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SITE ASSESSMENT, REMEDIATION & REVITALIZATION

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June 14, 2019

Ms. Regan Rahn
Project Manager
Bureau of Land and Waste Management
S.C. Department of Health and Environmental Control (SCDHEC)
2600 Bull Street
Columbia, SC 29201

Re: Itron Site (Greenwood, SC) ((RPVCC #13-6078-RP)
Revised Feasibility Study (FS) Report – June 2019
Groundwater Monitoring Report, May 2019

Dear Ms. Rahn:

As discussed and agreed upon during the February 19, 2019 meeting with you and your team (Mr. Lucas Berresford, Mr. Greg Cassidy, and Ms. Carol Crooks), Itron's contractor AECOM completed the groundwater monitoring of all existing groundwater monitoring wells at the site. In addition, the Feasibility Study (FS) Report was revised in accordance with the conclusions of the February 19, 2019 meeting. Two (2) hard copies of the groundwater monitoring report and two (2) hard copies of the revised Feasibility Study (FS) Report is enclosed with this letter.

If you have any question, do not hesitate to contact me at 510-844-2882 or email me at Pad.Kemmanahalli@itron.com

Sincerely,

Pad Kemmanahalli
Corporate Senior Director, Global HSE & Sustainability

Enclosures:

1. Revised Feasibility Study (FS) Report, June 2019
2. April 2019 Groundwater Monitoring Report, May 2019

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AECOM Environment

Submitted to
Itron, Inc.

Submitted by
AECOM
Greenville, SC
Project No. 60601469
Revised - June 2019

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Feasibility Study

Itron, Inc.
RPVCC 13-6078 RP
1310 Emerald Road
Greenwood, South Carolina

Revised - June 14, 2019

Prepared for:

Itron

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AECOM **Environment**

Submitted to
Itron, Inc.

Submitted by
AECOM
Greenville, SC
Project No. 60601469
Revised - June 2019

Feasibility Study

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to be the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Prepared By Aaron S. Council

Reviewed By Ronald Paulding, PG

Reviewed By Timothy S. Renn, PE

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 24284 TIMOTHY STEPHEN RENN

Itron, Inc.
RPVCC 13-6078 RP
1310 Emerald Road
Greenwood, South Carolina

Revised – June 14, 2019

Table of Contents

Table of Contents ..... **iii**

Executive Summary ..... **vii**

1 Introduction **1-1**

1.1 Feasibility Study Objective 1-1
1.2 Report Organization 1-1

2 Site Background **2-1**

2.1 Site Description, Location and Setting 2-1
2.2 General and Site-Specific Geology 2-1
2.3 General and Site-Specific Hydrogeology 2-3
2.4 Site Surface Water Hydrology 2-4
2.5 Current Nature and Extent of COCs 2-4
2.5.1 Groundwater Screening Levels 2-4
2.5.2 Groundwater Results 2-5
2.5.3 Soil Screening Levels 2-6
2.5.4 Soil Results 2-6
2.6 Summary of Fate and Transport 2-6
2.6.1 Contaminant Fate 2-6
2.6.2 Contaminant Transport 2-8

3 Identification of Remedial Action Objectives and Remedial Goals **3-1**

3.1 Constituents of Concern (COCs) 3-1
3.2 Remedial Action Objectives (RAOs) 3-1
3.3 Remedial Goals (RGs) 3-1

4 Screening of Technologies and Identification of Remedial Action Alternatives **4-1**

5 Description and Detailed Analysis of Groundwater Remedial Action Alternatives **5-1**

5.1 Remedial Alternatives 5-2
5.1.1 Alternative 1 – No Action 5-3
5.1.1.1 Description 5-3
5.1.1.2 Overall Protection of Human Health and the Environment 5-3
5.1.1.3 Compliance with Applicable or Relevant and Appropriate Requirements 5-3
5.1.1.4 Long-term Effectiveness and Permanence 5-3
5.1.1.5 Reduction of Toxicity, Mobility, or Volume 5-3
5.1.1.6 Short-term Effectiveness 5-3
5.1.1.7 Implementability 5-3
5.1.1.8 Cost 5-3
5.1.2 Alternative 2 – Monitored Natural Attenuation and Institutional Controls 5-4
5.1.2.1 Description 5-4
5.1.2.2 Overall Protection of Human Health and the Environment 5-4
5.1.2.3 Compliance with Applicable or Relevant and Appropriate Requirements 5-4
5.1.2.4 Long-term Effectiveness and Permanence 5-4
5.1.2.5 Reduction of Toxicity, Mobility, or Volume 5-4
5.1.2.6 Short-term Effectiveness 5-5
5.1.2.7 Implementability 5-5
5.1.2.8 Cost 5-5

5.1.3 Remedial Alternative 3 –Excavation and Disposal with MNA and ICs 5-6
5.1.3.1 Description 5-6
5.1.3.2 Overall Protection of Human Health and the Environment 5-6
5.1.3.3 Compliance with Applicable or Relevant and Appropriate Requirements 5-6
5.1.3.4 Long-term Effectiveness and Permanence 5-7
5.1.3.5 Reduction of Toxicity, Mobility, or Volume 5-7
5.1.3.6 Short-term Effectiveness 5-7
5.1.3.7 Implementability 5-7
5.1.3.8 Cost 5-7
5.1.4 Remedial Alternative 4 – In Situ Chemical Remediation using BOS 100® with MNA and ICs 5-8
5.1.4.1 Description 5-8
5.1.4.2 Overall Protection of Human Health and the Environment 5-9
5.1.4.3 Compliance with Applicable or Relevant and Appropriate Requirements 5-9
5.1.4.4 Long-term Effectiveness and Permanence 5-9
5.1.4.5 Reduction of Toxicity, Mobility, or Volume 5-9
5.1.4.6 Short-term Effectiveness 5-9
5.1.4.7 Implementability 5-9
5.1.4.8 Cost 5-10
5.1.5 Remedial Alternative 5 – In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA and ICs 5-11
5.1.5.1 Description 5-11
5.1.5.2 Overall Protection of Human Health and the Environment 5-11
5.1.5.3 Compliance with Applicable or Relevant and Appropriate Requirements 5-11
5.1.5.4 Long-term Effectiveness and Permanence 5-12
5.1.5.5 Reduction of Toxicity, Mobility, or Volume 5-12
5.1.5.6 Short-term Effectiveness 5-12
5.1.5.7 Implementability 5-12
5.1.5.8 Cost 5-12
5.1.6 Remedial Alternative 6 – Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs 5-13
5.1.6.1 Description 5-13
5.1.6.2 Overall Protection of Human Health and the Environment 5-13
5.1.6.3 Compliance with Applicable or Relevant and Appropriate Requirements 5-13
5.1.6.4 Long-term Effectiveness and Permanence 5-13
5.1.6.5 Reduction of Toxicity, Mobility, or Volume 5-13
5.1.6.6 Short-term Effectiveness 5-14
5.1.6.7 Implementability 5-14
5.1.6.8 Cost 5-14
6 Comparative Evaluation of Remedial Alternatives 6-1
6.1 Overall Protection of Human Health and the Environment 6-1
6.2 Compliance with Applicable of Relevant and Appropriate Requirements 6-1
6.3 Long-term Effectiveness and Permanence 6-2
6.4 Reduction in Toxicity, Mobility, and Volume 6-2
6.5 Short-term Effectiveness 6-2
6.6 Implementability 6-3
6.7 Costs 6-4
7 References 7-1

List of Tables

Table 1. Historical Groundwater Analytical Results
Table 2. Soil Analytical Results

Table 3. Opinion of Probable Costs: Cost Estimate Summary for Alternative 2 - Monitored Natural Attenuation (MNA) and ICs
Table 4. Opinion of Probable Costs: Cost Estimate Summary for Alternative 3 - Excavation and Disposal with MNA/ICs
Table 5. Opinion of Probable Costs: Cost Estimate Summary for Alternative 4 - In Situ Remediation using BOS 100® with MNA/ICs
Table 6. Opinion of Probable Costs: Cost Estimate Summary for Alternative 5 - In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs
Table 7 Opinion of Probable Costs: Cost Estimate Summary for Alternative 6 - Excavation and Disposal Combined With In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs
Table 8. Comparison of Remedial Alternatives to Evaluation Criteria

List of Figures

Figure 1. Site Location Map
Figure 2. Site Vicinity Map
Figure 3. Site Features Map
Figure 4-1. Trace of Geologic Cross Sections
Figure 4-2. Cross-Section E-E’
Figure 4-3. Cross-Section F-F’
Figure 4-4. Cross-Section G-G’
Figure 4-5. Cross-Section H-H’
Figure 4-6. Cross-Section I-I’
Figure 4-7. Cross-Section J-J’
Figure 5. Potentiometric Surface Map (Upper Regolith) - April 2019
Figure 6. Potentiometric Surface Map (Intermediate Regolith) - April 2019
Figure 7. Potentiometric Surface Map (Lower Regolith) - April 2019
Figure 8. Distribution of COCs in Upper Regolith - Groundwater (April 2019)
Figure 9. Distribution of COCs in Intermediate Regolith - Groundwater (April 2019)
Figure 10. Distribution of COCs in Lower Regolith - Groundwater (April 2019)
Figure 11. PCE Concentration Map - Soils (Steel Sump)
Figure 12. PCE Concentration Map - Soils (Cardboard Storage and Former UST Area)
Figure 13. Alternative 2 - Monitored Natural Attenuation (MNA) and Institutional Controls (ICs)
Figure 14. Alternative 3 - Excavation and Disposal with MNA/ICs
Figure 15. Alternative 4 - In Situ Remediation using BOS 100® with MNA/ICs
Figure 16. Alternative 5 - In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs
Figure 17. Alternative 6 - Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs

List of Acronyms

AECOM	AECOM Technical Services, Inc.
ARAR	Applicable or Relevant and Appropriate Requirements
ATSDR	Agency for Toxic Substances and Disease Registry
bgs	Below ground surface
cDCE	cis-1,2-Dicholoroethene
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cm/sec	centimeters per second
COC	Constituent of concern
DO	Dissolved Oxygen
FS	Feasibility Study
HASP	Health and safety plan
IC	Institutional Control
ISCO	In situ chemical oxidation
LDP	Land disturbance permit
MCL	Maximum Contaminant Level
µg/L	Micrograms per liter
mg/kg	Milligrams per kilogram
MNA	Monitored natural attenuation
MSL	Mean Sea Level
NPDES	National Pollutant Discharge Elimination System
ORP	Oxidation-Reduction Potential
PCE	Tetrachloroethene
PE	Professional Engineer
PG	Professional Geologist
PPE	Personal Protective Equipment
RAO	Remedial Action Objective
RBCA	Risk-Based Corrective Action
RBSL	Risk-Based Screening Levels
RG	Remedial goal
RI	Remedial Investigation
ROI	Radius of Influence
RPVCC	Responsible Party Voluntary Cleanup Contract
RSL	Regional Screening Level
SB	Soil Boring
SC	Clayey Sand
SCDHEC	South Carolina Department of Health and Environmental Control
SM	Silty Sand
SSL	Soil Screening Level
SVE	Soil Vapor Extraction
TCE	Tricholoroethene
UIC	Underground Injection Control
URS	URS Corporation
USCS	Unified Soil Classification System
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
UT	Unnamed Tributary
VC	Vinyl Chloride
VCP	Voluntary Cleanup Program
VOC	Volatile Organic Compound
ZVI	Zero valent iron

Executive Summary

This Feasibility Study (FS) has been developed for the Itron, Inc. (Itron) facility located in Greenwood, South Carolina (the Site). Substantial assessment activities have been performed at the Site since 2012. Itron and the South Carolina Department of Health and Environmental Control (SCDHEC) entered into a Responsible Party Voluntary Cleanup Contract 13-6078-RP, dated October 2, 2013, which required Itron to complete a Remedial Investigation (RI). The most recent assessment and field activities conducted at the Site are documented in the Groundwater Monitoring Report – April 2019, dated May 31, 2019. Based on the findings from the RI and subsequent investigations, this FS has been prepared.

The remedial action objectives for the Site are as follows:

- Restore groundwater concentrations to applicable remediation goals.
- Prevent exposure of human and ecological receptors to impacted soil and groundwater above applicable standards.

Based on the available data and historical information, six (6) remedial alternatives have been selected for evaluation in this FS. Evaluation methods and criteria follow those published by the United States Environmental Protection Agency (USEPA). The remedial alternatives are:

1. No Action
2. Monitored Natural Attenuation (MNA) and Institutional Controls (ICs)
3. Excavation and Disposal with MNA/ICs
4. In Situ Remediation using BOS 100® with MNA/ICs
5. In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs
6. Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs

1 Introduction

1.1 Feasibility Study Objective

On behalf of Itron, Inc. (Itron), AECOM Technical Services, Inc. (AECOM) has prepared this Feasibility Study (FS) for submittal to SCDHEC. The objective of the FS is to compare viable remedial alternatives that, upon implementation, will sufficiently address chlorinated solvent impacts to groundwater and soil resulting from operations dating back to approximately the 1972 at 1310 Emerald Road, Greenwood, South Carolina (the Site). The FS has been prepared in general accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Remedial Investigation (RI)/Feasibility Study (FS) Guidance document (United States Environmental Protection Agency [USEPA], 1988).

Remediation efforts for the Site are regulated by SCDHEC under the Voluntary Cleanup Program (VCP). The most recent document developed for the Site was a Groundwater Monitoring Report (AECOM 2019), submitted by Itron to SCDHEC in conjunction with this FS.

The six (6) remedial alternatives being evaluated are:

- Alternative 1: No Action
- Alternative 2: Monitored Natural Attenuation (MNA) and Institutional Controls (ICs)
- Alternative 3: Excavation and Disposal with MNA/ICs
- Alternative 4: In Situ Remediation using BOS 100® with MNA/ICs
- Alternative 5: In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs
- Alternative 6: Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs

1.2 Report Organization

This FS is organized as follows:

- **Section 1** describes the documents purpose and organization, and summarizes the Site's remedial and regulatory history.
- **Section 2** summarizes the Site background and characteristics.
- **Section 3** identifies the remedial action objectives (RAOs) and the remedial goals (RGs).
- **Section 4** presents a screening and identification of remedial alternatives.
- **Section 5** provides a description and detailed analysis of groundwater remedial alternatives.
- **Section 6** presents a comparative analysis of the remedial alternatives.
- **Section 7** provides references.

2 Site Background

2.1 Site Description, Location and Setting

The Site currently consists of a 130,000 square-foot building on a 24.04-acre parcel of property located at 1310 Emerald Road, Greenwood, South Carolina. A site location map is included as **Figure 1** and a site vicinity map is included as **Figure 2**. 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. 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. A site features map is included as **Figure 3**.

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.

The Site is located approximately 3 miles northeast of the town of Greenwood in a mixed, light-industrial, warehouse/distribution and residential area. As shown on the United States Geological Survey (USGS) 7.5 minute Ninety Six, South Carolina Quadrangle map (**Figure 1**), the Itron Site is located on the southern side of Emerald Road at the intersection of Parkland Place Road. A Seaboard Railroad line runs east-west, just north of Emerald Road.

A description of the regional and Site-specific geology and hydrogeology, the current nature and extent of constituents of concern (COCs) and the contaminant fate and transport for the Site is presented in the following subsections.

2.2 General and Site-Specific Geology

As originally documented in the *Remedial Investigation Report*, dated October 24, 2014 (URS, 2014), the Site is located in the Piedmont physiographic province of South Carolina. The topography of the region is characterized by gently to moderately steep slopes with broad to narrow ridge tops and narrow stream valleys, the locations of which are controlled by the structure and relative resistance of the underlying bedrock units. Elevations are approximately 375 feet above mean seal level (MSL) at the landward edge of the coastal plain, located 40 miles to the east rising to 1,000 feet above MSL near the mountains, located approximately 55 miles to the northwest of the Site. Surface drainage forms dendritic patterns with stream channels trending generally toward the southeast. Recent fluvial sediments are limited to streambeds and small floodplains adjacent to streams and rivers.

Specifically, 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 above MSL. Two, unnamed, intermittent 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 with 2 to 6 percent and 6 to 10 percent slopes [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. 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; consequently, the Site geology and hydrogeology are typical of the region. A Trace of Geologic Cross Sections map and Geologic Cross Section maps E-E', F-F', G-G', H-H', I-I' and J-J' are attached as **Figures 4-1, 4-2, 4-3, 4-4, 4-5, 4-6 and 4-7,** respectively. As shown on the cross-sections 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; and the underlying bedrock.

Based on the Geologic Map of the Greenville 1X2 degree 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. 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.

Due to differential weathering, the thickness of the regolith is extremely variable ranging from 24 feet at soil boring SB-58 located in the north-central part of the Site to 105 feet at well MW-5D located near the center of the property. The saprolite thickness at well MW-3, a boring located approximately 150 feet southeast of SB-58 and the only other boring to penetrate the entire regolith profile, is 47 feet deep. Also, refusal occurred at a depth of 14 feet in Geoprobe® boring SB-57, which is located inside the Building approximately 35 feet northwest of SB-58. Samples of the bedrock were not recovered during the RI or during earlier investigations; therefore, the definite presence of bedrock is undetermined. However, changes in drilling characteristics and drilling refusal are frequently the result of encountering bedrock and suggest that bedrock was encountered at 47 feet below ground surface (bgs) in the boring for well MW-3 and at 105 feet bgs in the boring for well MW-5D. Borings for the three other deep monitoring wells (MW-9D, MW-10D and MW-16D) were each advanced to 76 feet bgs without encountering bedrock. The results indicate a deep bedrock surface in the central part of the Site that rises abruptly by more than 80 feet over a distance of approximately 465 feet as the ridge top is approached. Approximate elevations of the actual or probable top of bedrock at borings MW-3, SB-57 and SB-58 are 515, 547, and 538 feet above MSL, respectively. Farther north, borings for wells MW-1 and MW-18 were advanced to approximate elevations of 526 and 518 feet above MSL, respectively, without encountering bedrock. Comparison of the five elevations suggests that the bedrock surface attains a maximum elevation near the northeast corner of the plant. Also, inspection of this area on topographic maps dated 1949 and 1978 indicates that grading performed during plant construction removed as much as 10 feet of the regolith. Furthermore, based on a description of the lithology encountered in these borings, a transition zone does not appear to be present at the bottom of the regolith underlying the Site.

2.3 General and Site-Specific Hydrogeology

As originally documented in the *Remedial Investigation Report*, dated October 24, 2014 (URS, 2014), the groundwater system in the Piedmont province can be divided into two hydrostratigraphic units: the regolith, including the transition zone where present, and the bedrock. The regolith contains water within pores under both saturated and unsaturated conditions. At the base of the soil layer, which is generally three to eight feet thick, the size of the particles decreases abruptly with a corresponding decrease in pore size (Daniel and Harned, 1998). Where the regolith consists of saprolite, the pore types may be characteristic of both the soil and underlying rock. Reflecting its inherent rock-like structure, continuous pores in saprolite may be related to quartz veins and natural joints or foliations in the bedrock. In the saturated regolith, groundwater is stored in and transmitted through pores that are present between the soil and rock particles. Groundwater in the regolith supplies and replenishes groundwater in the underlying fractured bedrock. With porosity that can range as high as 35 to 55 percent and a specific yield that is typically about 20 percent, the regolith is readily able to store considerable quantities of groundwater which it releases slowly to fractures in the underlying bedrock (Heath, 1980). The hydraulic conductivity of the regolith, which ranges from 3.5E-04 to 7.1E-03 centimeters per second (cm/sec), is anisotropic due to higher permeability along the direction of relict fractures and foliation.

The water table usually occurs within the regolith at depths that vary depending on location and topography. The water table is at or near land surface at the bottom of a stream valley or adjacent to a lake or pond; it typically ranges from a few feet to a tens of feet below the surface underlying hill slopes and broad, flat uplands; and, it can be at even greater depths beneath hills and ridges (Daniel and Harned, 1998).

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 likely occurs in the bedrock.

The water table is generally between 20 and 30 feet bgs, although it is as much as eight to nine feet deeper in several wells. Groundwater flow across the Site is to the east and southeast toward the UT to Wilson Creek located approximately 500 feet east of the Site. Historical interpretations of groundwater flow are in general agreement, but also indicate a flow component toward the northeast. The interpretation of flow direction assumes isotropic conditions exist at the Site, whereas fractured bedrock and regolith exhibiting relict structure are characteristically anisotropic. Although a lineament trace study was not performed during the RI, cursory examination of stream channel orientation on the 7.5-minute series topographic map suggests that the principal joint direction in the area is northwest to southeast, which aligns with the general groundwater flow direction and is characteristically normal to regional metamorphic deformation. However, migration of tetrachloroethene (PCE) also exhibits a southerly component suggesting that the actual groundwater flow direction may vary from that interpreted from the water-level measurements.

Groundwater flows in response to average horizontal hydraulic gradients of 0.023 and 0.033 feet/feet for the water table and the lower part of the regolith, respectively. However, whereas the average horizontal hydraulic gradient in the lower part of the regolith appears to be uniform, albeit only a small part of the Site is represented, the horizontal hydraulic gradient in the upper part of the regolith varies with location. The horizontal hydraulic gradient is mostly flat underlying the northwest quadrant of the Site with a slope of 0.011 and becomes steeper south and east of wells MW-8 and MW-16 with a slope approaching 0.045. The fact that the average horizontal hydraulic gradient becomes steeper even as the saturated thickness of the regolith increases suggests that the hydraulic conductivity of the unit is decreasing in the downgradient direction. This is supported, in part, by the presence of clay at downgradient well MW-9 and the relatively low hydraulic conductivity measured there (1.7E-05 cm/sec).

The K value of the regolith, which can be 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 range from 1.3E-05 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's attributed to saprolite in the Piedmont region by Heath (1980). Average groundwater velocity in the upper and lower parts of the regolith are approximately 120 and 170 feet per year, respectively, based on these gradients, an effective porosity of 0.2 and a K of 1.0E-04 cm/sec or 0.28 feet/day. This K value corresponds to the slug test results for the silty sands at the Site through which groundwater would be expected to flow preferentially.

Vertical hydraulic gradients at the Site indicate that slight upward gradients were measured at wells MW-5D and MW-9D and downward gradients were measured at MW-10D and MW-16D. 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.

Consistent with the slope aquifer concept, 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 base flow. 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. Contour maps of the upper, intermediate and lower portions of the regolith for February 2017 are included as **Figures 5, 6 and 7,** respectively.

2.4 Site Surface Water Hydrology

Wilson Creek, an eastward flowing perennial stream, is located approximately ½ mile south of the Site (**Figure 1**). Two intermittent streams that are unnamed tributaries to Wilson Creek are located east and west of the Site (**Figures 1 and 2**). The east tributary has been impounded at several locations near its headwaters forming three ponds that are located upstream of the Site. The closest perennial streams bounding the Site to the east and west are Coronaca Creek located approximately 6,100 feet east of the Site and an unnamed tributary to Wilson's Creek located approximately 4,000 feet to the west.

2.5 Current Nature and Extent of COCs

The current nature and extent of COCs in groundwater was most recently presented in the *Supplemental Remedial Investigation Report Addendum,* dated March 24, 2017 (AECOM, 2017a), and approved by SCDHEC on November 1, 2017. The nature and extent of COCs in soil is presented in the *Remedial Investigation Report*, dated October 24, 2014 (URS Corporation [URS], 2014), and approved by SCDHEC March 3, 2015 (SCDHEC, 2015). The groundwater and soil screening criteria is revisited in this section. An overview of the groundwater sampling results from the most recent sampling event in February 2017 and a synopsis of soil sampling results are discussed below.

2.5.1 Groundwater Screening Levels

The screening levels for groundwater are based on the EPA's MCLs, which are based on National Primary Drinking Water Standards (EPA, 2017) and the Risk-Based Screening Levels (RBSLs), established by SCDHEC and listed in the risk-based corrective action (RBCA) guidance document (SCDHEC, 2001). Based on a comparison of the groundwater analytical results to the MCLs and RBSLs, the following COCs have been identified in groundwater at the Site:

- PCE
- TCE
- cDCE
- Benzene

- Naphthalene
- 1,2-Dichloropropane
- Vinyl Chloride

2.5.2 Groundwater Results

As documented in the Groundwater Monitoring Report – April 2019, dated May 28, 2019 (AECOM, 2019), groundwater samples were collected from monitoring wells MW-1 through MW-9, MW-10R, MW-11 through MW-14, MW-15R, MW-16 through MW-21, MW-23, MW-10I, MW-5D, MW-9D, MW-10D, MW-16D and MW-22D. All samples were analyzed for volatile organic compounds (VOCs) per USEPA Method 8260B. Groundwater analytical results are summarized in **Table 1** and on **Figures 8, 9 and 10.** Groundwater results on the figures are broken out into the upper, intermediate and lower portions of the regolith.

VOCs were detected in 25 of the 28 groundwater monitoring wells sampled. Detected compounds included PCE, TCE and cDCE. Results exceeding the MCL and RBSL per each zone of the regolith are listed below:

Upper Regolith:

• Concentrations of PCE exceeding the EPA Maximum Contaminant Level (MCL) of 5 micrograms per liter (µg/l) were detected in wells MW-2 (5.2 µg/l), MW-3 (63 µg/l), MW-4 (14 µg/l), MW-5 (2,700 µg/l), MW-6 (4,300 µg/l), MW-7 (95,000 µg/l), MW-8 (18,000 µg/l), MW-9 (7.2 µg/l), MW-10R (6,000 µg/l), MW-14 (150 µg/l), MW-16 (780 µg/l) and MW-17 (190 µg/l). Also, the concentration of benzene in MW-3 (7.5 µg/l) exceeded the MCL of 5 µg/l.

Intermediate Regolith:

• Concentrations of PCE exceeding the MCL were detected in wells MW-10I, (14,000 µg/l), MW-12 (4,400 µg/l), and MW-20 (450 µg/l).

Lower Regolith:

• Concentrations of PCE exceeding the MCL were detected in wells MW-5D (21 µg/l), MW-9D (15 µg/l) and MW-16D (18 µg/l). Also, the concentration of cis-1,2-dichloroethene (cDCE) in MW-5D (170 µg/l) exceeded the MCL of 70 µg/l.

Concentrations of the COCs appear to decrease with depth across the Site and the isoconcentration contours suggest contamination is still confined within the property boundaries below the applicable screening levels.

The current groundwater plume in the upper regolith occurs beneath the central footprint of the Site, while the plume in the intermediate regolith is more isolated beneath the eastern section of the Site. The plume in the lower regolith is more centrally located beneath the Site. None of the plumes are known to extend beyond the property boundary of the Site. As described above, the plumes consist primarily of PCE, TCE and cDCE above their respective RGs. **Figures 8, 9 and 10** illustrate the areal extent of the contaminants from the April 2019 groundwater sampling event (AECOM, 2019).

The trends of PCE in individual wells appear relatively stable, and the bulk plume mass of this constituent appears to be relatively stable with some slight fluctuations from sampling event to sampling event. The center of mass in the PCE plumes in the upper, intermediate and lower regoliths are contained within the Site property boundaries. Horizontal migration of the plumes has not occurred at a significant rate and would not be expected to migrate significantly based on historical trends and vertical migration has not occurred at a significant rate as concentrations in the deep wells (lower regolith) are orders of magnitude lower than what has been detected in the upper and intermediate zones. However, based on the high concentrations of PCE, especially in wells MW-5, MW-6, MW-7, MW-8, MW-10R, MW-10I and MW-12, the remaining mass will likely continue to release into the adjacent groundwater for a period of greater than 50 years.

2.5.3 Soil Screening Levels

Soil contamination, primarily consisting of PCE, occurs in the area of the steel sump, beneath the cardboard storage room and also at various locations beneath and outside the south-southeast corner of the building at the Site.

Three potentially applicable soil screening levels (SSLs) are included in the USEPA Regional Screening Levels (RSLs): 1) MCL-based for Protection of Groundwater SSLs; 2) Resident Soil SSLs; and 3) Industrial Soil SSLs (USEPA 2017). Other potentially applicable screening levels are RBSLs listed in the SCDHEC's RBCA guidance document (SCDHEC, 2001). The COCs that have been identified in Site soil are:

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

2.5.4 Soil Results

The main areas of concern related to soil contamination at the Site for the purposes of this FS are located in the steel sump area and beneath the cardboard storage room and vicinity. **Figures 11 and 12** illustrate the areal extent of PCE, as documented in the RI Report (URS, 2014).

A total of 54 soil samples were analyzed from varying depth intervals within the steel sump area. PCE was detected in all soil samples collected as part of the RI within the steel sump area with the exception of four samples. Forty-three (43) of the samples exceeded the Protection of Groundwater SSL of 0.0023 milligrams per kilogram (mg/kg) for PCE. Six samples exceeded the resident soil SSL of 8.1 mg/kg for PCE, and one sample exceeded the industrial soil RSL of 39 mg/kg for PCE.

A total of 49 soil samples were analyzed from varying depth intervals within the cardboard storage room and vicinity. Thirty-eight (38) of the samples exceeded the Protection of Groundwater SSL for PCE. Fourteen (14) samples exceeded the resident soil RSL for PCE and 11 samples were either equal to or exceeded the industrial soil RSL for PCE.

2.6 Summary of Fate and Transport

2.6.1 Contaminant Fate

Physical, chemical and biological transformations of contaminants can occur in the environment. These transformations may result in the formation of contaminants that were not present in the original release and pose additional risks not easily recognized or contribute to the overall attenuation of the contaminants. Information pertaining to the fate of the PCE and naphthalene, which represent chlorinated and non-chlorinated COCs, is presented below. Information published by the United States Department of Health and Human Services Agency for Toxic Substances and Disease Registry (ATSDR) and the USEPA are significant sources of the information provided in this section.

PCE is a commercially important chlorinated solvent and chemical intermediate. It has been used as a dry-cleaning and textile processing solvent, as an intermediate product in chemical manufacturing, and as a vapor and liquid degreasing agent in metal-cleaning operations. PCE was first commercially produced in the United States in 1925 and saw extensive use from the 1940s through the 1980s. PCE use has decreased since the

1980s due to greater efficiencies in the industrial processes where it is used, concerns over environmental impacts and the availability of alternative solvents (ATSDR, 1997).

PCE is widely distributed in the environment. It is released to the environment from industrial processes and from building and consumer products. Releases are primarily to the atmosphere, but PCE is also released to surface water and land in sewage sludge and in other liquid and solid waste, where its high vapor pressure and Henry's law constant usually result in its rapid volatilization to the atmosphere. PCE has relatively low solubility in water and has medium-to-high mobility in soil, thus its residence time in surface environments is not expected to be more than a few days. However, it persists in the atmosphere for several months and may also persist in groundwater for several years or more (ATSDR, 1997).

The dominant transformation process for PCE in the atmosphere is a reaction with photochemically produced hydroxyl radicals. The reaction of volatile chlorinated hydrocarbons with hydroxyl radicals is temperature dependent and thus is expected to proceed more rapidly in the summer months. The degradation products of this reaction include phosgene, chloroacetylchlorides, formic acid, carbon monoxide, carbon tetrachloride and hydrochloric acid (ATSDR, 1997).

PCE does not readily transform in water. Photolysis does not contribute substantially to the transformation of PCE and chemical hydrolysis appears to occur only at elevated temperatures in a high pH (9.2) environment, and even then, at a very slow rate. In natural waters, biodegradation may also contribute to the transformation of PCE. However, because neither biodegradation nor hydrolysis occurs at a rapid rate, most PCE present in surface water is expected to volatilize into the atmosphere (ATSDR, 1997).

Biodegradation of PCE occurs in groundwater under anaerobic conditions, through the process of reductive dechlorination. Microbial degradation products of PCE in groundwater include TCE, and small amounts of cDCE, trans-1,2-dichoroethene and vinyl chloride (VC).

Biodegradation of PCE in soil appears to only occur under specific conditions, and then only to a limited degree. Based on indirect evidence from soil associated with contaminated aquifers, PCE is probably degraded to some extent in anaerobic soil environments (ATSDR, 1997).

Naphthalene is present in gasoline, mineral spirits, diesel fuel and coal, and is generated when wood or tobacco is burned. Naphthalene is produced in commercial quantities from either coal tar or petroleum. Most of the naphthalene produced in the United States comes from petroleum by the dealkylation of methylnaphthalenes in the presence of hydrogen at high temperature and pressure. Its production in the United States declined from 1968 to 1982; however, its import decreased and export increased from 1978 to 1989. The widespread use and production of naphthalene in the United States is evidenced by its presence in hazardous waste sites in at least 44 states (USEPA, 2003).

Naphthalene is released to the environment primarily to the air from residential combustion of wood and fossil fuels. Other residential sources of naphthalene include tobacco smoke and the vaporization of moth repellants. Naphthalene may also be released to the air during coal tar production and distillation, aeration processes in water treatment plants, and from the use of naphthalene during chemical manufacturing (USEPA, 2003).

In instances when naphthalene enters surface water sources, it generally volatilizes into the air fairly quickly. Naphthalene that remains in surface water will be degraded through photolysis and biodegradation processes. Biodegradation of naphthalene occurs quite rapidly, although degradation time will vary with concentration of the chemical, water temperature and the availability of nutrients (USEPA, 2003).

Volatilization from soil surfaces and biodegradation are important processes for the removal of naphthalene from soil. Maximum biodegradation is reported to occur at a pH of 8 and in the presence of a positive redox potential. Naphthalene is degraded to carbon dioxide and salicylate by aerobic microorganisms. In addition, soil organic matter is an important factor in degradation time because adsorption of naphthalene to organic matter significantly decreases its bioavailability to microorganisms (USEPA, 2003).

2.6.2 Contaminant Transport

Contaminants associated with former operations at the Site, primarily PCE, appear to have been released at the surface and infiltrated into the subsurface. The PCE appears to have leached from the soil and migrated vertically into the underlying groundwater which generally occurs at depths between 20 and 35 feet bgs. Groundwater flows east and southeast across the Site. The PCE plume in groundwater extends at least 500 feet south and southeast of the source areas identified above.

Releases of petroleum hydrocarbons on the northeast side of the Building may have occurred at the surface or directly into the subsurface from leaks in the underground storage tank system, which contained petroleum hydrocarbons. Contaminant transport mechanisms for the petroleum hydrocarbons are similar to those for PCE (e.g., migrate vertically through the soil and then dissolve into groundwater), but there is no evidence that light non-aqueous phase liquid is present in this area. In addition, the available data suggest that the extent of the source area is much smaller than for the PCE releases. The resulting impacts to groundwater appears to extend less than 300 feet downgradient of the source area, based on the absence of elevated levels of petroleum hydrocarbons in well MW-6.

Another potential contaminant transport mechanism at the Site is vapor phase transport. VOCs located in subsurface soils or in groundwater can volatilize, migrate through soil gas, and subsequently be transported into indoor spaces, potentially producing inhalation exposure. VOCs in soil gas will primarily migrate and spread out by vapor diffusion. Advective transport of VOC vapors is expected to occur near the ground surface as a result of atmospheric pressure variations and operation of heating, ventilation and air conditioning systems in buildings. A secondary spreading mechanism for VOCs in the vadose zone is the migration of soil moisture due to infiltration, evaporation and transpiration.

Based on soil data collected during the RI and previous investigations, it appears that vapor phase transport is responsible for many of the low level detections of PCE in the soil outside of the source areas. Personnel air monitoring inside the Building confirmed that there was no measurable exposure to COCs. Therefore, vapor intrusion into the building is not a transport mechanism at the Site.

A final potential transport mechanism at the Site is surface water runoff. Transport by surface water runoff, while possible, is unlikely to be significant due to the volatile nature of the COCs. In addition, the highest concentrations of PCE detected in Site soils are either beneath the cardboard storage room or at a depth of one foot or greater, thus making impacts from surface runoff unlikely.

3 Identification of Remedial Action Objectives and Remedial Goals

3.1 Constituents of Concern (COCs)

COCs are media-specific chemicals that are present at concentrations that either exceed an established promulgated standard or present an unacceptable risk of exposure to receptors. COCs for soil and groundwater are summarized below:

- **Soil COCs:** The primary COC for soil at the Site is PCE, which was detected above the Protection of Groundwater SSL. For the purposes of this FS, there are no soil COCs associated with the Site that pose an unacceptable risk. Ancillary COCs detected above SSLs at the Site include TCE and naphthalene.
- **Groundwater COCs:** The COCs for groundwater at the Site are PCE, TCE, cDCE, 1,2-dichloropropane, benzene, VC and naphthalene. PCE, the primary COC on site, was detected above its RG in 25 of 28 monitoring wells sampled in April 2019.

3.2 Remedial Action Objectives (RAOs)

RAOs are the end points which, when obtained, will result in appropriate protection of human health and the environment. The Site-specific RAOs are:

- **RAO 1:** Restore groundwater concentrations to applicable remediation goals.
- **RAO 2:** Prevent exposure of human and ecological receptors to impacted soil and groundwater above applicable standards.

3.3 Remedial Goals (RGs)

RGs are components of RAOs that are medium and constituent specific numerical values meant to provide an objective metric for when the RAO has been attained. The RGs are proposed below. All RGs are presented as the Maximum Contaminant Level (MCL) for each individual constituent. The MCLs are standards that are set by the USEPA for drinking water quality.

- PCE in groundwater – **MCL of 5 μg/L**
- TCE in groundwater – **MCL of 5 μg/L**
- cDCE in groundwater - **MCL of 70 μg/L**
- 1,2-dichloropropane in groundwater **– MCL of 5 μg/L**
- Benzene in groundwater – **MCL of 5 μg/L**
- Vinyl Chloride in groundwater – **MCL of 2 μg/L**
- Naphthalene in groundwater - **RBSL of 25 μg/L**

4 Screening of Technologies and Identification of Remedial Action Alternatives

In accordance with the CERCLA RI/FS guidance document, this section presents the rationale for screening of remedial technologies and identifying remedial alternatives to address impacted media (USEPA, 1988). It presents an initial evaluation (i.e., screening) to identify potentially applicable remedial methods (i.e., process options). Remedial methods passing the initial screening process are combined to create potentially feasible remedial alternatives. The remedial alternatives are evaluated further in Section 5.

Remediation efforts for the Site are regulated by SCDHEC under the Voluntary Cleanup Program (VCP). The most recent document developed for the Site was a Groundwater Monitoring Report (AECOM 2019) submitted by Itron to SCDHEC in conjunction with this FS. Based on the considerations provided above, remedial alternatives were developed to address impacted groundwater in the upper, intermediate and lower regoliths, in addition to soil contamination in select areas across the Site. These alternatives are as follows:

- Alternative 1: No Action
- Alternative 2: Monitored Natural Attenuation (MNA) and Institutional Controls (ICs)
- Alternative 3: Excavation and Disposal with MNA/ICs
- Alternative 4: In Situ Remediation using BOS 100® with MNA/ICs
- Alternative 5: In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs
- Alternative 6: Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs

Detailed discussion of these remedial alternatives is presented in Section 5. The underlying assumption for all the alternatives discussed and evaluated is that remedial measures will be implemented until the groundwater RGs are achieved.

5 Description and Detailed Analysis of Groundwater Remedial Action Alternatives

The CERCLA RI/FS guidance (USEPA, 1988) provides nine evaluation criteria for assessing the remedial alternatives within the context of a comprehensive FS. These criteria cover regulatory, technical, cost, institutional, and community considerations.

The two *threshold* criteria are:

- Overall Protection of Human Health and the Environment: Evaluates how the remedial alternative, as a whole, protects and maintains protection of human health and the environment during and after implementation.
- Compliance with Applicable or Relevant and Appropriate Requirements (ARARs): Evaluates how the alternative complies with chemical-specific, location-specific, and action-specific ARARs.

The five *balancing* criteria are:

- Long-term Effectiveness and Permanence: Evaluates the long-term ability of an alternative to protect human health and the environment after remedial goals have been achieved. The primary consideration is the effectiveness of controls that are necessary to manage the risks posed by treated or untreated residuals.
- Reduction of Toxicity, Mobility, or Volume through Treatment: Addresses the USEPA's statutory preference for remedial alternatives that (1) permanently reduce the toxicity, mobility, and volume of the compounds of concern and (2) use treatment as a principal element. This criterion focuses on the following factors:
  - The amount of hazardous materials treated or destroyed
  - The degree of reduction in toxicity, mobility, and volume of impacted material
  - The degree to which the treatment method would be irreversible
  - The characteristics and quantity of residual material that would remain
- Short-term Effectiveness: Addresses the effects of each alternative during construction and implementation until RAOs have been met. Specifically, this criterion evaluates the potential impact each alternative would have on workers, the community, and the environment during implementation of the remedial action.
- Implementability: Assesses the technical and administrative feasibility of implementing an alternative. Technical feasibility addresses the difficulties and unknowns associated with a technology, the reliability of a technology, the ease of undertaking future remedial actions, and the ability to monitor the effectiveness of the system. Administrative feasibility refers to the activities required to coordinate with regulatory agencies and the availability of equipment, services, and materials.
- Cost: Evaluates the capital and operations and maintenance costs associated with an alternative. Present worth analysis is used to evaluate expenditures that occur over multiple years (maximum 50 years). It should be noted that these costs are for comparison of alternatives and will be presented in a qualitative format (high, intermediate and low).

The final two criteria that often are evaluated after the initial publication of the FS are:

- Regulatory Acceptance: Evaluates the technical and administrative issues that the USEPA or the State of South Carolina may have regarding each of the alternatives. This analysis would include formal comments from meetings, agency reviews, and the transmittal of comments between agencies.
- Community Acceptance: Incorporates community input (solicited during the public comment period) regarding the selection of remedial alternatives.

Although the Site is managed under the SCDHEC VCP, at the direction of SCDHEC, the RI/FS Guidance (USEPA, 1988) document has been used to develop and analyze the remedial alternatives. The first seven criteria will be evaluated in this FS. The final two criteria will not be used during the evaluation process for the Site. Preliminary pricing information was solicited from vendors for this FS. This pricing information was used together with other sources, such as similar sites and AECOM's professional experience, to prepare the cost estimates for the alternatives evaluated.

5.1 Remedial Alternatives

The remedial alternatives developed for detailed analysis are listed below. These remedial alternatives are focused primarily on groundwater from the perspective of reaching RGs with the understanding that soil in select areas will also need to be addressed to achieve those RGs.

- Alternative 1: No Action
- Alternative 2: Monitored Natural Attenuation (MNA) and Institutional Controls (ICs)
- Alternative 3: Excavation and Disposal with MNA/ICs
- Alternative 4: In Situ Remediation using BOS 100® with MNA/ICs
- Alternative 5: In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs
- Alternative 6: Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs

5.1.1 Alternative 1 – No Action

5.1.1.1 *Description*

The No Action alternative is a baseline alternative included for comparison with the other remedial alternatives. The No Action alternative assumes that no action is taken, no monitoring is performed, and no costs are incurred. This alternative would not achieve the required RAOs.

5.1.1.2 *Overall Protection of Human Health and the Environment*

Alternative 1 would not provide control of exposure or reduction of risk to human health and the environment posed by impacted groundwater at the Site. This alternative would not actively reduce the COC concentrations in groundwater to the RGs and, therefore, it would not achieve the RAOs. A decrease in COC concentrations in groundwater may occur over time through natural processes. However, such reduction would not be monitored, quantified, or documented.

5.1.1.3 *Compliance with Applicable or Relevant and Appropriate Requirements*

Since no remedial activities are associated with this alternative, compliance with the chemical-specific ARARs for groundwater would not be met until such time that natural attenuation processes have reduced COC concentrations to the RGs. Since no remedial activities would be conducted under this alternative, action-specific ARARs are not applicable. Location-specific ARARs do not apply to this alternative.

5.1.1.4 *Long-term Effectiveness and Permanence*

This alternative would not provide for controls or long-term risk management measures for the untreated COCs. The current and potential future risks are likely to remain the same under this alternative.

5.1.1.5 *Reduction of Toxicity, Mobility, or Volume*

This alternative would not employ active treatment that would reduce the toxicity, mobility, or volume of the COCs in groundwater; therefore, this alternative would not satisfy the statutory preference for treatment. A decrease in the groundwater COC concentrations may occur slowly over time through natural processes although this would not be quantified because this alternative does not include additional sampling.

5.1.1.6 *Short-term Effectiveness*

Because the No Action alternative would not involve any active remedial measures, no short-term risks to the community, workers or the environment are likely to exist.

5.1.1.7 *Implementability*

There are no technical or administrative limitations to implementing the No Action alternative.

5.1.1.8 *Cost*

There are no costs associated with this alternative.

5.1.2 Alternative 2 – Monitored Natural Attenuation and Institutional Controls

5.1.2.1 *Description*

This alternative proposes to implement a Monitored Natural Attenuation (MNA) program and establish ICs. **Figures 8, 9 and 10** depict the locations of the existing monitoring well network and the most current groundwater quality data. It is assumed that the wells currently sampled within the network would be incorporated within the MNA approach and groundwater samples would be collected for analysis annually for 50 years.

MNA is a passive approach that monitors the natural degradation or reductions in the concentrations of COCs in groundwater. A typical MNA approach monitors the groundwater geochemistry and the detected COC concentrations to continually evaluate and confirm that the site conditions are supportive of natural COC degradation. During the implementation phase, a groundwater sampling plan would be developed to monitor remedy performance and to confirm that COC concentrations remain stable or decrease following the implementation of the remedy. Additionally this would include implementation of ICs necessary to protect human health and the environment. ICs include development restrictions and groundwater use restrictions.

As part of MNA, groundwater monitoring would be performed to evaluate if natural processes are enhancing attenuation of the dissolved COCs on site. For the purpose of costing, it is estimated that the existing monitoring wells sampled at the Site (28 wells) would be sampled annually from years one through 50 for VOCs. Select wells would be sampled for various geochemical parameters (e.g., dissolved gases, electron acceptors, etc.) during each event. In addition, field parameters such as dissolved oxygen (DO), oxidation reduction potential (ORP), pH, temperature, and conductivity would be measured at each sampled well during the monitoring events. Furthermore, once certain wells have a large enough data set to establish that all constituents are consistently below the RGs, then those wells would be recommended to be removed from the sampling program. Thus, optimization of the Site monitoring well network would be maintained over the duration of this alternative.

5.1.2.2 *Overall Protection of Human Health and the Environment*

Historical data indicate current plume stability. Therefore, this alternative would be expected to be protective of human health and the environment by implementing appropriate measures to prevent exposure to COCs from groundwater until it meets the RGs. Risk reduction and protectiveness is also contingent upon establishing ICs (e.g., groundwater use restrictions).

5.1.2.3 *Compliance with Applicable or Relevant and Appropriate Requirements*

This alternative is not expected to meet analyte-specific RGs within at least 50 years. The establishment of ICs would assist in meeting the action-specific ARARs on-site. There are no location-specific ARARs for this alternative.

5.1.2.4 *Long-term Effectiveness and Permanence*

Magnitude of residual risk: Alternative 2 is a passive remedy. Minimal long-term residuals are expected to persist at the Site while MNA is ongoing. While it is expected that MNA will eventually meet RGs, it will most likely take greater than 50 years to reach this end point. Since this alternative would leave COCs in the groundwater at concentrations exceeding MCLs for an extended period of time, 5-year remedy reviews would need to be completed to ensure that the MNA remedy continued to provide adequate protection to human health and the environment.

Adequacy and Reliability of controls: Existing risks in groundwater, which could be mitigated through ICs, are expected to be low and decline in the future due to the observed natural processes.

5.1.2.5 *Reduction of Toxicity, Mobility, or Volume*

The MNA approach will reduce the volume, mobility, and toxicity of constituents in groundwater over time, likely greater than 50 years.

5.1.2.6 *Short-term Effectiveness*

Implementation of this alternative is not expected to be effective in the short term. Proper use of personal protective equipment (PPE) and adhering to a site-specific health and safety plan (HASP) would minimize or eliminate impacts during groundwater sampling. Implementation of this alternative would not result in adverse environmental impacts and short-term risks are minimal.

5.1.2.7 *Implementability*

- Technical feasibility: This alternative involves establishing a Site-specific MNA program, which should be easily implemented based on the groundwater sampling already conducted at the site.
- Availability of services and materials: No special equipment or specialists other than qualified technicians are anticipated to be necessary during implementation.

5.1.2.8 *Cost*

The 50-year present worth (as an opinion of probable costs) for this alternative is estimated at $610,000. Details of the probable cost and key assumptions are included in **Table 3**.

5.1.3 Remedial Alternative 3 –Excavation and Disposal with MNA and ICs

5.1.3.1 *Description*

Under this scenario, a targeted excavation of impacted soils outside the southeast corner of the building would be performed. Then, once the source material was removed, non-impacted fill would be used for backfilling the excavation. Once the leaching of COCs into the groundwater is mitigated, COC biodegradation through MNA processes should treat the dissolved phase concentrations. MNA and ICs would then be instituted for up to 20 years.

It is not anticipated that surfaces such as asphalt and concrete will need to be removed to access the excavation areas. In the event there are small amounts, those surficial materials will be transported as a non-hazardous waste to a local sanitary Subtitle D landfill for disposal. Soil in the impacted areas would be excavated to varying depths to a maximum of approximately 20 feet bgs. A mobile laboratory would be utilized onsite and samples from the bottom and sidewalls of the excavations would periodically be analyzed to determine the extent of the excavations. The estimated size of the excavation would be 75 feet wide x 200 feet long x 15 feet deep. This translates into approximately 8,300 cubic yards or 11,620 tons of soil. A second area of approximately 30 feet wide x 50 feet long x 20 feet deep beneath the cardboard storage room would also be excavated. This translates into an additional 1,100 cubic yards or 1,540 tons of soil.

Lab results for the material excavated would determine whether it is disposed of as non-hazardous or hazardous waste. Hazardous material would be transported to a facility that is licensed and certified to accept hazardous waste and non-hazardous waste would be transported to a licensed subtitle D landfill For the purposes of this FS and the costing of this alternative, it was assumed that 15 percent of the soil will be characterized as hazardous and the remaining 85 percent will be characterized as non-hazardous.

Once the excavations are backfilled, the surface would be restored to its original condition and a series of performance monitoring events will be conducted for a year. These will include two semi-annual events to track the progress of groundwater concentration reduction. One of the sampling events conducted in the first year will also serve as one of the MNA events. After the first year, it is anticipated that MNA will continue for another 19 years when RGs are expected to be reached.

MNA would be used to address the residual constituents in areas beyond the influence of the excavation. As part of post-excavation monitoring and MNA, groundwater monitoring would be performed to evaluate if natural processes are enhancing attenuation of the residual dissolved COCs. For the purpose of costing, it is estimated that the existing monitoring wells sampled at the Site (28 wells) would be sampled annually from years one through twenty for VOCs. Select wells would be sampled for various geochemical parameters (e.g., dissolved gases, electron acceptors, etc.) during each event. In addition, field parameters such as DO, ORP, pH, temperature, and conductivity would be measured at each sampled well during the monitoring events.

The target excavation area associated with this alternative is shown on **Figure 14.**

For the purpose of this evaluation, the project life of this alternative is estimated to be 20 years.

5.1.3.2 *Overall Protection of Human Health and the Environment*

Implementation of Alternative 3 would provide protection to human health and the environment by removing COCs that remain in the subsurface. This alternative would eliminate the leaching of COCs into groundwater, creating a reduction in dissolved phase COC mass. MNA would be implemented at the completion of excavation activities to monitor the degradation of COCs remaining in groundwater. ICs would be established to restrict usage of impacted groundwater until RGs are met.

5.1.3.3 *Compliance with Applicable or Relevant and Appropriate Requirements*

Chemical-specific: This alternative is expected to result in COCs in groundwater meeting RGs within 20 years.

Location-specific: No location-specific ARARs were identified for this alternative at the Site.

Action-specific: While the anticipated disturbed area of this alternative would be less than one-acre, it is anticipated that a Land Disturbance Permit (LDP), or at least an erosion control plan consistent with SCDHEC requirements for a LDP, would be required to be developed to be protective of any runoff that could potentially drain off-site. No other permits are anticipated with this alternative.

5.1.3.4 *Long-term Effectiveness and Permanence*

Magnitude of residual risk: Alternative 3 involves a combination of active and passive remedies. Minimal long-term residuals are expected to persist in the active treatment area while MNA is expected to assist in meeting RGs in the untreated areas. The documented biodegradation and natural attenuation processes that are occurring should transform the remaining dissolved phase concentrations into innocuous daughter products. Since this alternative would leave COCs in the groundwater at concentrations exceeding MCLs for an extended period of time, 5-year remedy reviews would need to be completed to ensure that the selected remedy continued to provide adequate protection to human health and the environment.

Adequacy and reliability of controls: Existing risks with untreated residuals in groundwater are expected to be low and decline in the future due to physical removal and natural degradation processes.

5.1.3.5 *Reduction of Toxicity, Mobility, or Volume*

This alternative is expected to reduce the toxicity, mobility, and volume of COCs in the groundwater. The excavation of presumed residual source material would remove mass that may currently be slowly released into the underlying groundwater. This process would ultimately reduce the mass/volume of COCs.

5.1.3.6 *Short-term Effectiveness*

Implementation of Alternative 3 would involve a temporary disturbance of the Site. Once the excavated material is removed it is anticipated that groundwater concentrations in the immediate area would start decreasing at a rapid rate. Although it is possible through the temporary disturbance to create a small spike in groundwater COC concentrations, it is anticipated that decreases in the groundwater COC concentrations would ultimately occur and be confirmed through performance monitoring.

5.1.3.7 *Implementability*

Technical feasibility: Excavation, transportation and disposal has been successfully used to remediate similar sites in similar geologic settings. The construction activities required to perform the anticipated scope are commonly implemented and there are ample experienced contractors in the area to perform the work. As previously described, the soil located beneath the cardboard storage room has the highest detected concentrations of PCE in the soil at the Site. These detections are at depths beyond those of a typical excavation (i.e. greater than 20 feet). The cardboard storage room was added on to the main building in approximately 1987. Therefore, excavation of soils in this area would require the removal of the cardboard storage room. The process of excavating the materials would require the implementation of an approved HASP. The HASP would help to minimize exposure to affected media during the excavation and monitoring activities.

Administrative feasibility: Implementation of Alternative 3 requires no excessive coordination with state and local agencies. This alternative requires environmental construction contractors, a certified hazardous waste disposal contractor and an analytical laboratory contractor. Wastes would be profiled and reviewed for acceptance by the selected landfill facility prior to shipment. No other specialized contractors are anticipated to be needed.

Availability of services and materials: Vendors and contractors are readily available to supply labor and equipment to implement the targeted excavation program. Availability and scheduling of equipment and supplies would not be anticipated to pose problems.

5.1.3.8 *Cost*

The present worth (as an opinion of probable costs) for this alternative is estimated to be $2,868,000. Details of the probable cost and key assumptions are included in **Table 4**.

5.1.4 Remedial Alternative 4 – In Situ Chemical Remediation using BOS 100® with MNA and ICs

5.1.4.1 *Description*

BOS 100® is a Trap & Treat® in situ remediation technology specifically designed to degrade chlorinated solvents through abiotic means. It is a unique material manufactured from high grade virgin carbons (intended for use in food or drinking water applications). The food grade carbon is impregnated with metallic iron formed under reducing conditions at a temperature of roughly 850 degrees Celsius. At this temperature, as the metallic iron is formed, it partially dissolves into the carbon forming a new and unique material with properties of both the carbon and iron but with capabilities exceeding zero valent iron (ZVI) in terms of rates of destruction and the range of halogenated compounds it can degrade. As manufactured, the product contains roughly 6.5 percent by weight metallic iron. Reaction end products included dissolved iron, chloride, and a series of unregulated gases such as ethylene and methane. The product is relatively insensitive to groundwater geochemistry (e.g. pH, oxidation-reduction potential). At a groundwater pH less than 4, ZVI within the BOS 100® can readily dissolve from the carbon into the surrounding groundwater.

BOS 100® is typically mixed with water to create a slurry that can be applied using a variety of techniques including: direct-push injection, soil mixing techniques and trenching. It is commonly employed in plume wide treatment of source, mid and downgradient plume regions. Plume area treatment is normally accomplished using slurry injection across the impacted thickness at a number of points located using a triangular grid pattern.

Prior to implementing this alternative as a full-scale operation, it is envisioned that a pilot study would be conducted in the area of the PCE plume with the highest concentrations in between monitoring wells MW-7 and MW-8. Approximately 50 injection points would be used to introduce the product to the subsurface in two-foot intervals between 35 and 55 feet bgs within the groundwater in the upper regolith. Upon completion of the pilot study, if it is determined that reductions in COC concentrations were achieved, then a full-scale application of BOS 100® would be considered. It is anticipated a pilot study could be completed within a 6 to 12 month timeframe, when taking into account confirmatory and follow-up groundwater sampling. A full-scale installation would include an additional 250 to 350 injection points in the locations with the highest detected concentrations of PCE near the steel sump area and beneath the cardboard storage room. Soil data would be used to determine the location, depth, and number of injections to address the highest concentrations of soil contaminants. Additional injection points would be placed throughout the proposed treatment area in the vicinity of wells MW-3, MW-5, MW-5D, MW-6, MW-7, MW-8, MW-10R, MW-10I, MW-10D, MW-12, MW-16 and MW-16D. As described above, the BOS 100® would be introduced in two foot intervals between 35 and 55 feet within the groundwater in the upper regolith. Some injections would be slightly deeper, to approximately 80 feet, in the vicinity of wells MW-10I and MW-12. Due to the nature of in-situ applications, in order to achieve RGs at the Site, more than one injection event may be required. In order to ensure the BOS 100® (or any injectate referred to in this document) makes contact with the contaminated zones, high injection pressures, as high as practicable, without having the injectate come to the surface by coming up the outside of the drilling pipe (i.e. commonly referred to as daylighting) will be employed by the drilling contractor..

The treatment area associated with this alternative is shown on **Figure 15.**

MNA would be used to address the residual constituents in areas beyond the influence of BOS 100®. As part of post-application monitoring and MNA, groundwater monitoring would be performed to evaluate if natural processes are enhancing attenuation of the residual dissolved COCs. For the purpose of costing, it is estimated that the existing monitoring wells sampled at the Site (28 wells) would be sampled annually from years one through 10 for VOCs. Select wells would be sampled for various geochemical parameters (e.g., dissolved gases, electron acceptors, etc.) during each event. In addition, field parameters such as DO, ORP, pH, temperature, and conductivity would be measured at each sampled well during the monitoring events.

It is anticipated that MNA would continue annually for another 9 years after the completion of the full-scale BOS 100® injection event. At that time, RGs should be met. For the purpose of this evaluation, the project life of this alternative is estimated to be 15 years.

5.1.4.2 *Overall Protection of Human Health and the Environment*

Alternative 4 is expected to be protective of human health and the environment. The use of BOS 100® in the treatment area is expected to reduce concentrations of PCE. Natural attenuation processes are expected to remediate any remaining untreated (residual) impacts in groundwater. ICs would continue to be implemented to restrict usage of impacted groundwater until RGs are met.

5.1.4.3 *Compliance with Applicable or Relevant and Appropriate Requirements*

Chemical-specific: This alternative is expected to result in COCs concentrations in groundwater meeting RGs within 10 years.

Location-specific: No location-specific ARARs were identified for this alternative.

Action-specific: A UIC permit from the SCDHEC UIC Section would be required for this alternative.

5.1.4.4 *Long-term Effectiveness and Permanence*

Magnitude of Residual Risk: Alternative 4 involves a combination of active and passive remedies. The untreated residual COCs in groundwater are expected to attenuate through natural degradation processes. BOS 100® technology has been demonstrated in various case studies at similar sites with chlorinated solvent impacts to be an effective treatment remedy.

Adequacy and reliability of controls: Treatment of impacted groundwater with BOS 100® would be an effective method of remediating COCs in groundwater and reducing impacts to the environment. Existing risks associated with untreated residuals in groundwater are expected to decline in the future due to natural attenuation processes. ICs would be required until the groundwater RGs are achieved.

5.1.4.5 *Reduction of Toxicity, Mobility, or Volume*

BOS 100® is expected to reduce toxicity, mobility, and volume of constituents in groundwater. In addition, natural attenuation processes are expected to assist in reducing toxicity, mobility, and volume of constituents in groundwater.

5.1.4.6 *Short-term Effectiveness*

Implementation of Alternative 4 would involve routine groundwater sampling to monitor effectiveness. The areas proposed for treatment in this alternative are easily accessible. The installation of BOS 100® involves the handling of activated carbon and zero valent iron. Use of proper PPE and adhering to a site-specific HASP would provide adequate worker protection. This alternative would not impact the community or result in adverse environmental impacts. Long-term monitoring will be required to meet the groundwater cleanup goals.

5.1.4.7 *Implementability*

Technical feasibility: To be successful, BOS 100® must achieve contact with the targeted COCs. This requirement is often difficult to achieve in dense silts and saprolite, which are present at the Site. Therefore, delivery of the BOS 100® would be achieved by injection through closely-spaced injection points (approximately 300 to 400 on 10-foot centers) at high injection pressures in the treatment area to increase the probability that the BOS 100® solution would contact the targeted COCs. The process of injecting BOS 100® via injection methods would require the implementation of a HASP. Implementation of the HASP would prevent exposure to chemicals during the application.

Administrative feasibility: Implementation of Alternative 4 requires no excessive coordination with state and local agencies other than obtaining a UIC permit, as previously mentioned. This alternative also requires licensed drillers and private utility location contractors. A specialized contractor skilled in the application and injection of the product is also anticipated to be required.

Availability of services and materials: Vendors and contractors for BOS 100® are available to supply the materials and needed subcontractor for application of the product. Availability and scheduling of equipment and supplies would not be anticipated to pose problems.

5.1.4.8 *Cost*

The present worth (as an opinion of probable costs) for this alternative is estimated to be $1,428,000. Details of the probable cost and key assumptions are included in **Table 5**.

5.1.5 Remedial Alternative 5 – In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA and ICs

5.1.5.1 *Description*

In Situ Chemical Oxidation (ISCO) would be achieved by using a reagent called PersulfOx®. This product destroys organic contaminants found in groundwater and soil through powerful, yet controlled, abiotic chemical reactions. A sodium persulfate-based technology, PersulfOx® employs a patented catalyst to enhance the oxidative destruction of chlorinated contaminants in the subsurface.

Typically, sodium persulfate is activated with the addition of heat, chelated metals, hydrogen peroxide, or a base in order to generate sulfate radicals. These activation processes are inherently complex, costly and can pose additional health and safety risks. In comparison, PersulfOx® is a relatively safe and easy-to-use ISCO agent with a built-in catalyst that activates the persulfate component, generating contaminant-destroying free radicals without the need for the addition of a separate activator. The PersulfOx® is used to treat areas with very high chlorinated VOC detections.

Prior to implementing this alternative as a full-scale operation, it is envisioned that a pilot study would be conducted in the area of the PCE plume with the highest concentrations in between monitoring wells MW-7 and MW-8. Approximately 50 injection points would be used to introduce the product to the subsurface in two-foot intervals between 35 and 55 feet bgs within the groundwater in the upper regolith. Upon completion of the pilot study, if it is determined that reductions in concentrations were achieved, then a full-scale application of ISCO would be considered. It is anticipated a pilot study could be completed within a 6 to 12 month timeframe, when taking into account confirmatory and follow-up groundwater sampling. A full-scale installation would include an additional 250 to 350 injection points in the locations with the highest detected concentrations of PCE near the steel sump area and beneath the cardboard storage room. Soil data would be used to determine the location, depth, and number of injections to address the highest concentrations of soil contaminants. Additional injection points would be placed throughout the proposed treatment area in the vicinity of wells MW-3, MW-5, MW-5D, MW-6, MW-7, MW-8, MW-10R, MW-10I, MW-10D, MW-12, MW-16 and MW-16D. As described above, the PersulfOx® would be introduced in two foot intervals between 35 and 55 feet within the groundwater in the upper regolith. Some injections would be slightly deeper, approximately to 80 feet, in the vicinity of wells MW-10I and MW-12. Due to the nature of in-situ applications, in order to achieve RGs at the Site, more than one injection event may be required.

The treatment area associated with this alternative is shown on **Figure 16.**

MNA would be used to address the residual constituents in areas beyond the influence of the ISCO application. As part of post-application monitoring and MNA, groundwater monitoring would be performed to evaluate if natural processes are enhancing attenuation of the residual dissolved COCs. For the purpose of costing, it is estimated that 28 monitoring wells would be sampled semi-annually in year one and annually from years two through 10 for VOCs. All wells would be sampled for various geochemical parameters (e.g., dissolved gases, electron acceptors, etc.) at each event. In addition, field parameters such as DO, ORP, pH, temperature, and conductivity would be measured at each sampled well during the monitoring events.

It is anticipated that MNA would continue annually for another 9 years after the completion of the full-scale ISCO injection event. At that time, RGs should be met. For the purpose of this evaluation, the project life of this alternative is estimated to be 15 years.

5.1.5.2 *Overall Protection of Human Health and the Environment*

Alternative 5 is expected to be protective of human health and the environment. Using ISCO in the treatment area is expected to reduce concentrations of PCE and its degradation products. Natural attenuation processes are expected to remediate any remaining untreated (residual) impacts in groundwater. ICs would continue to be implemented to restrict usage of impacted groundwater until RGs are met.

5.1.5.3 *Compliance with Applicable or Relevant and Appropriate Requirements*

Chemical-specific: This alternative is expected to result in COCs in groundwater meeting RGs within 10 years.

Location-specific: No location-specific ARARs were identified for this alternative.

Action-specific: A UIC permit from the SCDHEC UIC Section would be required for this alternative.

5.1.5.4 *Long-term Effectiveness and Permanence*

Magnitude of residual risk: Alternative 5 involves a combination of active and passive remedies. Areas containing residual COCs in groundwater that are not directly affected by the ISCO application are expected to attenuate through natural degradative processes. ISCO treatment has been demonstrated to be an effective remedial technique in sites with similar lithology and contaminants as the Site.

Adequacy and reliability of controls: Treatment of impacted groundwater with ISCO would be an effective method of treating COCs in groundwater and reducing impacts to the environment. Existing risks associated with untreated residuals in groundwater are expected to decline in the future due to natural attenuation processes. Groundwater use restrictions would continue until the groundwater RGs are achieved.

5.1.5.5 *Reduction of Toxicity, Mobility, or Volume*

The application of ISCO is expected to reduce toxicity, mobility, and volume of constituents in groundwater. In this process, contaminants are reduced to less harmful substances with the preferred goal being the innocuous endpoints ethene, carbon dioxide and water. Further, natural attenuation processes are expected to assist in reducing toxicity, mobility, and volume of constituents in groundwater.

5.1.5.6 *Short-term Effectiveness*

Implementation of Alternative 5 would involve routine groundwater sampling to monitor effectiveness. The areas proposed for ISCO treatment are easily accessible. This treatment process involves the handling of a strong oxidizer. Use of proper PPE and adhering to a site-specific HASP would provide adequate protection. This alternative would not impact the community or result in adverse environmental impacts. Long-term monitoring will be required to meet the groundwater RG.

5.1.5.7 *Implementability*

Technical feasibility: To be successful, oxidizers must achieve contact with the targeted COCs. This requirement is often difficult to achieve in dense silts and saprolite, which are present at the Site. Therefore, delivery of the ISCO product (PersulfOx®) would be achieved by injection through closely-spaced injection points (approximately 300 to 400 on 10-foot centers) at high injection pressures in the treatment area to increase the probability that the solution would contact the targeted COCs. The application process of PersulfOx® via injection methods would require the implementation of a HASP. Implementation of the HASP would prevent exposure to chemicals during the application.

5.1.5.8 *Cost*

The present worth (as an opinion of probable costs) for this alternative is estimated to be $1,378,000. Details of the probable cost and key assumptions are included in **Table 6.**

5.1.6 Remedial Alternative 6 – Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs

5.1.6.1 *Description*

This alternative would include a combination of excavation and disposal combined with In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs. This approach would treat impacted soil through excavation and disposal and groundwater would be treated using ISCO. Further description of each remedial method is described above in Alternatives 3 and 5.

The proposed treatment areas associated with this combined alternative are shown on **Figure 17**.

For the purpose of this evaluation, the project life of this combined alternative is estimated to be 10 years.

5.1.6.2 *Overall Protection of Human Health and the Environment*

Implementation of Alternative 6 would provide protection to human health and the environment by removing COCs that remain in the soil, thus drastically reducing the leaching of COCs into groundwater. In addition to the excavation (soil removal), use of ISCO in the treatment area is expected to reduce concentrations of PCE and its degradation products. Natural attenuation processes are expected to remediate any remaining untreated (residual) impacts in groundwater. ICs would continue to be implemented to restrict usage of impacted groundwater until RGs are met.

5.1.6.3 *Compliance with Applicable or Relevant and Appropriate Requirements*

Chemical-specific: This combined alternative is expected to result in COC concentrations in groundwater meeting RGs in the treatment area within 10 years.

Location-specific: No location-specific ARARs were identified for this combined alternative.

Action-specific: While the anticipated disturbed area of this alternative would be less than one-acre, it is anticipated that a Land Disturbance Permit (LDP), or at least an erosion control plan consistent with SCDHEC requirements for a LDP, would be required to be developed to be protective of any runoff that could potentially drain off-site. In addition, a UIC permit from the SCDHEC UIC Section would be required for this alternative.

5.1.6.4 *Long-term Effectiveness and Permanence*

Magnitude of residual risk: Alternative 6 involves a combination of active and passive remedies. Minimal long-term residuals are expected to persist in the active treatment area while MNA is expected to assist in meeting RGs in the untreated areas. The documented biodegradation and natural attenuation processes that are occurring should transform the remaining dissolved phase concentrations into innocuous daughter products. Since this alternative would leave COCs in the groundwater at concentrations exceeding MCLs for an extended period of time, 5-year remedy reviews would need to be completed to ensure that the selected remedy continued to provide adequate protection to human health and the environment. Areas containing residual COCs in groundwater that are not directly affected by the ISCO application are expected to attenuate through natural degradative processes. ISCO treatment has been demonstrated to be an effective remedial technique in sites with similar lithology and contaminants as the Site.

Adequacy and reliability of controls: Removal of impacted soils and the treatment of impacted groundwater with ISCO would be an effective method of treating COCs in groundwater and reducing impacts to the environment. Existing risks associated with untreated residuals in groundwater are expected to decline in the future due to natural attenuation processes. Groundwater use restrictions would continue until the groundwater RGs are achieved.

5.1.6.5 *Reduction of Toxicity, Mobility, or Volume*

This alternative is expected to primarily reduce the toxicity, mobility and volume of COCs in the groundwater. The excavation of presumed residual source material would remove mass that may currently be slowly released into the underlying groundwater. This process would ultimately reduce the mass/volume of COCs. In combination

with ISCO, contaminants are reduced to less harmful substances with the preferred goal being the innocuous endpoints ethene, carbon dioxide and water. Further, natural attenuation processes are expected to assist in reducing toxicity, mobility, and volume of constituents in groundwater.

5.1.6.6 *Short-term Effectiveness*

Implementation of Alternative 6 would involve a temporary disturbance of the Site. Once the excavated material is removed it is anticipated that groundwater concentrations in the immediate area would start decreasing at a rapid rate. ISCO would be used in combination to treat groundwater and would involve routine groundwater sampling to monitor effectiveness. The areas proposed for ISCO treatment are easily accessible. The ISCO treatment process involves the handling of a strong oxidizer. Use of proper PPE and adhering to a site-specific HASP would provide adequate protection. This alternative would not impact the community or result in adverse environmental impacts. Long-term monitoring will be required to meet the groundwater RGs.

5.1.6.7 *Implementability*

Technical feasibility: Excavation, transportation and disposal has been successfully used to remediate similar sites in similar geologic settings. The construction activities required to perform the anticipated scope are commonly implemented and there are ample experienced contractors in the area to perform the work. As previously described, the soil located beneath the cardboard storage room has the highest detected concentrations of PCE in the soil at the Site. These detections are at depths beyond those of a typical excavation (i.e. greater than 20 feet). The cardboard storage room was added on to the main building in approximately 1987. Therefore, excavation of soils in this area would require the removal of the cardboard storage room. In combination with the excavation, ISCO would be used to treat groundwater. In order to be successful, oxidizers must achieve contact with the targeted COCs. This requirement is often difficult to achieve in dense silts and saprolite, which are present at the Site. Therefore, delivery of the ISCO product (PersulfOx®) would be achieved by injection through closely-spaced injection points (approximately 300 to 400 on 10-foot centers) at high injection pressures in the treatment area to increase the probability that the solution would contact the targeted COCs. Excavation activities and the application process of PersulfOx® via injection methods would require the implementation of a HASP. Implementation of the HASP would mitigate hazards associated with excavation work and prevent exposure to chemicals during application of ISCO.

Administrative feasibility: Implementation of Alternative 6 requires no excessive coordination with state and local agencies. This alternative requires environmental construction contractors, a certified hazardous waste disposal contractor and an analytical laboratory contractor. Wastes would be profiled and reviewed for acceptance by the selected landfill facility prior to shipment. In addition, an environmental contractor experienced in the application and injection of ISCO would be anticipated to be needed. Availability of services and materials: Vendors and contractors are available to perform excavation and disposal and ISCO injection activities. Availability and scheduling of equipment and supplies would not be anticipated to pose problems.

5.1.6.8 *Cost*

The present worth (as an opinion of probable costs) for this alternative is estimated to be $3,693,000. Details of the probable cost and key assumptions are included in **Table 7**.

6 Comparative Evaluation of Remedial Alternatives

This section presents a comparative analysis of the remedial alternatives according to the CERCLA evaluation criteria (USEPA, 1988). This analysis is the second stage of the detailed evaluation process and provides information that forms the basis for selecting a preferred remedy. The analysis of similarities and differences among alternatives is presented to highlight significant differences. A summary of the comparative analysis is presented on **Table 8**.

6.1 Overall Protection of Human Health and the Environment

The 6 alternatives provide varying levels of human health protection. Alternative 1, no action, does not achieve the RAOs and provides the least protection of all the alternatives; it provides no reduction in risks to human health and the environment because no measures would be implemented to eliminate potential pathways for human exposure to COCs in groundwater or soil.

All five remaining alternatives protect human health and the environment as long as appropriate measures are implemented (i.e., ICs) to prevent exposure to COCs from groundwater and soil until the RGs are met. Alternative 2 would rely upon the implementation of annual groundwater sampling with the addition of a MNA program in combination with ICs. Alternative 3 relies upon a physical process to either remove mass or to reduce the mobility of current mass and the propensity of that mass to leach into the groundwater. Alternatives 4 and 5 use chemical processes to convert mass of COCs into innocuous compounds. And finally, alternative 6 would use a combination of physical and chemical processes.

6.2 Compliance with Applicable of Relevant and Appropriate Requirements

Alternative 1 (No Action) - Does not comply with chemical-specific ARARs for groundwater because no remedial measures would be implemented.

All remaining treatment alternatives (Alternatives 2-6) are active, and they are expected to improve the groundwater quality to meet the chemical-specific ARARs. The active alternatives would require different time frames to achieve the RGs.

Alternative 2 (MNA and ICs) – Implements an annual monitoring plan with the addition of a MNA program. This process is anticipated to take a comparatively long time (i.e., 50 years or more). However, it is expected to eventually meet the chemical and action-specific ARARs.

Alternative 3 (Excavation and Disposal with MNA/ICs) - Relies upon removal of mass contaminants. Although this alternative would remove significant amounts of mass contaminants from the soil, groundwater would not be addressed. Thus, the timeframe to achieve the RGs would be approximately 20 years.

Alternative 4 (In Situ Remediation using BOS 100® with MNA/ICs) and Alternative 5 (ISCO using PersulfOx® with MNA/ICs) - Comply with the chemical-specific ARARs for groundwater because they would convert the current existing mass into innocuous compounds and would eventually result in groundwater concentrations that are less than RGs. This would likely occur in 15 years.

Alternative 6 (Excavation and Disposal combined with ISCO using PersulfOx® with MNA/ICs) – Relies upon removal of mass contaminants in soil along with the combination of treating groundwater. This would comply with the chemical-specific ARARs for groundwater because they would convert the current existing mass into innocuous compounds and would eventually result in groundwater concentrations that are less than RGs. In addition, mass contaminants removed from the soil would no longer leach into the groundwater. Achieving RGs with this alternative would likely occur in 10 years.

All of the active treatment alternatives would comply with the location-specific and action-specific ARARs.

6.3 Long-term Effectiveness and Permanence

Alternative 1 would be the least effective and permanent in the long term because no COC removal or treatment would take place. No measures would be implemented to control exposure to risks posed by affected groundwater or the potential for groundwater to migrate to downgradient receptors.

Alternative 2 would be more effective than No Action and the implementation of ICs since it provides additional risk mitigation through periodic verification that the assumptions made in the performance of the risk evaluation are still salient.

Residual risk for the remaining active alternatives is expected to be minimal as long as the integrity of institutional and engineered controls is maintained.

Alternative 3 only addresses the removal of mass contaminants from soil and not directly from groundwater. Over time, the removal of contaminants from soil would eliminate leaching into the underlying groundwater. However, significant groundwater concentrations currently detected would require long-term management until the Site RAOs are achieved.

Alternatives 4 and 5 also run the recurring risk of COC rebound in groundwater either by ineffective contact with the amendments, COC mass heterogeneities, or through alteration of the groundwater geochemistry, and mobilization of additional COC mass. These two alternatives (Alternatives 4 and 5) would require management, approximately 15 years each, until RAOs are achieved.

Alternative 6 also runs the recurring risk of COC rebound in groundwater either by ineffective contact with the amendments, COC mass heterogeneities, or through alteration of the groundwater geochemistry, and mobilization of additional COC mass. However, the risk of rebound should be less as mass contaminants in soil will no longer be present to leach into the groundwater. This alternative would require management, approximately 10 years, until RAOs are achieved.

6.4 Reduction in Toxicity, Mobility, and Volume

Alternatives 1and 2 do not employ treatment of groundwater and would not result in a reduction of toxicity, mobility, or volume of COCs, other than that which occurs naturally.

The remaining alternatives are expected to reduce toxicity, mobility, and volume through removal, immobilization and/or in situ treatment. Alternative 2 provides documentation of reductions in toxicity and volume via the performance of annual groundwater sampling and MNA.

Alternative 3 provides a reduction of mass volume through a reduction in overall toxicity. Alternatives 4 and 5 reduce both the volume and toxicity of COCs by degrading the COCs to innocuous compounds. Alternative 6 provides a reduction of mass volume through a reduction in overall toxicity combined with reducing both the volume and toxicity of COCs by degrading the COCs to innocuous compounds. As with any remedial alternative, there is always the possibility for contaminant concentrations to rebound based on a variety of different reasons.

6.5 Short-term Effectiveness

Risk to workers during implementation of the active remedial alternatives includes exposure to COCs contained in the soil or the dissolved phase plume and/or the vapor phase; however, this risk would be minimized when proper health and safety procedures are used. Each of the active alternatives present on-site physical risks due to the use of vehicles and/or heavy equipment. Proper safety measures are required to ensure potential chemical hazards associated with the use of BOS 100® for Alternative 4 and PersulfOx® for Alternatives 5 and 6. Engineering controls would minimize exposure to COCs. MNA would be required for all active alternatives to demonstrate meeting groundwater RGs.

6.6 Implementability

Administratively, all the action alternatives are implementable.

The five active alternatives (Alternatives 2 through 6) are all technically implementable with varying degrees of difficulty. In the order of most appropriate alternative for the Site based on the evaluation criterion presented above, the Alternatives are ranked: Alternative 6, Alternative 5, Alternative 4, Alternative 3 and Alternative 2. Each of the alternatives discussed are common applications, have been historically used in the environmental industry, and have specifically been used at sites contaminated with chlorinated solvents.

6.7 Costs

The following table presents the probable range of costs for each alternative:

Alternative	Estimated Cost
1. No Action	No cost
2. Monitored Natural Attenuation and ICs	$610,000
3. Excavation and Disposal with MNA/ICs	$2,868,000
4. In Situ Remediation using BOS 100® with MNA/ICs	$1,428,000
5. In Situ Chemical Oxidation (ISCO) using PersulfOx® with MNA/ICs	$1,378,000
6. Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) using PersulfOx® MNA/ICs	$3,693,000

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Tables

Table 1
Groundwater Analytical Results
Current (April 2019) 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	2/7/2017	4/10/2019	4/19/2012	8/23/2012	6/4/2014	7/28/2015	2/7/2017	4/9/2019	4/19/2012	8/23/2012	6/4/2014	7/29/2015	4/10/2019	4/19/2012	8/23/2012	6/5/2014	7/29/2015	4/10/2019
Volatile Organic Compounds (EPA Method 8260)																								
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Benzene	5	5	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	**8.2**	<5.0	<5.0	**0.54 J**	<5.0	<1.0	**12**	**15.1**	**17 J**	**10 J**	**7.5**	<5.0	<5.0	<5.0	<5.0	<1.0
Bromodichloromethane	80	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<10.0	<25.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0
2-Butanone (MEK)	NSL	NSL	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	***30***	<20.0	***33 J***	<50.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0
Chloroform	80	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<10.0	<25.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0
1,2-Dichloroethane	5	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	**1.2 J**	**1.2 J**	<5.0	<1.0	<5.0	<10.0	<25.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0
cis-1,2-Dichloroethene	70	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	**280**	**389**	**440**	**280**	**230**	<5.0	<5.0	**0.39 J**	**0.23 J**	<1.0
1,2-Dichloropropane	5	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	**11**	<5.0	<5.0	<1.0	<5.0	<10.0	<25.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0
Ethylbenzene	700	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	**11**	<10.0	**16 J**	**6.9 J**	**14**	<5.0	<5.0	<5.0	<5.0	<1.0
2-Hexanone	NSL	NSL	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	***11***	<20.0	***10 J***	***4.6 J***	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0
Isopropylbenzene	NSL	NSL	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	***0.52J***	<5.0	**1.7**	***9.5***	***19.5***	***26***	***17 J***	**19**	<5.0	<5.0	<5.0	<5.0	<1.0
4-Methyl-2-pentanone	NSL	NSL	<10.0	<10.0	<10.0	<10.0	<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***	<50.0	<10.0	<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	<5.0	<5.0	<5.0	<5.0	<10.0	***5.1 J***	***4.5 J***	**3.2 J**	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5	NSL	<5.0	<5.0	**0.80 J**	**7.7**	<5.0	**0.42 J**	<5.0	<5.0	**0.86 J**	**1.1J**	<5.0	**5.2**	**50**	<10.0	**21 J**	**13 J**	**63**	<5.0	<5.0	**2.4 J**	**3.0 J**	**14**
Trichloroethene	5	NSL	<5.0	<5.0	<5.0	<5.0	**14**	<1.0	<5.0	<5.0	<5.0	<5.0	**17**	<1.0	**43**	<10.0	<25.0	**0.81 J**	**2.5 J**	**5.8**	<5.0	<5.0	<5.0	<1.0
Vinyl Chloride	2	NSL	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<4.0	<10.0	<10.0	<5.0	<2.0	<2.0	**0.42 J**	<2.0	**0.42 J**
Xylenes (total)	10,000	10,000	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	**10**	<5.0	<5.0	**3.4 J**	<5.0	**15**	**41**	**41.5**	**110**	**56**	**91**	<5.0	<5.0	<5.0	<5.0	<1.0
Nitrate (EPA Method 9056A)																								
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Nitrate	10	NSL	NA	NA	NA	NA	NA	1.8	NA	NA	NA	NA	NA	2.6	NA	NA	NA	NA	<0.020	NA	NA	NA	NA	<0.020
Sulfate (EPA Method 9056A)																								
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Sulfate	250	NSL	NA	NA	NA	NA	NA	0.35 J	NA	NA	NA	NA	NA	0.41 J	NA	NA	NA	NA	4.7	NA	NA	NA	NA	2.2
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																								
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Benzo(a)anthracene	NSL	10	NA	NA	<0.20	NA	NA	NA	NA	NA	**0.042 J**	NA	NA	NA	NA	NA	<100	<40.0	NA	NA	NA	NA	<0.20	NA	NA
Benzo(a)pyrene	0.20	NSL	NA	NA	<0.20	NA	NA	NA	NA	NA	**0.050 J**	NA	NA	NA	NA	NA	<100	<40.0	NA	NA	NA	NA	<0.20	NA	NA
Benzo(b)fluoranthene	NSL	10	NA	NA	<0.20	NA	NA	NA	NA	NA	**0.11 J**	NA	NA	NA	NA	NA	<100	<40.0	NA	NA	NA	NA	<0.20	NA	NA
Chrysene	NSL	10	NA	NA	<0.20	NA	NA	NA	NA	NA	**0.077 J**	NA	NA	NA	NA	NA	<100	<40.0	NA	NA	NA	NA	<0.20	NA	NA
Fluoranthene	NSL	NSL	NA	NA	<0.20	NA	NA	NA	NA	NA	***0.15 J***	NA	NA	NA	NA	NA	<100	<40.0	NA	NA	NA	NA	<0.20	NA	NA
Fluorene	NSL	NSL	NA	NA	<0.20	NA	NA	NA	NA	NA	***0.063 J***	NA	NA	NA	NA	NA	<100	<40.0	NA	NA	NA	NA	***0.028 J***	NA	NA
Naphthalene	NSL	25	NA	NA	<0.20	NA	NA	NA	NA	NA	**1.1**	NA	NA	NA	NA	NA	**200**	**190**	NA	NA	NA	NA	**0.14 J**	NA	NA
Phenathrene	NSL	NSL	NA	NA	<0.20	NA	NA	NA	NA	NA	***0.15 J***	NA	NA	NA	NA	NA	<100	<40.0	NA	NA	NA	NA	<0.20	NA	NA
Pyrene	NSL	NSL	NA	NA	<0.20	NA	NA	NA	NA	NA	***0.13 J***	NA	NA	NA	NA	NA	<100	<40.0	NA	NA	NA	NA	<0.20	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 (November 2018).
5. All VOC and PAH concentrations are in micrograms per liter (ug/L).
6. All sulfate and nitrate concentrations are in millligrams per liter (mg/l)
7. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected in any of the samples.
8. A bold value indicates a detected concentration.
9. A bold and highlighted value indicates a detected concentration which exceeds the MCL or RBSL.
10. NSL = No Screening Level Listed.
11. A bold and italicized value indicates detected value with no established MCL or RBSL.
12. NA = Not analyzed or not applicable
13. J - Estimated Value
14. < - Indicates less than

Table 1
Groundwater Analytical Results
Current (April 2019) 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	4/10/2019	6/5/2014	7/28/2015	2/8/2017	4/10/2019	4/19/2012	8/23/2012	6/4/2014	7/29/2015	2/7/2017	4/10/2019	4/20/2012	8/23/2012	6/4/2014	7/29/2015	2/8/2017	4/10/2019
Volatile Organic Compounds (EPA Method 8260)																							
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Benzene	5	5	<100	<200	<250	<250	<50.0	<5.0	**0.27 J**	<5.0	<1.0	<1,000	<500	<1,000	<1,000	<500	<100	<500	<4,000	<5,000	<10,000	<5,000	<2,000
Bromodichloromethane	80	NSL	<100	<200	<250	<250	<50.0	<5.0	<5.0	<5.0	<1.0	<1,000	<500	<1,000	<1,000	<500	<100	<500	<4,000	<5,000	<10,000	<5,000	<2,000
2-Butanone (MEK)	NSL	NSL	<200	<400	<500	<500	<500	<10.0	<10.0	<10.0	<10.0	<2,000	<1,000	<2,000	<2,000	<1,000	<1,000	<1,000	<8,000	<10,000	<20,000	<10,000	<20,000
Chloroform	80	NSL	<100	<200	<250	<250	<50.0	<5.0	<5.0	<5.0	<1.0	<1,000	<500	<1,000	<1,000	<500	<100	<500	<4,000	<5,000	<10,000	<5,000	<2,000
1,2-Dichloroethane	5	NSL	<100	<200	<250	<250	<50.0	<5.0	<5.0	<5.0	<1.0	<1,000	<500	<1,000	<1,000	<500	<100	<500	<4,000	<5,000	<10,000	<5,000	<2,000
cis-1,2-Dichloroethene	70	NSL	<100	<200	**46 J**	**15 J**	<50.0	<5.0	**130**	**88**	**170**	<1,000	<500	<1,000	<1,000	<500	<100	<500	<4,000	<5,000	<10,000	<5,000	<2,000
1,2-Dichloropropane	5	NSL	<100	<200	<250	<250	<50.0	<5.0	<5.0	<5.0	<1.0	<1,000	<500	<1,000	<1,000	<500	<100	<500	<4,000	<5,000	<10,000	<5,000	<2,000
Ethylbenzene	700	NSL	<100	<200	<250	<250	<50.0	<5.0	<5.0	<5.0	<1.0	<1,000	<500	<1,000	<1,000	<500	<100	<500	<4,000	<5,000	<10,000	<5,000	<2,000
2-Hexanone	NSL	NSL	<200	<400	<500	<500	<500	<10.0	<10.0	<10.0	<10.0	<2,000	<1,000	<2,000	<2,000	<1,000	<1,000	<1,000	<8,000	<10,000	<20,000	<10,000	<20,000
Isopropylbenzene	NSL	NSL	<100	<200	<250	<250	<50.0	<5.0	<5.0	<5.0	<1.0	<1,000	<500	<1,000	<1,000	<500	<100	<500	<4,000	<5,000	<10,000	<5,000	<2,000
4-Methyl-2-pentanone	NSL	NSL	<100	<400	<500	<500	<500	<10.0	<10.0	<10.0	<10.0	<2,000	<1,000	<2,000	<2,000	<1,000	<1,000	<1,000	<8,000	<10,000	<20,000	<10,000	<20,000
Methylcyclohexane	NSL	NSL	<100	<200	<250	<250	<250	<5.0	<5.0	<5.0	<5.0	<1,000	<500	<1,000	<1,000	<500	<500	<500	<4,000	<5,000	<10,000	<5,000	<10,00
Tetrachloroethene	5	NSL	**3,900**	**4,290**	**3,700**	**4,000**	**2700**	**190**	**0.96 J**	<5.0	**21**	**12,000**	**14,400**	**14,000**	**9,600**	**8,700**	**4,300**	**7,000**	**56,900**	**97,000**	**100,000**	**91,000**	**95,000**
Trichloroethene	5	NSL	<100	<200	**15 J**	**10 J**	<50.0	**0.56 J**	**0.22 J**	<5.0	**2.4**	<1,000	<500	<1,000	<1,000	<500	<100	<500	<4,000	<5,000	<10,000	<5,000	<2,000
Vinyl Chloride	2	NSL	<40.0	<80.0	**38 J**	<100	<50.0	<2.0	<2.0	<2.0	<1.0	<400	<200	<400	<400	<200	<100	<200	<1,600	<2,000	<4,000	<2,000	<2,000
Xylenes (total)	10,000	10,000	<100	<200	<250	<250	<50.0	<5.0	<5.0	<5.0	<1.0	<1,000	<500	<1,000	<1,000	<500	<100	<500	<4,000	<5,000	<10,000	<5,000	<2,000
Nitrate (EPA Method 352.1)																							
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Nitrate	10	NSL	NA	NA	NA	NA	2.0	NA	NA	NA	<0.020	NA	NA	NA	NA	NA	0.38	NA	NA	NA	NA	NA	1.3
Sulfate (EPA Method 375.2)																							
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Sulfate	250	NSL	NA	NA	NA	NA	2.8	NA	NA	NA	0.49 J	NA	NA	NA	NA	NA	0.20 J	NA	NA	NA	NA	NA	0.32 J
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																							
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Benzo(a)anthracene	NSL	10	NA	NA	<0.20	NA	NA	<0.20	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	0.20	NSL	NA	NA	<0.20	NA	NA	<0.20	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NSL	10	NA	NA	<0.20	NA	NA	<0.20	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NSL	10	NA	NA	<0.20	NA	NA	<0.20	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NSL	NSL	NA	NA	<0.20	NA	NA	<0.20	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NSL	NSL	NA	NA	<0.20	NA	NA	<0.20	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NSL	25	NA	NA	<0.20	NA	NA	**0.10 J**	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenathrene	NSL	NSL	NA	NA	<0.20	NA	NA	<0.20	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NSL	NSL	NA	NA	<0.20	NA	NA	<0.20	NA	NA	NA	NA	NA	<0.20	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 (November 2018).
5. All VOC and PAH concentrations are in micrograms per liter (ug/L).
6. All sulfate and nitrate concentrations are in millligrams per liter (mg/l)
7. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected in any of the samples.
8. A bold value indicates a detected concentration.
9. A bold and highlighted value indicates a detected concentration which exceeds the MCL or RBSL.
10. NSL = No Screening Level Listed.
11. A bold and italicized value indicates detected value with no established MCL or RBSL.
12. NA = Not analyzed or not applicable
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Table 1
Groundwater Analytical Results
Current (April 2019) 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	4/9/2019	4/19/2012	8/23/2012	6/4/2014	7/28/2015	2/8/2017	4/9/2019	6/4/2014	7/28/2015	4/9/2019	4/19/2012	8/23/2012	6/4/2014
Volatile Organic Compounds (EPA Method 8260)																			
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Benzene	5	5	<2,000	<1,000	<2500	<2500	<500	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<500	<500	<5.0
Bromodichloromethane	80	NSL	<2,000	<1,000	<2500	<2500	<500	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<500	<500	<5.0
2-Butanone (MEK)	NSL	NSL	<4,000	<2,000	<5000	<5000	<5000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	<1,000	<10.0
Chloroform	80	NSL	<2,000	<1,000	<2500	<2500	<500	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	**1.8 J**	<5.0	<1.0	<500	<500	<5.0
1,2-Dichloroethane	5	NSL	<2,000	<1,000	<2500	<2500	<500	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<500	<500	<5.0
cis-1,2-Dichloroethene	70	NSL	<2,000	<1,000	<2500	<2500	<500	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	**0.26 J**	<5.0	<1.0	<500	<500	**0.46 J**
1,2-Dichloropropane	5	NSL	<2,000	<1,000	<2500	<2500	<500	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<500	<500	<5.0
Ethylbenzene	700	NSL	<2,000	<1,000	<2500	<2500	<500	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<500	<500	<5.0
2-Hexanone	NSL	NSL	<4,000	<2,000	<5000	<5000	<5000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	<1,000	<10.0
Isopropylbenzene	NSL	NSL	<2,000	<1,000	<2500	<2500	<500	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<500	<500	<5.0
4-Methyl-2-pentanone	NSL	NSL	<4,000	<2,000	<5000	<5000	<5000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	<1,000	<10.0
Methylcyclohexane	NSL	NSL	<2,000	<1,000	<2500	<2500	<2500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<500	<5.0
Tetrachloroethene	5	NSL	**19,000**	**25,200**	**21,000**	**20,000**	**18,000**	**10**	<5.0	**1.4 J**	**1.8 J**	<5.0	**7.2**	<5.0	**0.73 J**	**15**	**12,000**	**15,200**	**1,500**
Trichloroethene	5	NSL	<2,000	<1,000	<2500	<2500	<500	**54**	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<500	<500	**1.3 J**
Vinyl Chloride	2	NSL	<800	<400	<1000	<1000	<500	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<2.0	<1.0	<200	<200	<2.0
Xylenes (total)	10,000	10,000	<2,000	<1,000	<2,500	<2,500	<500	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<500	<500	<5.0
Nitrate (EPA Method 352.1)																			
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Nitrate	10	NSL	NA	NA	NA	NA	1.0	NA	NA	NA	NA	NA	0.85	NA	NA	0.12	NA	NA	NA
Sulfate (EPA Method 375.2)																			
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Sulfate	250	NSL	NA	NA	NA	NA	0.57 J	NA	NA	NA	NA	NA	0.52 J	NA	NA	3.4	NA	NA	NA
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																			
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Benzo(a)anthracene	NSL	10	NA	NA	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	NA	NA
Benzo(b)fluoranthene	NSL	10	NA	NA	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	NA	NA
Fluoranthene	NSL	NSL	NA	NA	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	NA	NA
Naphthalene	NSL	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenathrene	NSL	NSL	NA	NA	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	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 (November 2018).
5. All VOC and PAH concentrations are in micrograms per liter (ug/L).
6. All sulfate and nitrate concentrations are in millligrams per liter (mg/l)
7. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected in any of the samples.
8. A bold value indicates a detected concentration.
9. A bold and highlighted value indicates a detected concentration which exceeds the MCL or RBSL.
10. NSL = No Screening Level Listed.
11. A bold and italicized value indicates detected value with no established MCL or RBSL.
12. NA = Not analyzed or not applicable
13. J - Estimated Value
14. < - Indicates less than

Table 1
Groundwater Analytical Results
Current (April 2019) and Historical

Itron, Inc.
Greenwood, South Carolina

Compounds	MCLs	RBSLs	Monitoring Wells																					
			MW-10R			MW-10I			MW-10D			MW-11						MW-12				MW-13		
			7/28/2015	2/7/2017	4/9/2019	7/28/2015	2/7/2017	4/9/2019	6/4/2014	7/28/2015	4/9/2019	4/19/2012	8/23/2012	6/4/2014	7/29/2015	2/8/2017	4/9/2019	6/5/2014	7/29/2015	2/8/2017	4/10/2019	6/5/2014	7/28/2015	4/11/2019
Volatile Organic Compounds (EPA Method 8260)																								
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Benzene	5	5	<100	<500	<100	<1,000	<1,000	<200	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<250	<250	<500	<50	<5.0	<5.0	<1.0
Bromodichloromethane	80	NSL	<100	<500	<100	<1,000	<1,000	<200	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<250	<250	<500	<50	<5.0	<5.0	<1.0
2-Butanone (MEK)	NSL	NSL	<200	<1,000	<1,000	<2,000	<2,000	<2,000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<500	<500	<1,000	<500	<10.0	<10.0	<10.0
Chloroform	80	NSL	**5.8 J**	<500	<100	<1,000	<1,000	<200	**2.5 J**	**0.48 J**	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<250	<250	<500	<50	**2.8 J**	<5.0	**1.8**
1,2-Dichloroethane	5	NSL	<100	<500	<100	<1,000	<1,000	<200	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<250	<250	<500	<50	<5.0	<5.0	<1.0
cis-1,2-Dichloroethene	70	NSL	<100	<500	<100	<1,000	<1,000	<200	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<250	<250	<500	<50	<5.0	<5.0	<1.0
1,2-Dichloropropane	5	NSL	<100	<500	<100	<1,000	<1,000	<200	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<250	<250	<500	<50	<5.0	<5.0	<1.0
Ethylbenzene	700	NSL	<100	<500	<100	<1,000	<1,000	<200	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<250	<250	<500	<50	<5.0	<5.0	<1.0
2-Hexanone	NSL	NSL	<200	<1,000	<1,000	<2,000	<2,000	<2,000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<500	<500	<1,000	<500	<10.0	<10.0	<10.0
Isopropylbenzene	NSL	NSL	<100	<500	<100	<1,000	<1,000	<200	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<250	<250	<500	<50	<5.0	<5.0	<1.0
4-Methyl-2-pentanone	NSL	NSL	<100	<1,000	<1,000	<2,000	<2,000	<2,000	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<500	<500	<1,000	<500	<10.0	<10.0	<10.0
Methylcyclohexane	NSL	NSL	<100	<500	<500	<1,000	<1,000	<1000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<250	<250	<500	<250	<5.0	<5.0	<5.0
Tetrachloroethene	5	NSL	**2,900**	**5,900**	**6,000**	**15,000**	**19,000**	**14,000**	**1.8 J**	**2.2 J**	**3**	<5.0	<5.0	**37**	**2.8 J**	<5.0	**2.7**	**4,500**	**4,800**	**6,300**	**4,400**	**0.82 J**	<5.0	<1.0
Trichloroethene	5	NSL	**5.1 J**	<500	<100	<1,000	<1,000	<200	<5.0	<5.0	<1.0	**5.2**	<5.0	<5.0	<5.0	<5.0	<1.0	<250	<250	<500	<50	<5.0	<5.0	<1.0
Vinyl Chloride	2	NSL	<40.0	<200	<100	<400	<400	<200	<2.0	<2.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<100	<100	<200	<50	<2.0	<2.0	<1.0
Xylenes (total)	10,000	10,000	<100	<500	<100	<1,000	<1,000	<200	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<500	<500	<500	<50	<5.0	<5.0	<1.0
Nitrate (EPA Method 352.1)																								
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Nitrate	10	NSL	NA	NA	0.87	NA	NA	1.5	NA	NA	0.77	NA	NA	NA	NA	NA	0.46	NA	NA	NA	1.7	NA	NA	0.58
Sulfate (EPA Method 375.2)																								
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Sulfate	250	NSL	NA	NA	0.26 J	NA	NA	0.56 J	NA	NA	6.5	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	0.30 J	NA	NA	0.23 J
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																								
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Benzo(a)anthracene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	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	<0.20	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	<0.20	NA	NA	NA	NA	NA	NA
Chrysene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA
Fluoranthene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA
Fluorene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA
Naphthalene	NSL	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.039 J**	NA	NA	NA	NA	NA	NA
Phenathrene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA
Pyrene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	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 (November 2018).
5. All VOC and PAH concentrations are in micrograms per liter (ug/L).
6. All sulfate and nitrate concentrations are in millligrams per liter (mg/l)
7. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected in any of the samples.
8. A bold value indicates a detected concentration.
9. A bold and highlighted value indicates a detected concentration which exceeds the MCL or RBSL.
10. NSL = No Screening Level Listed.
11. A bold and italicized value indicates detected value with no established MCL or RBSL.
12. NA = Not analyzed or not applicable
13. J - Estimated Value
14. < - Indicates less than

Table 1
Groundwater Analytical Results
Current (April 2019) 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				MW-18		
			6/4/2014	7/28/2015	4/9/2019	6/5/2014	7/28/2015	2/8/2017	4/10/2019	6/5/2014	7/28/2015	4/9/2019	6/4/2014	7/28/2015	4/9/2019	6/5/2014	7/28/2015	2/7/2017	4/10/2019	6/5/2014	7/28/2015	4/10/2019
Volatile Organic Compounds (EPA Method 8260)																						
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Benzene	5	5	<5.0	<25.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<25	<1.0	<5.0	<5.0	<1.0
Bromodichloromethane	80	NSL	<5.0	<25.0	<1.0	<5.0	**2.9 J**	<5.0	<1.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	**3.2 J**	<5.0	<25	<1.0	<5.0	<5.0	<1.0
2-Butanone (MEK)	NSL	NSL	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<100	<10.0	<10.0	<10.0	<10.0	<10.0	<50	<10.0	<10.0	<10.0	<10.0
Chloroform	80	NSL	**2.3 J**	<25.0	<1.0	**3.9 J**	**5.5**	<5.0	<1.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	**8.6**	<5.0	<25	<1.0	<5.0	<5.0	<1.0
1,2-Dichloroethane	5	NSL	<5.0	<25.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<25	<1.0	<5.0	<5.0	<1.0
cis-1,2-Dichloroethene	70	NSL	**0.24 J**	<25.0	**0.42 J**	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<25	<1.0	<5.0	<5.0	<1.0
1,2-Dichloropropane	5	NSL	<5.0	<25.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<25	<1.0	<5.0	<5.0	<1.0
Ethylbenzene	700	NSL	<5.0	<25.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<25	<1.0	<5.0	<5.0	<1.0
2-Hexanone	NSL	NSL	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<100	<10.0	<10.0	<10.0	<10.0	<10.0	<50	<10.0	<10.0	<10.0	<10.0
Isopropylbenzene	NSL	NSL	<5.0	<25.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<25	<1.0	<5.0	<5.0	<1.0
4-Methyl-2-pentanone	NSL	NSL	<10.0	<50.0	<10.0	<10.0	***0.84 J***	<10.0	<10.0	<10.0	<10.0	<100	<10.0	<10.0	<10.0	<10.0	<10.0	<50	<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	<50.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5	NSL	**78**	**150**	**170**	**0.60 J**	<5.0	<5.0	**1.8**	**160**	**110**	**780**	**18**	**30**	**18**	**75**	**690**	**380**	**190**	**0.78 J**	**0.90 J**	**0.51 J**
Trichloroethene	5	NSL	<5.0	<25.0	**0.84 J**	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	**0.79 J**	**8.3 J**	<25	**3.1**	<5.0	<5.0	<1.0
Vinyl Chloride	2	NSL	<2.0	<10.0	<1.0	<2.0	<2.0	<2.0	<1.0	<2.0	<2.0	<10.0	<2.0	<2.0	<1.0	<2.0	<2.0	<10	<1.0	<2.0	<2.0	<1.0
Xylenes (total)	10,000	10,000	<5.0	<25.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<25	<1.0	<5.0	<5.0	<1.0
Nitrate (EPA Method 352.1)																						
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Nitrate	10	NSL	NA	NA	0.62	NA	NA	NA	0.42	NA	NA	0.39	NA	NA	0.77	NA	NA	NA	1.9	NA	NA	2.4
Sulfate (EPA Method 375.2)																						
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Sulfate	250	NSL	NA	NA	<1.0	NA	NA	NA	<1.0	NA	NA	<1.0	NA	NA	0.25 J	NA	NA	NA	0.40 J	NA	NA	<1.0
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																						
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Benzo(a)anthracene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Benzo(a)pyrene	0.20	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Benzo(b)fluoranthene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Chrysene	NSL	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Fluoranthene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Fluorene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Naphthalene	NSL	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.033 J**	NA	NA	NA	**0.038 J**	NA	NA
Phenathrene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	***0.043 J***	NA	NA	NA	<0.20	NA	NA
Pyrene	NSL	NSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	<0.20	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 (November 2018).
5. All VOC and PAH concentrations are in micrograms per liter (ug/L).
6. All sulfate and nitrate concentrations are in millligrams per liter (mg/l)
7. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected in any of the samples.
8. A bold value indicates a detected concentration.
9. A bold and highlighted value indicates a detected concentration which exceeds the MCL or RBSL.
10. NSL = No Screening Level Listed.
11. A bold and italicized value indicates detected value with no established MCL or RBSL.
12. NA = Not analyzed or not applicable
13. J - Estimated Value
14. < - Indicates less than

Table 1
Groundwater Analytical Results
Current (April 2019) and Historical

Itron, Inc.
Greenwood, South Carolina

Compounds	MCLs	RBSLs	Monitoring Wells													
			MW-19			MW-20			MW-21			MW-22D			MW-23	
			7/28/2015	2/8/2017	4/10/2019	7/28/2015	2/8/2017	4/11/2019	7/29/2015	2/8/2017	4/9/2019	7/28/2015	2/8/2017	4/10/2019	2/7/2017	4/11/2019
Volatile Organic Compounds (EPA Method 8260)																
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Benzene	5	5	<5.0	<5.0	<1.0	<5.0	<50	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0
Bromodichloromethane	80	NSL	**0.27 J**	<5.0	<1.0	<5.0	<50	<5.0	<5.0	<5.0	<1.0	**0.31 J**	<5.0	<1.0	<5.0	<1.0
2-Butanone (MEK)	NSL	NSL	<10.0	<10.0	<10.0	<10.0	<100	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Chloroform	80	NSL	**0.77 J**	<5.0	<1.0	**2.9 J**	<50	<5.0	<5.0	<5.0	<1.0	**1.3 J**	<5.0	<1.0	<5.0	<1.0
1,2-Dichloroethane	5	NSL	<5.0	<5.0	<1.0	<5.0	<50	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0
cis-1,2-Dichloroethene	70	NSL	<5.0	<5.0	<1.0	**3.8 J**	<50	**2.2 J**	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0
1,2-Dichloropropane	5	NSL	<5.0	<5.0	<1.0	<5.0	<50	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0
Ethylbenzene	700	NSL	<5.0	<5.0	<1.0	<5.0	<50	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0
2-Hexanone	NSL	NSL	<10.0	<10.0	<10.0	<10.0	<100	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Isopropylbenzene	NSL	NSL	<5.0	<5.0	<1.0	<5.0	<50	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0
4-Methyl-2-pentanone	NSL	NSL	<10.0	<10.0	<10.0	<10.0	<100	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Methylcyclohexane	NSL	NSL	<5.0	<5.0	<5.0	<5.0	<50	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5	NSL	**1.2 J**	<5.0	**1.1**	**360**	**590**	**450**	**1.7 J**	**9.2**	**2.5**	<5.0	<5.0	**1.2**	<5.0	<1.0
Trichloroethene	5	NSL	<5.0	<5.0	<1.0	**4.3 J**	<50	**4.8 J**	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0
Vinyl Chloride	2	NSL	<2.0	<2.0	<1.0	<2.0	<20	<5.0	<2.0	<2.0	<1.0	<2.0	<2.0	<1.0	<2.0	<1.0
Xylenes (total)	10,000	10,000	<5.0	<5.0	<1.0	<5.0	<50	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0
Nitrate (EPA Method 352.1)																
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Nitrate	10	NSL	NA	NA	0.79	NA	NA	0.078	NA	NA	0.39	NA	NA	0.45	NA	0.18
Sulfate (EPA Method 375.2)																
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Sulfate	250	NSL	NA	NA	0.21 J	NA	NA	2.9	NA	NA	<1.0	NA	NA	1.4	NA	12
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Benzo(a)anthracene	NSL	10	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
Benzo(b)fluoranthene	NSL	10	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
Fluoranthene	NSL	NSL	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
Naphthalene	NSL	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenathrene	NSL	NSL	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

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 (November 2018).
5. All VOC and PAH concentrations are in micrograms per liter (ug/L).
6. All sulfate and nitrate concentrations are in millligrams per liter (mg/l)
7. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected in any of the samples.
8. A bold value indicates a detected concentration.
9. A bold and highlighted value indicates a detected concentration which exceeds the MCL or RBSL.
10. NSL = No Screening Level Listed.
11. A bold and italicized value indicates detected value with no established MCL or RBSL.
12. NA = Not analyzed or not applicable
13. J - Estimated Value
14. < - Indicates less than

Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet									
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3	SB-4	SB-4	SB-5	SB-5
					4-6'	20-22'	8-10'	14-16'	0-2'	8-10'	10-12'	18-20'	14-16'	18-20'
					1/10/2012	1/10/2012	1/10/2012	1/10/2012	1/11/2012	1/11/2012	1/11/2012	1/11/2012	1/11/2012	1/11/2012
Volatile Organic Compounds (EPA Method 8260)														
Acetone	NSL	6,100	67,000	NSL	<0.021	<0.028	<0.027	<0.023	0.024	0.24	<0.029	<0.033	0.038	0.062
Benzene	0.0026	1.2	5.1	0.007	<0.0052	<0.0071	<0.0069	<0.0059	<0.0056	<0.0065	<0.0072	<0.0082	<0.0061	<0.0064
Bromoform	0.021	19	86	NSL	<0.0052	<0.0071	<0.0069	<0.0059	<0.0056	<0.0065	<0.0072	<0.0082	<0.0061	<0.0064
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.0052	<0.0071	<0.0069	<0.0059	**0.13**	<0.0065	<0.0072	<0.0082	0.011	0.02
trans-1,2-Dichloroethene	0.031	160	2,300	NSL	<0.0052	<0.0071	<0.0069	<0.0059	0.008	<0.0065	<0.0072	<0.0082	<0.0061	<0.0064
1,1,2-Trichloroethane	0.0016	0.15	0.63	NSL	<0.0052	<0.0071	<0.0069	<0.0059	<0.0056	<0.0065	<0.0072	<0.0082	<0.0061	<0.0064
Cyclohexane	NSL	650	2,700	NSL	<0.0052	<0.0071	<0.0069	<0.0059	<0.0056	<0.0065	<0.0072	<0.0082	0.022	0.048
Dibromochloromethane	0.021	8.3	39	NSL	<0.0052	<0.0071	<0.0069	<0.0059	<0.0056	<0.0065	<0.0072	<0.0082	<0.0061	<0.0064
Ethylbenzene	0.78	5.8	25	1.15	<0.0052	<0.0071	0.033	<0.0059	<0.0056	<0.0065	<0.0072	<0.0082	0.0071	0.014
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.0052	<0.0071	*0.041*	<0.0059	<0.0056	<0.0065	<0.0072	<0.0082	*0.012*	*0.056*
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.0052	<0.0071	<0.0069	<0.0059	<0.0056	<0.0065	<0.0072	<0.0082	*0.08*	*0.16*
Styrene	0.11	600	3,500	NSL	<0.0052	<0.0071	<0.0069	<0.0059	<0.0056	<0.0065	<0.0072	<0.0082	<0.0061	<0.0064
Xylenes (total)	9.9	58	250	14.5	<0.0052	<0.0071	0.16	0.011	<0.0056	<0.0065	<0.0072	<0.0082	0.055	0.11
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.010	<0.014	<0.014	<0.012	<0.011	0.082	<0.014	<0.016	0.012	0.022
2-Hexanone	NSL	20	130	NSL	<0.010	<0.014	0.032	<0.012	<0.011	0.016	<0.014	<0.016	<0.012	0.51
4-Methyl-2-pentanone	NSL	3,300	14,000	NSL	<0.010	<0.014	<0.014	<0.012	<0.011	<0.013	<0.014	<0.016	<0.012	<0.013
Toluene	0.69	490	4,700	1.45	<0.0052	<0.0071	<0.0069	<0.0059	<0.0056	<0.0065	<0.0072	<0.0082	<0.0061	0.0069
Tetrachloroethene	0.0023	8.1	39	NSL	<0.0052	<0.0071	<0.0069	<0.0059	**5.4**	**6.8**	<0.0072	<0.0082	**0.037**	**0.12**
Trichloroethene	0.0018	0.41	1.9	NSL	<0.0052	<0.0071	<0.0069	<0.0059	**0.38**	**0.0075**	<0.0072	<0.0082	<0.0061	<0.0064
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)														
Acenaphthene	NSL	360	4,500	NSL	<0.410	<0.420	2.9	1.9	<0.400	<0.380	<0.380	<0.380	<1.7	<1.9
Anthracene	NSL	1,800	23,000	NSL	<0.410	<0.420	0.86	0.52	<0.400	<0.380	<0.380	<0.380	<1.7	<1.9
Fluoranthene	NSL	240	3,000	NSL	<0.410	<0.420	0.44	<0.370	<0.400	<0.380	<0.380	<0.380	<1.7	<1.9
Fluorene	NSL	240	3,000	NSL	<0.410	<0.420	4.2	2.6	<0.400	<0.380	<0.380	<0.380	<1.7	<1.9
Naphthalene	NSL	3.8	17	0.036	<0.410	<0.420	**8.5**	**5.3**	<0.400	<0.380	<0.380	<0.380	<1.7	<1.9
Phenathrene	NSL	NSL	NSL	NSL	<0.410	<0.420	15	7.4	<0.400	<0.380	<0.380	<0.380	<1.7	<1.9
Pyrene	NSL	180	2,300	NSL	<0.410	<0.420	0.82	0.63	<0.400	<0.380	<0.380	<0.380	<1.7	<1.9

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina.
2. Screening Levels are established by Environmental Protection Agency (EPA), Regional Screening level (RSL) Summary Table (November 2017).
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. All results are in milligrams per kilogram (mg/kg).
5. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected above the reporting limit.
6. A bold value indicates a concentration which exceeds a screening level.
7. NSL - No Screening Level Listed.
8. An italicized value indicates detected value with no established screening level.
9. NS - Not Sampled
10. J - Estimated Value

Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet								
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	SB-6	SB-6	SB-7	SB-8	SB-9	SB-10	SB-10	SB-11	SB-11
					4-6'	12-14'	16-18'	10-12'	16-18'	2-4'	14-16'	0-2'	6-8'
					1/11/2012	1/11/2012	1/11/2012	1/11/2012	1/11/2012	1/11/2012	1/11/2012	1/11/2012	1/11/2012
Volatile Organic Compounds (EPA Method 8260)													
Acetone	NSL	6,100	67,000	NSL	<0.027	<0.030	<0.028	<0.035	<0.029	<0.028	<0.026	<0.030	0.027
Benzene	0.0026	1.2	5.1	0.007	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
Bromoform	0.021	19	86	NSL	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
trans-1,2-Dichloroethene	0.031	160	2,300	NSL	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
1,1,2-Trichloroethane	0.0016	0.15	0.63	NSL	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
Cyclohexane	NSL	650	2,700	NSL	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
Dibromochloromethane	0.021	8.3	39	NSL	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
Ethylbenzene	0.78	5.8	25	1.15	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
Styrene	0.11	600	3,500	NSL	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
Xylenes (total)	9.9	58	250	14.5	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.014	<0.015	<0.014	<0.017	<0.015	<0.014	<0.013	<0.015	<0.013
2-Hexanone	NSL	20	130	NSL	<0.014	<0.015	<0.014	<0.017	<0.015	<0.014	<0.013	<0.015	<0.013
4-Methyl-2-pentanone	NSL	3,300	14,000	NSL	<0.014	<0.015	<0.014	<0.017	<0.015	<0.014	<0.013	<0.015	<0.013
Toluene	0.69	490	4,700	1.45	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
Tetrachloroethene	0.0023	8.1	39	NSL	**0.069**	**0.024**	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
Trichloroethene	0.0018	0.41	1.9	NSL	<0.0068	<0.0076	<0.0069	<0.0087	<0.0074	<0.0069	<0.0065	<0.0075	<0.0063
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)													
Acenaphthene	NSL	360	4,500	NSL	<0.390	<0.420	<0.430	<0.390	<0.400	<0.370	<0.380	<0.350	<0.360
Anthracene	NSL	1,800	23,000	NSL	<0.390	<0.420	<0.430	<0.390	<0.400	<0.370	<0.380	<0.350	<0.360
Fluoranthene	NSL	240	3,000	NSL	<0.390	<0.420	<0.430	<0.390	<0.400	<0.370	<0.380	<0.350	<0.360
Fluorene	NSL	240	3,000	NSL	<0.390	<0.420	<0.430	<0.390	<0.400	<0.370	<0.380	<0.350	<0.360
Naphthalene	NSL	3.8	17	0.036	<0.390	<0.420	<0.430	<0.390	<0.400	<0.370	<0.380	<0.350	<0.360
Phenathrene	NSL	NSL	NSL	NSL	<0.390	<0.420	<0.430	<0.390	<0.400	<0.370	<0.380	<0.350	<0.360
Pyrene	NSL	180	2,300	NSL	<0.390	<0.420	<0.430	<0.390	<0.400	<0.370	<0.380	<0.350	<0.360

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina.
2. Screening Levels are established by Environmental Protection Agency (EPA), Regional Screening level (RSL) Summary Table (November 2017).
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. All results are in milligrams per kilogram (mg/kg).
5. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected above the reporting limit.
6. A bold value indicates a concentration which exceeds a screening level.
7. NSL - No Screening Level Listed.
8. An italicized value indicates detected value with no established screening level.
9. NS - Not Sampled
10. J - Estimated Value

Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet											
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	MW-1	MW-6	MW-6	MW-7	MW-7	MW-7	MW-7	MW-9	SB-12	SB-12	SB-12	SB-13
					20'	20'	30'	2'	14'	20'	28'	30'	1'	10'	28'	18'
					3/13/2012	3/13/2012	3/13/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/13/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012
Volatile Organic Compounds (EPA Method 8260)																
Acetone	NSL	6,100	67,000	NSL	<0.024	<0.022	<0.021	<0.021	<0.024	<0.026	<0.026	<0.023	<0.021	<0.020	<0.024	<0.022
Benzene	0.0026	1.2	5.1	0.007	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
Bromoform	0.021	19	86	NSL	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
trans-1,2-Dichloroethene	0.031	160	2,300	NSL	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
1,1,2-Trichloroethane	0.0016	0.15	0.63	NSL	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
Cyclohexane	NSL	650	2,700	NSL	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
Dibromochloromethane	0.021	8.3	39	NSL	<0.0059	<0.0055	<0.0052	<0.0051	**0.98**	<0.0060	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
Ethylbenzene	0.78	5.8	25	1.15	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
Styrene	0.11	600	3,500	NSL	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
Xylenes (total)	9.9	58	250	14.5	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.012	<0.011	<0.010	<0.010	<0.012	<0.013	<0.013	<0.011	<0.011	<0.0099	<0.012	<0.011
2-Hexanone	NSL	20	130	NSL	<0.012	<0.011	<0.010	<0.010	<0.012	<0.013	<0.013	<0.011	<0.011	<0.0099	<0.012	<0.011
4-Methyl-2-pentanone	NSL	3,300	14,000	NSL	<0.012	<0.011	<0.010	<0.010	<0.012	<0.013	<0.013	<0.011	<0.011	<0.0099	<0.012	<0.011
Toluene	0.69	490	4,700	1.45	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
Tetrachloroethene	0.0023	8.1	39	NSL	<0.0059	**0.029**	**0.39**	**62**	**0.72**	**0.6**	**3.4**	<0.0057	**0.25**	**0.049**	**1.8**	**0.024**
Trichloroethene	0.0018	0.41	1.9	NSL	<0.0059	<0.0055	<0.0052	<0.0051	<0.0060	<0.0066	<0.0065	<0.0057	<0.0053	<0.0049	<0.0059	<0.0054
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																
Acenaphthene	NSL	260	4,500	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Anthracene	NSL	1,800	23,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluorene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NSL	3.8	17	0.036	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenathrene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyrene	NSL	180	2,300	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina.
2. Screening Levels are established by Environmental Protection Agency (EPA), Regional Screening level (RSL) Summary Table (November 2017).
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. All results are in milligrams per kilogram (mg/kg).
5. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected above the reporting limit.
6. A bold value indicates a concentration which exceeds a screening level.
7. NSL - No Screening Level Listed.
8. An italicized value indicates detected value with no established screening level.
9. NS - Not Sampled
10. J - Estimated Value

Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet											
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	SB-13	SB-14	SB-14	SB-14	SB-15	SB-15	SB-16	SB-16	SB-17	SB-17	SB-18	SB-18
					28'	1'	14'	22'	8'	24'	8'	14'	6'	24'	14'	22'
					3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/15/2012	3/15/2012
Volatile Organic Compounds (EPA Method 8260)																
Acetone	NSL	6,100	67,000	NSL	<0.023	<0.025	<0.023	0.036	<0.024	<0.022	<0.018	<0.020	<0.022	<0.023	<0.020	<0.024
Benzene	0.0026	1.2	5.1	0.007	<0.0058	<0.0063	<0.0058	<0.0054	<0.0059	<0.0056	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
Bromoform	0.021	19	86	NSL	<0.0058	<0.0063	<0.0058	<0.0054	<0.0059	<0.0056	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.0058	0.0087	<0.0058	<0.0054	<0.0059	<0.0056	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
trans-1,2-Dichloroethene	0.031	160	2,300	NSL	<0.0058	<0.0063	<0.0058	<0.0054	<0.0059	<0.0056	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
1,1,2-Trichloroethane	0.0016	0.15	0.63	NSL	<0.0058	<0.0063	<0.0058	**0.023**	<0.0059	<0.0056	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
Cyclohexane	NSL	650	2,700	NSL	<0.0058	<0.0063	<0.0058	<0.0054	<0.0059	<0.0056	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
Dibromochloromethane	0.021	8.3	39	NSL	<0.0058	<0.0063	<0.0058	<0.0054	<0.0059	<0.0056	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
Ethylbenzene	0.78	5.8	25	1.15	<0.0058	<0.0063	<0.0058	<0.0054	<0.0059	0.022	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.0058	<0.0063	<0.0058	<0.0054	<0.0059	0.18	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.0058	<0.0063	<0.0058	0.012	<0.0059	0.0076	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
Styrene	0.11	600	3,500	NSL	<0.0058	<0.0063	<0.0058	<0.0054	<0.0059	<0.0056	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
Xylenes (total)	9.9	58	250	14.5	<0.0058	<0.0063	<0.0058	0.018	<0.0059	0.33	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.012	<0.013	<0.012	0.013	<0.012	<0.011	<0.0089	<0.0099	<0.011	<0.011	<0.010	<0.012
2-Hexanone	NSL	20	130	NSL	<0.012	<0.013	<0.012	0.012	<0.012	0.25	<0.0089	<0.0099	<0.011	<0.011	<0.010	<0.012
4-Methyl-2-pentanone	NSL	3,300	14,000	NSL	<0.012	<0.013	<0.012	<0.011	<0.012	<0.011	<0.0089	<0.0099	<0.011	<0.011	<0.010	<0.012
Toluene	0.69	490	4,700	1.45	<0.0058	<0.0063	<0.0058	<0.0054	<0.0059	<0.0056	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
Tetrachloroethene	0.0023	8.1	39	NSL	**0.19**	**8.3**	**0.27**	**7.4**	<0.0059	**7.3**	**0.0078**	**0.013**	**0.054**	**0.43**	**0.052**	**0.16**
Trichloroethene	0.0018	0.41	1.9	NSL	<0.0058	**0.067**	<0.0058	**0.013**	<0.0059	<0.0056	<0.0045	<0.0049	<0.0054	<0.0057	<0.0051	<0.0061
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																
Acenaphthene	NSL	360	4,500	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Anthracene	NSL	1,800	23,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluorene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NSL	3.8	17	0.036	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenathrene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyrene	NSL	180	2,300	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina.
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Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet															
					SB-19			SB-20			SB-21			SB-22		SB-22A	SB-23		SB-23A	SB-24	
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	0-1'	3-4'	18-19'	0-1'	10-11'	23-24'	0-1'	8-9'	27-28'	27-28'	29-30'	0-1'	25-26'	29-30'	4-5'	3-4'	24-25'
					5/10/2014	5/10/2014	5/10/2014	5/10/2014	5/10/2014	5/10/2014	5/10/2014	5/10/2014	5/10/2014	3/31/2014	3/31/2014	4/1/2014	3/31/2014	3/31/2014	4/1/2014	3/31/2014	3/31/2014
Volatile Organic Compounds (EPA Method 8260)																				
Acetone	NSL	6,100	67,000	NSL	<0.033	<0.031	<0.022	<0.024	<0.019	<0.028	<0.022	<0.026	<0.025	<0.024	<0.22	<0.19	<0.023	<0.023	<0.022	<0.033	<0.025
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.017	<0.015	<0.011	<0.012	<0.0095	<0.014	<0.011	<0.013	<0.012	<0.012	<0.11	<0.096	<0.012	<0.011	<0.011	<0.017	<0.013
Chloroform	0.022	0.32	1.4	NSL	<0.0084	<0.0077	<0.0055	<0.0059	<0.0047	<0.0069	<0.0055	<0.0065	<0.0062	<0.0060	<0.055	<0.048	<0.0058	<0.0057	<0.0054	<0.0083	<0.0064
1,1-Dichloroethene	0.0025	23	100	NSL	**0.0042 J**	<0.0077	<0.0055	<0.0059	<0.0047	<0.0069	<0.0055	<0.0065	<0.0062	<0.0060	<0.055	<0.048	<0.0058	<0.0057	<0.0054	<0.0083	<0.0064
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.0084	<0.0077	<0.0055	<0.0059	<0.0047	<0.0069	<0.0055	<0.0065	<0.0062	<0.0060	<0.055	<0.048	<0.0058	<0.0057	<0.0054	<0.0083	<0.0064
Ethylbenzene	0.78	5.8	25	1.15	<0.0084	<0.0077	<0.0055	<0.0059	<0.0047	<0.0069	<0.0055	<0.0065	<0.0062	<0.0060	<0.055	<0.048	<0.0058	<0.0057	<0.0054	<0.0083	<0.0064
2-Hexanone	NSL	20	130	NSL	<0.017	<0.015	<0.011	<0.012	<0.0095	<0.014	<0.011	<0.013	<0.012	<0.012	<0.11	<0.096	<0.012	<0.011	<0.011	<0.017	<0.013
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.0084	<0.0077	<0.0055	<0.0059	<0.0047	<0.0069	<0.0055	<0.0065	<0.0062	<0.0060	<0.055	<0.048	<0.0058	<0.0057	<0.0054	<0.0083	<0.0064
Methyl acetate	NSL	7,800	120,000	NSL	<0.0084	<0.0077	<0.0055	<0.0059	<0.0047	<0.0069	<0.0055	<0.0065	<0.0062	<0.0060	<0.055	<0.048	<0.0058	<0.0057	<0.0054	<0.0083	<0.0064
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.0084	<0.0077	<0.0055	<0.0059	<0.0047	<0.0069	<0.0055	<0.0065	<0.0062	<0.0060	<0.055	<0.048	<0.0058	<0.0057	<0.0054	<0.0083	<0.0064
Methylene Chloride	0.0013	35	320	NSL	<0.0084	<0.0077	<0.0055	<0.0059	<0.0047	<0.0069	<0.0055	<0.0065	<0.0062	<0.0060	<0.055	<0.048	<0.0058	<0.0057	<0.0054	<0.0083	<0.0064
Tetrachloroethene	0.0023	8.1	39	NSL	**0.22 J**	0.0022 J	**0.068J**	**0.12 J**	0.00088 J	**0.012**	**0.22**	**0.017**	**0.065 J**	**0.16**	**0.29**	**0.092**	**0.45**	**0.19**	**0.32**	**0.0025 J**	**0.015**
Toluene	0.69	490	4,700	1.45	<0.0084	<0.0077	<0.0055	<0.0059	<0.0047	<0.0069	<0.0055	<0.0065	<0.0062	<0.0060	<0.055	<0.048	<0.0058	<0.0057	<0.0054	<0.0083	<0.0064
1,1,2-Trichloroethane	0.0011	0.15	0.63	NSL	<0.0084	<0.0077	<0.0055	<0.0059	<0.0047	<0.0069	<0.0055	<0.0065	<0.0062	<0.0060	<0.055	<0.048	<0.0058	<0.0057	<0.0054	<0.0083	<0.0064
Trichloroethene	0.0018	0.41	1.9	NSL	<0.0084	<0.0077	<0.0055	<0.0059	<0.0047	<0.0069	<0.0055	<0.0065	<0.0062	<0.0060	<0.055	<0.048	<0.0058	<0.0057	<0.0054	<0.0083	<0.0064
Xylenes (total)	9.9	58	250	14.5	<0.0084	<0.0077	<0.0055	<0.0059	<0.0047	<0.0069	<0.0055	<0.0065	<0.0062	<0.0060	<0.055	<0.048	<0.0058	<0.0057	<0.0054	<0.0083	<0.0064
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																				
Acenaphthene	NSL	360	4,500	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)anthracene	NSL	0.15	2.9	0.066	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)pyrene	0.24	0.015	0.29	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(b)fluoranthene	NSL	0.15	3	0.066	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(g,h,i)perylene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chrysene	NSL	15	290	0.066	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluorene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NSL	3.8	17	0.036	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenathrene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyrene	NSL	180	2,300	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total Organic Carbon (EPA Method 5310)																				
TOC	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina
2. Screening Levels are established by Environmental Protection Agency (EPA), Regional Screening level (RSL) Summary Table (November 2017).
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. All results are in milligrams per kilogram (mg/kg).
5. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected above the reporting limit
6. A bold value indicates a concentration which exceeds a screening level.
7. NSL - No Screening Level Listed.
8. An italicized value indicates detected value with no established screening level.
9. NS - Not Sampled
10. J - Estimated Value

Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet														
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	SB-25		SB-25A	SB-26				SB-26A	SB-27		SB-28			SB-29	
					27-28'	28-29'	0-1'	1-2'	2-3'	3-4'	29-30'	0-1'	7-8'	29-30'	14-15'	26-27'	29-30'	22-23'	27-28'
					3/31/2014	3/31/2014	4/1/2014	3/31/2014	3/31/2014	3/31/2014	3/31/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014
Volatile Organic Compounds (EPA Method 8260)																			
Acetone	NSL	6,100	67,000	NSL	<0.026	<1.3	<1.1	<4.3	<1,200	<2.2	<1.1	<0.97	<0.020	<0.020	<0.022	<1.0	<0.017	0.028	<0.021
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.013	<0.64	<0.57	<2.2	<600	<1.1	<0.55	<0.48	<0.010	<0.010	<0.011	<0.5	<0.0087	0.0064 J	<0.011
Chloroform	0.022	0.32	1.4	NSL	0.0020 J	<0.32	<0.29	<1.1	<300	<0.54	<0.27	<0.24	<0.0051	<0.0050	<0.0056	<0.25	0.0015 J	0.00095 J	0.0035 J
1,1-Dichloroethene	0.0025	23	100	NSL	<0.0065	<0.32	<0.29	<1.1	<300	<0.54	<0.27	<0.24	<0.0051	<0.0050	<0.0056	<0.25	<0.0044	<0.0051	<0.0053
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.0065	<0.32	<0.29	<1.1	<300	<0.54	<0.27	<0.24	<0.0051	<0.0050	<0.0056	<0.25	<0.0044	<0.0051	0.0016 J
Ethylbenzene	0.78	5.8	25	1.15	<0.0065	<0.32	<0.29	<1.1	<300	<0.54	<0.27	<0.24	<0.0051	<0.0050	<0.0056	<0.25	<0.0044	<0.0051	<0.0053
2-Hexanone	NSL	20	130	NSL	<0.013	<0.64	<0.57	<2.2	<600	<1.1	<0.55	<0.48	<0.010	<0.010	<0.011	<0.5	<0.0087	<0.010	<0.011
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.0065	<0.32	<0.29	<1.1	<300	<0.54	<0.27	<0.24	<0.0051	<0.0050	<0.0056	<0.25	<0.0044	<0.0051	<0.0053
Methyl acetate	NSL	7,800	120,000	NSL	<0.0065	<0.32	<0.29	<1.1	<300	<0.54	<0.27	<0.24	<0.0051	<0.0050	<0.0056	<0.25	<0.0044	<0.0051	<0.0053
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.0065	<0.32	<0.29	<1.1	<300	<0.54	<0.27	<0.24	<0.0051	<0.0050	<0.0056	<0.25	<0.0044	<0.0051	<0.0053
Methylene Chloride	0.0013	35	320	NSL	<0.0065	<0.32	<0.29	<1.1	<300	<0.54	<0.27	<0.24	<0.0051	<0.0050	<0.0056	<0.25	<0.0044	<0.0051	<0.0053
Tetrachloroethene	0.0023	8.1	39	NSL	**11**	**14**	**5.6**	**18**	**2,600**	**4.7**	**2.2**	**31**	<0.0051	**0.91**	**0.0030 J**	**0.62**	**2.4**	**4.6**	**18**
Toluene	0.69	490	4,700	1.45	<0.0065	<0.32	<0.29	<1.1	<300	<0.54	<0.27	<0.24	<0.0051	<0.0050	<0.0056	<0.25	<0.0044	<0.0051	<0.0053
1,1,2-Trichloroethane	0.0011	0.15	0.63	NSL	**0.0013 J**	<0.32	<0.29	<1.1	<300	<0.54	<0.27	<0.24	<0.0051	<0.0050	<0.0056	<0.25	**0.0015 J**	**0.0099**	**0.015**
Trichloroethene	0.0018	0.41	1.9	NSL	<0.0065	<0.32	<0.29	<1.1	<300	<0.54	<0.27	<0.24	<0.0051	<0.0050	<0.0056	<0.25	<0.0044	<0.0051	**0.0039 J**
Xylenes (total)	9.9	58	250	14.5	<0.0065	<0.32	<0.29	<1.1	<300	<0.54	<0.27	<0.24	<0.0051	<0.0050	<0.0056	<0.25	<0.0044	<0.0051	<0.0053
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																			
Acenaphthene	NSL	360	4,500	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)anthracene	NSL	0.15	2.9	0.066	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)pyrene	0.24	0.015	0.29	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(b)fluoranthene	NSL	0.15	3	0.066	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(g,h,i)perylene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chrysene	NSL	15	290	0.066	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluorene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NSL	3.8	17	0.036	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenathrene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyrene	NSL	180	2,300	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total Organic Carbon (EPA Method 5310)																			
TOC	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina.
2. Screening Levels are established by Environmental Protection Agency (EPA), Regional Screening level (RSL) Summary Table (November 2017).
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).
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9. NS - Not Sampled
10. J - Estimated Value

Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet															
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	SB-29A		SB-30		SB-31		SB-32			SB-33		SB-33A		SB-34		
					3-4'	14-15'	6-7'	19-20'	6-7'	25-26'	7-8'	15-16'	20-21'	2-3'	8-9'	17-18'	22-23'	6-7'	17-18'	25-26'
					4/2/2014	4/2/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/2/2014	4/2/2014	4/2/2014	4/1/2014	4/1/2014	4/2/2014	4/2/2014	4/2/2014	4/2/2014	4/2/2014
Volatile Organic Compounds (EPA Method 8260)																				
Acetone	NSL	6,100	67,000	NSL	<1.1	<1.1	<0.021	<0.024	<0.021	<0.023	<0.028	<0.024	<0.021	0.0085 J	<0.019	<1.3	<0.023	<0.025	<0.026	<1.2
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.57	<0.57	<0.010	<0.012	<0.010	<0.012	<0.014	<0.012	<0.010	<0.010	<0.0096	<0.67	<0.012	<0.012	<0.013	<0.61
Chloroform	0.022	0.32	1.4	NSL	<0.28	<0.29	<0.0052	<0.0060	<0.0052	<0.0058	<0.0070	<0.0059	<0.0052	<0.0052	<0.0048	<0.34	<0.0058	<0.0062	<0.0066	<0.30
1,1-Dichloroethene	0.0025	23	100	NSL	<0.28	<0.29	<0.0052	<0.0060	<0.0052	<0.0058	<0.0070	<0.0059	<0.0052	<0.0052	<0.0048	<0.34	<0.0058	<0.0062	<0.0066	<0.30
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.28	<0.29	<0.0052	<0.0060	<0.0052	<0.0058	<0.0070	<0.0059	<0.0052	<0.0052	<0.0048	<0.34	<0.0058	<0.0062	<0.0066	<0.30
Ethylbenzene	0.78	5.8	25	1.15	<0.28	<0.29	<0.0052	<0.0060	<0.0052	<0.0058	<0.0070	<0.0059	<0.0052	<0.0052	<0.0048	<0.34	<0.0058	<0.0062	<0.0066	<0.30
2-Hexanone	NSL	20	130	NSL	<0.57	<0.57	<0.010	<0.012	<0.010	<0.012	<0.014	<0.012	<0.010	<0.010	<0.0096	<0.67	<0.012	<0.012	<0.013	<0.61
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.28	<0.29	<0.0052	<0.0060	<0.0052	<0.0058	<0.0070	<0.0059	<0.0052	<0.0052	<0.0048	<0.34	<0.0058	<0.0062	<0.0066	<0.30
Methyl acetate	NSL	7,800	120,000	NSL	<0.28	<0.29	<0.0052	<0.0060	<0.0052	<0.0058	<0.0070	<0.0059	<0.0052	<0.0052	<0.0048	<0.34	<0.0058	<0.0062	<0.0066	<0.30
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.28	<0.29	<0.0052	<0.0060	<0.0052	<0.0058	<0.0070	<0.0059	<0.0052	<0.0052	<0.0048	<0.34	<0.0058	<0.0062	<0.0066	<0.30
Methylene Chloride	0.0013	35	320	NSL	<0.28	<0.29	<0.0052	<0.0060	<0.0052	<0.0058	<0.0070	<0.0059	<0.0052	<0.0052	<0.0048	<0.34	<0.0058	<0.0062	<0.0066	<0.30
Tetrachloroethene	0.0023	8.1	39	NSL	**0.95**	**0.073 J**	<0.0049	0.0010 J	0.00055 J	**0.0061**	**0.14 J**	**0.0048 J**	**0.33**	0.00071 J	0.00058 J	**0.62**	**0.097**	0.00082 J	**0.03**	**4.3 J**
Toluene	0.69	490	4,700	1.45	<0.28	<0.29	<0.0052	<0.0060	<0.0052	<0.0058	<0.0058	<0.0059	<0.0052	<0.0052	<0.0048	<0.34	<0.0058	<0.0062	<0.0066	<0.30
1,1,2-Trichloroethane	0.0011	0.15	0.63	NSL	<0.28	<0.29	<0.0052	<0.0060	<0.0052	<0.0058	<0.0070	<0.0059	<0.0052	<0.0052	<0.0048	<0.34	<0.0058	<0.0062	<0.0066	<0.30
Trichloroethene	0.0018	0.41	1.9	NSL	<0.28	<0.29	<0.0052	<0.0060	<0.0052	<0.0058	<0.0070	<0.0059	<0.0052	<0.0052	<0.0048	<0.34	<0.0058	<0.0062	<0.0066	<0.30
Xylenes (total)	9.9	58	250	14.5	<0.28	<0.29	<0.0052	<0.0060	<0.0052	<0.0058	<0.0070	<0.0059	<0.0052	<0.0052	<0.0048	<0.34	<0.0058	<0.0062	<0.0066	<0.30
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																				
Acenaphthene	NSL	360	4,500	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)anthracene	NSL	0.15	2.9	0.066	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)pyrene	0.24	0.015	0.29	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(b)fluoranthene	NSL	0.15	3	0.066	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(g,h,i)perylene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chrysene	NSL	15	290	0.066	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluorene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NSL	3.8	17	0.036	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenathrene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyrene	NSL	180	2,300	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total Organic Carbon (EPA Method 5310)																				
TOC	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet															
					SB-35			SB-36			SB-37		SB-38			SB-39			SB-40	
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	7-8'	17-18'	25-26'	5-6'	18-19'	26-27'	4-5'	23-24'	0-1'	16-17'	24-25'	5-6'	14-15'	22-23'	17-18'	23-24'
					4/2/2014	4/2/2014	4/2/2014	4/2/2014	4/2/2014	4/2/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014
Volatile Organic Compounds (EPA Method 8260)																				
Acetone	NSL	6,100	67,000	NSL	<0.026	<1.3	<1.2	<0.026	<0.025	<0.022	0.45 J	<1.6	<0.024	<0.027	<0.021	<1.1	<1.5	<2.4	<1.3	<1.2
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.013	<0.65	<0.61	<0.013	<0.013	<0.011	<0.63	<0.81	<0.012	<0.013	<0.010	<0.54	<0.75	<1.2	<0.64	<0.58
Chloroform	0.022	0.32	1.4	NSL	<0.0064	<0.32	<0.31	<0.0065	<0.0064	<0.0055	<0.31	<0.4	<0.0059	<0.0067	<0.0052	<0.27	<0.37	<0.59	<0.32	<0.29
1,1-Dichloroethene	0.0025	23	100	NSL	<0.0064	<0.32	<0.31	<0.0065	<0.0064	<0.0055	<0.31	<0.4	<0.0059	<0.0067	<0.0052	<0.27	<0.37	<0.59	<0.32	<0.29
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.0064	<0.32	<0.31	<0.0065	<0.0064	<0.0055	<0.31	<0.4	<0.0059	<0.0067	<0.0052	<0.27	<0.37	<0.59	<0.32	0.049 J
Ethylbenzene	0.78	5.8	25	1.15	<0.0064	<0.32	<0.31	<0.0065	<0.0064	<0.0055	<0.31	0.58	<0.0059	<0.0067	<0.0052	<0.27	0.61	0.72	<0.32	0.63
2-Hexanone	NSL	20	130	NSL	<0.013	<0.65	<0.61	<0.013	<0.013	<0.011	<0.63	<0.81	<0.012	<0.013	<0.010	<0.54	<0.75	<1.2	<0.64	4.0
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.0064	<0.32	<0.31	<0.0065	<0.0064	<0.0055	<0.31	*1.6 J*	<0.0059	<0.0067	*0.00072 J*	*0.054 J*	*2.7*	*4.6*	*0.11 J*	*2.7*
Methyl acetate	NSL	7,800	120,000	NSL	<0.0064	<0.32	<0.31	<0.0065	<0.0064	<0.0055	<0.31	<0.4	<0.0059	<0.0067	<0.0052	<0.27	<0.37	<0.59	<0.32	<0.29
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.0064	<0.32	<0.31	<0.0065	<0.0064	<0.0055	<0.31	*0.42*	<0.0059	<0.0067	<0.0052	<0.27	*0.47*	*0.50 J*	<0.32	*0.38*
Methylene Chloride	0.0013	35	320	NSL	<0.0064	<0.32	<0.31	<0.0065	<0.0064	<0.0055	<0.31	<0.4	<0.0059	<0.0067	<0.0052	<0.27	<0.37	<0.59	<0.32	<0.29
Tetrachloroethene	0.0023	8.1	39	NSL	**0.04**	**1.1**	**0.38**	<0.0065	0.00067 J	**0.0061**	**0.27 J**	**0.14 J**	0.0012 J	<0.0067	<0.0052	<0.27	<0.37	<0.59	<0.32	**2.3**
Toluene	0.69	490	4,700	1.45	<0.0064	<0.32	<0.31	<0.0065	<0.0064	<0.0055	<0.31	<0.4	<0.0059	<0.0067	<0.0052	<0.27	<0.37	<0.59	<0.32	<0.29
1,1,2-Trichloroethane	0.0011	0.15	0.63	NSL	<0.0064	<0.32	<0.31	<0.0065	<0.0064	<0.0055	<0.31	<0.4	<0.0059	<0.0067	<0.0052	<0.27	<0.37	<0.59	<0.32	<0.29
Trichloroethene	0.0018	0.41	1.9	NSL	<0.0064	<0.32	<0.31	<0.0065	<0.0064	<0.0055	<0.31	<0.4	<0.0059	<0.0067	<0.0052	<0.27	<0.37	<0.59	<0.32	<0.29
Xylenes (total)	9.9	58	250	14.5	<0.0064	<0.32	<0.31	<0.0065	<0.0064	<0.0055	<0.31	4.8 J	<0.0059	<0.0067	<0.0052	<0.27	4.3	**10**	<0.32	4.7
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																				
Acenaphthene	NSL	360	4,500	NSL	NS	NS	NS	NS	NS	NS	<0.40	0.36 J	<0.39	<0.39	<0.39	<0.35	<0.43	<0.37	<0.37	<0.39
Benzo(a)anthracene	NSL	0.15	2.9	0.066	NS	NS	NS	NS	NS	NS	<0.40	<0.46	<0.39	<0.39	<0.39	0.046 J	0.042 J	<0.37	<0.37	<0.39
Benzo(a)pyrene	0.24	0.015	0.29	NSL	NS	NS	NS	NS	NS	NS	<0.40	<0.46	<0.39	<0.39	<0.39	<0.35	<0.43	<0.37	<0.37	<0.39
Benzo(b)fluoranthene	NSL	0.15	3	0.066	NS	NS	NS	NS	NS	NS	<0.40	<0.46	<0.39	<0.39	<0.39	0.036 J	<0.43	<0.37	<0.37	<0.39
Benzo(g,h,i)perylene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	<0.40	<0.46	<0.39	<0.39	<0.39	<0.35	<0.43	<0.37	<0.37	<0.39
Chrysene	NSL	15	290	0.066	NS	NS	NS	NS	NS	NS	<0.40	<0.46	<0.39	<0.39	<0.39	0.030 J	0.046 J	<0.37	<0.37	<0.39
Fluoranthene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	<0.40	<0.46	0.012 J	<0.39	<0.39	0.080 J	0.094 J	<0.37	<0.37	<0.39
Fluorene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	<0.40	<0.46	<0.39	<0.39	<0.39	<0.35	<0.43	<0.37	<0.37	<0.39
Naphthalene	NSL	3.8	17	0.036	NS	NS	NS	NS	NS	NS	<0.40	**2.9**	<0.39	<0.39	<0.39	0.026 J	**0.45**	**0.46**	**0.063 J**	**2.0**
Phenathrene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	*0.020 J*	*4.7*	<0.39	<0.39	<0.39	*0.042 J*	*0.17 J*	<0.37	*0.019 J*	*0.038 J*
Pyrene	NSL	180	2,300	NSL	NS	NS	NS	NS	NS	NS	<0.40	0.26 J	<0.39	<0.39	<0.39	0.057 J	0.088 J	<0.37	<0.37	<0.39
Total Organic Carbon (EPA Method 5310)																				
TOC	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina.
2. Screening Levels are established by Environmental Protection Agency (EPA), Regional Screening level (RSL) Summary Table (November 2017).
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. All results are in milligrams per kilogram (mg/kg).
5. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected above the reporting limit.
6. A bold value indicates a concentration which exceeds a screening level.
7. NSL - No Screening Level Listed.
8. An italicized value indicates detected value with no established screening level.
9. NS - Not Sampled
10. J - Estimated Value

Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet													
					SB-41			SB-42			SB-43			SB-44		SB-45			
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	1-2'	14-15'	23-24'	0-1'	14-15'	23-24'	7-8'	10-11'	19-20'	11-12'	24-25'	0-1'	3-4'	15-16'	21-22'
					4/8/2014	4/8/2014	4/8/2014	4/9/2014	4/9/2014	4/9/2014	4/9/2014	4/9/2014	4/9/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014
Volatile Organic Compounds (EPA Method 8260)																			
Acetone	NSL	6,100	67,000	NSL	<0.023	<1.3	<1.3	<1.2	<0.028	<1.4	<1.1	<1.2	<1.3	0.012 J	<45	0.075	<260	<35	<52
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.011	<0.66	<0.63	<0.59	<0.014	<0.71	<0.57	<0.60	<0.63	<0.0099	<22	0.010 J	<130	<18	<26
Chloroform	0.022	0.32	1.4	NSL	<0.0057	<0.33	<0.32	<0.29	<0.0070	<0.35	<0.29	<0.30	<0.32	<0.0050	<11	<0.0068	<66	<8.8	<13
1,1-Dichloroethene	0.0025	23	100	NSL	<0.0057	<0.33	<0.32	<0.29	<0.0070	<0.35	<0.29	<0.30	<0.32	<0.0050	<11	<0.0068	<66	<8.8	<13
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.0057	<0.33	<0.32	<0.29	<0.0070	0.20 J	0.077 J	0.21 J	0.17 J	<0.0050	<11	<0.0068	<66	<8.8	<13
Ethylbenzene	0.78	5.8	25	1.15	<0.0057	0.23 J	0.20 J	<0.29	<0.0070	0.22 J	<0.29	0.15 J	**1.3**	<0.0050	<11	<0.0068	<66	<8.8	<13
2-Hexanone	NSL	20	130	NSL	<0.011	<0.66	<0.63	<0.59	<0.014	<0.71	<0.57	<0.60	<0.63	<0.0099	<22	<0.014	<130	<18	<26
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.0057	*1.8 J*	*1.4 J*	<0.29	<0.0070	*2*	*0.072 J*	*0.47 J*	*6.8*	<0.0050	<11	<0.0068	<66	<8.8	<13
Methyl acetate	NSL	7,800	120,000	NSL	<0.0057	<0.33	<0.32	<0.29	<0.0070	<0.35	<0.29	<0.30	<0.32	<0.0050	<11	<0.0068	<66	<8.8	<13
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.0057	*0.12 J*	*0.14*	<0.29	<0.0070	*0.4*	*0.065 J*	*0.32 J*	*0.93*	<0.0050	<11	<0.0068	<66	<8.8	<13
Methylene Chloride	0.0013	35	320	NSL	<0.0057	<0.33	<0.32	<0.29	<0.0070	<0.35	<0.29	<0.30	<0.32	<0.0050	<11	<0.0068	<66	<8.8	**46**
Tetrachloroethene	0.0023	8.1	39	NSL	**0.034**	**2.2 J**	**0.79 J**	**22 J**	0.0020 J	**39**	**32 J**	**71 J**	**61**	**0.0038 J**	**220**	**18**	**1,300**	**6,300**	**7,300**
Toluene	0.69	490	4,700	1.45	<0.0057	<0.33	<0.32	<0.29	<0.0070	<0.35	<0.29	<0.30	<0.32	<0.0050	<11	<0.0068	<66	<8.8	<13
1,1,2-Trichloroethane	0.0011	0.15	0.63	NSL	<0.0057	<0.33	<0.32	<0.29	<0.0070	<0.35	<0.29	<0.30	<0.32	<0.0050	<11	<0.0068	<66	<8.8	<13
Trichloroethene	0.0018	0.41	1.9	NSL	<0.0057	<0.33	<0.32	<0.29	<0.0070	0.29 J	0.42 J	0.86	0.32	<0.0050	<11	0.017	<66	<8.8	<13
Xylenes (total)	9.9	58	250	14.5	<0.0057	4.1 J	3.3 J	<0.29	<0.0070	3.5	0.19 J	1.1 J	11	<0.0050	<11	<0.0068	<66	<8.8	<13
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																			
Acenaphthene	NSL	360	4,500	NSL	<0.42	<0.37	<0.38	<0.39	<0.44	<0.46	<0.40	<0.41	<0.38	<0.38	<0.36	<0.39	<4.2	<4.2	<3.8
Benzo(a)anthracene	NSL	0.15	2.9	0.066	<0.42	<0.37	<0.38	<0.39	<0.44	<0.46	<0.40	<0.41	<0.38	<0.38	<0.36	<0.39	<4.2	<4.2	<3.8
Benzo(a)pyrene	0.24	0.015	0.29	NSL	<0.42	<0.37	<0.38	<0.39	<0.44	<0.46	<0.40	<0.41	<0.38	<0.38	<0.36	<0.39	<4.2	<4.2	<3.8
Benzo(b)fluoranthene	NSL	0.15	3	0.066	<0.42	<0.37	<0.38	<0.39	<0.44	<0.46	<0.40	<0.41	<0.38	<0.38	<0.36	<0.39	<4.2	<4.2	<3.8
Benzo(g,h,i)perylene	NSL	NSL	NSL	NSL	<0.42	<0.37	<0.38	<0.39	<0.44	<0.46	<0.40	<0.41	<0.38	<0.38	<0.36	<0.39	<4.2	<4.2	<3.8
Chrysene	NSL	15	290	0.066	<0.42	<0.37	<0.38	<0.39	<0.44	<0.46	<0.40	<0.41	<0.38	<0.38	<0.36	<0.39	<4.2	<4.2	<3.8
Fluoranthene	NSL	240	3,000	NSL	<0.42	<0.37	<0.38	<0.39	<0.44	<0.46	<0.40	<0.41	<0.38	<0.38	<0.36	<0.39	<4.2	<4.2	0.16 J
Fluorene	NSL	240	3,000	NSL	<0.42	<0.37	<0.38	<0.39	<0.44	0.034 J	<0.40	<0.41	<0.38	<0.38	<0.36	<0.39	<4.2	<4.2	<3.8
Naphthalene	NSL	3.8	17	0.036	<0.42	**0.23 J**	**0.12 J**	<0.39	<0.44	**0.14 J**	<0.40	<0.41	**0.96**	<0.38	**1.2**	<0.39	<4.2	**5.9**	**7.7**
Phenathrene	NSL	NSL	NSL	NSL	<0.42	<0.37	*0.057 J*	<0.39	<0.44	*0.16 J*	<0.40	<0.41	<0.38	<0.38	*4*	<0.39	<4.2	*10*	*10*
Pyrene	NSL	180	2,300	NSL	<0.42	<0.37	<0.38	<0.39	<0.44	0.020 J	<0.40	<0.41	<0.38	<0.38	0.7	<0.39	<4.2	<4.2	<3.8
Total Organic Carbon (EPA Method 5310)																			
TOC	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina.
2. Screening Levels are established by Environmental Protection Agency (EPA), Regional Screening level (RSL) Summary Table (November 2017).
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. All results are in milligrams per kilogram (mg/kg).
5. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected above the reporting limit.
6. A bold value indicates a concentration which exceeds a screening level.
7. NSL - No Screening Level Listed.
8. An italicized value indicates detected value with no established screening level.
9. NS - Not Sampled
10. J - Estimated Value

Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet													
					SB-46			SB-47			SB-48			SB-49			SB-50		
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	3-4'	15-16'	25-26'	0-1'	6-7'	24-25'	2-3'	14-15'	25-26'	3-4'	12-13'	23-24'	0-1'	10-11'	19-20'
					4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/9/2014	4/9/2014	4/9/2014
Volatile Organic Compounds (EPA Method 8260)																			
Acetone	NSL	6,100	67,000	NSL	<1.3	<14	<12	<0.022	<0.028	<1.3	<1.0	<1.2	<0.022	<1.0	<0.027	0.024	<0.018	<0.027	<0.021
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.64	<7.2	<6.1	<0.011	<0.014	<0.63	<0.52	<0.59	<0.011	<0.52	<0.013	<0.012	<0.0088	<0.014	<0.011
Chloroform	0.022	0.32	1.4	NSL	<0.32	<3.6	<3.0	<0.0055	<0.0070	<0.32	<0.26	<0.30	<0.0054	<0.26	<0.0067	<0.0059	<0.0044	<0.0068	<0.0053
1,1-Dichloroethene	0.0025	23	100	NSL	<0.32	<3.6	<3.0	<0.0055	<0.0070	<0.32	<0.26	<0.30	<0.0054	<0.26	<0.0067	<0.0059	<0.0044	<0.0068	<0.0053
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.32	<3.6	<3.0	<0.0055	<0.0070	<0.32	<0.26	<0.30	<0.0054	0.54	<0.0067	<0.0059	<0.0044	<0.0068	<0.0053
Ethylbenzene	0.78	5.8	25	1.15	<0.32	<3.6	<3.0	<0.011	<0.014	<0.63	<0.52	<0.59	<0.011	<0.52	<0.013	<0.012	<0.0088	<0.014	<0.011
2-Hexanone	NSL	20	130	NSL	<0.64	<7.2	<6.1	<0.0055	<0.0070	<0.32	<0.26	<0.30	<0.0054	<0.26	<0.0067	<0.0059	<0.0044	<0.0068	<0.0053
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.32	<3.6	<3.0	<0.0055	<0.0070	<0.32	<0.26	<0.30	<0.0054	<0.26	<0.0067	<0.0059	<0.0044	<0.0068	<0.0053
Methyl acetate	NSL	7,800	120,000	NSL	<0.32	<3.6	<3.0	<0.0055	<0.0070	<0.32	0.36	<0.30	<0.0054	<0.26	<0.0067	<0.0059	<0.0044	<0.0068	<0.0053
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.32	<3.6	*0.41 J*	<0.0055	<0.0070	<0.32	<0.26	<0.30	<0.0054	<0.26	<0.0067	<0.0059	<0.0044	<0.0068	<0.0053
Methylene Chloride	0.0013	35	320	NSL	<0.32	<3.6	<3.0	<0.0055	<0.0070	<0.32	<0.26	<0.30	<0.0054	<0.26	<0.0067	<0.0059	<0.0044	<0.0068	<0.0053
Tetrachloroethene	0.0023	8.1	39	NSL	**330**	**1700 J**	**2,900**	**0.074**	**0.0040 J**	**0.36**	**18**	**2.7**	**0.053**	**8.0**	**0.094**	**0.45**	**0.026**	0.00092 J	<0.0053
Toluene	0.69	490	4,700	1.45	<0.32	<3.6	1.1 J	<0.0055	<0.0070	<0.32	<0.26	<0.30	<0.0054	<0.26	<0.0067	<0.0059	<0.0044	<0.0068	<0.0053
1,1,2-Trichloroethane	0.0011	0.15	0.63	NSL	<0.32	<3.6	<3.0	<0.0055	<0.0070	<0.32	<0.26	<0.30	<0.0054	<0.26	<0.0067	<0.0059	<0.0044	<0.0068	<0.0053
Trichloroethene	0.0018	0.41	1.9	NSL	0.28 J	<3.6	<3.0	<0.0055	<0.0070	<0.32	0.71	<0.30	<0.0054	0.19 J	<0.0067	<0.0059	<0.0044	<0.0068	<0.0053
Xylenes (total)	9.9	58	250	14.5	<0.32	<3.6	2.3 J	<0.0055	<0.0070	<0.32	<0.26	<0.30	<0.0054	<0.26	<0.0067	<0.0059	<0.0044	<0.0068	<0.0053
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																			
Acenaphthene	NSL	360	4,500	NSL	<0.43	<4.1	<4.2	<0.37	<0.39	<0.39	<0.36	<3.5	<0.37	<0.37	<0.42	<0.43	<0.38	<0.40	<0.38
Benzo(a)anthracene	NSL	0.15	2.9	0.066	<0.43	<4.1	<4.2	<0.37	<0.39	<0.39	<0.36	<3.5	<0.37	<0.37	<0.42	<0.43	<0.38	<0.40	<0.38
Benzo(a)pyrene	0.24	0.015	0.29	NSL	<0.43	<4.1	<4.2	<0.37	<0.39	<0.39	<0.36	<3.5	<0.37	<0.37	<0.42	<0.43	<0.38	<0.40	<0.38
Benzo(b)fluoranthene	NSL	0.15	3	0.066	<0.43	<4.1	<4.2	<0.37	<0.39	<0.39	<0.36	<3.5	<0.37	<0.37	<0.42	<0.43	<0.38	<0.40	<0.38
Benzo(g,h,i)perylene	NSL	NSL	NSL	NSL	<0.43	<4.1	<4.2	<0.37	<0.39	<0.39	<0.36	<3.5	<0.37	<0.37	<0.42	<0.43	<0.38	<0.40	<0.38
Chrysene	NSL	15	290	0.066	<0.43	<4.1	<4.2	<0.37	<0.39	<0.39	<0.36	<3.5	<0.37	<0.37	<0.42	<0.43	<0.38	<0.40	<0.38
Fluoranthene	NSL	240	3,000	NSL	<0.43	<4.1	<4.2	<0.37	<0.39	<0.39	<0.36	<3.5	<0.37	<0.37	<0.42	<0.43	0.020 J	<0.40	<0.38
Fluorene	NSL	240	3,000	NSL	<0.43	<4.1	<4.2	<0.37	<0.39	<0.39	<0.36	<3.5	<0.37	<0.37	<0.42	<0.43	<0.38	<0.40	<0.38
Naphthalene	NSL	3.8	17	0.036	**0.038 J**	**4.4**	**2.0 J**	<0.37	<0.39	<0.39	<0.36	<3.5	<0.37	<0.37	<0.42	<0.43	<0.38	<0.40	<0.38
Phenathrene	NSL	NSL	NSL	NSL	*0.057 J*	*9.6*	*4.7*	<0.37	<0.39	*0.089 J*	*0.018 J*	*0.75 J*	*0.18 J*	<0.37	<0.42	*0.31 J*	<0.38	<0.40	<0.38
Pyrene	NSL	180	2,300	NSL	<0.43	<4.1	<4.2	<0.37	<0.39	0.035 J	<0.36	<3.5	<0.37	<0.37	<0.42	<0.43	<0.38	<0.40	<0.38
Total Organic Carbon (EPA Method 5310)																			
TOC	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina.
2. Screening Levels are established by Environmental Protection Agency (EPA), Regional Screening level (RSL) Summary Table (November 2017).
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. All results are in milligrams per kilogram (mg/kg).
5. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected above the reporting limit.
6. A bold value indicates a concentration which exceeds a screening level.
7. NSL - No Screening Level Listed.
8. An italicized value indicates detected value with no established screening level.
9. NS - Not Sampled
10. J - Estimated Value

Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet													
					SB-51			SB-52			SB-53		SB-54		SB-55		SB-56		
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	2-3'	9-10'	23-24'	6-7'	9-10'	18-19'	1-2'	24-25'	1-2'	24-25'	11-12'	24-25'	0-1'	13-14'	28-29'
					4/3/2014	4/3/2014	4/3/2014	4/4/2014	4/4/2014	4/4/2014	4/4/2014	4/4/2014	4/4/2014	4/4/2014	4/4/2014	4/4/2014	4/8/2014	4/8/2014	4/8/2014
Volatile Organic Compounds (EPA Method 8260)																			
Acetone	NSL	6,100	67,000	NSL	<0.021	<0.024	<0.028	<0.022	<0.021	<0.031	<0.025	<0.019	<0.029	<0.021	<0.025	<1.1	<0.021	<1.4	<2.4
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.010	<0.012	<0.014	<0.011	<0.011	<0.016	<0.013	<0.0094	<0.015	<0.010	<0.013	<0.57	<0.010	<0.70	<1.2
Chloroform	0.022	0.32	1.4	NSL	<0.0052	<0.0061	<0.0069	<0.0056	<0.0054	<0.0078	<0.0063	<0.0047	<0.0074	<0.0052	<0.0063	<0.29	<0.0052	<0.35	<0.60
1,1-Dichloroethene	0.0025	23	100	NSL	<0.0052	<0.0061	<0.0069	<0.0056	<0.0054	<0.0078	<0.0063	<0.0047	<0.0074	<0.0052	<0.0063	<0.29	<0.0052	<0.35	<0.60
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.0052	<0.0061	<0.0069	<0.0056	<0.0054	<0.0078	<0.0063	<0.0047	<0.0074	<0.0052	<0.0063	<0.29	<0.0052	<0.35	<0.60
Ethylbenzene	0.78	5.8	25	1.15	<0.0052	<0.0061	<0.0069	<0.0056	<0.0054	<0.0078	<0.0063	<0.0047	<0.0074	<0.0052	<0.0063	0.29	<0.0052	0.42 J	**2.2 J**
2-Hexanone	NSL	20	130	NSL	<0.010	<0.012	<0.014	<0.011	<0.011	<0.016	<0.013	<0.0094	<0.015	<0.010	<0.013	<0.57	<0.010	<0.70	<1.2
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.0052	<0.0061	<0.0069	<0.0056	<0.0054	<0.0078	<0.0063	<0.0047	<0.0074	<0.0052	<0.0063	*1.5 J*	<0.0052	*0.55 J*	*2.7 J*
Methyl acetate	NSL	7,800	120,000	NSL	<0.0052	<0.0061	<0.0069	<0.0056	<0.0054	<0.0078	<0.0063	<0.0047	<0.0074	<0.0052	<0.0063	<0.29	<0.0052	<0.35	<0.60
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.0052	<0.0061	<0.0069	<0.0056	<0.0054	<0.0078	<0.0063	<0.0047	<0.0074	<0.0052	<0.0063	*1.1 J*	<0.0052	*0.075 J*	*2.3 J*
Methylene Chloride	0.0013	35	320	NSL	<0.0052	<0.0061	<0.0069	<0.0056	<0.0054	<0.0078	<0.0063	<0.0047	<0.0074	<0.0052	<0.0063	<0.29	<0.0052	<0.35	<0.60
Tetrachloroethene	0.0023	8.1	39	NSL	**0.18**	**0.1**	**0.16**	0.00056 J	0.00064 J	**0.0040 J**	**0.014**	**0.099**	<0.0074	<0.0052	0.0008 J	**0.051 J**	<0.0052	**0.042 J**	<0.60
Toluene	0.69	490	4,700	1.45	<0.0052	<0.0061	<0.0069	<0.0056	<0.0054	<0.0078	<0.0063	<0.0047	<0.0074	<0.0052	<0.0063	<0.29	<0.0052	<0.35	<0.60
1,1,2-Trichloroethane	0.0011	0.15	0.63	NSL	<0.0052	<0.0061	<0.0069	<0.0056	<0.0054	<0.0078	<0.0063	<0.0047	<0.0074	<0.0052	<0.0063	<0.29	<0.0052	<0.35	<0.60
Trichloroethene	0.0018	0.41	1.9	NSL	<0.0052	<0.0061	<0.0069	<0.0056	<0.0054	<0.0078	<0.0063	<0.0047	<0.0074	<0.0052	<0.0063	<0.29	<0.0052	<0.35	<0.60
Xylenes (total)	9.9	58	250	14.5	<0.0052	<0.0061	<0.0069	<0.0056	<0.0054	<0.0078	<0.0063	<0.0047	<0.0074	<0.0052	<0.0063	3.9	<0.0052	1.1 J	**15 J**
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																			
Acenaphthene	NSL	360	4,500	NSL	<0.35	<0.40	<0.41	<0.42	<0.40	<0.48	<0.38	<0.42	<0.44	<0.39	<0.45	1.9	<0.37	1.9	2.2
Benzo(a)anthracene	NSL	0.15	2.9	0.066	<0.35	<0.40	<0.41	<0.42	<0.40	<0.48	<0.38	<0.42	0.052 J	<0.39	<0.45	<0.75	<0.37	<1.8	<1.9
Benzo(a)pyrene	0.24	0.015	0.29	NSL	<0.35	<0.40	<0.41	<0.42	<0.40	<0.48	<0.38	<0.42	**0.038 J**	<0.39	<0.45	<0.75	<0.37	<1.8	<1.9
Benzo(b)fluoranthene	NSL	0.15	3	0.066	<0.35	<0.40	<0.41	<0.42	<0.40	<0.48	<0.38	<0.42	**0.075 J**	<0.39	<0.45	<0.75	<0.37	<1.8	<1.9
Benzo(g,h,i)perylene	NSL	NSL	NSL	NSL	<0.35	<0.40	<0.41	<0.42	<0.40	<0.48	<0.38	<0.42	0.046 J	<0.39	<0.45	<0.75	<0.37	<1.8	<1.9
Chrysene	NSL	15	290	0.066	<0.35	<0.40	<0.41	<0.42	<0.40	<0.48	<0.38	<0.42	0.044 J	<0.39	<0.45	<0.75	<0.37	<1.8	<1.9
Fluoranthene	NSL	240	3,000	NSL	<0.35	<0.40	<0.41	<0.42	<0.40	<0.48	<0.38	<0.42	0.094 J	<0.39	<0.45	<0.75	<0.37	<1.8	<1.9
Fluorene	NSL	240	3,000	NSL	<0.35	<0.40	<0.41	<0.42	<0.40	<0.48	<0.38	<0.42	<0.44	<0.39	<0.45	<0.75	<0.37	<1.8	<1.9
Naphthalene	NSL	3.8	17	0.036	<0.35	<0.40	<0.41	<0.42	<0.40	<0.48	<0.38	<0.42	<0.44	<0.39	<0.45	**3.9**	<0.37	**8.1**	**15 J**
Phenathrene	NSL	NSL	NSL	NSL	<0.35	<0.40	<0.41	<0.42	<0.40	<0.48	<0.38	<0.42	*0.030 J*	<0.39	<0.45	*9.7*	<0.37	*12*	*16 J*
Pyrene	NSL	180	2,300	NSL	<0.35	<0.40	<0.41	<0.42	<0.40	<0.48	<0.38	<0.42	0.063 J	<0.39	<0.45	0.63 J	<0.37	1.1 J	0.97 J
Total Organic Carbon (EPA Method 5310)																			
TOC	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina.
2. Screening Levels are established by Environmental Protection Agency (EPA), Regional Screening level (RSL) Summary Table (November 2017).
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. All results are in milligrams per kilogram (mg/kg).
5. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected above the reporting limit.
6. A bold value indicates a concentration which exceeds a screening level.
7. NSL - No Screening Level Listed.
8. An italicized value indicates detected value with no established screening level.
9. NS - Not Sampled
10. J - Estimated Value

Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet														
					SB-57			SB-58			SB-59		SB-60		MW-5D		MW-9D		
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	0-1'	4-5'	9-10'	4-5'	9-10'	23-24'	2-3'	3-4'	3-4'	4-5'	1-2'	21-22'	0-1'	15-16'	64-65'
					5/10/2014	5/10/2014	5/10/2014	4/8/2014	4/8/2014	4/8/2014	5/19/2014	5/19/2014	5/19/2014	5/19/2014	5/13/2014	5/13/2014	5/14/2014	5/14/2014	5/14/2014
Volatile Organic Compounds (EPA Method 8260)																			
Acetone	NSL	6,100	67,000	NSL	<0.030	<0.024	<0.024	<0.023	<0.021	<1.1	0.030 J	0.086	0.011 J	<0.020	<0.019	<0.026	<0.030	<0.023	NS
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.0074	<0.0060	<0.0059	<0.0059	<0.0052	<0.28	<0.0079	<0.0065	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
Chloroform	0.022	0.32	1.4	NSL	<0.0074	<0.0060	<0.0059	<0.0059	<0.0052	<0.28	<0.0079	<0.0065	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
1,1-Dichloroethene	0.0025	23	100	NSL	**0.0028 J**	<0.0060	<0.0059	<0.0059	<0.0052	<0.28	<0.0079	<0.0065	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.0074	<0.0060	<0.0059	<0.0059	<0.0052	<0.28	<0.0079	<0.0065	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
Ethylbenzene	0.78	5.8	25	1.15	<0.0074	<0.0060	<0.0059	<0.0059	<0.0052	<0.28	<0.0079	<0.0065	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
2-Hexanone	NSL	20	130	NSL	<0.015	<0.012	<0.012	<0.012	<0.010	<0.56	<0.016	<0.013	<0.015	<0.010	<0.0093	<0.013	<0.015	<0.012	NS
Isopropylbenzene	NSL	NSL	NSL	NSL	NSL	<0.0060	<0.0059	*0.0020 J*	<0.0052	<0.28	<0.0079	*0.048*	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
Methyl acetate	NSL	7,800	120,000	NSL	NSL	<0.0060	<0.0059	<0.0059	<0.0052	<0.28	<0.0079	<0.0065	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
Methylcyclohexane	NSL	NSL	NSL	NSL	NSL	<0.0060	<0.0059	<0.0059	<0.0052	<0.28	<0.0079	<0.0065	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
Methylene Chloride	0.0013	35	320	NSL	NSL	<0.0060	<0.0059	<0.0059	<0.0052	<0.28	<0.0079	<0.0065	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
Tetrachloroethene	0.0023	8.1	39	NSL	0.0011 J	<0.0060	<0.0059	<0.0059	<0.0052	<0.28	**0.035**	**0.035**	**0.0045 J**	**0.0034 J**	0.0017 J	**0.0066**	**0.0032 J**	**0.0025 J**	NS
Toluene	0.69	490	4,700	1.45	<0.0074	<0.0060	<0.0059	<0.0059	<0.0052	<0.28	<0.0079	<0.0065	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
1,1,2-Trichloroethane	0.0011	0.15	0.63	NSL	<0.0074	<0.0060	<0.0059	<0.0059	<0.0052	<0.28	<0.0079	<0.0065	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
Trichloroethene	0.0018	0.41	1.9	NSL	<0.0074	<0.0060	<0.0059	<0.0059	<0.0052	<0.28	<0.0079	<0.0065	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
Xylenes (total)	9.9	58	250	14.5	<0.0074	<0.0060	<0.0059	0.0053 J	<0.0052	<0.28	<0.0079	0.0046 J	<0.0074	<0.0051	<0.0047	<0.0066	<0.0075	<0.0058	NS
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																			
Acenaphthene	NSL	360	4,500	NSL	<0.43	<0.38	<0.45	0.025 J	<0.39	<0.36	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)anthracene	NSL	0.15	2.9	0.066	<0.43	<0.38	<0.45	<0.37	<0.39	<0.36	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)pyrene	0.24	0.015	0.29	NSL	<0.43	<0.38	<0.45	<0.37	<0.39	<0.36	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(b)fluoranthene	NSL	0.15	3	0.066	<0.43	<0.38	<0.45	<0.37	<0.39	<0.36	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(g,h,i)perylene	NSL	NSL	NSL	NSL	<0.43	<0.38	<0.45	<0.37	<0.39	<0.36	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chrysene	NSL	15	290	0.066	<0.43	<0.38	<0.45	<0.37	<0.39	<0.36	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	NSL	240	3,000	NSL	<0.43	<0.38	<0.45	<0.37	<0.39	<0.36	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluorene	NSL	240	3,000	NSL	<0.43	<0.38	<0.45	<0.37	<0.39	<0.36	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NSL	3.8	17	0.036	<0.43	<0.38	<0.45	<0.37	<0.39	<0.36	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenathrene	NSL	NSL	NSL	NSL	<0.43	*0.048 J*	*0.062 J*	*0.36 J*	<0.39	*0.16 J*	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyrene	NSL	180	2,300	NSL	<0.43	<0.38	<0.45	0.030 J	<0.39	0.043 J	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total Organic Carbon (EPA Method 5310)																			
TOC	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	40 J	<100

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina.
2. Screening Levels are established by Environmental Protection Agency (EPA), Regional Screening level (RSL) Summary Table (November 2017).
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. All results are in milligrams per kilogram (mg/kg).
5. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected above the reporting limit.
6. A bold value indicates a concentration which exceeds a screening level.
7. NSL - No Screening Level Listed.
8. An italicized value indicates detected value with no established screening level.
9. NS - Not Sampled
10. J - Estimated Value

Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet															
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	MW-10D		MW-12		MW-13			MW-14			MW-15				MW-16	
					7-8'	22-23'	0-1'	33-34'	1-2'	25-26'	36-37'	13-14'	20-21'	44-45'	7-8'	16-17'	23-24'	31-32'	3-4'	19-20'
					5/15/2014	5/15/2014	5/12/2014	5/12/2014	5/15/2014	5/15/2014	5/15/2014	5/14/2014	5/14/2014	5/14/2014	5/14/2014	5/14/2014	5/14/2014	5/14/2014	5/20/2014	5/20/2014
Volatile Organic Compounds (EPA Method 8260)																				
Acetone	NSL	6,100	67,000	NSL	<0.026	<0.026	0.080	<0.022	0.018 J	<0.023	NS	<0.025	<0.020	NS	<0.024	<0.026	<0.028	NS	<0.023	<0.020
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.013	<0.013	<0.013	<0.011	<0.013	<0.011	NS	<0.013	<0.010	NS	<0.012	<0.013	<0.014	NS	<0.011	<0.011
Chloroform	0.022	0.32	1.4	NSL	<0.0065	<0.0066	<0.0064	<0.0054	<0.0064	<0.0056	NS	<0.0063	<0.0051	NS	<0.0059	<0.0065	<0.0069	NS	<0.0056	<0.0049
1,1-Dichloroethene	0.0025	23	100	NSL	<0.0065	<0.0066	<0.0064	<0.0054	<0.0064	<0.0056	NS	<0.0063	<0.0051	NS	<0.0059	<0.0065	<0.0069	NS	<0.0056	<0.0049
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.0065	<0.0066	<0.0064	<0.0054	<0.0064	<0.0056	NS	<0.0063	<0.0051	NS	<0.0059	<0.0065	<0.0069	NS	<0.0056	<0.0049
Ethylbenzene	0.78	5.8	25	1.15	<0.0065	<0.0066	<0.0064	<0.0054	<0.0064	<0.0056	NS	<0.0063	<0.0051	NS	<0.0059	<0.0065	<0.0069	NS	<0.0056	<0.0049
2-Hexanone	NSL	20	130	NSL	<0.013	<0.013	<0.013	<0.011	<0.013	<0.011	NS	<0.013	<0.010	NS	<0.012	<0.013	<0.014	NS	<0.011	<0.0099
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.0065	<0.0066	<0.0064	<0.0054	<0.0064	<0.0056	NS	<0.0063	<0.0051	NS	<0.0059	<0.0065	<0.0069	NS	<0.0056	<0.0049
Methyl acetate	NSL	7,800	120,000	NSL	<0.0065	<0.0066	<0.0064	<0.0054	<0.0064	<0.0056	NS	<0.0063	<0.0051	NS	<0.0059	<0.0065	<0.0069	NS	<0.0056	<0.0049
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.0065	<0.0066	<0.0064	<0.0054	<0.0064	<0.0056	NS	<0.0063	<0.0051	NS	<0.0059	<0.0065	<0.0069	NS	<0.0056	<0.0049
Methylene Chloride	0.0013	35	320	NSL	<0.0065	<0.0066	<0.0064	<0.0054	<0.0064	<0.0056	NS	<0.0063	<0.0051	NS	<0.0059	<0.0065	<0.0069	NS	<0.0056	<0.0049
Tetrachloroethene	0.0023	8.1	39	NSL	**0.23**	**1.7**	**0.025**	**0.47 J**	**0.0028 J**	0.0020 J	NS	0.0021 J	**0.0024 J**	NS	0.0022 J	**0.0030 J**	**0.0034 J**	NS	0.0012 J	0.0011 J
Toluene	0.69	490	4,700	1.45	<0.0065	<0.0066	<0.0064	<0.0054	<0.0064	<0.0056	NS	<0.0063	<0.0051	NS	<0.0059	<0.0065	<0.0069	NS	<0.0056	<0.0049
1,1,2-Trichloroethane	0.0011	0.15	0.63	NSL	<0.0065	<0.0066	<0.0064	<0.0054	<0.0064	<0.0056	NS	<0.0063	<0.0051	NS	<0.0059	<0.0065	<0.0069	NS	<0.0056	<0.0049
Trichloroethene	0.0018	0.41	1.9	NSL	<0.0065	<0.0066	<0.0064	<0.0054	<0.0064	<0.0056	NS	<0.0063	<0.0051	NS	<0.0059	<0.0065	<0.0069	NS	<0.0056	<0.0049
Xylenes (total)	9.9	58	250	14.5	<0.0065	<0.0066	<0.0064	<0.0054	<0.0064	<0.0056	NS	<0.0063	<0.0051	NS	<0.0059	<0.0065	<0.0069	NS	<0.0056	<0.0049
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)																				
Acenaphthene	NSL	360	4,500	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)anthracene	NSL	0.15	2.9	0.066	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)pyrene	0.24	0.015	0.29	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(b)fluoranthene	NSL	0.15	3	0.066	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(g,h,i)perylene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chrysene	NSL	15	290	0.066	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluorene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NSL	3.8	17	0.036	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenathrene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyrene	NSL	180	2,300	NSL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total Organic Carbon (EPA Method 5310)																				
TOC	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	<100	*39 J*	<100	NS	<100	*390 J*	NS	NS	<100	NS	NS

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina.
2. Screening Levels are established by Environmental Protection Agency (EPA), Regional Screening level (RSL) Summary Table (Novmeber 2017).
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. All results are in milligrams per kilogram (mg/kg).
5. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected above the reporting limit.
6. A bold value indicates a concentration which exceeds a screening level.
7. NSL - No Screening Level Listed.
8. An italicized value indicates detected value with no established screening level.
9. NS - Not Sampled
10. J - Estimated Value

Table 2
Soil Analytical Results

Itron, Inc.
Greenwood, South Carolina

Compounds	Soil Screening Level				Soil Samples - Sample Depths in Feet							
					MW-16D		MW-17			MW-18		
	Protection of Groundwater	Resident Soil	Industrial Soil	RBSL	6-7'	22-23'	0-1'	4-5'	23-24'	4-5'	12-13'	38-39'
					5/19/2014	5/19/2014	5/10/2014	5/10/2014	5/10/2014	5/12/2014	5/12/2014	5/12/2014
Volatile Organic Compounds (EPA Method 8260)												
Acetone	NSL	6,100	67,000	NSL	<0.025	<0.017	<0.021	<0.020	<0.019	<0.024	<0.023	NS
2-Butanone (MEK)	NSL	2,700	19,000	NSL	<0.013	<0.083	<0.010	<0.010	<0.0096	<0.012	<0.011	NS
Chloroform	0.022	0.32	1.4	NSL	<0.0063	<0.0042	<0.0052	<0.0050	<0.0048	<0.0061	<0.0057	NS
1,1-Dichloroethene	0.0025	23	100	NSL	<0.0063	<0.0042	<0.0052	<0.0050	<0.0048	<0.0061	<0.0057	NS
cis-1,2-Dichloroethene	0.021	16	230	NSL	<0.0063	<0.0042	<0.0052	<0.0050	<0.0048	<0.0061	<0.0057	NS
Ethylbenzene	0.78	5.8	25	1.15	<0.0063	<0.0042	<0.0052	<0.0050	<0.0048	<0.0061	<0.0057	NS
2-Hexanone	NSL	20	130	NSL	<0.013	<0.0083	<0.010	<0.010	<0.0096	<0.012	<0.011	NS
Isopropylbenzene	NSL	NSL	NSL	NSL	<0.0063	<0.0042	<0.0052	<0.0050	<0.0048	<0.0061	<0.0057	NS
Methyl acetate	NSL	7,800	120,000	NSL	<0.0063	<0.0042	<0.0052	<0.0050	<0.0048	<0.0061	<0.0057	NS
Methylcyclohexane	NSL	NSL	NSL	NSL	<0.0063	<0.0042	<0.0052	<0.0050	<0.0048	<0.0061	<0.0057	NS
Methylene Chloride	0.0013	35	320	NSL	<0.0063	<0.0042	<0.0052	<0.0050	<0.0048	<0.0061	<0.0057	NS
Tetrachloroethene	0.0023	8.1	39	NSL	0.0018 J	0.00069 J	0.00067 J	0.00098 J	**0.0049**	0.0010 J	<0.0057	NS
Toluene	0.69	490	4,700	1.45	<0.0063	<0.0042	<0.0052	<0.0050	<0.0048	<0.0061	<0.0057	NS
1,1,2-Trichloroethane	0.0011	0.15	0.63	NSL	<0.0063	<0.0042	<0.0052	<0.0050	<0.0048	<0.0061	<0.0057	NS
Trichloroethene	0.0018	0.41	1.9	NSL	<0.0063	<0.0042	<0.0052	<0.0050	<0.0048	<0.0061	<0.0057	NS
Xylenes (total)	9.9	58	250	14.5	<0.0063	<0.0042	<0.0052	<0.0050	<0.0048	<0.0061	<0.0057	NS
Polynuclear Aromatic Hydrocarbons (EPA Method 8270)												
Acenaphthene	NSL	360	4,500	NSL	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)anthracene	NSL	0.15	2.9	0.066	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)pyrene	0.24	0.015	0.29	NSL	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(b)fluoranthene	NSL	0.15	3	0.066	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(g,h,i)perylene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS
Chrysene	NSL	15	290	0.066	NS	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS
Fluorene	NSL	240	3,000	NSL	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NSL	3.8	17	0.036	NS	NS	NS	NS	NS	NS	NS	NS
Phenathrene	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	NS	NS	NS
Pyrene	NSL	180	2,300	NSL	NS	NS	NS	NS	NS	NS	NS	NS
Total Organic Carbon (EPA Method 5310)												
TOC	NSL	NSL	NSL	NSL	NS	NS	NS	NS	NS	<100	NS	<100

Notes:
1. Sample analysis performed by Shealy Environmental Services, Inc. of West Columbia, South Carolina.
2. Screening Levels are established by Environmental Protection Agency (EPA), Regional Screening level (RSL) Summary Table (November 2017).
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. All results are in milligrams per kilogram (mg/kg).
5. Constituents not listed in this table, but analyzed as part of the analytical suite, were not detected above the reporting limit.
6. A bold value indicates a concentration which exceeds a screening level.
7. NSL - No Screening Level Listed.
8. An italicized value indicates detected value with no established screening level.
9. NS - Not Sampled
10. J - Estimated Value

Table 3
Opinion of Probable Costs:
Cost Estimate Summary for Alternative 2
MNA/ICs

Itron, Inc.
Greenwood, South Carolina
June 2019

Total First Year Capital Cost	Unit	Unit Cost	Cost
Task 1: Project Coordination and Management, MNA Plan, HASP, Institutional Controls, Regulatory Correspondence	1	$20,000	$20,000
Task 2: Groundwater Sampling, Reporting and Development of Groundwater Model (Year 1)	1	$25,000	$25,000
Total First Year Capital Cost			**$45,000**
Present Value Cost	**Unit**	**Unit Cost**	**Cost**
Total First Year Cost	1	$45,000	$45,000
Task 2: Annual Groundwater Sampling and Reporting (Years 2-30)	29	$17,000	$493,000
Task 3: 5-Year Remedy Review (Years 5, 10, 15, 20, 25 and 30) and Groundwater Model Update	6	$12,000	$72,000
Total Present Worth Cost Using Discount Rate of 5 Percent			**$610,000**

Assumptions:

Task 1: Includes the following:

- Project coordination and management
- Development of HASP
- Development of Institutional Controls
- Generation of MNA Plan

Task 2: Includes the following:

- Quarterly sampling and reporting and development of groundwater model (Year 1)
- Annual sampling and reporting (Years 2-30)
- Evaluation of data, preparation of report (including tables, figures, etc.)
- Number of wells sampled per event = 28 for VOCs, nitrate, sulfate, methane, ethane, ethene, chloride, ferrous iron, total organic carbon and alkalinity.
- 2-person field crew per sampling event
- Generate groundwater model
- Waste Disposal (annually)

Task 3: Includes the following:

- Labor to generate 5-Year Remedy Review documentation and update groundwater model.
- Site inspection and photo documentation.
- Agency meeting in Columbia, SC

Table 4
Opinion of Probable Costs:
Cost Estimate Summary for Alternative 3
Excavation and Disposal with MNA/ICs

Itron, Inc.
Greenwood, South Carolina
June 2019

Total First Year Capital Cost	**Unit**	**Unit Cost**	**Cost**
Task 1: Project Coordination and Management, Excavation Work Plan, MNA Plan, HASP, Institutional Controls, Land Disturbance Permit	1	$40,000	$40,000
Task 2: Utility Locate, Demolish Storage Building, Perform Excavation, Confirmation Sampling, Transportation and Disposal, Backfill, Site Restoration, Replace Storage Building	1	$2,400,000	$2,400,000
Task 3: Semi-Annual Groundwater Sampling, Reporting and Development of Groundwater Model (Year 1)	1	$45,000	$45,000
Total First Year Capital Cost			**$2,485,000**
Present Value Cost	**Unit**	**Unit Cost**	**Cost**
Total First Year Cost	1	$2,485,000	$2,485,000
Task 3A: Annual Groundwater Sampling and Reporting (Years 2-20)	19	$17,000	$323,000
Task 4: 5-Year Remedy Review (Years 5, 10, 15 and 20) and Groundwater Model Updates	4	$15,000	$60,000
Total Present Worth Cost Using Discount Rate of 5 Percent			**$2,868,000**

Assumptions:

Task 1: Includes the following:

- Project coordination and management
- Development of HASP
- Development of Institutional Controls
- Generation of Remedial Action Work Plan
- Generation of MNA Plan

Task 2: Includes the following:

- Perform utility location in excavation area
- Demolition of existing storage building
- Perform excavation
- Confirmation sampling
- Transportation and disposal of contaminated soils (Assume 15 percent Hazardous and 85 percent Non-Hazardous)
- Clean backfill
- Site restoration (asphalt and concrete), replace storage building

Table 4
Opinion of Probable Costs:
Cost Estimate Summary for Alternative 3
Excavation and Disposal with MNA/ICs

Itron, Inc.
Greenwood, South Carolina
June 2019

Task 3/3A: Includes the following:

- Semi-Annual sampling and reporting and development of groundwater model (Year 1)
- Annual sampling and reporting (Years 2-20)
- Evaluation and preparation of annual reports (including tables, figures, etc.)
- Number of wells sampled per event = 28 for VOCs, nitrate, sulfate, methane, ethane, ethene, chloride, ferrous iron, total organic carbon and alkalinity.
- 2- person field crew per sampling event
- Generate groundwater model
- Waste Disposal (annually)

Task 4: Includes the following:

- Labor to generate 5-Year Remedy Review (Years 5, 10, 15 and 20) documentation and update groundwater model.
- Site inspection and photo documentation.
- Agency meeting in Columbia, SC

Table 5
Opinion of Probable Costs:
Cost Estimate Summary for Alternative 4
In Situ Remediation Using BOS 100® with MNA/ICs

Itron, Inc.
Greenwood, South Carolina
June 2019

Total First Year Capital Cost	**Unit**	**Unit Cost**	**Cost**
Task 1: Project Coordination and Management, HASP, Institutional Controls, MNA Plan, BOS 100® Pilot Study Injection Plan and Design	1	$60,000	$60,000
Task 2: (Pilot Study) BOS 100®, UIC permit, private utility locator, additional groundwater characterization, subcontractor to perform injection, fieldwork and injection report.	1	$175,000	$175,000
Task 3: (Full Scale) BOS 100®, UIC permit, private utility locator, additional groundwater characterization, subcontractor to perform injection, fieldwork and injection report.	1	$900,000	$900,000
Task 4: Annual Groundwater Sampling, Reporting and Development of Groundwater Model (Year 1)	1	$25,000	$25,000
Total First Year Capital Cost			**$1,160,000**
Present Value Cost	**Unit**	**Unit Cost**	**Cost**
Total First Year Cost	1	$1,160,000	$1,160,000
Task 4A: Annual Groundwater Sampling reporting (Years 2-15)	14	$17,000	$238,000
Task 5: 5-Year Remedy Review (Years 5, 10 and 15) and Groundwater Model Update	2	$10,000	$30,000
Total Present Worth Cost Using Discount Rate of 5 Percent			**$1,428,000**

Assumptions:

Task 1: Includes the following:

- Project coordination and management
- Development of HASP
- Development of Institutional Controls
- Generation of BOS 100® Injection Plan and Design
- Generation of MNA Plan

Task 2: Includes the following:

- Perform utility location in treatment area
- UIC Permitting
- Additional groundwater characterization
- Perform Pilot Study BOS 100®Injection
- Pilot Study Injection Report

Table 5
Opinion of Probable Costs:
Cost Estimate Summary for Alternative 4
In Situ Remediation Using BOS 100® with MNA/ICs

Itron, Inc.
Greenwood, South Carolina
June 2019

Task 3: Includes the following:

- Perform utility location in treatment area
- UIC Permitting
- Additional groundwater characterization
- Perform Full Scale BOS 100®Injection
- Full Scale Injection Report

Task 4/4A: Includes the following:

- Annual sampling and reporting and development of groundwater model (Year 1)
- Annual sampling and reporting (Years 2-15)
- Evaluation of data and preparation of annual reports
- Number of wells sampled per event = 28 for VOCs, nitrate, sulfate, methane, ethane, ethene, chloride, ferrous iron, total organic carbon and alkalinity
- 2-person field crew per sampling event
- Generate groundwater model
- Waste Disposal (annually)

Task 5: Includes the following:

- Labor to generate 5-Year Remedy Review (Years 5, 10 and 15) documentation and update groundwater model
- Site inspection and photo documentation
- Agency meeting in Columbia, SC

Table 6
Opinion of Probable Costs:
Cost Estimate Summary for Alternative 5
In Situ Chemical Oxidation (ISCO) with MNA/ICs

Itron, Inc.
Greenwood, South Carolina
June 2019

Total First Year Capital Cost	**Unit**	**Unit Cost**	**Cost**
Task 1: Project Coordination and Management, HASP, Institutional Controls, MNA Plan, Injection Work Plan and Design	1	$60,000	$60,000
Task 2: (Pilot Study) ISCO, UIC permit, private utility locator, additional groundwater characterization, subcontractor to perform injection, fieldwork and injection report.	1	$165,000	$165,000
Task 3: (Full Scale) ISCO, UIC permit, private utility locator, additional soil and groundwater characterization, subcontractor to perform injection, fieldwork and injection report.	1	$850,000	$850,000
Task 4: Annual Groundwater Sampling, Reporting and Development of Groundwater Model (Year 1)	1	$25,000	$25,000
Total First Year Capital Cost			**$1,110,000**
Present Value Cost	**Unit**	**Unit Cost**	**Cost**
Total First Year Cost	1	$1,110,000	$1,110,000
Task 4A: Annual Groundwater Sampling reporting (Years 2-15)	14	$17,000	$238,000
Task 5: 5-Year Remedy Review (Years 5, 10 and 15) and Groundwater Model Update	2	$10,000	$30,000
Total Present Worth Cost Using Discount Rate of 5 Percent			**$1,378,000**

Assumptions:

Task 1: Includes the following:

- Project coordination and management
- Development of HASP
- Development of Institutional Controls
- Generation of ISCO Injection Plan and Design
- Generation of MNA Plan

Task 2: Includes the following:

- Perform utility location in treatment area
- UIC Permitting
- Additional groundwater characterization
- Perform Pilot Study ISCO Injection
- Pilot Study Injection Report

Task 3: Includes the following:

- Perform utility location in treatment area
- UIC Permitting
- Additional groundwater characterization
- Perform Full Scale ISCO Injection
- Full Scale Injection Report

Task 4/4A: Includes the following:

- Annual sampling and reporting and development of groundwater model (Year 1)
- Annual sampling and reporting (Years 2-15)
- Evaluation of data and preparation of annual reports
- Number of wells sampled per event = 28 for VOCs, nitrate, sulfate, methane, ethane, ethene, chloride, ferrous iron, total organic carbon and alkalinity
- 2-person field crew per sampling event
- Generate groundwater model
- Waste Disposal (annually)

Task 5: Includes the following:

- Labor to generate 5-Year Remedy Review (Years 5, 10 and 15) documentation and update groundwater model
- Site inspection and photo documentation
- Agency meeting in Columbia, SC

Table 7
Opinion of Probable Costs:
Cost Estimate Summary for Alternative 6
Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) with MNA/ICs

Itron, Inc.
Greenwood, South Carolina
June 2019

Total First Year Capital Cost	**Unit**	**Unit Cost**	**Cost**
Task 1: Project Coordination and Management, HASP, Institutional Controls, MNA Plan, Excavation Work Plan, Pilot Study ISCO Work Plan, Full Scale Injection Work Plan and Design	1	$60,000	$60,000
Task 2: Utility Locate, Demolish storage building, Perform Excavation, Confirmation Sampling, Transportation and Disposal, Backfill, Site Restoration, Replace Storage Building	1	2,400,000	2,400,000
Task 3: (Pilot Study) ISCO, UIC permit, private utility locator, additional groundwater characterization, subcontractor to perform injection, fieldwork and injection report.	1	$165,000	$165,000
Task 4: (Full Scale) ISCO, UIC permit, Utility Locate, additional soil and groundwater characterization, subcontractor to perform injection, fieldwork and injection report.	1	$850,000	$850,000
Task 5: Semi-Annual Groundwater Sampling, Reporting and Development of Groundwater Model (Year 1)	1	$45,000	$45,000
Total First Year Capital Cost			**$3,520,000**
Present Value Cost	**Unit**	**Unit Cost**	**Cost**
Total First Year Cost	1	$3,520,000	$3,520,000
Task 5A: Annual Groundwater Sampling reporting (Years 2-10)	9	$17,000	$153,000
Task 6: 5-Year Remedy Review (Years 5 and 10) and Groundwater Model Update	2	$10,000	$20,000
Total Present Worth Cost Using Discount Rate of 5 Percent			**$3,693,000**

Assumptions:

Task 1: Includes the following:

- Project coordination and management
- Development of HASP
- Development of Institutional Controls
- Generation of Excavation Work Plan
- Generation of Pilot Study and Full Scale ISCO Injection Plans and Design
- Generation of MNA Plan

Task 2: Includes the following:

- Perform utility location in excavation area
- Demolition of existing storage building
- Perform excavation

- Confirmation sampling
- Transportation and disposal of contaminated soils (assume hazardous)
- Clean Backfill
- Site restoration (asphalt and concrete), replace storage building

Task 3: Includes the following:

- Perform utility location in treatment area
- UIC Permitting
- Additional groundwater characterization
- Perform Pilot Study ISCO Injection
- Pilot Study Injection Report

Task 4: Includes the following:

- Perform utility location in treatment area
- UIC Permitting
- Additional groundwater characterization
- Perform Full Scale ISCO Injection
- Full Scale Injection Report

Task 5/5A: Includes the following:

- Annual sampling and reporting and development of groundwater model (Year 1)
- Annual sampling and reporting (Years 2-10)
- Evaluation of data and preparation of annual reports
- Number of wells sampled per event = 28 for VOCs, nitrate, sulfate, methane, ethane, ethene, chloride, ferrous iron, total organic carbon and alkalinity
- 2-person field crew per sampling event
- Generate groundwater model
- Waste Disposal (annually)

Task 6: Includes the following:

- Labor to generate 5-Year Remedy Review (Years 5 and 10) documentation and update groundwater model
- Site inspection and photo documentation
- Agency meeting in Columbia, SC

Table 8
Comparison of Remedial Alternatives to Evaluation Criteria
Itron, Inc.
1310 Emerald Road
Greenwood, South Carolina

	Remedial Alternatives					
	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Criterion	No Action	MNA/ICs	Excavation and Disposal with MNA/ICs	In Situ Remediation using BOS 100® with MNA/ICs	In Situ Chemical Oxidation (ISCO) with MNA/ICs	Excavation and Disposal Combined withIn Situ Chemical Oxidation (ISCO) with MNA/ICs
Overall Protection of human health and the environment	1	3	4	6	6	6
Compliance with applicable federal, state and local regulations	1	3	4	6	6	6
Long-term effectiveness and permanence	1	1	3	3	4	6
Reduction of toxicity, mobility and volumes	1	2	3	5	5	6
Short-term effectiveness	1	2	3	4	5	6
Implementability	6	4	2	5	5	3
Total Score	**11**	**15**	**19**	**29**	**31**	**33**
Relative Cost	No Cost	$610,000	$2,868,000	$1,428,000	$1,378,000	$3,693,000
State and community acceptance	--	--	--	--	--	--

Notes:

MNA - Monitored Natural Attenuation

ICs - Institutional Controls

-- Not Ranked. State and community acceptance will be evaluated following approval of FS.

Scoring:

1 = Unacceptable, does not meet the minimum requirements

2 = Alternative is on the **Low** end of the alternative criteria

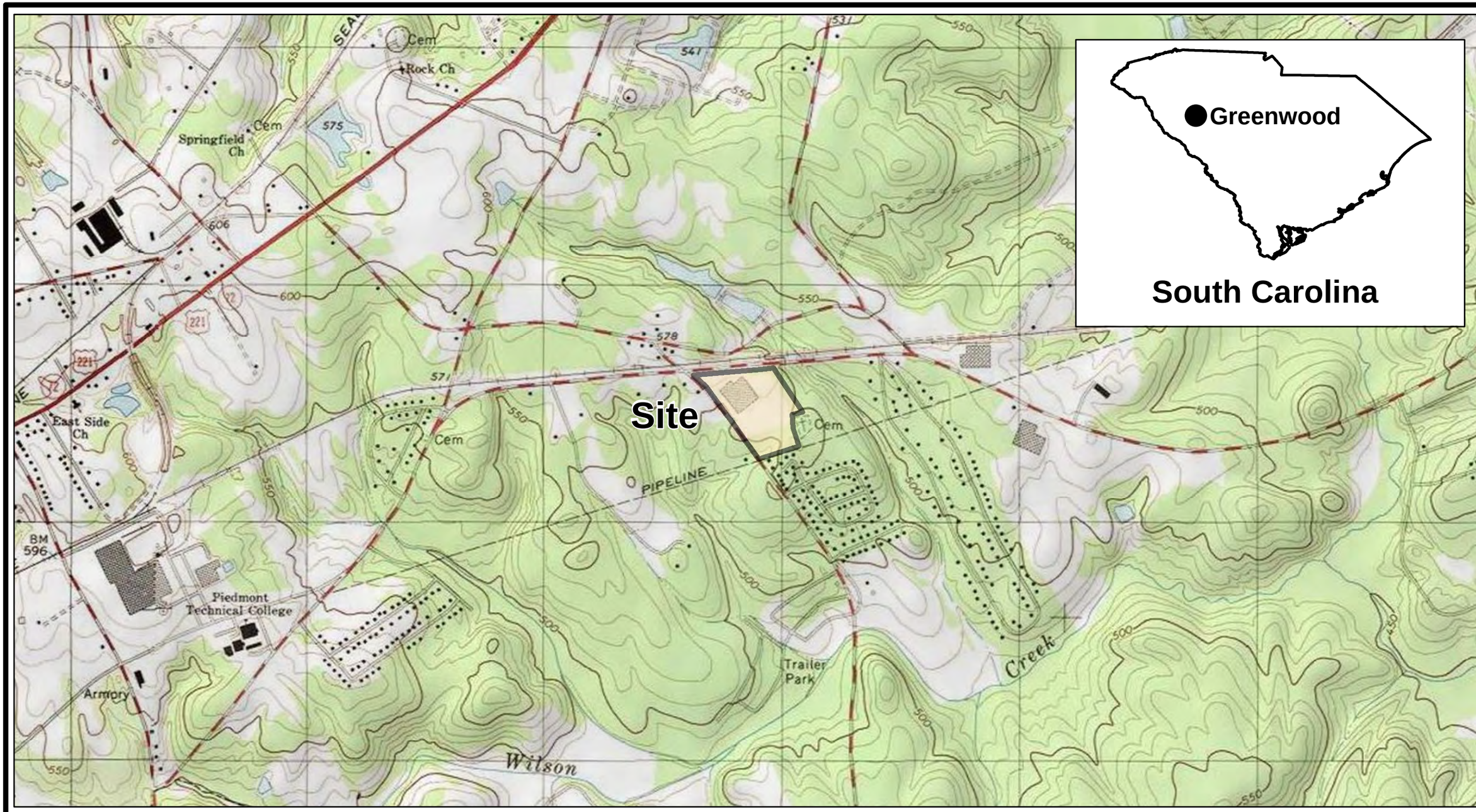
3 = Alternative is **Fair** with respect to meeting the alternative criteria

4 = Alternative is **Good** with respect to meeting the alternative criteria

5 = Alternative is **Very Good** with respect to meeting the alternative criteria

6 = Alternative is **Excellent** with respect to meeting the alternative criteria

Figures



Legend

Itron Property Line (Approximate)

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

N

0 0.25 0.5 Miles

AECOM

Itron

Figure 1
Site Location Map

Land Use Numerical Key

1. Itron Property (Red Seal Measurement)
2. New Faith Tabernacle Church
3. Jesse's Diner
4. Express Check
5. Undeveloped Property - Virginia Smith
6. Country Homes Subdivision
7. CSX Railway
8. Brewer Middle School
9. Woodfields Elementary School
10. Private Residence - Virginia Smith
11. Private Residence - Barry Campbell
12. Private Residence - Sandra Smith
13. Undeveloped Property - Stockman Lands, Inc.
14. Velux Greenwood, Inc.
15. Former Phillips 66 Gas Station
16. Lil Cricket / Marathon Gas Station
17. Byrd Cemetery

Legend

- Itron Property Line (Approximate)
- Parcels/ Tracts
- Potential Private Water Supply Well
- Stream/Creek
- Pond
- CSX Railroad

N

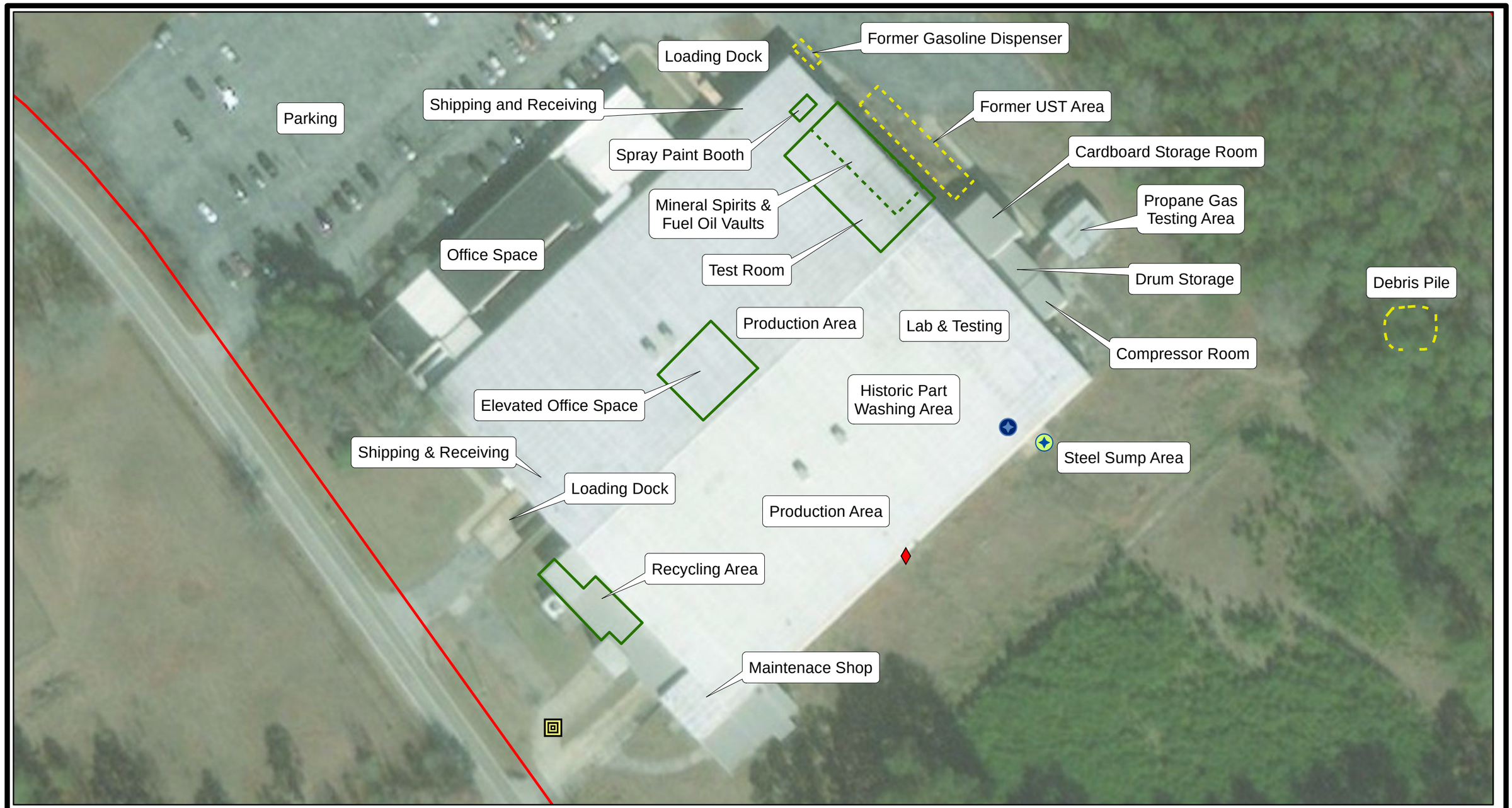
South Carolina State Plane, NAD 83
Zone 3900, International Feet

0 400 800
Feet

AECOM

Itron

Figure 2
Site Vicinity Map



Legend

- Concrete Sump Pit
- Itron Property Line (Approximate)
- HistoricPart
- Floor Sump
- Oil Water Separator

N

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

0 70 140 Feet

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Itron

Figure 3
Site Features Map

Note:
Cross Sections A-A' through D-D'
were prepared during the RI and are
included in the RI report (October 24, 2014).
Cross section K-K' is included in the
Supplemental RI Report Addendum (March 24, 2017)

Legend

- Shallow Monitoring Well
- Intermediate Monitoring Well
- Deep Monitoring Well
- Soil Boring Location
- Itron Property Line (Approximate)

- Trace E-E' (MW-21, 14, 10D, 10R, 10I, 9D, 9, 13)
- Trace F-F' (MW-11, 7, 6, SB-30, SB-32, 12)
- Trace G-G' (MW-11, 14, 19)
- Trace H-H' (MW-1, 7, 16D, 16, 10D, 10I, 10, 10R, 15R, 15)
- Trace I-I' (MW-2, 3, 12, 4, 5, 5D, 9, 9D)
- Trace J-J' (MW-20, 22D, 13)

N

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

0 200 400 Feet

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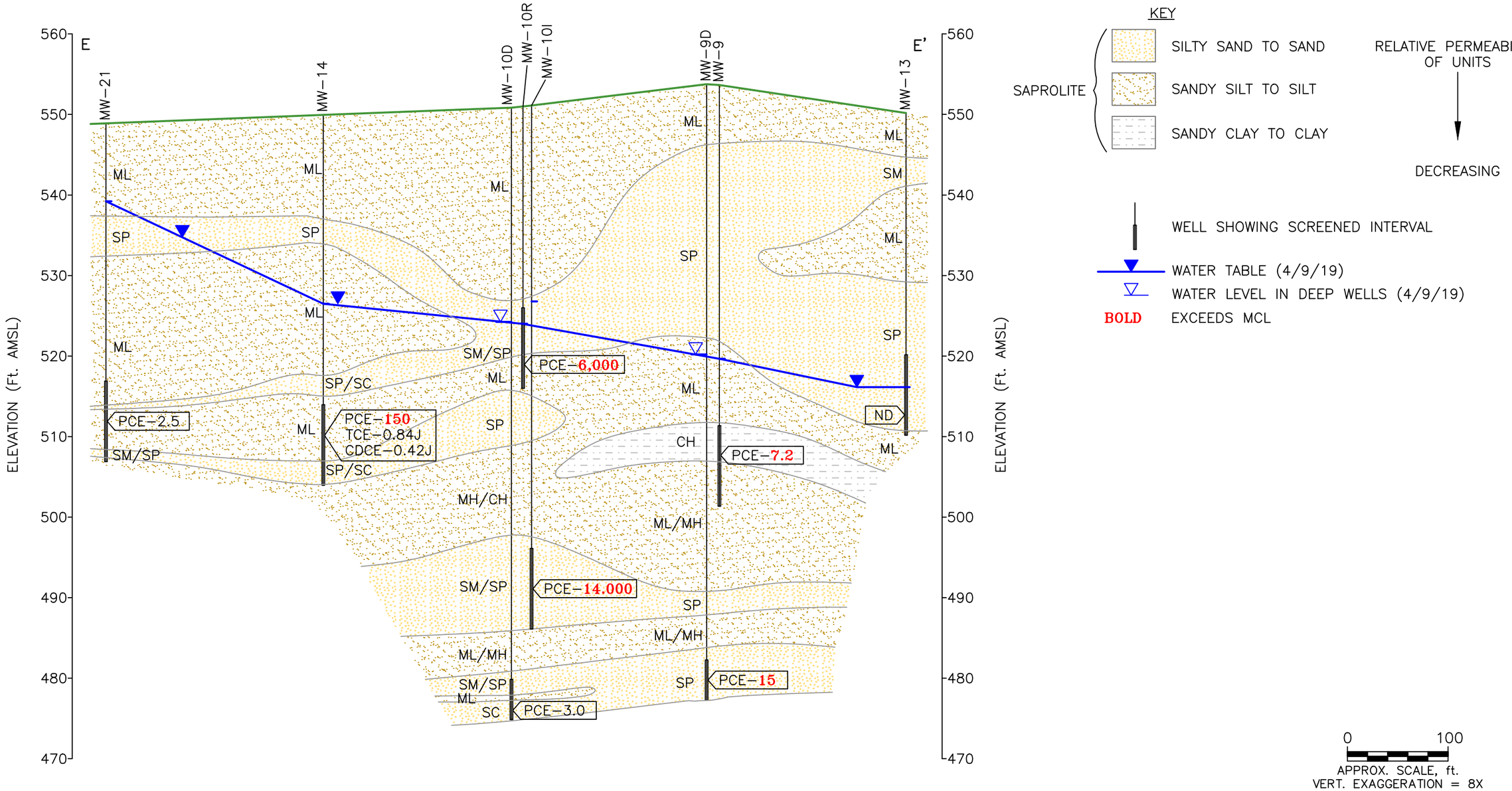
Figure 4-1
Trace of Geologic Cross Sections



Legend

J - Estimated Value
PCE - Tetrachloroethene
TCE - Trichloroethene
CDCE - cis-1,2-Dichloroethene
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

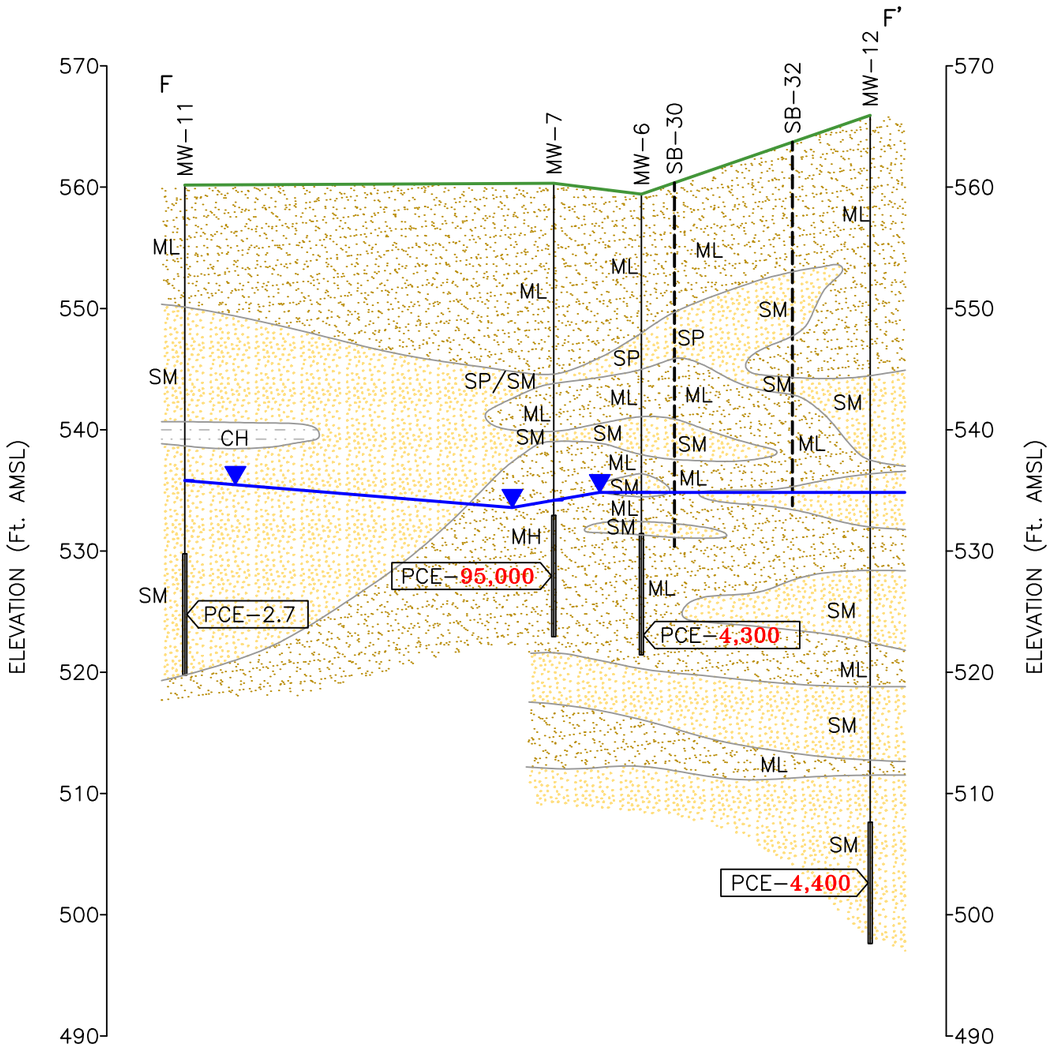
Red indicates concentrations above Maximum Contanminant Levels (MCLs).

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

All analytical results from April 2019.

AECOM Itron

Figure 4-2
Geologic Cross Section
E-E'



KEY

SAPROLITE

- SILTY SAND TO SAND
- SANDY SILT TO SILT
- SANDY CLAY TO CLAY

RELATIVE PERMEABILITY OF UNITS

DECREASING

WELL SHOWING SCREENED INTERVAL

WATER TABLE (4/9/19)

BOLD EXCEEDS MCL

0 100

APPROX. SCALE, ft.
VERT. EXAGGERATION = 8X

Legend

J - Estimated Value
PCE - Tetrachloroethene
ND - Not Detected

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

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

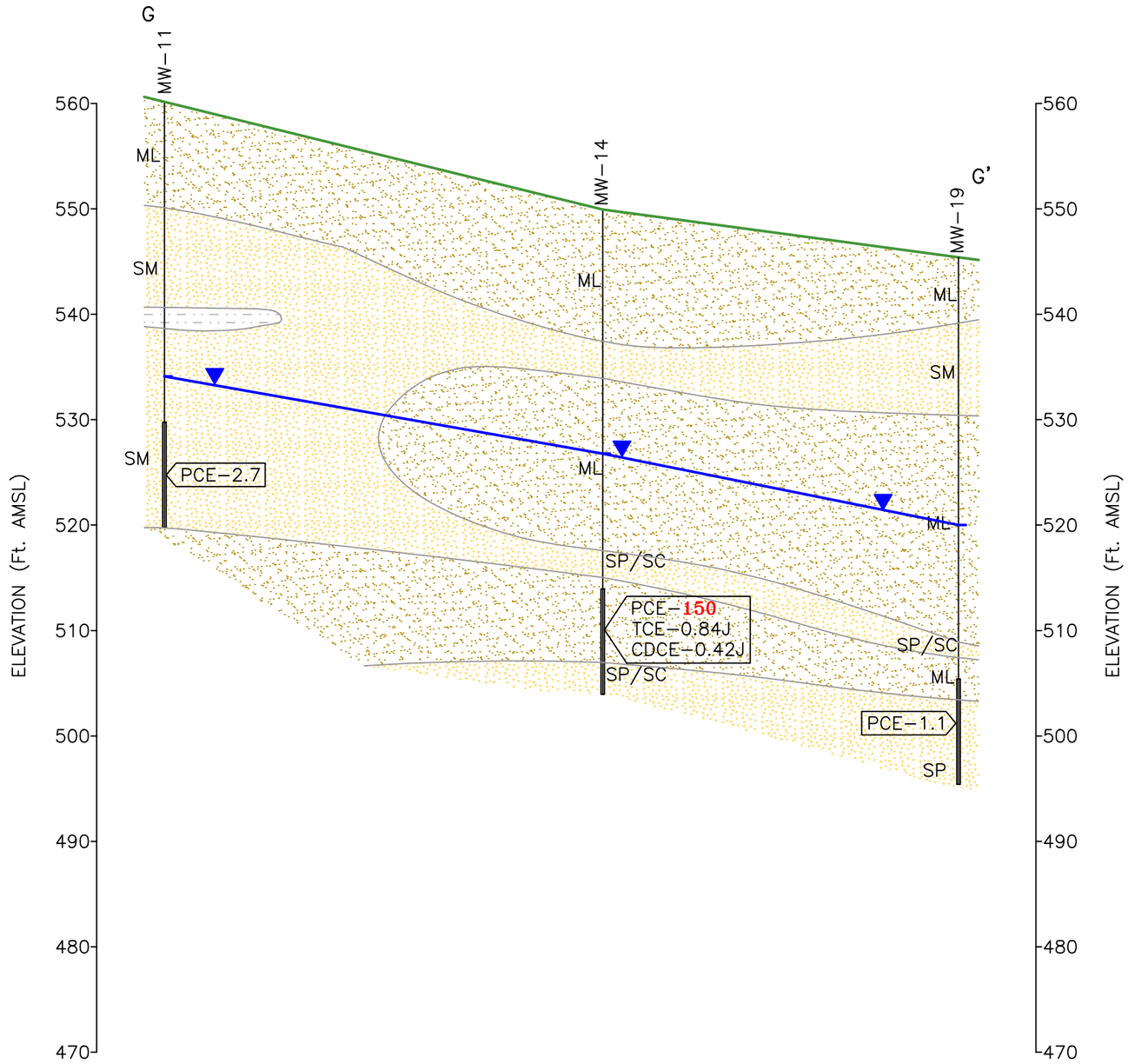
Red indicates concentrations above Maximum Contanminant Levels (MCLs).

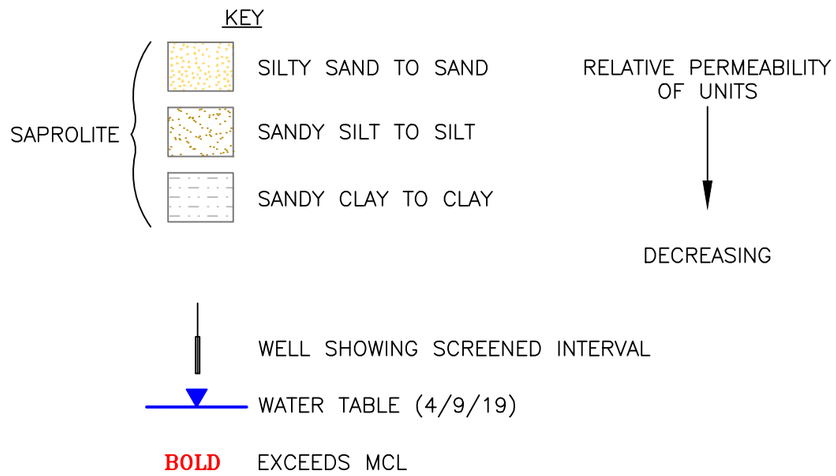
Surface layer and thin seams within the predominant soil units are not differentiated.

All analytical results from April 2019.

AECOM Itron

Figure 4-3
Geologic Cross Section
F-F'





Legend

J - Estimated Value
PCE - Tetrachloroethene
TCE - Trichloroethene
CDCE - cis-1,2-Dichloroethene
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

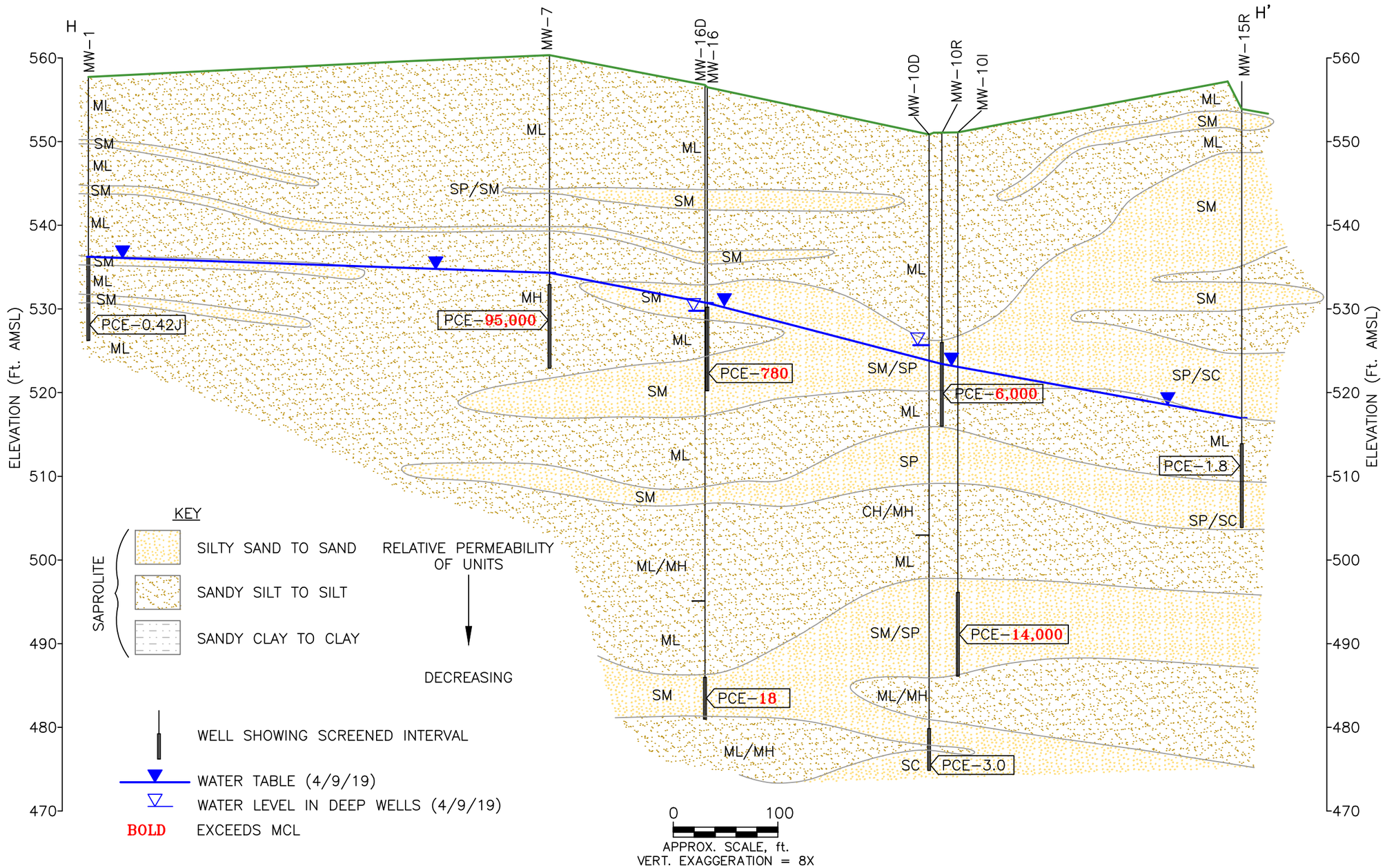
Red indicates concentrations above Maximum Contanminant Levels (MCLs).

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

All analytical results from April 2019.

AECOM Itron

Figure 4-4
Geologic Cross Section
G-G'



Legend

J - Estimated Value
PCE - Tetrachloroethene
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

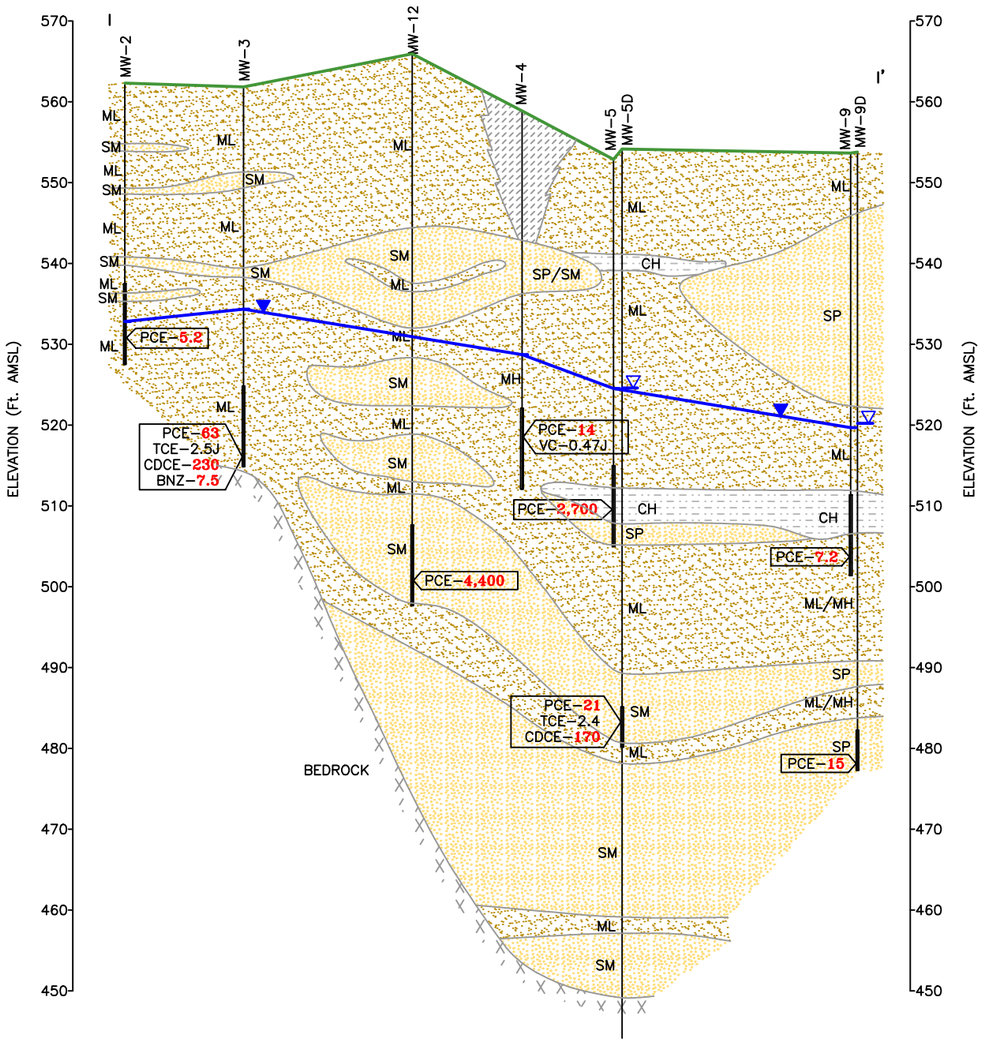
Red indicates concentrations above Maximum Contanminant Levels (MCLs).

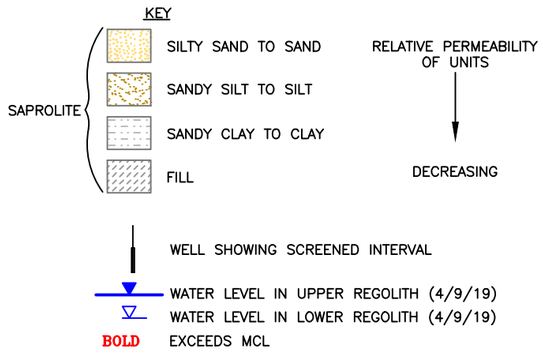
Surface layer and thin seams within the predominant soil units are not differentiated.

All analytical results from April 2019.

AECOM Itron

Figure 4-5
Geologic Cross Section
H-H'





0 150
APPROX. SCALE, ft.
VERT. EXAGGERATION = 8X

Legend

J - Estimated Value
PCE - Tetrachloroethene
TCE - Trichloroethene
CDCE - cis - 1,2 Dichloroethene
VC - Vinyl Chloride
ND - Not Detected

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

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

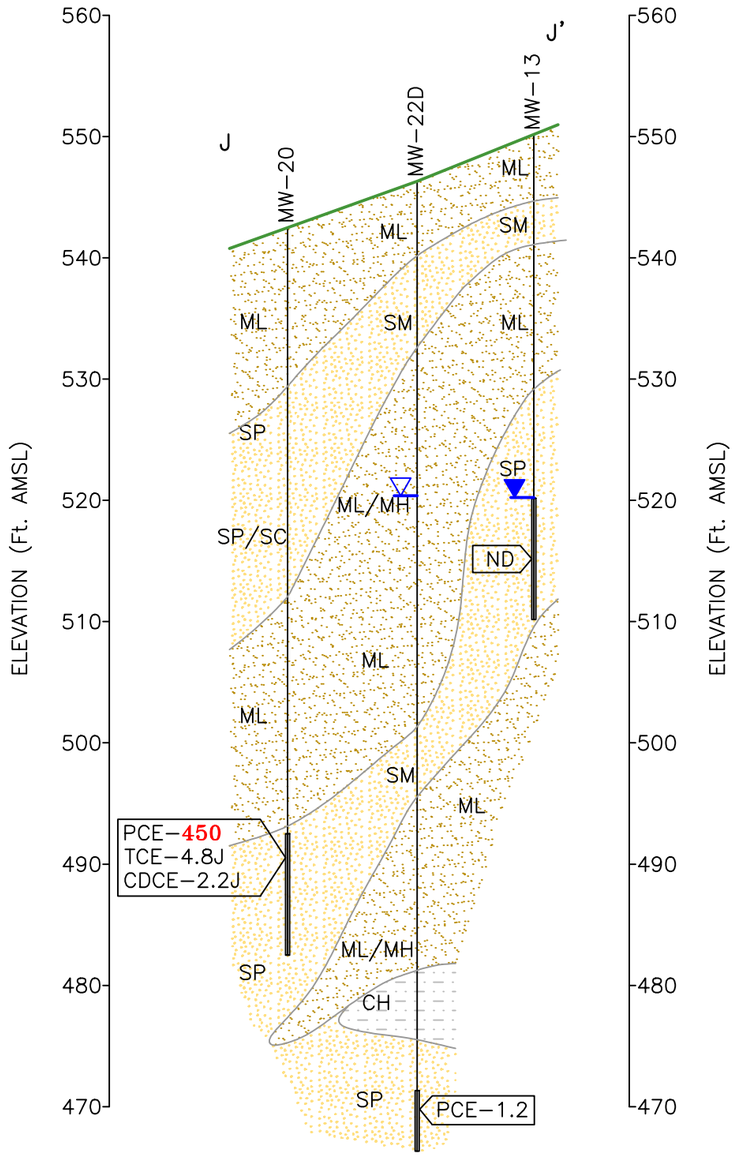
Red indicates concentrations above Maximum Contanminant Levels (MCLs) or Risk Based Screening Levels (RBSLs).

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

All analytical results from April 2019.

AECOM Itron

Figure 4-6
Geologic Cross Section I-I'



KEY

SAPROLITE

- SILTY SAND TO SAND
- SANDY SILT TO SILT
- SANDY CLAY TO CLAY

RELATIVE PERMEABILITY OF UNITS

DECREASING

WELL SHOWING SCREENED INTERVAL

WATER LEVEL IN UPPER REGOLITH (4/9/19)

WATER LEVEL IN LOWER REGOLITH (4/9/19)

BOLD EXCEEDS MCL

0 100

APPROX. SCALE, ft.
VERT. EXAGGERATION = 8X

Legend

J - Estimated Value
PCE - Tetrachloroethene
TCE - Trichloroethene
CDCE - cis-1,2-Dichloroethene
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 Contanminant Levels (MCLs).

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

All analytical results from April 2019.

AECOM Itron

Figure 4-7
Geologic Cross Section
J-J'

Legend

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

MSL - Mean Sea Level

[532.82] - Water Elevation (feet above MSL)

Water levels measured April 9, 2019

N

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

0 200 400 Feet

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Figure 5 Potentiometric Surface Map (Upper Regolith) - April 2019

Legend

- Intermediate Monitoring Well Location
- 528 ---- Potentiometric Surface Contours (feet above MSL)
- Approximate Groundwater Flow Direction
- Itron Property Line (Approximate)

MSL - Mean Sea Level

[530.25] - Water Elevation (feet above MSL)

Water levels measured April 9, 2019

N

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

0 200 400 Feet

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Figure 6
Potentiometric Surface Map (Intermediate Regolith) - April 2019

Legend

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

MSL - Mean Sea Level

[530.47] - Water Elevation (feet above MSL)

Water levels measured April 9, 2019

N

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

0 200 400 Feet

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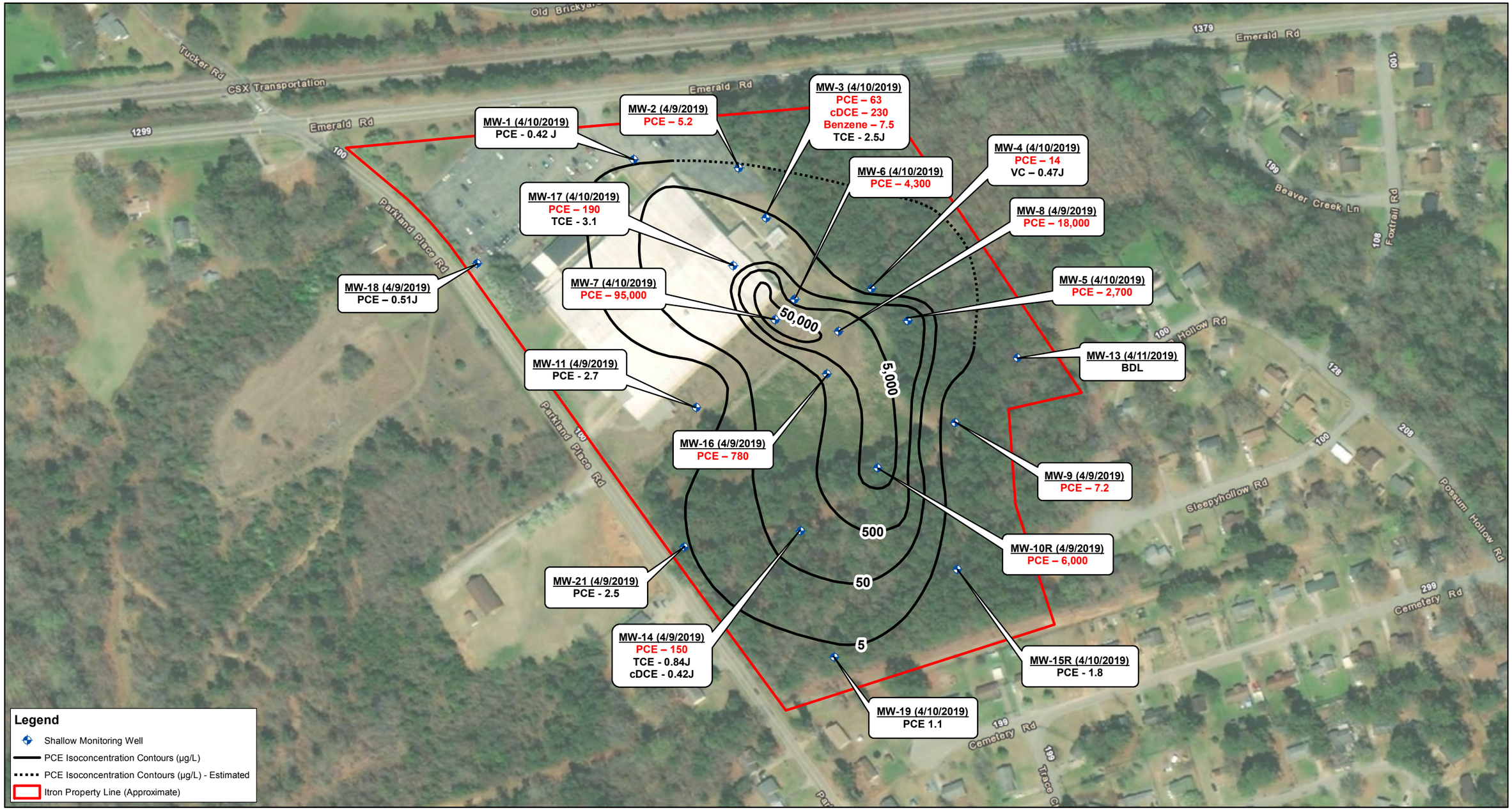
Figure 7
Potentiometric Surface Map (Lower Regolith) - April 2019



NOTES:

Red indicates concentrations above Maximum Contaminant Levels (MCLs).

All results reported in µg/l (micrograms per liter).

Only Chemicals of Concern (COCs) detected above laboratory detection limit included. Other COCs included in Table 2 of the Groundwater Monitoring Report - April 2019.

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

N

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

0 200 400 Feet

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Figure 8
Distribution of COCs in Upper Regolith - Groundwater
April 2019

Legend

- Intermediate Monitoring Well
- PCE Isoconcentration Contours (µg/L)
- PCE Isoconcentration Contours (µg/L) - Estimated
- Itron Property Line (Approximate)

NOTES:

Red indicates concentrations above Maximum Contaminant Levels (MCLs).

All results reported in µg/l (micrograms per liter).

Only Chemicals of Concern (COCs) detected above laboratory detection limit included. Other COCs included in Table 2 of the Groundwater Monitoring Report - April 2019.

- BDL – Below Detection Limits

N

0 200 400 Feet

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

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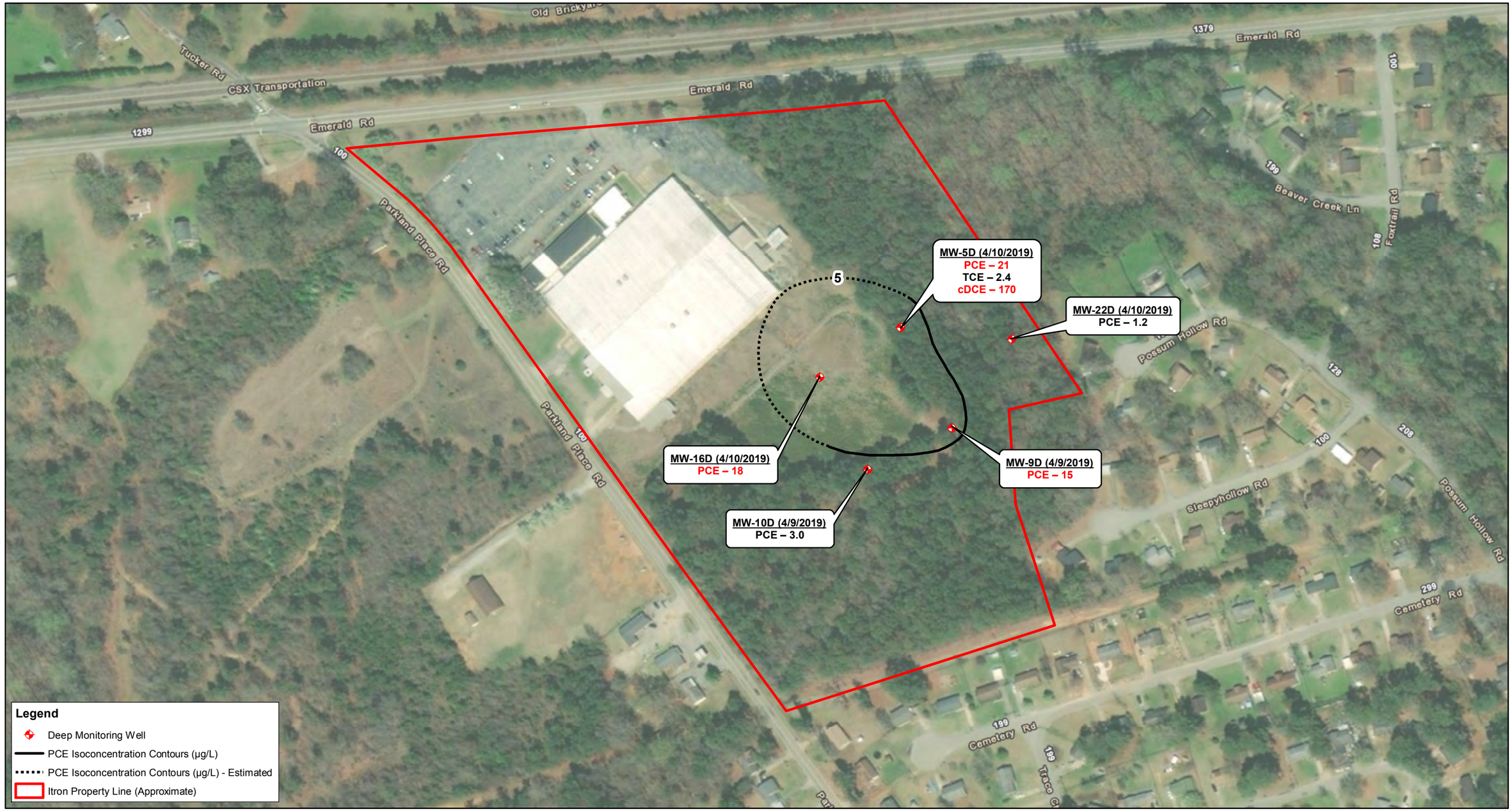
Figure 9
Distribution of COCs in Intermediate Regolith - Groundwater
April 2019



NOTES:

Red indicates concentrations above Maximum Contaminant Levels (MCLs).

All results reported in µg/l (micrograms per liter).

Only Chemicals of Concern (COCs) detected above laboratory detection limit included. Other COCs included in Table 2 of the Groundwater Monitoring Report - April 2019.

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

N

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

0 200 400 Feet

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Figure 10
Distribution of COCs in Lower Regolith - Groundwater
April 2019

SB-34 (4/2/2014)
(6-7') 0.00082J
(17-18') 0.03
(25-26') 4.3J

SB-12 (3/14/2012)
(1') 0.25
(10') 0.049
(28') 1.8

SB-35 (4/2/2014)
(7-8') 0.04
(17-18') 1.1
(25-26') 0.38

SB-7 (1/11/2012)
(16-18') 0.024

SB-32 (4/2/2014)
(7-8') 0.40
(15-16') 0.0048J
(20-21') 0.33

SB-30 (4/1/2014)
(6-7') ND
(19-20') 0.0010J

SB-20 (5/10/2014)
(0-1') 0.12J
(10-11') 0.00088J
(23-24') 0.012

SB-17 (3/14/2012)
(6') 0.054
(24') 0.43

SB-21 (5/10/2014)
(0-1') 0.22
(8-9') 0.017
(27-28') 0.065J

SB-24 (3/31/2014)
(3-4') 0.0025J
(24-25') 0.015

SB-27 (4/1/2014)
(7-8') ND
(29-30') 0.91

MW-6 (3/13/2012)
(20') 0.029
(30') 0.39

SB-33 (4/1/2014)
(2-3') 0.00071J
(8-9') 0.00058J
(17-18') 0.62
(22-23') 0.097

SB-13 (3/14/2012)
(18') 0.024
(28') 0.19

SB-36 (4/2/2014)
(5-6') ND
(18-19') 0.00067J
(26-27') 0.0061

SB-31 (4/1/2014)
(6-7') 0.00055J
(25-26') 0.0061

SB-28 (4/1/2014)
(14-15') 0.0030J
(26-27') 0.62
(29-30') 2.4

SB-25 (3/31/2014)
(0-1') 5.6
(27-28') 11
(28-29') 14

SB-18 (3/15/2012)
(14') 0.052
(22') 0.16

SB-19 (5/10/2014)
(0-1') 0.22J
(3-4') 0.0022J
(18-19') 0.068J

SB-16 (3/14/2012)
(8') 0.0078
(14') 0.013

SB-22 (3/31/2014)
(0-1') 0.092
(27-28') 0.16
(29-30') 0.29

SB-23 (3/31/2014)
(4-5') 0.32
(25-26') 0.45
(29-30') 0.19

MW-7 (3/14/2012)
(2') 62
(14') 0.72
(20') 0.6
(28') 3.4

SB-26 (3/31/2014)
(0-1') 31
(1-2') 18
(2-3') 2,600
(3-4') 4.7
(29-30') 2.2

SB-29 (4/1/2014)
(3-4') 0.95
(14-15') 0.073J
(22-23') 4.6
(27-28') 18

LOCATION REFERENCE - NOT TO SCALE

Legend

- Soil Boring Location
- Shallow Monitoring Well
- Floor Sump
- Steel Sump

NOTES:
- Red indicates concentrations above Soil Screening Level (SSL) Protection of Groundwater.
- Other chemicals of concern (COCs) included in Table 6 of the Remedial Investigation (RI) Report.
- J - Estimated Value
- PCE - Tetrachloroethene
- ND - Not Detected
- (8'-10') - Depth Interval (Feet)
- All results reported in mg/kg (milligrams per kilogram)

N

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

0 5 10 20 30 40 Feet

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Figure 11
PCE Concentration Map - Soils (Steel Sump)

Former Gasoline Dispenser

SB-54 (4/4/2014)
(1-2') ND
(24-25') ND

SB-56 (4/8/2014)
(0-1') ND
(13-14') 0.042J
(28-29') ND

SB-2 (1/10/2012)
(8-10') ND
(14-16') ND

SB-57 (5/10/2014)
(0-1') 0.0011J
(4-5') ND
(9-10') ND

SB-10 (1/11/2012)
(2-4') ND
(14-16') ND

Spray Paint Booth

SB-11 (1/11/2012)
(0-2') ND
(6-8') ND

SB-55 (4/4/2014)
(11-12') 0.0008J
(24-25') 0.051J

SB-58 (4/8/2014)
(4-5') ND
(9-10') ND
(23-24') ND

SB-38 (4/8/2014)
(0-1') 0.0012J
(16-17') ND
(24-25') ND

Former UST Area

SB-4 (1/10/2012)
(10-12') ND
(18-20') ND

SB-42 (4/9/2014)
(0-1') 22J
(14-15') 0.0020J
(23-24') 39

SB-37 (4/8/2014)
(4-5') 0.27J
(23-24') 0.14J

SB-41 (4/8/2014)
(1-2') 0.034
(14-15') 2.2J
(23-24') 0.79J

SB-5 (1/11/2012)
(14-16') 0.037
(18-20') 0.12

MW-2
NS

SB-39 (4/8/2014)
(5-6') ND
(14-15') ND
(22-23') ND

SB-40 (4/8/2014)
(17-18') ND
(23-24') 2.3

SB-9 (1/11/2012)
(16-18') ND

SB-15 (3/14/2012)
(8') ND
(24') 7.3

SB-43 (4/9/2014)
(7-8') 32J
(10-11') 71J
(19-20') 61

MW-3
NS

SB-8 (1/11/2012)
(10-12') ND

SB-3 (1/10/2012)
(0-2') 5.4
(8-10') 6.8

SB-45 (4/3/2014)
(0-1') 18
(3-4') 1,300
(15-16') 6,300
(21-22') 7,300

SB-46 (4/3/2014)
(3-4') 330
(15-16') 1,700J
(25-26') 2,900

SB-49 (4/3/2014)
(3-4') 8
(12-13') 0.094
(23-24') 0.45

SB-6 (1/11/2012)
(4-6') 0.069
(12-14') 0.024

SB-52 (4/4/2014)
(6-7') 0.00056J
(9-10') 0.00064J
(18-19') 0.0040J

SB-53 (4/4/2014)
(1-2') 0.014
(24-25') 0.099

MW-12 (5/12/2014)
(0-1') 0.025
(33-34') 0.47

SB-50 (4/9/2014)
(0-1') 0.026
(10-11') 0.00092J
(19-20') ND

LOCATION REFERENCE - NOT TO SCALE

SB-44 (4/3/2014)
(11-12') 0.0038J
(24-25') 220

Cardboard Storage Room

SB-48 (4/3/2014)
(2-3') 18
(14-15') 2.7
(25-26') 0.053

SB-47 (4/3/2014)
(0-1') 0.074
(6-7') 0.0040J
(24-25') 0.36

SB-14 (3/14/2012)
(1') 8.3
(14') 0.27
(22') 7.4

MW-17 (5/10/2014)
(0-1') 0.00067J
(4-5') 0.00098J
(23-24') 0.0049

SB-51 (4/3/2014)
(2-3') 0.18
(9-10') 0.10
(23-24') 0.16

Legend

- Soil Boring Location
- Shallow Monitoring Well

NOTES:
- Red indicates concentrations above Soil Screening Level (SSL) Protection of Groundwater.
- Other chemicals of concern (COCs) included in Table 6 of the Remedial Investigation (RI) Report.
- J - Estimated Value
- PCE - Tetrachloroethene
- ND - Not Detected
- (8'-10') - Depth Interval (Feet)
- All results reported in mg/kg (milligrams per kilogram)

N

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

0 20 40 Feet

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Figure 12
PCE Concentration Map - Soils (Cardboard Storage and Former UST Area)

Legend

- Shallow Monitoring Well
- Intermediate Monitoring Well
- Deep Monitoring Well
- Potential Source Area
- Itron Property Line (Approximate)

N

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

0 200 400 Feet

AECOM

Itron

Figure 13
Alternative 2 - Monitored Natural Attenuation (MNA) and Insitutional Controls (ICs)

Legend

- Shallow Monitoring Well
- Intermediate Monitoring Well
- Deep Monitoring Well
- Proposed Excavation Area
- Potential Source Area
- Itron Property Line (Approximate)

N

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

0 200 400 Feet

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Itron

Figure 14
Alternative 3 - Excavation and Disposal With MNA/ICs

Legend

- Shallow Monitoring Well
- Intermediate Monitoring Well
- Deep Monitoring Well
- Potential Source Area
- Itron Property Line (Approximate)
- Proposed Treatment Area

N

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

0 200 400 Feet

AECOM

Itron

Figure 15
Alternative 4 - In Situ Remediation Using BOS 100® with MNA/ICs

Legend

- Shallow Monitoring Well
- Intermediate Monitoring Well
- Deep Monitoring Well
- Potential Source Area
- Itron Property Line (Approximate)
- Proposed Treatment Area

N

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

0 200 400 Feet

AECOM

Itron

Figure 16
Alternative 5 - In Situ Chemical Oxidation (ISCO) with MNA/ICs

Legend

- Shallow Monitoring Well
- Intermediate Monitoring Well
- Deep Monitoring Well
- Potential Source Area
- Itron Property Line (Approximate)
- Proposed Excavation Area
- Proposed Treatment Area

N

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

0 200 400 Feet

AECOM

Itron

Figure 17
Alternative 6 - Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) Using PersulfOx® with MNA/ICs