Georgia Environmental Protection Division
Land Protection Branch
Response and Remediation Program
Response Development Units 1 – 3

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Document Submittal Form

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Name of Document:	2024 Groundwater Monitoring & Maintenance Plan
Date of Document:	August 30, 2024
Site Name:	Former Americus MGP Site
Site ID Number:	10139

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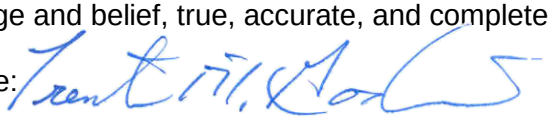
Signature: 

Name (printed): Trenton M. Godwin, P.G.

Date: 9/3/2024

Organization: Resolute Environmental

Phone: 470.895.0647

Email: Trent.Godwin@ResoluteEnv.com

Receipt Date
(for EPD use only)

Georgia Power

Environmental Affairs
241 Ralph McGill Boulevard NE
Atlanta, GA 30308-3374

September 3, 2024

Ms. Antonia Beavers
Response and Remediation Program
Georgia Department of Natural Resources
2 Martin Luther King Jr. Drive, SE, Suite 1462 East
Atlanta, Georgia 30334

Subject: Revised Monitoring and Maintenance Plan and Cost Estimate
Former Americus Manufactured Gas Plant (MGP) Site
HSI Site No. 10139

Dear Ms. Beavers:

Georgia Power Company and our contractor, Resolute Environmental & Water Resources, have edited the enclosed Revised Monitoring and Maintenance Plan and Cost Estimate for the Former Americus Manufactured Gas Plant (MGP) Site based on your comments.

Please contact me at (404) 290-8099 or tsroyer@southernco.com if you have any questions.

Sincerely,

Tim Royer, CHMM
Environmental Specialist
Georgia Power Company

Enclosures

Resolute
Environmental & Water Resources Consulting

1003 Weatherstone Parkway
Suite 320
Woodstock, GA 30188
Telephone: 678-398-9942
Fax: 888-881-8219

August 30, 2024

Mr. Tim Royer, CHMM
Georgia Power Company
Environmental Affairs
Bin 10221
241 Ralph McGill Boulevard, NE
Atlanta, Georgia 30308-3374

Subject: Revised Monitoring and Maintenance Plan
Former Americus Manufactured Gas Plant (MGP) Site
HSI Site No. 10139
304 North Dudley Street
Americus, Georgia

Dear Mr. Royer:

Resolute Environmental & Water Resources Consulting, LLC (Resolute) is pleased to present this Revised Monitoring & Maintenance (M&M) Plan for the Former Americus MGP site in Americus, Georgia.

If you have any questions about this Plan, please contact me at (470) 895-0647.

Sincerely,
Resolute Environmental & Water Resources Consulting, LLC

Trenton M. Godwin, P.G.
Senior Project Manager

REVISED MONITORING & MAINTENANCE PLAN

FORMER AMERICUS MGP SITE
304 N. DUDLEY STREET
AMERICUS, GEORGIA
HSI Site Number 10139

Prepared for:

GEORGIA POWER COMPANY
Atlanta, Georgia

Prepared by:

Resolute Environmental & Water Resources Consulting, LLC
1003 Weatherstone Parkway, Suite 320
Woodstock, Georgia

AUGUST 2024

Certification

I certify that I am a qualified groundwater scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by me or by a subordinate working under my direction.

Trenton M. Godwin, P.G.
Registered Professional Geologist
Georgia Registration #2086

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1.0 BACKGROUND

The former Americus Manufactured Gas Plant (MGP) Site is located at 304 North Dudley Street in Americus, Georgia. The Site is listed on the Hazardous Site Inventory (HSI) as HSI Site No. 10139. The site was assessed between 1994 and 1996, followed by the preparation and submittal of a Compliance Status Report by RETEC in 1996. Since the submittal of the CSR in 1996, a number of activities have been performed:

1997

- Additional assessment activities were performed at the Site by RETEC in 1997.
- A Soil Corrective Action Plan (CAP), dated August 28, 1997, was prepared by Williams Engineering, Inc.

1998

- A Groundwater CAP, dated February 1998 was prepared by Southern Company Services (SCS);
- The Soil CAP was implemented, and a Final Status Report describing the implementation was initially prepared on February 17, 1998 and revised, dated July 24, 1998. This revised Final Status Report resulted in the Certification of Compliance for Type 3 Risk Reduction Standards (RRS) for soils remaining after remediation and the EPD approval of that Certification for the Site;
- The Groundwater CAP was implemented, and post-remediation groundwater monitoring was implemented, with the first quarterly sampling report prepared by SCS and issued in October 1998.

2001-2003

- In May 2001, a *CAP Addendum for Remediation of Groundwater* describing in-situ chemical oxidation (ISCO) was prepared and submitted to the Georgia Environmental Protection Division (EPD).
- ISCO of the groundwater was performed in accordance with the CAP Addendum.
- A Completion Report on Additional Corrective Action for Groundwater was submitted in September 2003.

2007-2009

- A *Fesibility Study (FS) for Residual MGP Contamination*, which included a field investigation using TarGOST® (Tar-specific Green Optical Screening Technology) was prepared between 2007 and 2009, and submitted in March 2009.

2010-2014

- A CAP describing a proposed Type 5 Risk Reduction Standard (RRS) remedy was prepared and submitted to EPD in November 2010;
- EPD conditionally-approved the CAP on January 5, 2012. One of the conditions was the preparation of a Monitoring and Maintenance (M&M) Plan describing the continuing actions necessary to demonstrate and maintain compliance with a Type 5 RRS;
- A M&M Plan was prepared and submitted to EPD in April 2012;
- EPD issued comments on the M&M Plan in a letter dated June 28, 2013, and Georgia Power subsequently issued a response letter to EPD, dated August 30, 2013.
- A revised M&M Plan was submitted to EPD in December 2013. This Plan presented protocols for monitoring the Type 5 RRS area in accordance with EPD regulations. EPD reviewed the December 2013 M&M Plan and issued comments.

- A revised M&M Plan was submitted to EPD in May 2014. The Plan clarified parcels included within the Type 5 RRS area, presented Certifications of Compliance for Type 3 and 5 RRS areas, addressed EPD comments from the April 2012 M&M Plan and presented a transition to semi-annual groundwater sampling and annual reporting.

2014-Present

- GPC has implemented the revised M&M Plan, dated May 2014, inlcuding semi-annual groundwater sampling, annual reporting, and annual certification of continued non-residential use of the site.
- On October 13, 2017, GPC filed Uniform Environmental Covenants (UECs) for the tax parcels restricted by Type 5 RRS.
- In 2017, GPC completed installation of the permanent markers around the UEC area.
- GPC submitted the most recent annual groundwater monitoring report and annual property non-residential use certification to EPD on December 29 and 30, 2021, respectively.
- A CSR Addendum was submitted in April 2018 to present an updated Certification of Compliance for groundwater for Parcel 5-3-2, and portions of Parcels 5-1-4 and the associated Railroad Right of Way (ROW) to Type 5 RRS. The Site was certified in 1998 to meet Type 3 RRS for soil on affected parcels and in 2014 for groundwater to Type 1 RRS at Parcels 5-3-9 and 5-3-10.
- EPD requested a vertical extent boring at the site to evaluate the potential for vertical contaminant migration. GPC advanced a deep boring at the site on December 07, 2020, to collect additional lithological characteristics and thicknesses of the clay unit underlying the site in order to evaluate if the unit is of sufficient thickness and composition to prevent vertical contaminant migration. The results of this assessment were presented to EPD in March 2021.
- EPD approved of the 2018 CSR and 2021 CSR Addendum in a letter dated January 10, 2023.

This Revised M&M Plan has been prepared to:

- Clarify which Tax Parcels are included or excluded in the Type 5 RRS area;
- Present Certifications of Compliance to appropriate RRS for groundwater for those Parcels excluded from the Type 5 RRS area;
- Present a Certification of Compliance to Type 5 RRS for groundwater for areas noted to exceed Type 1-4 RRS;
- Present 2022 revised groundwater monitoring program methodology and frequency;
- Present protocols for monitoring and maintaining selected Parcels included in the Type 5 RRS area in accordance with EPD regulations; and,
- Address EPD comments on the April 2012 and May 2014 M&M Plans.

1.1 DESCRIPTION OF THE SITE

HSRA defines the term “Site” as that portion of contiguous properties affected by a release. Based upon the extent of regulated substances previously detected in soil and groundwater, the

Site has historically included the following Tax Parcels or portions of the following Tax Parcels (**Figure 1**):

- Portions of Parcel 5-1-4 (Norfolk Southern) and the associated railroad Right-of-Way (ROW) adjoining 5-3-2 and 5-3-10;
- Parcel 5-3-2 (Roy Lee Prevatt) [currently owned by Christopher H. Herrin and Jonathon W. Herrin],
- Parcel 5-3-9 (William Herrin d/b/a Bill Herrin Plumbing Company), and
- Parcel 5-3-10 (John Beaver).

This Revised M&M Plan presents Certifications of Compliance for groundwater at Parcels 5-3-9 and 5-3-10 to Type 1 RRS and Certifications of Compliance for groundwater for portions of Parcels 5-3-2, 5-1-4 and the associated railroad ROW to Type 5 RRS. The Site was previously certified in 1998 to meet Type 3 RRS for soil following remediation activities.

1.2 CURRENT SOIL AND GROUNDWATER COMPLIANCE

The soils on this Site were collectively certified, and accepted by EPD, to be in compliance with Type 3 RRS (default, non-residential RRS) as presented in the Final Status Report, dated July 1998, following the 1997 remediation of unsaturated soils. (The Type 3 RRS accepted by EPD for the Site in the 1998 report are again provided for the record and used in this Revised M&M Plan). During the most recent site visit by SCS, the current use of the properties within the Site were non-residential, so the Site use remains in compliance with their previous Type 3 RRS certification.

Groundwater samples are currently analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by USEPA Method 8260B and for polynuclear aromatic hydrocarbons (PAHs) by USEPA Method 8270C. The primary substances which have recently exceeded Type 1 RRS at the Site are benzene and naphthalene. Recent groundwater quality data (collected October 2022 and reported December 2022) for benzene and naphthalene are summarized on **Figure 2**. As illustrated on this Figure, concentrations of benzene exceeded the Type 1 (and 3) RRS of 0.005 milligrams per liter (mg/l), as well as the Type 3 RRS of 0.009 mg/l in well MW-14R, and concentrations of naphthalene exceeded the Type 1 (and 3 and 5) RRS of 0.020 mg/l in wells MW-4RR and MW-14R.

1.3 RESIDUAL MGP IMPACTS BENEATH GROUNDWATER

Georgia Power has evaluated the presence and extent of residual MGP impacts (i.e., tar, tar-like material, residual tar, or NAPL) beneath groundwater at the Site since the initial CSR investigation in 1994. Numerous borings, lithologic descriptions, and laboratory analyses of samples of both groundwater and saturated soil have been developed or performed for the CSR, the 1998 CAP, the 2001 CAP Addendum for the ISCO injections, and the 2009 FS. The latter included TarGOST® borings which were used to aid in the identification of potential tar, tar-like material, and NAPL (non-aqueous phase liquid) below groundwater.

In the 2009 FS, the 2010 CAP, and the 2012 initial M&M Plan, the information from these borings which indicated the presence or former presence of various types of MGP residuals, including tar, tar-like material, residual tar, staining, sheen, or NAPL at varying depths was

combined and collectively presented as the extent and thickness of residual NAPL beneath groundwater on the Site. (A version of this combined thickness, modified based on subsequent analysis for this M&M Plan, is illustrated on **Figure 3**). Inherent in the 2010 CAP and 2012 initial M&M Plan was the assumption that all of these combined materials were source material, as defined under the Rules for Hazardous Site Response, and contributing to the continued detection of regulated substances in groundwater. However, subsequent evaluation of existing analytical data, performed for the evaluation of certification of compliance with RRS for outlying Tax Parcels presented in the following Section, indicates that some of the residual MGP impacts do not meet the definition of source material.

2.0 TYPE 5 AREA AND SURROUNDING PARCELS

In the 2010 CAP and the initial 2012 M&M Plan, Georgia Power requested, and EPD conditionally approved, a Type 5 for groundwater. This Revised M&M Plan clarifies the area of the Type 5, evaluates soil and groundwater concentrations on adjoining Tax Parcels, and presents documentation for Certifications of Compliance to the appropriate RRS.

2.1 TYPE 5 GROUNDWATER AREA

As illustrated on **Figure 2**, groundwater concentrations exceeding Type 1 through 5 RRS in the most recent sampling event (collected October 2022 and reported December 2022) are limited to monitoring wells MW-4RR and MW-14R. The Type 5 area (**Figure 3**) has been drawn to conservatively encompass not only the impacted groundwater around these wells, but also the residual MGP impacts beneath groundwater on Parcels 5-1-4, 5-3-2, and the Norfolk Southern railroad ROW. The area described by a Uniform Environmental Covenant (UEC) for the Type 5 closure is also illustrated on **Figure 3**.

Permanent markers were placed along the boundary of the Type 5 UEC area as shown on **Figure 3**. These markers were placed on groundwater monitoring well pads or an above-ground sign. The markers read:

> "Restricted Area, Subject to Environmental Covenant, Groundwater Use Prohibited, EPD HSI Site 10139, For Further Information contact Property Owner or GA EPD."

The Certification of Compliance for the Type 5 RRS for groundwater is presented in **Appendix B**.

2.2 ADJOINING PARCELS

Prior documents, including the 2010 CAP and initial 2012 M&M Plan, presented a Type 5 delineation that extended onto the corner of Parcel 5-3-9 and the northeastern edge of Parcel 5-3-10, inferring that groundwater was impacted above Type 1 through 4 RRS. Georgia Power has subsequently revisited the existing groundwater analytical data, soil boring lithologic descriptions, and TarGOST® investigation to evaluate if groundwater concentrations on these Parcels (and off-site Parcel 5-3-1A) exceeded Type 1 through 4 RRS criteria and if source material was present. This evaluation also included a review of existing soil data to confirm that the prior, Site-wide certification to Type 3 RRS for soil was applicable to Parcels 5-3-9 and 5-3-10.

On-Site Parcel 5-3-9

As a result of the document review, eleven former soil borings and one former groundwater monitoring well were identified on Parcel 5-3-9:

- Soil Borings B-37, B-38, B-45, B-45A, B-46, B-49, and B-50 from the 1996 Compliance Status Report (CSR) investigation;
- Groundwater Monitoring Well MW-9R from the 1996 CSR investigation;
- Post-excavation samples 103 and 104 from the 1997-98 soil remediation completion report; and,
- TarGOST® borings TG 1-1 and TG 1-2 from the 2007 investigation.

Boring logs for Soil Borings B-37, B-38, B-45, B-45A, B-46, B-49, and B-50 are presented in **Appendix A**. A boring log and well construction diagram for monitoring well MW-9R is also presented in **Appendix A**.

A map of the parcel (**Figure 4**) was generated based on a compilation of prior figures of the Site contained in previous investigation and remediation reports. (When the key features of these prior figures, such as boring locations and excavation areas, were consolidated, the locations of all of the features did not correlate exactly, likely because of the variety of sources and ages of the prior figures. Therefore, the boring and excavation locations on **Figure 4** are reasonable approximations).

The most recent analytical results from the soil samples on the parcel are summarized on **Tables 1, 2, and 3**, and the most recent analytical results from former monitoring well MW-9R are presented on **Table 4**. These tables also present a comparison to RRS criteria calculated by others in 1996 and 1997, at the time of the soil and groundwater sample collection.

Tables 1, 2, and 3 present some sample results which were collected prior to the 1997-98 Site remediation that led to Certification of Compliance with Type 3 RRS for soils. These results are highlighted in the tables, noting the depths that were excavated after sample collection. Similarly, these tables also present soil data which were collected from saturated soil below groundwater. (Based on depths to groundwater reported in Monitoring Well MW-9R on the parcel, the depth to groundwater varies from approximately 6 to 9 feet below ground surface). Under the Hazardous Site Response Act (HSRA), concentrations of regulated substances in the saturated soil below groundwater are regulated by groundwater sample analysis and comparison of groundwater samples to groundwater RRS criteria. Therefore, the soil samples analyzed from saturated soil below groundwater were also highlighted in the tables, and comparison to soil RRS criteria was not performed.

As shown in **Tables 1 through 4**, the soil samples remaining after the 1997-98 Site soil remediation are less than the Type 3 RRS for the substances detected.

In the boring log for B-45A, "*solid tar*" was described in the 1 to 2 foot depth interval based on visual (and potentially olfactory) observation, and 6 inches of "*black product*" was also described at a depth of approximately 4.5 feet. However, the laboratory analytical results from this same boring yielded concentrations less than Type 1 RRS in the 0 to 2-foot depth interval, and less than the Type 3 RRS in the 2- to 3.5-foot and the 3.5- to 8-foot depth intervals. Therefore, material described as "*tar*" or "*product*" in this boring complies with Type 3 RRS criteria. Further, material described as "*tar*" or "*product*" from visual or olfactory observations in other borings may also comply with Type 1 through 3 RRS criteria, so the visual or olfactory indications of "*tar*" or "*product*" on this Parcel do not indicate "source material" as defined under HSRA.

The analytical results from the most recent sample from former Monitoring Well MW-9R were less than the Type 1 RRS for the substances detected.

Based on the results of this review, Parcel 5-3-9 has been confirmed to comply with the Type 3 RRS criteria for soil. Further, the results of this review demonstrate that Parcel 5-3-9 complies with the Type 1 RRS criteria for groundwater. Therefore, exclusion of this Parcel from the Type 5 area is justified. The Certification of Compliance is presented in **Appendix B**.

On-Site Parcel 5-3-10

Twenty-six former soil borings and three groundwater monitoring wells (two former and one current) were identified on Parcel 5-3-10:

- Soil Borings B-34, B-36, B-41, B-41A, B-42, B-43, B-44, B-47, B-48, B-51, B-52, TT-2A and TT-2B from the 1996 Compliance Status Report (CSR) investigation;
- Groundwater Monitoring Wells MW-7R, MW-8, and MW-40 from the 1996 CSR investigation;
- Post-excavation samples C1.5, C2.5, D1.5, D2.5, D3.5, D4, E2, E3, 101, 102 and 105 from the 1997-98 soil remediation completion report; and,
- TarGOST® borings TG 2-1 and TG 2-2 from the 2007 investigation.

Boring logs for Soil Borings B-34, B-36, B-41, B-41A, B-42, B-43, B-44, B-47, B-48, B-51, and B-52 are presented in **Appendix A**. Boring logs and well construction diagrams for monitoring wells MW-7R, MW-8, and MW-40 are also presented in **Appendix A**.

A map of the parcel (**Figure 5**) was generated based on a compilation of prior figures of the site in a variety of investigation and remediation reports. As with **Figure 4**, the boring and excavation locations on **Figure 5** are reasonable approximations based on prior figures.

The most recent analytical results from the soil samples on the parcel are summarized on **Tables 5, 6, and 7**, and the most recent analytical results from current monitoring well MW-7R and former monitoring wells MW-8 and MW-40 are presented on **Table 8**. These tables also present a comparison to RRS criteria calculated by others in 1996 and 1997, at the time of the soil and groundwater sample collection.

Tables 5, 6, and 7 present some sample results which were collected prior to the 1997-98 Site soil remediation, and these results are highlighted in the tables, noting the depths that were excavated after sample collection. As shown on Figure 2, significant excavation was performed on Parcel 5-3-10. These tables also present soil data which were collected from saturated soil below groundwater. (Based on depths to groundwater reported in Monitoring Well MW-7R on the parcel, the depth to groundwater varies from approximately 6 to 8 feet below ground surface). Under HSRA, concentrations of regulated substances in the saturated soil below groundwater are regulated by groundwater sample analysis and comparison of groundwater samples to groundwater RRS criteria. Therefore, the soil samples analyzed from saturated soil below groundwater were also highlighted in the tables, and comparison to soil RRS criteria was not performed.

As shown on **Figure 5**, TarGOST® (TG) boring 2-2 reported the detection of "*tar-like*" material at a depth of 6 feet in 2007 on the boundary between an area that was previously excavated to 8 feet and an area that was excavated to 4.5 feet in 1997-98.

In nearby boring B-41A, "*product*" was visually observed in the 4 to 7 foot depth interval, "*streaks of grey and black product*" were visually observed in the 7 to 13 foot depth interval, and 6 inches of "*black product*" was observed at a depth of approximately 11.5 to 12.0 feet. In addition, droplets of black product were described in the 13 to 18.5 foot depth interval (**Appendix A**). These observations appear consistent with the "*tar-like*" material reported in nearby TG boring 2-2 (approximately 10 to 12 feet from B-41A) at a depth of 6 feet, as well as the tar detections at 9 to 11 feet in TG-borings 1-3, 1-4, and 2-3 on adjacent Parcel 5-3-2 (**Figure 5**).

Soil samples from boring B-41A were collected from depth intervals 0-2 feet, 2-3.5 feet, 3.5-8.5 feet, 8.5-13 feet, and 13.5-18.5 feet. Comparison of the soil analytical results to soil RRS criteria (**Table 5**) shows that the concentrations in each sample depth interval with visual or olfactory observations of "*product*" were less than Type 3 RRS soil criteria. This comparison includes soil samples from both the vadose zone (unsaturated soils) and the saturated zone (saturated soils below groundwater). For the saturated soils, this comparison was not made to demonstrate groundwater compliance which is demonstrated by groundwater samples from monitoring wells, but to demonstrate that the "*product*" zones observed on and analyzed from Parcel 5-3-10 were in compliance with Type 3 RRS soil criteria. Therefore, data from material described as "*tar*" or "*product*" in this boring substantially meets Type 3 RRS soil criteria in each of the depth intervals analyzed, and the visual or olfactory observations of "*tar*" or "*product*" on this Parcel do not indicate "source material" as defined under HSRA.

Because of the immediate proximity of TG boring 2-2 to boring B-41A (approximately 10 to 12 feet), as well as the similarity of the depth of "*tar-like*" material at 6 feet in TG 2-2 and "*product*" described in the 4 to 7 foot depth interval in B-41A, the analytical results from the 3.5- to 8-foot sample interval from B-41A can reasonably be applied to TG boring 2-2. Therefore, the material described as "*tar-like*" or "*product*" in these borings complies with Type 3 RRS soil criteria.

As shown in **Tables 5 through 8**, the soil samples remaining after the 1997-98 Site soil remediation are less than the Type 3 RRS for the substances detected.

The analytical results from the most recent groundwater samples from Monitoring Wells MW-7R, MW-8, and MW-40 were less than the Type 1 RRS for the substances detected.

Based on the results of this review, Parcel 5-3-10 has been confirmed to comply with the Type 3 RRS criteria for soil. Further, the results of this review demonstrate that Parcel 5-3-10 complies with the Type 1 RRS criteria for groundwater. Therefore, exclusion of this Parcel from the Type 5 area is justified. The Certification of Compliance is presented in **Appendix B**.

Off-Site Parcel 5-3-1A

Parcel 5-3-1A is not included in the HSI Site, and is an adjoining Parcel to the Site and the Type 5 area. The following evaluation of soil and groundwater concentrations at or near the property boundary, as well as one TG boring on the Parcel, was performed to confirm exclusion of the Parcel from the Type 5 area.

Seven former soil borings and one groundwater monitoring well were identified on the parcel:

- Soil Borings B-10 through B-12 from the 1996 Compliance Status Report (CSR) investigation;
- Groundwater Monitoring Well MW-17 from the 1996 CSR investigation;
- Post-excavation samples H5.5, H6, and H6.5 from the 1997-98 Site soil remediation report; and,
- TarGOST® borings TG 4-6 from the 2007 investigation.

Boring logs for Soil Borings B-10 through B-12 are presented in **Appendix A**. The boring log and well construction diagram for monitoring well MW-17 is also presented in **Appendix A**.

A map of the parcel (**Figure 6**) was generated based on a compilation of prior figures of the site in a variety of investigation and remediation reports. As with **Figures 4 and 5**, the boring and excavation locations on **Figure 6** are reasonable approximations based on prior figures.

The most recent analytical results from the soil samples on the parcel are summarized on **Tables 9, 10 and 11**, and the most recent analytical results from current monitoring well MW-7R and former monitoring wells MW-17 are presented on **Table 12**. These tables also present a comparison to RRS criteria calculated by others in 1996 and 1997, at the time of the soil and groundwater sample collection.

Tables 9, 10 and 11 present some sample results which were collected prior to the 1997-98 Site soil remediation, and these results are highlighted in the tables, noting the depths that were excavated after sample collection. As shown on **Figure 6**, excavation appears to have extended to the edge of Parcel 5-3-1A. These tables also present soil data which were collected from saturated soil below groundwater. (Based on depths to groundwater reported in Monitoring Well MW-17 on the parcel, the depth to groundwater varies from approximately 6 to 8 feet below ground surface). Under HSRA, concentrations of regulated substances in the saturated soil below groundwater are regulated by groundwater sample analysis and comparison of groundwater samples to groundwater RRS criteria. Therefore, the soil samples analyzed from saturated soil below groundwater were also highlighted in the tables, and comparison to soil RRS criteria was not performed.

As shown on **Figure 6**, TarGOST® (TG) boring 4-6 reported the detection of "*Not likely tar, 14-22' but naturally occurring substance instead*" (2007 TarGOST® Investigation in *Feasibility Study*, Southern Company Services, 2009) material at a depth of 14 to 22 feet in 2007.

As shown in **Tables 5 through 8**, the soil samples remaining after the 1997-98 Site soil remediation are less than the Type 3 RRS for the substances detected, confirming the previous Certification of Compliance for adjoining Parcel 5-3-2. The analytical results from the most recent groundwater samples from Monitoring Well MW-17 confirm that groundwater on Parcel 5-3-1A was not impacted.

2.3 COVENANTS AND PROPERTY NOTICES

Georgia Power prepared the applicable UECs and property notices for the Type 5 area for groundwater and the Type 3 area for soils. Georgia Power worked with the adjacent-parcel property owners to implement these HSRA requirements. These documents were prepared and the appropriate documentation was submitted to EPD under separate cover following EPD's approval of the respective Certifications of Compliance for the applicable Parcels. The UECs for each site parcel were approved in 2017 by the Sumter County Georgia Superior Court.

3.0 SOIL AND GROUNDWATER MONITORING

3.1 SOIL MONITORING PROGRAM

The soils on this Site (including Tax Parcels 5-3-2, 5-3-9, 5-3-10, 5-1-4 and the Norfolk Southern Railroad Right-of-Way) were certified, and accepted by EPD, to be in compliance with Type 3 RRS (default, non-residential RRS) or less. Therefore, monitoring of soils is not required. Annual re-certification of the non-residential status will be presented in Section 4.1, Soil Maintenance

3.2 GROUNDWATER MONITORING PROGRAM

The following groundwater monitoring program has been revised from the 2014 M&M plan.

Monitoring Well Network
The monitoring well network at the Site is comprised of the following wells, which are segregated into the following well groups:

Non-compliance and compliance wells:
MW-4RR
MW-14R
MW-15
MW-19

Sentry wells:
MW-21
MW-22

Auxilliary wells:
MW-7R
MW-20
MW-26R
MW-28

Sampling Protocols

During each sampling event, groundwater samples will be collected using sampling protocols consistent with the most recent version of the US EPA Region 4 LSASD, Operating Procedure Number PROC-301-R6 (April 22, 2023, or most recent version). Activities such as field measurements, equipment operation and decontamination, quality assurance/quality control, and sample handling, preservation and shipping will also be conducted in accordance with the most recent version of the appropriate SESD procedure.

Prior to sampling, water levels will be measured and recorded for each well and at the staff gauge in Town Creek. Each well will also be tested with an interface probe or transparent bailer to check for the presence of LNAPL or DNAPL free-product. If product is not present, the well will be sampled in accordance with the appropriate Sampling Frequency and Sampling Protocols. If product is detected, the thickness will be noted on the sampling log, and the well will not be sampled during that sampling event. If the detected product thickness is 0.1-foot or greater, the product will be bailed or pumped into a purge-water container for appropriate off-site disposal consistent with purge water disposal from the Site.

Groundwater samples are currently analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by USEPA Method 8260B and for polynuclear aromatic hydrocarbons (PAHs) by USEPA Method 8270C. The primary substances which have recently exceeded Type 1 RRS at the Site are benzene and naphthalene.

Sampling Frequency

Groundwater sampling at the Site will be conducted in accordance with the following schedule:

2024 and beyond:
Georgia Power Company will transition to a biennial groundwater sampling event schedule (every other year), sampling during the 4th quarter, beginning in October 2024. The suite of wells, including the sentry wells to verify plume stability, to be sampled will be limited to the following:

Non-compliance and compliance wells
MW-4RR
MW-14R
MW-15
MW-19

Sentry wells:
MW-21
MW-22

The biennial sampling schedule will continue indefinitely, except in the event of unexpected increases in concentrations, request for additional sampling from the Department, or a decision from the Department that states groundwater sampling may be permanently ceased based on compliance.

Decision-making Criteria

Sentry wells (MW-21 and MW-22):
If either benzene or naphthalene is detected in a sentry well at concentrations greater than their respective Type 1 RRS of 0.005 mg/L or 0.02 mg/L, a confirmation sample will be collected and analyzed. If the exceedance is confirmed in a sentry well, Georgia Power will initiate surface water sampling in Town Creek. Surface water samples will be collected in accordance with Region 4 Environmental Protection Agency Science and Ecosystem Support Division (SESD) Field Branches Quality System and Technical Procedures, Surface Water Sampling Operating Procedure Number LSASDPROC-201-R6 (April, 22, 2023). Surface water sampling will continue until concentrations in sentry well return below Type 1 RRS criteria. If the exceedance is confirmed in a sentry well during the period of biennial groundwater sampling (2024 and beyond), EPD will be notified and confirmation samples will be collected within 90 days of contaminant detections above the Type 1 RRS in sentry wells or above the GISWQS for Town Creek. The sampling frequency will then revert to semi-annual sampling until concentrations in sentry wells return below Type 1 RRS criteria for two consecutive sampling events. In addition, Georgia Power may evaluate active and passive remedial options. These options may include, but not be limited to the following:

- Georgia Power may evaluate potential active remediation methods such as an interceptor trench, groundwater or NAPL extraction, or in-situ injection. Active remediation will not be performed without notification to and approval by EPD. Or,

- Alternative options which may be developed. These options will be presented to EPD for approval prior to implementation.

- If surface water samples indicate that Town Creek has been impacted above an In-Stream Water Quality Standard (ISWQS), a confirmation sample may be collected. If the ISWQS exceedance is confirmed, Georgia Power will develop a CAP Amendment describing active remedial measures to be implemented. The CAP Amendment will be submitted to EPD within 90 days of exceedance confirmation. Active remediation will not be performed without notification to and approval by EPD.

Reporting

Georgia Power will submit M&M Plan Reports to EPD on an biennial basis. These reports will present the results of the Groundwater Monitoring Program. The annual property evaluation and re-certification of non-residential use for on-site soils will continue to be sumbitted annually. The biennial report will include:

- A Monitoring Well Inspection/Repair Log (**Appendix C**),
- A Permanent Marker Inspection/Repair Log (**Appendix C**),
- Annual re-certification of non-residential use for Type 3 RRS soils will be performed on the Monitoring and Evaluation Form provided by EPD (**Appendix C**),
- Text summarizing the work performed and the results,
- Tabular summaries of data,
- Figures to illustrate results of work performed and to summarize analytical data,
- Potentiometric surface maps, and
- Copies of analytical laboratory reports and other backup information.

Completion of Groundwater Monitoring

When concentrations of benzene and naphthalene in the non-compliance wells, compliance wells and sentry wells are below applicable RRS for two consecutive sampling events, Georgia Power will attempt to demonstrate compliance of the site with applicable RRS, pursuant to Section 391-3-19-.07(6)(a) and (7)(a) of the Rules for Hazardous Site Response. This demonstration may require additional assessment and will also require a demonstration that residual coal tar or tar-like material does not meet the definition of a source as defined under the Rules for Hazardous Site Response.

4.0 MAINTENANCE PROGRAM

4.1 SOILS

The soils on this Site (including Tax Parcels 5-3-1A, 5-3-2, 5-3-9, 5-3-10 and the Norfolk Southern Railroad Right-of-Way) were certified, and accepted by EPD, to be in compliance with Type 3 RRS (default, non-residential RRS) or less. Therefore, the soil maintenance program for these soils consists of an annual site visit to confirm the continued non-residential use of the Site, as well as the annual re-certification of non-residential site use to be submitted in the annual report to EPD. This annual re-certification will be performed on the Monitoring and Evaluation Form provided by EPD in their M&M Plan Review Comment letter, dated June 28, 2013.

4.2 GROUNDWATER MONITORING WELLS

Each groundwater monitoring well and Type 5 permanent marker will be visually inspected during groundwater sampling events and the annual property certification. Each well and marker will be inspected not less than once per year. The wells will be visually inspected for signs of deterioration or damage that could compromise the integrity of the well or otherwise potentially impact the validity of a groundwater sample from the well. The markers will be visually inspected for signs of deterioration or damage that could make them illegible or vegetative growth that could obscure them. The visual inspection will include, but not be limited to, the following:

Observation of the well pad for:
- Cracks within the pad;
- Gaps between the pad and ground;
- Gaps between the pad and the protective well cover.

Observation of the outer well casing for:
- Rust;
- Bent casing or other exterior damage;
- Presence and function of well lock;
- Gaps in the protective cover that would allow water or other foreign objects to enter;

Observation of the inner well casing for:
- Presence and function of well cap (locking cap if exterior lock not present);
- Damage that would impede access or compromise the integrity of the well.

Observation of the Type 5 marker for:
- Vegetative cover or other objects that may obscure the marker.
- Damage that could make the markers illegible.

In addition, during well purging in groundwater sampling events, the samplers will observe and document water quality parameters (pH, temperature, conductivity, and turbidity) and well yield for indications that the well has “silted-in” and may need re-development.

Minor well and marker maintenance and repairs, or well re-development, will be performed on an as-needed basis and documented on a Monitoring Well Inspection/Repair Log, or Permanent Marker Inspection/Repair Log, respectively, for annual reporting to EPD. Should

a well or marker require abandonment or replacement, Georgia Power will notify EPD of the situation and their plans for abandonment or replacement prior to implementation.

TABLES

Table 1

Americus Former MGP Site

PAHs and BTEX Analytical Results Concerning Borings Located in Parcel 5 3 9

PRE-REMEDIATION Results from RETEC June 1996 Compliance Status Report

	Risk Reduction Standard Limits*					B-37			B-38			B-45			B-45A				B-46		B-49				B-50		
PAHs Method 8270 (ug/Kg)	**Type 1**	**Type 2**	**Surface Type 3**	**Soil Type 3**	**Type 4**	**0-3**	**8-13**	**23-28**	**4.5-9**	**9.5-14.5**	**29.5-34.5**	**0-3**	**3-8**	**23-28**	**0-2**	**2-3.5**	**3.5-8.5**	**8.5-13.5**	**8.5-13.5**	**30-37**	**0-3**	**3-8**	**8-13**	**23-28**	**4-9**	**19-24**	**24-29**
Naphthalene	100,000	3,100,000	100,000	100,000	82,000,000	< 660	NA	< 660	NA	NA	< 660	< 660	< 660	< 660	< 660	11,000	140,000	< 660	< 660	< 660	< 660	NA	NA	< 660	NA	NA	< 660
Acenaphthene	300,000	4,700,000	300,000	300,000	120,000,000	< 660	NA	< 660	NA	NA	< 660	< 660	< 660	< 660	< 660	3,000 J	<7,800	< 660	< 660	< 660	< 660	NA	NA	< 660	NA	NA	< 660
Acenapthylene	130,000	2,300,000	130,000	130,000	61,000,000	< 660	NA	< 660	NA	NA	< 660	< 660	1,850	< 660	< 660	8,500 J	<7,800	< 660	< 660	< 660	< 660	NA	NA	< 660	NA	NA	< 660
Anthracene	500,000	23,000,000	500,000	500,000	610,000,000	< 660	NA	< 660	NA	NA	< 660	< 660	< 660	< 660	< 660	18,000	<7,800	< 660	< 660	< 660	< 660	NA	NA	< 660	NA	NA	< 660
Benzo(a)anthracene	19,000	20,000	> 46,000	> 46,000	78,000	< 660	NA	< 660	NA	NA	< 660	< 660	< 660	< 660	270 J	28,000	3,600 J	< 660	< 660	< 660	6,720	NA	NA	< 660	NA	NA	< 660
Benzo(a)pyrene	2,000	2,000	7,700	> 41,000	7,800	< 660	NA	< 660	NA	NA	< 660	2,020	1,680	< 660	350 J	41,000	3,700 J	< 660	< 660	< 660	6,690	NA	NA	< 660	NA	NA	< 660
Benzo(b)fluoranthene	20,000	20,000	> 60,000	> 60,000	77,000	< 660	NA	< 660	NA	NA	< 660	3,640	2,530	< 660	580 J	60,000	7,100 J	< 660	< 660	< 660	13,500	NA	NA	< 660	NA	NA	< 660
Benzo(g,h,i)perylene	500,000	***	***	***	***	< 660	NA	< 660	NA	NA	< 660	3,220	< 660	< 660	<1,200	50,000	4,000 J	< 660	< 660	< 660	7,700	NA	NA	< 660	NA	NA	< 660
Benzo(k)fluoranthene	> 13,000	200,000	> 13,000	> 13,000	760,000	< 660	NA	< 660	NA	NA	< 660	< 660	< 660	< 660	< 660	13,000	1,700 J	< 660	< 660	< 660	< 660	NA	NA	< 660	NA	NA	< 660
Chrysene	> 37,000	2,000,000	> 37,000	> 37,000	7,800,000	< 660	NA	< 660	NA	NA	< 660	< 660	< 660	< 660	280 J	26,000	3,600 J	< 660	< 660	< 660	7,330	NA	NA	< 660	NA	NA	< 660
Dibenzo(a,h)anthracene	2,000	2,000	7,800	> 8,000	7,800	< 660	NA	< 660	NA	NA	< 660	< 660	< 660	< 660	< 660	8,000 J	<7,800	< 660	< 660	< 660	< 660	NA	NA	< 660	NA	NA	< 660
Fluoranthene	500,000	3,100,000	500,000	500,000	82,000,000	< 660	NA	< 660	NA	NA	< 660	2,130	5,580	< 660	600 J	90,000	11,000	< 660	< 660	< 660	12,900	NA	NA	< 660	NA	NA	< 660
Fluorene	360,000	3,100,000	360,000	360,000	82,000,000	< 660	NA	< 660	NA	NA	< 660	< 660	< 660	< 660	< 660	9,100 J	2,200 J	< 660	< 660	< 660	< 660	NA	NA	< 660	NA	NA	< 660
Indeno(1,2,3-cd)pyrene	21,000	21,000	> 45,000	> 45,000	78,000	< 660	NA	< 660	NA	NA	< 660	< 660	< 660	< 660	400 J	45,000	3,600 J	< 660	< 660	< 660	7,580	NA	NA	< 660	NA	NA	< 660
Phenanthrene	110,000	2,300,000	110,000	110,000	61,000,000	< 660	NA	< 660	NA	NA	< 660	925	930	< 660	250 J	66,000	7300 J	< 660	< 660	< 660	3,230	NA	NA	< 660	NA	NA	< 660
Pyrene	500,000	2,300,000	500,000	500,000	61,000,000	< 660	NA	< 660	NA	NA	< 660	2,380	6,100	< 660	600 J	73,000	11,000	< 660	< 660	< 660	11,900	NA	NA	< 660	NA	NA	< 660
BTEX Method 8020 (ug/Kg)																											
Benzene	500	***	***	***	***	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	NA	NA	NA	NA	< 5.00	< 5.00	< 5.00	NA	< 5.00	NA	< 5.00	< 5.00	NA
Toluene	100,000	***	***	***	***	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	NA	NA	NA	NA	< 5.00	< 5.00	< 5.00	NA	< 5.00	NA	< 5.00	< 5.00	NA
Ethylbenzene	70,000	***	***	***	***	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	NA	NA	NA	NA	< 5.00	< 5.00	< 5.00	NA	< 5.00	NA	< 5.00	< 5.00	NA
Total Xylenes	1,000,000	***	***	***	***	< 10.0	< 10.0	NA	< 10.0	< 10.0	NA	< 10.0	< 10.0	NA	NA	NA	NA	NA	< 10.0	< 10.0	< 10.0	NA	< 10.0	NA	< 10.0	< 10.0	NA

< = WAS NOT DETECTED AT THE METHOD DETECTION LIMIT

NA = NOT ANALYZED ND = NOT DETECTED

*** = Constituent meets Type 1 Risk Reduction Standard

All results taken from Table E-1 of the RETEC June 1996 Compliance Status Report

*Complies with Type 1 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 2 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 3 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 4 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

= Sample collected below groundwater within saturated zone. Comparison to soil RRS not applicable

= Excavated during remediation activities in 1998

Table 2

Americus Former MGP Site

Metals, Total Cyanide, and Total Sulfide Analytical Results Concerning Borings Located in Parcel 5 3 9

PRE-REMEDIATION Excerpt from June 1996 Compliance Status Report

METALS	Risk Reduction Standard Limits*					B-37			B-38			B-45			B-46		B-49				B-50		
Method 7000 Series (mg/Kg)	Type 1	Type 2	Surface Type 1	Soil Type 3	Type 4	0-3	8-13	23-28	4.5-9.5	9.5-14.5	29.5-34.5	0-3	3-8	23-28	8.5-13.5	30-37	0-3	3-8	8-13	23-28	4-9	19-24	24-29
Arsenic	20	***	***	***	***	< 0.50	< 0.50	NA	< 0.50	< 0.50	NA	< 0.50	< 0.50	NA	< 0.50	< 0.50	< 0.50	NA	< 0.50	NA	< 0.50	< 0.50	NA
Barium	1,000	***	***	***	***	22.3	10.8	NA	54.8	12	NA	67.7	16.7	NA	8.91	13.7	25.8	NA	16.0	NA	1.21	14.5	NA
Cadmium	2	***	***	***	***	0.08	0.31	NA	0.2	0.61	NA	0.21	0.40	NA	0.1	0.36	1.28	NA	0.06	NA	0.13	0.11	NA
Chromium	100	***	***	***	***	4.78	4.73	NA	3.49	9.9	NA	6.89	6.72	NA	1.44	2.95	4.69	NA	2.4	NA	4.63	3.73	NA
Lead	223	223	223	300	223	15.5	0.89	NA	7.04	0.88	NA	186	< 0.04	NA	0.37	1.79	21	NA	0.2	NA	0.97	< 0.04	NA
Mercury	0.5	1.1	0.5	17	10,000	< 0.02	< 0.02	NA	< 0.02	< 0.02	NA	0.07	< 0.02	NA	0.95	0.07	< 0.02	NA	0.21	NA	< 0.02	0.49	NA
Selenium	2	390	36	36	10,000	< 0.75	< 0.75	NA	0.77	< 0.75	NA	< 0.75	< 0.75	NA	0.44	< 0.75	< 0.75	NA	< 0.75	NA	< 0.75	< 0.75	NA
Silver	2	***	***	***	***	< 0.07	< 0.07	NA	< 0.07	< 0.07	NA	< 0.07	< 0.07	NA	< 0.07	< 0.07	< 0.07	NA	< 0.07	NA	< 0.07	< 0.07	NA
CYANIDE Method 9010																							
Total Cyanide (mg/Kg)	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.00	NA	NA	NA	NA	NA	NA	NA	NA
SULFIDE Method 376																							
Total Sulfide (mg/Kg)	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.00	NA	NA	NA	NA	NA	NA	NA	NA

< = WAS NOT DETECTED AT THE METHOD DETECTION LIMIT

NA = NOT ANALYZED ND = NOT DETECTED

*** = Constituent meets Type 1 Risk Reduction Standard

All results taken from Table E-1 of the RETEC June 1996 Compliance Status Report

*Complies with Type 1 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 2 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 3 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 4 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

= Sample collected below groundwater within saturated zone. Comparison to soil RRS not applicable

= Excavated during remediation activities in 1998

Table 3

Americus Former MGP Site

PAHs Analytical Results of Confirmation Samples

1998 POST-REMEDIATION Williams Report

	Risk Reduction Standard Limits*					C-23 (C2.5)	D-23 (D2.5/E2/E3)	D-34 (D3.5/D4/E3/E4)
PAHs Method 8270 (mg/Kg)	**Type 1**	**Type 2**	**Surface Type 3**	**Soil Type 3**	**Type 4**	**0-4.5**	**0-3**	**0-3**
Naphthalene	100,000	3,100,000	100,000	100,000	82,000,000	< 660	< 1,650	35,400
Acenaphthene	300,000	4,700,000	300,000	300,000	120,000,000	< 660	< 1,650	16,300
Acenapthylene	130,000	2,300,000	130,000	130,000	61,000,000	< 660	< 1,650	< 1,650
Anthracene	500,000	23,000,000	500,000	500,000	610,000,000	< 660	< 1,650	5,730
Benzo(a)anthracene	19,000	20,000	> 46,000	> 46,000	78,000	< 660	1,720	-
Benzo(a)pyrene	2,000	2,000	7,700	> 41,000	7,800	< 660	< 1,650	4,640
Benzo(b)fluoranthene	20,000	20,000	> 60,000	> 60,000	77,000	< 660	1,850	-
Benzo(g,h,i)perylene	500,000	***	***	***	***	< 660	< 1,650	2,020
Benzo(k)fluoranthene	> 13,000	200,000	> 13,000	> 13,000	760,000	< 660	1,940	-
Chrysene	> 37,000	2,000,000	> 37,000	> 37,000	7,800,000	< 660	1,800	-
Dibenzo(a,h)anthracene	2,000	2,000	7,800	> 8,000	7,800	< 660	< 1,650	< 1,650
Fluoranthene	500,000	3,100,000	500,000	500,000	82,000,000	< 660	2,460	12,200
Fluorene	360,000	3,100,000	360,000	360,000	82,000,000	< 660	< 1,650	8,500
Indeno(1,2,3-cd)pyrene	21,000	21,000	> 45,000	> 45,000	78,000	< 660	< 1,650	< 1,650
Phenanthrene	110,000	2,300,000	110,000	110,000	61,000,000	< 660	< 1,650	22,500
Pyrene	500,000	2,300,000	500,000	500,000	61,000,000	< 660	2,680	13,900

< = WAS NOT DETECTED AT THE METHOD DETECTION LIMIT

NA = NOT ANALYZED ND = NOT DETECTED

*** = Constituent meets Type 1 Risk Reduction Standard

All results taken from 1998 Final Status Report by Williams Environmental Services, Inc.

*Complies with Type 1 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 2 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 3 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 4 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

= Sample collected below groundwater within saturated zone. Comparison to soil RRS not applicable

= Excavated during remediation activities in 1998

Table 4			
Americus Former MGP Site			
PAHs, BTEX, Metals, Total Cyanide, and Total Sulfide Laboratory Analyses for MW-9R			
	MW-9R		**Type 1**
PAHs Method 8270 (ug/L)	**June 1996***	**December 1996****	**RRS**
Naphthalene	11.1	< 1.0	**20**
Acenaphthene	< 2.00	< 1.0	**---**
Acenapthylene	< 2.00	< 2.0	**10**
Anthracene	< 2.00	< 1.0	**10**
Benzo(a)anthracene	< 2.00	< 4.0	**0.1**
Benzo(a)pyrene	< 2.00	< 2.0	**0.2**
Benzo(b)fluoranthene	< 2.00	< 3.0	**0.2**
Benzo(g,h,i)perylene	< 2.00	< 3.0	**---**
Benzo(k)fluoranthene	< 2.00	< 2.0	**---**
Chrysene	< 2.00	< 3.0	**0.2**
Dibenzo(a,h)anthracene	< 2.00	< 2.0	**0.3**
Fluoranthene	< 2.00	< 2.0	**1,000**
Fluorene	< 2.00	< 1.0	**1,000**
Indeno(1,2,3-cd)pyrene	< 2.00	< 2.0	**0.4**
Phenanthrene	< 2.00	< 3.0	**10**
Pyrene	< 2.00	< 1.0	**1,000**
BTEX Method 8020 (ug/L)			
Benzene	116	2.74	**5**
Toluene	< 1.00	< 1.0	**1,000**
Ethylbenzene	< 1.00	< 1.0	**700**
Total Xylenes	6.34	< 10.0	**10,000**
METALS	MW-9R		
Method 7000 Series (mg/L)	June 1996*	December 1996**	
Arsenic	< 0.005	NA	**---**
Barium	0.106	NA	**2**
Cadmium	< 0.001	NA	**---**
Chromium	< 0.007	NA	**0.1**
Lead	0.01	< 0.005	**0.015**
Mercury	< 0.0005	NA	**0.002**
Selenium	< 0.008	NA	**---**
Silver	< 0.007	NA	**---**
CYANIDE Method 355			
Total Cyanide (mg/L)	0.008	0.008	**0.2**
SULFIDE Method 376			
Total Sulfide (mg/L)	0.046	NA	**---**

< = WAS NOT DETECTED AT THE METHOD DETECTION LIMIT

NA = NOT ANALYZED ND = NOT DETECTED --- = NOT AVAILABLE

Complies with Type 1 RRS from Table 6-7 in the June 1996 CSR by RETEC

*Results taken from June 1996 CSR by RETEC

**Results taken from December 1996 CSR Addendum by RETEC after well redevelopment.

*Complies with Type 1 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

Table 5

Americus Former MGP Site

PAHs and BTEX Analytical Results Concerning Borings Located in Parcel 5 3 10

PRE-REMEDIATION Results from RETEC June 1996 Compliance Status Report and LAW 1997 RRS Evaluation

	Risk Reduction Standard Limits*					B-34			B-36			B-41				B-41A					B-42			B-43			B-44			
PAHs Method 8270 (ug/Kg)	Type 1	Type 2	Surface Type 3	Soil Type 3	Type 4	4-9	14-19	19-24	0-4	4-9	19-24	0-3	3-8	8-13	18-23	0-2	2-3.5	3.5-8.5	8.5-13	13.5-18.5	0-4	4-9	24-29	4-9	9-14	19-24	0-3	3-8	13-18	23-28
Naphthalene	100,000	3,100,000	100,000	100,000	82,000,000	< 660	NA	< 660	< 660	NA	< 660	< 660	< 660	5,870	< 660	<820	<1,100	<2,800	46,000	1,400 J	<6,600	NA	< 660	NA	NA	< 660	< 13,200	NA	< 660	< 660
Acenaphthene	300,000	4,700,000	300,000	300,000	120,000,000	< 660	NA	< 660	< 660	NA	< 660	< 660	< 660	< 660	< 660	<820	<1,100	<2,800	6,800	1,500 J	<6,600	NA	< 660	NA	NA	< 660	< 13,200	NA	< 660	< 660
Acenapthylene	130,000	2,300,000	130,000	130,000	61,000,000	< 660	NA	< 660	< 660	NA	< 660	21900	11700	5,280	< 660	<820	300 J	<2,800	61,000	13,000	<6,600	NA	< 660	NA	NA	< 660	< 13,200	NA	< 660	< 660
Anthracene	500,000	23,000,000	500,000	500,000	610,000,000	< 660	NA	< 660	< 660	NA	< 660	16,200	< 660	3,160	< 660	<820	<1,100	<2,800	19,000	13,000	19,400	NA	< 660	NA	NA	< 660	34,300	NA	< 660	< 660
Benzo(a)anthracene	19,000	20,000	> 46,000	> 46,000	78,000	< 660	NA	< 660	12,500	NA	< 660	87,900	46,300	2,680	< 660	<820	1,900	4,000	12,000	7,200	28,200	NA	< 660	NA	NA	< 660	72,000	NA	< 660	< 660
Benzo(a)pyrene	2,000	2,000	7,700	> 41,000	7,800	< 660	NA	< 660	3,800	NA	< 660	113,000	42,900	2,630	< 660	<820	2,100	3,600	8,400	4200 J	24,600	NA	< 660	NA	NA	< 660	71,400	NA	< 660	< 660
Benzo(b)fluoranthene	20,000	20,000	> 60,000	> 60,000	77,000	< 660	NA	< 660	5,140	NA	< 660	167,000	55,500	2,200	< 660	<820	3,400	4,800	8,400	4,800	67,200	NA	< 660	NA	NA	< 660	94,700	NA	< 660	< 660
Benzo(g,h,i)perylene	500,000	***	***	***	***	< 660	NA	< 660	< 660	NA	< 660	93,300	20,400	1,100	< 660	<820	2,900	3,100	5,600	< 4300	30,800	NA	< 660	NA	NA	< 660	61,100	NA	< 660	< 660
Benzo(k)fluoranthene	> 13,000	200,000	> 13,000	> 13,000	760,000	22,900	NA	< 660	< 660	NA	< 660	< 660	< 660	< 660	< 660	<820	3,600	1000 J	2300 J	1200 J	67,200	NA	< 660	NA	NA	< 660	< 13,200	NA	< 660	< 660
Chrysene	> 37,000	2,000,000	> 37,000	> 37,000	7,800,000	18,500	NA	< 660	4410	NA	< 660	96,500	43,400	3,060	< 660	<820	1,700	31,000	8,400	5,000	43,100	NA	< 660	NA	NA	< 660	65,200	NA	< 660	< 660
Dibenzo(a,h)anthracene	2,000	2,000	7,800	> 8,000	7,800	< 660	NA	< 660	< 660	NA	< 660	22,700	< 660	< 660	< 660	<820	720 J	670 J	1400 J	< 4300	<6,600	NA	< 660	NA	NA	< 660	< 13,200	NA	< 660	< 660
Fluoranthene	500,000	3,100,000	500,000	500,000	82,000,000	13,400	NA	< 660	6,900	NA	< 660	185,000	100,000	8,550	< 660	<820	3,400	10,000	32,000	18,000	61,100	NA	< 660	NA	NA	< 660	136,000	NA	1,350	< 660
Fluorene	360,000	3,100,000	360,000	360,000	82,000,000	< 660	NA	< 660	< 660	NA	< 660	< 660	< 660	1,890	< 660	<820	<1,100	<2,800	40,000	12,000	<6,600	NA	< 660	NA	NA	< 660	< 13,200	NA	< 660	< 660
Indeno(1,2,3-cd)pyrene	21,000	21,000	> 45,000	> 45,000	78,000	< 660	NA	< 660	< 660	NA	< 660	78400	< 660	700	< 660	<820	2,400	2,700 J	4,800	2400 J	30,700	NA	< 660	NA	NA	< 660	50,000	NA	< 660	< 660
Phenanthrene	110,000	2,300,000	110,000	110,000	61,000,000	< 660	NA	< 660	3,260	NA	< 660	17,500	< 660	9,590	< 660	<820	1,200	<2,800	63,000	38,000	19,000	NA	< 660	NA	NA	< 660	33,500	NA	< 660	< 660
Pyrene	500,000	2,300,000	500,000	500,000	61,000,000	19,700	NA	< 660	7,800	NA	< 660	396,000	215,000	13,000	< 660	<820	5,100	19,000	52,000	27,000	53,700	NA	< 660	NA	NA	< 660	133,000	NA	1,270	< 660
BTEX Method 8020 (ug/Kg)																														
Benzene	500	***	***	***	***	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	NA	< 5.00	< 5.00	NA	NA	NA	NA	NA	NA	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	NA	< 5.00	NA
Toluene	100,000	***	***	***	***	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	NA	< 5.00	< 5.00	NA	NA	NA	NA	NA	NA	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	NA	< 5.00	NA
Ethylbenzene	70,000	***	***	***	***	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	NA	< 5.00	< 5.00	NA	NA	NA	NA	NA	NA	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	NA	< 5.00	NA
Total Xylenes	1,000,000	***	***	***	***	< 10.0	< 10.0	NA	< 10.0	< 10.0	NA	NA	< 10.0	< 10.0	NA	NA	NA	NA	NA	NA	< 10.0	< 10.0	NA	< 10.0	< 10.0	NA	< 10.0	NA	< 10.0	NA

	Risk Reduction Standard Limits*					B-47			B-48			B-51			B-52			TT-2A			TT-2B		
PAHs Method 8270 (ug/Kg)	Type 1	Type 2	Surface Type 3	Soil Type 3	Type 4	0-4	4-9	19-24	0-3	3-8	18-23	0-4	4-9	19-24	0-3	8-13	23-28	0-2.3	2.3-7.3	7.3-12.3	0-2	3.5-5	5-8
Naphthalene	100,000	3,100,000	100,000	100,000	82,000,000	< 660	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	< 970	< 660	< 740	2,100 J	3,800 J	< 660
Acenaphthene	300,000	4,700,000	300,000	300,000	120,000,000	< 660	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	< 970	< 660	< 740	< 400	< 6,900	< 660
Acenapthylene	130,000	2,300,000	130,000	130,000	61,000,000	< 660	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	< 970	< 660	< 740	< 400	< 6,900	< 660
Anthracene	500,000	23,000,000	500,000	500,000	610,000,000	7,490	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	220 J	< 660	< 740	4,500	10,000	< 660
Benzo(a)anthracene	19,000	20,000	> 46,000	> 46,000	78,000	7,250	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	1,100	< 660	< 740	9,400	22,000	< 660
Benzo(a)pyrene	2,000	2,000	7,700	> 41,000	7,800	5,460	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	620 J	< 660	< 740	5,100	11,000	< 660
Benzo(b)fluoranthene	20,000	20,000	> 60,000	> 60,000	77,000	11,900	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	1,200	< 660	< 740	14,000	22,000	< 660
Benzo(g,h,i)perylene	500,000	***	***	***	***	6,010	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	680 J	< 660	< 740	7,400	15,000	< 660
Benzo(k)fluoranthene	> 13,000	200,000	> 13,000	> 13,000	760,000	< 660	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	410 J	< 660	< 740	< 400	6,600 J	< 660
Chrysene	> 37,000	2,000,000	> 37,000	> 37,000	7,800,000	10,800	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	1,200	< 660	< 740	9,500	21,000	< 660
Dibenzo(a,h)anthracene	2,000	2,000	7,800	> 8,000	7,800	< 660	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	< 970	< 660	< 740	2,000 J	4,000 J	< 660
Fluoranthene	500,000	3,100,000	500,000	500,000	82,000,000	22,200	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	2,400	< 660	< 740	37,000	83,000	< 660
Fluorene	360,000	3,100,000	360,000	360,000	82,000,000	< 660	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	< 970	< 660	< 740	1,200 J	15,000	< 660
Indeno(1,2,3-cd)pyrene	21,000	21,000	> 45,000	> 45,000	78,000	4,670	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	700 J	< 660	< 740	7,400	15,000	< 660
Phenanthrene	110,000	2,300,000	110,000	110,000	61,000,000	6,730	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	1,700	< 660	< 740	36,000	92,000	< 660
Pyrene	500,000	2,300,000	500,000	500,000	61,000,000	17,400	NA	< 660	< 660	NA	< 660	< 660	NA	< 660	NA	NA	< 660	1,900	< 660	< 740	26,000	61,000	< 660
BTEX Method 8020 (ug/Kg)																							
Benzene	500	***	***	***	***	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	NA	NA	< 5.00	NA	NA
Toluene	100,000	***	***	***	***	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	NA	NA	< 5.00	NA	NA
Ethylbenzene	70,000	***	***	***	***	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	NA	NA	< 5.00	NA	NA
Total Xylenes	1,000,000	***	***	***	***	< 10.0	< 10.0	NA	< 10.0	< 10.0	NA	< 10.0	< 10.0	NA	< 10.0	< 10.0	NA	< 10.0	NA	NA	< 10.0	NA	NA

< = WAS NOT DETECTED AT THE METHOD DETECTION LIMIT

NA = NOT ANALYZED ND = NOT DETECTED

*** = Constituent meets Type 1 Risk Reduction Standard

All results taken from Table E-1 of the RETEC June 1996 Compliance Status Report

*Complies with Type 1 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 2 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 3 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 4 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

* Exceeds Types 1 through 4 RRS based on Table 5.3 from the RETEC June 1996 CSR

= Sample collected below groundwater within saturated zone. Comparison to soil RRS not applicable

= Excavated during remediation activities in 1998

Table 6
Americus Former MGP Site
Metals, Total Cyanide, and Total Sulfide Analytical Results Concerning Borings Located in Parcel 5 3 10
PRE-REMEDIATION Excerpt from June 1996 Compliance Status Report

METALS	Risk Reduction Standard Limits*					B-34			B-36			B-41				B-41A					B-42			B-43			B-44			
Method 7000 Series (mg/Kg)	Type 1	Type 2	Surface Type 1	Soil Type 3	Type 4	4-9	14-19	19-24	0-4	4-9	19-24	0-3	3-8	8-13	18-23	0-2	2-3.5	3.5-8.5	8.5-13	13.5-18.5	0-4	4-9	24-29	4-9	9-14	19-24	0-3	3-8	13-18	23-28
Arsenic	20	***	***	***	***	NA	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA	< 0.50	< 0.50	NA	NA	NA	NA	NA	NA	< 0.50	< 0.50	NA	< 0.50	< 0.50	NA	< 0.50	NA	< 0.50	NA
Barium	1,000	***	***	***	***	NA	13.7	0.15	39.3	18.0	NA	NA	22.6	17.5	NA	NA	NA	NA	NA	NA	46.0	19.4	NA	18.9	16.2	NA	44.6	NA	13.8	NA
Cadmium	2	***	***	***	***	NA	< 0.04	< 0.04	0.35	0.08	NA	NA	<0.04	0.85	NA	NA	NA	NA	NA	NA	0.48	0.54	NA	0.14	< 0.04	NA	0.13	NA	< 0.04	NA
Chromium	100	***	***	***	***	NA	1.94	< 0.07	5.77	2.20	NA	NA	7.70	11.9	NA	NA	NA	NA	NA	NA	3.41	2.53	NA	7.15	2.27	NA	2	NA	0.36	NA
Lead	223	223	223	300	223	NA	0.18	0.97	36.9	0.55	NA	NA	< 0.04	< 0.04	NA	NA	NA	NA	NA	NA	71.20	3.73	NA	< 0.04	0.57	NA	77	NA	1.14	NA
Mercury	0.5	1.1	0.5	17	10,000	NA	< 0.02	< 0.02	< 0.02	< 0.02	NA	NA	0.34	< 0.02	NA	NA	NA	NA	NA	NA	< 0.02	0.22	NA	< 0.02	< 0.02	NA	< 0.02	NA	< 0.02	NA
Selenium	2	390	36	36	10,000	NA	< 0.75	< 0.75	< 0.75	< 0.75	NA	NA	< 0.75	< 0.75	NA	NA	NA	NA	NA	NA	< 0.75	<0.75	NA	< 0.075	< 0.75	NA	< 0.75	NA	< 0.75	NA
Silver	2	***	***	***	***	NA	< 0.07	< 0.07	< 0.07	< 0.07	NA	NA	< 0.07	< 0.07	NA	NA	NA	NA	NA	NA	< 0.07	<0.07	NA	< 0.07	< 0.07	NA	< 0.07	NA	< 0.07	NA
CYANIDE Method 9010																														
Total Cyanide (mg/Kg)	NA	NA	NA	NA	NA	< 1.00	< 1.00	NA	NA	NA	NA	NA	< 1.00	NA	NA	NA	NA	NA	NA	NA	< 1.00	NA	NA	NA	NA	NA	NA	< 1.00	NA	NA
SULFIDE Method 376											N	N			N															
Total Sulfide (mg/Kg)	NA	NA	NA	NA	NA	< 1.00	< 1.00	NA	NA	NA	NA	NA	< 1.00	NA	NA	NA	NA	NA	NA	NA	< 1.00	NA	NA	NA	NA	NA	NA	< 1.00	NA	NA

METALS	Risk Reduction Standard Limits*					B-47			B-48			B-51					B-52			TT-2A			TT-2B		
Method 7000 Series (mg/Kg)	Type 1	Type 2	Surface Type 1	Soil Type 3	Type 4	0-4	4-9	19-24	0-3	3-8	18-23	0-4	0-4 Dup.	4-9	4-9 Dup.	19-24	0-3	8-13	23-28	0-2.3	2.3-7.3	7.3-12.3	0-2	3.5-5	5-8
Arsenic	20	***	***	***	***	< 0.50	< 0.50	NA	< 0.50	< 0.50	NA	< 0.50	< 0.50	< 0.50	< 0.50	NA	< 0.50	< 0.50	NA	NA	NA	NA	NA	NA	NA	NA
Barium	1,000	***	***	***	***	21.7	17.4	NA	24.7	14.8	NA	18.6	14.4	12.7	17.9	NA	16.9	17.6	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	2	***	***	***	***	0.73	1.37	NA	0.4	1.5	NA	0.05	0.26	0.1	< 0.04	NA	0.13	< 0.04	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	100	***	***	***	***	6.69	25	NA	9.13	31.4	NA	4.22	5.86	2.82	3.06	NA	4.71	1.63	NA	NA	NA	NA	NA	NA	NA	NA
Lead	223	223	223	300	223	11.1	< 0.04	NA	3.38	1.43	NA	< 0.04	< 0.04	0.12	0.58	NA	< 0.04	0.41	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.5	1.1	0.5	17	10,000	< 0.02	< 0.02	NA	< 0.02	< 0.02	NA	< 0.02	< 0.02	< 0.02	< 0.02	NA	< 0.02	< 0.02	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	2	390	36	36	10,000	< 0.75	< 0.75	NA	< 0.75	< 0.75	NA	< 0.75	< 0.75	< 0.75	< 0.75	NA	< 0.75	< 0.75	NA	NA	NA	NA	NA	NA	NA	NA
Silver	2	***	***	***	***	< 0.07	< 0.07	NA	< 0.07	< 0.07	NA	< 0.07	< 0.07	< 0.07	< 0.07	NA	< 0.07	< 0.07	NA	NA	NA	NA	NA	NA	NA	NA
CYANIDE Method 9010																										
Total Cyanide (mg/Kg)	NA	NA	NA	NA	NA	NA	< 1.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SULFIDE Method 376																										
Total Sulfide (mg/Kg)	NA	NA	NA	NA	NA	NA	< 1.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

< = WAS NOT DETECTED AT THE METHOD DETECTION LIMIT
NA = NOT ANALYZED ND = NOT DETECTED
*** = Constituent meets Type 1 Risk Reduction Standard
All results taken from Table E-1 of the RETEC June 1996 Compliance Status Report
*Complies with Type 1 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR
*Complies with Type 2 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR
*Complies with Type 3 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR
*Complies with Type 4 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR
= Sample collected below groundwater within saturated zone. Comparison to soil RRS not applicable
= Excavated during remediation activities in 1998

Table 7

Americus Former MGP Site

PAHs Analytical Results of Confirmation Samples

1998 POST-REMEDIATION Williams Report

	Risk Reduction Standard Limits*					C12/D12 (C1.5/D1.5)	C-23 (C2.5)	D-23 (D2.5/E2/E3)	D-34 (D3.5/D4/E3/E4)	E-23 (E3/E2.5)	C34 (101, 102, 103, 104)	D45 (D4/D5/D4.5/E4/E5)
PAHs Method 8270 (mg/Kg)	**Type 1**	**Type 2**	**Surface Type 3**	**Soil Type 3**	**Type 4**	**0-3**	**0-4.5**	**0-3**	**0-3**	**0-3**	**0-3**	**0-3**
Naphthalene	100,000	3,100,000	100,000	100,000	82,000,000	ND	< 660	< 1,650	35,400	ND	ND	11.8
Acenaphthene	300,000	4,700,000	300,000	300,000	120,000,000	ND	< 660	< 1,650	16,300	ND	ND	11.5
Acenapthylene	130,000	2,300,000	130,000	130,000	61,000,000	ND	< 660	< 1,650	< 1,650	ND	ND	3.23
Anthracene	500,000	23,000,000	500,000	500,000	610,000,000	ND	< 660	< 1,650	5,730	ND	ND	4.53
Benzo(a)anthracene	19,000	20,000	> 46,000	> 46,000	78,000	4,140	< 660	1,710	-	ND	2,270	3.53
Benzo(a)pyrene	2,000	2,000	7,700	> 41,000	7,800	3,240	< 660	< 1,650	4,640	ND	ND	3.53
Benzo(b)fluoranthene	20,000	20,000	> 60,000	> 60,000	77,000	4,760	< 660	1,850	-	ND	3,810	2.37
Benzo(g,h,i)perylene	500,000	***	***	***	***	3,140	< 660	< 1,650	2,020	ND	ND	ND
Benzo(k)fluoranthene	> 13,000	200,000	> 13,000	> 13,000	760,000	3,730	< 660	1,940	-	ND	1,820	3.17
Chrysene	> 37,000	2,000,000	> 37,000	> 37,000	7,800,000	4,750	< 660	1,800	-	ND	2,160	3.07
Dibenzo(a,h)anthracene	2,000	2,000	7,800	> 8,000	7,800	ND	< 660	< 1,650	< 1,650	ND	ND	ND
Fluoranthene	500,000	3,100,000	500,000	500,000	82,000,000	6,810	< 660	2,460	12,200	ND	4,050	6.55
Fluorene	360,000	3,100,000	360,000	360,000	82,000,000	ND	< 660	< 1,650	8,500	ND	ND	5.92
Indeno(1,2,3-cd)pyrene	21,000	21,000	> 45,000	> 45,000	78,000	2,450	< 660	< 1,650	< 1,650	ND	ND	ND
Phenanthrene	110,000	2,300,000	110,000	110,000	61,000,000	1,960	< 660	< 1,650	22,500	ND	ND	18.4
Pyrene	500,000	2,300,000	500,000	500,000	61,000,000	6,560	< 660	2,680	13,900	ND	5,130	15.5

< = WAS NOT DETECTED AT THE METHOD DETECTION LIMIT

NA = NOT ANALYZED ND = NOT DETECTED

*** = Constituent meets Type 1 Risk Reduction Standard

All results taken from 1998 Final Status Report by Williams Environmental Services, Inc.

*Complies with Type 1 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 2 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 3 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 4 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

= Sample collected below groundwater within saturated zone. Comparison to soil RRS not applicable

= Excavated during remediation activities in 1998

Table 8

Americus Former MGP Site

PAHs, BTEX, Metals, Total Cyanide, and Total Sulfide Laboratory Analyses for Monitoring Wells on Parcel 5-3-10

	MW-7/-7R		MW-8		MW-40		Type 1
PAHs Method 8270 (ug/L)	date	**results**					**RRS**
Naphthalene	12/12 - 12/15/11	< 9	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	**20**
Acenaphthene	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	10/17 - 10/18/96	3.1	**2,000**
Acenapthylene	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	**10**
Anthracene	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	**10**
Benzo(a)anthracene	10/17 - 10/18/96	< 4	10/17 - 10/18/96	< 4	10/17 - 10/18/96	< 4	**0.1**
Benzo(a)pyrene	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	**0.2**
Benzo(b)fluoranthene	10/17 - 10/18/96	< 3	10/17 - 10/18/96	< 3	10/17 - 10/18/96	< 3	**0.2**
Benzo(g,h,i)perylene	10/17 - 10/18/96	< 3	10/17 - 10/18/96	< 3	10/17 - 10/18/96	< 3	**---**
Benzo(k)fluoranthene	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	**---**
Chrysene	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	**0.2**
Dibenzo(a,h)anthracene	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	**0.3**
Fluoranthene	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	**1,000**
Fluorene	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	**1,000**
Indeno(1,2,3-cd)pyrene	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	**0.4**
Phenanthrene	10/17 - 10/18/96	< 3	10/17 - 10/18/96	< 3	10/17 - 10/18/96	< 3	**10**
Pyrene	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	**1,000**
BTEX Method 8020 (ug/L)							
Benzene	12/12- 12/15/11	< 2	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	**5**
Toluene	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	**1,000**
Ethylbenzene	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	10/17 - 10/18/96	< 1	**700**
Total Xylenes	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	10/17 - 10/18/96	< 2	**10,000**
Methyl Tert Butyl Ether	10/17 - 10/18/96	NA	10/17 - 10/18/96	1.78	10/17 - 10/18/96	< 1	**Not Reg.**
METALS	**MW-7/-7R**		**MW-8**		**MW-40**		
Method 7000 Series (mg/L)							
Arsenic	7/1/1996	< 0.005	7/1/1996	< 0.005	7/1/1996	< 0.005	**---**
Barium	9/1/1998	0.04	7/1/1996	0.162	7/1/1996	0.099	**2**
Cadmium	7/1/1996	< 0.001	7/1/1996	< 0.001	7/1/1996	< 0.001	**---**
Chromium	9/1/1998	< 0.007	7/1/1996	< 0.007	7/1/1996	< 0.007	**0.1**
Lead	9/1/1998	< 0.004	10/18/1996	< 0.005	10/18/1996	< 0.005	**0.015**
Mercury	9/1/1998	< 0.0005	7/1/1996	< 0.0005	7/1/1996	< 0.0005	**0.002**
Selenium	7/1/1996	0.009	7/1/1996	< 0.008	7/1/1996	< 0.008	**0.05**
Silver	7/1/1996	< 0.007	7/1/1996	< 0.007	7/1/1996	< 0.007	**---**
CYANIDE Method 355							
Total Cyanide (mg/L)	9/1/1998	BDL	11/13/1996	0.13	10/17/1996	0.026	**0.2**
SULFIDE Method 376							
Total Sulfide (mg/L)	7/1/1996	0.044	7/1/1996	< 0.004	7/1/1996	0.012	**---**

< = WAS NOT DETECTED AT THE METHOD DETECTION LIMIT

NA = NOT ANALYZED ND = NOT DETECTED --- = NOT AVAILABLE

Complies with Type 1 RRS from Table 6-7 in the June 1996 CSR by RETEC

*Results taken from June 1996 CSR by RETEC

**Results taken from December 1996 CSR Addendum by RETEC after well redevelopment.

Not Reg. = Not Regulated under HSRA

Table 9

Americus Former MGP Site

PAHs and BTEX Analytical Results for Borings Located in Parcel 5 3 1 A

PRE-REMEDIATION Results from RETEC June 1996 Compliance Status Report and 1996 CSR Addendum

	Risk Reduction Standard Limits*					B-10			B-11			B-12			MW-17
PAHs Method 8270 (ug/Kg)	**Type 1**	**Type 2**	**Surface Type 3**	**Soil Type 3**	**Type 4**	**0-4.5**	**4.5-9.5**	**19.5-24.5**	**0-4.5**	**4.5-9.5**	**14.5-19.5**	**0-5**	**5-10**	**15-20**	**8.5-13.5**
Naphthalene	100,000	3,100,000	100,000	100,000	82,000,000	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Acenaphthene	300,000	4,700,000	300,000	300,000	120,000,000	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Acenapthylene	130,000	2,300,000	130,000	130,000	61,000,000	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Anthracene	500,000	23,000,000	500,000	500,000	610,000,000	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Benzo(a)anthracene	19,000	20,000	> 46,000	> 46,000	78,000	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Benzo(a)pyrene	2,000	2,000	7,700	> 41,000	7,800	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Benzo(b)fluoranthene	20,000	20,000	> 60,000	> 60,000	77,000	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Benzo(g,h,i)perylene	500,000	***	***	***	***	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Benzo(k)fluoranthene	> 13,000	200,000	> 13,000	> 13,000	760,000	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Chrysene	> 37,000	2,000,000	> 37,000	> 37,000	7,800,000	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Dibenzo(a,h)anthracene	2,000	2,000	7,800	> 8,000	7,800	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Fluoranthene	500,000	3,100,000	500,000	500,000	82,000,000	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Fluorene	360,000	3,100,000	360,000	360,000	82,000,000	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Indeno(1,2,3-cd)pyrene	21,000	21,000	> 45,000	> 45,000	78,000	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Phenanthrene	110,000	2,300,000	110,000	110,000	61,000,000	<3,300	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
Pyrene	500,000	2,300,000	500,000	500,000	61,000,000	6,590	<660	< 660	<660	<660	< 660	NA	NA	<660	<660
BTEX Method 8020 (ug/Kg)															
Benzene	500	***	***	***	***	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	NA	< 5.00	<1,810
Toluene	100,000	***	***	***	***	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	NA	< 5.00	<1,810
Ethylbenzene	70,000	***	***	***	***	< 5.00	< 5.00	NA	< 5.00	< 5.00	NA	< 5.00	NA	< 5.00	<1,810
Total Xylenes	1,000,000	***	***	***	***	< 10.0	< 10.0	NA	< 10.0	< 10.0	NA	< 10.0	NA	< 10.0	<5,430

< = WAS NOT DETECTED AT THE METHOD DETECTION LIMIT

NA = NOT ANALYZED

*** = Constituent meets Type 1 Risk Reduction Standard

Results taken from Table E-1 of the RETEC June 1996 Compliance Status Report and Table D-1 of the 1996 CSR Addendum

*Complies with Type 1 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 2 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 3 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 4 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

= Sample collected below groundwater within saturated zone. Comparison to soil RRS not applicable

= Excavated during remediation activities in 1998

Table 10

Americus Former MGP Site

Metals, Total Cyanide, and Total Sulfide Analytical Results for Borings Located in Parcel 5 3 1 A

PRE-REMEDIATION Results from RETEC June 1996 Compliance Status Report

METALS	Risk Reduction Standard Limits*					B-10			B-11			B-12			MW-17
Method 7000 Series (mg/Kg)	Type 1	Type 2	Surface Type 1	Soil Type 3	Type 4	0-4.5	4.5-9.5	19.5-24.5	0-4.5	4.5-9.5	14.5-19.5	0-5	5-10	15-20	8.5-13.5
Arsenic	20	***	***	***	***	<0.50	< 0.50	NA	3.43	< 0.50	NA	<0.50	< 0.50	NA	NA
Barium	1,000	***	***	***	***	79.7	13.4	NA	130	25.8	NA	50.9	6.01	NA	NA
Cadmium	2	***	***	***	***	0.90	< 0.04	NA	0.79	0.33	NA	0.20	0.14	NA	NA
Chromium	100	***	***	***	***	12.2	4.52	NA	7.39	6.52	NA	3.82	2.89	NA	NA
Lead	223	223	223	300	223	238	6.32	NA	73.8	8.28	NA	23.0	2.41	NA	NA
Mercury	0.5	1.1	0.5	17	10,000	0.14	1.32	NA	0.85	0.25	NA	<0.02	<0.02	NA	NA
Selenium	2	390	36	36	10,000	<0.75	< 0.75	NA	< 0.75	< 0.75	NA	<0.75	< 0.75	NA	NA
Silver	2	***	***	***	***	<0.07	< 0.07	NA	< 0.07	< 0.07	NA	<0.07	< 0.07	NA	NA
CYANIDE Method 9010															
Total Cyanide (mg/Kg)	**NA**	**NA**	**NA**	**NA**	**NA**	NA	< 1.00	NA	NA	NA	NA	<1.00	NA	NA	NA
SULFIDE Method 376								**N**			**N**	**N**			
Total Sulfide (mg/Kg)	**NA**	**NA**	**NA**	**NA**	**NA**	NA	< 1.00	NA	NA	NA	NA	<1.00	NA	NA	NA

< = WAS NOT DETECTED AT THE METHOD DETECTION LIMIT

NA = NOT ANALYZED ND = NOT DETECTED

*** = Constituent meets Type 1 Risk Reduction Standard

Results taken from Table E-1 of the RETEC June 1996 Compliance Status Report and Table D-1 of the 1996 CSR Addendum

*Complies with Type 1 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 2 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 3 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 4 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

= Sample collected below groundwater within saturated zone. Comparison to soil RRS not applicable

= Excavated during remediation activities in 1998

Table 11

Americus Former MGP Site

PAHs Analytical Results of Confirmation Samples

1998 POST-REMEDIATION Williams Report

	Risk Reduction Standard Limits*					G6.5	Grid G56 (G5/G6/G5.5/H5/H6)	Grid G67 (G6/G7/G6.5/H6)	Grid H56 (H5/H6/H5.5)
PAHs Method 8270 (mg/Kg)	**Type 1**	**Type 2**	**Surface Type 3**	**Soil Type 3**	**Type 4**	**0-4.5**	**0-4.5**	**0-4.5**	**0-4.5**
Naphthalene	100,000	3,100,000	100,000	100,000	82,000,000	NA	ND	ND	ND
Acenaphthene	300,000	4,700,000	300,000	300,000	120,000,000	NA	ND	ND	ND
Acenapthylene	130,000	2,300,000	130,000	130,000	61,000,000	NA	ND	ND	ND
Anthracene	500,000	23,000,000	500,000	500,000	610,000,000	NA	ND	ND	ND
Benzo(a)anthracene	19,000	20,000	> 46,000	> 46,000	78,000	NA	ND	ND	ND
Benzo(a)pyrene	2,000	2,000	7,700	> 41,000	7,800	NA	ND	ND	ND
Benzo(b)fluoranthene	20,000	20,000	> 60,000	> 60,000	77,000	NA	ND	ND	ND
Benzo(g,h,i)perylene	500,000	***	***	***	***	NA	ND	ND	ND
Benzo(k)fluoranthene	> 13,000	200,000	> 13,000	> 13,000	760,000	NA	ND	ND	ND
Chrysene	> 37,000	2,000,000	> 37,000	> 37,000	7,800,000	NA	ND	ND	ND
Dibenzo(a,h)anthracene	2,000	2,000	7,800	> 8,000	7,800	NA	ND	ND	ND
Fluoranthene	500,000	3,100,000	500,000	500,000	82,000,000	NA	ND	790	ND
Fluorene	360,000	3,100,000	360,000	360,000	82,000,000	NA	ND	ND	ND
Indeno(1,2,3-cd)pyrene	21,000	21,000	> 45,000	> 45,000	78,000	NA	ND	ND	ND
Phenanthrene	110,000	2,300,000	110,000	110,000	61,000,000	NA	ND	1,720	ND
Pyrene	500,000	2,300,000	500,000	500,000	61,000,000	NA	ND	1,360	ND

< = WAS NOT DETECTED AT THE METHOD DETECTION LIMIT

NA = NOT ANALYZED ND = NOT DETECTED

*** = Constituent meets Type 1 Risk Reduction Standard

All results taken from 1998 Final Status Report by Williams Environmental Services, Inc.

*Complies with Type 1 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 2 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 3 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

*Complies with Type 4 RRS based on Table 5.3: Types 1 through 4 Soil Risk Reduction Standards from the RETEC June 1996 CSR

Samples Collected January 1998

= Sample collected below groundwater within saturated zone. Comparison to soil RRS not applicable

= Excavated during remediation activities in 1998

Table 12			
Americus Former MGP Site			
PAHs, BTEX, Metals, Total Cyanide, and Total Sulfide Laboratory Analyses for Monitoring Well on Parcel 5-3-1A			
	MW-17		
PAHs Method 8270 (ug/L)	date	**results**	**Type 1 RRS**
Naphthalene	10/30 - 10/31/96	<1.0	**20**
Acenaphthene	10/30 - 10/31/96	<1.0	**2,000**
Acenapthylene	10/30 - 10/31/96	<2.0	**10**
Anthracene	10/30 - 10/31/96	<1.0	**10**
Benzo(a)anthracene	10/30 - 10/31/96	<4.0	**0.1**
Benzo(a)pyrene	10/30 - 10/31/96	<2.0	**0.2**
Benzo(b)fluoranthene	10/30 - 10/31/96	<3.0	**0.2**
Benzo(g,h,i)perylene	10/30 - 10/31/96	<3.0	**---**
Benzo(k)fluoranthene	10/30 - 10/31/96	<2.0	**---**
Chrysene	10/30 - 10/31/96	<2.0	**0.2**
Dibenzo(a,h)anthracene	10/30 - 10/31/96	<2.0	**0.3**
Fluoranthene	10/30 - 10/31/96	<2.0	**1,000**
Fluorene	10/30 - 10/31/96	<1.0	**1,000**
Indeno(1,2,3-cd)pyrene	10/30 - 10/31/96	<2.0	**0.4**
Phenanthrene	10/30 - 10/31/96	<3.0	**10**
Pyrene	10/30 - 10/31/96	<1.0	**1,000**
BTEX Method 8020 (ug/L)			
Benzene	10/30 - 10/31/96	<1.0	**5**
Toluene	10/30 - 10/31/96	<1.0	**1,000**
Ethylbenzene	10/30 - 10/31/96	<1.0	**700**
Total Xylenes	10/30 - 10/31/96	<3.0	**10,000**
Methyl Tert Butyl Ether	10/30 - 10/31/96	NA	**Not Reg.**
METALS	**MW-17**		
Method 7000 Series (mg/L)			
Arsenic	11/21/96	NA	**0.05**
Barium	11/21/96	NA	**2**
Cadmium	11/21/96	NA	**0.005**
Chromium	11/21/96	NA	**0.1**
Lead	11/21/96	<0.005	**0.015**
Mercury	11/21/96	NA	**0.002**
Selenium	11/21/96	NA	**0.05**
Silver	11/21/96	NA	**0.1**
CYANIDE Method 355			
Total Cyanide (mg/L)	10/31/96	<0.10	**0.2**
SULFIDE Method 376			
Total Sulfide (mg/L)	10/31/96	NA	**---**

< = WAS NOT DETECTED AT THE METHOD DETECTION LIMIT

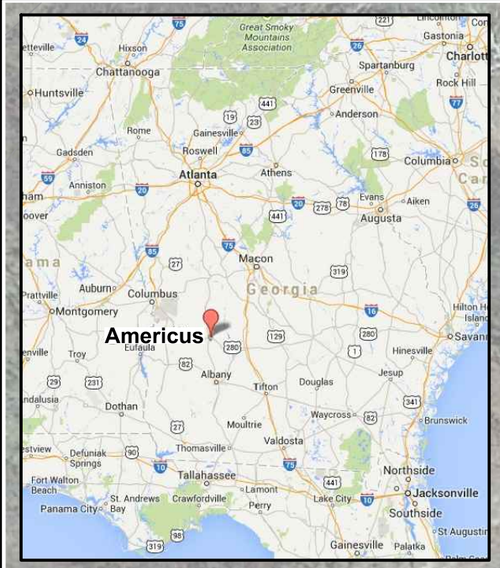
NA = NOT ANALYZED --- = NOT AVAILABLE

Complies with Type 1 RRS from Table 6-7 in the June 1996 CSR by RETEC

Results taken from June 1996 CSR by RETEC

Not Reg. = Not Regulated under HSRA

FIGURES



Source: CAD Basemap provided by Southern Company Generation Engineering and Construction Services.

Resolute
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TL

DATE:
November 19, 2013

Former Americus MGP Site
Americus, Georgia

Site Location
and Tax Parcel Map

FIGURE
1

Figure 1.dwg

N

0 40 80 160 240 320

Feet

MW-21
329.07
Benzene <1.0
Naphthalene <8.6
October 2022

MW-19
330.79
Benzene <1.0
Naphthalene <8.6
October 2022

MW-22
328.38
Benzene <1.0
Naphthalene <8.6
October 2022

5-1-4
Certification of Compliance
Groundwater - Type 5 RRS

MW-15
331.50
Benzene <1.0
Naphthalene <8.6
October 2022

MW-14R
333.14
Benzene 6.3
Naphthalene 230
October 2022

330
332
334
336
338
340
342
344
346
348
350
352
354

Railroad Right-of-Way
Certification of Compliance
Groundwater - Type 5 RRS

MW-4RR
352.65
Benzene <1.0
Naphthalene 13
October 2022

MW-20
328.96
NS
October 2022

MW-28
346.86
NS
October 2022

5-3-2
Certification of Compliance
Soil - Type 3 RRS
Groundwater - Type 5 RRS

MW-7R
352.02
NS
October 2022

MW-26R
354.32
NS
October 2022

5-3-10
Certification of Completion
Soil - Type 3 RRS
Groundwater - Type 1 RRS

5-3-9
Certification of Compliance
Soil - Type 3 RRS
Groundwater - Type 1 RRS

Legend

- Monitoring Well
- Groundwater Potentiometric Contour
- Type 5 Permanent Marker
- Boundary of Type 5 Restrictive Use Covenant
- MW-4RR 352.65 — Potentiometric Surface Elevation
- Tax Parcel Boundary
- 5-1-4 — Tax Parcel ID

Notes:
Potentiometric surface elevations shown in ft NAVD 88.
Analytical results are reported in micrograms per liter (µg/L).
< indicates the analyte was not detected above the laboratory reporting limit.
NS - not sampled.

Resolute
Environmental & Water Resources Consulting

Woodstock, GA | December 2022

Former Americus MGP Site
Groundwater Quality
Recent Benzene and Naphthalene
Americus, GA

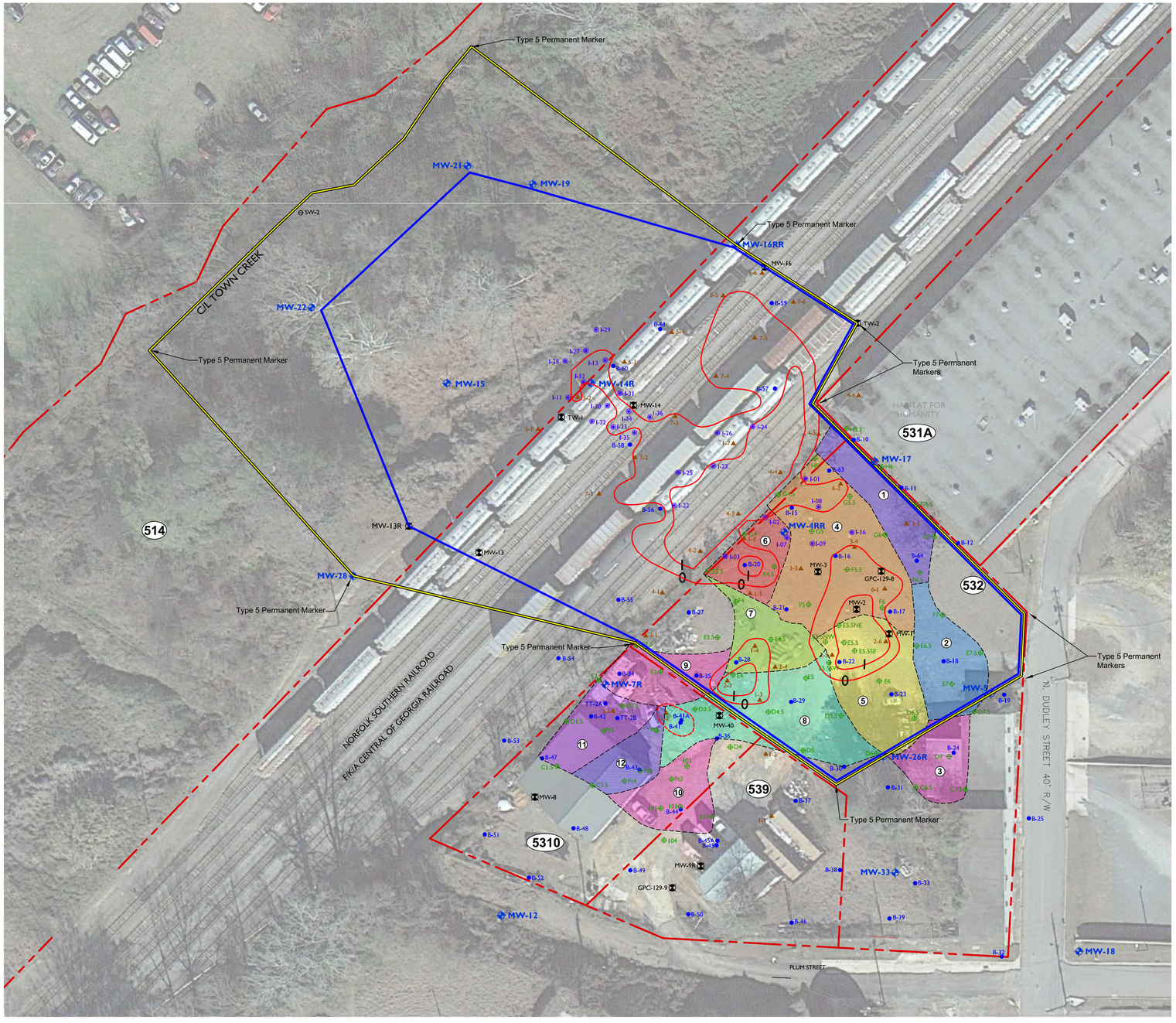
Figure
2

Document Path: C:\Users\Resolute 1\Resolute Environmental\RE_SP - Environmental\ArcGIS\Americus\2022\GIS\Revised M&M 2022 Figures\Figure 2 - Groundwater Quality Recent Benz and Naph.mxd

Legend

- ▲ - TarGOST Boring (2007)
- ◉ - Chemical Oxidation Injection Point (2002)
- ⊕ - Post Remediation Confirmation Sample (1998)
- ● - CSR Assessment Boring (1996-1997)
- ⊖ - Surface Water Monitoring Location
- ✥ - Monitoring Well
- ⊠ - Former Monitoring Well
- Boundary of Type 5 Restrictive Use Covenant
- Proposed Type 5 Groundwater Area
- Tax Parcel Boundary
- NAPL or Tar Thickness (1=1 Foot) (TarGOST 2007)

1997-1998 Excavation Depth	Area Designation
3 Ft.	3, 9, 10
4 Ft.	11
4.5 Ft.	1, 12
5 Ft.	2
8 Ft.	8
10 Ft.	7
13 Ft.	5
14 Ft.	4
19 Ft.	6



Source: CAD Basemap provided by Southern Company Generation Engineering and Construction Services.

Scale
0 20 40
1 inch = 40 ft.

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DATE: December 9, 2013

Former Americus MGP Site
Americus, Georgia

Proposed Type 5 RRS Area

FIGURE 3

Figure 3.dwg

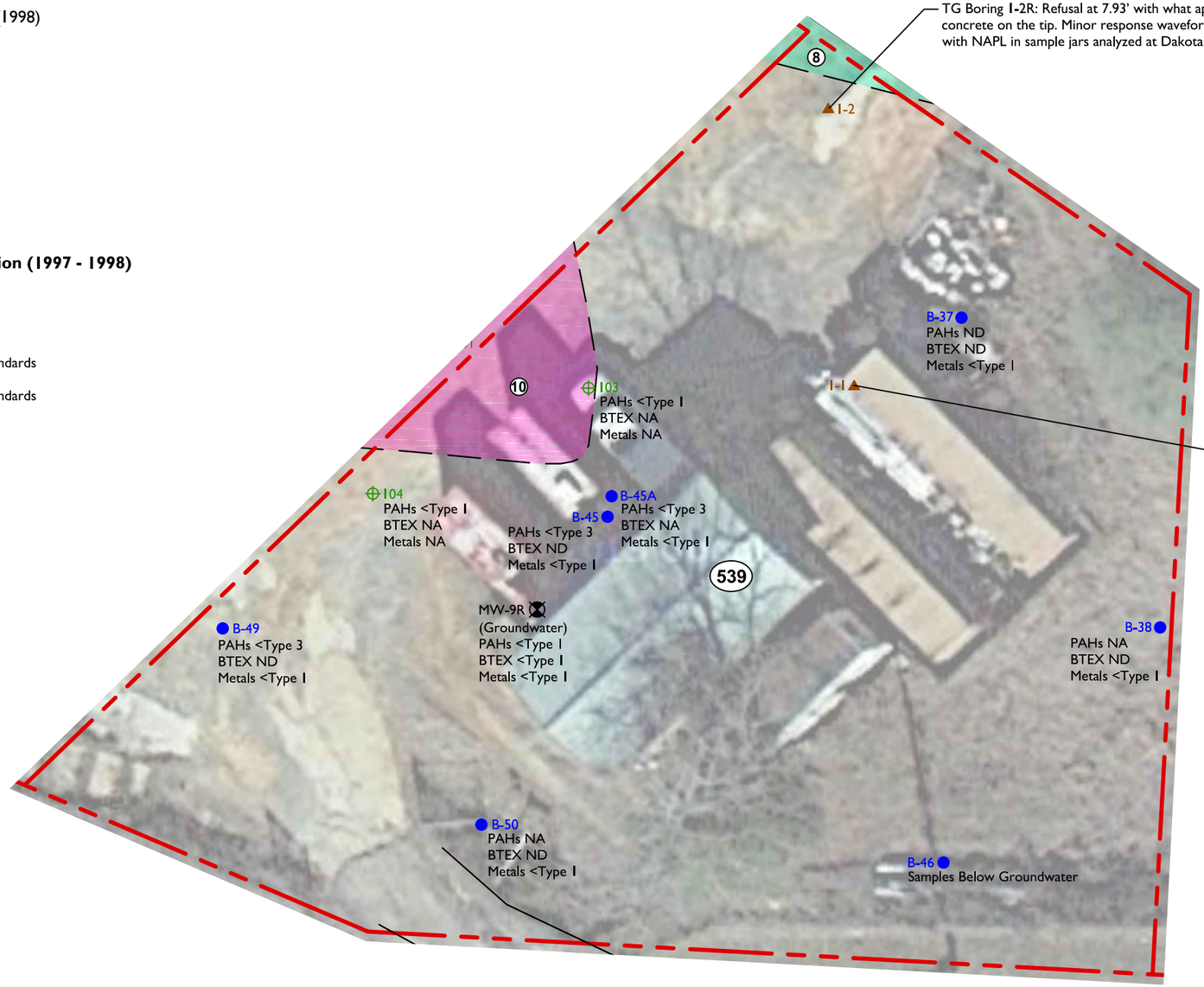
Legend

- ▲ - TarGOST Boring (2007)
- ⊕ - Post Remediation Confirmation Sample (1998)
- ● - CSR Assessment Boring (1996-1997)
- ⊗ - Former Monitoring Well
- — - Tax Parcel Boundary

1997-1998 Excavation Depth	Area Designation
3 Ft.	10
8 Ft.	8

Concentrations Remaining After Excavation (1997 - 1998)

PAHs = Poly Aromatic Hydrocarbons
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
Metals = See Attached Tables
ND = Not Detected
NA = Not Analyzed
<Type 1 = Less Than HSRA Type 1 Risk Reduction Standards (See Attached Tables)
<Type 3 = Less Than HSRA Type 3 Risk Reduction Standards (See Attached Tables)



Source: CAD Basemap provided by Southern Company Generation Engineering and Construction Services.

Scale
0 10 20
1 inch = 20 ft.

N

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DATE: November 20, 2013

Former Americus MGP Site
Americus, Georgia

Soil and Groundwater
Concentrations Remaining After Remediation
Tax Parcel 539

FIGURE 4

Figures 4 - 5.dwg

Legend

- ▲ - TarGOST Boring (2007)
- ⊕ - Post Remediation Confirmation Sample (1998)
- ● - CSR Assessment Boring (1996-1997)
- ⊕ - Monitoring Well
- ⊗ - Former Monitoring Well
- — — — - Tax Parcel Boundary
- ——— - NAPL or Tar Thickness (1=1 Foot) (TarGOST 2007)

1997-1998 Excavation Depth	Area Designation
3 Ft.	9, 10
4 Ft.	11
4.5 Ft.	12
8 Ft.	8

Concentrations Remaining After Excavation (1997 - 1998)

PAHs = Poly Aromatic Hydrocarbons
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
Metals = See Attached Tables
ND = Not Detected
NA = Not Analyzed
<Type 1 = Less Than HSRA Type 1 Risk Reduction Standards (See Attached Tables)
<Type 3 = Less Than HSRA Type 3 Risk Reduction Standards (See Attached Tables)

Scale
0 10 20
1 inch = 20 ft.

N

Source: CAD Basemap provided by Southern Company Generation Engineering and Construction Services.

Resolute
Environmental & Water Resources Consulting
12600 Deerfield Parkway, Suite 100
Alpharetta, Georgia 30004
www.ResoluteEnv.com

DRAWN BY: TL

DATE: November 19, 2013

Former Americus MGP Site
Americus, Georgia

Soil and Groundwater
Concentrations Remaining After Remediation
Tax Parcel 5310

FIGURE 5

Figures 4 - 5.dwg

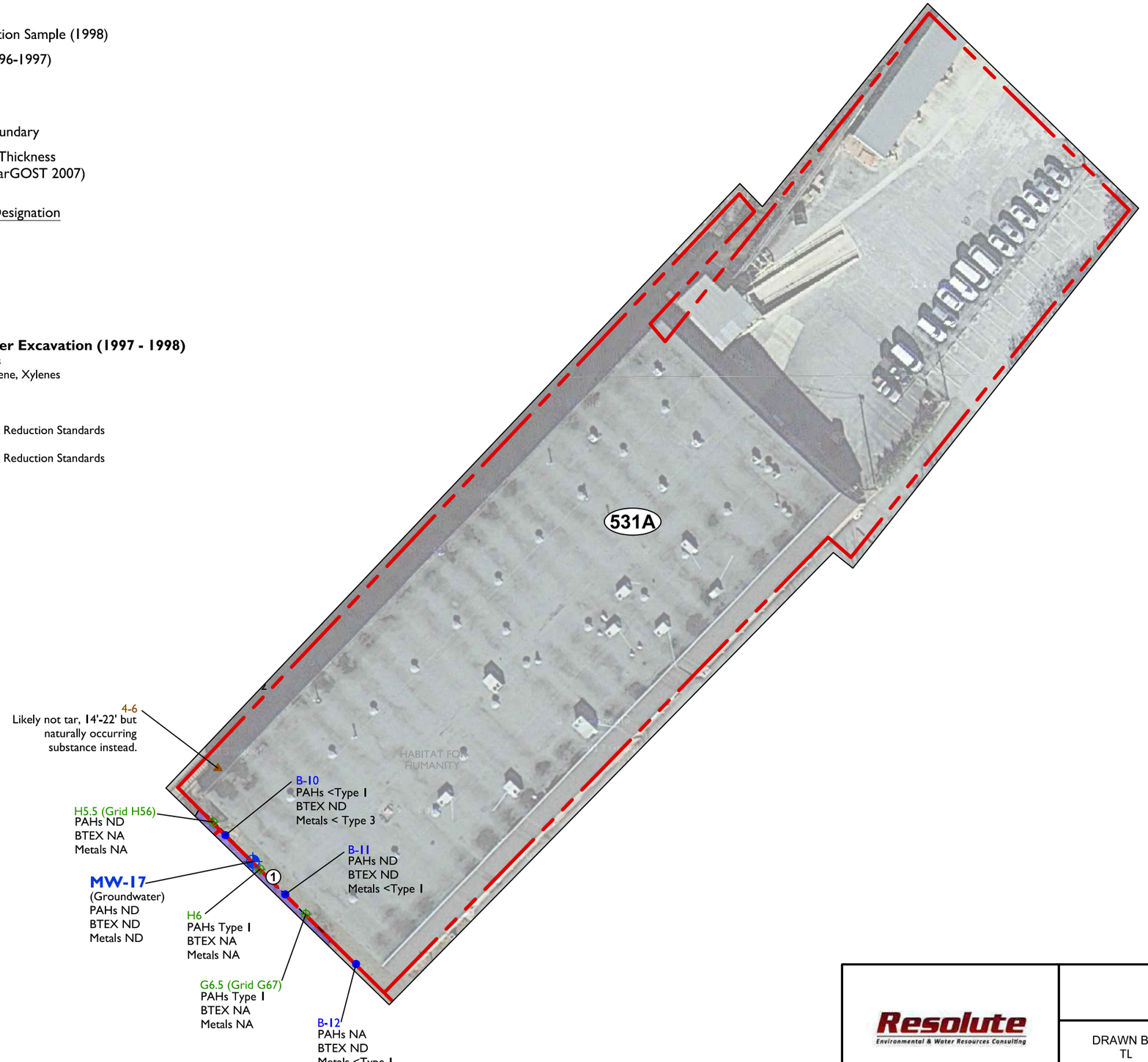
Legend

- ▲ - TarGOST Boring (2007)
- ⊕ - Post Remediation Confirmation Sample (1998)
- ● - CSR Assessment Boring (1996-1997)
- ⊕ - Monitoring Well
- ⊗ - Former Monitoring Well
- — - Tax Parcel Boundary
- — - NAPL or Tar Thickness (1=1 Foot) (TarGOST 2007)

1997-1998 Excavation Depth	Area Designation
4.5 Ft.	1, 12

Concentrations Remaining After Excavation (1997 - 1998)

PAHs = Poly Aromatic Hydrocarbons
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
Metals = See Attached Tables
ND = Not Detected
NA = Not Analyzed
<Type 1 = Less Than HSRA Type 1 Risk Reduction Standards (See Attached Tables)
<Type 3 = Less Than HSRA Type 3 Risk Reduction Standards (See Attached Tables)



Source: CAD Basemap provided by Southern Company Generation Engineering and Construction Services.

Resolute
Environmental & Water Resources Consulting
12600 Deerfield Parkway, Suite 100
Alpharetta, Georgia 30004
www.ResoluteEnv.com

DRAWN BY: TL

DATE: November 19, 2013

Former Americus MGP Site
Americus, Georgia

Soil and Groundwater Concentrations Remaining After Remediation Tax Parcel 531A

FIGURE 6

Figure 6.dwg

APPENDICES

Appendix A

HISTORIC BORING LOGS AND WELL COMPLETION DIAGRAMS

RETEC

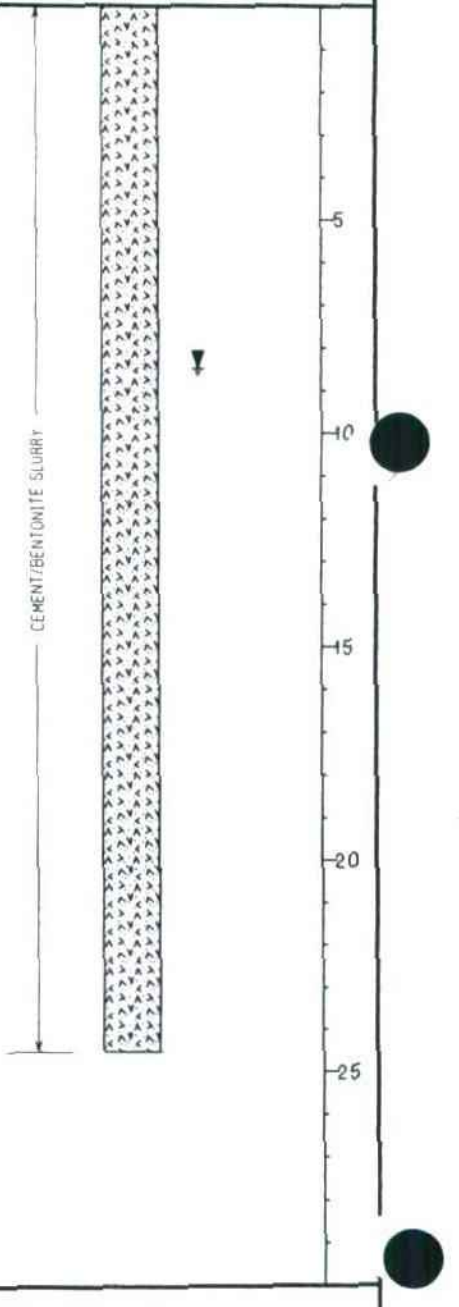
BORING/WELL INSTALLATION LOG
B-10

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *24.5'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.. 354.70' (MSL)*
START DATE: *7/26/94* *TIME: 15:30*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *8.5' bgs*
COMPLETION DATE: *7/28/94 TIME: 16:00*	RIG TYPE: *CME 850*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *JSM*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CB	40"		3.1		SM SC		SILTY SAND and CLAYEY SAND interlayered; trace cinders; red to black (10R 5/8 to 10YR 2/1); moist (Fill)
5	CB	36"		2.1		SM		SILTY SAND; trace clay; yellowish brown (10YR 5/8); moist
						ML		CLAYEY SILT; dark grayish brown (10YR 4/2); moist
						SM		SILTY SAND; dark grayish brown (10YR 2/2); wet; possible naphthalene-like odor and slight sheen
10	CB	0"		--				NO RECOVERY
15	CB	14"		2.1		SC		CLAYEY SILTY SAND; clay occurs in thin laminae; sand fine to coarse; brown (7.5YR 5/2); wet
20	CB	80"		3.0		CL		SILTY CLAY; trace sand; brownish yellow (19.5' to 21.5') to dark gray (10YR 6/8 to 10YR 4/1); very hard; brittle; parts on silty micaceous seam; slight plasticity; wet
25								EOB 24.5'

CONSTRUCTION DETAILS



REMARKS: FID Background=2.1 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

BORING/WELL INSTALLATION LOG

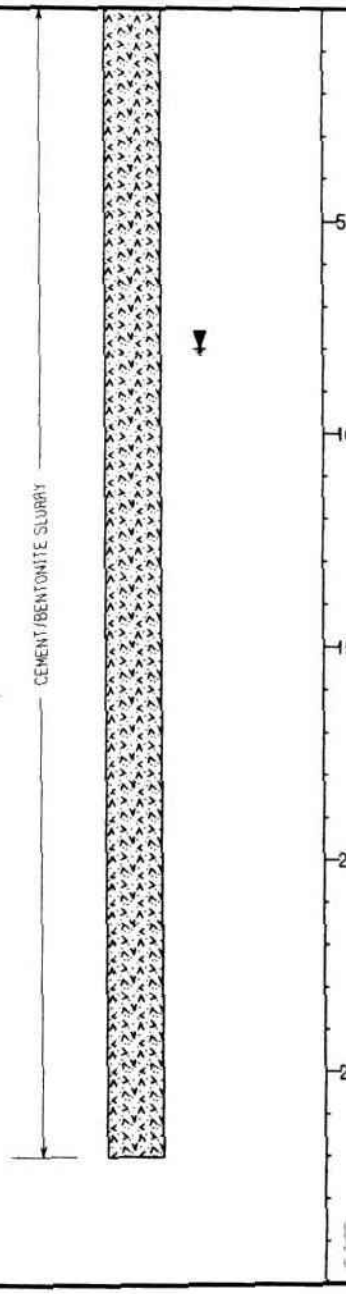
B-11

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *27'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 355.92' (MSL)*
START DATE: *7/27/94 TIME: 08:00*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *8' bgs*
COMPLETION DATE: *7/27/94 TIME: 09:10*	RIG TYPE: *CME 850*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *JSM*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
	CB	24"		2.4		GM		GRAVELLY SAND with some coal, cinder, and coke fragments; dark brown (7.5YR 6/4); moist (Fill)
5	CB	36"		2.4		SM		SILTY SAND; trace clay in 1/4" laminae; organic matter in shoe of sampler; red to gray (2.5YR 5/6 to 10YR 4/1); wet
10	CB	0"		--				NO RECOVERY
15	CB	42"		2.4		CL		SILTY CLAY; trace sand; brownish yellow (14.5' to 16.5') to dark gray (10YR 6/8 to 10YR 4/1); very hard; brittle; parts on silty micaceous seams; slight plasticity; wet
20	CB			--				AS ABOVE; dark gray (10YR 4/1)
25	ST	24"		--				AS ABOVE
								EOB 27'

CONSTRUCTION DETAILS



REMARKS: FID Background=2.4 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

BORING/WELL INSTALLATION LOG

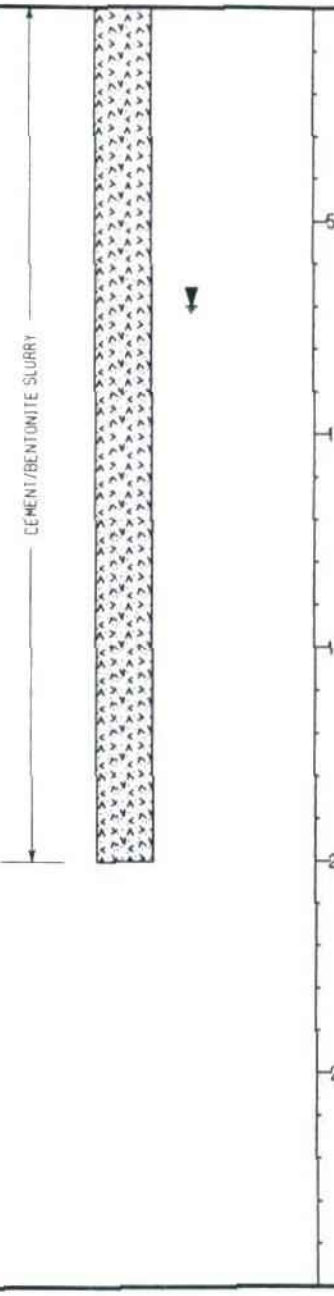
B-12

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *20'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 357.95' (MSL)*
START DATE: *7/27/94* TIME: *09:25*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *7' bgs*
COMPLETION DATE: *7/27/94* TIME: *10:00*	RIG TYPE: *CME 850*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *JSM*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CB	48"		2.2		GM		GRAVELLY SAND; trace silt; trace cinders, coal fragments, and possible bluish wood chip purifier residuals (1.5' to 3'); red to black (2.5YR 5/8 to 2.5YR2.5/0)
5	CB	24"		2.2		SM		SILTY SAND; trace clay; reddish yellow (10YR 6/6); moist SILTY SAND; trace clay and gravel; reddish yellow to brown (7.5YR 6/6 to 10YR 5/2); wet at 7'
10	CB	0"		--				NO RECOVERY
15	CB	36"		2.2		CL		SILTY CLAY; trace sand; brownish yellow (15' to 15.5') to dark gray (10YR 6/8 to 10YR 4/1); very hard; brittle; parts on silty micaceous seams; slight plasticity; wet
20								EOB 20'
25								

CONSTRUCTION DETAILS



REMARKS: FID Background=2.2 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

BORING/WELL INSTALLATION LOG
B-34

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: *' (MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *24.0'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 360.73' (MSL)*
START DATE: *7/30/94 TIME: 07:50*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *8.5' bgs*
COMPLETION DATE: *7/30/94 TIME: 08:25*	RIG TYPE: *CME 850*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *DT*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CB	48"		1.67		GM		SANDY GRAVEL AND CONCRETE (Fill)
5	CB	54"		1.50				CONCRETE with stringers of cinder materials and gravel; moist (Fill)
10	CB	3.6"		--		SM		SILTY SAND; light gray (10YR 7/1); wet at 8.5' AS ABOVE (poor recovery)
15	CB	12"		14.0				AS ABOVE; very pale brown (10YR 7/4); medium to coarse grained sand; wet
20	CB	60"		4.0		CL		SILTY CLAY; yellow to gray (10YR 7/8 to 6/1); dense; brittle; parts on micaceous seams; wet AS ABOVE; color change to gray (10YR 5/1)
25								EOB 24'

CONSTRUCTION DETAILS

REMARKS: FID Background=1.25 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

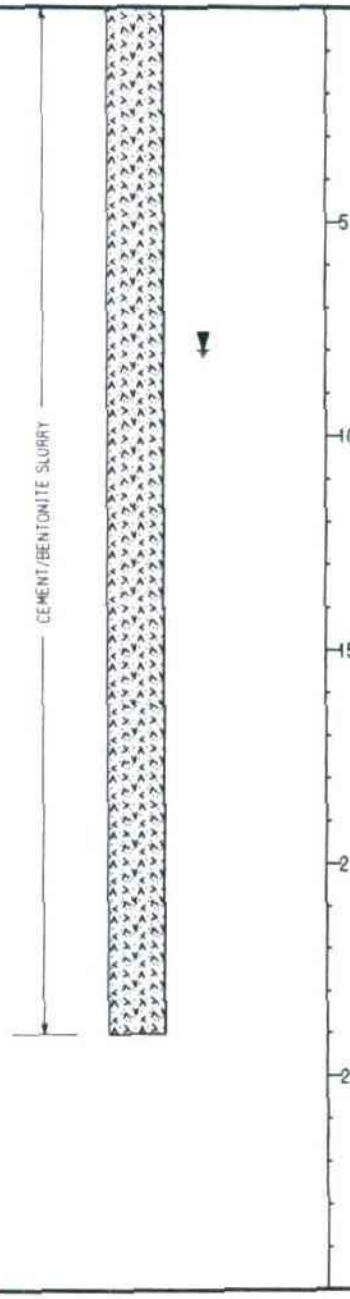
BORING/WELL INSTALLATION LOG
B-38

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *24'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 361.68' (MSL)*
START DATE: *7/29/94* *TIME: 14:30*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *8'bgs*
COMPLETION DATE: *7/29/94 TIME: 15:05*	RIG TYPE: *CME 850*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *DT*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CB	48"		7.1		GM		GRAVEL and SAND; some cinders (Fill)
5	CB	42"		1.04		SM		SILTY SAND; trace clay; very pale brown (10YR 7/4); moist AS ABOVE AS ABOVE; wet AS ABOVE; color change to reddish yellow (5YR 6/8); wet
10	CB	48"		1.1		SC		SILTY/CLAYEY SAND; reddish yellow (5YR 6/8); wet
15	CB	0"		--		SM		SILTY SAND; very pale brown (10YR 7/4); wet POOR RECOVERY; silty sand on tip of core barrel sampler
20	CB	60"		5.1		CL		SILTY CLAY; gray and reddish yellow layers; (7.5YR 6/0 and 7/8); dense; brittle; parts on micaceous seams; wet
25								EOB 24'

CONSTRUCTION DETAILS



REMARKS: FID Background=0.75 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

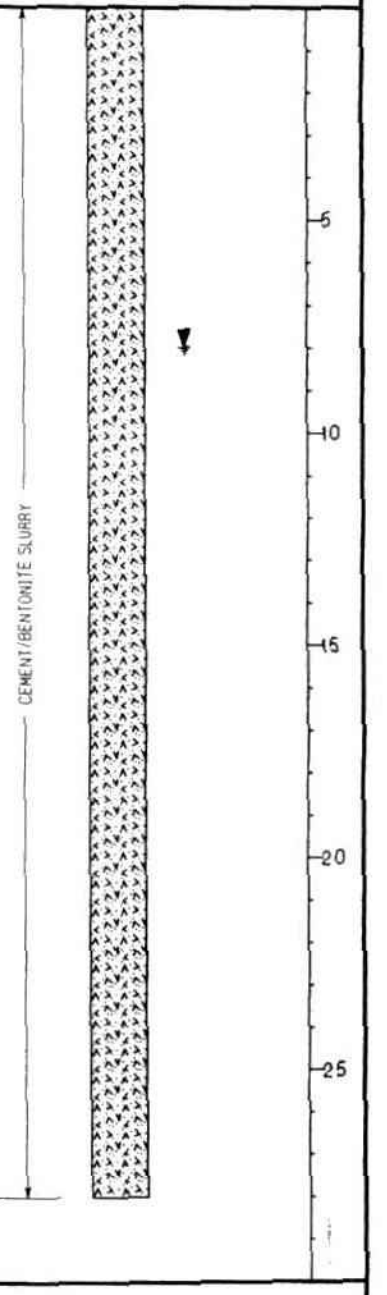
BORING/WELL INSTALLATION LOG
B-37

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *28'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 363.56' (MSL)*
START DATE: *7/29/94* TIME: *13:30*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *8' bgs*
COMPLETION DATE: *7/29/94* TIME: *14:30*	RIG TYPE: *CME75*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *JSM*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CB	18"		14.57		GM		GRAVELLY SAND with concrete and asphalt material; brown (10YR 5/3); moist (Fill)
								AS ABOVE
5	CB	49"		4.01				SILTY SAND; trace clay; brownish yellow (10YR 6/8); moist; wet at 8' (DUP-5 collected)
								AS ABOVE; wet
10	CB	48"		1.98				
						SM		AS ABOVE; increase in clay content; color change to yellow (10YR 7/8)
15	CB	24"		1.77				
								AS ABOVE
20	CB	24"		1.83				
								AS ABOVE
25	CB	60"		23.8		CL		SILTY CLAY; yellow and light gray (10YR 7/8 and 7/1) layers; brittle; hard; parts on micaceous seams; layers of slight plasticity
								AS ABOVE; color change to dark gray (10YR 5/1)
								EOB 28'

CONSTRUCTION DETAILS



REMARKS: FID Background=1.53 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

BORING/WELL INSTALLATION LOG
B-38

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *34.5'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 372.72' (MSL)*
START DATE: *7/27/94* *TIME: 10:30*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *9.5' bgs*
COMPLETION DATE: *7/27/94 TIME: 12:05*	RIG TYPE: *CME 850*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *DT*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CB	42"		18		GM		GRAVELLY SAND; some cinders, coal/coke fragments; pale brown to black (10YR 6/3 to 2/1); moist
5						GM PT		GRAVEL AND ORGANIC MATERIAL; fragments of wood; some sand; brown to black (10YR 5/3 to 2/1); moist
	CB	60"		2.1				SILTY SAND; trace clay; reddish yellow (5YR 6/8); medium to coarse grained sand; moist, wet at tip of core barrel shoe
10						SM		AS ABOVE; color change to yellowish red (5YR 5/8); wet
	CB	60"		1.8				
15	CB	47"		1.8		SP SM		SAND AND SILTY SAND interlayered; reddish yellow (5YR 6/8); wet
20	CB	12"		1.8		SP		SAND; trace silt; reddish yellow (5YR 6/8); loose; wet
25	CB	30"		1.8				AS ABOVE; color change to reddish yellow (5YR 7/8)
								AS ABOVE

CONSTRUCTION DETAILS

CEMENT/BENTONITE SLURRY

REMARKS:

FID Background=1.8 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

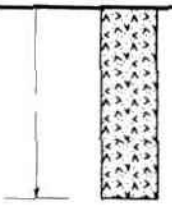
BORING/WELL INSTALLATION LOG
B-38

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *34.5'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 372.72' (MSL)*
START DATE: *7/27/94* *TIME: 10:30*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *9.5'* bgs
COMPLETION DATE: *7/27/94* *TIME: 12:05*	RIG TYPE: *CME 850*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *DT*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
						CL		SILTY CLAY; reddish yellow (5YR 7/8); wet
						SP		SAND; trace silt and carbonaceous material; reddish yellow (5YR 7/8); wet
	CB	48"		1.8		CL		SILTY CLAY; reddish yellow and gray layers (5YR 7/8 and 10YR 5/1); micaceous; hard; parts on micaceous seams; wet
35								EOB 34.5'
40								
45								
50								
55								

CONSTRUCTION DETAILS



REMARKS

FID Background=1.8 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

BORING/WELL INSTALLATION LOG

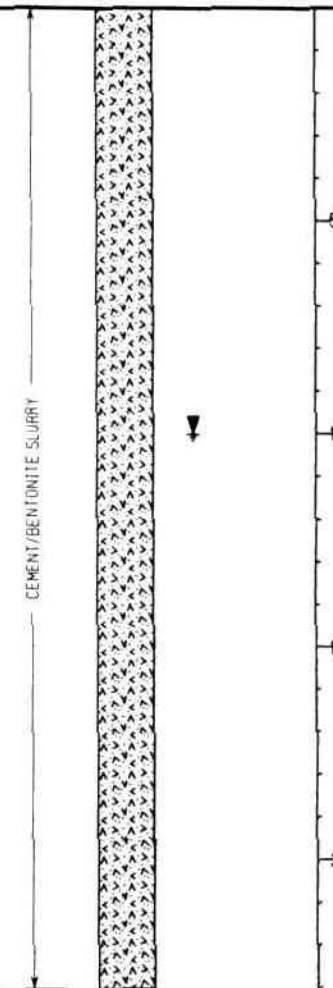
B-41

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: 3-1647-320 Wheatley/Forehand	DRILLING CO.: SCS	MP ELEV.: ' (MSL)
CLIENT: GPCo/Wachovia	DRILLER: Jeff	TOTAL DEPTH: 23'
SITE LOCATION: Americus, GA	BORING ID: 7 5/8"	SURFACE ELEV.: 361.80' (MSL)
START DATE: 7/31/94 TIME: 08:30	METHOD: HSA	WATER LEVEL DURING DRILLING: 10' bgs
COMPLETION DATE: 7/31/94 TIME: 08:48	RIG TYPE: CME 75	STICK-UP: '
WELL LOCATION:		LOGGED BY: DT

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CB	36"		.55		GM		SAND, GRAVEL, AND BRICK; brown (10YR 5/3); moist (Fill)
						SM		SILTY SAND; some cinders; brown (10YR 5/3); moist (Fill)
5	CB	60"		7.7		SM SC		SILTY SAND TO CLAYEY SAND; mottled pale brown and brown (10YR 6/3 and 5/3); moist
10	CB	42"		207		SM		SILTY SAND; trace clay; pale brown to yellow (10YR 6/3 to 7/8) AS ABOVE; sheen; possible naphthalene-like odor
15	CB	0"		--				NO RECOVERY
20	CB	60"		2.9		CL		SILTY CLAY; yellow and gray (10YR 7/8 and 6/1) layers; dense; brittle; parts on micaceous seams; slight to no plasticity; wet
25								EOB 23'

CONSTRUCTION DETAILS



REMARKS: FID Background=0.55 ppm
CB=Core Barrel Sample
ST=Shelby Tube

TEST BORING RECORD

DATUM ELEVATION: 361.80

ELEVATION (FEET)	DEPTH (FEET)	DESCRIPTION	WELL DIAGRAM	PID (ppm)	RECOVERY	SAMPLE	SPLIT BARREL SAMPLES
361.8		Very pale brown (10YR 7/3) GRAVEL/ SAND fill (GM)		55.8	3.2'		
				0			
	4.0						
356.8		Very pale brown (10YR 8/3) clean medium SAND, moist (SW) Naptha-like odor, sheen/ Product		0	4.5'		
	7.0						
		Light yellowish brown (2.5YR 6/4) Silty medium SAND, moist, streaks of gray to black product (SM)					
351.8		% silt increases approx. 8.3'-12.0'		30.8	4.6'		
		black product approx. 11.5'-12.0'					
		Naptha-like odor, sheen / product					
	13.0						
		Yellow (2.5YR 7/6) clean fine to medium SAND with sheen and droplets of black product (SP) Naptha-like odor					
346.8				0	1.9'		
	18.5						
		Boring terminated at 18.5 feet					
341.8							
336.8							
331.8							
326.8							
321.8							

A:\B-41A.PL3 CER.1 4-15-96

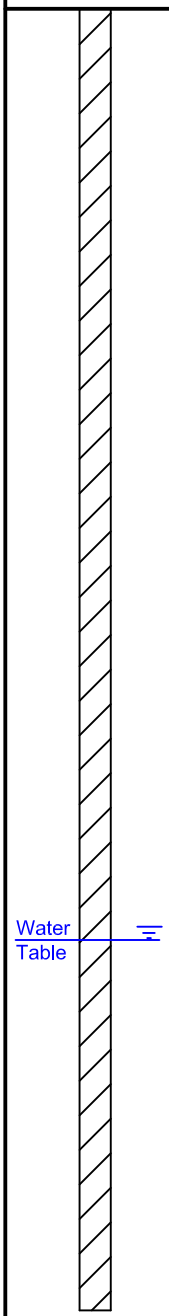
REMARKS:
1. Ground surface elevation for the boring was not surveyed. Elevation shown was taken from adjacent boring B-41.
2. Boring was drilled by Southern Company Services.
3. ▽ Water Table, Time of Drilling.
4. Boring is located 3.0' N 35° E of B-41.

DRILLED BY	J. Gilreath	BORING NUMBER	B-41A
LOGGED BY	L. Diprima	DATE STARTED	2/15/96
CHECKED BY	J. Keyser	DATE COMPLETED	2/15/96
		JOB NUMBER	11001-6-0055

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES

Boring Log B-41A

Project: ***Former Americus MGP Site*** Installation Date: ***February 15, 1996*** Logged By: ***L. Diprima***



Depth (Ft. BLS)	Description	Analytical Results	PID (ppm)	TarGOST
0	Very pale brown (10YR 7/3) GRAVEL/SAND fill (GM)	PAHs ND BTEX NA Metals NA	55.8	
3		PAHs < Type 3 BTEX NA Metals NA	0	
4	Very pale brown (10YR 8/3) clean medium SAND, moist (SW) Naptha-like odor, sheen / product	PAHs < Type3 BTEX NA Metals NA	0	TarGOST Sample 2-2 Only tar-like response is at 6 feet
7	Light yellowish brown (2.5YR 6/4) Silty medium SAND, moist, streaks of gray to black product (SM) % silt increases approx. 8.3'-12.0' black product approx. 11.5'-12.0' Naptha-like odor, sheen / product	*(Soil Sample Below Groundwater)* PAHs < Type 3 BTEX NA Metals NA	30.8	
13	Yellowish (2.5YR 7/6) clean fine to medium SAND with sheen and droplets of black product (SP) Naptha-like odor	(Soil Sample Below Groundwater) PAHs < Type 3 BTEX NA Metals NA	0	
18	Boring terminated at 18.5 feet			
20				

Resolute
Environmental & Water Resources Consulting

REMARKS:
1 Ground surface elevation for the boring was not surveyed.
2. Boring was drilled by Southern Company Services.
3. Boring is located 3.0' N 35° E of B-41.
Water Table, Time of Drilling.

File name: Boring Logs.dwg | Print Date: 2013-10-03

Boring Log and Analytical Data Source:
HSRA Soil and Ground-Water Risk Reduction Standard Evaluation Report, 304 N. Dudley Street Site, Americus, May 1996, Law Engineering & Environmental Services.

TarGOST(R) descriptions Source:
Evaluation of In Situ Thermal Stabilization at a Former Manufactured Gas Plant, Volume 1, November2009, Electric Power Research Institute (EPRI).

RETEC

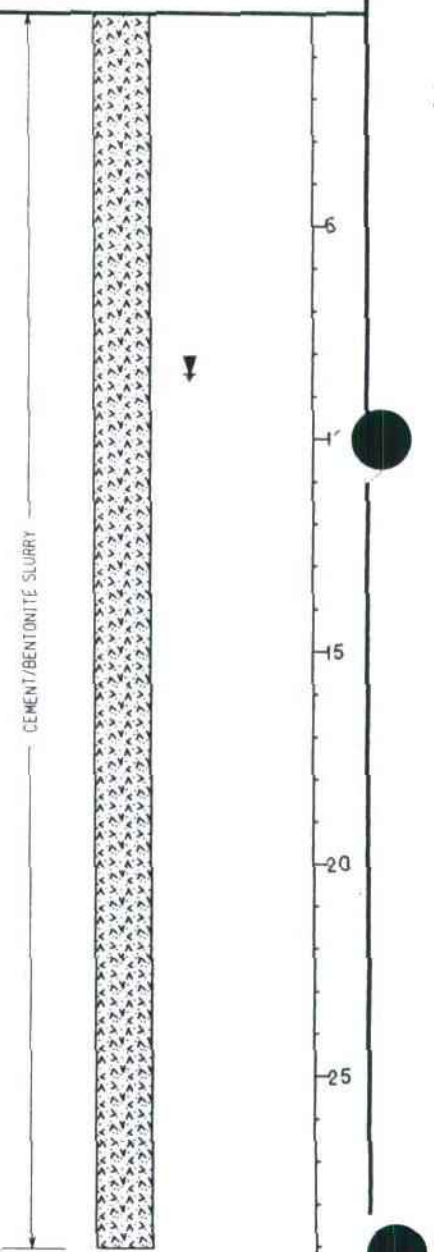
BORING/WELL INSTALLATION LOG
B-42

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: *' (MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *29'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 361.03' (MSL)*
START DATE: *7/30/94* TIME: *09:05*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *8.5' bgs*
COMPLETION DATE: *7/30/94* TIME: *09:45*	RIG TYPE: *CME 850*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *DT*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
	CB	60"		0.7		GM		SAND AND GRAVEL with cinders and coal fragments; dark brown (10YR 2/3); moist (Fill)
5	CB	60"		2.27		SM SC		SILTY SAND/CLAYEY SAND interbedded; very pale brown to brownish yellow (10YR 7/4 to 6/8); moist; wet at 8.5'
								AS ABOVE; trace bluish-green color
10	CB	60"		1.9		SM		SILTY SAND; yellow (10YR 7/8); medium grained sand; wet
15	CB	0"		--				POOR RECOVERY; coarse sand on shoe of core barrel sampler
20	CB	0"		--				NO RECOVERY
25	CB	60"		1.2		CL		SILTY CLAY; dark gray (10YR 4/1); micaceous; dense; brittle; parts on micaceous seams; wet
								EOB 29'

CONSTRUCTION DETAILS



REMARKS. FID Background=0.64 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

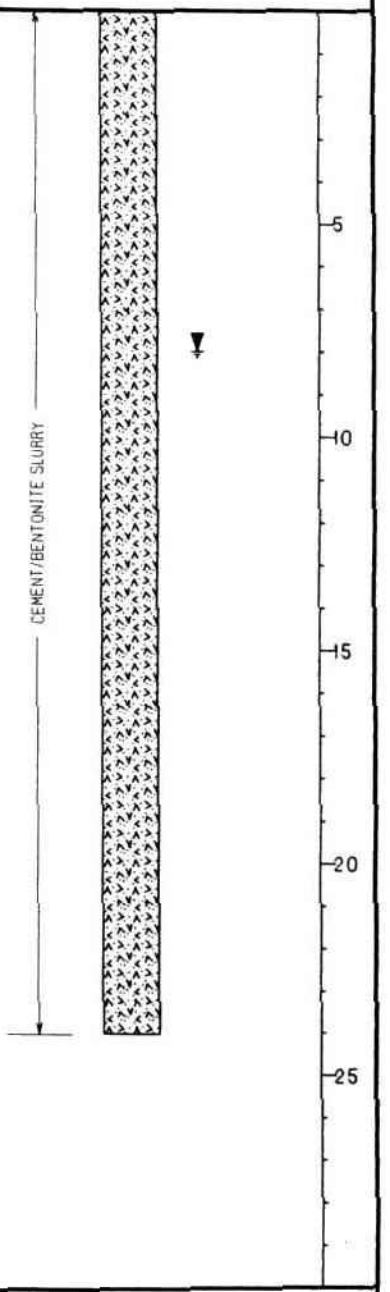
BORING/WELL INSTALLATION LOG
B-43

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *24'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 361.24' (MSL)*
START DATE: *7/30/94* TIME: *10:20*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *8'bgs*
COMPLETION DATE: *7/30/94* TIME: *11:00*	RIG TYPE: *CME 850*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *DT*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
						GM		SAND AND GRAVEL; excavation backfill through 4' thick brick and mortar foundation (Fill)
5						SC SM		SILTY SAND to CLAYEY SAND; yellow (10YR 7/8); moist
	CB	60"		65.0				SILTY SAND; trace clay; reddish yellow (7.5YR 6/8); wet at 8'
								AS ABOVE
10	CB	36"		7.0		SM		
								HEAVING SANDS
15								POOR RECOVERY; sand on shoe of core barrel; very pale brown (10YR 7/3); medium grained sand
	CB	0"						
								SILTY SAND; trace clay; yellow (10 YR 7/8)
20								SILTY CLAY; layers of yellow and gray (10YR 7/8 and 6/1); dense; brittle; parts on micaceous seams; wet
	CB	60"		1.01		CL		
25								EOB 24'

CONSTRUCTION DETAILS



REMARKS. FID Background=1.01 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

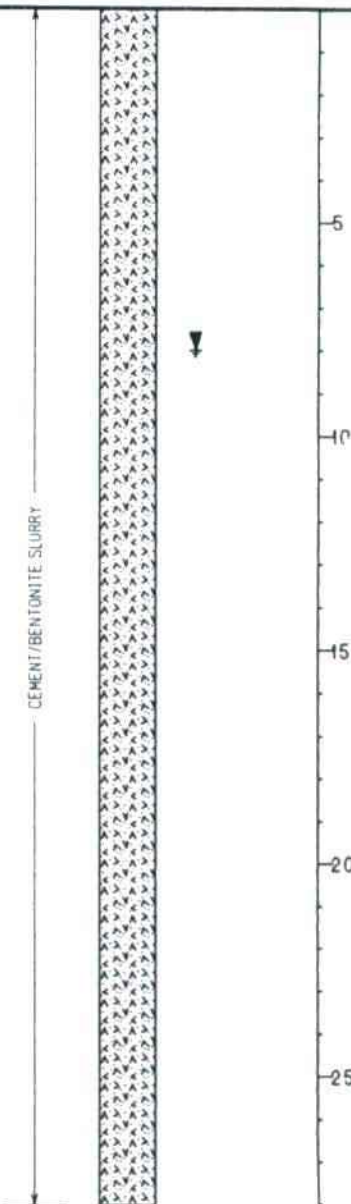
BORING/WELL INSTALLATION LOG
B-44

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: *' (MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *28.0'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 362.02' (MSL)*
START DATE: *7/30/94* *TIME: 09:50*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *8.0' bgs*
COMPLETION DATE: *7/30/94 TIME: 10:15*	RIG TYPE: *CME75*	STICK-UP: *'*
WELL LOCATION:		LOGGED BY: *DT*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
	CB	36"		9.49		GM		GRAVEL AND SAND; cinders, organic material and brick; brown (10YR 5/3); moist
						SM		SILTY SAND; brown (10YR 5/3); moist
						SM SC		SILTY AND CLAYEY SAND; brownish yellow (10YR 6/8); moist
5	CB	60"		1.75		CL		SILTY to SANDY CLAY; brownish yellow to gray (10YR 6/8 to 6/1); moist
						SM SC		SILTY SAND and CLAYEY SAND; reddish yellow (5YR 6/8); wet at 8'
10	CB	24"		1.18				AS ABOVE; color change to very pale brown (10YR 7/4) (DUP-6 collected)
						SM		SILTY SAND; brownish yellow (10YR 6/8); loose; wet
15	CB	24"		1.38				AS ABOVE
20	CB	48"		1.30		SM SP		SILTY SAND AND SAND; very pale brown (10YR 7/4); cross-bedded layers of coarse sand; wet
25	CB	60"		0.86		CL		SILTY CLAY; yellow and gray (10YR 7/8 and 6/1) layers; hard; brittle; parts on micaceous seams; wet
								AS ABOVE; color change to dark gray (10YR 4/1)
								EOB 28'

CONSTRUCTION DETAILS



REMARKS: FID Background=0.50 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

BORING/WELL INSTALLATION LOG
B-45

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *28'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 361.87' (MSL)*
START DATE: *7/30/94* *TIME: 08:30*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *9'bgs*
COMPLETION DATE: *7/30/94 TIME: 09:00*	RIG TYPE: *CME75*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *DT*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
	CB	36"		1.8		GM		SAND AND GRAVEL; some cinders, coal, and coke (Fill)
5	CB	80"		220		SM SC		SILTY SAND AND CLAYEY SAND interlayered; pale brown (10YR 6/3); moist
						SM		SILTY SAND; reddish brown (5YR 5/3; moist
								NO RECOVERY; wet at approximately 9'
10	CB	0"		--				
								NO RECOVERY (grab sample collected from augers)
15	GS	0"		--				SILTY SAND; pale brown (10YR 6/3)
						SM		NO RECOVERY (grab sample collected from augers)
20	GS	0"		--				SILTY SAND; pale brown (10YR 6/3)
								SILTY CLAY; yellow and gray layers (10YR 7/8 and 5/1); hard; brittle; parts on micaceous seams; wet
25	CB			19.8		CL		AS ABOVE; color change to dark gray (10YR 4/1)
								EOB 28'

CONSTRUCTION DETAILS

CEMENT/BENTONITE SLURRY

REMARKS: FID Background=1.18 ppm
CB=Core Barrel Sample
ST=Shelby Tube
GS=Grab Sample

TEST BORING RECORD

DATUM ELEVATION: 361.87

ELEVATION (FEET)	DEPTH (FEET)	DESCRIPTION	WELL DIAGRAM	PID (ppm)	RECOVERY	SAMPLE	SPLIT BARREL SAMPLES
361.9	1.0	Very pale brown (10YR 7/3) GRAVEL/ SAND fill (GM)		0	3.4'		
	2.0	Black (10YR 2/1) CINDERS/Clinkers/Solid Tar Naptha-like odor		0			
356.9		Yellowish red (5YR 4/6) Silty Clayey coarse SAND (SM) Approx. 4.5', 6" black product, Naptha-like odor		0	5.0'		
	7.5 8.0	Yellowish brown (10YR 5/6) Silty CLAY (CL)					
351.9		Yellowish red (5YR 4/6) Silty coarse SAND decrease in % silt with depth (SM)		0	2.0'		
	13.5	Boring terminated at 13.5 feet					
346.9							
341.9							
336.9							
331.9							
326.9							
321.9							

A:\B-45A.PL3 CER: 1 4.15.96

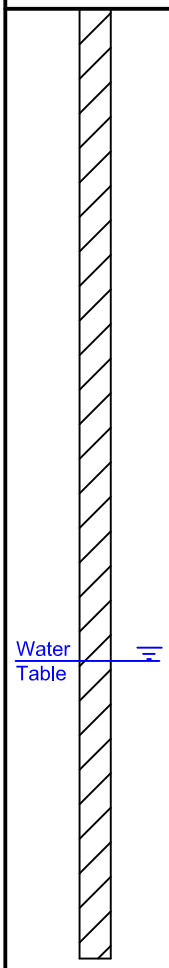
REMARKS:
1. Ground surface elevation for the boring was not surveyed. Elevation shown was taken from adjacent boring B-45.
2. Boring was drilled by Southern Company Services.
3. ▽ Water Table, Time of Drilling.
4. Boring is located 1.2' N 10° E of B-45.

DRILLED BY	J. Gilreath	BORING NUMBER	B-45A
LOGGED BY	L. Diprima	DATE STARTED	2/16/96
CHECKED BY	J. Keyser	DATE COMPLETED	2/16/96
		JOB NUMBER	11001-6-0055

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES

Boring Log B-45A

Project: ***Former Americus MGP Site*** Installation Date: ***February 16, 1996*** Logged By: ***L. Diprima***



Depth (Ft. BLS)	Description	Analytical Results	PID (ppm)	TarGOST
0	Very pale brown (10YR 7/3) GRAVEL/SAND fill (GM)	PAHs < Type 1 BTEX NA Metals NA	0	No TarGOST borings near B-45A
1	Black (10YR 2/1) CINDERS/Clinkers/Soild Tar Naptha-like odor		0	
2	Yellowish red (5YR 4/6) Silty Clayey coarse SAND Approx. 4.5', 6" black product, Naptha-like odor (SM)	PAHs < Type 3 BTEX NA Metals NA	0	
3				
4				
5		PAHs < Type 2 BTEX NA Metals NA		
6				
7				
8	Yellowish brown (10YR 5/6) Silty CLAY (CL) Yellowish red SAND (5YR 4/6) Silty coarse decrease in % silt with depth (SM)			
9		*(Soil Sample Below Groundwater)* PAHs ND BTEX NA Metals NA	0	
10				
11				
12				
13				
14	Boring terminated at 13.5 feet			
15				
16				
17				
18				
19				
20				

Resolute
Environmental & Water Resources Consulting

REMARKS:
1 Ground surface elevation for the boring was not surveyed.
2. Boring was drilled by Southern Company Services.
3. Boring is located 1.2' N 10° E of B-45.
Water Table, Time of Drilling.

File name: Boring Logs.dwg | Print Date: 2013-10-03

Boring Log and Analytical Data Source:
HSRA Soil and Ground-Water Risk Reduction Standard Evaluation Report, 304 N. Dudley Street Site, Americus, May 1996, Law Engineering & Environmental Services.

TarGOST(R) descriptions Source:
Evaluation of In Situ Thermal Stabilization at a Former Manufactured Gas Plant, Volume 1, November2009, Electric Power Research Institute (EPRI).

RETEC

BORING/WELL INSTALLATION LOG
B-46

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: *' (MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *37'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 370.00' (MSL)*
START DATE: *7/25/94 TIME: 16:00*	METHOD: *HSA/Mud Rotary*	WATER LEVEL DURING DRILLING: *10.5' bgs*
COMPLETION DATE: *7/26/94 TIME: 10:00*	RIG TYPE: *CME75*	STICK-UP: *' *
WELL LOCATION:		LOGGED BY: *JSM/DT*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CB	32"		0.5		SM		SILTY SAND; trace clay; strong brown (7.5YR 5/8); fine to coarse grained sand; loose; moist
5	CB	80"		0.51		SM		AS ABOVE; with layers of increased clay content; color change to very pale brown and white (10YR 7/4 and 8/1)
10	CB	42"		0.51		CL / SM		AS ABOVE; strong brown (7.5YR 5/8); medium to coarse grained sand; loose; wet at 10.5' SILTY CLAY; yellow to white (2.5Y 7/8 to 2.5YR 8/1); medium plasticity; wet SILTY SAND; trace clay; strong brown (7.5YR 5/8); loose; wet
15	CB	14"		0.51		SP		SAND; trace silt; brownish yellow (10YR 6/6); medium to coarse grained; loose; wet
20	CB	20"		0.57		SP		AS ABOVE; color change to yellow (10YR 7/6)
25	GS	0"		--		SP		AS ABOVE; loose; wet; poor recovery; heaving sand results in core barrel being sand-locked and twisted sample obtained from tip of core barrel and drill cuttings
								NO SAMPLE

CONSTRUCTION DETAILS

CEMENT/BENTONITE SLURRY

REMARKS: PID Background=0.45 ppm, 1.34 ppm after 30'
CB=Core Barrel Sample
ST=Shelby Tube
GS=Grab Sample
SS=Split Spoon Sample

RETEC

BORING/WELL INSTALLATION LOG

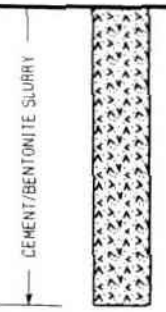
B-46

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: *' (MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *37'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 370.00' (MSL)*
START DATE: *7/25/94 TIME: 16:00*	METHOD: *HSA/Mud Rotary*	WATER LEVEL DURING DRILLING: *10.5' bgs*
COMPLETION DATE: *7/26/94 TIME: 10:00*	RIG TYPE: *CME75*	STICK-UP: *'*
WELL LOCATION:		LOGGED BY: *JSM/DT*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
						SM SP		SILTY SAND; gray (10YR 6/1); wet
	SS	24"		1.34				SILTY CLAY; yellow and gray layers (10YR 6/8 and 6/1); dense; brittle; parts on micaceous seams; wet
35	SS	24"		1.34		CL		AS ABOVE; color grades to dark gray (10YR 4/1)
								EOB 37' NOTE: Overdrove split spoons at 30' and 33.5'. Used mud rotary drilling method after 30'
40								
45								
50								
55								

CONSTRUCTION DETAILS



REMARKS. FID Background=0.45 ppm; 1.34 ppm after 30'
CB=Core Barrel Sample
ST=Shelby Tube
GS=Grab Sample
SS=Split Spoon Sample

RETEC

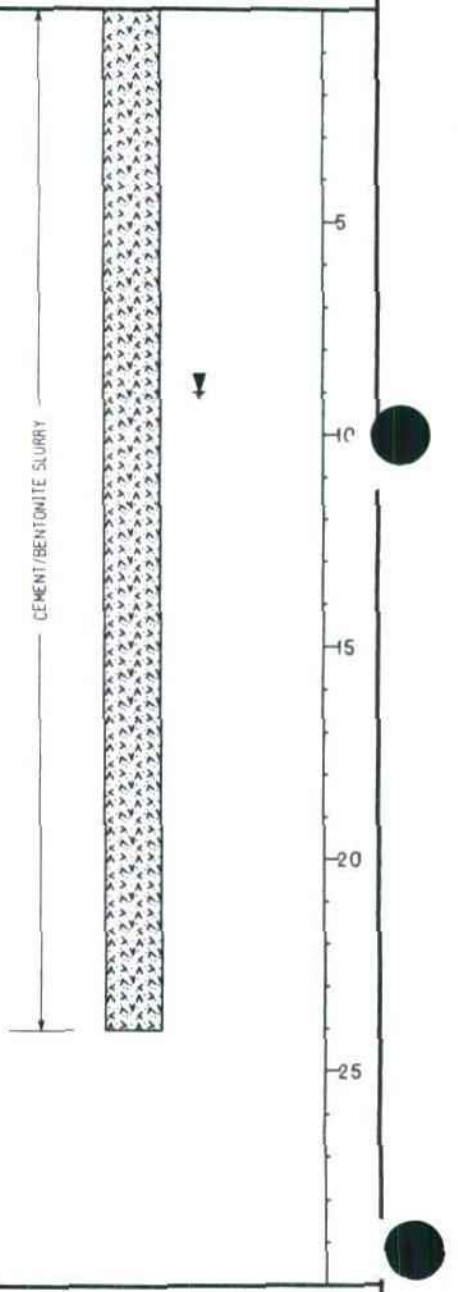
BORING/WELL INSTALLATION LOG
B-47

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *24'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 361.03' (MSL)*
START DATE: *7/31/94* TIME: *07:50*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *9' bgs*
COMPLETION DATE: *7/31/94* TIME: *08:20*	RIG TYPE: *CME 850*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *DT*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CB	48"		0.55		GM		SAND AND GRAVEL; some clay, cinders and coke; brown (10YR 5/3); moist (Fill)
5	CB	60"		0.80		SM CL		SILTY SAND AND SANDY CLAY; brownish yellow (10YR 6/8); dense; moist AS ABOVE AS ABOVE; bluish color at this interval
10	CB	60"		0.60		SM		SILTY SAND; very pale brown (10YR 7/4); loose; wet AS ABOVE; color change to mottled very pale brown and brownish yellow (10YR 7/4 and 6/8)
15	CB	0"		--				NO RECOVERY
20	CB	60"		0.65		SM CL		SILTY SAND; brownish yellow (10YR 6/8); wet SILTY CLAY; layers of yellow and gray (10YR 7/8 and 6/1); hard; brittle; parts on micaceous seams; wet AS ABOVE; color change to dark gray (10YR 4/1)
25								EOB 24'

CONSTRUCTION DETAILS



REMARKS: FID Background=0.40 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

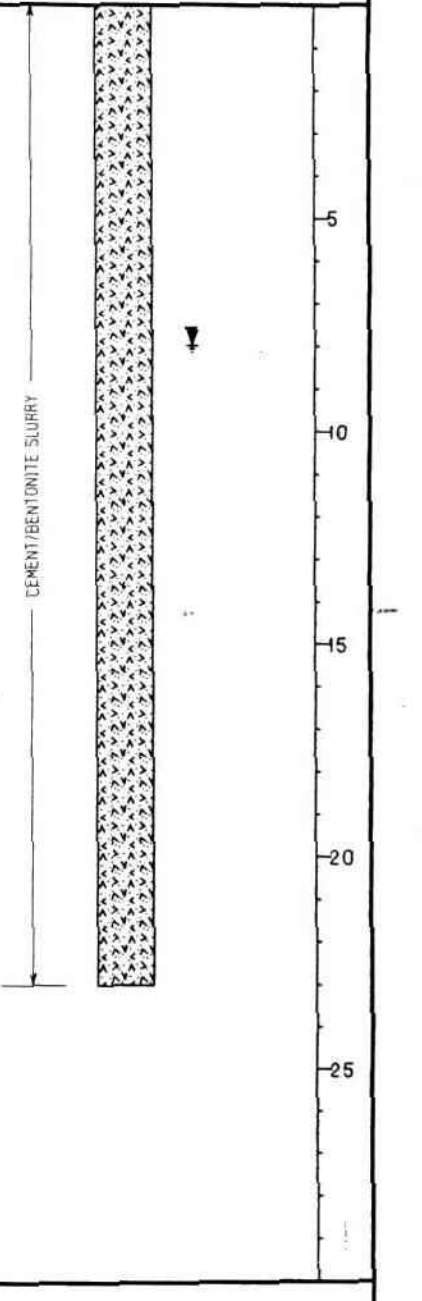
BORING/WELL INSTALLATION LOG
B-48

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *23.0'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 362.69' (MSL)*
START DATE: *7/30/94* TIME: *14:25*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *8.0' bgs*
COMPLETION DATE: *7/30/94* TIME: *15:00*	RIG TYPE: *CME75*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *JSM*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
	CB	36"		0.47		GM		GRAVELLY SAND; some silt; white to brown (10YR 8/1 to 5/3); moist (Fill)
						SM		SILTY SAND; red (2.5YR 5/6); moist
5	CB	54"		0.30				AS ABOVE; trace silty clay layers; yellow to red (10YR 8/8 to 2.5YR 4/6); moist
								AS ABOVE; yellow (10YR 8/8) with red and white layers (2.5YR 5/6 and 10YR 8/1); wet
10	CB	36"		0.30				
								NO RECOVERY
15	CB	0"		--				
						SP		SAND; trace silt; reddish yellow (7.5YR 7/8); coarse grained; loose; wet
20	CB	48"		0.30		CL		SILTY CLAY; brownish yellow and light gray layers (10YR 6/6 and 7/1); micaceous; brittle; hard; zones of slight plasticity; parts on micaceous seams; wet
								EOB 23'
25								

CONSTRUCTION DETAILS



REMARKS. FID Background=0.27 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

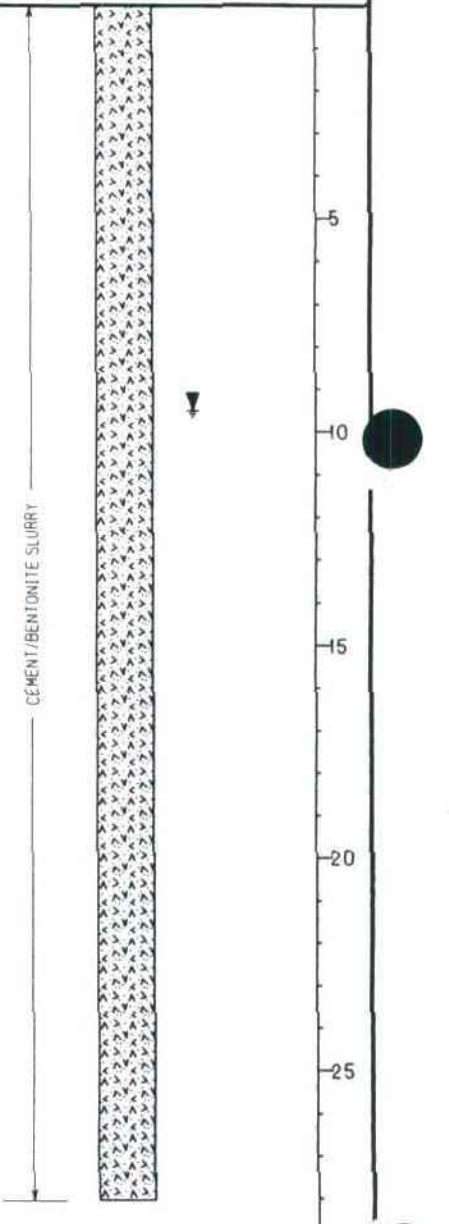
BORING/WELL INSTALLATION LOG
B-49

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *28'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 364.10' (MSL)*
START DATE: *7/30/94* TIME: *11:25*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *9.5' bgs*
COMPLETION DATE: *7/30/94* TIME: *12:00*	RIG TYPE: *CME75*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *DT*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
	CB	36"		0.73		GM		GRAVEL AND SAND; some concrete and cinders (Fill)
								SILTY SAND/CLAYEY SAND interbedded; red (2.5YR 5/8); moist
5	CB	48"		0.34		SC SM		AS ABOVE; color change to light red and reddish yellow (2.5YR 6/8 and 7.5YR 7/8) (DUP-6 collected)
								AS ABOVE; wet at 9.5'
10	CB	60"		0.34		SM		SILTY SAND; trace clay; reddish yellow (5YR 6/8); wet
								SILTY SAND AND SAND interbedded; light red to reddish yellow (2.5YR 6/8 to 7.5YR 7/8); medium grained sand; wet
15	CB	18"		0.35				
								AS ABOVE; color change to reddish yellow (7.5YR 7/8)
						SM SP		
20	CB	36"		0.46				
								AS ABOVE; color change to reddish yellow (5YR 7/8)
25	CB	60"		0.37				
						CL		SILTY CLAY; layers of reddish yellow and gray (5YR 7/8 and 6/1); hard; brittle; parts on micaceous seams; wet
								EOB 28'

CONSTRUCTION DETAILS



REMARKS. FID Background=0.16 ppm
CB=Core Barrel Sample
ST=Shelby Tube
DUP-6 collected from 7' depth interval

RETEC

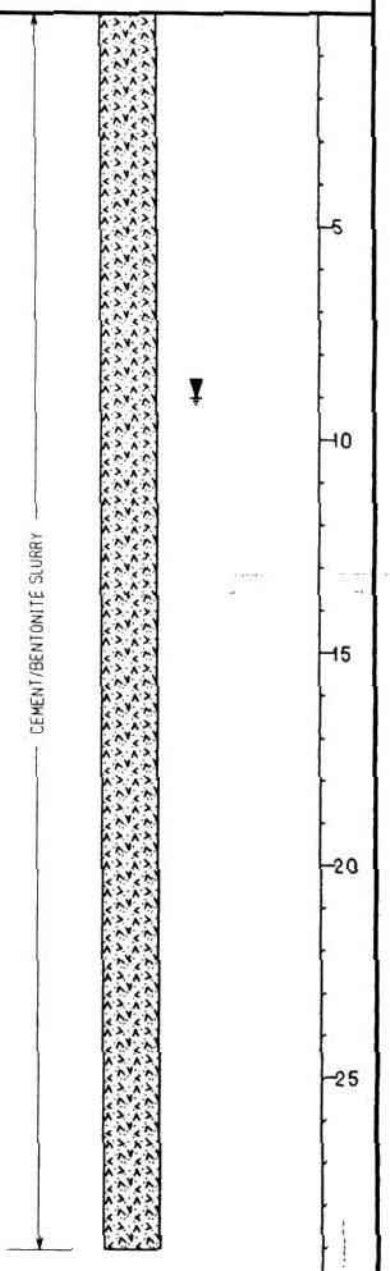
BORING/WELL INSTALLATION LOG
B-50

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *29'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 366.21' (MSL)*
START DATE: *7/30/94* *TIME: 13:25*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *9' bgs*
COMPLETION DATE: *7/30/94 TIME: 14:15*	RIG TYPE: *CME75*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *JSM*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
	CB	60"		0.27		GM		GRAVELLY SAND; scattered cinders; light brown to brown (7.5YR 6/4 to 5/4); moist
						SM		SILTY SAND; trace clay; reddish yellow (10YR 6/6); moist
5								AS ABOVE (DUP-7 collected)
	CB	30"		0.19				
								AS ABOVE; wet at 9'
10	CB	30"		0.19				
15	CB	0"		--				NO RECOVERY
20	CB	24"		--		SP		SAND; trace silt; very pale brown (10YR 7/4); loose; medium to coarse grained sand; wet
25	CB	48"		--		CL		SILTY CLAY; trace sand; reddish yellow and light gray layers (10YR 6/6 to 7/1); slightly plastic in areas; micaceous; brittle; hard; wet (DUP-7A collected)
								EOB 29'

CONSTRUCTION DETAILS



REMARKS: FID Background=0.19 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

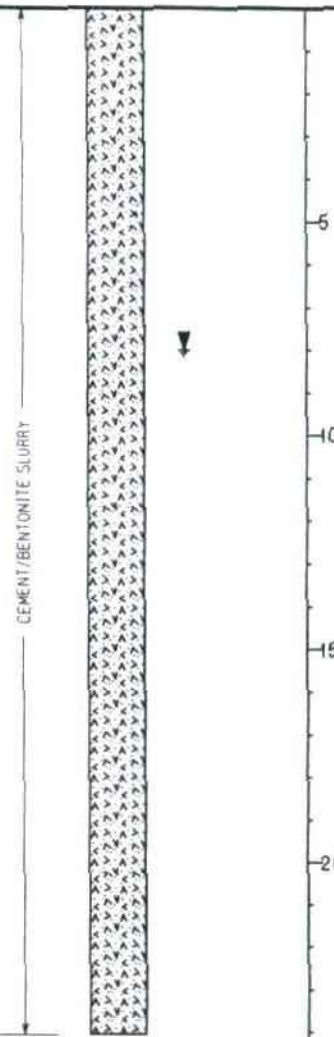
BORING/WELL INSTALLATION LOG
B-51

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: ' *(MSL)*
CLIENT: *GPCo/Nachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *24'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 381.43' (MSL)*
START DATE: *7/30/94* *TIME: 15:00*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *8' bgs*
COMPLETION DATE: *7/30/94 TIME: 15:48*	RIG TYPE: *CME 850*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *JSM*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
						GM		GRAVELLY SAND; trace cinders and asphaltic material (Fill)
	CB	48"		65		SC CL		CLAYEY SAND AND SILTY CLAY interbedded; mottled red and yellow (2.5YR 4/6 and 10YR 7/6); moist (DUP-12 collected)
5						SM		SILTY SAND; trace clay; red to yellow (2.5YR 4/6 to 10YR 7/6); fine to medium grained sand; wet at 8' (DUP-9 collected)
	CB	60"		0.5				
								AS ABOVE
10	ST	24"		--				
								NO RECOVERY
	CB	0"		--				
15								
	CB	0"		--				
						SM		SILTY SAND; trace clay; yellow (10YR 7/6); medium to coarse grained sand; wet
20	ST	24"		--		CL		SILTY CLAY; light gray and yellow layers (10YR 7/1 and 7/6); dark gray (10YR 4/1) at 22.5 feet; slightly plastic; micaceous; friable; hard; wet (DUP -8 collected)
	CB	36"		0.7				
								EOB 24'
25								

CONSTRUCTION DETAILS



REMARKS: PID Background=1.0 ppm
CB=Core Barrel Sample
ST=Shelby Tube

RETEC

BORING/WELL INSTALLATION LOG

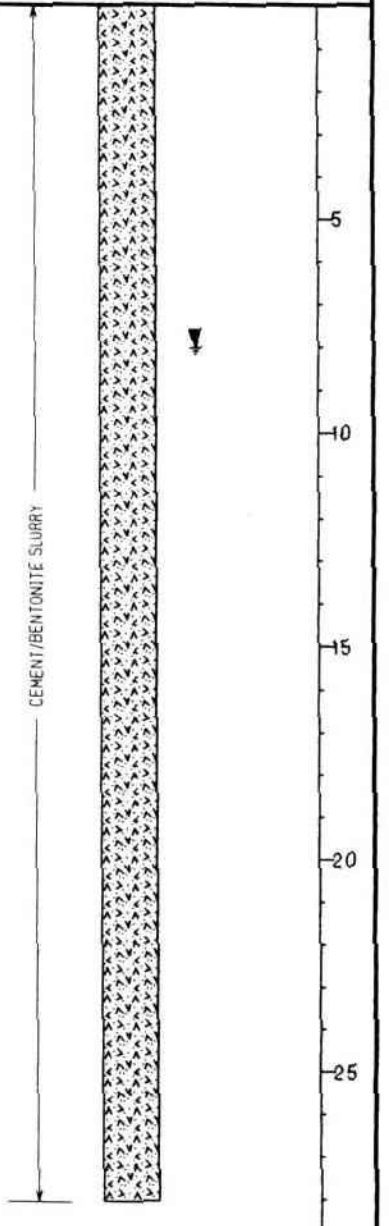
B-52

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: *' (MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *28'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 382.46' (MSL)*
START DATE: *7/30/94* TIME: *16:00*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *8' bgs*
COMPLETION DATE: *7/30/94* TIME: *17:00*	RIG TYPE: *CME 75*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *DW*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CB	36"		1.2		SM		SILTY SAND; trace clay; yellow (10YR 7/6); fine to medium grained sand; moist
5	CB	60"		0.3		SM/SC		SILTY SAND AND CLAYEY SAND interlayered; yellow (10YR 7/8); moist
10	CB	60"		0.8		SM		SILTY SAND; trace clay; pale brown to yellow (10YR 6/3 to 7/6); medium to coarse grained sand; wet
15	CB	0"		--				NO RECOVERY
20	CB	0"		--				NO RECOVERY
25	CB	60"		0.7		CL		SILTY CLAY; trace fine sand; gray and yellow layers (10YR 5/1 and 7/6); brittle; hard; parts on micaceous seams; wet AS ABOVE; color change to dark gray (10YR 4/1) (DUP-11 collected)
								EOB 28'

CONSTRUCTION DETAILS



REMARKS: FID Background=1.0 ppm
CB=Core Barrel Sample
ST=Shelby Tube

TEST BORING RECORD

DATUM ELEVATION: Not Known

ELEVATION (FEET)	DEPTH (FEET)	DESCRIPTION	WELL DIAGRAM	PID (ppm)	RECOVERY	SAMPLE	SPLIT BARREL SAMPLES
		Very pale brown (10YR 7/3) GRAVEL/ SAND Fill (GM)		0	2.3'		
	2.3	Black (10YR 2/1) CINDERS/CLINKERS with yellow tint (sulfur odor)					
	3.3	Light gray (10YR 7/1) clean fine SAND moist; SILT % begins to decrease (SW/SM) Naptha-like / Sulfur odor Approx. 9.9' black streak (residuals)		0	3.8'		
				0	5.0'		
	10.8	Gray (10YR 5/1) clean medium to coarse SAND (SP)					
	12.3	Boring terminated at 12.3 feet					

A:\TT-2A.PL3 CER-1 4-15-96

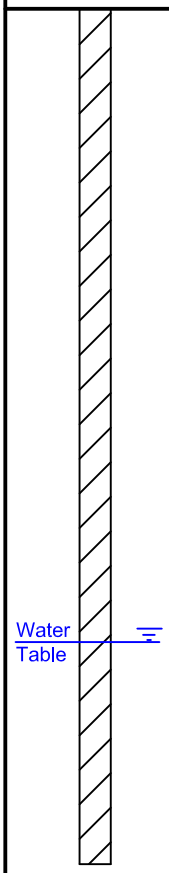
REMARKS:
1. Ground surface elevation for the boring was not surveyed.
2. Boring was drilled by Southern Company Services.
3. ▽ Water Table, Time of Drilling.
4. Boring is located 12.0' N 35° E of B-42.

DRILLED BY	J. Gilreath	BORING NUMBER	TT-2A
LOGGED BY	L. Diprima	DATE STARTED	2/16/96
CHECKED BY	J. Keyser	DATE COMPLETED	2/16/96
		JOB NUMBER	11001-6-0055

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES

Boring Log TT-2A

Project: ***Former Americus MGP Site*** Installation Date: ***February 16, 1996*** Logged By: ***L. Diprima***



Depth (Ft. BLS)	Description	Analytical Results	PID (ppm)	TarGOST
0 – 1 – 2	Very pale brown (10YR 7/3) GRAVEL/ SAND Fill (GM)	PAHs < Type 1 BTEX < Type 1 Metals NA	0	TarGOST Boring 2-1 No high confidence tar-like waveforms or colors
2 – 3	Black (10YR 2/1) CINDERS/CLINKERS with Yellow tint (sulfur odor)			
3 – 4 – 5 – 6 – 7	Light gray (10YR 7/1) clean fine SAND moist; SILT % begins to decrease (SW/SM) Naptha-like / Sulfur odor Approx. 9.9' black streak (residuals)	PAHs ND BTEX NA Metals NA	0	
7 – 8 – 9 – 10 – 11		*(Soil Sample Below Groundwater)* PAHs ND BTEX NA Metals NA	0	
11 – 12	Gray (10YR 5/1) clean medium to coarse SAND (SP)			
12 – 13 – 14 – 15 – 16 – 17 – 18 – 19 – 20	Boring terminated at 12.3 feet			

Resolute
Environmental & Water Resources Consulting

REMARKS:
1 Ground surface elevation for the boring was not surveyed.
2. Boring was drilled by Southern Company Services.
3. Boring is located 12.0' N 35° E of B-42
Water Table, Time of Drilling.

File name: Boring Logs.dwg | Print Date: 2013-10-03

Boring Log and Analytical Data Source:
HSRA Soil and Ground-Water Risk Reduction Standard Evaluation Report, 304 N. Dudley Street Site, Americus, May 1996, Law Engineering & Environmental Services.

TarGOST(R) descriptions Source:
Evaluation of In Situ Thermal Stabilization at a Former Manufactured Gas Plant, Volume 1, November2009, Electric Power Research Institute (EPRI).

TEST BORING RECORD

DATUM ELEVATION: Not Known

ELEVATION (FEET)	DEPTH (FEET)	DESCRIPTION	WELL DIAGRAM	PID (ppm)	RECOVERY	SAMPLE	SPLIT BARREL SAMPLES
		Very pale brown (10YR 7/3) GRAVEL/ SAND Fill (GM) light Naptha-like odor		0	2.0'		
	2.0	Black (10YR 2/1) CINDERS/Clinkers/ WOOD CHIPS (Sulfur Odor)		0			
	5.0	Light gray (10YR 7/1) Silty fine SAND, moist (SM) Naptha-like / sulfur odor		0	4.5'		
	8.5	Boring terminated at 8.5 feet					

A:\TT-2B.PL3 CER-1 4-12-96

REMARKS:
1. Ground surface elevation for the boring was not surveyed. Elevation shown was taken from adjacent boring B-42.
2. Boring was drilled by Southern Company Services.
3. ▽ Water Table, Time of Drilling.
4. Boring is located 15.5' N 88° E of B-42.

DRILLED BY	J. Gilreath	BORING NUMBER	TT-2B
LOGGED BY	L. Diprima	DATE STARTED	2/16/96
CHECKED BY	J. Keyser	DATE COMPLETED	2/16/96
		JOB NUMBER	11001-6-0055

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES

Boring Log TT-2B

Project: ***Former Americus MGP Site*** Installation Date: ***February 16, 1996*** Logged By: ***L. Diprima***

Soil Boring	Depth (Ft. BLS)	Description	Analytical Results	PID (ppm)	TarGOST
	0	Very pale brown (10YR 7/3) GRAVEL/ SAND Fill (GM) light Naptha-like odor	PAHs < Type 3 BTEX < Type 1 Metals NA	0	TarGOST Boring 2-1 No high confidence tar-like waveforms or colors
	1				
	2	Black (10YR 2/1) CINDERS/Clinkers/ WOOD CHIPS (Sulfur Odor)			
	3				
	4		PAHs < Type 3 BTEX NA Metals NA	0	
	5	Light gray (10YR 7/1) Silty fine SAND, moist (SM) Naptha-iike / sulfur odor			
	6		PAHs ND BTEX NA Metals NA	0	
	7				
	8				
	9	Boring terminated at 8.5 feet			
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

Resolute
Environmental & Water Resources Consulting

REMARKS:
1 Ground surface elevation for the boring was not surveyed.
2. Boring was drilled by Southern Company Services.
3. Boring is located 15.5' N 88° E of B-42.

File name: Boring Logs.dwg | Print Date: 2013-10-03

Boring Log and Analytical Data Source:
HSRA Soil and Ground-Water Risk Reduction Standard Evaluation Report, 304 N. Dudley Street Site, Americus, May 1996, Law Engineering & Environmental Services.

TarGOST(R) descriptions Source:
Evaluation of In Situ Thermal Stabilization at a Former Manufactured Gas Plant, Volume 1, November2009, Electric Power Research Institute (EPRI).

REIEC

TABLE 3-4
MONITORING WELL CONSTRUCTION SUMMARY
WHEATLEY / FOREHAND PROPERTIES SITE INVESTIGATION

Monitoring Well Identification	Well Construction	Total Well Depth from Top of Riser (Feet)	Top of Riser Elevation (NGVD)	Screen Length (Feet)	Elevation of Bottom of Screen (NGVD)
MW-1	At Grade	12	359.16	10.0	347.16
MW-2	At Grade	12	359.15	10.0	347.15
MW-3	At Grade	12	358.79	10.0	346.79
MW-4	At Grade	15	358.54	10.0	343.54
MW-5	At Grade	15	360.33	10.0	345.33
MW-7	At Grade	15	359.21	10.0	344.21
MW-8	At Grade	15	360.94	10.0	345.94
MW-9R	At Grade	16	362.10	10.0	346.10
MW-26	At Grade	11.5	361.77	5.0	350.27
MW-33	At Grade	21.5	370.49	10.0	348.99
MW-40	At Grade	16	361.56	10.0	345.56
TW-1	At Grade*	17	350.96	10.0	333.96
TW-2	At Grade*	14	352.43	10.0	338.43

NGVD = National Geodetic Vertical Datum

*Measurements corrected for elevation of riser above grade

Southern Company Services, Inc.
Soil Boring Log

Borehole No.:
MW-7

Project:	Americus Drilling	**Drilling Co.:**	SCS	**Page 1 of 1**
Location:	Americus, Ga. MGP Corrective Action	**Driller:**	Brad Filopovich	
Elevation:	E. 754597.3302 W. 2247279.8118	**Rig type:**	CME-850	
[redacted]ger:	R.A. Esposito	**Drilling method:**	HSA	
[redacted]s drilled:	6/6/98	**No. SPT:** 0	**No. UD:** 0	**Total depth:** 20'6"
Hole closure:	4" Recovery Well			

Water level	Elev. (ft.)	Depth (ft)	Soil type	Description	Sample No.	Interval	Blows/6" (N)	Recovery (%)	Comments	Well Log	Monitoring Well
		0		Red Sandy/clay Fill							8" Flush ground mount
		5		Red-brown-black Sandy Clay. Fragments(Rock), Pumice like framents, Slight odor and PVC parts.							1:1 Portland Cement w/bentonite 2" I.D. PVC SCH-40
		10		Clean white to tan, flowery SAND, W/water							Bentonite Seal @ 7'-9' bgs Top of Screen
		15		Clean white SAND, w/water and flowing							2" dia sch 40 PVC U-PAK screen (0.01" machine slotted) packed w/ 1A quartz SAND
		20		Boring Terminated @ 20'6"							Bottom of Sump Terminus of Hole @ 20'6"
		25									
		30									

RETEC

BORING/WELL INSTALLATION LOG

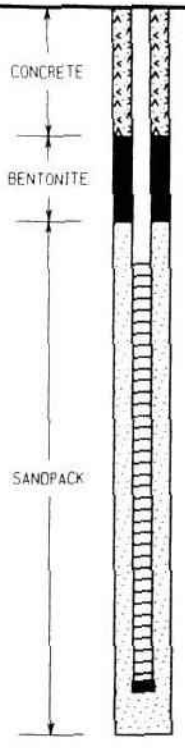
MW-9R

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: *' (MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *17'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 362.10' (MSL)*
START DATE: *8/1/94* *TIME: 08:00*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *8' bgs*
COMPLETION DATE: *8/1/94 TIME: 09:00*	RIG TYPE: *CME 75*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *JSM*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CB	36"		--		GM		GRAVELLY SAND; trace silt; some cinder and coal/coke fragments; pale brown (10YR 6/3); moist
						SM		SILTY SAND; trace clay; reddish brown (5YR 5/4); moist
5	CB	48"		--				SILTY SAND; trace clay in thin layers; reddish yellow (7.5YR 6/6); moist; coarse sand near shoe of core barrel
								AS ABOVE; wet
10	CB	18"		--				AS ABOVE
15	CB	18"		--				EOB 17'
20								
25								

CONSTRUCTION DETAILS



REMARKS: CB=Core Barrel Sample

BORING/WELL INSTALLATION LOG

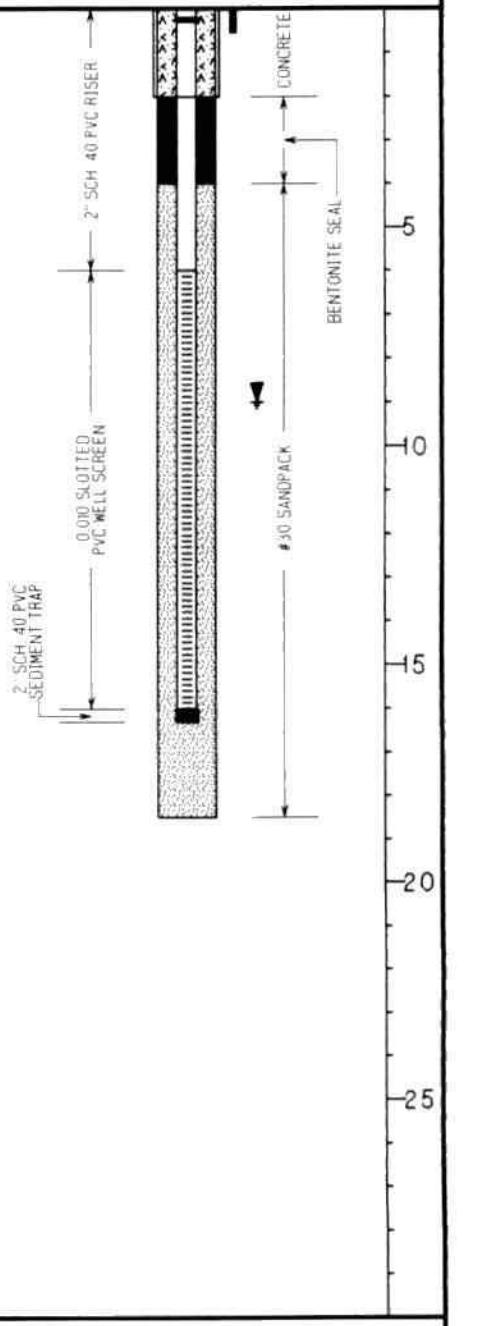
MW-17

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-2651-200 Americus MGP*	DRILLING CO.: *Southern Companies*	MP ELEV.: *' (MSL) TOC*
CLIENT: *Georgia Power*	DRILLER: *Dave Ivey*	TOTAL DEPTH: *18.5'*
SITE LOCATION:	BORING ID: *8 1/4-inch*	*SURFACE ELEV.: ' (MSL)*
START DATE: *10/28/96* TIME:	METHOD: *4 1/4-inch HSA*	WATER LEVEL DURING DRILLING: *9.0'* bgs
COMPLETION DATE: *10/28/96* TIME:	RIG TYPE: *CME 75*	STICK-UP: *At Grade'*
WELL LOCATION:		LOGGED BY: *Tom Dahl*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CS	24%		3.0		GM		SILTY GRAVEL (pea gravel) with some sand; very dark brown (10YR 3/2); moist (Fill)
								AS ABOVE with bricks; low yield due to bricks
								AS ABOVE with more sand; subangular to subrounded gravel; widely scattered angular cobbles and red brick fragments; strong brown (7.5YR 4/6) to very dark gray (7.5YR 3/1);
5	CS	67%		1.0				AS ABOVE; very moist
				1.0		SW		SAND; poorly sorted; fine to medium grained; brown (10YR 5/3) with dark gray (10YR 4/1) zones; very moist
10	CS	17%						AS ABOVE; saturated; low yield due to very loose saturated sand
				10.0				
15	CS	84%		0.0		CL		CLAY with some silt; little fine grained sand; moderate plasticity; mottled strong brown (7.5YR 5/8), gray (7.5YR 6/1); and yellow red (5YR 5/6); saturated
								AS ABOVE with more sand and silt; low plasticity
20								E.O.B. = 18.5 Feet
25								

CONSTRUCTION DETAILS



REMARKS: CS = Continuous sample using 5-foot long split barrel sampler
PID background = 2.5 ppm
PID measurements recorded as above background

RETEC

BORING/WELL INSTALLATION LOG

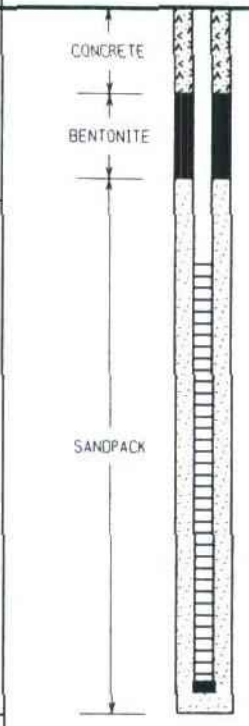
MW-40

413 Wacouta Street
Suite 400
St. Paul, MN 55101
(612)222-0841

PROJECT NO: *3-1647-320 Wheatley/Forehand*	DRILLING CO.: *SCS*	MP ELEV.: *361.56' (MSL)*
CLIENT: *GPCo/Wachovia*	DRILLER: *Jeff*	TOTAL DEPTH: *16.5'*
SITE LOCATION: *Americus, GA*	BORING ID: *7 5/8"*	*SURFACE ELEV.: 361.56' (MSL)*
START DATE: *8/1/94* TIME: *11:15*	METHOD: *HSA*	WATER LEVEL DURING DRILLING: *9'bgs*
COMPLETION DATE: *8/1/94 TIME: 14:30*	RIG TYPE: *CME75*	STICK-UP: '
WELL LOCATION:		LOGGED BY: *JSM*

DEPTH (feet)	SAMPLE TYPE	RECOVERY	SAMPLE DEPTH	HEADSPACE (ppm)	BLOW CTS.	U.S.C.S.	LITHOLOGY	DESCRIPTION
0	CB	48"		17		GC		GRAVELLY SAND; trace clay and silt, cinders, coal, and coke; white to black (10YR 8/1 to 2/1); moist; slight naphthalene-like odor (Fill)
								AS ABOVE
5	CB	32"		0.8		SM		SILTY SAND; trace clay; pale to dark brown (10YR 6/3 to 3/3); moist
								AS ABOVE; color change to light gray (10YR 7/1); wet
10	CB	32"		14.5				AS ABOVE; mottled light gray to dark gray (10YR 7/1 to 4/1); wet
15	CB	32"		--				EOB 16.5'
20								
25								

CONSTRUCTION DETAILS



REMARKS: FID Background=0.6 ppm
CB=Core Barrel Sample
ST=Shelby Tube

Appendix B

CERTIFICATIONS OF COMPLIANCE

Certification of Compliance

Parcel 5-3-2 and Portions of Parcel 5-1-4 and Railroad Right-of-Way

(HSI Site Number 10139)

I certify under penalty of law that this report and all attachments were prepared under my direction 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 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.

Based on my review of the findings of this report with respect to the risk reduction standards of the Rules for Hazardous Site Response, Rule 391-3-19-.07, I have determined that Parcel 5-3-2 and portions of Parcel 5-1-4 and the Railroad Right-of-Way, as illustrated on attached Figure 2, are in compliance with applicable Type 5 (non-residential) risk reduction standards for regulated substances associated with releases from this site (HSI Site10139) in groundwater.

Mark S. Berry
Environmental & Natural Resources Vice President

04/13/2018
Date

Certification of Compliance

Parcel 5-3-9

(HSI Site Number 10139)

I certify under penalty of law that this report and all attachments were prepared under my direction 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 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.

Based on my review of the findings of this report with respect to the risk reduction standards of the Rules for Hazardous Site Response, Rule 391-3-19-.07, I have determined that Parcel 5-3-9 is in compliance with applicable Type 1 (residential) risk reduction standards for regulated substances associated with releases from this site (HSI Site10139) in groundwater.

Ms. Tanya Blalock
Environmental Affairs General Manager

12/12/13
Date

{Note: The Certification of Compliance for soils to Type 3 (non-residential) risk reduction standards for regulated substances associated with releases from this site (HSI Site10139) was previously submitted to EPD on March 18, 1998 and accepted by EPD on August 25, 1998. Copies of these documents are attached.}

Certification of Compliance

Parcel 5-3-10

(HSI Site Number 10139)

I certify under penalty of law that this report and all attachments were prepared under my direction 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 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.

Based on my review of the findings of this report with respect to the risk reduction standards of the Rules for Hazardous Site Response, Rule 391-3-19-.07, I have determined that Parcel 5-3-10 is in compliance with applicable Type 1 (residential) risk reduction standards for regulated substances associated with releases from this site (HSI Site10139) in groundwater.

Ms. Tanya Blalock

Ms. Tanya Blalock
Environmental Affairs General Manager

12/12/13
Date

{Note: The Certification of Compliance for soils to Type 3 (non-residential) risk reduction standards for regulated substances associated with releases from this site (HSI Site10139) was previously submitted to EPD on March 18, 1998 and accepted by EPD on August 25, 1998. Copies of these documents are attached.}

Certification of Compliance

Portions of Parcels 5-3-2, 5-1-4, and Railroad Right-of-Way

(HSI Site Number 10139)

I certify under penalty of law that this report and all attachments were prepared under my direction 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 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.

Based on my review of the findings of this report with respect to the risk reduction standards of the Rules for Hazardous Site Response, Rule 391-3-19-.07, I have determined that Portions of Parcels 5-3-2, 5-1-4, and the Railroad Right-of-Way as illustrated on attached Figure A are in compliance with applicable Type 5 (non-residential) risk reduction standards for regulated substances associated with releases from this site (HSI Site10139) in groundwater.

Ms. Tanya Blalock

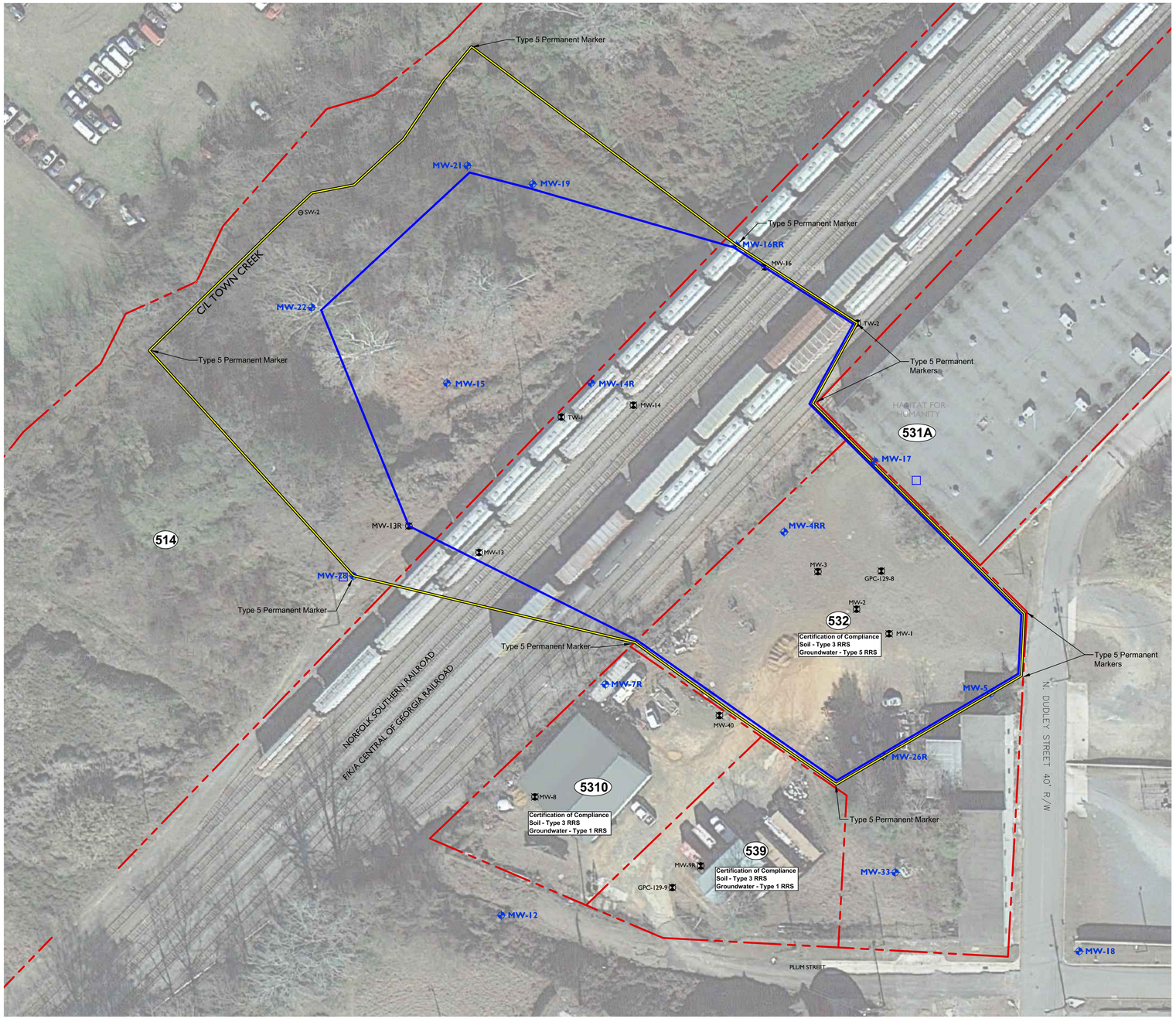
Ms. Tanya Blalock
Environmental Affairs General Manager

12/12/13
Date

{Note: The Certification of Compliance for soils to Type 3 (non-residential) risk reduction standards for regulated substances associated with releases from this site (HSI Site10139) was previously submitted to EPD on March 18, 1998 and accepted by EPD on August 25, 1998. Copies of these documents are attached.}

Legend

- Boundary of Type 5 Restrictive Use Covenant
- Limit of Groundwater Above Type 1-4 RRS (September 2013 Data)
- -Tax Parcel Boundary



Source: CAD Basemap provided by Southern Company Generation Engineering and Construction Services.

N

Scale

0 20 40

1 inch = 40 ft.

Resolute
Environmental & Water Resources Consulting

12600 Deerfield Parkway, Suite 100
Alpharetta, Georgia 30004
www.ResoluteEnv.com

DRAWN BY: TL

DATE: December 9, 2013

Former Americus MGP Site
Americus, Georgia

Proposed Type 5 RRS Area

FIGURE A

Figure 3.dwg

Georgia Department of Natural Resources
205 Butler Street, S.E., Suite 1462, Atlanta, Georgia 30334
Lonice C. Barrett, Commissioner
Environmental Protection Division
Harold F. Reheis, Director
404/657-8600

August 25, 1998

HAND DELIVERED

Mr. Darahyl Dennis
Manager, Environmental Affairs
Georgia Power Company
Tower Building, 17th Floor
333 Piedmont Avenue
Post Office Box 4545
Atlanta, Georgia 30308

RE: Final Status Report
304 North Dudley/Americus Manufactured Gas Plant Site
HSI# 10139

Dear Mr. Dennis:

The Georgia Environmental Protection Division (EPD) has received and reviewed the Final Status Report dated July 24, 1998 regarding the soil removal for the above-referenced site. All deficiencies specified in my June 18, 1998 letter have been sufficiently addressed. Therefore, EPD has determined that the Final Status Report is complete.

Should you have any further questions, please contact me at (404) 657-8600.

Sincerely,

Alexandra Y Cleary

Alexandra Y. Cleary
Unit Coordinator
Hazardous Sites Response Program

File: HSI# 10139
R:\DANIELH\304DUDLE\SOILCSR.COM

CERTIFICATION OF COMPLIANCE WITH RISK REDUCTION STANDARDS

I certify under penalty of law that this report and all attachments were prepared under my direction 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 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.

Based on my review of the findings of this report with respect to the risk reduction standards of the Rules for Hazardous Site Response, Rule 391-3-19-.07, I have determined that this site is in compliance with Type 3 risk reduction standards for soil.

Certified By: Date:

Robert B. Lawler, Jr. V.P. 3-19-98

Robert B. Lawler, Jr.
Wachovia Bank, N.A.
As Executor Under the Will of
Charles H. Wheatley

3/18/98

Christopher M. Hobson
Georgia Power Company

GPC 276423

Chris M. Hobson
General Manager

[illegible] Boulevard NE
[illegible] 30308-3374
[illegible] 8526

GEORGIA POWER
SOUTHERN COMPANY

March 18, 1998

BY UNITED PARCEL SERVICE

Hon. Harold F. Reheis, Director
Environmental Protection Division
205 Butler Street, SE
Floyd Towers, East
Atlanta, Georgia 30334

Re: 304 North Dudley Street, Americus, Sumter County, Georgia
Hazardous Site Inventory No. 10139

Dear Mr. Reheis:

The Georgia Power Company ("Georgia Power") and the Wachovia Bank, N.A., as Executor under the Will of Charles H. Wheatley ("the Estate") are submitting the attached Final Status Report indicating the completion of soil remediation activities at the above-referenced site. We have re-certified the site to be in compliance with Type 3 Risk Reduction Standards for soil. We are providing copies of the Final Status Report to each property owner believed to be part of the Site.

On February 6, 1998, Georgia Power and the Estate submitted a Groundwater Corrective Action Plan to EPD for review. We are awaiting EPD's approval of the CAP before beginning groundwater monitoring activities.

If you have any questions about the report, please contact N. Darahyl Dennis at Georgia Power at (404) 506-7064 or Robert B. Lawler, Jr. at Wachovia Bank at (404) 332-6675.

Sincerely,

Chris M. Hobson
Georgia Power Company

Jerry B. Bassfor
Nill V. Toulme as Counsel for
Wachovia Bank, N.A.

GPC 276424

0147871.DOC

Enclosure

cc: Timothy L. Cash
Alexandra Cleary (w/o enclosure)
N. Darahyl Dennis (w/o enclosure)
Nill V. Toulme, Esq. (w/o enclosure)
Mark Kinzer, Esq. (w/o enclosure)
Todd Silliman, Esq. (w/o enclosure)
Terry B. Bass, Esq. (w/o enclosure)

Appendix C

INSPECTION AND CERTIFICATION FORMS

SITE USE, TYPE 3 SOIL, AND TYPE 5 GROUNDWATER RRS MONITORING EVALUATION FORM

304 North Dudley Street Site, HSI Site No. 10139
Tax Parcels 5-3-2, 5-3-10, 5-1-4, and Central of Georgia (Norfolk Southern) R-O-W (impacted rail lines)

TYPE	No.	CRITERIA RESPONSE	YES	NO
Land Use	1	Does this HSRA site meet the definition of non-residential property as defined in HSRA Rule 391-3-19.02(2)? "Non-residential property means any property or portion of a property not currently being used for human habitation or for other purposes with a similar potential for human exposure, at which activities have been or are being conducted that can be categorized in one of the 1987 Standard Industrial Classification major group..."		
	1a	If no to 1, provide a written explanation (attached) to the EPD within 30 days.		
Exposure	2	Are site workers expected to be directly exposed to soils with chemical concentrations in excess of Type 4 RRS at this HSRA site in excess of 250 days per year?		
	2a	If yes to 2, are these same site workers expected to be exposed to soils at this HSRA site in excess of 25 years throughout their career?		
	3	Has groundwater beneath the property been used or extracted for drinking water or any other non-remedial purpose?		
	3a	If yes to 3, please terminate said use immediately and provide a revised corrective action plan (CAP) that describes the actions necessary to bring the site's groundwater into compliance with residential risk reduction standards within 30 days.		
Erosion	4	Is there evidence of soil erosion in the remedial areas of the site?		
	4a	If yes to 4, is there evidence of erosion of these soils to off-site areas?		
	4b	If yes to 4a, are corrective measures being taken?		
	4c	If yes to 2, 3, 4, 4a, and/or 4b, provide written explanation (attached) to the EPD within 30 days.		
Property Instruments	5	Do all leases or other property instruments for the site have the applicable deed notice language inserted into them?		
	5a	If no to 5, provide a written explanation (attached) to the EPD within 30 days.		
Inspection	6	Date of inspection:		
	6a	Name of inspector:		
	6b	Details of inspection including Monitoring Well and Permanent Marker Inspection/ Repair Logs (attached):		
	6c	Photographs showing current land use (attached)		

Certification:

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 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.

NAME (Please type or print) _____ TITLE _____

SIGNATURE _____ DATE _____

Former Americus MGP Site
Monitoring Well Inspection Log

Inspection Date(s): _____

Inspection Personnel: _____

Well ID	Well Protective Stickup or Flush-Mount Cover Damaged or Leaking?	Well Locked?	Concrete Well Pad Damaged?	Well ID Clearly Marked?	Internal Well Damage or Obstruction?	Well Readily Visible and Accessible?	Notes or Corrective Action Needed for Items Noted
MW-4RR							
MW-14R							
MW-15							
MW-19							
MW-21							
MW-22							
MW-7R							
MW-16RR							
MW-20							
MW-25							
MW-26R							
MW-28							

Former Americus MGP Site
Permanent Marker Inspection Log

Inspection Date(s): _____

Inspection Personnel: _____

Marker ID	Marker Readily Visible and Accessible?	Marker Legible?	Sign or Concrete Marker Pad Damaged?	Notes or Corrective Action Needed for Items Noted
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Disclaimer

In preparing this report Resolute Environmental & Water Resources Consulting, LLC ("Resolute") relied upon reports prepared by third parties ("Consulting Reports"). The Consulting Reports provided information concerning activities the project Site in which Resolute did not draw conclusions. Resolute did not control the investigation and preparation of the Consulting Reports or their conclusions. Resolute expressly disclaims any and all liability arising from or related to errors, omissions or misinterpretations contained in the Consulting Reports referenced in Resolute's report.