-130	08/04/2015 1833	
Dichlorodifluoromethane	ND	250	230	5	92	10-158	08/04/2015 1833	
1,1-Dichloroethane	ND	250	240	5	97	69-132	08/04/2015 1833	
1,2-Dichloroethane	ND	250	250	5	98	70-130	08/04/2015 1833	
1,1-Dichloroethene	ND	250	260	5	103	50-132	08/04/2015 1833	
cis-1,2-Dichloroethene	280	250	530	5	100	70-130	08/04/2015 1833	
trans-1,2-Dichloroethene	ND	250	260	5	104	70-130	08/04/2015 1833	
1,2-Dichloropropane	ND	250	250	5	99	71-126	08/04/2015 1833	
cis-1,3-Dichloropropene	ND	250	250	5	98	69-130	08/04/2015 1833	
trans-1,3-Dichloropropene	ND	250	240	5	97	73-131	08/04/2015 1833	
Ethylbenzene	6.9	250	250	5	97	70-130	08/04/2015 1833	
2-Hexanone	4.6	500	410	5	81	60-140	08/04/2015 1833	
Isopropylbenzene	17	250	260	5	97	70-130	08/04/2015 1833	
Methyl acetate	ND	250	200	5	81	15-128	08/04/2015 1833	
Methyl tertiary butyl ether (MTBE)	ND	250	250	5	101	70-130	08/04/2015 1833	
4-Methyl-2-pentanone	2.6	500	430	5	86	60-140	08/04/2015 1833	
Methylcyclohexane	4.5	250	190	5	74	70-130	08/04/2015 1833	
Methylene chloride	ND	250	250	5	99	69-129	08/04/2015 1833	
Styrene	0.81	250	250	5	102	70-130	08/04/2015 1833	
1,1,2,2-Tetrachloroethane	ND	250	240	5	97	60-155	08/04/2015 1833	
Tetrachloroethene	13	250	240	5	91	70-130	08/04/2015 1833	
Toluene	2.9	250	250	5	100	70-130	08/04/2015 1833	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	250	220	5	87	70-130	08/04/2015 1833	
1,2,4-Trichlorobenzene	ND	250	260	5	104	70-130	08/04/2015 1833	
1,1,1-Trichloroethane	ND	250	260	5	104	77-132	08/04/2015 1833	
1,1,2-Trichloroethane	ND	250	250	5	99	77-132	08/04/2015 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 - MS

Sample ID: QG30034-003MS

Matrix: Aqueous

Batch: 81416

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	0.81	250	260	5	103	73-124	08/04/2015 1833	
Trichlorofluoromethane	ND	250	230	5	93	60-140	08/04/2015 1833	
Vinyl chloride	ND	250	290	5	114	29-159	08/04/2015 1833	
Xylenes (total)	56	500	560	5	101	70-130	08/04/2015 1833	
Surrogate	Q	% Rec	Acceptance Limit					
1,2-Dichloroethane-d4		89	70-130					
Bromofluorobenzene		93	70-130					
Toluene-d8		101	70-130					

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - MSD

Sample ID: QG30034-003MD

Batch: 81416

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	10	500	410	5	80	3.2	60-140	20	20	08/04/2015 1857
Benzene	10	250	270	5	103	0.61	70-130	20	20	08/04/2015 1857
Bromodichloromethane	ND	250	260	5	104	2.1	71-143	20	20	08/04/2015 1857
Bromoform	ND	250	240	5	97	4.0	65-131	20	20	08/04/2015 1857
Bromomethane (Methyl bromide)	ND	250	300	5	120	0.015	36-168	20	20	08/04/2015 1857
2-Butanone (MEK)	ND	500	430	5	86	0.098	60-140	20	20	08/04/2015 1857
Carbon disulfide	ND	250	260	5	104	0.32	60-140	20	20	08/04/2015 1857
Carbon tetrachloride	ND	250	240	5	98	0.25	37-166	20	20	08/04/2015 1857
Chlorobenzene	ND	250	260	5	102	0.96	78-129	20	20	08/04/2015 1857
Chloroethane	ND	250	250	5	102	0.71	60-140	20	20	08/04/2015 1857
Chloroform	ND	250	240	5	95	0.70	63-123	20	20	08/04/2015 1857
Chloromethane (Methyl chloride)	ND	250	280	5	110	4.9	20-158	20	20	08/04/2015 1857
Cyclohexane	ND	250	200	5	79	2.3	70-130	20	20	08/04/2015 1857
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	220	5	87	3.1	70-130	20	20	08/04/2015 1857
Dibromochloromethane	ND	250	250	5	101	2.3	74-134	20	20	08/04/2015 1857
1,2-Dibromoethane (EDB)	ND	250	260	5	102	0.71	70-130	20	20	08/04/2015 1857
1,2-Dichlorobenzene	ND	250	250	5	100	0.037	70-130	20	20	08/04/2015 1857
1,3-Dichlorobenzene	ND	250	250	5	100	0.84	70-130	20	20	08/04/2015 1857
1,4-Dichlorobenzene	ND	250	240	5	97	0.21	70-130	20	20	08/04/2015 1857
Dichlorodifluoromethane	ND	250	230	5	92	0.045	10-158	20	20	08/04/2015 1857
1,1-Dichloroethane	ND	250	240	5	98	0.85	69-132	20	20	08/04/2015 1857
1,2-Dichloroethane	ND	250	250	5	100	1.5	70-130	20	20	08/04/2015 1857
1,1-Dichloroethene	ND	250	260	5	103	0.038	50-132	20	20	08/04/2015 1857
cis-1,2-Dichloroethene	280	250	520	5	96	2.0	70-130	20	20	08/04/2015 1857
trans-1,2-Dichloroethene	ND	250	260	5	104	0.41	70-130	20	20	08/04/2015 1857
1,2-Dichloropropane	ND	250	250	5	102	2.5	71-126	20	20	08/04/2015 1857
cis-1,3-Dichloropropene	ND	250	250	5	100	1.7	69-130	20	20	08/04/2015 1857
trans-1,3-Dichloropropene	ND	250	240	5	98	1.2	73-131	20	20	08/04/2015 1857
Ethylbenzene	6.9	250	260	5	100	2.9	70-130	20	20	08/04/2015 1857
2-Hexanone	4.6	500	420	5	83	2.9	60-140	20	20	08/04/2015 1857
Isopropylbenzene	17	250	260	5	98	0.72	70-130	20	20	08/04/2015 1857
Methyl acetate	ND	250	200	5	82	1.0	15-128	20	20	08/04/2015 1857
Methyl tertiary butyl ether (MTBE)	ND	250	250	5	102	0.68	70-130	20	20	08/04/2015 1857
4-Methyl-2-pentanone	2.6	500	440	5	87	0.13	60-140	20	20	08/04/2015 1857
Methylcyclohexane	4.5	250	200	5	76	2.7	70-130	20	20	08/04/2015 1857
Methylene chloride	ND	250	250	5	98	1.2	69-129	20	20	08/04/2015 1857
Styrene	0.81	250	260	5	103	1.1	70-130	20	20	08/04/2015 1857
1,1,2,2-Tetrachloroethane	ND	250	240	5	98	1.1	60-155	20	20	08/04/2015 1857
Tetrachloroethene	13	250	250	5	93	2.4	70-130	20	20	08/04/2015 1857
Toluene	2.9	250	260	5	103	2.2	70-130	20	20	08/04/2015 1857
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	250	210	5	85	2.5	70-130	20	20	08/04/2015 1857
1,2,4-Trichlorobenzene	ND	250	260	5	105	1.3	70-130	20	20	08/04/2015 1857
1,1,1-Trichloroethane	ND	250	250	5	102	2.2	77-132	20	20	08/04/2015 1857
1,1,2-Trichloroethane	ND	250	260	5	102	2.7	77-132	20	20	08/04/2015 1857

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the 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: QG30034-003MD

Matrix: Aqueous

Batch: 81416

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	0.81	250	260	5	104	1.4	73-124	20	08/04/2015 1857	
Trichlorofluoromethane	ND	250	230	5	93	0.72	60-140	20	08/04/2015 1857	
Vinyl chloride	ND	250	290	5	114	0.073	29-159	20	08/04/2015 1857	
Xylenes (total)	56	500	550	5	99	0.93	70-130	20	08/04/2015 1857	
Surrogate	Q	% Rec	Acceptance Limit							
1,2-Dichloroethane-d4		90	70-130							
Bromofluorobenzene		92	70-130							
Toluene-d8		100	70-130							

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Semivolatile Organic Compounds by GC/MS (SIM) - MB

Sample ID: QQ81425-001

Batch: 81425

Analytical Method: 8270D (SIM)

Matrix: Aqueous

Prep Method: 3520C

Prep Date: 08/04/2015 1350

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acenaphthene	ND		1	0.20	0.021	ug/L	08/07/2015 1829
Acenaphthylene	ND		1	0.20	0.024	ug/L	08/07/2015 1829
Anthracene	ND		1	0.20	0.016	ug/L	08/07/2015 1829
Benzo(a)anthracene	ND		1	0.20	0.019	ug/L	08/07/2015 1829
Benzo(a)pyrene	ND		1	0.20	0.020	ug/L	08/07/2015 1829
Benzo(b)fluoranthene	ND		1	0.20	0.019	ug/L	08/07/2015 1829
Benzo(g,h,i)perylene	ND		1	0.20	0.062	ug/L	08/07/2015 1829
Benzo(k)fluoranthene	ND		1	0.20	0.024	ug/L	08/07/2015 1829
Chrysene	ND		1	0.20	0.021	ug/L	08/07/2015 1829
Dibenzo(a,h)anthracene	ND		1	0.20	0.040	ug/L	08/07/2015 1829
Fluoranthene	ND		1	0.20	0.018	ug/L	08/07/2015 1829
Fluorene	ND		1	0.20	0.022	ug/L	08/07/2015 1829
Indeno(1,2,3-c,d)pyrene	ND		1	0.20	0.050	ug/L	08/07/2015 1829
Naphthalene	ND		1	0.20	0.030	ug/L	08/07/2015 1829
Phenanthrene	ND		1	0.20	0.023	ug/L	08/07/2015 1829
Pyrene	ND		1	0.20	0.017	ug/L	08/07/2015 1829
Surrogate	Q	% Rec		Acceptance Limit			
2-Methylnaphthalene-d10		93		15-139			
Fluoranthene-d10		99		23-154			

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 \geq MDL

+ = RPD is out of criteria

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

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

Semivolatile Organic Compounds by GC/MS (SIM) - LCS

Sample ID: QQ81425-002

Batch: 81425

Analytical Method: 8270D (SIM)

Matrix: Aqueous

Prep Method: 3520C

Prep Date: 08/04/2015 1350

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	0.60	0.55		1	92	41-120	08/07/2015 1859
Acenaphthylene	0.60	0.55		1	91	33-93	08/07/2015 1859
Anthracene	0.60	0.48		1	80	13-122	08/07/2015 1859
Benzo(a)anthracene	0.60	0.55		1	91	38-126	08/07/2015 1859
Benzo(a)pyrene	0.60	0.49		1	82	15-115	08/07/2015 1859
Benzo(b)fluoranthene	0.60	0.61		1	101	35-145	08/07/2015 1859
Benzo(g,h,i)perylene	0.60	0.56		1	94	34-142	08/07/2015 1859
Benzo(k)fluoranthene	0.60	0.65		1	108	36-146	08/07/2015 1859
Chrysene	0.60	0.57		1	96	40-135	08/07/2015 1859
Dibenzo(a,h)anthracene	0.60	0.58		1	96	33-144	08/07/2015 1859
Fluoranthene	0.60	0.58		1	97	26-148	08/07/2015 1859
Fluorene	0.60	0.64		1	107	34-126	08/07/2015 1859
Indeno(1,2,3-c,d)pyrene	0.60	0.59		1	98	36-141	08/07/2015 1859
Naphthalene	0.60	0.63		1	106	21-148	08/07/2015 1859
Phenanthrene	0.60	0.73		1	121	29-136	08/07/2015 1859
Pyrene	0.60	0.57		1	95	36-128	08/07/2015 1859
Surrogate	Q	% Rec	Acceptance Limit				
2-Methylnaphthalene-d10		85	15-139				
Fluoranthene-d10		89	23-154				

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 \geq MDL

+ = RPD is out of criteria

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

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

Semivolatile Organic Compounds by GC/MS (SIM) - MS

Sample ID: QG30034-003MS

Batch: 81425

Analytical Method: 8270D (SIM)

Matrix: Aqueous

Prep Method: 3520C

Prep Date: 08/04/2015 1350

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	0.40	ND	N	200	0.00	41-120	08/08/2015 1909
Acenaphthylene	ND	0.40	ND	N	200	0.00	33-93	08/08/2015 1909
Anthracene	ND	0.40	ND	N	200	0.00	13-122	08/08/2015 1909
Benzo(a)anthracene	ND	0.40	ND	N	200	0.00	38-126	08/08/2015 1909
Benzo(a)pyrene	ND	0.40	ND	N	200	0.00	15-115	08/08/2015 1909
Benzo(b)fluoranthene	ND	0.40	ND	N	200	0.00	35-145	08/08/2015 1909
Benzo(g,h,i)perylene	ND	0.40	ND	N	200	0.00	34-142	08/08/2015 1909
Benzo(k)fluoranthene	ND	0.40	ND	N	200	0.00	36-146	08/08/2015 1909
Chrysene	ND	0.40	ND	N	200	0.00	40-135	08/08/2015 1909
Dibenzo(a,h)anthracene	ND	0.40	ND	N	200	0.00	33-144	08/08/2015 1909
Fluoranthene	ND	0.40	ND	N	200	0.00	26-148	08/08/2015 1909
Fluorene	ND	0.40	6.7	N	200	1680	34-126	08/08/2015 1909
Indeno(1,2,3-c,d)pyrene	ND	0.40	ND	N	200	0.00	36-141	08/08/2015 1909
Naphthalene	190	0.40	210	N	200	6340	21-148	08/08/2015 1909
Phenanthrene	ND	0.40	15	N	200	3850	29-136	08/08/2015 1909
Pyrene	ND	0.40	ND	N	200	0.00	36-128	08/08/2015 1909
Surrogate	Q	% Rec	Acceptance Limit					
Fluoranthene-d10	N	0.00	23-154					
2-Methylnaphthalene-d10	N	1350	15-139					

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 \geq MDL

+ = RPD is out of criteria

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

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

Semivolatile Organic Compounds by GC/MS (SIM) - MSD

Sample ID: QG30034-003MD

Batch: 81425

Analytical Method: 8270D (SIM)

Matrix: Aqueous

Prep Method: 3520C

Prep Date: 08/04/2015 1350

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	0.40	ND	N	200	0.00	0.00	41-120	40	08/08/2015 1938
Acenaphthylene	ND	0.40	ND	N	200	0.00	0.00	33-93	40	08/08/2015 1938
Anthracene	ND	0.40	ND	N	200	0.00	0.00	13-122	40	08/08/2015 1938
Benzo(a)anthracene	ND	0.40	ND	N	200	0.00	0.00	38-126	40	08/08/2015 1938
Benzo(a)pyrene	ND	0.40	ND	N	200	0.00	0.00	15-115	40	08/08/2015 1938
Benzo(b)fluoranthene	ND	0.40	ND	N	200	0.00	0.00	35-145	40	08/08/2015 1938
Benzo(g,h,i)perylene	ND	0.40	ND	N	200	0.00	0.00	34-142	40	08/08/2015 1938
Benzo(k)fluoranthene	ND	0.40	ND	N	200	0.00	0.00	36-146	40	08/08/2015 1938
Chrysene	ND	0.40	ND	N	200	0.00	0.00	40-135	40	08/08/2015 1938
Dibenzo(a,h)anthracene	ND	0.40	ND	N	200	0.00	0.00	33-144	40	08/08/2015 1938
Fluoranthene	ND	0.40	ND	N	200	0.00	0.00	26-148	40	08/08/2015 1938
Fluorene	ND	0.40	6.5	N	200	1620	3.4	34-126	40	08/08/2015 1938
Indeno(1,2,3-c,d)pyrene	ND	0.40	ND	N	200	0.00	0.00	36-141	40	08/08/2015 1938
Naphthalene	190	0.40	220	N	200	7800	2.7	21-148	40	08/08/2015 1938
Phenanthrene	ND	0.40	13	N	200	3270	16	29-136	40	08/08/2015 1938
Pyrene	ND	0.40	ND	N	200	0.00	0.00	36-128	40	08/08/2015 1938
Surrogate	Q	% Rec	Acceptance Limit							
Fluoranthene-d10	N	0.00	23-154							
2-Methylnaphthalene-d10	N	1450	15-139							

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 \geq MDL

+ = RPD is out of criteria

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

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

SHEALY 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 50103

SHEALY ENVIRONMENTAL SERVICES, INC.

Client AECOM		Report to Contact Aaron Council		Telephone No. / E-mail aaron.council@aecomm.com		Date No. 17808	
Address 10 Patterson Dr., Building 6, Suite 500		Sample ID / Description X Aaron Council		Analytes (Attach sheet if more species is needed)			
City Greenville	State SC	Zip Code 29615	Printed Name				
Project Name Iron - Greenwood		P.O. No. 62143 ACM	Date 7/28/15	Time 1038	Activity Sampling	No. of Containers by Preservative type	Remarks / Cooler I.D.
(Containers for each sample may be combined on one line.)							
MW-1		7/28/15	1058	G ✓	3 ✓	1	
MW-2		7/29/15	0855	G ✓	3 ✓	1	
MW-3		7/29/15	0855	G ✓	5 ✓	1	
MW-3	MS	7/29/15	0855	G ✓	5 ✓	1	
MW-3	MSD	7/29/15	0855	G ✓	5 ✓	1	
MW-4		7/29/15	1100	G ✓	3 ✓	1	
MW-5		7/28/15	1401	G ✓	3 ✓	1	
MW-5D		7/28/15	1358	G ✓	3 ✓	1	
MW-6		7/29/15	1030	G ✓	3 ✓	1	
Trip Blank 1					2 ✓		
Turn Around Time Required (After lab information required for requested M/T)		Sample Disposal		Possible Hazard Information			
<input checked="" type="checkbox"/> Standard		<input type="checkbox"/> Return to Client		<input checked="" type="checkbox"/> Biohazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison
<input type="checkbox"/> Rush (Specify)				<input type="checkbox"/> Unknown			
1. Requisitioned by Aaron A. Council		Date 7/30/15	Time 07:17:16	1. Received by OF	Date 7/30/15	Time 11:33	Date 7/30/15
2. Relinquished by				2. Received by OF			
3. Relinquished by				3. Received by			
4. Relinquished by				4. Laboratory Received by OF			
				LAB USE ONLY			
				Received on site (Circle) <input checked="" type="checkbox"/> No			
				Refrigerated Temp. 2-4 °C			
Note: All samples are retained for four weeks from receipt unless other arrangements are made.							

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

Document Number: FAD-133 Effective Date: 08-01-2014



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 50104

SHEALY ENVIRONMENTAL SERVICES, INC.

client AECOM	Respondent Contact Aaron Council	Sampling Signature <i>X. Aaron Council</i>	Date Telephone No. / E-mail 804-234-3032	Address Email or Council @ aaron.council@aecom.com	Quota No. 11808
Address Oppenwood Dr., Building G, Suite 500	Analysis (List if more space is needed)				Page 2 of 4
City Greenville	State SC	Zip Code 29615	QG30034		
Project Name I-Tron - Greenwood	PO No. G0429584.04000	Date 7/29/15	Time 1140	Matrix Acryl	No of Containers by Preservative Type
(Containers for each sample may be combined on one line.)					
DUP-1	7/29/15	0810	6 ✓	3 ✓	✓
EB-1	7/29/15	1115	6 ✓	3 ✓	✓
MW-7	7/29/15	1200	6 ✓	3 ✓	✓
MW-8	7/28/15	1145	6 ✓	3 ✓	✓
MW-9	7/28/15	1145	6 ✓	3 ✓	✓
MW-9D	7/28/15	0925	6 ✓	3 ✓	✓
MW-10Z	7/28/15	0938	6 ✓	3 ✓	✓
MW-10T	7/28/15	0925	6 ✓	3 ✓	✓
MW-11	7/29/15	0940	6 ✓	3 ✓	✓
QC Requirements (Specify)					
Turn Around Time Required (Prior lab approval) required for expedited (X) / Sample Disposal <input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush (Specify)	Possible Hazards of Identification <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison				
1. relinquished by <i>Aaron J. Council</i>	Date 7/30/15	Time 1133	1. Received <i>7/30/15</i>	Date 7/30/15	Time 1133
2. Relinquished by			2. Received by <i>7/30/15</i>		
3. Relinquished by			3. Received by <i>7/30/15</i>		
4. Relinquished by			4. Laboratory Received by <i>7/30/15</i>		
Note: All samples are retained for four weeks from receipt Unless other arrangements are made.					
LAB USE ONLY Received on ice (Circle) <input checked="" type="checkbox"/> No Ice Pack Receipt Temp. 2.7 °C					

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

Document Number: F-AD-139 Effective Date: 06-01-2014

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 50105

SHEALY ENVIRONMENTAL SERVICES, INC.

Client AECOM	Report to Contact: Aaron Council	Telephone No./Email 804-234-3032 aaron.council@decam.com	Quartile No. 117808
Address 10 Patewood Dr., Building C, Suite 500 City Greenville State SC Zip Code 29615 Project Name Itron - Greenwood		Analysis (Check list if more species is needed)	
Sample ID / Description (Indicate if 80th sample may be restricted on one line.)		Page <u>3</u> of <u>4</u>	
Project No. 60429584.04000		PO. No. 62743 ACM	Printed Name Aaron Council
Date 7/29/15	Time 1020	Matrix G	No of Containers by Measurement Type 3
7/28/15	1357	G	1
7/28/15	1110	G	1
7/28/15	1509	G	3
7/28/15	1635	G	3
7/28/15	1650	G	3
7/28/15	1640	G	3
7/28/15	1640	G	3
7/28/15	1640	G	3
Trip Blank Z		2	2
Turn Around Time Required (Prior lab approval required for expedited (AT))		Sample Disposal	
<input type="checkbox"/> Standard	<input checked="" type="checkbox"/> Rush (Specify)	<input type="checkbox"/> Discard by Lab	<input type="checkbox"/> Discard by Client
1. Prepared by Aaron S. Council		1. Received by AS	1. Skin Irritant <input type="checkbox"/>
2. Rerelished by		2. Received by AS	2. Flammable <input type="checkbox"/>
3. Relinquished by		3. Received by AS	3. Corrosive <input type="checkbox"/>
4. Rerelished by		4. Analytical received by AS	4. Polyisobutylene <input type="checkbox"/>
		LAB USE ONLY From/Vessel on ice (Circle) <input checked="" type="checkbox"/>	No Ice Pack <input type="checkbox"/>
		Receipt Temp. <u>2.9</u> °C	Receipt Date <u>2015-07-30</u>
Note: All samples are retained for four weeks from receipt unless other arrangements are made.			
DISTRIBUTION: WHITE & YELLOW=Return to laboratory with Sample(s); PINK=Field/Client Copy			
Document Number: F-AD-153 Effective Date: 08-07-2014			

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 17

Page 1 of 1
Replaces Date: 11/07/14
Effective Date: 04/30/15

Sample Receipt Checklist (SRC)

Client: AEWm

Cooler Inspected by/date: mwm 073015 Lot #: Qa30031

Means of receipt: <input checked="" type="checkbox"/> SESI <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Airborne Exp <input type="checkbox"/> Other				
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	1. Were custody seals present on the cooler?		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	2. If custody seals were present, were they intact and unbroken?	
Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: <u>13.0 / 3.0 °C</u> <u>124 / 24 °C</u> <u>/ / °C</u> <u>/ / °C</u>				
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: <u>S</u> IR Gun Correction Factor: <u>0.0 °C</u>				
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> None				
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____ (For coolers received via commercial courier, PMs are to be notified immediately.)	
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	4. Is the commercial courier's packing slip attached to this form?	
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	5. Were proper custody procedures (relinquished/received) followed?	
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	5a Were samples relinquished by client to commercial courier?	
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	6. Were sample IDs listed on the COC?	
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	7. Were sample IDs listed on all sample containers?	
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	8. Was collection date & time listed on the COC?	
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	9. Was collection date & time listed on all sample containers?	
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	10. Did all container label information (ID, date, time) agree with the COC?	
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	11. Were tests to be performed listed on the COC?	
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	12. Did all samples arrive in the proper containers for each test?	
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	13. Did all containers arrive in good condition (unbroken, lids on, etc.)?	
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	14. Was adequate sample volume available?	
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>	15. Were all samples received within ½ the holding time or 48 hours, whichever comes first?	
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>	16. Were any samples containers missing?	
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>	17. Were there any excess samples not listed on COC?	
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>	18. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?	
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>	19. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?	
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>	20. Were all cyanide and/or sulfide samples received at a pH >12?	
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	21. Were all applicable NH ₃ /TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?	
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	22. Were collection temperatures documented on the COC for NC samples?	
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	23. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?	
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>	24. 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 ₂ SO ₄ , HNO ₃ , HCl, NaOH) using SR # _____.				
Sample(s) _____ were received with bubbles >6 mm in diameter.				
Sample(s) _____ were received with TRC >0.2 mg/L (If #21 is No)				
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: <u>mwm</u> Verified by: _____ Date: <u>7/30/15</u>				

Comments:

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

AECOM
10 Patewood Drive
Building 6, Suite 500
Greenville, SC 29615
Attention: Aaron Council

Project Name: Itron - Greenwood

Project Number: 60429584

Lot Number: QG17027

Date Completed: 07/23/2015



Lucas Odom
Project Manager



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

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

SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative AECOM Lot Number: QG17027

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.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Summary

AECOM

Lot Number: QG17027

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	MW-10I (49-50')	Solid	07/13/2015 1605	07/17/2015
(1 sample)				

SHEALY ENVIRONMENTAL SERVICES, INC.

Executive Summary

AECOM

Lot Number: OG17027

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	MW-10I (49-50')	Solid	Tetrachloroethene	8260B	170		ug/kg	6
001	MW-10I (49-50')	Solid	Toluene	8260B	4.1	J	ug/kg	6

(2 detections)

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)		
1	5035	8260B	1	07/21/2015 2028	JJG		80286	5.20		
2	5035	8260B	1	07/22/2015 1336	DCS		80355	5.40		
Parameter		CAS Number		Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone		67-64-1		8260B	ND		27	6.9	ug/kg	1
Benzene		71-43-2		8260B	ND		6.8	2.1	ug/kg	1
Bromodichloromethane		75-27-4		8260B	ND		6.8	2.3	ug/kg	1
Bromoform		75-25-2		8260B	ND		6.8	2.7	ug/kg	1
Bromomethane (Methyl bromide)		74-83-9		8260B	ND		6.8	3.0	ug/kg	1
2-Butanone (MEK)		78-93-3		8260B	ND		14	5.8	ug/kg	1
Carbon disulfide		75-15-0		8260B	ND		6.8	1.8	ug/kg	1
Carbon tetrachloride		56-23-5		8260B	ND		6.8	2.0	ug/kg	1
Chlorobenzene		108-90-7		8260B	ND		6.8	2.2	ug/kg	1
Chloroethane		75-00-3		8260B	ND		6.8	3.2	ug/kg	1
Chloroform		67-66-3		8260B	ND		6.8	2.1	ug/kg	1
Chloromethane (Methyl chloride)		74-87-3		8260B	ND		6.8	2.7	ug/kg	1
Cyclohexane		110-82-7		8260B	ND		6.8	2.4	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)		96-12-8		8260B	ND		6.8	2.8	ug/kg	1
Dibromochloromethane		124-48-1		8260B	ND		6.8	2.3	ug/kg	1
1,2-Dibromoethane (EDB)		106-93-4		8260B	ND		6.8	2.3	ug/kg	1
1,2-Dichlorobenzene		95-50-1		8260B	ND		6.8	2.3	ug/kg	1
1,3-Dichlorobenzene		541-73-1		8260B	ND		6.8	2.3	ug/kg	1
1,4-Dichlorobenzene		106-46-7		8260B	ND		6.8	2.1	ug/kg	1
Dichlorodifluoromethane		75-71-8		8260B	ND		6.8	5.1	ug/kg	1
1,1-Dichloroethane		75-34-3		8260B	ND		6.8	2.0	ug/kg	1
1,2-Dichloroethane		107-06-2		8260B	ND		6.8	2.2	ug/kg	1
1,1-Dichloroethene		75-35-4		8260B	ND		6.8	2.5	ug/kg	1
cis-1,2-Dichloroethene		156-59-2		8260B	ND		6.8	2.2	ug/kg	1
trans-1,2-Dichloroethene		156-60-5		8260B	ND		6.8	2.1	ug/kg	1
1,2-Dichloropropane		78-87-5		8260B	ND		6.8	2.0	ug/kg	1
cis-1,3-Dichloropropene		10061-01-5		8260B	ND		6.8	2.0	ug/kg	1
trans-1,3-Dichloropropene		10061-02-6		8260B	ND		6.8	2.1	ug/kg	1
Ethylbenzene		100-41-4		8260B	ND		6.8	2.2	ug/kg	1
2-Hexanone		591-78-6		8260B	ND		14	5.2	ug/kg	1
Isopropylbenzene		98-82-8		8260B	ND		6.8	2.1	ug/kg	1
Methyl acetate		79-20-9		8260B	ND		6.8	2.5	ug/kg	1
Methyl tertiary butyl ether (MTBE)		1634-04-4		8260B	ND		6.8	2.2	ug/kg	1
4-Methyl-2-pentanone		108-10-1		8260B	ND		14	5.0	ug/kg	1
Methylcyclohexane		108-87-2		8260B	ND		6.8	2.3	ug/kg	1
Methylene chloride		75-09-2		8260B	ND		6.8	1.7	ug/kg	1
Styrene		100-42-5		8260B	ND		6.8	2.4	ug/kg	1
1,1,2,2-Tetrachloroethane		79-34-5		8260B	ND		6.8	2.7	ug/kg	1
Tetrachloroethene		127-18-4		8260B	170		6.8	2.4	ug/kg	1

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

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

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Client: AECOM

Laboratory ID: QG17027-001

Description: MW-10I (49-50')

Matrix: Solid

Date Sampled: 07/13/2015 1605

% Solids: 70.2 07/19/2015 1448

Date Received: 07/17/2015

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)		
1	5035	8260B	1	07/21/2015 2028	JJG		80286	5.20		
2	5035	8260B	1	07/22/2015 1336	DCS		80355	5.40		
Parameter		CAS Number		Analytical Method	Result	Q	PQL	MDL	Units	Run
Toluene		108-88-3		8260B	4.1	J	6.6	2.0	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane		76-13-1		8260B	ND		6.8	2.5	ug/kg	1
1,2,4-Trichlorobenzene		120-82-1		8260B	ND		6.8	2.5	ug/kg	1
1,1,1-Trichloroethane		71-55-6		8260B	ND		6.8	1.9	ug/kg	1
1,1,2-Trichloroethane		79-00-5		8260B	ND		6.8	2.2	ug/kg	1
Trichloroethene		79-01-6		8260B	ND		6.8	2.2	ug/kg	1
Trichlorofluoromethane		75-69-4		8260B	ND		6.8	4.4	ug/kg	1
Vinyl chloride		75-01-4		8260B	ND		6.8	4.1	ug/kg	1
Xylenes (total)		1330-20-7		8260B	ND		6.8	4.5	ug/kg	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits				
1,2-Dichloroethane-d4		84	53-142		86	53-142				
Bromofluorobenzene		102	47-138		106	47-138				
Toluene-d8		97	68-124		105	68-124				

PQL = Practical quantitation limit

B = Detected 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 \geq MDL

P = The RPD between two GC columns exceeds 40%

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: QQ80286-001

Batch: 80286

Analytical Method: 8260B

Matrix: Solid

Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	7.6	J	1	20	5.1	ug/kg	07/21/2015 1824
Benzene	ND		1	5.0	1.6	ug/kg	07/21/2015 1824
Bromodichloromethane	ND		1	5.0	1.7	ug/kg	07/21/2015 1824
Bromoform	ND		1	5.0	2.0	ug/kg	07/21/2015 1824
Bromomethane (Methyl bromide)	ND		1	5.0	2.2	ug/kg	07/21/2015 1824
2-Butanone (MEK)	ND		1	10	4.2	ug/kg	07/21/2015 1824
Carbon disulfide	ND		1	5.0	1.3	ug/kg	07/21/2015 1824
Carbon tetrachloride	ND		1	5.0	1.4	ug/kg	07/21/2015 1824
Chlorobenzene	ND		1	5.0	1.6	ug/kg	07/21/2015 1824
Chloroethane	ND		1	5.0	2.4	ug/kg	07/21/2015 1824
Chloroform	ND		1	5.0	1.5	ug/kg	07/21/2015 1824
Chloromethane (Methyl chloride)	ND		1	5.0	2.0	ug/kg	07/21/2015 1824
Cyclohexane	ND		1	5.0	1.7	ug/kg	07/21/2015 1824
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	2.1	ug/kg	07/21/2015 1824
Dibromochloromethane	ND		1	5.0	1.7	ug/kg	07/21/2015 1824
1,2-Dibromoethane (EDB)	ND		1	5.0	1.7	ug/kg	07/21/2015 1824
1,2-Dichlorobenzene	ND		1	5.0	1.7	ug/kg	07/21/2015 1824
1,4-Dichlorobenzene	ND		1	5.0	1.5	ug/kg	07/21/2015 1824
1,3-Dichlorobenzene	ND		1	5.0	1.7	ug/kg	07/21/2015 1824
Dichlorodifluoromethane	ND		1	5.0	3.7	ug/kg	07/21/2015 1824
1,2-Dichloroethane	ND		1	5.0	1.6	ug/kg	07/21/2015 1824
1,1-Dichloroethane	ND		1	5.0	1.5	ug/kg	07/21/2015 1824
1,1-Dichloroethene	ND		1	5.0	1.8	ug/kg	07/21/2015 1824
cis-1,2-Dichloroethene	ND		1	5.0	1.6	ug/kg	07/21/2015 1824
trans-1,2-Dichloroethene	ND		1	5.0	1.5	ug/kg	07/21/2015 1824
1,2-Dichloropropane	ND		1	5.0	1.5	ug/kg	07/21/2015 1824
cis-1,3-Dichloropropene	ND		1	5.0	1.5	ug/kg	07/21/2015 1824
trans-1,3-Dichloropropene	ND		1	5.0	1.5	ug/kg	07/21/2015 1824
Ethylbenzene	ND		1	5.0	1.6	ug/kg	07/21/2015 1824
2-Hexanone	ND		1	10	3.8	ug/kg	07/21/2015 1824
Isopropylbenzene	ND		1	5.0	1.5	ug/kg	07/21/2015 1824
Methyl acetate	ND		1	5.0	1.8	ug/kg	07/21/2015 1824
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	1.6	ug/kg	07/21/2015 1824
4-Methyl-2-pentanone	ND		1	10	3.6	ug/kg	07/21/2015 1824
Methylcyclohexane	ND		1	5.0	1.7	ug/kg	07/21/2015 1824
Methylene chloride	ND		1	5.0	1.2	ug/kg	07/21/2015 1824
Styrene	ND		1	5.0	1.7	ug/kg	07/21/2015 1824
1,1,2,2-Tetrachloroethane	ND		1	5.0	2.0	ug/kg	07/21/2015 1824
Tetrachloroethene	ND		1	5.0	1.7	ug/kg	07/21/2015 1824
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	1.8	ug/kg	07/21/2015 1824
1,2,4-Trichlorobenzene	ND		1	5.0	1.8	ug/kg	07/21/2015 1824
1,1,2-Trichloroethane	ND		1	5.0	1.6	ug/kg	07/21/2015 1824
1,1,1-Trichloroethane	ND		1	5.0	1.4	ug/kg	07/21/2015 1824
Trichloroethene	ND		1	5.0	1.6	ug/kg	07/21/2015 1824

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: QQ80286-001

Matrix: Solid

Batch: 80286

Prep Method: 5035

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichlorofluoromethane	ND		1	5.0	3.2	ug/kg	07/21/2015 1824
Vinyl chloride	ND		1	5.0	3.0	ug/kg	07/21/2015 1824
Xylenes (total)	ND		1	5.0	3.3	ug/kg	07/21/2015 1824
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene	121		47-138				
1,2-Dichloroethane-d4	97		53-142				
Toluene-d8	111		68-124				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: QQ80286-002

Batch: 80286

Analytical Method: 8260B

Matrix: Solid

Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	140		1	136	60-140	07/21/2015 1705
Benzene	50	55		1	110	69-123	07/21/2015 1705
Bromodichloromethane	50	54		1	107	69-121	07/21/2015 1705
Bromoform	50	53		1	106	61-119	07/21/2015 1705
Bromomethane (Methyl bromide)	50	50		1	99	10-168	07/21/2015 1705
2-Butanone (MEK)	100	110		1	109	57-148	07/21/2015 1705
Carbon disulfide	50	57		1	114	58-122	07/21/2015 1705
Carbon tetrachloride	50	58		1	115	58-136	07/21/2015 1705
Chlorobenzene	50	54		1	108	59-129	07/21/2015 1705
Chloroethane	50	54		1	109	42-163	07/21/2015 1705
Chloroform	50	51		1	102	71-125	07/21/2015 1705
Chloromethane (Methyl chloride)	50	51		1	103	34-134	07/21/2015 1705
Cyclohexane	50	61		1	122	53-139	07/21/2015 1705
1,2-Dibromo-3-chloropropane (DBCP)	50	53		1	105	55-125	07/21/2015 1705
Dibromochloromethane	50	54		1	107	66-119	07/21/2015 1705
1,2-Dibromoethane (EDB)	50	53		1	106	74-124	07/21/2015 1705
1,2-Dichlorobenzene	50	57		1	113	57-131	07/21/2015 1705
1,4-Dichlorobenzene	50	57		1	114	52-133	07/21/2015 1705
1,3-Dichlorobenzene	50	57		1	114	51-134	07/21/2015 1705
Dichlorodifluoromethane	50	57		1	114	10-157	07/21/2015 1705
1,2-Dichloroethane	50	51		1	102	67-129	07/21/2015 1705
1,1-Dichloroethane	50	51		1	103	71-127	07/21/2015 1705
1,1-Dichloroethene	50	57		1	113	69-138	07/21/2015 1705
cis-1,2-Dichloroethene	50	54		1	108	70-122	07/21/2015 1705
trans-1,2-Dichloroethene	50	55		1	110	68-131	07/21/2015 1705
1,2-Dichloropropane	50	54		1	108	72-124	07/21/2015 1705
cis-1,3-Dichloropropene	50	56		1	112	70-126	07/21/2015 1705
trans-1,3-Dichloropropene	50	58		1	115	70-124	07/21/2015 1705
Ethylbenzene	50	59		1	119	59-128	07/21/2015 1705
2-Hexanone	100	110		1	108	54-137	07/21/2015 1705
Isopropylbenzene	50	58		1	117	50-136	07/21/2015 1705
Methyl acetate	50	52		1	104	59-137	07/21/2015 1705
Methyl tertiary butyl ether (MTBE)	50	52		1	103	70-130	07/21/2015 1705
4-Methyl-2-pentanone	100	110		1	106	60-134	07/21/2015 1705
Methylcyclohexane	50	61		1	122	41-144	07/21/2015 1705
Methylene chloride	50	48		1	96	70-130	07/21/2015 1705
Styrene	50	57		1	115	54-136	07/21/2015 1705
1,1,2,2-Tetrachloroethane	50	54		1	108	69-132	07/21/2015 1705
Tetrachloroethene	50	59		1	119	45-150	07/21/2015 1705
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	59		1	118	49-136	07/21/2015 1705
1,2,4-Trichlorobenzene	50	62		1	123	34-145	07/21/2015 1705
1,1,2-Trichloroethane	50	53		1	105	55-128	07/21/2015 1705
1,1,1-Trichloroethane	50	55		1	111	63-128	07/21/2015 1705
Trichloroethene	50	57		1	114	62-126	07/21/2015 1705

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: QQ80286-002

Matrix: Solid

Batch: 80286

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichlorofluoromethane	50	57		1	114	45-138	07/21/2015 1705
Vinyl chloride	50	56		1	112	42-132	07/21/2015 1705
Xylenes (total)	100	120		1	116	58-128	07/21/2015 1705
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		109	47-138				
1,2-Dichloroethane-d4		89	53-142				
Toluene-d8		102	68-124				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: QQ80355-001

Matrix: Solid

Batch: 80355

Prep Method: 5035

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Toluene	ND		1	5.0	1.5	ug/kg	07/22/2015 1308
Surrogate	Q % Rec		Acceptance Limit				
Bromofluorobenzene	115		47-138				
1,2-Dichloroethane-d4	101		53-142				
Toluene-d8	108		68-124				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: QQ80355-002

Matrix: Solid

Batch: 80355

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)		Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Surrogate	Q	% Rec	Acceptance Limit					
Toluene	50		56		1	113	61-129	07/22/2015 1212
Bromofluorobenzene	118		47-138					
1,2-Dichloroethane-d4	98		53-142					
Toluene-d8	112		68-124					

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq MDL

+ = RPD is out of criteria

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

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 17

Page 1 of 1
Replaces Date: 11/07/14
Effective Date: 04/30/15

Sample Receipt Checklist (SRC)

Client: Aecom 7-17-15 Cooler Inspected by/date: DUP 7-17-15 Lot #: QG17027

Means of receipt: <input checked="" type="checkbox"/> SESI <input type="checkbox"/> Client <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Airborne Exp <input type="checkbox"/> Other			
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	1. Were custody seals present on the cooler?	
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	2. If custody seals were present, were they intact and unbroken?
Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: <u>16.0 / 16.0 °C</u> / <u> </u> °C / <u> </u> °C / <u> </u> °C / <u> </u> °C			
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles IR Gun ID: <u>S</u> IR Gun Correction Factor: <u>0 °C</u>			
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> None			
3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____ (For coolers received via commercial courier, PMs are to be notified immediately.)			
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	4. Is the commercial courier's packing slip attached to this form?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	5. Were proper custody procedures (relinquished/received) followed?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	5a Were samples relinquished by client to commercial courier?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		6. Were sample IDs listed on the COC?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		7. Were sample IDs listed on all sample containers?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		8. Was collection date & time listed on the COC?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		9. Was collection date & time listed on all sample containers?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		10. Did all container label information (ID, date, time) agree with the COC?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		11. Were tests to be performed listed on the COC?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		12. Did all samples arrive in the proper containers for each test?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		13. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		14. Was adequate sample volume available?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		15. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		16. Were any samples containers missing?
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		17. Were there any excess samples not listed on COC?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	18. Were bubbles present (>"pea-size" (½" or 6mm in diameter) in any VOA vials?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	19. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	20. Were all cyanide and/or sulfide samples received at a pH >12?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	21. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	22. Were collection temperatures documented on the COC for NC samples?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	23. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?
Yes <input type="checkbox"/>	No <input type="checkbox"/>		24. 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 ₂ SO ₄ , HNO ₃ , HCl, NaOH) using SR # _____.			
Sample(s) _____ were received with bubbles >6 mm in diameter.			
Sample(s) _____ were received with TPC >0.2 mg/L (If #21 is No)			
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: <u>DUP</u>		Verified by:	Date: <u>7-17-15</u>

Comments:
