

Voluntary Remediation Program Interim Final Compliance Status Report

Prepared for
Former MacGregor Golf Company Site
HSI Site No. 10398
Albany, Georgia
January 26, 2017

Voluntary Remediation Program Interim Final Compliance Status Report

Prepared for
Former MacGregor Golf Company Site
HSI Site No. 10398
Albany, Georgia
January 26, 2017

Submitted to the Georgia Environmental Protection Division

on behalf of
Albany Partners, LLC
Albany Sport Co.
Brunswick Corporation



990 Hammond Drive, Suite 400
Atlanta, Georgia 30328

Table of Contents

List of Figures	v
List of Tables.....	v
Statement of Findings.....	vi
Certification of Compliance with Risk Reduction Standards	vii
Professional Engineer Certification	viii
1. Introduction	1-1
1.1 Site Description and Setting.....	1-1
1.2 Site History.....	1-1
1.3 Source Description.....	1-2
1.4 Site Constituents of Concern.....	1-2
1.5 Applicable Risk Reduction Standards.....	1-2
1.6 Report Organization	1-3
2. Previous Environmental Investigations Under HSRA.....	2-1
3. Corrective Measures Under HSRA	3-1
3.1 Remedial Evaluation	3-1
3.2 2003 Pilot Testing.....	3-1
3.3 2004 Pilot Testing.....	3-2
3.4 Summary.....	3-2
4. Environmental Investigations under the VRP.....	4-1
4.1 Groundwater Flow Evaluations and Monitoring	4-1
4.2 Delineation of Nickel in Soil.....	4-2
4.3 Delineation of VOCs in Soil	4-2
4.4 Delineation of Nickel in Groundwater	4-3
4.5 Delineation of VOCs in Groundwater.....	4-3
4.6 Vapor Intrusion Assessment.....	4-3
4.7 Delineation of Chromium in Groundwater	4-3
4.7.1 Delineation of Chromium in Groundwater to the North	4-4
4.7.2 Delineation of Chromium in Groundwater around MW-11.....	4-4
4.7.3 Delineation of Chromium in Groundwater around MW-24.....	4-5
4.7.4 Delineation of Chromium in Groundwater around MW-19.....	4-5
4.7.5 Delineation of Chromium in Groundwater to the South	4-6
4.7.6 Chromium Delineation Summary.....	4-6
4.8 Remedial Evaluation and Groundwater Modeling	4-7
4.8.1 Remedial Evaluation.....	4-7
4.8.2 Groundwater Fate and Transport Modeling.....	4-7
4.8.3 Meeting with EPD.....	4-8
4.9 Model Validation Monitoring.....	4-8

5. Delineation Status 5-1

 5.1 Soil Delineation Status 5-1

 5.2 Groundwater Delineation Status..... 5-1

 5.2.1 On-Site Groundwater Delineation 5-1

 5.2.2 Off-Site Groundwater Delineation 5-1

6. Conceptual Site Model..... 6-1

 6.1 Elements of the Conceptual Site Model 6-1

 6.1.1 Ground Surface Features 6-1

 6.1.2 Subsurface Features 6-1

 6.1.3 Contaminant Source..... 6-2

 6.1.4 Contaminant Fate and Transport..... 6-2

 6.2 Receptors and Exposure Pathways..... 6-3

 6.2.1 Human Receptor Survey..... 6-3

 6.2.2 Ecological Receptor Survey 6-4

7. Compliance with VRP Cleanup Requirements 7-1

 7.1 Groundwater..... 7-1

 7.1.1 VOCs in Groundwater in Monitoring Well MW-4..... 7-1

 7.1.2 Fate and Transport Modeling for Hexavalent Chromium in Groundwater 7-2

 7.1.3 Environmental Covenants 7-2

 7.2 Soil Measures..... 7-3

 7.2.1 Focused Risk Assessment for VOCs in Subsurface Soil..... 7-3

 7.2.2 Evaluation of VOC Migration from Soil to Groundwater..... 7-3

8. Future Actions 8-1

 8.1 Environmental Covenants and CSR Addendum 8-1

 8.2 Annual Sampling and Reporting..... 8-1

 8.3 Monitoring Well Abandonment..... 8-1

 8.4 Project Schedule 8-2

9. Engineer’s Services this Period..... 9-1

10. Limitations..... 10-1

11. References 11-1

Appendix A: Annual Property Evaluation Form..... A-1



List of Figures

- Figure 1. Site Location Map
- Figure 2. Site Map – Monitoring Well Locations
- Figure 3. Potentiometric Surface Map - Upper Water Bearing Zone - April 5, 2016
- Figure 4. Potentiometric Surface Map - Lower Water Bearing Zone - April 5, 2016
- Figure 5a. Soil Compliance Status Map
- Figure 5b. Drainage Ditch Cross-Section A-A' - Soil Compliance Status
- Figure 5c. Former Source Area Cross-Sections B-B' and C-C' - Soil Compliance Status
- Figure 6a. Groundwater Compliance Status Map - Overview
- Figure 6b. Groundwater Compliance Status Map - MW-24 and MW-11 Area
- Figure 6c. Groundwater Compliance Status Map - MW-19 Area
- Figure 7. Updated Conceptual Site Model - Plan View
- Figure 8. Updated Conceptual Site Model - Profile View

List of Tables

- Table 1. Well Construction Data and Most Recent Groundwater Elevations
- Table 2. Historical Soil Detections of Site COCs
- Table 3. Historical Groundwater Detections of Site COCs
- Table 4. Summary of Site Status Relative to Delineation and Cleanup Standards
- Table 5. Potential Ecological Receptors
- Table 6. Updated Project Milestone Schedule
- Table 7. Summary of Hours Invoiced by Professional Engineer this Period

Statement of Findings

The Former MacGregor Golf Group, consisting of Albany Partners, LLC, Albany Sport, Co., and Brunswick Corporation (the Group), have delineated soil and groundwater impact at the Former MacGregor Golf Company (MacGregor) Site (Site [Hazardous Site Inventory Site No. 10398]). The Group is certifying compliance of the MacGregor property, Parcel 00212/00001/019, with Site Risk Reduction Standards (RRSs) under the Georgia Environmental Protection Division (EPD) Voluntary Remediation Program (VRP). Compliance of adjacent impacted parcel to the south (Parcel 00212/00001/30E) will be certified at a later date, as discussed in Section 8.1.

Delineation of Site constituents of concern (COCs) and compliance with RRSs are detailed in the 2013 through 2016 Semiannual Progress Reports and summarized herein. A combination of compliance with numeric RRSs, fate and transport modeling, limited risk assessment, and environmental land use covenants demonstrate compliance of Parcel 00212/00001/019 with VRP requirements.

As outlined in Section 8 of this report, the Group will prepare and submit a Final CSR Addendum at a later date when compliance of adjacent impacted Parcel 00212/00001/30E can be certified. In addition, the Group will perform annual groundwater monitoring and reporting on Parcel 00212/00001/019 for 2 years subsequent to delisting. The Group requests EPD approval to abandon all monitoring wells installed by the Group on Parcel 00212/00001/019 other than the wells to be monitored.

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 and the Voluntary Remediation Program, I have determined that Parcel 00212/00001/019 of the Former MacGregor Golf Company Site is in compliance with Type 4 risk reduction standards for soil and Type 5 risk reduction standards with controls for groundwater.

Signature: Eric Gold

Date: 1/17/2017

Printed Name: Eric Gold

Title: Authorized Signatory

Company: Albany Partners, LLC

Signature: Ray Berens

Date: January 17, 2017

Printed Name: Ray Berens, Esq.

Title: Authorized Signatory

Company: Albany Sport Co.

Signature: David Selig

Date: 1-24-2017

Printed Name: David Selig

Title: Authorized Signatory

Company: Brunswick Corporation



Professional Engineer Certification

I certify that I am a qualified environmental professional who has received a baccalaureate or post-graduate degree in a natural science or engineering, and have sufficient training and experience in groundwater hydrology, engineering, 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 myself or by a subordinate working under my direction.

Patricia C. Reifenberger

Patricia C. Reifenberger, P.E.

1/23/2017

(date)

Georgia Registration Number: 20676

Seal:



Section 1

Introduction

This Interim Final Compliance Status Report (CSR) for the Former MacGregor Golf Company (MacGregor) Site (Site) was prepared by Brown and Caldwell (BC) on behalf of Albany Partners, LLC, Albany Sport, Co., and Brunswick Corporation (the Group) for submittal to the Response and Remediation Program of the Land Protection Branch of the Georgia Environmental Protection Division (EPD) in accordance with the EPD's Voluntary Remediation Program (VRP) Act. The MacGregor property is located at 1601 South Slappey Boulevard in Albany, Dougherty County, Georgia (Figure 1), Parcel 00212/00001/019. The Site consists of the MacGregor property and a neighboring parcel (no. 00212/00001/019) located south of the MacGregor parcel. The Site is listed on EPD's Hazardous Site Inventory (HSI) as Site No. 10398 and is enrolled in EPD's VRP.

1.1 Site Description and Setting

The MacGregor property is approximately 50 acres and is presently unoccupied. The parcel formerly consisted of a golf club manufacturing facility, several storage buildings, paved parking areas, a golf club testing range, and an equipment building (Figure 2). The warehouse and former driving range are fenced and there are two access roads, located east and south of the warehouse. The eastern portion of the parcel is primarily asphalt paved, whereas the western portion of the parcel where the former driving range was located is a grass and shrub field. A total of 28 monitoring wells have been installed for environmental assessment and monitoring (25 on-site and three off-site). The Site features and monitoring well locations are shown on Figure 3, and monitoring well data are provided in Table 1.

The parcel topography is relatively flat and the ground surface elevation varies from 191 to 204 feet above mean sea level (amsl). An intermittent drainage ditch runs in a westerly direction from the western side of the warehouse, in a tree line, to the western property boundary. The ditch ends in an intermittent detention basin. Storm water runoff flows primarily towards the intermittent drainage ditch, which also receives storm water runoff from off-site sources, including a railroad right-of-way, and then discharges into a detention basin. The intermittent drainage ditch and detention basin are normally dry, except following significant rain events.

1.2 Site History

MacGregor operated the plant from 1960 to 1993 primarily for manufacturing golf clubs. As part of the golf club production, a metal plating facility was operated until 1993. This operation was located along the southern wall of the warehouse and consisted of plating tanks housed within three concrete pits. In 1993, the tanks were removed and in 1994, the concrete pits were filled with soil and clean sand and then sealed with concrete.

Since 2002, the Group has conducted groundwater monitoring, zero valent iron (ZVI) pilot testing in the source area, soil and groundwater delineation, fate and transport modeling, and limited risk assessment. The Site was accepted into the VRP on July 30, 2012. Additional Site history, regulatory history, and previous environmental work are described in detail in the Compliance Status Report (CSR [BC 2006]), Revised CSR and Corrective Action Plan (CAP [BC 2008]), and Revised CSR and CAP Addendum (BC 2009) submitted in compliance with Hazardous Site Response Act (HSRA) requirements. Additionally, soil and groundwater data were submitted to the EPD in the April 2011 VRP Application, February 2012 Revised VRP

Application, and Semiannual Progress Reports since January 2013. A summary of previous environmental work is provided in Section 2.

1.3 Source Description

Based on historical reports, manufacturing wastes were likely disposed from approximately 1962 to 1973 in an area located just west of the main building that is part of the former test driving range. This “source area” is approximately 60 feet by 100 feet and is located northeast of the equipment shed. According to previous reports, no disposal pit or lagoon was created; the waste was poured or spread directly on the ground. Wastes included spent solvents and plating process sludge that contained xylenes, methyl and ethyl alcohol, toluene, chromium, nickel, lead, and cyanide. The chromium applied during the plating process was likely in the hexavalent form as chromic acid (CrO_3).

Construction of the test driving range involved grading of the former disposal area, and the soils were dispersed over a wider area. An intermittent drainage ditch runs in a westerly direction from north of the former disposal area along the tree line, to the western property boundary. The ditch ends in an intermittent detention basin that discharges to the south via a 24-inch reinforced concrete pipe to a storm water collection box where it co-mingles with flow from another 18-inch reinforced concrete pipe running east and parallel to Industry Drive.

1.4 Site Constituents of Concern

The current site constituents of concern (COCs) were defined in the December 2009 Revised CSR and CAP Addendum (BC 2009), which was accepted by the EPD in a letter dated February 17, 2011.

The organic COCs include the following:

- 1,1-Dichloroethene (1,1-DCE)
- Benzene
- Cis-1,2-Dichloroethene (cis-1,2-DCE)
- Ethylbenzene
- Trichloroethene (TCE)
- Vinyl chloride (VC)
- Xylenes, Total.

The inorganic COCs include the following:

- Chromium, Total
- Chromium, Hexavalent
- Chromium, Trivalent
- Cyanide
- Nickel.

1.5 Applicable Risk Reduction Standards

The delineation and cleanup standards for the Site have been determined based on VRP protocols. The soil and groundwater standards, which were approved by the EPD their November 29, 2011 letter, are presented in Tables 2 and 3, respectively.

1.6 Report Organization

This report is organized into eleven sections. The present section summarizes the project background and provides an outline of the report. Summaries of previous investigations and corrective actions completed under the HSRA program are provided in Sections 2 and 3. Section 4 summarizes environmental investigations completed under the VRP. The current extents of soil and groundwater impacts as well as status relative to delineation standards are included in Section 5. Section 6 presents the updated Conceptual Site Model (CSM). Measures to demonstrate compliance with cleanup requirements are presented in Section 7, and future work presently anticipated is presented in Section 8. The project Professional Engineer's services this period are summarized in Section 9. Limitations associated with the use of this report are noted in Section 10, and cited references are provided in Section 11.



Section 2

Previous Environmental Investigations Under HSRA

Environmental investigations and regulatory responses at the Site were initiated in the late 1980s. Documentation from previous investigations is included in previous reports as referenced below. The investigation and remediation work conducted under HSRA and prior to enrollment in the VRP is summarized below.

1989 – Soil Investigation in Former Disposal Area: Soil and Materials Engineers (S&ME) drilled four soil borings in the former disposal area west of the main warehouse (S&ME 1989). Soil samples from one of the borings contained 91 milligrams per kilogram (mg/kg) cyanide and 210 mg/kg nickel.

1994 – Soil and Groundwater Investigation in Plating Area: Geosciences, Inc. (Geosciences) completed a soil sampling event at the Site in the area of the former plating facility (the southwest side of the warehouse) and its discharge point to the city sewer, the compressor room, and a covered area along the south side of the metal building, east of the water tower (Geosciences 1994). The soil samples collected from the former plating area were obtained before the plating pits were closed. The samples were collected from 2 feet below the concrete slab foundation of the plating pits. At the time of the sampling, the pits had been pumped out and pressure washed but had not yet been filled in. Holes cored through the concrete foundation allowed samples to be collected with hand augers. Soil samples were collected and analyzed for RCRA metals using the Toxicity Characteristic Leaching Procedure (TCLP). TCLP concentrations in soil were below USEPA characteristic hazardous waste levels. A groundwater sample was also collected and analyzed for arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. The analytical results indicated no metal concentrations in groundwater above USEPA maximum contaminant levels (MCLs). No additional work was recommended at the plating facility and the investigation results were submitted to EPD in a HSRA notification on February 24, 1995, by MacGregor. In a letter dated April 19, 1995, EPD advised MacGregor that the Site would not be listed on the HSI.

1995 – Additional Soil and Groundwater Investigation and Site Listing: Clayton Environmental Consultants (Clayton) completed a soil and groundwater investigation in the former plating area, the petroleum handling area, and the former disposal area (Clayton 1995). Results of the investigation indicated an impact to groundwater in the former disposal area. Vinyl chloride, cis-1,2-DCE, and TCE were detected above MCLs in MW-4. Metal concentrations in soil from the former disposal area and plating area were all less than HSRA notification concentrations except location DA-3, from the former disposal area, which contained 92.4 mg/kg chromium. The investigation results were submitted to EPD on August 9, 1995, by Albany Partners. In a letter dated September 22, 1995, EPD advised counsel for Albany Partners that the Site would be listed on the HSI. In the HSRA notification evaluation prepared by EPD dated September 1, 1995, EPD determined that a release to groundwater had occurred in the former disposal area.

1998 – Assessment Activities and CSR Preparation: Arcadis Geraghty & Miller (Arcadis) conducted CSR-related activities and prepared the first CSR. Activities conducted by Arcadis included a hydrogeologic assessment, characterization of biogeochemical conditions in groundwater, and a risk assessment. The hydrogeologic assessment consisted of advancing six soil borings in and adjacent to the former disposal area, installing five monitoring wells in the upper water bearing zone and seven wells in the lower water bearing zone, and conducting aquifer tests to characterize hydraulic parameters. Soil and groundwater

samples were collected and analyzed for VOCs and select inorganics. The CSR was submitted to EPD in December 1998 (Arcadis 1998).

1999 – Additional Investigation, Revision of CSR, and Proposed Consent Order: In May 1999, the facility was advised that elevated inorganic concentrations had been detected in soil samples they had collected from the intermittent drainage ditch. The EPD issued a Notice of Deficiency (NOD) to the Group in March 1999 requesting additional assessment and submission of a new CSR. Additional investigation in the former disposal area was conducted to determine the impact of release. The revised CSR was submitted to EPD in November 1999 (Arcadis 1999).

2000 – Drainage Ditch Investigation, CSR Addendum, and Reissuance of Proposed Consent Order: In a July 2000 NOD EPD requested additional delineation of soil contamination (in the drainage ditch) and groundwater contamination (horizontal and vertical extent). A CSR Addendum was prepared and submitted to EPD in October 2000 (Arcadis 2000).

2002 – Interim Corrective Action Plan: Following receipt of additional comments on the CSR Addendum in February 2002, the Group decided that the delineation efforts requested by the EPD would be better addressed by implementing an interim CAP to facilitate quicker measures to stem migration of the plume. The PRP Group subsequently conducted focused groundwater delineation and remediation pilot testing.

2003 and 2004 – Groundwater Monitoring, Alternatives Evaluation, and Pilot Testing: Groundwater monitoring for VOCs was conducted in February/March 2003 to assess Site conditions and delineate VOCs in the vicinity of MW-4 (located in the former disposal area). Applicable VOC remediation technologies were screened, and zero valent iron injection via pneumatic fracturing was selected for pilot testing. The pilot testing was conducted in May 2003 and February 2004 and the results are discussed in the 2006 CAP.

2006 – Metals Delineation, Source Area Monitoring, Administrative Order, CSR and CAP: On April 4, 2006, the EPD issued an Administrative Order for failure to submit a revised CSR and a CAP. Additional sampling was conducted to address delineation issues identified. Results from this investigation and other issues noted in the February 2002 NOD were addressed in the August 2006 CSR and CAP (BC 2006).

2007 – CSR NOD and Corrective Action Plan: The Group worked to address issues identified in a September 2007 NOD on the CSR and CAP that requested: 1) additional horizontal and vertical delineation of metals, VOCs, and cyanide in soils; 2) additional vertical delineation in groundwater for VOCs; 3) recalculation of RRSs using toxicity factors provided by EPD and updated physical-chemical properties; and 4) revisions to the CAP.

2008 – Revised CSR and CAP: Additional soil and groundwater sampling at the Site was conducted, the VOC and inorganics RRSs were recalculated, and the Revised CSR and CAP was submitted to the EPD (BC 2008).

2009 – Limited Field Investigations: Subsequent soil, surface water, and groundwater VOC and inorganics sampling results and updated RRSs for the Site were presented to the EPD in the 2009 Revised CSR/CAP Addendum.

2010 – Semiannual Groundwater Monitoring: Semiannual monitoring was conducted in July 2010 as part of the proposed groundwater corrective action at the Site. Site COCs exceeded RRSs in three of the monitoring wells sampled.

2011 – Application to the VRP: The Group submitted an application to the VRP in April 2011 in lieu of implementation of the CAP (BC 2011). The EPD provided comments on the application in a November 2011 letter, and the application and RRSs were revised accordingly.

2012 – Revised Application to the VRP: A revised application to the VRP was submitted in February 2012 (BC 2012). The revised application contained revised RRSs for site COCs and an updated CSM. The EPD approved the application and accepted the voluntary remediation plan in July 2012.

Section 3

Corrective Measures Under HSRA

In order to expedite corrective action, the Group performed pilot testing in the former disposal area in 2003 and 2004. The goal of the pilot testing was to determine the efficacy of the selected technology at treating VOCs, specifically chlorinated ethenes, in the source area. In general, this groundwater impact was localized to the vicinity of monitoring well MW-4. The VOCs that exceeded the applicable risk reduction standards were TCE and cis-1,2-DCE.

3.1 Remedial Evaluation

In 2002, BC conducted a preliminary evaluation of potential treatment alternatives for the VOCs in groundwater at the Site. Technologies screened included enhanced bioremediation, zero-valent iron (ZVI), chemical oxidation, air sparging/soil vapor extraction, and high vacuum extraction. Technical advantages and disadvantages related to cost, implementation, and feasibility of each technology were evaluated (BC 2008).

ZVI was selected for pilot testing to determine its overall effectiveness in reducing source area VOC groundwater concentrations to below applicable RRS. The selection was based on a desire to maintain favorable geochemical conditions that would continue to promote reductive dechlorination, including relatively low sulfate, nitrate, and low dissolved oxygen (DO) concentrations, and low oxidation-reduction potential (ORP), and would also discourage the transformation of trivalent chromium to the hexavalent form.

ARS Technologies, Inc. (ARS) was selected to help develop the pilot test injection approach, which included using their patented FeroxSM technology. This technology was compared to similar injection technologies offered by others and was preferred for two reasons. First, the process utilized a highly reactive grade of iron that allowed injection of 6 times less material than that offered by others. This reduced the amount of surface heave and limited the potential for structural damage to the nearby building. Second, the ARS injection process utilized a gaseous atomization technique that improves subsurface distribution of reactive material relative to traditional liquid injection methods.

3.2 2003 Pilot Testing

BC initiated the ZVI pilot test in May 2003 to determine if injected ZVI could alter the local geochemical conditions and effectively treat the source area VOCs by achieving the predetermined applicable risk reduction standards for TCE and DCE. The pilot test included installation of one injection borehole located 20 feet north of MW-4 and two temporary pilot monitoring wells (PMW-1 and PMW-2). ZVI injection resulted in the delivery of approximately 3,740 pounds of ZVI to the injection borehole over a 10-ft interval within the upper water bearing zone. The material was evenly distributed over four 2.5-foot lifts (i.e., 935 pounds per lift).

As further discussed in the April 2008 Revised CSR and CAP (BC 2008), the analytical data revealed a dramatic and expected reduction in dissolved oxygen (DO) and oxidation-reduction potential (ORP) in PMW-1 and PMW-2, and less dramatic but expected reductions in MW-4. The effects show the direct and rapid reactive effects of the ZVI. Associated with the reduced DO and ORP was a reduction in TCE concentrations to below the applicable risk reduction standards in PMW-2. Vinyl chloride, an expected byproduct of reductive dechlorination, was present in PMW-2. A pronounced decrease in cis-1,2-DCE from 2,200 micrograms per liter ($\mu\text{g/L}$) to below applicable risk reduction standards was observed in MW-4. TCE

concentrations in MW-4, located 20 feet from the ZVI injection well, decreased by nearly 31 percent but remained above the applicable risk reduction standards. This result implied that the ZVI injection followed preferential injection pathways that did not directly intersect the area around MW-4.

3.3 2004 Pilot Testing

Based on the results of the first ZVI injection, a second ZVI injection was conducted in February 2004. The injection borehole was installed 8 feet east of MW-4. Two additional temporary pilot monitoring wells (PMW-3 and PMW-4) were installed 10 feet east and south, respectively, from the new injection point. Once again, samples were analyzed for VOCs, DO, ORP, pH, nitrate, ferrous iron, chloride, sulfide, and sulfate prior to the injection. Approximately 4,050 pounds of ZVI were injected into the injection well over a 10-foot interval using four 2.5-foot lifts containing approximately 1,000 pounds of ZVI each.

The second ZVI injection resulted in a reduction of TCE concentrations in all pilot test wells, including MW-4. TCE in PMW-3 and PMW-4 were reduced to below applicable RRSs by August 2004. In PMW-2, the TCE concentration remained below the applicable RRS for approximately 1 year, but then increased in August 2004. TCE in MW-4 was measured at a concentration slightly above the applicable RRSs in August 2004 and remained at this level for 2 years following the second injection. Additionally, VOC concentrations in surrounding sentinel wells, MW-22 and MW-23, were still below applicable RRSs in May 2006, demonstrating that downgradient migration had not occurred.

3.4 Summary

The ZVI pilot test successfully treated the impacted area around MW-4 as evidenced by a comparison of the PMW-1, PMW-3, and PMW-4 data to the applicable risk reduction standard for TCE. The effectiveness of the ZVI pilot test was based on the reduction of TCE and the ability to induce geochemical changes to further promote reductive dechlorination. The test results demonstrated that TCE was being converted to cis-1,2-DCE and subsequently to vinyl chloride and ethene. A temporary increase in vinyl chloride concentration was expected with this technology and in fact was observed in PMW-2, but this well also showed higher concentrations of ethene, thus demonstrating completion of the reductive dechlorination pathway.

Section 4

Environmental Investigations under the VRP

The Site was accepted into the VRP in July 2012. Upon entering the VRP, several investigations were completed to address the delineation and other requirements of the program. These activities are described below. Historical and recent soil and groundwater analytical results are presented in Tables 2 and 3, respectively. Sampling locations are shown on Figures 2 and 5a.

4.1 Groundwater Flow Evaluations and Monitoring

Per EPD Comment No. 2 in their November 29, 2011 letter, all existing groundwater wells located on-site were re-surveyed on January 10, 2012 and groundwater elevations were re-measured (BC 2013a). Groundwater was encountered in the upper water bearing zone at elevations ranging from 148 to 157 feet amsl, and in the lower water bearing zone at elevations of 148 to 149 feet amsl. The groundwater levels measured in January 2012 suggested a groundwater elevation high, or mounding, in the upper water bearing zone in the vicinity of MW-25 (near the southwest corner of the main warehouse), with groundwater flow outward from there. The cause of this mounding, which was not evident during the March 2011 or prior sampling events, was believed to be associated with recent drought conditions or a possible water line leak near the facility. In an effort to better understand the upper water bearing zone in this area, groundwater levels were measured monthly for a period of three months following acceptance into the VRP to ensure representative groundwater elevations were used to develop the final remediation plan.

The depth to groundwater was measured in 15 of the upper water bearing zone wells at the Site (MW-1 through MW-4, MW-10 through MW-14, MW-18, MW-19, and MW-22 through MW-25) on August 31, October 1, and November 6, 2012 (Figure 2 [BC 2013a]). Similar to the January 2012 groundwater elevations, the groundwater continued to exhibit a higher elevation in the area of monitoring wells MW-4, MW-22, MW-23, and MW-25 (near the southwest corner of the main warehouse) of the upper water bearing zone, with groundwater flow outward from this area.

In addition, monitoring wells MW-4 and MW-22 (Figure 2) were sampled on November 28, 2012 to determine if a water line leak was causing the mounding of groundwater near the southwest corner of the main building. Samples were analyzed for water treatment disinfection byproducts (bromodichloromethane, bromoform, chloroform, and dibromochloromethane). None of these analytes was detected above reporting limits in either groundwater sample (BC 2013a).

A site-wide water level gauging conducted in May 2013 showed an increase of 4 and 14 feet in the water levels in the upper and lower water bearing zones since the last gauging events (BC 2013b). There had been a significant amount of rainfall at the Site since the last reporting period, which likely contributed to the higher groundwater elevations. By June 2014, groundwater elevations had returned to levels observed prior to 2013 (BC 2014b). The mounding of the upper water bearing zone in the area of wells MW-4, MW-22, MW-23 and MW-25 that was observed from January 2012 to July 2013 was not present in the 2014 or 2015 gauging events.

The groundwater flow in the upper water bearing zone appears to be predominantly to the southwest; however, due to the flat groundwater gradient and impervious surfaces at the Site, small water level

fluctuations between gauging events result in the appearance of localized changes in groundwater flow direction. The flat groundwater gradient is easily influenced by rainfall as large portions of the Site are impervious, resulting in uneven recharge of the upper water bearing zone during rain events. In April 2016, the groundwater gradient was primarily to the south-southwest in the western portion of the Site, with some southeasterly flow in the eastern portion of the Site around wells MW-1, MW-12, and MW-13 (Figure 3).

The groundwater in the lower water bearing zone appears to flow predominantly toward the northeast. As with the upper water bearing zone, the groundwater gradient is fairly flat and subject to fluctuations in response to localized events (e.g., rainfall). In the April 2016 event, water level elevations indicate an easterly groundwater flow across the Site (Figure 4).

Outside of localized water level fluctuations, the groundwater gradients and predominant groundwater flow directions observed during the most recent (April 2016) monitoring event were similar to those observed historically.

4.2 Delineation of Nickel in Soil

Horizontal delineation of nickel in soil was previously achieved with SB-11, SB-20, and SB-30 to the north, SB-7 to the east, SB-1, SB-21, SB-22, SB-35, and SB-38 to the south, and SB-28 to the west. In order to vertically delineate nickel, one soil boring was advanced at the SB-17A location where nickel exceeded the soil delineation standard in the sample collected from 23 to 25 feet below ground surface (bgs) in September 1999. A soil sample was collected and analyzed, and based on the results from this boring, vertical delineation of nickel was achieved at this location (BC 2013a).

4.3 Delineation of VOCs in Soil

A soil boring was also advanced on November 26, 2012 at the location of boring B-4 where cis-1,2-DCE and vinyl chloride exceeded the soil cleanup standards in the sample collected from 5 to 10 feet bgs in May 2005 (Figures 5a and 5c [BC 2013a]). The levels of cis-1,2-DCE and vinyl chloride measured at B-4 in 2012 also were not in compliance with either the delineation or cleanup standards.

In February 2013, nine additional soil borings (Figures 5a and 5c) were advanced in the vicinity of the B-4 boring to vertically and horizontally delineate the concentrations of cis-1,2-DCE and VC detected above the RRSs in the soil sample collected from a depth of 9 to 10 feet bgs (BC 2013b). Five primary borings (B-4a and GP-1 through GP-4) and four secondary borings (GP-5 through GP-8) were installed to a depth of approximately 20 feet bgs using direct push technology (DPT) methods. The five primary borings were installed adjacent to and approximately 5 feet from boring B-4, and the secondary borings were installed in a ring further from B-4 to horizontally delineate the concentrations detected above the cleanup standards in B-4 (Figure 5a and Table 2).

The results from the soil samples collected from the primary borings indicated that cis-1,2-DCE was present at a concentration above the delineation and cleanup standard in one boring (GP-1) at depths of 4 to 5 feet bgs and 5 to 6 feet bgs). The cis-1,2-DCE concentration in the sample from 14 to 15 feet bgs was below the delineation and cleanup standard and thus cis-1,2-DCE was delineated vertically in this boring. In addition, vinyl chloride was not detected above the delineation and cleanup standard in any samples from this boring; thus, vinyl chloride was vertically and horizontally delineated in soil in this area. The remaining primary samples analyzed were all less than the delineation and cleanup standards. These results are shown on Figure 5c and Table 2.

Based on the GP-1 results, two samples collected from the secondary boring to the north, GP-6, at depths similar to those in which the cleanup standard was exceeded, were analyzed to horizontally delineate cis-1,2-DCE to the north. The results for these GP-6 samples, collected at 2 to 3 feet bgs and 8 to 9 feet bgs, indicated concentrations of cis-1,2-DCE below the delineation and cleanup standards (Table 2). Therefore,

horizontal and vertical delineation were achieved in the B-4 area and the remaining secondary boring samples were not analyzed.

4.4 Delineation of Nickel in Groundwater

Groundwater monitoring in October 2013 (BC 2014a) and January 2014 (BC 2014b) was conducted to confirm compliance with delineation and/or cleanup standards. Groundwater samples from MW-4 were analyzed for total nickel in October 2013. The total nickel concentration (0.203 mg/L) was greater than the delineation standard but less than the cleanup standard. However, nickel in groundwater has been delineated to the north of MW-4 by MW-22, to the southeast by MW-25, southwest by MW-23, and west by MW-18.

4.5 Delineation of VOCs in Groundwater

Continued groundwater monitoring in October 2013 and January 2014 was conducted to confirm compliance with delineation and/or cleanup standards (BC 2014a and BC 2014b, respectively). Groundwater samples from MW-4 were analyzed for VOCs in October 2013 and January 2014. TCE, cis-1,2-DCE, and VC were detected in these samples at concentrations above the cleanup standard, but at concentrations almost an order of magnitude less than concentrations when the well was installed in 1995. VOCs were also detected above Site VRP cleanup levels in the groundwater sample collected from monitoring well MW-4 in July 2015 and April 2016.

4.6 Vapor Intrusion Assessment

Based on the VOC concentrations in groundwater in the vicinity of MW-4 located just west of the main warehouse, a vapor intrusion assessment was completed in October 2012 (BC 2013a). Nine sub-slab soil gas and indoor air samples and one outdoor air samples were collected in and around the main warehouse building. Based on the results of the sub-slab soil gas and indoor and outdoor air samples collected in the main warehouse, the potential for indoor inhalation of vapor emissions from groundwater was eliminated as a potential exposure pathway at the Site.

4.7 Delineation of Chromium in Groundwater

Site COCs in groundwater had been delineated vertically and horizontally, with the exception of chromium (total and/or hexavalent) in the upper and lower water bearing zones to the north of monitoring wells MW-11 and MW-24 and to the south of MW-19.

Activities continued in March and June 2014 (BC 2014b) to delineate chromium in groundwater to the south of monitoring well MW-19, to the west northwest of monitoring well MW-24, and to characterize the extent of chromium in groundwater around monitoring wells MW-11, MW-19, and MW-24 in support of remedial design. Twenty-eight temporary wells (TW-1 through TW-15, TW-17, TW-18, TW-20 and TW-22 through TW-30) were installed in March 2014, and 13 temporary wells (TW-16 and TW-31 through TW-42) were installed in June 2014.

The temporary wells installed in March 2014 were installed in two phases: initially at locations close to the existing wells MW-11, MW-19 and MW-24, and then outward as necessary based on the groundwater sample results from the first locations. The same approach was used during the June 2014 event, with the location of the initial temporary borings being outward from the March temporary wells that exceeded the chromium delineation standard, and then proceeding outward as necessary. Temporary wells were not installed in the area of monitoring well MW-24 during the June event as sufficient delineation was achieved in the March mobilization. This tiered approach was used to strategically assess the extent of chromium

impact in groundwater around the existing permanent monitoring wells. The results of the sampling around wells MW-11, MW-19, and MW-24 are discussed separately below.

4.7.1 Delineation of Chromium in Groundwater to the North

In November 2012, a new monitoring well (MW-26) was installed approximately 40 feet north of MW-24 using hollow-stem auger (HSA) methods to a depth of approximately 62 feet bgs in the lower water bearing zone (BC 2013a). The installation of an additional well in the shallow zone was planned; however, only 6 inches of groundwater was measured in the nearby shallow well MW-11, and thus it was clear that there were not distinctly different shallow and deep zones in this area. Following installation of MW-26, groundwater samples were collected from MW-24 and MW-26 and analyzed for total and dissolved chromium, and chromium was speciated. An attempt was made to sample MW-11; however, there was insufficient groundwater in the well to collect a sample. The sample results from MW-24 and MW-26 exceeded the delineation and cleanup standards for total and hexavalent chromium. Therefore, delineation had not yet been achieved to the north of monitoring wells MW-24 and MW-11.

Following the November 2012 sampling event, the owner of the adjacent property to the north, Spartan GA, was contacted regarding the possibility of installing a monitoring well to enable groundwater delineation to the north. Two monitoring wells, Spartan MW-1 and Spartan MW-2, had already been installed on the southern portion of the Spartan GA property approximately 250 and 100 feet east of MW-26, respectively, as part of a Phase II Environmental Site Assessment conducted prior to Spartan GA acquiring the property in 2008. The two wells had been sampled for VOCs, and no analytes were detected. The monitoring well closest to MW-26 (Spartan MW-2) was installed to a depth of 64.5 feet bgs, which is similar to the depth of MW-26, and thus the Group requested and obtained permission to sample the Spartan MW-2 well in January 2013 (BC 2013b).

In February 2013, groundwater samples were collected from MW-26 and Spartan MW-2 and analyzed for chromium (BC 2013b). These samples contained trivalent chromium at concentrations greater than the delineation standard of 0.01 mg/L, which was inconsistent with historical results in these wells where chromium was primarily present in the hexavalent state. The reduction of hexavalent chromium to trivalent chromium could have been due to the 13-foot increase in water levels in MW-26 and the elevated turbidity in Spartan MW-2. Another anomaly noted was that the dissolved chromium concentrations were very different from the total chromium concentrations, whereas typically the total and dissolved chromium concentrations are similar. Based on these results, MW-26 and Spartan MW-2 were resampled in May 2013 to confirm the trivalent chromium concentrations. The May results indicated chromium was in fact in hexavalent form. Total and hexavalent chromium concentrations in groundwater were greater than the delineation and cleanup standards in MW-26, and less than the laboratory reporting limit of 0.010 mg/L for Spartan MW-2. Therefore, delineation had been achieved to the northeast of monitoring well MW-26.

Additional groundwater samples were collected in October 2013 (BC 2014a) and January 2014 (BC 2014b) to confirm compliance with delineation and/or cleanup standards of Site COCs. Total chromium and hexavalent chromium concentrations in groundwater from monitoring well MW-26 (and its duplicate) in October 2013 were less than the laboratory reporting limit of 0.01 mg/L. Total chromium and hexavalent chromium concentrations in MW-26 were less than the reporting limit in January 2014 as well. Delineation had been achieved to the north based on data from monitoring well MW-26 and previous data from monitoring well Spartan MW-2.

4.7.2 Delineation of Chromium in Groundwater around MW-11

In an effort to further characterize the extent of chromium in groundwater around monitoring well MW-11 for remedial design, seven temporary wells (TW-6 through TW-10, TW-22 and TW-28) were installed in March 2014 and five temporary wells (TW-31 through TW-35) were installed in June 2014 by solid stem auger (SSA) methods, with the exception that TW-6 was initially attempted by GeoProbe® DPT and when refusal

was encountered prior to reaching the total depth, the remainder of the boring was installed by SSA methods (Figure 6b). The temporary wells were installed to a depth of approximately 45 feet bgs and completed with 1-inch Schedule 40 polyvinyl chloride (PVC) riser and 10 feet of ultra-fine pre-packed 0.01-slot PVC screen.

The total chromium delineation standard (0.10 mg/L) and trivalent chromium delineation standard (0.01 mg/L) were met in all the temporary wells around monitoring well MW-11 sampled during the March event. The groundwater samples collected from all the temporary wells sampled during the March event also met the hexavalent chromium delineation standard (0.01 mg/L) except for the samples collected from temporary wells TW-8, TW-22 and TW-28 located southeast of monitoring well MW-11. Therefore, five additional temporary wells (TW-31 through TW-35) were installed further southeast of MW-11 in June 2014 in an effort to delineate the hexavalent chromium concentrations detected above the standards in the samples from temporary wells TW-8, TW-22 and TW-28 (Figure 6b). The total chromium delineation and cleanup standards as well as the trivalent chromium cleanup standard were met in all temporary wells sampled in June 2014. The delineation and cleanup standard for hexavalent chromium, and the delineation standard for trivalent chromium were met in samples from all temporary wells except from temporary well TW-31 (BC 2014b).

The groundwater in monitoring well MW-11 was sampled again in July 2015 and total and hexavalent chromium concentrations were 0.0864 mg/L and 0.0895 mg/L, respectively (BC 2016a). The total chromium concentration (0.0864 mg/L) was less than the Site VRP delineation and cleanup goal of 0.1 mg/L; however, the hexavalent chromium concentration (0.0895 mg/L) still exceeded the Site delineation and VRP cleanup level of 0.01 mg/L. In April 2016, total and hexavalent chromium concentrations were less than the reporting limit of 0.01 mg/L, and therefore less than the Site VRP delineation and cleanup goals of 0.1 and 0.01 mg/L, respectively (BC 2016b). These data are summarized in Table 3.

4.7.3 Delineation of Chromium in Groundwater around MW-24

The delineation activities in March 2014 characterize the extent of chromium in groundwater around monitoring well MW-24 for remedial design. Seven temporary wells (TW-11 through TW-14, TW-23, TW-24 and TW-29) were installed by DPT and/or SSA methods to a depth of approximately 60 feet bgs (Figure 6b [BC 2014b]). The temporary wells were completed in a similar method to those around MW-11. The total and trivalent chromium cleanup standards were met in all of these temporary wells in March 2014 except TW-11 (total chromium only). Hexavalent chromium was detected above the cleanup standard in the groundwater samples collected from temporary wells TW-11, TW-13, TW-14 and TW-24 (Table 3). Temporary wells were not installed in the area of monitoring well MW-24 during the June event as sufficient delineation was achieved in the March mobilization.

Additional groundwater samples were collected from monitoring well MW-24 in July 2015 and April 2016. The hexavalent chromium concentration remained above the delineation and cleanup standard in MW-24 in July 2015 and April 2016 (BC 2016a and 2016b, respectively).

4.7.4 Delineation of Chromium in Groundwater around MW-19

Groundwater samples were collected in October 2013 (BC 2014a) and January 2014 (BC 2014b) to confirm compliance with delineation and/or cleanup standards of Site COCs. Groundwater concentrations measured in the sample from monitoring well MW-19 indicated that delineation had not been achieved south of this well.

In an effort to delineate chromium in groundwater south of monitoring well MW-19, 13 temporary wells (TW-1 through TW-5, TW-15, TW-17, TW-18, TW-20, TW-25 through TW-27 and TW-30) were installed in March and eight temporary wells (TW-16, TW-36 through TW-42) were installed in June by DPT, SSA and/or HSA methods to depths between 35 feet and 45 feet bgs (Figure 6c). The temporary wells were completed in a similar manner to those around MW-11. Sampling locations in the southern right-of-way of Industry Avenue were also planned; however, they could not be installed due to the presence of overhead and underground utilities already present in the right-of way (BC 2014b).

In March 2014, total chromium concentrations were above the delineation and cleanup standard in samples from the temporary wells TW-1, TW-4, TW-17, TW-18 and TW-20 in the vicinity of well MW-19. Trivalent chromium was detected above the delineation standard in nine of the temporary wells installed and sampled in March, but not above the cleanup standard. Hexavalent chromium was detected above the delineation and cleanup standard in all of the temporary wells sampled except TW-15 (Table 3). Based on the March 2014 groundwater results, eight additional temporary wells (TW-16 and TW-36 through TW-42) were installed further from monitoring well MW-19 in June 2014 in an effort to delineate the total and/or hexavalent chromium detected above the cleanup standards in the initial round of temporary well installation. The June 2014 groundwater results indicated that all detections of total chromium were less than both the cleanup and delineation levels (Table 3). Trivalent chromium was detected in three (TW-16, TW-36 and TW-41) of the eight temporary wells at concentrations below the cleanup standard but greater than the delineation standard. Hexavalent chromium was detected in three (TW-36, TW-39 and TW-41) of the eight temporary wells at concentrations greater than both the delineation and cleanup standard (BC 2014b).

Additional groundwater samples were collected from monitoring well MW-19 in July 2015 and April 2016. In July 2015, the hexavalent chromium concentration remained above the delineation and cleanup standard of 0.01 mg/L while the total chromium concentration was less than the delineation and cleanup standard of 0.1 mg/L (BC 2016a). In April 2016, both total and hexavalent chromium concentrations were less than the reporting limit of 0.01 mg/L and thus were less than their respective delineation and cleanup standards (BC 2016b).

4.7.5 Delineation of Chromium in Groundwater to the South

As concentrations of total and hexavalent chromium in groundwater samples from monitoring well MW-19 in July 2015 continued to exceed the delineation and cleanup standards, an access agreement with the property owner to the south, Taylor Enterprises (Taylor) was executed on July 20, 2015 to allow the Group to install monitoring wells on the Taylor property to further delineate hexavalent chromium to the south of MW-19 (BC 2015a, BC 2015b). Two temporary monitoring wells (TW-43 and TW-44) were installed on the Taylor property in July 2015 in the grassy area between the loading dock and Industry Avenue (Figure 2). As shown in Table 3, total and hexavalent chromium were detected in TW-43 and TW-44 at concentrations exceeding the site delineation and cleanup levels (BC 2016a).

In order to complete horizontal off-Site delineation to the south, two permanent monitoring wells, MW-27 and MW-28, were installed and sampled in November 2015. These wells were located on the Taylor Property south of temporary wells TW-43 and TW-44 (Figure 2) and were screened in the upper water bearing zone. Total and hexavalent chromium were not detected in samples from these wells, and thus chromium delineation in groundwater south of MW-19 has been achieved (Table 3 [BC 2016a]).

Groundwater samples were also collected from monitoring wells MW-27 and MW-28 in April 2016. Hexavalent chromium was detected in groundwater from MW-27 at a concentration just above the delineation and cleanup standard of 0.01 mg/L, and was not detected above the reporting limit in groundwater from MW-28. Total chromium was not detected in samples from either well (Table 3 [BC 2016b]).

4.7.6 Chromium Delineation Summary

Based on analysis of samples collected as described above, chromium delineation in groundwater has been achieved.

4.8 Remedial Evaluation and Groundwater Modeling

A remedial evaluation was completed in 2014 to identify potential remedial approaches for areas at the Site where COCs had been detected at concentrations exceeding Site VRP cleanup levels. The evaluation was conducted to support the Final Remediation Plan for the Site and to satisfy requirements under the VRP. Activities included the evaluation of a range of alternatives for addressing VOCs in groundwater, VOCs in subsurface soil, and hexavalent chromium in groundwater (BC 2015a), as well as development of a fate and transport modeling and groundwater modeling. The remedial approach was discussed and approved by the EPD in a meeting in December 2014.

4.8.1 Remedial Evaluation

As mentioned previously, VOC concentrations in groundwater from monitoring well MW-4 have declined almost an order of magnitude since the well was installed in 1995. Given the continued decline in VOC concentrations in MW-4, it was apparent that natural attenuation is occurring at a sufficient magnitude to keep the limited VOC plume in a state of equilibrium or shrinking. Concentration trend analyses were thus completed to identify statistically significant trends in VOC concentrations. As discussed in the Final Remediation Plan, this approach was used to demonstrate compliance with the Site VRP cleanup levels for VOCs in groundwater.

The risks associated with the concentrations of VOCs remaining in subsurface soil were assessed in a focused risk assessment (RA). Due to the depth below ground surface, no ecological receptors were expected to come into direct contact with impacted soils. In addition, the only human receptor that could come into direct contact with impacted soils at that depth is an excavation worker. Concentration trends in groundwater from MW-4 were also reviewed to assess the actual impact from the migration of VOCs from subsurface soil to groundwater. As further discussed in the Final Remediation Plan, the results of the focused RA and groundwater concentration trend analyses were used to demonstrate compliance with the Site VRP cleanup levels.

4.8.2 Groundwater Fate and Transport Modeling

Since hexavalent chromium concentrations in groundwater exceed Site VRP cleanup levels in the areas around monitoring wells MW-11, MW-19, and MW-24, additional action was necessary to demonstrate compliance under the VRP. Based on our knowledge of the Site and available remedial technologies, fate and transport modeling was the preferred approach to demonstrating compliance with the Site VRP cleanup levels for hexavalent chromium in groundwater. In addition to being cost-effective, fate and transport modeling is the least disruptive to Site activities and to off-site impacted properties. The model is discussed in further detail elsewhere (BC 2015a).

Results of the modeling indicated that the hexavalent chromium plume (defined as concentrations greater than the cleanup goal of 0.01 mg/L) in the MW-11 area will not extend beyond the northwest parking lot on the Site. Concentrations of hexavalent chromium in groundwater in this area were projected to be below the cleanup goal after 5 to 10 years. In the vicinity of MW-19, the model indicated that the hexavalent chromium plume will migrate onto the Industry Avenue right-of-way (ROW) and the property on the south side of the ROW (Taylor Enterprises [Taylor] Property). However, the plume will not migrate beyond the Taylor property. The modeling indicated that concentrations of hexavalent chromium in groundwater in this area will be below the cleanup goal after 25 to 30 years. Finally, in the vicinity of MW-24, the model indicated that the hexavalent chromium plume will not extend beyond the northern property boundary. Based on the modeling, concentrations of hexavalent chromium in groundwater in this area are projected to be below the cleanup goal after 40 to 45 years.

4.8.3 Meeting with EPD

A meeting with EPD was held on December 10, 2014 at their offices in Atlanta, Georgia to discuss the current status of the Site relative to VRP delineation and cleanup levels, and to present the preliminary results of the fate and transport model (BC 2015a). During the meeting, EPD concurred with a narrative approach for addressing VOCs in groundwater and subsurface soil (presented in Sections 7.1.1 and 7.2.2 of this report). EPD also concurred with the fate and transport modeling approach to demonstrate compliance with VRP groundwater cleanup goals.

4.9 Model Validation Monitoring

Two annual model validation monitoring events have been conducted in accordance with the Final Remediation Plan. The first was conducted in July 2015 and included groundwater sampling in monitoring wells MW-4, MW-11, MW-19, and MW-24 to validate the model and other corrective actions presented in the Final Remediation Plan (BC 2016a). The second model validation monitoring event was conducted in April 2016 and consisted of groundwater sampling in monitoring wells MW-4, MW-11, MW-19, MW-24, MW-27, and MW-28 (BC 2016b). The resulting data are used to certify compliance of Parcel 00212/00001/019 under the VRP in this Interim Final CSR. A third annual model validation monitoring event is planned for April 2017. The model validation sampling procedures are consistent with those described previously.

Section 5

Delineation Status

The soil and groundwater delineation status at the Site is discussed below and summarized in Table 4. Figures 5a, 5b, and 5c illustrate soil sampling locations relative to delineation standards, and Figures 6a, 6b, and 6c illustrate groundwater sampling locations relative to delineation standards.

5.1 Soil Delineation Status

VOCs and inorganics in soil have been horizontally and vertically delineated at the Site (Figure 5a). Numerous surficial soil samples collected from the drainage ditch and detention basin from 0 to 2 feet bgs had concentrations of chromium and/or nickel above the delineation standards. However, based on the vertical concentration profiles in other deeper borings along the drainage ditch and in the detention basin, it is evident that inorganic concentrations generally decline with depth. Figure 5b, a cross-section view of the drainage ditch and detention basin, illustrates that chromium and nickel are both horizontally vertically delineated in the drainage ditch and detention basin.

Two soil samples collected from the former source area, B-4 and GP-1, contained cis-1,2-DCE and vinyl chloride at concentrations greater than the delineation standards. However, as shown in the cross-section views provided on Figure 5c, these constituents are both horizontally and vertically delineated within the source area.

5.2 Groundwater Delineation Status

5.2.1 Groundwater Delineation on the MacGregor Property

VOCs have been delineated in groundwater in the upper and lower water bearing zones across the Site (Figure 6a). VOC impacts in groundwater are limited to a small area in the immediate vicinity of MW-4 in the former source area. The impacted area is bounded to the north by MW-22, to the southeast by MW-25, and to the southwest by MW-23. Groundwater impacts in this area are delineated vertically by MW-5, which is screened in the lower water bearing zone.

Delineation of chromium on the MacGregor property (total, hexavalent, and trivalent) in groundwater at the northern end of the property in the vicinity of MW-11 and MW-24 was achieved with the sampling activities conducted in March and June 2014, as discussed in Section 4.7 (BC 2014b). Chromium in this area is delineated to the north by MW-26 and TW-23, to the east by MW-14 and TW-32, and to the south by TW-32 through TW-34 and MW-18 further south. Additionally, total and hexavalent chromium were not detected in MW-11 in April 2016 (Figure 6b).

At the southern end of the property, chromium (total, hexavalent, and trivalent) has been delineated in the MW-19 area (Figure 6c). Chromium in this area has been horizontally delineated by TW-37, TW-38, and MW-2 to the north, TW-40 and MW-1 to the east, and MW-10 to the west. Hexavalent and trivalent chromium extend beyond the southern property boundary at concentrations just above the delineation standard of 0.01 mg/L.

5.2.2 Groundwater Delineation Beyond the MacGregor Property

Temporary monitoring wells TW-43 and TW-44 were installed and sampled on the neighboring Taylor Property in July 2015. Groundwater from both wells exceeded the delineation and cleanup standard for

hexavalent chromium. Therefore, permanent monitoring wells MW-27 and MW-28 were installed and sampled in November 2015. No chromium was detected in groundwater samples from either well in November 2015. However, hexavalent chromium was detected just above the delineation and cleanup standard in a sample from MW-27 in April 2016. Chromium in MW-28 in April 2016 was non-detect. Horizontal delineation of hexavalent and trivalent chromium in groundwater to the south was achieved on Parcel 00212/00001/30E (BC 2016a; Figure 6c).

Section 6

Updated Conceptual Site Model

This section presents the updated CSM that reflects recent data.

6.1 Elements of the Conceptual Site Model

A three-dimensional CSM was originally developed for the Site's VRP Application (BC 2012) to illustrate the approximate extent of VOCs and inorganics in the subsurface, and the potential exposure pathways and receptors at the Site. The CSM has been continuously updated since then to reflect current conditions at the Site. Figures 7 and 8 illustrate plan and profile views of the current CSM, respectively (BC 2016b).

6.1.1 Ground Surface Features

The Site topography is relatively flat with elevations ranging from 191 to 204 feet above mean sea level (amsl). Storm water run-off flows primarily towards the intermittent drainage ditch that runs in a westerly direction from north of the former disposal area along the tree line, to the western property boundary. The ditch ends in an on-site intermittent detention basin. The intermittent drainage ditch and detention basin are typically dry, except following significant rain events. Both features also receive storm water run-off from off-site sources, including a railroad right-of-way to the west.

Soil samples collected from the intermittent ditch and detention basin in 1998, 1999, 2000, 2008, and 2009 indicated elevated concentrations of nickel and chromium. Based on the flow direction of storm water at the Site, the metals appear to have migrated from the former waste disposal area to the drainage ditch.

6.1.2 Subsurface Features

6.1.2.1 Vadose Zone and Upper Water Bearing Zone

The upper water bearing zone consists predominantly of silty sands, sandy silts, clays and chert of the weathered limestone residuum as illustrated on Figure 8. The thickness of the unconsolidated soil at the Site is approximately 40 to 50 feet with the thin layers of chert occurring at depths of 18 to 45 feet below ground surface (bgs). Beneath the chert, sediments increase in clay content with clay layers ranging from 1 to 6 feet thick. The lower boundary to this zone is the chalky limestone that occurs in the uppermost Ocala Limestone at 50 to 55 feet bgs. In the most recent Site-wide gauging event (April 2016), groundwater was encountered in the upper water bearing zone between 30 and 36 feet bgs (Table 1). The potentiometric surface measured in this event is illustrated on Figure 3.

The groundwater flow in the upper water bearing zone appears to be predominantly to the southwest; however, given the flat groundwater gradient at this Site, small water level fluctuations between gauging events result in the appearance of localized changes in groundwater flow direction. The flat groundwater gradient is easily influenced by rainfall as large portions of the Site are impervious, resulting in uneven recharge of the upper water bearing zone during rain events. In the April 2016 event, groundwater in the upper water bearing zone appears to flow to the southwest in the central portion of the Site and to the southeast in the northern and eastern portions of the Site (Figure 3).

According to previous reports, waste was poured or spread on the ground surface in the former waste disposal area. The VOCs and inorganics released at the ground surface would be expected to migrate vertically under the influence of gravity, with some horizontal spreading with depth through the unsaturated

zone and into the saturated zone. Figures 7 and 8 illustrate the approximate areas where VOCs (MW-4 area) and inorganics (MW-11, MW-19, and MW-24 areas) are present in the upper water bearing zone above the groundwater delineation and/or cleanup standards.

6.1.2.2 Semi-Confining Unit

Between the depths of approximately 50 and 55 feet bgs, a chalky limestone occurs that grades with depth to increasing cementation and induration and decreasing permeability. This layer is laterally continuous across the Site and is interpreted to be a hydraulic boundary to the lower water bearing zone encountered at about 60 feet bgs. However, based on the hydraulic properties (i.e., vertical groundwater velocity, vertical gradient and vertical hydraulic conductivity) of the semi-confining unit and concentrations of VOCs and inorganics in the lower water bearing zone, vertical leakage occurs through the chalky limestone from the upper water bearing zone to the lower water bearing zone.

6.1.2.3 Lower Water Bearing Zone

At approximately 60 feet bgs, the chalky limestone increases in competency and becomes a porous and permeable fossiliferous limestone of the Ocala Limestone that extends to a depth of approximately 170 feet bgs. This unit, the Upper Floridan aquifer, is a principal water supply aquifer and previously served to supply irrigation and fire water to the Site. The Upper Floridan aquifer is confined above and below. The upper confining zone is the chalky limestone described above, and the lower confining zone is the calcareous clayey Lisbon formation.

In the April 2016 gauging event, potentiometric levels in the wells screened in the lower water bearing zone were between about 30 and 42 feet bgs (Table 1). The potentiometric surface during this event is illustrated on Figure 4. Groundwater in the lower water bearing zone appears to flow predominantly toward the northeast. As with the upper water bearing zone, the groundwater gradient is fairly flat and subject to fluctuations in response to localized events (e.g., rainfall). In the April 2016 event, water level elevations indicate an easterly groundwater flow across the Site (Figure 4).

VOCs are not present above Site VRP cleanup standards in the lower water bearing zone; specifically, the upper portion of the permeable fossiliferous limestone. This layer was observed during the installation of monitoring well MW-15 at a depth of approximately 70 feet bgs.

6.1.3 Contaminant Source

Reportedly, manufacturing wastes were likely disposed from approximately 1962 to 1973 in an area located just west of the main building that is part of the former test driving range. This “source area” is approximately 60 by 100 feet and is located next to the equipment shed (Figure 2). According to previous reports, no disposal pit or lagoon was created; the waste was poured or spread directly on the ground. Wastes included spent solvents and plating process sludge that contained xylenes, methyl and ethyl alcohol, toluene, chromium, nickel, lead, and cyanide. The chromium applied during the plating process was likely in the hexavalent form as chromic acid. Construction of the test driving range involved grading of the former disposal area, and the soils were dispersed over a wider area.

6.1.4 Contaminant Fate and Transport

Following the release to the ground surface, spent solvents and plating process sludge appear to have migrated downward through the subsurface. In the vadose zone, soil concentrations of these constituents were likely altered by precipitation flushing and diffusion. Precipitation typically leaches constituents to the shallow water table during wet weather events. Volatile constituents can also evaporate from shallow soils resulting in a decrease of concentrations.

Once in groundwater, spent solvents (chlorinated VOCs) migrate with the flow of groundwater and naturally attenuate through biodegradation and other mechanisms. Chlorinated VOCs degrade to daughter products

via reductive dechlorination under certain conditions. More conservative constituents associated with the plating process (inorganics) migrate with the flow of groundwater and may naturally attenuate depending on chemical characteristics and groundwater chemistry and flow.

A limited interim remedial action consisting of injection of ZVI to address VOCs within the upper water bearing zone was conducted in 2003. The interim action created a barrier zone of accelerated attenuation downgradient of monitoring well MW-4. The barrier has most likely resulted in the decrease in VOC concentrations observed in the downgradient monitoring wells.

6.2 Receptors and Exposure Pathways

The potential receptors and exposure pathways are identified on Figures 7 and 8, and are detailed below. These receptors and exposure pathways were previously detailed in the February 2012 Revised VRP Application (BC 2012), the January 2013 Semiannual Progress Report (BC 2013a), the January 2015 Semiannual Progress Report and Final Remediation Plan (BC 2015a), and the July 2015 Semiannual Progress Report (BC 2015b). These receptors and exposure pathways have remained unchanged since July 2015.

6.2.1 Human Receptor Survey

The Site is currently vacant, though the on-site facilities could be used for future office space and warehousing operations. The surrounding properties primarily consist of industrial and/or commercial facilities. The nearest residence is located approximately 0.2 mile east of the Site (Figure 1). Municipal water is provided throughout the study area. There are no known water wells that supply potable water within a 1,000-foot radius of the Site.

Anticipated future use of the Site is industrial and/or commercial. Even if allowed, it is highly unlikely that this property would be used for residential properties due to the industrial nature of the surrounding area.

Based on VOC concentrations previously detected in monitoring well MW-4 located just west of the main warehouse (Table 3), the potential for indoor inhalation of vapor emissions from groundwater in the main warehouse was identified in the February 2012 VRP Application (BC 2012). Therefore, a vapor intrusion assessment was completed in the main warehouse in October 2012 (BC 2013a). Based on the results of the sub-slab soil gas and indoor and outdoor air samples collected in the main warehouse, the potential for indoor inhalation of vapor emissions from groundwater has been eliminated as a potential exposure pathway at the Site, and no additional vapor intrusion assessment is recommended.

Another potential area for indoor inhalation of vapor emissions is in the storage shed located just west of the main building. VOCs have been detected above cleanup standards in the recent soil boring B-4 (Table 2), which is located next to the storage shed. However, this shed is a small (approximately 1,600 square feet), unoccupied structure that is primarily used for storage. Human health receptors will be limited to an occasional visitor and exposure will therefore be limited. An assessment of vapor intrusion into this storage shed is therefore not warranted at this time.

Potential exposure pathways for human receptors are provided below. Each of the human exposure scenarios are on-site scenarios. There are no potential groundwater scenarios.

- Future Site Worker: Commercial site workers were considered receptors in this evaluation due to their anticipated future presence at the Site. Although commercial workers would primarily remain inside the facility and exposure to soils is minimal, workers would occasionally exit the facility to access outside buildings and structures. Possible routes of exposure associated with commercial workers include:
 - Future Ingestion of surficial soil
 - Future Dermal contact with surficial soil
 - Future Inhalation of vapors and particulates from surficial soil

The risk of exposure to future site workers has been eliminated, as there are no Site COCs present in surficial soils at the Site above the VRP cleanup standards.

- Current/Future Groundskeeper or Construction Worker: Construction workers and groundskeepers were considered as limited receptors in this evaluation. Construction workers are likely to spend only negligible amounts of time in the existing building as compared to commercial workers, and may be exposed to surficial soil during excavations. Groundskeepers are exposed to surficial soils during routine maintenance of the grounds. Therefore, potential routes of exposure associated with construction workers and groundskeepers include:
 - Ingestion of surficial soil
 - Dermal contact with surficial soil
 - Inhalation of vapors and particulates from surficial soil.

The risk of exposure to current and future groundskeepers or construction workers has been eliminated, as there are no Site COCs present in surficial soils at the Site above the VRP cleanup standards.

- Current/Future Excavation Worker: Excavation workers could potentially be exposed to impacted subsurface soils located in the former source area, in the vicinity of B-4 and GP-1, during excavation activities. Possible routes of exposure associated with excavation workers include:
 - Current/future ingestion of subsurface soil
 - Current/future dermal contact with subsurface soil
 - Current/future inhalation of vapors and particulates from subsurface soil.

The risk of exposure to current and future excavation workers has been eliminated through focused risk assessment, as described in Section 7.2.1.

- Current/Future Adolescent Trespasser: Trespassers were considered receptors in this evaluation despite the Site being located in a commercial area unlikely to attract trespassers. The Site is surrounded by security fencing and has a gate (Figure 2). However, trespassers were included as receptors for future use of the Site. The possible routes of exposure associated with trespassers are:
 - Ingestion of surficial soil
 - Dermal contact with surficial soil.
 - Inhalation of vapors and particulates from surficial soil

The risk of exposure to current and future adolescent trespassers has been eliminated, as there are no Site COCs present in surficial soils at the Site above the VRP cleanup standards.

- Current/Future Off-Site Workers: Due to the migration of chromium in groundwater to the south of the Site, future ingestion of groundwater has been added as a potential exposure pathway for off-site receptors. Possible routes of exposure associated with off-site commercial workers include:
 - Future Ingestion of groundwater

The risk of exposure to current and future off-site workers has been eliminated with the use of an environmental covenant restricting the use of groundwater.

6.2.2 Ecological Receptor Survey

The Georgia Natural Heritage Program provides a listing of “Known Locations of Rare and Other Special Concern Animals, Plants and Natural Communities within Georgia” organized by Topographic Quadrangle. The site is within the Albany West Southwest, Georgia Quadrangle. Potential plant and animal receptors are provided in Table 5.

Theoretical potential exposure pathways for terrestrial organisms are ingestion (e.g., plant matter, surface water, soil, and sediment), dermal absorption, and inhalation. The potential exposure pathways for aquatic

organisms are through root absorption, ingestion (e.g., plant matter, surface water, and sediment), dermal absorption, and inhalation.

Site contaminants are located in subsurface groundwater, surficial soil, and subsurface soil. There are no perennial surface water bodies or flows on the Site. The closest surface water body is an unnamed storm water drainage swale 0.75 to 1 mile east and southeast of the Site. The Flint River is 1.75 miles directly east of the Site. An intermittent drainage ditch runs in a westerly direction from near the northern edge of the former disposal area, in a tree line, to the western property boundary. The ditch ends in an intermittent detention basin. However, both the drainage ditch and detention basin are normally dry, except following significant rain events. Therefore, the potential for the environmental receptors identified in Table 5 to be exposed appears to be negligible. In addition, the drainage ditch and detention basin were sampled for site contaminants and all concentrations were below the Site cleanup levels.

Section 7

Compliance with VRP Cleanup Requirements

Previous remediation activities and groundwater modeling combined with risk assessment and environmental covenants demonstrate compliance with VRP cleanup requirements. The following sections describe these measures in more detail.

7.1 Groundwater

The numeric VRP groundwater cleanup levels are met in all monitoring wells except in three areas, as discussed below.

Groundwater from MW-4 near the former source area contains TCE, cis-1,2-DCE, and VC at concentrations slightly exceeding the VRP cleanup standards (Table 3, Figure 6a).

Near the northern property boundary, groundwater from monitoring well MW-24 and two temporary wells in the vicinity of MW-11 and MW-24 contains total and hexavalent chromium at concentrations exceeding the VRP cleanup standards (Table 3, Figure 6b). Groundwater from six temporary wells in this area contains hexavalent chromium at concentrations exceeding its VRP cleanup standard. Hexavalent chromium concentrations in groundwater from monitoring well MW-11 have historically exceeded the VRP cleanup standard; however, during the April 2016 sampling event, hexavalent chromium was not detected above the reporting limit.

Near the southern property boundary and to the south of MW-19, groundwater from five temporary wells contains total and hexavalent chromium at concentrations exceeding the VRP cleanup standards (Table 3; Figure 6c). In addition, groundwater from 13 temporary monitoring wells in the area of MW-19 contains hexavalent chromium at concentrations exceeding the VRP cleanup standard. Hexavalent chromium was also detected in groundwater from MW-27, located on the adjoining property to the south, at a concentration slightly above the VRP cleanup standard in April 2016. Historically, hexavalent chromium concentrations in groundwater from monitoring well MW-11 have exceeded the VRP cleanup standard; however, during the April 2016 sampling event, hexavalent chromium was not detected above the reporting limit.

In areas where the numeric cleanup levels are not met, compliance with VRP cleanup requirements will be met with groundwater modeling and environmental land use covenants as discussed below.

7.1.1 VOCs in Groundwater in Monitoring Well MW-4

Given the continued decline in VOC concentrations in MW-4 and the contracting plume, it is apparent that natural attenuation is occurring at a sufficient magnitude to keep the limited VOC plume around well MW-4 in equilibrium or shrinking such that it will not migrate off-site.

A quantitative assessment of TCE, cis-1,2-DCE, and VC concentration trends in groundwater from MW-4 was conducted using the Mann-Kendall Test as described in the 2015 Final Remediation Plan (BC 2015a). The test results indicated statistically significant decreasing TCE and cis-1,2-DCE concentration trends in monitoring well MW-4 from 2004 through 2014, while no significant trends were observed in VC concentrations over this time frame. TCE concentrations in groundwater from MW-4 had decreased by approximately 75 percent, from 0.379 mg/L in February 2004 to 0.097 mg/L in January 2014. Similarly,

cis-1,2-DCE concentrations in groundwater from this well had decreased by approximately 84 percent, from 1.8 mg/L in February 2004 to 0.290 mg/L in January 2014. The presence of cis-1,2-DCE and VC indicates that anaerobic degradation of TCE and cis-1,2-DCE are occurring. The fact that VC concentrations had not been increasing or accumulating indicates that VC is also degrading.

In the 20 years of monitoring, the VOC plume from MW-4 has only reached monitoring wells MW-22 and MW-25, which are located approximately 79 feet and 89 feet downgradient of MW-4, respectively. Historically, TCE concentrations in samples from these wells were generally at or just above the groundwater cleanup standard (maximum TCE concentrations of 0.009 mg/L), and TCE and its degradation products have not been detected in these wells since 2010. Thus, the VOC plume appears to be contracting. Given the steady decline in VOC concentrations in MW-4 and the contracting plume, VOCs in groundwater from this area will not migrate off-Site. Based on this empirical evidence, the EPD agreed in their April 14, 2015 letter that detailed transport modeling of VOCs at the Site was not necessary, and EPD accepted the above concentration trend analysis for VOCs in groundwater.

7.1.2 Fate and Transport Modeling for Hexavalent Chromium in Groundwater

In compliance with the VRP, a fate and transport model was developed for hexavalent chromium in groundwater. The model development and results were submitted to the EPD in the Final Remediation Plan on January 19, 2015 (BC 2015a), and the model was accepted by the EPD in their April 14, 2015 letter. The model was used to evaluate whether hexavalent chromium in the MW-11 and MW-24 area and at MW-19 would migrate to or beyond the current property lines, and to project future concentrations in groundwater. The model predicted that 1) dissolved phase hexavalent chromium concentrations around MW-11 will remain on-site and fall below the Site VRP groundwater cleanup standard in 5 to 10 years, 2) dissolved phase hexavalent chromium concentrations around MW-24 will remain on-site and fall below the Site VRP groundwater cleanup standard in 40 to 45 years, and 3) dissolved phase hexavalent chromium concentrations associated with the MW-19 area will migrate beyond the property lines and ultimately attenuate to below the Site VRP cleanup level between 25 to 30 years.

To address the predicted off-site migration of hexavalent chromium from the MW-19 area, off-site shallow temporary monitoring wells (TW-43 and TW-44) were installed to further evaluate the extent of COCs downgradient of MW-19, and based on the temporary well data, two permanent shallow monitoring wells (MW-27 and MW-28) were installed for long-term monitoring and as points of compliance. The transport model was then updated to incorporate hexavalent chromium concentrations from these additional temporary and permanent monitoring wells and the updated model was used to evaluate the predicted extent and potential cleanup times of hexavalent chromium in the MW-19 area. The updated model was submitted to the EPD on January 28, 2016 (BC 2016a) and approved by EPD in their May 6, 2016 email.

The updated modeling (BC 2016a) predicted that hexavalent chromium concentrations around MW-19 will migrate approximately 375 feet downgradient onto the adjoining Taylor Property, but not to migrate beyond the Taylor Property. Dissolved phase hexavalent chromium concentrations around MW-19 are predicted to fall below the Site VRP groundwater cleanup standard after 25 to 30 years.

7.1.3 Environmental Covenants

The VRP allows environmental covenants to be used to prevent access to groundwater where COCs exceed the applicable RRSs. Environmental covenants restricting future water well installation and withdrawal will be used to prevent exposure to Site contaminants in groundwater in areas where the cleanup levels are exceeded. Based on current groundwater concentrations, environmental covenants are expected to be required on two properties as discussed below.

7.1.3.1 Environmental Covenant for the MacGregor Property

The owner of the MacGregor property (Parcel 00212/00001/019), Albany Partners, LLC, will execute an environmental covenant when this Interim Final CSR is approved by the EPD.

7.1.3.2 Environmental Covenant for the Taylor Property

The Group contacted the owner of the Taylor Property (Taylor Real Estate Enterprises, LP) in December 2015 regarding the environmental covenant. Discussions with the owner are currently progressing, and it is anticipated that the Group will proceed with one of two options for the Taylor Property (Parcel 00212/00001/30E). The first and preferred option is to execute an environmental covenant for the Taylor Property in the near future followed by annual monitoring of monitoring wells MW-27 and MW-28 for 2 years post-delisting. The second option is to continue monitoring groundwater in wells MW-27 and/or MW-28 on the Taylor Property until such time that the EPD agrees that monitoring can be discontinued and the permanent monitoring wells abandoned.

7.2 Soil Measures

Currently all of the Site soil concentrations are in compliance with Site VRP cleanup levels except for two samples collected below the former source area near the storage shed. Concentrations of cis-1,2-DCE and VC measured in the subsurface soil in boring B-4 in 2012 and the concentration of cis-1,2-DCE in the subsurface soil in boring GP-1 in 2013 exceed the soil cleanup levels. Due to the depth below ground surface (4 to 10 feet below grade), no ecological receptors are expected to come into direct contact with impacted soils, and the only human receptor that could come into direct contact with impacted soils at that depth is an excavation worker. Therefore, the risks associated with the concentrations of VOCs remaining in subsurface soil were assessed in a focused risk assessment, as detailed in the Final Remediation Plan (BC 2015a). In addition, groundwater concentrations in MW-4 were used to assess actual migration of VOCs from subsurface soil to groundwater.

The results of the focused RA and groundwater concentration trend analysis, described below, will be used to demonstrate compliance with the Site VRP soil cleanup levels. The Georgia EPD accepted the focused RA and groundwater concentration trend analysis in their April 14, 2015 letter.

7.2.1 Focused Risk Assessment for VOCs in Subsurface Soil

The objective of the focused RA was to characterize potential adverse human health effects related to chemical constituents in subsurface soil in the former source area at the Site and provide information to evaluate whether the remaining concentrations of cis-1,2-DCE and VC in soil can be left in place without adversely affecting potential receptors.

The focused RA was submitted to the EPD in the Final Remediation Plan (BC 2015). Based on the results of this focused RA, the concentrations of cis-1,2-DCE and VC remaining in subsurface soil in the former source area do not pose significant health risk to an excavation worker, the only human receptor with exposure potential.

7.2.2 Evaluation of VOC Migration from Soil to Groundwater

As cis-1,2-DCE and VC have been detected in subsurface soil immediately upgradient of monitoring well MW-4 in the area of the former source area, the concentration trends in groundwater in MW-4 were analyzed to assess actual migration of these VOCs from subsurface soil to groundwater. Concentration trends for TCE, cis-1,2-DCE, and VC in groundwater in MW-4 were determined using the Mann-Kendall Test as described in the Final Remediation Plan (BC 2015a).

TCE and cis-1,2-DCE concentrations in groundwater from monitoring well MW-4 demonstrate statistically significant decreasing trends from 2004 to 2014. Concentrations have continued to decline despite the

upgradient source of VOCs in subsurface soil indicated by samples at borings B-4 and GP-1. Thus, the groundwater data indicate that cis-1,2-DCE and VC remaining in soil in the former source area is not negatively impacting the groundwater in this area. In addition, as the absence of TCE in subsurface soil indicates that the impact is historic and not ongoing, change in the declining groundwater concentration trend is not anticipated.



Section 8

Future Actions

This section describes the future actions planned for the MacGregor Golf Site following EPD's approval of this Interim Final CSR. The schedule for these tasks is outlined in Table 6.

8.1 Environmental Covenants and CSR Addendum

Once the Interim Final CSR has been approved by EPD, an environmental covenant for the MacGregor property will be executed as described in Section 7.1.3. In addition, discussions with the owner of the Taylor Property regarding an environmental covenant will continue. Once it is determined whether an environmental covenant can be executed for the Taylor Property, a Final CSR Addendum addressing the Taylor property will be prepared and submitted to EPD for approval.

Once the Interim Final CSR and subsequent Final CSR Addendum have been approved by EPD, it is anticipated that the Site will be delisted.

8.2 Annual Sampling and Reporting

Consistent with EPD's May 6, 2016 email, groundwater monitoring will be conducted annually following delisting. As indicated in the Final Remediation Plan and approved by EPD in their April 14, 2015 letter, annual monitoring will be conducted in monitoring wells MW-4, MW-11, MW-19, MW-24, MW-27, and MW-28. The additional monitoring will be conducted for a period of 2 years (anticipated in April 2018 and April 2019). Water levels in the wells will be gauged prior to sampling, and samples will be collected in accordance with USEPA and EPD protocols.

The results of the annual groundwater monitoring will be provided to the EPD within 60 days of sample collection. Additionally, the Group will report to EPD annually on the status of the environmental covenants. The annual letter report will state whether or not the groundwater limitation in the covenants is being abided by, and whether or not potable wells have been installed on any of these properties. A copy of the proposed annual property evaluation form for the MacGregor Property is provided in Appendix A.

No additional monitoring or reporting beyond activities described above will be conducted following submittal of this Interim Final CSR.

8.3 Monitoring Well Abandonment

Following delisting, or when otherwise approved by EPD, all of the monitoring wells associated with the Site will be properly abandoned except for the wells to be monitored annually (wells MW-4, MW-11, MW-19, MW-24, MW-27, and MW-28), as previously discussed with EPD. Following the second annual monitoring event and upon notice to EPD, the remaining six wells will be abandoned.

The wells will be abandoned according to procedures set forth in EPA Region 4's *Design and Installation of Monitoring Wells* (Quality System and Technical Procedures document (USEPA January 2013)). Abandonment will include pressure grouting the Schedule 40 PVC well screens and casings from the bottom to land surface so that the grout will migrate through the screen and grout the sand pack. The wells will not be over-drilled because all the wells were properly constructed at the time of installation with the annular spaces grouted to prevent vertical migration of groundwater around the wells. For wells located in unpaved areas, the well casing/grout and surrounding concrete pads will be removed to a depth of 1 to 2 feet below

land surface prior to grouting, a concrete patch will be placed over the abandoned well, and the borehole will be filled with soil to grade. Wells completed in paved areas will be grouted flush to land surface, including the area inside the well vaults.

8.4 Project Schedule

An updated project milestone schedule is provided in Table 6. This schedule is based on the assumption that the Site will be delisted following approval of this Final CSR.

Section 9

Engineer's Services this Period

Table 7 summarizes the effort of the BC Professional Engineer overseeing work on this project since the last submittal to the EPD (between July 28, 2016 and January 28, 2017).

Section 10

Limitations

This document was prepared solely for Albany Partners, LLC, Albany Sport, Co., and Brunswick Corporation (the Group) in accordance with professional standards at the time the services were performed and in accordance with the contract between the Group and Brown and Caldwell January 20, 2016. This document is governed by the specific scope of work authorized by the Group; it is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by the Group and other parties and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

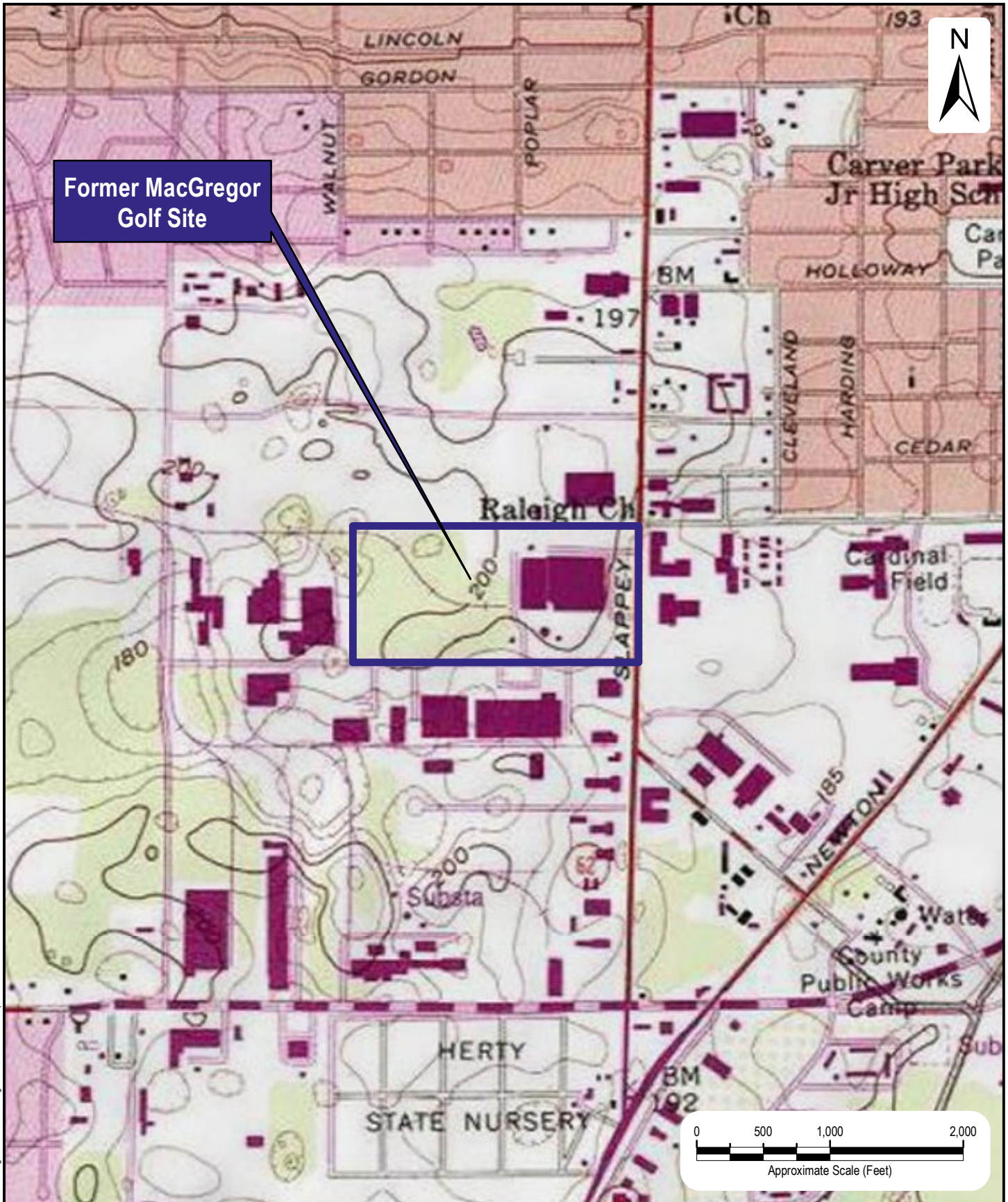
This document sets forth the results of certain services performed by Brown and Caldwell with respect to the property or facilities described therein (the Property). The Group recognizes and acknowledges that these services were designed and performed within various limitations, including budget and time constraints. These services were not designed or intended to determine the existence and nature of all possible environmental risks (which term shall include the presence or suspected or potential presence of any hazardous waste or hazardous substance, as defined under any applicable law or regulation, or any other actual or potential environmental problems or liabilities) affecting the Property. The nature of environmental risks is such that no amount of additional inspection and testing could determine as a matter of certainty that all environmental risks affecting the Property had been identified. Accordingly, THIS DOCUMENT DOES NOT PURPORT TO DESCRIBE ALL ENVIRONMENTAL RISKS AFFECTING THE PROPERTY, NOR WILL ANY ADDITIONAL TESTING OR INSPECTION RECOMMENDED OR OTHERWISE REFERRED TO IN THIS DOCUMENT NECESSARILY IDENTIFY ALL ENVIRONMENTAL RISKS AFFECTING THE PROPERTY.

Further, Brown and Caldwell makes no warranties, express or implied, with respect to this document, except for those, if any, contained in the agreement pursuant to which the document was prepared. All data, drawings, documents, or information contained this report have been prepared exclusively for the person or entity to whom it was addressed and may not be relied upon by any other person or entity without the prior written consent of Brown and Caldwell unless otherwise provided by the Agreement pursuant to which these services were provided.

Section 11

References

- Arcadis Geraghty & Miller (Arcadis). 1998. *Compliance Status Report*. Former MacGregor Golf Company Site, Albany, Georgia. December 1998.
- Arcadis Geraghty & Miller (Arcadis). 1999. *Revised Compliance Status Report*. Former MacGregor Golf Company Site, Albany, Georgia. November 1999.
- Arcadis Geraghty & Miller (Arcadis). 2000. *Revised Compliance Status Report Addendum*. Former MacGregor Golf Company Site, Albany, Georgia. October 2000.
- Brown and Caldwell. 2006. *Compliance Status Report*. Former MacGregor Golf Company Site, Albany, Georgia. August 2006.
- Brown and Caldwell. 2008. *Revised Compliance Status Report and Corrective Action Plan*. Former MacGregor Golf Company Site, Albany, Georgia. April 2008.
- Brown and Caldwell. 2009. *Revised Compliance Status Report and Corrective Action Plan Addendum*. Former MacGregor Golf Company Site, Albany, Georgia. December 2009.
- Brown and Caldwell. 2011. *Voluntary Remediation Program Application*. Former MacGregor Golf Company Site, Albany, Georgia. April 2011.
- Brown and Caldwell. 2012. *Revised Remediation Program Application*. Former MacGregor Golf Company Site, Albany, Georgia. February 2012.
- Brown and Caldwell. 2013a. *Voluntary Remediation Program Semiannual Progress Report*. Former MacGregor Golf Company Site, Albany, Georgia. January 2013.
- Brown and Caldwell. 2013b. *Voluntary Remediation Program Semiannual Progress Report*. Former MacGregor Golf Company Site, Albany, Georgia. July 2013.
- Brown and Caldwell. 2014a. *Voluntary Remediation Program Semiannual Progress Report*. Former MacGregor Golf Company Site, Albany, Georgia. January 2014.
- Brown and Caldwell. 2014b. *Voluntary Remediation Program Semiannual Progress Report*. Former MacGregor Golf Company Site, Albany, Georgia. July 2014.
- Brown and Caldwell. 2015a. *Voluntary Remediation Program Semiannual Progress Report and Final Remediation Plan*. Former MacGregor Golf Company Site, Albany, Georgia. January 2015.
- Brown and Caldwell. 2015b. *Voluntary Remediation Program Semiannual Progress Report*. Former MacGregor Golf Company Site, Albany, Georgia. July 2015.
- Brown and Caldwell. 2016a. *Voluntary Remediation Program Semiannual Progress Report*. Former MacGregor Golf Company Site, Albany, Georgia. January 2016.
- Brown and Caldwell. 2016b. *Voluntary Remediation Program Semiannual Progress Report*. Former MacGregor Golf Company Site, Albany, Georgia. September 2016.
- Clayton Environmental Consultants (Clayton). 1995. *Subsurface Investigation*. Former MacGregor Golf Company Site, Albany, Georgia.
- Geosciences, Inc. (Geosciences). 1994. *Report of Soil/Groundwater Sampling and Analysis*. Former MacGregor Golf Company Site, Albany, Georgia.
- Soil & Material Engineers, Inc. (S&ME). 1989. *Report of Subsurface Exploration and Soil Quality Investigation*. Former MacGregor Golf Company Site, Albany, Georgia.



Path: R:\Projects\MacGregor\GIS\MapDocs\MacGregor\VRP_2016\Figure 1 - Site Location Map.mxd

Brown AND Caldwell

PREPARED FOR:	Brunswick Corp., Albany Sport Co., & Albany Partners, LLC
DATE:	01/04/2017
SCALE:	AS SHOWN
DRAWN BY:	RPJ
CHECKED BY:	TCB, PCR
PROJECT #:	149071

Figure 1

Site Location Map

Former MacGregor Golf Company
1601 South Slapley Blvd, Albany, Dougherty County, Georgia



Spartan Property

Former MacGregor Golf Site

Detention Basin

Drainage Ditch

South Slapley Boulevard

Industry Avenue

Taylor Property

LEGEND

- Approximate Property Boundaries
- Deep Monitoring Well
- Shallow Monitoring Well
- Well Not Included in the Current Monitoring Program
- Deep Monitoring Well Installed by Others
- Deep Temporary Monitoring Well
- Shallow Temporary Monitoring Well

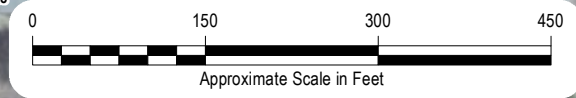


Figure 2

Site Map
Monitoring Well Locations

Former MacGregor Golf Company
1601 South Slapley Blvd; Albany, Dougherty County, Georgia



Prepared For: Brunswick Corp.,
Albany Sport Co., &
Albany Partners, LLC

DATE:	01/04/2017
SCALE:	AS SHOWN
DRAWN BY:	RPJ
CHECKED BY:	TCB
PROJECT #:	149071



LEGEND

- 148.00 Groundwater Elevation (Feet NAVD88)
- Groundwater Elevation Contour (Contour Interval is 0.50 Feet NAVD88)
- - - Estimated Groundwater Elevation Contour
- Apparent Groundwater Flow Direction
- ⊕ Deep Monitoring Well
- ⊙ Shallow Monitoring Well
- ⊕ Well Not Included in the Current Monitoring Program
- ⊕ Deep Monitoring Well Installed by Others
- ⊕ Deep Temporary Monitoring Well
- Approximate Property Boundaries

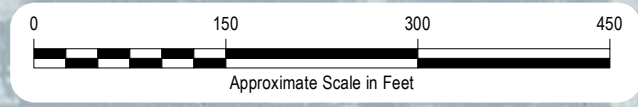


Figure 4
 Potentiometric Surface Map
 Lower Water Bearing Zone
 April 5, 2016

Former MacGregor Golf Company
 1601 South Slapsee Blvd; Albany, Dougherty County, Georgia

Brown AND Caldwell	Prepared For: Brunswick Corp., Albany Sport Co., & Albany Partners, LLC	DATE: 01/04/2017
		SCALE: AS SHOWN
		DRAWN BY: GTG
		CHECKED BY: SEJ
		PROJECT #: 149071

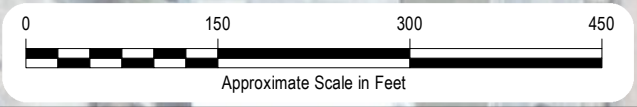
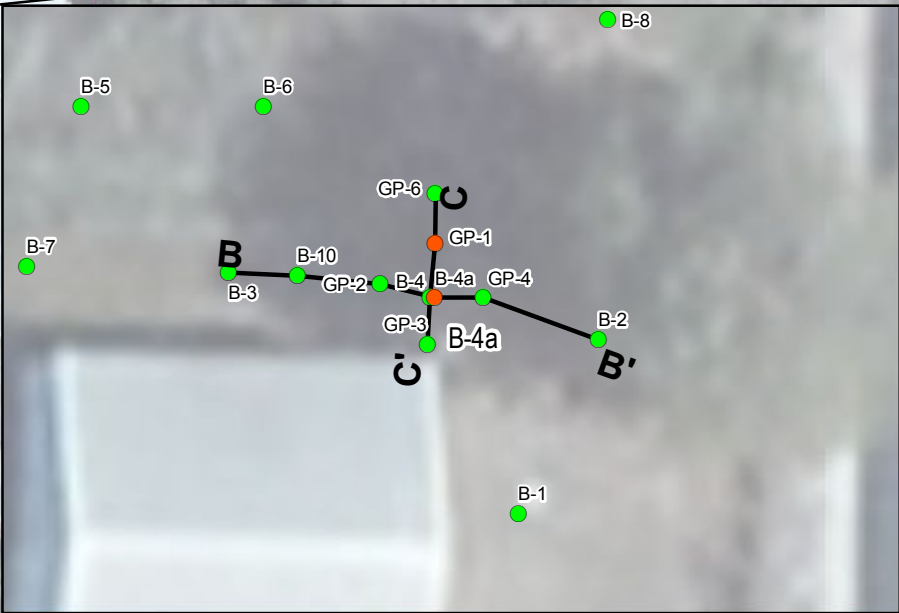


Figure 5a
Soil Compliance Status Map

LEGEND

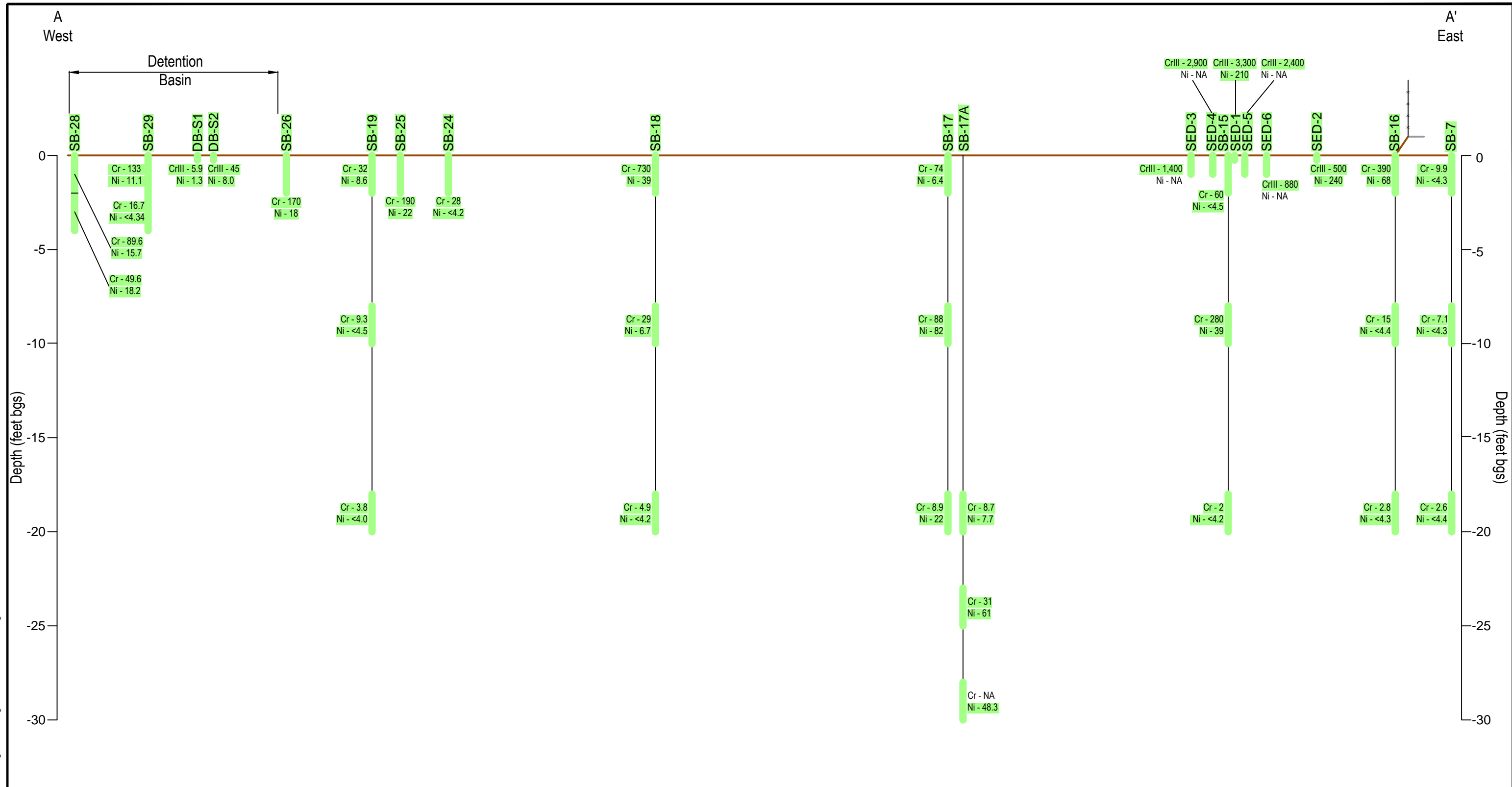
- Soil Sample Locations
 - Orange dot: Exceeds Soil Cleanup Standards
 - Green dot: Below Soil Cleanup Standards
- Black line: Cross Section
- Red dashed line: Approximate Property Boundary

Former MacGregor Golf Company
1601 South Slapley Blvd; Albany, Dougherty County, Georgia



Prepared For: Brunswick Corp., Albany Sport Co., & Albany Partners, LLC

DATE:	01/04/2017
SCALE:	AS SHOWN
DRAWN BY:	RPJ
CHECKED BY:	SEJ
PROJECT #:	149071



LEGEND

- Soil Boring
- Soil Sample Below Cleanup Standard

- Notes:
- 1) All concentrations are shown in milligrams per kilograms (mg/kg)-dry weight.
 - 2) All depths given as feet below ground surface (bgs). No points have surveyed elevations.
 - 3) The Nickel (Ni) cleanup standard is 2,665 mg/kg.
 - 4) The Total Chromium (Cr) cleanup standard is 1,200 mg/kg.
 - 5) The Trivalent Chromium (CrIII) cleanup standard is 3,066,000 mg/kg.
 - 6) All Results for Hexavalent Chromium (CrVI) and Cyanide were Below Detection Limits.

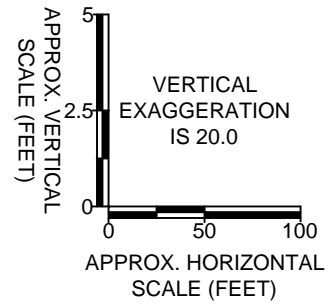
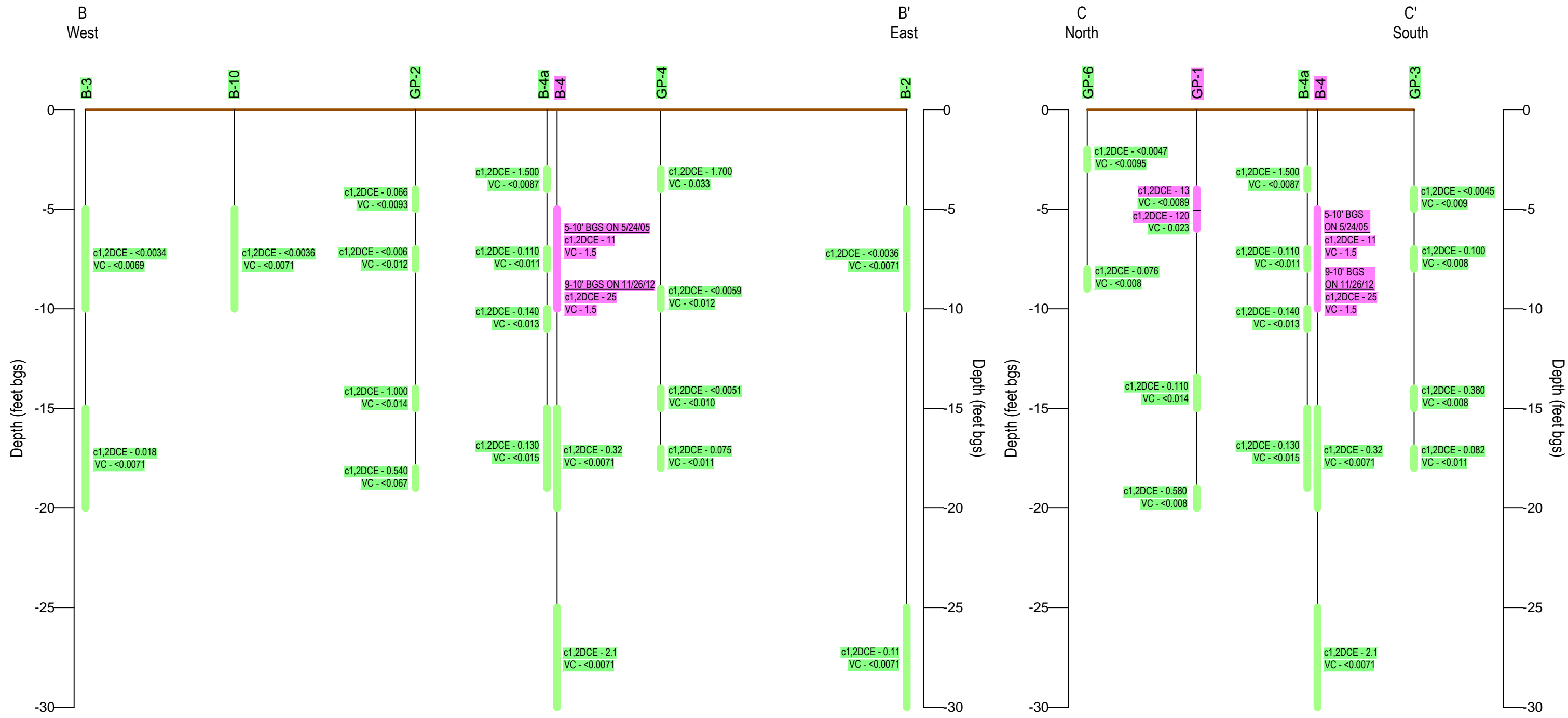


Figure 5b
Drainage Ditch Cross-Section A-A'
Soil Compliance Status

Former MacGregor Golf Company
 1601 South Slappey Blvd, Albany, Dougherty County, Georgia

	PREPARED FOR:	Brunswick Corp., Albany Sport Co., & Albany Partners, LLC	DATE:	01/04/2017
	SCALE:	AS SHOWN	DRAWN BY:	DRM
	CHECKED BY:	SEJ	PROJECT #:	149071



LEGEND

- Soil Boring
- Soil Sample Below Cleanup Standard
- Soil Sample Above Cleanup Standard

- Notes:**
- 1) All concentrations are shown in milligrams per kilograms (mg/kg)-dry weight.
 - 2) All depths given as feet below ground surface (bgs). No points have surveyed elevations.
 - 3) The cleanup standard for cis-1,2-Dichloroethene (c1,2DCE) is 7.0 mg/kg.
 - 2) The cleanup standard for Vinyl Chloride (VC) is 0.2 mg/kg.

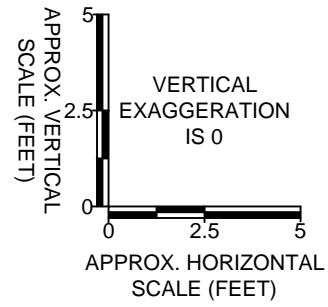


Figure 5c
 Former Source Area Cross-Sections B-B' and C-C'
 Soil Compliance Status

Former MacGregor Golf Company
 1601 South Slappey Blvd; Albany, Dougherty County, Georgia

PREPARED FOR: Brunswick Corp., Albany Sport Co., & Albany Partners, LLC

DATE: 01/04/2017
 SCALE: AS SHOWN
 DRAWN BY: DRM
 CHECKED BY: SEJ
 PROJECT #: 149071

Brown and Caldwell



LEGEND

	Exceeds cleanup standards - Shallow Monitoring Well		Exceeds cleanup
	Meets delineation standards - Shallow Monitoring Well		Exceeds delineation standards, but meets cleanup standards
	Exceeds delineation standards, but meets cleanup standards - Deep Monitoring Well		Meets delineation
	Meets delineation standards - Deep Monitoring Well		Approximate Property Boundary
	Not Sampled - Deep Monitoring		

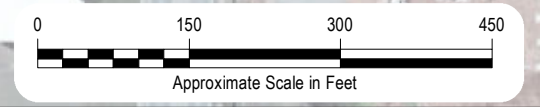


Figure 6a
Groundwater Compliance Status Map Overview

Former MacGregor Golf Company
1601 South Slapppy Blvd; Albany, Dougherty County, Georgia

Prepared For: Brunswick Corp., Albany Sport Co., & Albany Partners, LLC

	DATE: 01/04/2017
	SCALE: AS SHOWN
	DRAWN BY: RPJ
	CHECKED BY: SEJ
	PROJECT #: 149071



LEGEND

- Permanent Monitoring Well**
 - Exceeds cleanup standards - Shallow Monitoring Well (Red circle with white center)
 - Meets Delineation Standards - Shallow Monitoring Well (Green circle with white center)
 - Meets Delineation Standards - Deep Monitoring Well (Green circle with white center and crosshair)
 - Not Sampled - Deep Monitoring Well (Blue circle with white center and crosshair)
- Temporary Monitoring Well**
 - Exceeds cleanup standards (Red circle)
 - Exceeds delineation standards, but meets cleanup standards (Yellow circle)
 - Meets Delineation Standards (Green circle)
- Approximate Property Boundaries (Red dashed line)

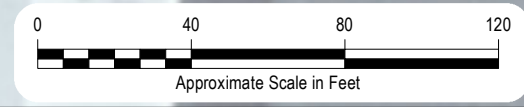
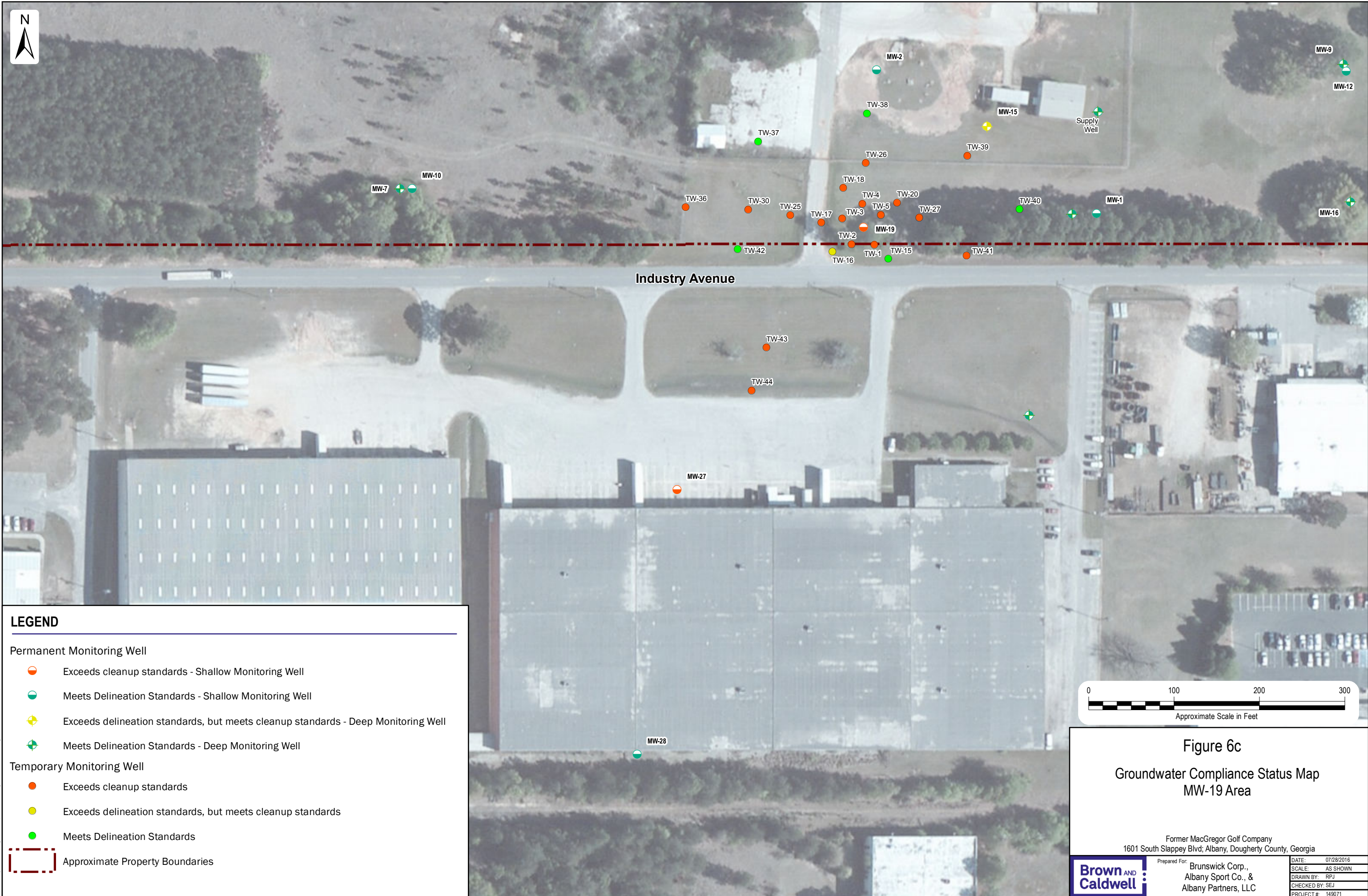


Figure 6b
Groundwater Compliance Status Map
MW-24 and MW-11 Area





Former MacGregor Golf Company
1601 South Slappey Blvd; Albany, Dougherty County, Georgia

Brown AND Caldwell	Prepared For: Brunswick Corp., Albany Sport Co., & Albany Partners, LLC	DATE: 01/04/2017
		SCALE: AS SHOWN
		DRAWN BY: RPJ
		CHECKED BY: SEJ
		PROJECT#: 149071







LEGEND

Permanent Monitoring Well

-  Exceeds cleanup standards - Shallow Monitoring Well
-  Meets Delineation Standards - Shallow Monitoring Well
-  Exceeds delineation standards, but meets cleanup standards - Deep Monitoring Well
-  Meets Delineation Standards - Deep Monitoring Well

Temporary Monitoring Well

-  Exceeds cleanup standards
-  Exceeds delineation standards, but meets cleanup standards
-  Meets Delineation Standards

 Approximate Property Boundaries

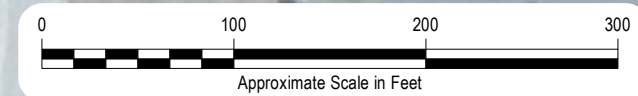


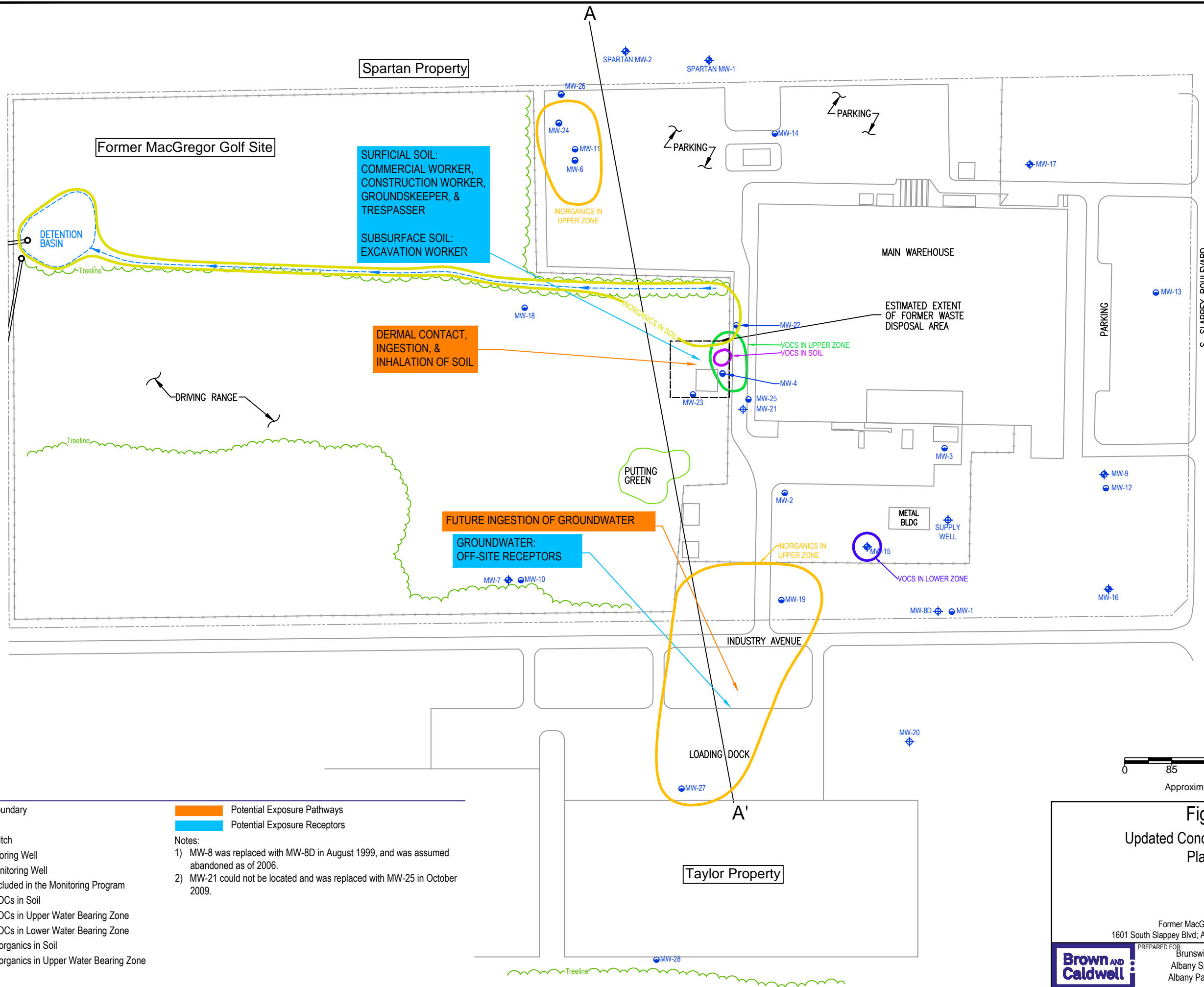
Figure 6c
Groundwater Compliance Status Map
MW-19 Area

Former MacGregor Golf Company
1601 South Slappey Blvd; Albany, Dougherty County, Georgia



Prepared For: Brunswick Corp.,
Albany Sport Co., &
Albany Partners, LLC

DATE:	07/28/2016
SCALE:	AS SHOWN
DRAWN BY:	RPJ
CHECKED BY:	SEJ
PROJECT #:	149071



LEGEND

- Property Boundary
- Fence
- - - Drainage Ditch
- ⊕ Deep Monitoring Well
- Shallow Monitoring Well
- ⊕ Well Not Included in the Monitoring Program
- Extent of VOCs in Soil
- Extent of VOCs in Upper Water Bearing Zone
- Extent of VOCs in Lower Water Bearing Zone
- Extent of Inorganics in Soil
- Extent of Inorganics in Upper Water Bearing Zone

- Orange box: Potential Exposure Pathways
- Blue box: Potential Exposure Receptors

Notes:
 1) MW-8 was replaced with MW-8D in August 1999, and was assumed abandoned as of 2006.
 2) MW-21 could not be located and was replaced with MW-25 in October 2009.

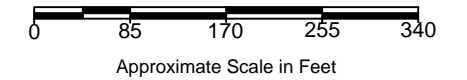


Figure 7
 Updated Conceptual Site Model
 Plan View

Former MacGregor Golf Company
 1601 South Slappey Blvd; Albany, Dougherty County, Georgia

PREPARED FOR:
 Brunswick Corp.,
 Albany Sport Co., &
 Albany Partners, LLC

DATE: 01/04/2017
 SCALE: AS SHOWN
 DRAWN BY: BAS
 CHECKED BY: SEJ
 PROJECT #: 149071



1/4/2017 12:49:02 PM
 R:\Projects\MacGregorGolf\Mapdocs\MacGregor Golf VRP 2016\Figure 8 - Updated Conceptual Site Model - Plan View.dwg
 DMCCLOY



LEGEND

- Property Boundary
- Approximate Water Table in Upper Water-Bearing Zone
- Approximate Water Table in Lower Water-Bearing Zone
- Potential Exposure Pathways
- Potential Exposure Receptors
- Soil
- Chert
- Semiconfining Unit / Chalky Limestone
- Limestone Bedrock
- Lower Confining Unit / Limestone
- VOC impacts
- Inorganics impacts

Drawing not to scale

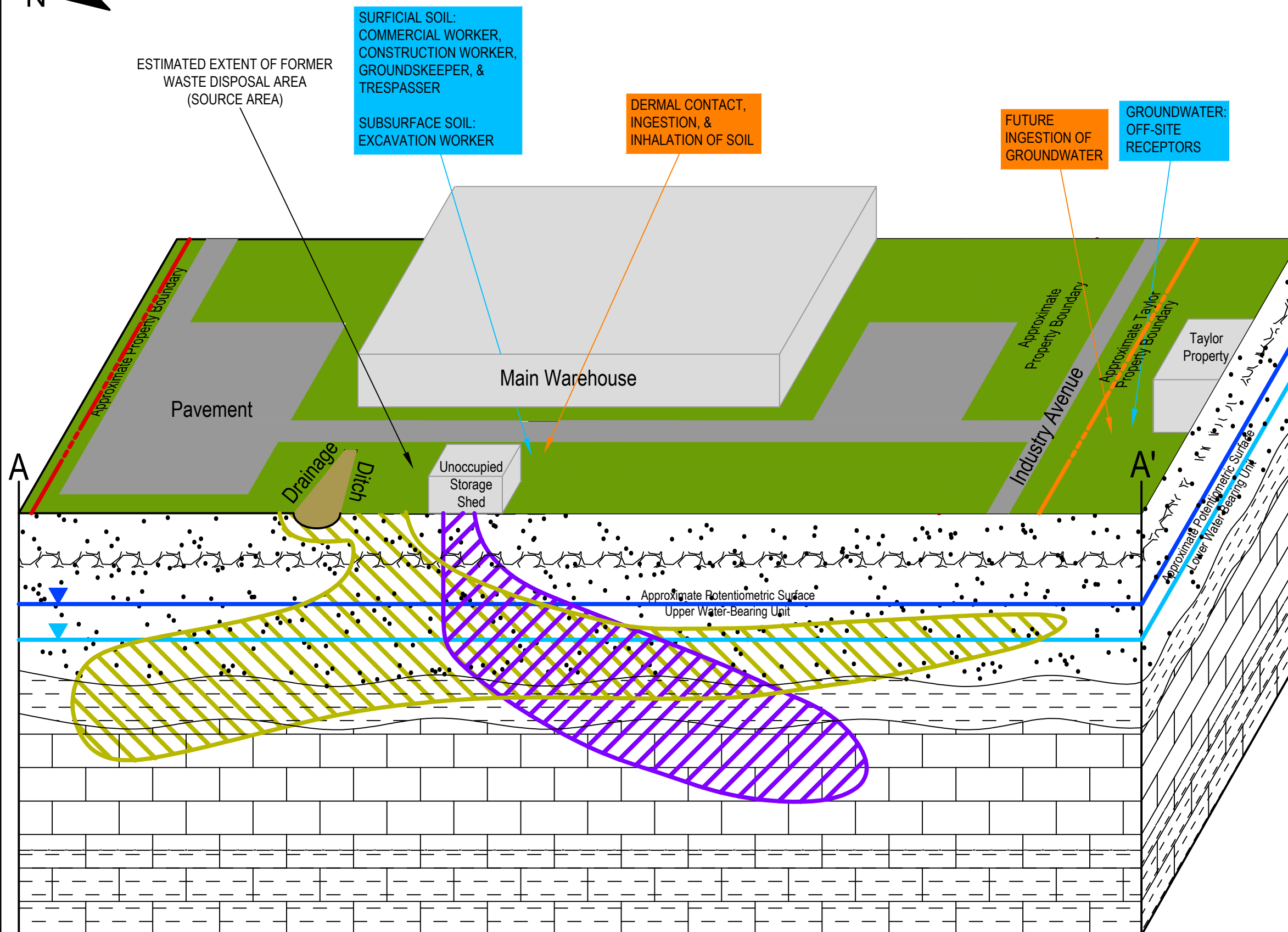


Figure 8
 Updated Conceptual Site Model
 Profile View

Former MacGregor Golf Company
 1601 South Slappey Blvd; Albany, Dougherty County, Georgia

Brown and Caldwell	PREPARED FOR:	Brunswick Corp., Albany Sport Co., & Albany Partners, LLC	DATE:	01/04/2017
	SCALE:	NOT TO SCALE	DRAWN BY:	BAS
	CHECKED BY:	SEJ	PROJECT #:	149071
	PROJECT #:			
	PROJECT #:			

**Table 1. Well Construction Data and Most Recent Groundwater Elevations
Former MacGregor Golf Company
Albany, Georgia**

Well ID	Well Completion Date	Water Bearing Unit	Northing (Feet - Georgia West State Plane NAD83)	Easting (Feet - Georgia West State Plane NAD83)	Total Depth ^a (feet)	Screened Interval ^a (feet)	Open Hole Interval ^a (feet)	Top of Casing Elevation ^b (feet)	April 5, 2016	
									Static Depth to Water ^a (feet)	Groundwater Elevation ^b (feet)
Upper Water Bearing Zone										
MW-1	6/28/1995	Upper	566051.98	2293023.36	45.88	33.5-48.5	NA	196.54	31.74	164.80
MW-2	6/28/1995	Upper	566220.01	2292765.44	40.19	25-40	NA	196.61	31.99	164.62
MW-3	6/29/1995	Upper	566348.21	2293042.11	46.33	32.50-47.50	NA	198.41	33.65	164.76
MW-4	6/29/1995	Upper	566470.82	2292611.54	46.96	28-41.50	NA	198.43	33.51	164.92
MW-6 ^c	7/25/1998	Upper	566911.71	2292317.29	60.13	NA	60-73	200.14	35.97	164.17
MW-10	7/15/1998	Upper	566080.73	2292221.58	48.37	33.30-48.30	NA	193.75	29.71	164.04
MW-11	7/15/1998	Upper	566921.91	2292317.31	48.30	33-48	NA	200.25	35.43	164.82
MW-12	7/16/1998	Upper	566218.48	2293315.55	45.28	35-50	NA	194.70	30.05	164.65
MW-13	10/22/1998	Upper	566566.74	2293392.86	50.38	35-50	NA	196.48	31.72	164.76
MW-14	10/20/1998	Upper	566899.03	2292756.18	49.71	34.80-49.80	NA	196.99	32.37	164.62
MW-18	6/17/1999	Upper	566533.98	2292176.82	43.70	28.8-43.8	NA	196.49	31.92	164.57
MW-19	6/17/1999	Upper	566035.83	2292750.34	44.12	29-44	NA	193.40	28.59	164.81
MW-21 ^{d,e}	3/11/2003	Upper	NM	NM	38.61	28.61-38.61	NA	196.80	NM	NM
MW-22	3/11/2003	Upper	566540.86	2292649.02	45.69	35.4-45.4	NA	196.89	32.16	164.73
MW-23	3/11/2003	Upper	566423.91	2292556.49	48.10	37.95-47.95	NA	199.73	35.10	164.63
MW-24 ^c	2/8/2008	Upper	566975.84	2292293.48	58.75	50-60	NA	200.39	36.22	164.17
MW-25 ^e	10/21/2009	Upper	566402.83	2292666.80	39.16	29-39	NA	195.82	31.20	164.62
MW-26 ^c	11/26/2012	Upper	567002.52	2292301.47	62.20	52.20-62.20	NA	200.90	36.09	164.81
MW-27	11/3/2015	Upper	565728.36	2292531.80	43.00	33-43	NA	188.56	24.00	164.56
MW-28	11/3/2015	Upper	565418.49	2292485.20	43.00	33-43	NA	188.04	24.10	163.94
TW-2 ^f	3/17/2014	Upper	566015.94	2292736.14	35.51	25.51-35.51	NA	193.36	NM	NM
TW-9 ^f	3/19/2014	Upper	566898.95	2292305.58	44.79	34.79-44.79	NA	200.18	NM	NM
TW-10 ^f	3/19/2014	Upper	566921.71	2292291.27	44.78	34.78-44.78	NA	200.19	NM	NM
TW-11 ^{c,f}	3/20/2014	Upper	566992.21	2292277.10	59.74	49.74-59.74	NA	200.54	NM	NM
TW-15 ^f	3/21/2014	Upper	565998.92	2292779.18	42.95	32.94-42.95	NA	193.99	NM	NM
TW-23 ^{c,f}	3/24/2014	Upper	567002.88	2292252.96	59.78	49.78-59.78	NA	200.26	NM	NM
TW-24 ^{c,f}	3/24/2014	Upper	566940.64	2292250.83	59.68	49.68-59.68	NA	200.15	NM	NM
TW-31 ^f	6/4/2014	Upper	566879.07	2292400.98	45.25	35.25-45.25	NA	201.28	NM	NM
TW-35 ^f	6/4/2014	Upper	566848.17	2292320.97	45.07	35.07-45.07	NA	200.02	NM	NM
TW-41 ^f	6/4/2014	Upper	566002.49	2292870.78	45.11	35.11-45.11	NA	196.35	NM	NM
TW-42 ^f	6/4/2014	Upper	566010.23	2292603.03	45.00	35.00-45.00	NA	193.33	NM	NM
TW-43 ^f	7/28/2015	Upper	565894.76	2292636.51	44.00	34.00-44.00	NA	191.20	NM	NM
TW-44 ^f	7/28/2015	Upper	565844.66	2292619.29	44.00	34.00-44.00	NA	189.53	NM	NM
Lower Water Bearing Zone										
MW-5	7/23/1998	Lower	566495.97	2292539.09	60.50	NA	60-73	199.89	35.96	163.93
MW-7	7/22/1998	Lower	566080.91	2292207.62	69.35	60-70	NA	194.22	30.19	164.03
MW-8/8D ^{d,g}	8/17/1999	Lower	NM	NM	207.50	197.3-207.3	NA	198.00	NM	NM
MW-9	7/20/1998	Lower	566227.03	2293312.05	69.28	NA	58.5-73.5	194.68	31.61	163.07
MW-15	10/23/1998	Lower	566153.85	2292894.90	75.38	65.70-75.70	NA	199.23	35.78	163.45
MW-16	10/21/1998	Lower	566065.57	2293320.44	75.47	64.70-74.70	NA	193.61	30.77	162.84
MW-17	6/17/1999	Lower	566871.51	2293186.97	73.81	66-76	NA	198.73	35.45	163.28
MW-20 ^c	8/14/1999	Lower	NM	NM	70.00	60-70	NA	193.31	NM	NM
Spartan MW-1	11/10/2008	Lower	567032.71	2292578.90	68.5	52-67	NA	206.37	41.88	164.49
Spartan MW-2	11/10/2008	Lower	567048.65	2292428.10	65.0	49.5-64.5	NA	205.78	41.02	164.76
Supply Well	1958	Lower	NM	NM	168.0	NA	NA	NM	NM	NM

^a Depth below top of casing.

^b Elevation is feet above mean sea level.

^c Wells are screened at the base of the upper water bearing zone and are therefore not used for contouring.

^d Wells are not gauged or sampled as part of the monitoring program.

^e Well MW-25 was replaced MW-21 in 2009.

^f Temporary wells were abandoned following survey and water level measurements.

^g Wells assumed to be abandoned or lost.

NA - Not Applicable

NM - Not Measured

NAD83 - North American Datum of 1983

Table 2. Historical Soil Detections of Site COCs

Former MacGregor Golf Company
Albany, Georgia

Location	Sample Depth (feet)	Sampling Date	Inorganics: Concentration (mg/kg)					Organics: Concentration (mg/kg)						
			Total Chromium	Hexavalent Chromium	Trivalent Chromium	Cyanide	Nickel	1,1-Dichloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Benzene	Ethylbenzene	Xylenes (Total)
Soil Delineation Standard			100	2.0	2.5	20	50	0.7	7.0	0.5	0.2	0.5	70	1,000
Soil Cleanup Standard			1,200	3.84	3,066,000	412.9	2,665	4.18	7.0	0.5	0.2	0.5	70	1,000
SB-1	0-2	7/27/98	12	NA	NA	< 0.2	2.9	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
	0-2 D	7/27/98	5.3	NA	NA	< 0.2	2.6	< 0.005	0.015	< 0.005	NA	NA	NA	< 0.005
	28-30	7/27/98	6.7	NA	NA	< 0.2	13	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
SB-2	0-2 ^a	7/25/98	7.6	NA	NA	0.2	4	< 0.005	< 0.005	< 0.005	NA	NA	NA	0.007
	0-2 ^b	7/25/98	NA	NA	NA	NA	NA	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
	29-31 ^a	7/25/98	2.7	NA	NA	< 0.2	2.7	< 0.005	< 0.005	< 0.005	NA	NA	NA	0.005
	29-31 ^b	7/25/98	NA	NA	NA	NA	NA	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
SB-3	34-36	7/25/98	9.4	NA	NA	0.4	14	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
	2-4 ^a	7/24/98	4.2	NA	NA	3.7	300	< 0.005	< 0.005	< 0.005	NA	NA	NA	0.019
	2-4 ^b	7/24/98	NA	NA	NA	NA	NA	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
	8-10 ^a	7/24/98	3.8	NA	NA	< 0.2	620	< 0.005	< 0.005	< 0.005	NA	NA	NA	0.017
	8-10 ^b	7/24/98	NA	NA	NA	NA	NA	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
	34-36 ^a	7/24/98	12	NA	NA	0.5	23	< 0.005	1 E	0.45 E	NA	NA	NA	0.019
	34-36 ^b	7/25/98	NA	NA	NA	NA	NA	< 0.005	0.1	0.04	NA	NA	NA	< 0.005
SB-4	0-2 ^a	7/25/98	530	NA	NA	0.2	52	< 0.005	< 0.005	< 0.005	NA	NA	NA	0.008
	0-2 ^b	7/25/98	NA	NA	NA	NA	NA	< 0.005	< 0.005	< 0.005	NA	NA	NA	0.0024 E
	29-31 ^a	7/25/98	1.8	NA	NA	< 0.2	< 2	< 0.005	< 0.005	< 0.005	NA	NA	NA	0.01
	29-31 ^b	7/25/98	NA	NA	NA	NA	NA	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
	34-36 ^a	7/24/98	8.6	NA	NA	0.3	5.2	< 0.005	< 0.005	< 0.005	NA	NA	NA	0.008
MW-5	3-5 ^a	7/18/98	4	NA	NA	< 0.2	< 2	< 0.005	< 0.005	< 0.005	NA	NA	NA	0.02
	3-5 ^b	7/18/98	NA	NA	NA	NA	NA	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
	8-10 ^a	7/18/98	6.1	NA	NA	< 0.2	< 2	< 0.005	< 0.005	< 0.005	NA	NA	NA	0.018
	8-10 ^b	7/18/98	NA	NA	NA	NA	NA	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
	32-34 ^a	7/18/98	< 1	NA	NA	< 0.2	< 2	< 0.005	< 0.005	< 0.005	NA	NA	NA	0.012
	32-34 ^b	7/18/98	NA	NA	NA	NA	NA	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
MW-6	13-15 ^a	7/21/98	13	NA	NA	< 0.2	< 1	< 0.005	< 0.005	< 0.005	NA	NA	NA	0.023
	13-15 ^b	7/21/98	NA	NA	NA	NA	NA	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
SB-5	0-2	10/23/98	6.8	NA	NA	NA	< 2	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
	8-10	10/23/98	5.5	NA	NA	NA	< 2	NA	NA	NA	NA	NA	NA	NA
	34-36	10/23/98	45	NA	NA	NA	28	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
SB-6	0-2	10/23/98	650	NA	NA	NA	61	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
	8-10	10/23/98	7.2	NA	NA	NA	< 2	NA	NA	NA	NA	NA	NA	NA
	20-22	10/23/98	NA	NA	NA	NA	NA	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
	34-36	10/23/98	30	NA	NA	NA	24	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.005
SB-7	0-2	6/24/99	9.9	NA	NA	< 1.1	< 4.3	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.01
	8-10	6/24/99	7.1	NA	NA	< 1.1	< 4.3	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.009
	18-20	6/24/99	2.6	NA	NA	< 1.1	< 4.4	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0096
SB-8	0-2	6/24/99	10	NA	NA	< 1.1	< 4.3	< 0.004	< 0.004	< 0.004	NA	NA	NA	< 0.0084
	8-10	6/24/99	6.3	NA	NA	< 1.1	< 4.3	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0092
	18-20	6/24/99	4.7	NA	NA	< 1.1	< 4.3	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0094
SB-9	0-2	6/24/99	14	NA	NA	< 1.1	< 4.4	< 0.004	< 0.004	< 0.004	NA	NA	NA	< 0.0087
	8-10	6/24/99	10	NA	NA	< 1.1	< 4.3	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0094
	18-20	6/24/99	2.6	NA	NA	< 1.1	< 4.3	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.009
SB-10	0-2	6/24/99	8.3	NA	NA	< 1.1	< 4.5	< 0.004	< 0.004	< 0.004	NA	NA	NA	< 0.0086
	8-10	6/24/99	7.8	NA	NA	< 1.1	< 4.4	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.009
	18-20	6/24/99	3.9	NA	NA	< 1.1	< 4.5	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0094
SB-11	0-2	6/24/99	8.1	NA	NA	< 1.1	< 4.9	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0093
	8-10	6/24/99	12	NA	NA	< 1.1	< 4.5	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0094
	18-20	6/24/99	8.4	NA	NA	< 1.1	< 4.5	< 0.004	< 0.004	< 0.004	NA	NA	NA	< 0.0089
SB-12	0-2	6/24/99	7.9	NA	NA	< 1.1	< 4.3	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.01
	8-10	6/24/99	6.9	NA	NA	< 1.1	< 4.6	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0094
	18-20	6/24/99	23	NA	NA	< 1.1	< 4.4	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0091
SB-13	0-2	6/24/99	17	NA	NA	< 1.1	6.3	< 0.004	< 0.004	< 0.004	NA	NA	NA	< 0.0089
	8-10	6/24/99	22	NA	NA	< 1.1	< 4.4	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.01
	18-20	6/24/99	5.2	NA	NA	< 1.1	< 4.4	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0096
SB-14	0-2	6/24/99	7.8	NA	NA	< 1.1	< 8.7	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.01
	8-10	6/24/99	9.9	NA	NA	< 1.1	< 4.3	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0093
	18-20	6/24/99	9	NA	NA	< 1.1	< 4.4	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0092

Table 2. Historical Soil Detections of Site COCs
Former MacGregor Golf Company
Albany, Georgia

Location	Sample Depth (feet)	Sampling Date	Inorganics: Concentration (mg/kg)					Organics: Concentration (mg/kg)							
			Total Chromium	Hexavalent Chromium	Trivalent Chromium	Cyanide	Nickel	1,1-Dichloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Benzene	Ethylbenzene	Xylenes (Total)	
Soil Delineation Standard			100	2.0	2.5	20	50	0.7	7.0	0.5	0.2	0.5	70	1,000	
Soil Cleanup Standard			1,200	3.84	3,066,000	412.9	2,665	4.18	7.0	0.5	0.2	0.5	70	1,000	
SB-15	0-2	6/25/99	60	NA	NA	< 1.1	< 4.5	< 0.004	< 0.004	< 0.004	NA	NA	NA	< 0.0089	
	8-10	6/25/99	280	NA	NA	< 1.3	39	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.01	
	18-20	6/25/99	2	NA	NA	< 1.1	< 4.2	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0094	
SB-16	0-2	6/25/99	390	NA	NA	< 1.2	68	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.011	
	8-10	6/25/99	15	NA	NA	< 1.1	< 4.4	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.0092	
	18-20	6/25/99	2.8	NA	NA	< 1.1	< 4.3	< 0.005	< 0.005	< 0.005	NA	NA	NA	< 0.009	
SB-17	0-2	8/5/99	74	NA	NA	NA	6.4	NA	NA	NA	NA	NA	NA	NA	
	8-10	8/5/99	88	NA	NA	NA	82	NA	NA	NA	NA	NA	NA	NA	
	18-20	8/5/99	8.9	NA	NA	NA	22	NA	NA	NA	NA	NA	NA	NA	
SB-17A	18-20	9/3/99	8.7	NA	NA	NA	7.7	NA	NA	NA	NA	NA	NA	NA	
	23-25	9/3/99	31	NA	NA	NA	61	NA	NA	NA	NA	NA	NA	NA	
	28-30	11/26/12	NA	NA	NA	NA	48.3	NA	NA	NA	NA	NA	NA	NA	
SB-18	0-2	8/5/99	730	NA	NA	NA	39	NA	NA	NA	NA	NA	NA	NA	
	8-10	8/5/99	29	NA	NA	NA	6.7	NA	NA	NA	NA	NA	NA	NA	
	18-20	8/5/99	4.9	NA	NA	NA	< 4.2	NA	NA	NA	NA	NA	NA	NA	
SB-19	0-2	8/5/99	32	NA	NA	NA	8.6	NA	NA	NA	NA	NA	NA	NA	
	8-10	8/5/99	9.3	NA	NA	NA	< 4.5	NA	NA	NA	NA	NA	NA	NA	
	18-20	8/5/99	3.8	NA	NA	NA	< 4	NA	NA	NA	NA	NA	NA	NA	
SB-20	0-2	8/5/99	7.2	NA	NA	NA	< 8.5	NA	NA	NA	NA	NA	NA	NA	
	8-10	8/5/99	11	NA	NA	NA	< 4.5	NA	NA	NA	NA	NA	NA	NA	
	18-20	8/5/99	9.8	NA	NA	NA	< 4.7	NA	NA	NA	NA	NA	NA	NA	
SB-21	0-2	8/5/99	5.3	NA	NA	NA	< 3.9	NA	NA	NA	NA	NA	NA	NA	
	8-10	8/5/99	22	NA	NA	NA	< 4.4	NA	NA	NA	NA	NA	NA	NA	
	18-20	8/5/99	12	NA	NA	NA	< 4.7	NA	NA	NA	NA	NA	NA	NA	
SB-22	0-2	8/5/99	13	NA	NA	NA	< 3.9	NA	NA	NA	NA	NA	NA	NA	
	8-10	8/5/99	15	NA	NA	NA	< 4.1	NA	NA	NA	NA	NA	NA	NA	
	18-20	8/5/99	6.6	NA	NA	NA	< 4.1	NA	NA	NA	NA	NA	NA	NA	
SB-23	0-2	8/5/99	7.5	NA	NA	NA	< 4.3	NA	NA	NA	NA	NA	NA	NA	
	8-10	8/5/99	7.8	NA	NA	NA	< 4.3	NA	NA	NA	NA	NA	NA	NA	
	18-20	8/5/99	9.2	NA	NA	NA	< 4.5	NA	NA	NA	NA	NA	NA	NA	
SB-24	0-2	9/13/00	28	NA	NA	NA	< 4.2	NA	NA	NA	NA	NA	NA	NA	
SB-25	0-2	9/13/00	190	NA	NA	NA	22	NA	NA	NA	NA	NA	NA	NA	
SB-26	0-2	9/13/00	170	NA	NA	NA	18	NA	NA	NA	NA	NA	NA	NA	
MW-17	0-2	6/16/99	6.6	NA	NA	< 1.1	< 4.2	NA	NA	NA	NA	NA	NA	NA	
	8-10	6/17/99	21	NA	NA	< 1.1	< 4.3	NA	NA	NA	NA	NA	NA	NA	
	18-20	6/17/99	5.8	NA	NA	< 1.1	< 4.4	NA	NA	NA	NA	NA	NA	NA	
MW-18	0-2	6/16/99	16	NA	NA	< 1.1	6.2	NA	NA	NA	NA	NA	NA	NA	
	8-10	6/16/99	19	NA	NA	< 1.2	< 4.7	NA	NA	NA	NA	NA	NA	NA	
	18-20	6/16/99	7.1	NA	NA	< 1.1	< 4.4	NA	NA	NA	NA	NA	NA	NA	
MW-20	0-2	8/5/99	18	NA	NA	NA	5.4	NA	NA	NA	NA	NA	NA	NA	
	8-10	8/5/99	16	NA	NA	NA	< 5.1	NA	NA	NA	NA	NA	NA	NA	
	18-20	8/5/99	2.1	NA	NA	NA	< 4.2	NA	NA	NA	NA	NA	NA	NA	
B-1	10-15	5/24/05	NA	NA	NA	NA	NA	< 0.0032	0.0062	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
	20-25	5/24/05	NA	NA	NA	NA	NA	< 0.0032	< 0.0036	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
	35-40	5/24/05	NA	NA	NA	NA	NA	< 0.0032	0.12	0.01	< 0.0071	0.0042	< 0.0036	< 0.0036	
B-2	5-10	5/24/05	NA	NA	NA	NA	NA	< 0.0032	< 0.0036	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
	25-30	5/24/05	NA	NA	NA	NA	NA	< 0.0032	0.11	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
B-3	5-10	5/24/05	NA	NA	NA	NA	NA	< 0.0034	< 0.0034	< 0.0034	< 0.0069	< 0.0034	32	130	
	15-20	5/24/05	NA	NA	NA	NA	NA	< 0.0032	0.018	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	

Table 2. Historical Soil Detections of Site COCs
Former MacGregor Golf Company
Albany, Georgia

Location	Sample Depth (feet)	Sampling Date	Inorganics: Concentration (mg/kg)					Organics: Concentration (mg/kg)							
			Total Chromium	Hexavalent Chromium	Trivalent Chromium	Cyanide	Nickel	1,1-Dichloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Benzene	Ethylbenzene	Xylenes (Total)	
Soil Delineation Standard			100	2.0	2.5	20	50	0.7	7.0	0.5	0.2	0.5	70	1,000	
Soil Cleanup Standard			1,200	3.84	3,066,000	412.9	2,665	4.18	7.0	0.5	0.2	0.5	70	1,000	
B-4	5-10	5/24/05	NA	NA	NA	NA	NA	0.013	11	< 0.0036	1.5	0.0098	4.00	16.6	
	9-10	11/26/12	NA	NA	NA	NA	NA	NA	25	NA	1.5	NA	NA	NA	
	9-10	11/26/12 Dup	NA	NA	NA	NA	NA	NA	37	NA	1.4	NA	NA	NA	
	15-20	5/24/05	NA	NA	NA	NA	NA	0.025	0.32	0.0056	< 0.0071	< 0.0036	0.0061	0.028	
	25-30	5/24/05	NA	NA	NA	NA	NA	0.025	2.1	0.014	< 0.0071	< 0.0036	0.67	3.21	
B-4a	3-4	2/22/13	NA	NA	NA	NA	NA	NA	1.500	NA	< 0.0087	NA	NA	NA	
	7-8	2/22/13	NA	NA	NA	NA	NA	NA	0.110	NA	< 0.011	NA	NA	NA	
	10-11	2/22/13	NA	NA	NA	NA	NA	NA	0.140	NA	< 0.013	NA	NA	NA	
	15-19	2/22/13	NA	NA	NA	NA	NA	NA	0.130	NA	< 0.015	NA	NA	NA	
B-5	15-20	5/25/05	NA	NA	NA	NA	NA	< 0.0032	< 0.0036	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
	25-30	5/25/05	NA	NA	NA	NA	NA	< 0.0032	< 0.0036	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
B-6	5-10	5/25/05	NA	NA	NA	NA	NA	< 0.0032	< 0.0036	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
	25-30	5/25/05	NA	NA	NA	NA	NA	< 0.0032	< 0.0036	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
B-7	5-10	5/25/05	NA	NA	NA	NA	NA	< 0.0032	< 0.0036	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
	15-20	5/25/05	NA	NA	NA	NA	NA	< 0.0032	< 0.0036	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
B-8	0-5	5/25/05	NA	NA	NA	NA	NA	< 0.0032	< 0.0036	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
	15-20	5/25/05	NA	NA	NA	NA	NA	< 0.0032	< 0.0036	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
B-10	5-10	5/25/05	NA	NA	NA	NA	NA	< 0.0032	< 0.0036	< 0.0036	< 0.0071	< 0.0036	< 0.0036	< 0.0036	
SB-27	0-2	2/20/08	58.60	NA	NA	NA	13.10	NA	NA	NA	NA	NA	NA	NA	
	2-4	2/20/08	52.90	NA	NA	NA	11.50	NA	NA	NA	NA	NA	NA	NA	
SB-28	0-2	2/20/08	89.60	NA	NA	NA	15.70	NA	NA	NA	NA	NA	NA	NA	
	2-4	2/20/08	49.60	NA	NA	NA	18.20	NA	NA	NA	NA	NA	NA	NA	
SB-29	0-2	2/20/08	133	NA	NA	NA	11.10	NA	NA	NA	NA	NA	NA	NA	
	2-4	2/20/08	16.70	NA	NA	NA	< 4.34	NA	NA	NA	NA	NA	NA	NA	
SB-30	0-2	2/20/08	5.47	NA	NA	NA	< 5.80	NA	NA	NA	NA	NA	NA	NA	
SB-31	0-2	2/20/08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8-10	2/20/08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SB-31	23-25	2/20/08	< 2.20	NA	NA	NA	< 4.41	NA	NA	NA	NA	NA	NA	NA	
	30-32	2/20/08	5.72	NA	NA	NA	< 5.30	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.019	< 0.0095	< 0.0095	
SB-32	0-2	2/20/08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8-10	2/20/08	13.00	NA	NA	NA	< 5.32	NA	NA	NA	NA	NA	NA	NA	
	23-25	2/20/08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SB-33	0-2	2/20/08	NA	NA	NA	< 1.08	NA	NA	NA	NA	NA	NA	NA	NA	
	34-36	2/20/08	6.53	NA	NA	NA	< 4.5	NA	NA	NA	NA	NA	NA	NA	
	40-42	2/20/08	8.70	NA	NA	NA	< 5.73	NA	NA	NA	NA	NA	NA	NA	
SB-34	34-36	2/20/08	22.50	NA	NA	NA	7.31	NA	NA	NA	NA	NA	NA	NA	
SB-35	0-2	2/20/08	9.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SB-36	0-2	4/8/08	8.56	NA	NA	NA	< 5.14	NA	NA	NA	NA	NA	NA	NA	
SB-37	0--2	4/8/08	9.46	NA	NA	NA	< 4.41	NA	NA	NA	NA	NA	NA	NA	
SB-38	0-2	4/8/08	6.39	NA	NA	NA	< 5.06	NA	NA	NA	NA	NA	NA	NA	
	0-2	4/8/08 Dup	3.4	NA	NA	NA	< 5.06	NA	NA	NA	NA	NA	NA	NA	
SB-39	34-36	4/8/08	12	NA	NA	NA	< 4.60	NA	NA	NA	NA	NA	NA	NA	
DB-S1	0-1	10/20/09	5.9	< 0.37	5.9	NA	1.3	NA	NA	NA	NA	NA	NA	NA	
DB-S2	0-1	10/20/09	45.0	< 0.75	45.0	NA	8.0	NA	NA	NA	NA	NA	NA	NA	
	0-1 D	10/20/09	40.0	< 0.60	40.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SED-1	0-3"	2000	3,300 ^c	NA	NA	NA	210	NA	NA	NA	NA	NA	NA	NA	
SED-2	0-3"	2000	500 ^c	NA	NA	NA	240	NA	NA	NA	NA	NA	NA	NA	
	0-3"	2000 Dup	490 ^c	NA	NA	NA	270	NA	NA	NA	NA	NA	NA	NA	
SED-3	0-1	10/20/09	1,400 ^d	< 0.36	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SED-4	0-1	10/20/09	2,900 ^d	< 0.42	2,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SED-5	0-1	10/20/09	2,400 ^d	< 0.36	2,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SED-6	0-1	10/20/09	880	< 0.35	880	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table 2. Historical Soil Detections of Site COCs
Former MacGregor Golf Company
Albany, Georgia

Location	Sample Depth (feet)	Sampling Date	Inorganics: Concentration (mg/kg)					Organics: Concentration (mg/kg)							
			Total Chromium	Hexavalent Chromium	Trivalent Chromium	Cyanide	Nickel	1,1-Dichloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Benzene	Ethylbenzene	Xylenes (Total)	
Soil Delineation Standard			100	2.0	2.5	20	50	0.7	7.0	0.5	0.2	0.5	70	1,000	
Soil Cleanup Standard			1,200	3.84	3,066,000	412.9	2,665	4.18	7.0	0.5	0.2	0.5	70	1,000	
GP-1	4-5	2/22/13	NA	NA	NA	NA	NA	NA	13	NA	< 0.0089	NA	NA	NA	
	5-6	2/22/13	NA	NA	NA	NA	NA	NA	120	NA	0.023	NA	NA	NA	
	14-15	2/22/13	NA	NA	NA	NA	NA	NA	0.110	NA	< 0.014	NA	NA	NA	
	19-20	2/22/13	NA	NA	NA	NA	NA	NA	0.580	NA	< 0.008	NA	NA	NA	
GP-2	4-5	2/22/13	NA	NA	NA	NA	NA	NA	0.066	NA	< 0.0093	NA	NA	NA	
	7-8	2/22/13	NA	NA	NA	NA	NA	NA	< 0.006	NA	< 0.012	NA	NA	NA	
	14-15	2/22/13	NA	NA	NA	NA	NA	NA	1.000	NA	< 0.014	NA	NA	NA	
	18-19	2/22/13	NA	NA	NA	NA	NA	NA	0.540	NA	< 0.0067	NA	NA	NA	
GP-3	4-5	2/22/13	NA	NA	NA	NA	NA	NA	< 0.0045	NA	< 0.009	NA	NA	NA	
	7-8	2/22/13	NA	NA	NA	NA	NA	NA	0.100	NA	< 0.008	NA	NA	NA	
	14-15	2/22/13	NA	NA	NA	NA	NA	NA	0.380	NA	< 0.008	NA	NA	NA	
	17-18	2/22/13	NA	NA	NA	NA	NA	NA	0.082	NA	< 0.011	NA	NA	NA	
GP-4	3-4	2/22/13	NA	NA	NA	NA	NA	NA	1.700	NA	0.033	NA	NA	NA	
	9-10	2/22/13	NA	NA	NA	NA	NA	NA	< 0.0059	NA	< 0.012	NA	NA	NA	
	14-15	2/22/13	NA	NA	NA	NA	NA	NA	< 0.0051	NA	< 0.010	NA	NA	NA	
	17-18	2/22/13	NA	NA	NA	NA	NA	NA	0.075	NA	< 0.011	NA	NA	NA	
GP-6	2-3	2/22/13	NA	NA	NA	NA	NA	NA	< 0.0047	NA	< 0.0095	NA	NA	NA	
	8-9	2/22/13	NA	NA	NA	NA	NA	NA	0.076	NA	< 0.008	NA	NA	NA	

NA - Sample not analyzed for this parameter.

Dup - Duplicate sample

mg/kg - milligrams per kilogram

E - Estimated (value above quantitation range)

J - Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an estimated value.

^a Soil from lab-contaminated Encore samplers run for 8260 VOCs.

^b Soil from soil jars run for 8260 VOCs.

^c The area immediately surrounding SED-1 and SED-2 was resampled in 2009. Based on the speciation of samples SED-3 through SED-6, the chromium in SED-1 and SED-2 was assumed to be in trivalent form.

^d Based on the speciation of samples SED-3 through SED-6, the chromium is in trivalent form.

Purple Highlight - Indicates concentration is greater than delineation standard.

Orange Highlight - Indicates concentration is greater than delineation and cleanup standard.

**Table 3. Historical Groundwater Detections of Site COCs
Former MacGregor Golf Company
Albany, Georgia**

Well ID	Sampling Date	Inorganics: Concentration (mg/L)					Organics: Concentration (mg/L)						
		Total Chromium	Hexavalent Chromium	Trivalent Chromium	Cyanide	Nickel	1,1-Dichloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Benzene	Ethylbenzene	Xylenes (Total)
GW Delineation Standard		0.10	0.01	0.01	0.20	0.10	0.007	0.07	0.005	0.002	0.005	0.7	10
GW Cleanup Standard		0.10	0.01	153	2.04	2.04	0.58	0.204	0.038	0.0033	0.0088	0.70	10
MW-1	6/30/95	0.05	NA	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.002	<0.002	<0.005
	6/10/98	NA	NA	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.002	<0.002	<0.005
	7/31/98	< 0.010	NA	NA	< 0.02	< 0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005
	6/30/99	NA	NA	NA	NA	NA	0.0017	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	8/6/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	NA	NA	NA	NA
	3/12/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
MW-2	6/30/95	0.04	NA	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.002	<0.002	<0.005
	6/10/98	NA	NA	NA	NA	NA	<0.005	0.0059	<0.005	<0.002	<0.002	<0.002	<0.005
	7/31/98	< 0.010	NA	NA	< 0.02	< 0.02	<0.002	0.004	<0.002	<0.002	<0.002	<0.002	<0.005
MW-3	6/30/95	0.05	NA	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.002	<0.002	<0.005
	6/10/98	NA	NA	NA	NA	NA	0.0094	<0.005	0.005	<0.002	<0.002	<0.002	<0.005
	7/31/98	< 0.010	NA	NA	< 0.02	0.03	0.007	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005
	6/30/99	NA	NA	NA	NA	NA	0.0058	0.0019	<0.001	<0.001	<0.001	<0.001	<0.002
	2/26/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
MW-4	6/30/95	< 0.010	NA	NA	NA	NA	<0.005	1.560	0.376	0.065	<0.002	<0.002	<0.005
	6/10/98	NA	NA	NA	NA	NA	<0.005	2.900	0.310	<0.002	<0.002	<0.002	<0.005
	7/29/98	0.33	NA	NA	< 0.02	0.39	<0.002	2.800	0.350	0.013	<0.002	<0.002	<0.005
	6/30/99	NA	NA	NA	NA	NA	<0.025	3.700	0.460	<0.001	<0.025	<0.025	<0.050
	2/26/03	NA	NA	NA	NA	NA	<0.0002	2.200	0.290	0.017	<0.0002	<0.0003	<0.0015
	5/21/03	NA	NA	NA	NA	NA	<0.0002	1.300	0.200	0.0034	<0.0002	<0.0003	<0.0015
	6/13/03	NA	NA	NA	NA	NA	<0.0002	2.200	0.190	0.0022	<0.0002	<0.0003	<0.0015
	7/18/03	NA	NA	NA	NA	NA	<0.007	1.500	0.200	0.0068	<0.009	<2.300	<10.000
	8/14/03	NA	NA	NA	NA	NA	<0.00022	1.600	0.200	0.0020	<0.00019	<0.00032	<0.0015
	2/19/04	NA	NA	NA	NA	NA	<0.007	1.800	0.370	0.013	<0.009	<2.300	<10.000
	3/29/04	NA	NA	NA	NA	NA	<0.005	1.700	0.130	0.021	<0.005	<0.005	<0.015
	5/19/04	NA	NA	NA	NA	NA	<0.005	0.890	0.110	0.0087	<0.005	<0.005	<0.015
	8/23/04	NA	NA	NA	NA	NA	<0.005	1.400	0.180	0.0074	<0.005	<0.005	<0.015
	5/30/06	< 0.010	NA	NA	NA	2.83	<0.005	1.100	0.170	0.0088	<0.005	<0.005	<0.015
	10/22/09	NA	NA	NA	NA	NA	0.00025 J	0.400	0.079	0.015	<0.00028	<0.00025	<0.00068
	7/28/10	NA	NA	NA	NA	NA	<0.005	0.690	0.200	0.025	<0.005	<0.005	<0.015
	3/31/11	NA	NA	NA	NA	NA	<0.005	0.410	0.110	0.0048	<0.005	<0.005	<0.015
	1/11/12	NA	NA	NA	NA	0.0725	NA	NA	NA	NA	NA	NA	NA
	11/28/12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/22/13	< 0.010	< 0.010	< 0.010	NA	0.203	< 0.005	0.380	0.120	0.015	< 0.005	< 0.005	< 0.005
1/7/14	NA	NA	NA	NA	NA	< 0.005	0.290	0.097	0.011	< 0.005	< 0.005	< 0.005	
7/27/15	NA	NA	NA	NA	NA	< 0.005	0.410	0.110	0.0093	< 0.005	< 0.005	< 0.005	
4/5/16	NA	NA	NA	NA	NA	< 0.005	0.480	0.110	0.0210	< 0.005	< 0.005	< 0.005	
MW-5	7/30/98	0.01	NA	NA	< 0.02	< 0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005
	6/28/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	8/9/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	NA	NA	NA	NA
	9/3/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	NA	NA	NA	NA
	3/13/03	NA	NA	NA	NA	NA	<0.0002	0.030	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
	5/30/06	NA	NA	NA	NA	< 0.02	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.015
MW-6	7/30/98	0.01	NA	NA	< 0.02	< 0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005
	6/28/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	2/25/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
MW-7	7/30/98	< 0.010	NA	NA	< 0.02	< 0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005
	6/29/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	3/13/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015

Table 3. Historical Groundwater Detections of Site COCs
Former MacGregor Golf Company
Albany, Georgia

Well ID	Sampling Date	Inorganics: Concentration (mg/L)					Organics: Concentration (mg/L)						
		Total Chromium	Hexavalent Chromium	Trivalent Chromium	Cyanide	Nickel	1,1-Dichloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Benzene	Ethylbenzene	Xylenes (Total)
GW Delineation Standard		0.10	0.01	0.01	0.20	0.10	0.007	0.07	0.005	0.002	0.005	0.7	10
GW Cleanup Standard		0.10	0.01	153	2.04	2.04	0.58	0.204	0.038	0.0033	0.0088	0.70	10
MW-8	7/15/98	NA	NA	NA	NA	NA	0.007	<0.002	0.003	<0.002	<0.002	<0.002	<0.005
	7/31/98	< 0.010	NA	NA	0.03	< 0.02	0.008	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005
	6/8/99	NA	NA	NA	NA	NA	0.014	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005
	6/28/99	NA	NA	NA	NA	NA	0.016	<0.001	<0.0002	<0.001	<0.001	<0.001	<0.002
MW-8D	6/17/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	NA	NA	NA	NA
MW-9	7/29/98	< 0.010	NA	NA	< 0.02	< 0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005
	6/28/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	8/6/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	NA	NA	NA	NA
	2/25/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
	2/21/08	NA	NA	NA	NA	NA	<0.007	NA	NA	NA	NA	NA	NA
MW-10	7/29/98	0.01	NA	NA	< 0.02	< 0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005
	6/29/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	3/13/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
MW-11	7/30/98	0.04	NA	NA	< 0.02	< 0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005
	6/28/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	9/13/99	0.37 ^a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/25/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
	2/21/08	0.0404	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/21/09	0.0250	0.0300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/29/10	0.1930	0.0322	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/29/11	0.0285	0.0243	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/23/13	0.0459	0.0402	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/7/14	0.0319	0.0351	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/27/15	0.0864	0.0895	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
4/6/16	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
MW-12	7/30/98	< 0.010	NA	NA	< 0.02	< 0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005
	6/28/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	2/25/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
	7/28/10	NA	NA	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.015
	3/28/11	NA	NA	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.015
MW-13	10/26/98	NA	NA	NA	NA	NA	<0.002	<0.002	<0.002	<0.002	0.014	0.770	4.5
	6/28/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	2/25/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
	3/20/10	< 0.010	< 0.010	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.015
	7/28/10	< 0.010	< 0.010	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.015
3/29/11	< 0.010	< 0.010	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.015	
MW-14	10/27/98	NA	NA	NA	NA	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005
	6/28/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	2/25/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
MW-15	10/26/98	NA	NA	NA	NA	NA	0.057	<0.002	0.004	<0.002	<0.002	<0.002	<0.005
	6/30/99	NA	NA	NA	NA	NA	0.340	<0.002	0.032	<0.002	<0.002	<0.002	<0.004
	2/26/03	NA	NA	NA	NA	NA	0.066	< 0.0004	0.008	< 0.0001	< 0.0002	< 0.0003	< 0.0015
MW-16	10/26/98	NA	NA	NA	NA	NA	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.005
	6/29/99	NA	NA	NA	NA	NA	< 0.001	< 0.001	0.0017	< 0.001	< 0.001	< 0.001	< 0.0002
	8/6/99	NA	NA	NA	NA	NA	< 0.001	0.0018	0.004	NA	NA	NA	NA
	9/3/99	NA	NA	NA	NA	NA	< 0.001	0.0012	< 0.001	NA	NA	NA	NA
	9/13/00	NA	NA	NA	< 0.01	NA	< 0.001	0.0015	0.0029	< 0.001	< 0.001	< 0.001	< 0.002
2/25/03	NA	NA	NA	NA	NA	< 0.0002	< 0.0004	< 0.0002	< 0.0001	< 0.0002	< 0.0003	< 0.0015	

Table 3. Historical Groundwater Detections of Site COCs
Former MacGregor Golf Company
Albany, Georgia

Well ID	Sampling Date	Inorganics: Concentration (mg/L)					Organics: Concentration (mg/L)						
		Total Chromium	Hexavalent Chromium	Trivalent Chromium	Cyanide	Nickel	1,1-Dichloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Benzene	Ethylbenzene	Xylenes (Total)
GW Delineation Standard		0.10	0.01	0.01	0.20	0.10	0.007	0.07	0.005	0.002	0.005	0.7	10
GW Cleanup Standard		0.10	0.01	153	2.04	2.04	0.58	0.204	0.038	0.0033	0.0088	0.70	10
MW-17	6/28/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	8/9/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	NA	NA	NA	NA
	2/25/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
MW-18	6/26/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	8/9/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	NA	NA	NA	NA
	9/13/99	<0.010	NA	NA	NA	<0.04	NA	NA	NA	NA	NA	NA	NA
MW-19	6/28/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	8/9/99	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	NA	NA	NA	NA
	2/26/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
	7/28/10	0.0117	0.0139	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.015
	3/29/11	<0.010	<0.010	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.015
	10/23/13	0.296	0.284 J	0.0113 J	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/8/14	0.196	0.199	<0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/8/14 Dup	0.204	0.198	<0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/27/15	0.0236	0.0301	<0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/7/16	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
4/7/16 Dup	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
MW-20	8/17/99	NA	NA	NA	NA	NA	0.0047	<0.001	0.0016	NA	NA	NA	NA
	9/3/99	NA	NA	NA	NA	NA	0.0073	<0.001	<0.001	NA	NA	NA	NA
	9/13/00	NA	NA	NA	<0.01	NA	0.0085	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
	2/25/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
MW-21	3/13/03	NA	NA	NA	NA	NA	<0.0002	0.030	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
MW-22	3/13/03	NA	NA	NA	NA	NA	<0.0002	<0.0004	0.007	<0.0001	<0.0002	<0.0003	<0.0015
	5/30/06	NA	NA	NA	NA	<0.02	<0.005	0.0084	0.0090	<0.002	<0.005	<0.005	<0.015
	10/22/09	NA	NA	NA	NA	NA	<0.00024	0.0062	0.0053	<0.00029	<0.00028	<0.00025	<0.00068
	7/28/10	NA	NA	NA	NA	NA	<0.005	0.0095	0.0089	<0.002	<0.005	<0.005	<0.015
	3/31/11	NA	NA	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.015
11/28/12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
MW-23	3/13/03	NA	NA	NA	NA	NA	<0.0002	0.030	<0.0002	<0.0001	<0.0002	<0.0003	<0.0015
	5/30/06	NA	NA	NA	NA	<0.02	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.015
	2/8/08	0.33	NA	NA	NA	<0.02	NA	NA	NA	NA	NA	NA	NA
	10/22/09	NA	NA	NA	NA	NA	<0.00024	0.0012	0.00059J	<0.00029	<0.00028	<0.00025	<0.00068
	7/28/10	NA	NA	NA	NA	NA	<0.005	0.0089	<0.005	<0.002	<0.005	<0.005	<0.015
	3/29/11	NA	NA	NA	NA	NA	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.005
	10/2/12	<0.010	<0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/22/13	<0.010	<0.010	<0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA	
MW-24	4/9/08	0.386	NA	NA	NA	<0.02	NA	NA	NA	NA	NA	NA	NA
	10/21/09	0.11	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/29/10	0.108	0.107	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/29/10 Dup	0.109	0.110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/30/11	0.120	0.0945	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/11/12	0.153 ^b	0.125 ^b	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/2/12	0.138 ^c	0.105	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/2/12 Dup	0.139	0.116	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/23/13	0.0829	0.0513	0.0316	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/30/15	0.0715	0.0772	<0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
4/6/16	0.242	0.209	0.0328	NA	NA	NA	NA	NA	NA	NA	NA	NA	
MW-25	10/22/09	NA	NA	NA	NA	NA	<0.00024	0.004	0.0018	<0.00029	<0.00028	<0.00025	<0.00068
	7/28/10	NA	NA	NA	NA	NA	<0.005	0.011	0.0055	<0.002	<0.005	<0.005	<0.015
	3/29/11	NA	NA	NA	NA	NA	<0.005	0.0083	<0.005	<0.002	<0.005	<0.005	<0.015

Table 3. Historical Groundwater Detections of Site COCs
Former MacGregor Golf Company
Albany, Georgia

Well ID	Sampling Date	Inorganics: Concentration (mg/L)					Organics: Concentration (mg/L)						
		Total Chromium	Hexavalent Chromium	Trivalent Chromium	Cyanide	Nickel	1,1-Dichloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Benzene	Ethylbenzene	Xylenes (Total)
GW Delineation Standard		0.10	0.01	0.01	0.20	0.10	0.007	0.07	0.005	0.002	0.005	0.7	10
GW Cleanup Standard		0.10	0.01	153	2.04	2.04	0.58	0.204	0.038	0.0033	0.0088	0.70	10
MW-26	11/29/12	0.175	0.184	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/29/12 Dup	0.175	0.180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/20/2013	0.0959	< 0.010	0.0959	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/20/2013 Dup	0.0979	< 0.010	0.0979	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/9/2013	0.0337	0.031	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/24/2013	< 0.010	< 0.010	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/24/2013 Dup	< 0.010	< 0.010	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-27	1/8/2014	< 0.010	< 0.010	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/5/2015	< 0.010	< 0.010	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/5/2015 Dup	< 0.010	< 0.010	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-28	4/5/2016	< 0.010	0.0115	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/5/2015	< 0.010	< 0.010	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
Spartan MW-2	4/5/2016	< 0.010	< 0.010	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/21/2013	0.0101	< 0.050	0.0101	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/8/2013	< 0.010	< 0.010	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
Supply Well	5/8/2013 Dup	< 0.010	< 0.010	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/22/98	NA	NA	NA	NA	NA	0.003	< 0.002	0.003	< 0.002	< 0.002	< 0.002	< 0.005
	6/15/99	NA	NA	NA	NA	NA	0.0011	< 0.001	0.0026	< 0.001	< 0.001	< 0.001	< 0.002
DB-SW-1 (Surface Water)	3/12/03	NA	NA	NA	NA	0.006	< 0.0004	< 0.0002	< 0.0001	< 0.0002	< 0.0003	< 0.0015	
TW-1	10/20/09	0.0027J	NA	NA	NA	< 0.0022	NA	NA	NA	NA	NA	NA	NA
TW-2	3/18/2014	0.160	0.143	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/18/2014 Dup	0.034	0.026J	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-3	3/18/2014	0.076	0.068	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-4	3/18/2014	0.125	0.110	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-5	3/19/2014	0.075	0.070J	< 0.01 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-6	3/19/2014	0.020	< 0.01	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-7	3/19/2014	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-8	3/19/2014	0.020	0.013	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-9	3/20/2014	0.015J	< 0.01 UJ	0.015J	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-10	3/20/2014	0.011	< 0.01	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-11	3/20/2014	1.740	1.490	0.250	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/20/2014 Dup	1.730	1.460	0.274	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-12	3/20/2014	0.011	< 0.01	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-13	3/21/2014	0.060	0.056	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-14	3/21/2014	0.587	0.580	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-15	3/22/2014	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-16	6/2/2014	0.018	< 0.01	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-17	3/22/2014	0.116	0.102	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-18	3/23/2014	0.107	0.098	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-20	3/23/2014	0.199	0.185	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-22	3/21/2014	0.019	0.017	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-23	3/24/2014	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-24	3/24/2014	0.021	0.013	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-25	3/23/2014	0.086	0.075	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-26	3/25/2014	0.083	0.068J	0.015J	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-27	3/25/2014	0.168	0.147J	0.022J	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-28	3/25/2014	0.039	0.024	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-29	3/26/2014	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-30	3/25/2014	0.064	0.047	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-31	6/4/2013	0.024	0.013	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-32	6/4/2013	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/5/2014	< 0.01	< 0.01 UJ	< 0.01 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-33	6/5/2014 Dup	< 0.01	< 0.01 UJ	< 0.01 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/5/2014	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-34	6/5/2014	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-35	6/5/2014	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-36	6/3/2014	0.041	0.028J	0.012J	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-37	6/3/2014	0.015	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-38	6/4/2014	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-39	6/4/2014	0.040	0.034J	< 0.01 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 3. Historical Groundwater Detections of Site COCs
Former MacGregor Golf Company
Albany, Georgia**

Well ID	Sampling Date	Inorganics: Concentration (mg/L)					Organics: Concentration (mg/L)						
		Total Chromium	Hexavalent Chromium	Trivalent Chromium	Cyanide	Nickel	1,1-Dichloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Benzene	Ethylbenzene	Xylenes (Total)
GW Delineation Standard		0.10	0.01	0.01	0.20	0.10	0.007	0.07	0.005	0.002	0.005	0.7	10
GW Cleanup Standard		0.10	0.01	153	2.04	2.04	0.58	0.204	0.038	0.0033	0.0088	0.70	10
TW-40	6/3/2014	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-41	6/3/2014	0.049	0.037	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/3/2014 Dup	0.050	0.038	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-42	6/2/2014	< 0.01	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-43	7/28/2015	0.0197	0.0129	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/28/2015 Dup	0.0190	0.0148	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-44	7/28/2015	0.0163	0.0166	< 0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA - Sample not analyzed for this parameter.

J - Result qualified as estimated by the laboratory or as the result of data verification.

Dup - Duplicate sample

mg/L - milligrams per liter

^a MW-11 sample from 9/13/99 was highly turbid at time of sample collection; data not representative of groundwater conditions.

^b MW-24 samples from 1/11/12 were highly turbid at time of sample collection. Concentrations of dissolved total chromium and dissolved hexavalent chromium were 0.122 mg/L and 0.115 mg/L, respectively.

^c MW-24 samples from 10/2/12 were highly turbid at time of sample collection. Concentration of total dissolved chromium in the parent and duplicate samples was 0.134 mg/L. The samples were not analyzed for dissolved

Purple Highlight - Indicates concentration is greater than delineation standard.

Orange Highlight - Indicates concentration is greater than delineation and cleanup standard.

**Table 4. Summary of Site Status Relative to Delineation and Cleanup Standards
Former MacGregor Golf Company
Albany, Georgia**

Delineation		Remediation	
Areas Requiring Additional Delineation	Proposed Plans to Complete Delineation	Areas Requiring Cleanup	Measures to Demonstrate Compliance
Soil			
• None	• None	<ul style="list-style-type: none"> Former Waste Disposal Area: cis-1,2-DCE and VC exceed cleanup standards in B4 (5-10 ft bgs) and GP-1 (4-6 ft bgs). 	<ul style="list-style-type: none"> Formal Waste Disposal Area: Focused risk assessment and groundwater concentration trend analysis were used to demonstrate compliance with cleanup standards, as detailed in the Final Remediation Plan (BC 2015a) and accepted by the Georgia EPD in their April 14, 2015 letter.
Groundwater			
• None	• None	<ul style="list-style-type: none"> MW-4 (upper water bearing zone, in former waste disposal area): TCE, cis-1,2-DCE, and VC exceed cleanup standards. Vicinities of MW-11 and MW-24 (upper water bearing zone, near northern property boundary): Total and/or hexavalent chromium exceed cleanup standards. Vicinity of MW-19 (upper water bearing zone, near southern property boundary): Total and/or hexavalent chromium exceed cleanup standards. 	<ul style="list-style-type: none"> MW-4: Empirical evidence and groundwater concentration trend analysis were used to demonstrate compliance with cleanup standards in the MW-4 area, as detailed in the Final Remediation Plan (BC 2015a) and accepted by the Georgia EPD in their April 14, 2015 letter. Vicinities of MW-11, MW-24, and MW-19: Modeling to demonstrate compliance with cleanup standards at the designated point of exposure and point of demonstration well was used in MW-11, MW-19, and MW-24 areas. The updated model was submitted to the EPD on January 28, 2016 (BC 2016a) and approved by EPD in their May 6, 2016 email.

**Table 5. Potential Ecological Receptors^a
Former MacGregor Golf Company
Albany, Georgia**

Animals Species - Common Name. Habitat	Plants Species - Common Name. Habitat
<i>Haideotriton wallacei</i> - Georgia Blind Salamander. Cave pools.	<i>Polygala leptostachys</i> - Georgia Milkwort. Oak-pine scrub.
<i>Ameiurus serracanthus</i> - Spotted Bullhead. Large streams and rivers with moderate current and rock-sand substrate	<i>Scirpus hallii</i> - Hall Bulrush. Pond shores in peaty sands.
<i>Cambarus cryptodytes</i> - Dougherty Plain Cave Crayfish. Pool areas of subterranean systems.	<i>Trillium reliquum</i> - Relict Trillium. Mesic hardwood forests; limesink forests; usually with <i>Fagus</i> and <i>Tilia</i> .
<i>Elliptio fraterna</i> - Brother Spike. Large to medium sized rivers.	
<i>Geomys pinetis</i> - Southeastern Pocket Gopher. Georgia habitat information not available.	
<i>Heterodon simus</i> - Southern Hognose Snake. Sandhills; fallow fields; longleaf pine-turkey oak.	

^a Plants and animals of concern identified within the Georgia Natural Heritage Program's listing of "Known Locations of Rare and Other Special Concern Animals, Plants and Natural Communities within Georgia" organized by Topographic Quadrangle. The site is within the Albany West Southwest, Georgia Quadrangle.

Table 6. Updated Project Milestone Schedule
Former MacGregor Golf Company
Albany, Georgia

Task Name	Completion Date	Year 1: July 2012 - July 2013				Year 2: July 2013 - July 2014				Year 3: July 2014 - July 2015				Year 4: July 2015 - July 2016				Year 5: July 2016 - July 2017				Year 6: July 2017 - July 2018				Year 7: July 2018 - July 2019				Year 8: July 2019 - Dec 2019			
		2012		2013		2014		2015		2016		2017		2018		2019		2019															
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Enrollment in VRP	July 30, 2012																																
Preliminary Cost Estimate for Implementation of Remediation & Continuing Actions, and Financial Assurance Demonstration	March 13, 2013	X	X	X																													
Monthly Groundwater Level Measurements	November 6, 2012	X	X	X																													
Horizontal Delineation of Site COCs (on accessible property)	November 29, 2012	X	X	X																													
Semiannual Progress Report with Updated CSM	January 30, 2013		X																														
Semiannual Progress Report with Updated CSM	July 30, 2013				X																												
Vertical Delineation of Site COCs	May 31, 2013			X	X																												
Semiannual Progress Report with Updated CSM	January 30, 2014					X																											
Horizontal Delineation of Site COCs (on property previously inaccessible)	November 5, 2015			X	X			X	X				X	X																			
Semiannual Progress Report with Updated CSM	July 30, 2014							X																									
Semiannual Progress Report with Final Remediation Plan, Updated CSM, and Final Cost Estimate for Remediation and/or Continuing Actions	January 30, 2015									X																							
Active remediation, if necessary	NA																																
Semiannual Progress Report with Updated CSM	July 27, 2015											X																					
Semiannual Progress Report with Updated CSM	January 28, 2016												X																				
Compliance Status Report under the VRP with Certifications	Interim: January 28, 2017 Addendum: January 28, 2018																			X													
Annual Model Validation Monitoring	Anticipated April 30, 2017												X																				
Annual Post-Delisting Monitoring	Anticipated July 31, 2019																													X			

^a Due date indicated on VRP Application.

On-site Horizontal Delineation

Off-site Horizontal Delineation

Vertical Delineation, Final Remediation Plan, and Final Cost Estimate

CSR Submittal to VRP with Certifications

^a Due date for this task was extended per EPD's approval.
 "X" Indicates task accomplished.

**Table 7. Summary of Hours Invoiced by Professional Engineer This Period
Former MacGregor Golf Company
Albany, Georgia**

Registered PE	Month	Hours Invoiced	Description of Services
Trish Reifenberger, P.E. Georgia PE No. 20676	August 2016	1.50	* Reviewed monthly status update * Participated in monthly project status call
	September 2016	4.25	* Reviewed monthly status update * Participated in monthly project status call * Reviewed July 2016 Semiannual Progress Report
	October 2016	2.00	* Reviewed monthly status update * Participated in monthly project status call
	November 2016	3.50	* Reviewed monthly status update * Participated in monthly project status call
	December 2016	5.75	* Reviewed monthly status update * Participated in monthly project status call
	January 2017	5.00	* Reviewed monthly status update * Participated in monthly project status call * Reviewed Interim CSR
Total Hours Invoiced this Period		22.00	

Appendix A: Annual Property Evaluation Form



Annual Property Evaluation Form

**Former MacGregor Golf Company, HSI Site No. 10398
Parcel 00212/00001/019**

TYPE	No.	CRITERIA RESPONSE	YES	NO
Land Use	1	Does this former 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 that do not meet residential standards 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	Is there evidence of groundwater usage on the property?		
	3a	If yes to 3, are corrective measures being taken?		
Property Instruments	4	Do all leases or other property instruments for the site have the applicable deed notice language inserted into them.		
	4a	If no to 4, provide a written explanation (attached) to the EPD within 30 days.		
Inspection	5	Date of inspection:		
	5a	Name of inspector:		

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