VOLUNTARY REMEDIATION PROGRAM APPLICATION

Southern States Phosphate and Fertilizer Company
1600 East President Street
Savannah, Chatham County, Georgia
EPD HSI No. 10371

March 1, 2018
Terracon Project No. ES177374

Prepared for:

Seagate Terminals Savannah, LLC
Savannah, Georgia

Prepared by:

Terracon Consultants, Inc.
Savannah, Georgia

Terracon

March 1, 2018

Georgia Environmental Protection Division
Land Protection Branch - Response and Remediation Program
2 Martin Luther King, Jr. Drive, SE
Suite 1054, East Tower
Atlanta, Georgia 30334

Attn: Mr. Kevin Collins
E: kevin.collins@dnr.ga.gov

Re: Voluntary Remediation Program Application
Southern States Phosphate and Fertilizer Company
EPD HSI No. 10371
1600 East President Street
Savannah, Chatham County, Georgia
Terracon Project No. ES177374

Dear Mr. Collins:

On behalf of Seagate Terminals Savannah, LLC (Seagate), Terracon Consultants, Inc. (Terracon) is submitting this Voluntary Remediation Program (VRP) Application for Southern States Phosphate and Fertilizer Company (SSPF) facility in Savannah, Georgia (Site). Ownership of the Site was transferred from SSPF to Seagate on May 10, 2017. SSPF and Seagate are both subsidiaries of Dulany Industries, Inc. This VRP Application has been completed in general accordance with the Georgia Voluntary Remediation Program Act (O.C.G.A. § 12-8-100) and discussions between the Georgia Environmental Protection Division (EPD), Seagate, and Terracon during a meeting on November 7, 2017. The VRP Application fee is attached.

If you have any questions concerning this report, please contact us at (912) 629 4000.

Sincerely,
Terracon Consultants, Inc.

Justin J. Johnson, PG
Senior Geologist

William S. Anderson, III, PE
Senior Principal / Office Manager

Enclosures
cc: 1 – Georgia EPD (1 hard copy; 2 electronic copies)
1 – Client (1 hard copy; 1 electronic copy)
1 – File (1 electronic copy)

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1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) has prepared this Voluntary Remediation Program (VRP) Application on behalf of Seagate Terminals Savannah, LLC (Seagate) (Participant) for the Southern States Phosphate and Fertilizer Company (SSPF) facility located at 1600 East President Street in Savannah, Chatham County, Georgia (Site). Ownership of the Site was transferred from SSPF to Seagate on May 10, 2017. SSPF and Seagate are both subsidiaries of Dulany Industries, Inc.

This VRP Application has been completed in general accordance with the Georgia Voluntary Remediation Program Act (O.C.G.A. § 12-8-100) and discussions between the Georgia Environmental Protection Division (EPD), Seagate, and Terracon during a meeting on November 7, 2017. The VRP Application and Checklist are provided in Appendix A. The warranty deed documentation for the property is included in Appendix B. A Site Location Map (Figure 1), Tax Parcel Map (Figure 2), and Site Diagram (Figure 3) are included in Appendix C.

1.1 Purpose

The purpose of this document is to provide justification for enrollment of the Site into the VRP by presenting a current understanding of site conditions based on existing data and a preliminary conceptual site model (CSM), a plan for additional investigation to fill data gaps, and a plan for site remediation.

1.2 Property Eligibility

Under O.C.G.A § 12-8-105, the following criteria must be met in order to be considered a qualifying property for the VRP:

1. The property must be listed on the inventory under Part 2 of this article or be a property which meets the criteria of O.C.G.A. § 12-8-105 or otherwise have a release of regulated substances into the environment;

2. The property shall not:
    a. Be listed on the federal National Priorities List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601, et seq;
    b. Be currently undergoing response activities required by an order of the regional administrator of the federal Environmental Protection Agency; or
    c. Be a facility required to have a permit under O.C.G.A. § 12-8-66
3. Qualifying the property under this part would not violate the terms and conditions under which the division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency; and
4. Any lien filed under subsection (e) of O.C.G.A. § 12-8-96 or subsection (b) of O.C.G.A. § 12-13-12 against the property shall be satisfied or settled and released by the director pursuant to O.C.G.A. § 12-8-94 or O.C.G.A. § 12-13-6.

Based on the criteria listed above, the SSPF site is a “qualifying property” under the VRP.

1.3 Participant Eligibility

Under O.C.G.A. § 12-8-106, the following criteria must be met in order for the participant to meet the qualifications of the VRP:

1. Be the property owner of the voluntary remediation property or have express permission to enter another’s property to perform corrective action including, to the extent practical, implementing controls for the site pursuant to written lease, order, or indenture;
2. Not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director; and
3. Meet other such criteria as may be established by the board pursuant to O.C.G.A. § 12-8-103.

The participant, Seagate, meets all of the criteria stated above, and is therefore “qualified” under the VRP. The contact for the applicant and owner of the site is as follows:

Mr. Bobby Mattox
Site Manager
Seagate Terminals Savannah, LLC
P.O. Box 546
Savannah, Georgia 31402
(912) 790-6340
bmattox@sschemical.com

2.0 BACKGROUND

2.1 Site Description

The SSPF site encompasses approximately 88 acres and is comprised of approximately 46 acres of industrial operations, 13 acres of partially wooded area (the Jordan Sign Property [JSP]), and 29 acres of tidal marsh / swamp lands. The configuration of the Site is depicted on Figure 2 in Appendix C.

The SSPF site is listed on the Georgia Environmental Protection Division (EPD) Hazardous Site Inventory (HSI) as Site No. 10371 under the Hazardous Site Response Act (HSRA). The SSPF site is defined as a "non-residential property" per the HSRA (Chapter 39-3-19-.02(2)(i)) based on operations at the site and surrounding properties.

Current operations at the SSPF facility mainly consist of the manufacturing of sulfuric acid. The facility is also operated as a bulk solids terminal for fertilizer-related products received from off-site manufacturers. Terminal operations include loading, unloading, handling, screening and limited bagging of the bulk solid materials.

2.2 Site History

The SSPF facility began operations in 1903. The facility historically manufactured sulfuric acid, super phosphate and granular nitrogen, and phosphate and potassium (NPK) fertilizers. Hydrofluorosilicic acid (HFS) was also generated as a by-product from the production of super phosphate. The super phosphate and fertilizer manufacturing operations were shut down on March 29, 2000.

According to the initial Compliance Status Report (CSR) (Advent, 2000), raw materials used to produce products at the facility have included sulfur, phosphate rock, potassium salts, ammonia, ammonium nitrate, limestone, gypsum, and sand. Prior to the mid-1920s, the facility roasted iron pyrite ore as the source of sulfur in the production of sulfuric acid. In the mid-1920s, the ore was replaced with solid sulfur. Molten sulfur has been used as the main raw material in the production of sulfuric acid since the construction of the existing acid plants in the 1960s.

The JSP was purchased by SSPF in 1974. Historical information indicates that the property was used as an uncontrolled landfill by the residents of Savannah and was later covered with dredge spoil from the Savannah River. The northern portion of the JSP was developed by Yara North America (Yara) in 2009 for use as a liquid fertilizer import terminal and tank farm, with operations commencing in January 2010.

2.3 Historical Sources of Contamination

In preparation of the CSR, Advent conducted subsurface investigation activities within nine potential source areas in 2000. Based on the investigation results, six areas were identified as historical sources for soil and groundwater contamination on the Site. The descriptions of the six historical source areas and associated historical operations in the following sections are based upon the information provided by the CSR (Advent, 2000). The historical source areas are depicted on Figure 4 in Appendix C.

2.3.1 Hydrofluorosilicic Acid Pit

The HFS pit was an earthen trench approximately 10 feet wide, 40 feet long, and 10 feet deep. The pit collected rinse water from the flue conveying the exhaust from the super phosphate scrubber. The rinse water was recirculated into the flue and used as makeup water for the scrubber. The solids from the flue were collected in the pit. Sludge from the pit contained residual nutrients and was periodically removed and mixed with the curing super phosphate product for the recovery of the nutrients. In the early 1990s, the pit was replaced with a concrete HFS collection sump and aboveground storage tank (AST). The HFS pit was decommissioned by removing the sludge and filling it in with soil. Infiltration from the former HFS pit and releases from the former HSF AST are considered to be the source of fluoride contamination and contributor to the low pH of the groundwater.

2.3.2 Lead Chamber Area

The lead chamber area was used for the production of sulfuric acid from when the facility commenced operations in 1903 until the construction of the existing acid plants in the 1960s. From 1903 until approximately 1923, sulfuric acid was produced by roasting a sulfuric pyrite ore in industrial ovens or burners. Sulfur dioxide was released from the ore in the ovens and converted to sulfur trioxide upon reaction with catalysts. The sulfur trioxide vapor was mixed with a water spray in the lead chambers to form sulfuric acid. Acid was stored in the lead-lined tanks prior to use in the production of super phosphate fertilizer.

The residual pyrite slag was removed from the ovens and used to fill low-lying areas and to stabilize areas prior to construction. In the mid-1920s, the acid production process was converted from roasting pyrite ore to burning solid sulfur for the production of sulfuric dioxide. Therefore, the use of residual pyrite slag as fill material ended in the mid-1920s. In the mid-1960s, the lead chamber operation was replaced with the existing sulfuric acid plants which produce acid from molten sulfur.

The placement of residual pyrite slag in and immediately around the sulfuric acid production area was a source of lead and arsenic in the area. The historical releases of acidic liquids likely

mobilized lead and arsenic from the residual pyrite slag and transported these metals into the groundwater.

2.3.3 Base A Pile

The Base A Pile was comprised of raw and finished materials accumulated during the production and handling of granular fertilizer. The materials were collected in a pile and reused in the processes as fill material. The material contained the main ingredients of NPK fertilizers as well as micronutrients. During the 1996 United States Environmental Protection Agency (USEPA) sampling event, copper was detected in samples collected from the pile at concentrations exceeding the HSRA notification concentration. Therefore, the pile was considered a source of copper contamination. The pile was removed and reused in the production of fertilizer sometime between 1996 and 2000.

2.3.4 Disposal Area

The disposal area was comprised of approximately 1.75 acres located north of the Granulator process. The area was reportedly used for the disposal of construction debris, tires, equipment, wood, metal, fertilizer sludge, and sediment removed from the U-Shaped Pond. Based on the recollections of facility personnel, placement of waste material in the area began sometime prior to 1949 and continued until the early 1990s. The Disposal Area is considered to be a historical source of metals contamination in the soil and groundwater. The Disposal Area also likely contributed to the low pH conditions in the groundwater.

2.3.5 U-Shaped Pond and Surrounding Area

The U-Shaped Pond was used for the clarification of water from scrubbers used in the Granulator process. These scrubbers removed particulates and ammonia form the emissions produced by the Granulator process. Water from the scrubbers was pumped to one end of the U-Shaped Pond. Particulates would settle to the bottom as the water flowed through the pond. The clarified water on the opposite end of the pond was then returned to the scrubbers. Sludge that had accumulated at the bottom of the pond was periodically removed and placed in either the Disposal Area or along the banks of the pond. The sludge from the pond is considered to be a historical source of metals contamination in the soil and groundwater. The water from the pond is considered to be a historical source of ammonia contamination in the groundwater.

2.3.6 Granulator

The Granulator process was used to manufacture granulated fertilizer from 1966 to 2000. The process involved mixing super phosphate, nitrogen solutions, ammonia, sulfuric acid, trace elements, and filler materials in a heated rotary reactor. The mixtures were varied to produce

granular fertilizer material with the desired characteristics and nutrient concentrations. The finished product was transferred to the warehouse for bulk storage until sold.

CSR investigation activities identified elevated concentrations of ammonia in the groundwater in the vicinity of the Disposal Area, U-Shaped Pond, and Granulator. The ammonia contamination is attributed to the scrubber water from the Granulator. In addition, incidental spills of granular fertilizer were common while handling and transporting the material in the vicinity of the Granulator. The residual fertilizer from these historical spills is considered to be a source of ammonia and metals in the soil and groundwater.

2.4 Site Compliance Summary

As documented in the CSR (Advent, 2000), the SSPF facility entered into a Consent Order (No. EPD-SW-703) with the EPD following a release of HFS in 1991. The Consent Order required SSPF to conduct a comprehensive environmental assessment of the Site to determine if facility operations had impacted groundwater. The environmental site assessment was performed by Technical Services, Inc. (TSI) in 1992. As part of the assessment, TSI installed and sampled 21 shallow groundwater monitoring wells, collected soil samples from select locations, and collected surface water samples from representative storm water drainage features.

The results of the TSI site assessment were summarized in the Southern States Phosphate & Fertilizer Company Environmental Assessment report submitted to the EPD in 1992. Analytical results indicated that shallow groundwater was contaminated with metals and fluoride in certain areas of the Site. Soil results were inconclusive, as the soil samples were collected as composites of fractions of samples from multiple depths in borings and from multiple boring locations. Surface water results did not indicate the presence of target constituents at levels that would suggest that contaminants were being conveyed off-site through surface water runoff.

Following a review of the TSI report, the EPD requested SSPF implement a quarterly groundwater monitoring program for lead and pH levels using the existing monitoring well network. SSPF conducted quarterly groundwater monitoring from 1992 until the CSR investigation was performed in 2000.

In 1996, representatives of the Region IV office of the USEPA collected soil, groundwater, and surface water samples from the Site. In a report following the sampling event, the USEPA concluded that site soils and groundwater had been impacted by releases of acids and heavy metals (USEPA, 1996).

Based on the findings of the previous assessments, the SSPF facility was listed on the HSI as Site No. 10371 on May 23, 1998. On October 12, 1999, the EPD issued a letter to SSPF requiring a submittal of a CSR. The CSR was submitted to the EPD for the Site in September 2000 in accordance with EPD Administrative Order EPD-HSR-427 (Advent, 2000).

Several revisions and addendums were made to the CSR based on the EPD's review comments and additional field activities conducted at the Site. The Jordan Sign Property was sub-listed as part of HSI No. 10371 on October 15, 2003.

A final CSR was submitted to EPD in October 2005 as CSR Addendum Revision # 2 (ENVIRON, 2005a). The CSR indicated that a limited number of contaminants of potential concern (COPCs) were present in the soil and shallow groundwater at the Site at concentrations greater than the applicable risk reduction standards (RRS).

A Corrective Action Plan (CAP) was submitted to EPD in October 2005 and was conditionally approved by EPD in November 2006 (ENVIRON, 2005b). Based on further comments from EPD, a CAP Addendum was submitted to EPD in June 2008 (ENVIRON, 2008). The CAP Addendum was conditionally approved by EPD in August 2008.

For soil, the CAP specified that the RRS would be met by excavation of contaminated soils and off-site disposal in an appropriate landfill. The CAP also provided for the possibility of requesting certification to Type 5 RRS in the event that excavation activities might impact on-site process structures and operations.

As designated in the CAP, six general areas of the Site were identified for soil remediation, each of which had at least one sample with a detected concentration greater than the applicable RRS: A seventh remediation area was later added to address arsenic and lead-impacted soil around the former maintenance shop. The seven corrective action areas are depicted on Figure 5 and are listed below:

- Area 1 - Former Material Storage Area South and Parking Lot South
- Area 2 - Former Lead Chamber Plant Site
- Area 3 - Former Material Storage Area North and Parking Lot North
- Area 4 - Former Super Phosphate Production Area and Storage
- Area 5 - Jordan Sign Property
- Area 6 - Former Fertilizer Production Plant Site
- Area 7 – Former Maintenance Shop

In accordance with the schedule submitted with the CAP, remediation activities began in Area 5 in May 2008. As described in the 2008 and 2009 Annual Status Reports submitted by others, significant remediation was also initiated and completed at the other areas, well in advance of the agreed-upon schedule.

The CAP provides for a baseline monitoring and subsequent semi-annual monitoring events of shallow groundwater at the Site prior to the consideration of active remediation. Semi-annual monitoring of shallow groundwater at the Site commenced in April 2009.

2.5 Risk Reduction Standards

As the Site and surrounding properties are used for non-residential purposes, Type 4 RRS (non-residential, site-specific) were developed in accordance with the HSRA rules. Specifically, Type 4 RRS for the contaminants of concern (COCs) in soil were developed to be protective of industrial and construction workers at the Site via direct contact, and to be protective of groundwater (even though the shallow groundwater is not utilized, nor is reasonably expected to be used in the future). Surface soil and subsurface soil COCs and approved RRS are presented in Table 1 and Table 2 of Appendix B, respectively.

Exceedance of the Type 4 RRS for arsenic and lead have been identified in surface and subsurface soil at a number of locations throughout the Site. In addition, an exceedance of the Type 4 RRS for thallium was identified in the surface soil at one location in Area 5. These historic exceedances have been the focus of the remediation at the Site.

Similarly, Type 4 RRS for the COCs in groundwater were developed for hypothetical future non-residential receptors that might use the surficial groundwater as a source of drinking water. Groundwater COCs and approved RRS are presented in Table 3 in Appendix B.

Since the implementation of the semi-annual groundwater monitoring program in April 2009, COCs detected in shallow groundwater at concentrations exceeding Type 4 RRS include ammonia, arsenic, cadmium, chromium, lead, and fluoride.

3.0 CURRENT SITE CONDITIONS

3.1 Surface and Subsurface Soil

As of October 2017, substantial soil remediation has been completed to the extent that Areas 1 through 7 are either in compliance with the approved Type 4 RRS or bounded by process-related obstructions (e.g., operational structures, site buildings, railroad tracks, and roadways). The soil remediation areas are depicted on Figure 6 in Appendix C. The compliance status of each remediation area is summarized below:

- **Area 1** - Confirmatory sample analytical results indicate that the soil within Area 1 is in compliance with the RRS, except for limited areas along the northeastern boundary of the excavation. Further remediation of the soil along the northeast border of Area 1 is

constrained by aboveground piping and cooling water drainage ditch. The remediation of soil in Area 1 is considered complete, as there are no remaining areas where further excavation is feasible.

- **Area 2** - Confirmatory sample analytical results indicate that the soil within Area 2 is in compliance with the RRS, except for isolated areas along the northern and southern boundaries of the excavation. Further remediation of soil to the northeast is restricted by Warehouse #2 and a concrete drainage structure. A small building also limits the extent of the excavation to the north. Plant process equipment and site buildings prevent further excavation along the southern boundary of Area 2. Process piping prohibits further excavation to the west of the loading rack. The remediation of soil in Area 2 is considered complete, as there are no remaining areas where further excavation is feasible.
- **Area 3** - Confirmatory sample analytical results indicate that the soil within Area 3 is in compliance with the RRS, except for the southeastern portion of the area. Further remediation of the soil in the southeast corner of Area 3 is constrained by existing aboveground piping and railroad tracks. The remediation of soil in Area 3 is considered complete, as there are no remaining areas where further excavation is feasible.
- **Area 4** - Confirmatory sample analytical results indicate that the soil within Area 4 is in compliance with the RRS, except for isolated areas in the vicinity of historical sample locations GP-33 and MW-14. Further remediation in the vicinity of GP-33 is restricted by physical obstructions, including railroad tracks and a rail scale to the north, railroad tracks to the south, the main entrance road to the west, and the former store room foundation to the east. Additional remediation for the area around MW-14 is constrained by railroad tracks to the south and wetlands to the west, north, and east. The remediation of soil in Area 4 is considered complete, as there are no remaining areas where further excavation is feasible.
- **Area 5** - Confirmatory sample analytical results indicate that the soil within Area 5 is in compliance with the RRS. Therefore, the remediation of soil in Area 5 is considered complete.
- **Area 6** - Confirmatory sample analytical results indicate that the soil within Area 6 is in compliance with the RRS. Therefore, the remediation of soil in Area 6 is considered complete.
- **Area 7** - Confirmatory sample analytical results indicate that the soil within Area 7 is in compliance with the RRS, except for limited areas along the eastern, western, northwestern, and southwestern boundaries of the excavation. Further excavation to the east is limited by a roadway and buildings. Additional excavation to the west is restricted by the truck fueling station and main entrance road. Further remediation to the northwest and southwest is limited by railroad tracks and buildings. Therefore, the remediation of soil in Area 7 is considered complete.

Soils exceeding Type 4 RRS remain underneath and / or directly adjacent to certain facility structures (i.e., buildings, tanks, pipelines, railroad tracks, and roadways) in limited portions of Areas 1, 2, 3, 4 and 7. In accordance with the CAP, SSPF will request that these soils be certified to Type 5 RRS. Proposed Type 5 RRS soil areas are depicted on Figure 7 in Appendix C. Soil analytical results exceeding Type 4 RRS for samples collected within or adjacent to Type 5 RRS areas are summarized in Table 4 in Appendix B.

3.2 Groundwater

Groundwater at the Site has been sampled on a semi-annual basis since April 2009, as specified in the CAP. The current monitoring well network consists of 20 shallow wells and four deep wells. The monitoring well network is depicted in Figure 3 of Appendix C. The groundwater COCs and associated Type 4 RRS are presented in Table 3 of Appendix B.

The most recent groundwater monitoring event was completed at the Site in November 2017. The groundwater results indicate four COCs are not currently in compliance with the Type 4 RRS: arsenic, lead, ammonia, and fluoride. The analytical results from the November 2017 groundwater sampling event are shown on Figure 8 in Appendix C and summarized in Table 5 in Appendix B.

Based on statistical analysis of the historical and recent groundwater monitoring data, the only upward trends noted were for ammonia in MW-12D and MW-18 and fluoride in MW-9D-R. Upward trends for pH were noted in MW-3, MW-5, MW-7, MW-9-R, MW-13, MW-15, MW-16, and MW-18. Downward trends were observed for ammonia in MW-11 and MW-15; arsenic in MW-12; fluoride in MW-2; and pH in MW-1H-R. The November 2017 isoconcentration contour maps for pH, ammonia, arsenic, fluoride, and lead are depicted on Figures 9 through 13 in Appendix C.

3.3 Surface Water

As documented in the CSR Addendum (ERM, 2004), ten surface water samples (SW-A through SW-J1) were collected from locations in the marsh identified to have the highest likelihood of impact from site operations. The surface water samples were analyzed for ammonia and select metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, and zinc). The historical surface water sample locations are depicted on Figure 3 in Appendix C. The historical surface water sample results are summarized in Table 6 in Appendix B.

Zinc was detected in surface water samples SW-E and SW-J1 at concentrations of 140 µg/L and 110 µg/L, respectively. Zinc was not detected above the laboratory reporting limit in the sample collected from the background location (SW-A). No other metals were detected above laboratory reporting limits in the surface water samples.

Ammonia was detected in all ten surface water samples at concentrations ranging from 67 µg/L (SW-C) to 580 µg/L (SW-E). The ammonia concentration at the background sample location (SW-A) was 78 µg/L.

The pH of the surface water samples ranged from 6.92 (SW-D) to 7.27 (SW-I), with an average pH of 7.13.

3.4 Sediment

A sediment sample (HA-2005-4sed) was collected from the marsh to the north of the former disposal area in September 2005 (Environ, 2005). The sediment sample was analyzed for certain metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, and zinc). The sediment sample location is depicted on Figure 3 in Appendix C. The sediment sample results are summarized in Table 7 in Appendix B.

According to the CSR Addendum #2 (Environ, 2005), detected COCs concentrations in the sediment sample were consistent with background concentrations for those constituents. Based on the analytical results, it was concluded that the sediment had not been impacted by historical releases of inorganic COCs from the facility.

4.0 PRELIMINARY CONCEPTUAL SITE MODEL

A preliminary CSM has been developed using data collected during previous site investigations and information obtained from reviews of published literature. It is intended that the CSM will be updated as new information is gathered for the Site. The CSM illustrates the Site's surface and subsurface setting; potential human health and ecological receptors; and the complete and incomplete exposure pathways that exist for the Site.

4.1 Geologic Setting

The following subsections summarize the regional and site-specific geomorphic, stratigraphic, and hydrogeologic settings. Geologic data for this area are based on numerous published reports, previous environmental studies conducted at the Site, and discussions with other researchers familiar with the geology and hydrogeology of the area.

4.1.1 Regional Geology

The Site is located in the Coastal Plain physiographic province of Georgia. The stratigraphy of the Coastal Plain of Georgia and Chatham County has been described by numerous authors (e.g., Herrick, 1961; Herrick and Vorhis, 1963; Counts and Donsky, 1963; Furlow, 1969; Chowns

and Williams, 1983; Clarke et al., 1990; Weems and Edwards, 2001; Williams and Gill, 2010; and Clarke et al., 2011) and is summarized in the following paragraphs. The area stratigraphic units are discussed in ascending order, from the deepest Paleocene units to the surficial Holocene deposits. Cretaceous and pre-Cretaceous rock units in the Coastal Plain are typically found at depths of several thousand feet below ground surface; therefore, only a general description of the lithologic character is provided for these rock units.

Cretaceous and pre-Cretaceous Stratigraphy

Pre-Cretaceous strata underlying the area are considered "basement" rocks. These "basement" rocks consist of igneous intrusive rocks and low-grade metamorphic rocks of Paleozoic age, and sedimentary rocks and volcanic rocks of Triassic to Early Jurassic Age (Chowns and Williams, 1983). Upper Cretaceous sediments consist of inter-bedded sands and clayey silts at depths of 1,600 feet below ground surface (Herrick, 1961).

Paleocene Stratigraphy

Paleocene units in the area mark the beginning of a regional transgression of the sea that lasted through the late Eocene (Clarke et al., 1990). Paleocene units unconformably overlie strata of Late Cretaceous age. The Clayton Formation and the Cedar Keys Formation make up the Paleocene units in the area. The upper portion of the Clayton Formation is a hard, sandy glauconitic, fossiliferous limestone, while the remaining portion of the formation consists of glauconitic sand, argillaceous sand, and small amounts of medium-to-dark gray clay (Clarke et al., 1990). The Cedar Keys Formation is a Paleocene carbonate-evaporite facies. The Cedar Keys Formation consists of thick beds of anhydrite and dolomite (Clarke et al., 1990).

Eocene Stratigraphy

The early Eocene Oldsmar Formation unconformably overlies the Paleocene Clayton Formation (Clarke et al., 1990). Glauconitic limestone and dolomite are characteristic lithologies of the Oldsmar Formation (Miller, 1986; Clarke et al., 1990). The Oldsmar Formation may also contain an upper layer of sand in some areas (Clarke et al., 1990).

The middle Eocene Avon Park Formation unconformably overlies the Oldsmar formation (Miller, 1986; Clarke et al., 1990). The Avon Park, a glauconitic dolomite and limestone, has a thickness in the range of 700 to 500 feet in the Chatham County area.

The Ocala Limestone is a massive, fossiliferous limestone. Fossils identified in the Ocala include bryozoan remains, foraminiferal tests, and mollusk shells (Furlow, 1969; Miller, 1986; Clarke et al., 1990). The Ocala Limestone unconformably overlies the dolomite and limestone of the Avon Park Formation (Furlow, 1989; Krause and Randolph, 1989; and Clarke et al., 1990). The thickness of the Ocala is more than 200 feet thick, and in some areas exceeds 400 feet (Clarke et al., 1990).

Oligocene Stratigraphy

Buff-colored, porous fossiliferous (foraminiferal tests, micrite, and non-particulate ubiquitous phosphate) limestone describe the sediments of Oligocene age (Clarke et al., 1990). Huddleston (1988) named these sediments the Lazaretto Creek Formation and the Tiger Leap Formation. Weems and Edwards (2001) refined the descriptions of the two formations. The Lazaretto Creek Formation includes the lower Oligocene sediments in the study area and the Tiger Leap Formation includes the upper Oligocene sediments marked by an increase in phosphate. The abundance of miliolid foraminifera in the Oligocene sediments is used to differentiate the unit from the underlying Ocala Limestone, and the absence of particulate phosphate is used to differentiate the overlying Miocene carbonate sediments.

Miocene Stratigraphy

There are three units of Miocene age in Chatham County. These units have been described lithologically and by geophysical markers by several authors (Furlow, 1969; Huddleston, 1988; Clarke et al., 1990; Weems and Lewis, 2001). The three layers are lithologically similar and are only differentiated based on stratigraphic position, geophysical characteristics, and limited paleontologic evidence (Clarke et al., 1990).

The lowermost Miocene unit in the Chatham County area was designated as Unit C by Clarke and others (1990). Unit C is correlative to the Parachucla Formation of Huddleston (1988) and the Tampa Limestone equivalent of Furlow (1969). Typically, only the lower portion of Unit C is found in the area, which is generally a sandy, phosphatic dolomite or limestone (Clarke et al., 1990). The middle clay and upper sandy layers have been removed by erosion (Clarke et al., 1990).

The middle Miocene unit has been designated as Miocene Unit B (Miller, 1986, and Clarke et al., 1990). Unit B is correlative to the Hawthorn Formation of Counts and Donsky (1963) and Miller (1986); the Marks Head Formation of Woolsey (1977) and Huddlestun (1988). The Marks Head Formation name has been used for this study after the work of Weems and Edwards (2001). The basal carbonate layer on Unit B typically consists of olive-green dolomite and limestone that contains very fine to coarse quartz sand, shiny brown to black phosphatic sand, and contains some fossils, typically mollusk molds and shark teeth. (Furlow, 1969; Clarke et al., 1990). Distinguishing the basal layer of Unit B from Unit C is difficult because both Unit C and Unit B are lithologically similar, therefore requiring paleontological evidence and/or borehole geophysical logs (Clarke et al., 1990). The two basal units are juxtaposed because the middle and upper clastic layers of Unit C have been eroded away (Clarke et al., 1990). The middle layer of Unit B typically consists of olive-green phosphatic silty clay and clayey silt and grades upward to the upper sandy layer (Furlow, 1969; and Clarke et al., 1990). The upper sandy unit of Unit B typically consists of poorly sorted, very fine to coarse sand and locally a thin very dense dolomite layer

(Furlow, 1969; and Clarke et al., 1990). Unit B (Hawthorn Formation) ranges in thickness from 20 to 55 feet thick (Furlow, 1969).

Miocene Unit A overlies Unit B and is included in the Hawthorn Formation of Counts and Donsky (1963) and Miller (1986), and correlates with the Coosawhatchie Formation of Woolsey (1977) and Huddleston (1988). The name Coosawhatchie Formation is adopted for this study based on the work of Weems and Edwards (2001). The Coosawhatchie Formation contains two members. The basal layer, which is the Tybee Phosphorite Member, consists of a sandy phosphatic limestone and dolomite with some fossils (Clarke et al., 1990). In Chatham County, clay is the matrix material surrounding most of the phosphate grains instead of dolomite (Clarke et al., 1990). The sand in the basal unit generally consists of very fine to coarse quartz and brown to black phosphate. The middle clay layer consists of fossiliferous clay and silt laminae and the upper sand unit consists of a very fine to coarse, poorly sorted sand (Clarke et al., 1990). The upper portion of this unit is equivalent to the Berryville Clay Member. Unit A is about 20 feet thick in the Savannah Area.

Pliocene, Pleistocene, and Holocene Stratigraphy

Sediments of Pliocene age are generally accepted as absent in Chatham County, with Pleistocene sediments unconformably overlying Miocene sediments (Herrick, 1965; Furlow, 1969; and Clarke et al., 1990). Pleistocene sediments typically consist of arkosic sand and gravel with discontinuous clay beds. Basal Pleistocene sediments contain reworked olive-green clay from the underlying Miocene units (Furlow, 1969). Lignitic and fossiliferous clay and micaceous sandy sediment ranging in thickness from 10 to 60 feet are typical of Pleistocene sediments. The Penholoway Formation is the principal surficial Pleistocene deposit in Chatham County (Weems and Edwards, 2001). The Penholoway is one of many remnants of former shoreline complexes through the area, which were the result of numerous transgressions and regressions of the sea, the result of extensive glaciations in North American during the Pleistocene Epoch.

4.1.2 Regional Hydrogeology

Hydrologic units in Chatham County, Georgia include (in descending order), the surficial aquifer system, consisting of the water-table zone, upper confined zone, and lower confined zone (Clarke, 2003); the Brunswick Aquifer System (which can be missing in some areas of Chatham County) (Clarke et al., 1990); the Upper Floridan Aquifer, and the Lower Floridan Aquifer (Miller, 1986, Williams and Gill, 2010).

In the Savannah, Georgia area, the surficial aquifer system is typically present from land surface to approximately 100 feet below ground surface (bgs) (Edwards and Weems, 2001) and includes the Pearson terrace unit and the Ebenezer Formation, however variations in thickness and depth are common in the region. For this study, the surficial aquifer is undifferentiated; however, the surficial aquifer is generally informally divided into a water-table zone, an upper confined zone,

and a lower confined zone. These water-bearing zones are separated by clay confining units. The "water-table" zone is the zone that is intersected by the temporary monitoring wells installed at the subject property. The thickness of the surficial aquifer and associated clay confining units is approximately 120 feet. The confining units within the surficial aquifer system are identified on natural-gamma radiation logs along with the A-marker horizon, which is present just above the Upper Brunswick Aquifer at the Site at an elevation of approximately -100 feet mean sea level (MSL) (Clarke et al., 1990 and Weems and Edwards, 2001).

The principal source for all drinking water uses in the coastal area of Georgia is the Floridan Aquifer system. The Floridan Aquifer system is composed of carbonate rocks of varying permeability (Clarke et al., 1990; Clark et al., 2011). There are several water-bearing zones within the Floridan Aquifer system that are separated by layers of relatively dense limestone and dolostone that act as semi-confining units (Krause and Randolph, 1989; Clarke et al., 1990; Williams and Gill, 2010).

The Chatham County area, the two shallowest water bearing zones of the five that comprise Floridan Aquifer system are part of the upper Floridan Aquifer (McCollum and Counts, 1964; Krause and Randolph, 1989; Clark et al., 1990; Williams and Gill, 2010). The upper Floridan Aquifer is overlain by a confining unit consisting of layers of silty clay and dense phosphatic Oligocene dolomite identified by a distinct response on gamma-ray logs (Clarke et al., 1990). Clarke and others (1990) identified the base of the confining unit as the C-marker horizon. The C-marker horizon is present near the top of the Suwannee Limestone and is considered to be the top of the upper Floridan Aquifer in the study area (Williams and Gill, 2010). Based on well log information for the nearby Standard Oil Well (USGS Well ID 37Q017), the top of the upper Floridan Aquifer is encountered at a depth of approximately 202 feet. The D-marker horizon represents the top of the permeable zone of the Upper Floridan Aquifer and is present at the top of the Ocala Limestone (Williams and Gill, 2010). The Standard Oil Well log shows the D-marker horizon at a depth of approximately 280 feet bgs. The bottom of the Upper Floridan Aquifer was recorded in the Standard Oil Well at approximately 404 feet bgs.

4.1.3 Site Geology

The ground surface at the Site is relatively flat with a gentle downward slope to the northeast towards the Savannah River, approximately 0.38 miles north of the SSPF site. Data from historical soil borings conducted at the Site indicate that the strata is generally comprised of shallow sand, middle clay, and lower sand layers underlain by a gray-green silt. Operational portions of the facility (i.e., Areas 2, 3, 4 and the southern part of Area 6) are covered by 6 inches to 2 feet of road base-like material (e.g., rock or gravel / crusher-run). Generalized stratigraphic cross-sections were developed using the information provided by historical boring logs. The cross-section layout is presented on Figure 14 and the cross-sections are shown on Figures 15 and 16 in Appendix C.

The stratigraphic cross-sections will be updated using soil information collected during the installation of monitoring wells for the proposed VRP investigation. The updated stratigraphic cross-sections will be provided in the first semi-annual progress report.

4.1.4 Site Hydrogeology

Certain areas of shallow groundwater at the Site are influenced by tidal activity because of the areas' proximity to the Savannah River and Atlantic Ocean. Depth to groundwater at the Site typically ranges from 1 to 18 feet bgs.

During each semi-annual monitoring event, water level measurements are collected from the entire monitoring well network. These measurements, in conjunction with the elevation of each monitoring well's top of casing reference point, are used to calculate the elevation of the water table at each monitoring well.

The groundwater elevation data are used to prepare a potentiometric surface map and estimate groundwater flow direction. The inferred groundwater flow direct at the Site in November 2017 is towards the north-northwest, which is generally consistent with previous monitoring events. The potentiometric surface map for November 2017 is depicted on Figure 17 in Appendix C.

Slug tests were performed for the 21 monitoring wells during the 2000 CSR investigation (Advent, 2000). The slug test results indicated that the hydraulic conductivity of the shallow monitoring wells ranged from 0.00046 centimeters per second (cm/sec) in monitoring well MW-15 to 0.05291 cm/sec in MW-9 with an average of 0.01415 cm/sec for all the shallow monitoring wells. Hydraulic conductivity for the deep wells ranged from 0.01076 cm/sec for MW-3D to 0.12051 cm/sec for MW-12D with an average of 0.04020 cm/sec for all of the deep monitoring wells. Hydraulic conductivity for the Site will be reevaluated by conducting slug tests within various monitoring wells during the proposed VRP investigation.

According to the 2000 CSR, the calculated groundwater velocity for the upper portion of the surficial aquifer was 593 feet per year (Advent, 2000). The velocity of the shallow and deep groundwater within the surficial aquifer will be calculated based on the slug test results of the proposed VRP investigation.

4.2 Potential Environmental Receptors

4.2.1 Human Receptors

The Site is zoned heavy industrial and developed with a sulfuric acid manufacturing plant with a terminal for bulk solid fertilizer-related products. The Site is improved with warehouse buildings, an office building, aboveground storage tanks (ASTs), aboveground and underground process

piping, cooling water drainage ditches, railroad tracks, paved and unpaved parking lots and roadways. The remaining portion of the Site consists of undeveloped marsh and wooded land. Based on the current use of the Site, on-site residents are not considered potential human receptors.

The SSPF facility and JSP are enclosed by a chain link fence capped with three strands of barbed wire. A guard house with a barrier gate arm is located at the main entrance to the SSPF facility. The guard house is occupied by at least one security guard at all times. Contractors, truck drivers, and other facility visitors must have prior approval, sign-in at the guard house, and be issued a temporary security badge before entering the Site. Other fence gates along the site perimeter are secured with chains and padlocks. Railroad entrances to the Site are equipped with automatic fence gates. The Yara facility on the JSP is also equipped with two automatic fence gates. The facility also maintains security cameras throughout the Site. Based on the current restricted access, trespassers are not considered potential human receptors.

The surrounding properties are primarily used for industrial and commercial purposes. The Site is bound to the south by a number of commercial and light industrial facilities along the north side of East President Street. Businesses include The Kennickell Group (printing, signage, and mailing services) at 1700 East President Street, the Rug Shoppe (flooring products) at 1690 East President Street, Savannah Sharks Cheerleading & Tumbling (training facility) at 1686 East President Street, and Auto Intensive Care (automotive repair shop) at 1680 East President Street.

There are also several businesses occupying parcels owned by Seagate along East President Street, including Champion Machine (industrial machine fabrication) at 1722 East President Street, Nine Line Apparel at 1732 East President Street, and Youmans Furniture Warehouse at 1734 East President Street. On the south side of East President Street is the Savannah Golf Club Course.

The SSPF site is bound to the west by the Kayton Canal followed by the City of Savannah President Street Wastewater Treatment Plant (1400 East President Street). The President Street facility is Savannah's largest water treatment plant.

The Site is bound to the east by the BASF Corporation - Savannah Operations facility (1800 East President Street). The BASF facility has been in operation since 1983 and manufactures fluid catalytic cracking (FCC) catalysts, co-catalysts, and additives for petroleum refiners. The BASF plant also manufactures kaolin-based microsphere intermediates used in FCC catalysts and co-catalysts; and alumina gel intermediates used in absorbents and desiccants.

The Site is bound to the north by undeveloped wooded and marsh land followed by East Coast Terminal Company (ECT) facility (136 Marine Terminal Drive) and the Savannah River. The ECT facility is a marine terminal for dry and liquid bulk materials such as wood chips / pellets, cement, gypsum, aggregate, bauxite, slag, and fertilizer.

The closest residential structures are located approximately 1,400 feet to the southeast and up-gradient from the Site. Based on the surrounding land use, groundwater flow direction, and distance from residential structures, off-site residents are not considered potential human receptors.

4.2.2 Ecological Receptors

A screening-level ecological risk assessment (SLERA) was completed in 2004 for the surface water in the tidal marsh in the northern portion of the Site (ERM, 2004). The SLERA concluded that surface water at the Site posed no unacceptable increased ecological risks. However, the EPD requested a further ecological evaluation for terrestrial receptors at the JSP. In addition, the EPD requested an evaluation of potential ecological risks associated with exposure to contaminated sediment in the tidal marsh.

In response to the EPD's request, a supplemental ecological risk assessment (ERA) was completed for the Site in 2005 (Environ, 2005a). The supplemental ERA determined that wildlife habitat for federal threatened and endangered species is not present on the JSP or in the tidal marsh. The results of the supplemental ERA identified some exceedances of conservative USEPA Region 4 criteria and ecological soil screening levels (EcoSSLs); however, the extent and magnitude of the exceedances were limited. The supplemental ERA concluded that ecologically significant impacts are not expected for wildlife on the JSP or in the tidal marsh.

4.3 Potential Exposure Pathways

An evaluation of potential exposure pathways was conducted for the Site. The exposure pathways evaluated include the potential exposure of COCs in soil, groundwater, vapors, and sediment and/or surface water from impacted soil and groundwater. The receptors potentially exposed to these pathways include current and future on-site and off-site industrial/construction workers.

4.3.1 Drinking Water

Seagate currently maintains and operates two water supply wells under Groundwater Withdrawal Permit # 025-0011. According to the Comprehensive Water Conservation Plan (Advent, 2007) submitted as part of the 2007 renewal permit, the two wells withdrawal groundwater from the Upper Floridan aquifer at depths ranging from 700 to 1,000 feet bgs. The groundwater is used for sanitary facilities, process cooling water, and process water for the manufacturing of sulfuric acid. The Site also receives potable water from the Main System of the City of Savannah Water Supply and Treatment Department.

The Site and surrounding properties receive water from the Main System of the City of Savannah Water Supply and Treatment Department. According to the City of Savannah's 2016 Water Quality Report (most recently published report available), the drinking water for the Main System is drawn from 22 wells installed within the Floridan Aquifer at depths between 414 and 1,006 feet deep.

According to information from the USGS National Water Information System (NWIS) database, 12 water wells exist within a 1-mile radius of the Site. Water supply well locations and search radii are depicted on Figure 18 in Appendix C. Water well survey data are summarized in Table 8 in Appendix D.

Based on the data provided by the NWIS database, seven of the off-site wells are cased to withdraw from the Floridan Aquifer system, specifically the upper Floridan Aquifer. Construction information was not available for the remaining five off-site water supply wells; however, they are also presumed to produce from the Floridan Aquifer System.

Ammonia, arsenic, lead, and fluoride are currently present within the surficial aquifer at the Site at concentrations exceeding Type 4 RRS. As stated previously, the Floridan Aquifer system in the Savannah, Chatham County area is hydraulically separated from the surficial aquifer system by a series confining units. Therefore, contamination within the surficial aquifer at the Site is unlikely to impact on-site water wells producing from the Floridan Aquifer. Based on this information, the drinking water pathway is considered incomplete for COCs in shallow groundwater at the Site.

4.3.2 Soil Ingestion, Inhalation, or Direct Contact

The soil exposure pathway for ingestion, inhalation, or direct contact by on-site construction workers during future excavation activities is potentially complete. Substantial soil remediation has been completed to the extent that Areas 1 through 7 are either in compliance with the approved Type 4 RRS or bounded by facility structures (i.e., buildings, tanks, pipelines, railroad tracks, and roadways). Soils exceeding Type 4 RRS remain underneath and / or directly adjacent to certain facility structures in limited portions of the subject property. The proposed VRP investigation will include additional soil sampling to further delineate the lateral extent of Type 5 RRS soils at the Site. Following the completion of delineation activities, a monitoring & maintenance plan / land disturbance plan will be developed for the Type 5 RRS soil areas as part of the institutional controls to be implemented for the subject property.

4.3.3 Groundwater Ingestion, Inhalation, or Direct Contact

The groundwater exposure pathway for ingestion, inhalation, or direct contact by on-site and off-site construction workers during future excavation activities is potentially complete. Ammonia, arsenic, fluoride, and lead are currently present in the shallow groundwater on the Site at

concentrations exceeding Type 4 RRS. The proposed VRP investigation includes the installation of additional monitoring wells to further delineate COCs in the shallow groundwater on the Site. Groundwater investigation activities will continue as practical until regulated COCs are delineated to Type 4 RRS. Following the completion of delineation activities, an excavation dewatering management plan will be developed as part of the institutional controls to be implemented for the subject property.

4.3.4 Vapor Intrusion

The vapor intrusion exposure pathway for on-site industrial/construction workers is potentially complete for ammonia. Ammonia is present in the shallow groundwater in the vicinity of the SG # 5 warehouse building in the northeast corner of the subject property. Vapor modeling and/or the collection of soil gas and/or indoor air quality samples will be completed for ammonia to further evaluate the potential vapor intrusion pathway.

Mercury has not been detected at concentrations exceeding Type 4 RRS in the shallow groundwater on the subject property. Therefore, the vapor intrusion exposure pathway for on-site workers is considered incomplete for mercury.

No other COCs are considered to be sufficiently volatile to pose an inhalation risk via vapor intrusion from groundwater.

4.3.5 Surface Water / Sediment

The surface water and sediment exposure pathways are potentially complete. Storm water runoff on the northern portion of the facility either discharges directly to the tidal marsh or through the storm water pond to the west of the hanger building. In addition, shallow groundwater is likely to be hydraulically connected to the tidal marsh. The proposed VRP investigation includes additional sampling within the tidal marsh to further evaluate the potential surface water and sediment pathways.

Storm water runoff within the sulfuric acid production area drains to catch basins or ditches that discharge to a holding pond west of the production area. The combined storm water and process waste water stream in the holding pond discharges to the Kayton Canal under an industrial wastewater permit (NPDES Permit No. GA0002437). As part of the permit, the wastewater is continuously monitored for pH prior to discharge and the outfall is sampled on a monthly basis. The open channel ditch and holding pond are also equipped with gates that will automatically close when monitors detect pH levels outside of the acceptable range. Based on the monitoring and control measures in-place for the wastewater discharge permit, the surface water pathway is considered incomplete for the sulfuric acid production area.

4.4 Fate and Transport Modeling

Following the identification and horizontal delineation of the COCs in the groundwater, fate and transport modeling will be conducted to substantiate the use of Type 5 RRS.

4.5 Cleanup Standards

Inaccessible soils exceeding Type 4 RRS and groundwater contamination will be subject to Type 5 RRS. The Type 5 RRS allows contamination to remain in place, provided the principal exposure pathways at the Site are mitigated by engineering and institutional controls. These controls could include, but are not limited to, a monitoring & maintenance plan / land disturbance plan, a uniform environmental covenant governing site activity and use limitations (AULs), restricted access, and 24-hour security measures.

5.0 VRP INVESTIGATION PLAN

Upon the acceptance of the VRP Application, Seagate will suspend the semi-annual groundwater monitoring and proceed with the following proposed investigation activities in place of the 2005 CAP requirements.

5.1 Soil Investigation

On behalf of Seagate, Terracon will conduct additional sampling activities to further delineate the lateral extent of Type 5 RRS soils at the Site. The proposed soil sample locations are depicted on Figure 19 in Appendix C.

Each boring will be advanced with a stainless steel hand auger until encountering saturated soil conditions. Soil samples will be collected at 1-foot intervals, visually classified in general accordance with ASTM D-2488 - 09a *"Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*", and field screened for arsenic and lead using an x-ray fluorescence spectrometer (XRF).

In general, the soil samples exhibiting the highest XRF readings from 0 to 2 feet bgs and from 2 feet to observed saturated zones in each boring will be selected for laboratory analysis. The soil samples selected for analysis will be placed in laboratory prepared containers, labeled, and placed on ice in coolers secured with custody seals. The samples and completed chain-of-custody forms will be transported to an independent Georgia-certified for analysis of arsenic and lead by USEPA Method 6010C.

Terracon will continue investigation activities as practical until Type 5 RRS soils are sufficiently delineated at the Site.

5.2 Groundwater Investigation

For the purposes of horizontal and vertical delineation of groundwater contamination to Type 4 RRS, the following monitoring wells will be installed at the Site:

- MW-22 will be installed to further delineate the horizontal extent of ammonia, arsenic, fluoride, and lead impacts to the west of MW-16;
- MW-23 through MW-27 will be installed to further delineate the horizontal extent of ammonia, fluoride, and arsenic contamination in the northeast corner of the Site;
- MW-28 will be installed to further delineate the horizontal extent of arsenic contamination to the west of MW-5;
- MW-3D2 will be installed with a minimum total depth of 57 feet to vertically delineate fluoride contamination in the vicinity of MW-3 / MW-3D; and
- MW-9D2 will be installed with a minimum total depth of 63 feet to vertically delineate ammonia contamination in the vicinity of MW-9-R / MW-9D-R.

In addition, existing monitoring well MW-3 will be abandoned and replaced as proposed in the 2017 Annual Status Report (Terracon, 2017). The proposed monitoring well locations are depicted on Figure 20 in Appendix C.

Prior to the installation of the monitoring wells, soil borings will be completed at the proposed locations to facilitate the collection of soil samples and lithologic data. The soil borings will be initially advanced with a stainless steel hand auger to a depth of 5 feet bgs in order to verify underground utility clearance. Once cleared, the borings will be advanced using direct push methods to the target depth of the monitoring well. Soil samples will be continuously collected to total boring depth to document soil lithology and saturated zone depths. Terracon will use this information to prepare stratigraphic cross-sections and further develop the CSM.

Soil samples will also be field screened for metals using an XRF and for organic vapors using a photo-ionization detector (PID). In general, the soil samples exhibiting potential impacts from 0 to 2 feet bgs and from 2 feet to observed saturated zones in each boring will be selected for laboratory analysis. The soil samples selected for analysis will be placed in laboratory prepared containers, labeled, and placed on ice in coolers secured with custody seals. The samples and completed chain-of-custody forms will be transported to an independent Georgia-certified laboratory and analyzed for one or more of the following COCs:

- Ammonia by USEPA Method 350.1

- Fluoride by USEPA Method 9056A
- Arsenic, cadmium, chromium, and lead by USEPA Method 6010C

Following the completion of soil sampling activities, the ten soil borings will be converted to monitoring wells. The monitoring wells will be completed in general accordance with procedures described in the US EPA Region 4, Science and Ecosystem Support Division guidance document titled Design and Installation of Monitoring Wells (SESDGUID-101-R1, effective date January 29, 2013).

Hollow stem auger drilling methods will be used to install the wells. The monitoring wells will be constructed with 2-inch diameter, Schedule 40 PVC risers and 0.010-inch slotted screens. Sand pack will be installed around the well screen from the bottom of the boring to approximately one 1 to 2 feet above the top of the screen. Approximately 1 to 2 feet of hydrated bentonite pellets will be placed above the sand pack. The wells will be completed at the surface with concrete pads and metal covers.

The deep wells will be double-cased to prevent cross-contamination between the upper and lower water-bearing units. The outer casing of each deep well will extent a minimum of 2 feet into the marl. The outer casing will then be grouted from the bottom to the ground surface. The grout seal will be allowed to cure for a minimum of 24 hours before drilling through it. The screen and sand pack for the deep wells will be installed below the outer casing.

Upon the completion of installation activities, the monitoring wells will be developed by surging and removing groundwater with a whale pump (or equivalent) until fluids appear relatively free of sediment. Following the completion of development activities, the monitoring wells will be purged and sampled in general accordance with the low-flow sampling protocol *USEPA Region 4, SESDPROC-301-R-4, Groundwater Sampling Operating Procedure, effective date April 26, 2017*.

Following the stabilization of field parameters, groundwater samples will be collected and placed in laboratory prepared containers, labeled, and placed on ice in coolers secured with custody seals. The groundwater samples and completed chain-of-custody forms will be transported to an independent Georgia-certified laboratory and analyzed for the following parameters:

- Ammonia by USEPA Method SM4500-NH3c
- Fluoride by USEPA Method 9056A
- Arsenic, cadmium, chromium, and lead by USEPA Method 6010C

Terracon will continue groundwater investigation activities as practical until regulated COPCs are delineated to Type 4 RRS.

5.2.1 Hydraulic Conductivity

Hydraulic conductivity, or the coefficient of permeability, describes the ease with which a fluid moves through the pore spaces or fractures in the subsurface. Terracon will determine a representative site hydraulic conductivities pursuant to the further development of the conceptual site model.

Representative hydraulic conductivity values will be determined by conducting rising head slug tests within various monitoring wells throughout the Site. Rising head slug tests are conducted by quickly removing a known volume of water (the slug) from a monitoring well and measuring the rate at which groundwater returns to static conditions. In order to collect accurate data, a transducer with an on-board data logger will be used to collect depth to water and hydrostatic pressure data over time.

Upon completion of the slug tests, time and depth to water data will be imported into the AQTESOLV™ aquifer software for analysis. Additional information input to the software will include the monitoring well diameter, the borehole diameter, the total depth of the monitoring well, the static water column height, the initial displacement, and an assumed gravel pack porosity. It is presumed that the Bouwer and Rice method for an unconfined aquifer will be used to determine the hydraulic conductivity values.

5.3 Surface Water Sampling

Surface water samples will be collected from the tidal marsh at locations previously sampled during the 2004 CSR Addendum investigation. These sample locations were selected as highest likelihood of impact by site operations as determined by a visual reconnaissance of the tidal marsh. Field water quality parameters, including pH, specific conductance, temperature, oxidation reduction potential (ORP), dissolved oxygen, and salinity, will be monitored during the collection of each surface water sample. The surface water samples will be collected and placed in laboratory prepared containers, labeled, and placed on ice in coolers secured with custody seals. The surface water samples and completed chain-of-custody forms will be transported to an independent Georgia-certified laboratory and analyzed for the following parameters:

- Ammonia by USEPA Method SM4500-NH3c
- Fluoride by USEPA Method 9056A
- Dissolved arsenic, cadmium, chromium, and lead by USEPA Method 6010C
- Hardness by USEPA Method 2540C

The surface water sample results will be evaluated to determine if this exposure pathway is complete.

5.4 Sediment Sampling

Sediment samples will be collected from surface water sample locations within the tidal marsh. These locations were selected as highest likelihood of impact by site operations as determined by a visual reconnaissance of the tidal marsh during the 2004 CSR Addendum investigation. The sediment samples will be collected and placed in laboratory prepared containers, labeled, and placed on ice in coolers secured with custody seals. The sediment samples and completed chain-of-custody forms will be transported to an independent Georgia-certified laboratory and analyzed for the following parameters:

- Ammonia by USEPA Method 350.1
- Fluoride by USEPA Method 9056A
- Arsenic, cadmium, chromium, and lead by USEPA Method 6010C

The sediment sample results will be evaluated to determine if this exposure pathway is complete.

In addition, a sediment sample will be collected from the northeast portion of the Lower Pond as proposed in the 2017 Annual Status Report (Terracon, 2017). The sediment sample will be analyzed for arsenic and lead. This action will be completed to address Comment #5 of the EPD's letter dated November 26, 2014.

6.0 REMEDIATION PLAN

6.1 Groundwater Monitoring

Upon completion of horizontal and vertical delineation of regulated COCs in groundwater, semi-annual groundwater monitoring program will resume at the Site. Groundwater monitoring will be conducted on a semi-annual basis for a period of up to three years to demonstrate attenuation and/or stabilization of regulated COCs and to confirm the results of the groundwater fate and transport model. Upon approval of the Georgia EPD, the monitoring program will be terminated when regulated COC concentrations are below Type 4 RRS; have stabilized or decreased over time; and / or are consistent with values predicted by the groundwater fate and transport model.

6.2 Institutional Controls

Soil and groundwater contamination will be subject to Type 5 RRS. The Type 5 RRS allows contamination to remain in place, provided the principal threats to human health and the environment are mitigated by engineering and institutional controls. An environmental covenant will likely be executed for the Site in conformance with O.C.G.A. § 44-61-1, et seq., the "Georgia

Uniform Environmental Covenants Act." This covenant will require that the site land use remain industrial and no drinking water well will be installed on-site. Other controls could include, but are not limited to, a soil monitoring & maintenance plan / land disturbance plan, excavation dewatering management plan, restricted access, and 24-hour security measures.

7.0 MILESTONE SCHEDULE

The schedule for the implementation of the Voluntary Investigation and Remediation Plan is presented in Appendix F. Progress reports will be submitted to the Georgia EPD on a semi-annual basis during the implementation period until the submittal of the final VRP CSR. A discussion of the VRP milestones is below:

- **On-site Horizontal/Vertical Delineation of Soil and Groundwater Impacts** – The results of on-site soil and groundwater delineation will be completed within the 6-month period specified under the VRP. The results of the delineation effort will be presented in Semi-Annual Progress Report No. 1.
- **Off-site Horizontal/Vertical Delineation of Soil and Groundwater Impacts** – The results of off-site soil and groundwater delineation will be completed within the 12-month period specified under the VRP. The results of the delineation effort will be presented in Semi-Annual Progress Report No. 2.
- **Updated CSM Submittal with Final Remediation Plan** – An updated CSM and final remediation plan will be submitted as part of Semi-Annual Progress Report No. 2 within 12 months following VRP enrollment. A Uniform Environmental Covenant will be prepared and executed in conjunction with this submittal.
- **VRP Compliance Status Report** – A VRP CSR certifying compliance with applicable rules and regulations will be submitted within 48 months following VRP enrollment.

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APPENDIX A

VOLUNTARY REMEDIATION PROGRAM APPLICATION AND CHECKLIST

Voluntary Investigation and Remediat. , Plan Application Form and Checklist

VRP APPLICANT INFORMATION					
COMPANY NAME	Seagate Terminals Savannah, LLC				
CONTACT PERSON/TITLE	Bobby Mattox / Site Manager				
ADDRESS	P.O. Box 546, Savannah, GA 31402				
PHONE	(912) 790-6340	FAX		E-MAIL	bmattox@sschemical.com

GEORGIA CERTIFIED PROFESSIONAL GEOLOGIST OR PROFESSIONAL ENGINEER OVERSEEING CLEANUP					
NAME	Justin J. Johnson			GA PE/PG NUMBER	PG No. 2196
COMPANY	Terracon Consultants, Inc.				
ADDRESS	2201 Rowland Avenue, Savannah, GA 31404				
PHONE	(912) 662-8481	FAX	(912) 629-4001	E-MAIL	justin.johnson2@terracon.com

APPLICANT'S CERTIFICATION

In order to be considered a qualifying property for the VRP:

(1) The property must have a release of regulated substances into the environment;
(2) The property shall not be:
- (A) Listed on the federal National Priorities List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601.
- (B) Currently undergoing response activities required by an order of the regional administrator of the federal Environmental Protection Agency; or
- (C) A facility required to have a permit under Code Section 12-8-66.

(3) Qualifying the property under this part would not violate the terms and conditions under which the division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency.
(4) Any lien filed under subsection (e) of Code Section 12-8-96 or subsection (b) of Code Section 12-13-12 against the property shall be satisfied or settled and released by the director pursuant to Code Section 12-8-94 or Code Section 12-13-6.

In order to be considered a participant under the VRP:
- (1) The participant must be the property owner of the voluntary remediation property or have express permission to enter another's property to perform corrective action.
- (2) The participant must not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director.

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.

I also certify that this property is eligible for the Voluntary Remediation Program (VRP) as defined in Code Section 12-8-105 and I am eligible as a participant as defined in Code Section 12-8-106.

APPLICANT'S SIGNATURE	Robert McMattox		
APPLICANT'S NAME/TITLE (PRINT)	Robert M. Mattox - Site Manager	DATE	3-1-18

QUALIFYING PROPERTY INFORMATION (For additional qualifying properties, please refer to the last page of application form)			
HAZARDOUS SITE INVENTORY INFORMATION (if applicable)			
HSI Number	10371	Date HSI Site listed	5/23/1998
HSI Facility Name	Southern States Phosphate & Fertilizer Co.	NAICS CODE	325188
PROPERTY INFORMATION			
TAX PARCEL ID	1-0289-01-008	PROPERTY SIZE (ACRES)	57.11
PROPERTY ADDRESS	1600 East President Street		
CITY	Savannah	COUNTY	Chatham
STATE	Georgia	ZIPCODE	31404
LATITUDE (decimal format)	32.073689	LONGITUDE (decimal format)	-81.061773
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	Seagate Terminals Savannah, LLC	PHONE #	(912) 790-6340
MAILING ADDRESS	P.O. Box 546		
CITY	Savannah	STATE/ZIPCODE	Georgia / 31402

ITEM #	DESCRIPTION OF REQUIREMENT	Location in VRP (i.e. pg., Table #, Figure #, etc.)	For EPD Comment Only (Leave Blank)
1.	**$5,000 APPLICATION FEE** IN THE FORM OF A CHECK PAYABLE TO THE GEORGIA DEPARTMENT OF NATURAL RESOURCES. (PLEASE LIST CHECK DATE AND CHECK NUMBER IN COLUMN TITLED "LOCATION IN VRP." PLEASE DO NOT INCLUDE A SCANNED COPY OF CHECK IN ELECTRONIC COPY OF APPLICATION.)	Check included with submittal. Check #: 010595 Date: 2/1/2018	
2.	**WARRANTY DEED(S)** FOR QUALIFYING PROPERTY.	Appendix B	
3.	**TAX PLAT** OR OTHER FIGURE INCLUDING QUALIFYING PROPERTY BOUNDARIES, ABUTTING PROPERTIES, AND TAX PARCEL IDENTIFICATION NUMBER(S).	Appendix C Figure 2	
4.	**ONE (1) PAPER COPY AND TWO (2) COMPACT DISC (CD) COPIES** OF THE VOLUNTARY REMEDIATION PLAN IN A SEARCHABLE PORTABLE DOCUMENT FORMAT (PDF).	Included with submittal.	
5.	The VRP participant's initial plan and application must include, using all reasonably available current information to the extent known at the time of application, a graphic three-dimensional preliminary conceptual site model (CSM) including a preliminary remediation plan with a table of delineation standards, brief supporting text, charts, and figures (no more than 10 pages, total) that illustrates the site's surface and subsurface setting, the known or suspected source(s) of contamination, how contamination might move within the environment, the potential human health and ecological receptors, and the complete or incomplete exposure pathways that may exist at the site; the preliminary CSM must be updated as the investigation and remediation progresses and an up-to-date CSM must be included in each semi-annual status report submitted to the director by the participant; a **PROJECTED MILESTONE SCHEDULE** for investigation and remediation of the site, and after enrollment as a participant, must update the schedule in each semi-annual status report to the director describing implementation of the plan	Sections 4 & 7 Appendices C - E	

	during the preceding period. A Gantt chart format is preferred for the milestone schedule. The following four (4) generic milestones are required in all initial plans with the results reported in the participant's next applicable semi-annual reports to the director. The director may extend the time for or waive these or other milestones in the participant's plan where the director determines, based on a showing by the participant, that a longer time period is reasonably necessary:		
5.a.	Within the first 12 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern on property where access is available at the time of enrollment;	Section 7 Appendix E	
5.b.	Within the first 24 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern extending onto property for which access was not available at the time of enrollment;	Section 7 Appendix E	
5.c.	Within 30 months after enrollment, the participant must update the site CSM to include vertical delineation, finalize the remediation plan and provide a preliminary cost estimate for implementation of remediation and associated continuing actions; and	Section 7 Appendix E	
5.d.	Within 60 months after enrollment, the participant must submit the compliance status report required under the VRP, including the requisite certifications.	Section 7 Appendix E	
6.	**SIGNED AND SEALED PE/PG CERTIFICATION** AND SUPPORTING DOCUMENTATION: "I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances. Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division. 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." Justin J. Johnson, PG #2196 Printed Name and GA PE/PG Number Signature and Stamp 3/[illegible]/2018 Date JUSTIN J. JOHNSON GEORGIA REGISTERED PROFESSIONAL GEOLOGIST No. 2196		

ADDITIONAL QUALIFYING PROPERTIES (COPY THIS PAGE AS NEEDED)

PROPERTY INFORMATION			
TAX PARCEL ID	1-0368-01-014	PROPERTY SIZE (ACRES)	4.82
PROPERTY ADDRESS	1600 East President Street		
CITY	Savannah	COUNTY	Chatham
STATE	Georgia	ZIPCODE	31404
LATITUDE (decimal format)	32.074581	LONGITUDE (decimal format)	-81.065472
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	Seagate Terminals Savannah, LLC	PHONE #	(912) 790-6340
MAILING ADDRESS	P.O. Box 546		
CITY	Savannah	STATE/ZIPCODE	Georgia / 31402

PROPERTY INFORMATION			
TAX PARCEL ID	1-0289-01-013	PROPERTY SIZE (ACRES)	15.2
PROPERTY ADDRESS	1600 East President Street		
CITY	Savannah	COUNTY	Chatham
STATE	Georgia	ZIPCODE	31404
LATITUDE (decimal format)	32.073385	LONGITUDE (decimal format)	-81.065682
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	Seagate Terminals Savannah, LLC	PHONE #	(912) 790-6340
MAILING ADDRESS	P.O. Box 546		
CITY	Savannah	STATE/ZIPCODE	Georgia / 31402

PROPERTY INFORMATION			
TAX PARCEL ID	1-0289-01-007	PROPERTY SIZE (ACRES)	6.82
PROPERTY ADDRESS	1600 East President Street		
CITY	Savannah	COUNTY	Chatham
STATE	Georgia	ZIPCODE	31404
LATITUDE (decimal format)	32.072021	LONGITUDE (decimal format)	-81.062435
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	Seagate Terminals Savannah, LLC	PHONE #	(912) 790-6340
MAILING ADDRESS	P.O. Box 546		
CITY	Savannah	STATE/ZIPCODE	Georgia / 31402

ADDITIONAL QUALIFYING PROPERTIES (COPY THIS PAGE AS NEEDED)

PROPERTY INFORMATION			
TAX PARCEL ID	1-0289-01-005	PROPERTY SIZE (ACRES)	4.39
PROPERTY ADDRESS	1600 East President Street		
CITY	Savannah	COUNTY	Chatham
STATE	Georgia	ZIPCODE	31404
LATITUDE (decimal format)	32.072844	LONGITUDE (decimal format)	-81.060642
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	Seagate Terminals Savannah, LLC	PHONE #	(912) 790-6340
MAILING ADDRESS	P.O. Box 546		
CITY	Savannah	STATE/ZIPCODE	Georgia / 31402

PROPERTY INFORMATION			
TAX PARCEL ID		PROPERTY SIZE (ACRES)	
PROPERTY ADDRESS			
CITY		COUNTY	
STATE		ZIPCODE	
LATITUDE (decimal format)		LONGITUDE (decimal format)	
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)		PHONE #	
MAILING ADDRESS			
CITY		STATE/ZIPCODE	

PROPERTY INFORMATION			
TAX PARCEL ID		PROPERTY SIZE (ACRES)	
PROPERTY ADDRESS			
CITY		COUNTY	
STATE		ZIPCODE	
LATITUDE (decimal format)		LONGITUDE (decimal format)	
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)		PHONE #	
MAILING ADDRESS			
CITY		STATE/ZIPCODE	

APPENDIX B

WARRANTY DEED

Doc ID: 030372110010 Type: WD
Recorded: 05/11/2017 at 01:45:34 PM
Fee Amt: $28.00 Page 1 of 10
Chatham, Ga. Clerk Superior Court
Tammie Mosley Clerk Superior Court
BK 1075 PG 173-182

PREPARED BY AND RETURN TO:
EDWIN W. KING, JR., P.C.
PO BOX 9873
SAVANNAH, GA 31412

STATE OF GEORGIA)
)
COUNTY OF CHATHAM)

WARRANTY DEED

THIS INDENTURE, made this 10th day of May, 2017, between **SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY,** a Georgia corporation, as Party of the First Part herein called Grantor, and **SEAGATE TERMINALS SAVANNAH, LLC,** a Georgia limited liability company, as Party of the Second Part, hereinafter called Grantee (the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits).

WITNESSETH:

That the said Party of the First Part, for and in consideration of the sum of **TEN AND NO 100'S DOLLARS ($10.00)** and other good and valuable consideration, in hand paid by the said Party of the Second Part, at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, has granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell, and convey unto the said Party of the Second Part, their heirs, successors and assigns, the following described property, to-wit: SEE EXHIBIT "A" attached hereto and made a part hereof.

TO HAVE AND TO HOLD the said tract or parcel of land, together with all and singular the rights, members and appurtenances thereof, to the same being, belonging or in anywise appertaining, to the only proper use, benefit and behoof of it, the said Party of the Second Part, their successors and assigns forever, **IN FEE SIMPLE.**

AND THE SAID PARTY of the First Part, for his successors and assigns will warrant and forever defend the right and title to the above described property unto the said Party of the Second Part, their successors and assigns, against the lawful claim of all persons whomsoever.

This conveyance is made expressly subject to all existing and recorded restrictions, exceptions, reservations, easements, rights-of-way, conditions, and covenants of whatever nature, if any, and is also expressly subject to all municipal, county and state zoning laws and other ordinances, regulations ,and restrictions, including statutes and other laws of municipal, county, or other governmental authorities applicable to and enforceable against the premises described in this instrument.

IN WITNESS WHEREOF, the said Party of the First Part has hereunto set its hand and affixed its seal, the day and year above written.

Sworn to and subscribed before me,
this 10th day of May, 2017:

Witness

Notary Public
My Commission Expires:
[NOTARIAL SEAL]

JEAN LOGAN MCCULLOUGH NOTARY PUBLIC CHATHAM COUNTY, GEORGIA MY COMM. EXPIRES JAN. 6, 2020

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY:

By: _____
F. Reed Dulany, III, President

Attest: _____
Edwin W. King, Jr., Secretary

[CORPORATE SEAL]

/sspf.sgts.warranty.deed

EXHIBIT "A"

LEGAL DESCRIPTION

PROPERTY DESCRIPTION KNOWN AS CHATHAM COUNTY PIN 1-0289 -01-003

ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND SITUATE, LYING AND BEING IN CHATHAM COUNTY, GEORGIA, 3RD G. M. DISTRICT, BEING A 0.69 ACRE PORTION OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO, AND BEING DESCRIBED AS FOLLOWS:

COMMENCING AT A PK NAIL IN THE ASPHALT HAVING GEORGIA STATE PLAN GRID, EAST ZONE COORDINATES N 754,972.17 AND E 998,602.42, SAID POINT BEING THE INTERSECTION OF THE NORTHERN RIGHT-OF-WAY LINE OF PRESIDENT STREET AND THE EASTERN PROPERTY LINE OF SAID PARCEL, ALSO KNOW AS ST REGIS ROAD;

EXTEND THENCE NORTH 77 DEGREES 05 MINUTES 09 SECONDS WEST
A DISTANCE OF 359.93 FEET TO THE **POINT OF BEGINNING;**
EXTEND THENCE NORTH 77 DEGREES 05 MINUTES 09 SECONDS WEST
A DISTANCE OF 200.27 FEET TO A CONCRETE MONUMENT FOUND;
THENCE NORTH 12 DEGREES 54 MINUTES 51 SECONDS EAST
A DISTANCE OF 151.62 FEET TO A POINT;
THENCE SOUTH 75 DEGREES 47 MINUTES 47 SECONDS EAST
A DISTANCE OF 200.32 FEET TO A POINT;
THENCE SOUTH 12 DEGREES 54 MINUTES 51 SECONDS WEST
A DISTANCE OF 147.13 FEET TO THE POINT OF BEGINNING;

THE ABOVE DESCRIBED PARCEL CONTAINS 0.69 ACRE.

SAID TRACT IS DESIGNATED AS CHATHAM COUNTY PIN 1-0289 -01-003 ON THAT CERTAIN PLAT OF SURVEY DATED 12-08-2010, TITLED BOUNDARY AND AS BUILT SURVEY OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO., PREPARED BY SUNDIAL LAND SURVEYING, PC.

PROPERTY DESCRIPTION KNOWN AS CHATHAM COUNTY PIN 1-0289 -01-003A

ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND SITUATE, LYING AND BEING IN CHATHAM COUNTY, GEORGIA, 3RD G. M. DISTRICT, BEING A 0.60 ACRE PORTION OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO, AND BEING DESCRIBED AS FOLLOWS:

COMMENCING AT A PK NAIL IN THE ASPHALT HAVING GEORGIA STATE PLAN GRID, EAST ZONE COORDINATES N 754,972.17 AND E 998,602.42, SAID POINT BEING THE INTERSECTION OF THE NORTHERN RIGHT-OF-WAY LINE OF PRESIDENT STREET AND THE EASTERN PROPERTY LINE OF SAID PARCEL, ALSO KNOW AS ST REGIS ROAD;

EXTEND THENCE NORTH 77 DEGREES 05 MINUTES 09 SECONDS WEST
A DISTANCE OF 180.93 FEET TO THE **POINT OF BEGINNING;**
EXTEND THENCE NORTH 77 DEGREES 05 MINUTES 09 SECONDS WEST
A DISTANCE OF 179.00 FEET TO A POINT;
THENCE NORTH 12 DEGREES 54 MINUTES 51 SECONDS EAST
A DISTANCE OF 147.13 FEET TO A POINT;
THENCE SOUTH 75 DEGREES 47 MINUTES 47 SECONDS EAST
A DISTANCE OF 179.05 FEET TO A POINT;
THENCE SOUTH 12 DEGREES 54 MINUTES 51 SECONDS WEST
A DISTANCE OF 143.10 FEET TO THE POINT OF BEGINNING;

THE ABOVE DESCRIBED PARCEL CONTAINS 0.60 ACRE.

SAID TRACT IS DESIGNATED AS CHATHAM COUNTY PIN 1-0289 -01-003A ON THAT CERTAIN PLAT OF SURVEY DATED 12-08-2010, TITLED BOUNDARY AND AS BUILT SURVEY OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO., PREPARED BY SUNDIAL LAND SURVEYING, PC.

PROPERTY DESCRIPTION KNOWN AS CHATHAM COUNTY PIN 1-0289 -01-003B

ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND SITUATE, LYING AND BEING IN CHATHAM COUNTY, GEORGIA, 3RD G. M. DISTRICT, BEING A 0.44 ACRE PORTION OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO, AND BEING DESCRIBED AS FOLLOWS:

COMMENCING AT A PK NAIL IN THE ASPHALT HAVING GEORGIA STATE PLAN GRID, EAST ZONE COORDINATES N 754,972.17 AND E 998,602.42, SAID POINT BEING THE INTERSECTION OF THE NORTHERN RIGHT-OF-WAY LINE OF PRESIDENT STREET AND THE EASTERN PROPERTY LINE OF SAID PARCEL, ALSO KNOW AS ST REGIS ROAD;

EXTEND THENCE NORTH 77 DEGREES 05 MINUTES 09 SECONDS WEST
A DISTANCE OF 30.73 FEET TO AN IRON ROD FOUND, SAID POINT BEING THE **POINT OF BEGINNING;**
EXTEND THENCE NORTH 77 DEGREES 05 MINUTES 09 SECONDS WEST
A DISTANCE OF 150.20 FEET TO A POINT;
THENCE NORTH 12 DEGREES 54 MINUTES 51 SECONDS EAST
A DISTANCE OF 143.10 FEET TO A POINT;
THENCE SOUTH 75 DEGREES 47 MINUTES 47 SECONDS EAST
A DISTANCE OF 118.49 FEET TO A POINT;
THENCE SOUTH 00 DEGREES 10 MINUTES 43 SECONDS WEST
A DISTANCE OF 143.98 FEET TO THE POINT OF BEGINNING;

THE ABOVE DESCRIBED PARCEL CONTAINS 0.44 ACRE.

SAID TRACT IS DESIGNATED AS CHATHAM COUNTY PIN 1-0289 -01-003B ON THAT CERTAIN PLAT OF SURVEY DATED 12-08-2010, TITLED BOUNDARY AND AS BUILT SURVEY OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO., PREPARED BY SUNDIAL LAND SURVEYING, PC.

PROPERTY DESCRIPTION KNOWN AS CHATHAM COUNTY PIN 1-0289 -01-005

ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND SITUATE, LYING AND BEING IN CHATHAM COUNTY, GEORGIA, 3RD G. M. DISTRICT, BEING A 4.80 ACRE PORTION OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO, AND BEING DESCRIBED AS FOLLOWS:

COMMENCING AT A PK NAIL IN THE ASPHALT HAVING GEORGIA STATE PLAN GRID, EAST ZONE COORDINATES N 754,972.17 AND E 998,602.42, SAID POINT BEING THE INTERSECTION OF THE NORTHERN RIGHT-OF-WAY LINE OF PRESIDENT STREET AND THE EASTERN PROPERTY LINE OF SAID PARCEL, ALSO KNOW AS ST REGIS ROAD;

EXTEND THENCE NORTH 00 DEGREES 06 MINUTES 39 SECONDS EAST
A DISTANCE OF 152.16 FEET TO A POINT;
THENCE NORTH 05 DEGREES 12 MINUTES 24 SECONDS WEST
A DISTANCE OF 307.04 FEET TO AN IRON ROD FOUND;
THENCE NORTH 72 DEGREES 36 MINUTES 42 SECONDS WEST
A DISTANCE OF 32.19 FEET TO THE **POINT OF BEGINNING;**
THENCE NORTH 10 DEGREES 23 MINUTES 23 SECONDS WEST
A DISTANCE OF 204.68 FEET TO A POINT;
THENCE NORTH 10 DEGREES 54 MINUTES 53 SECONDS EAST
A DISTANCE OF 180.92 FEET TO PK NAIL FOUND;
THENCE NORTH 21 DEGREES 49 MINUTES 01 SECONDS EAST
A DISTANCE OF 132.23 FEET TO A POINT;
THENCE SOUTH 67 DEGREES 46 MINUTES 47 SECONDS EAST
A DISTANCE OF 245.15 FEET TO A POINT;
THENCE ALONG A CURVE CONCAVE NORTHERLY
HAVING A RADIUS OF 572.02 FEET
247.14 FEET ALONG SAID CURVE TO A CONCRETE MONUMENT FOUND;
THENCE SOUTH 07 DEGREES 32 MINUTES 17 SECONDS WEST
A DISTANCE OF 17.28 FEET TO A CONCRETE MONUMENT FOUND;
THENCE SOUTH 26 DEGREES 10 MINUTES 39 SECONDS WEST
A DISTANCE OF 100.39 FEET TO A POINT;
THENCE SOUTH 21 DEGREES 46 MINUTES 03 SECONDS WEST
A DISTANCE OF 247.41 FEET TO A POINT;
THENCE NORTH 67 DEGREES 14 MINUTES 16 SECONDS WEST
A DISTANCE OF 29.61 FEET TO A CONCRETE MONUMENT FOUND;
THENCE SOUTH 21 DEGREES 49 MINUTES 25 SECONDS WEST

A DISTANCE OF 145.34 FEET TO AN IRON ROD FOUND;
THENCE NORTH 72 DEGREES 32 MINUTES 47 SECONDS WEST
A DISTANCE OF 277.54 FEET TO THE POINT OF BEGINNING;

THE ABOVE DESCRIBED PARCEL CONTAINS 4.80 ACRES.

SAID TRACT IS DESIGNATED AS CHATHAM COUNTY PIN 1-0289 -01-005 ON THAT CERTAIN PLAT OF SURVEY DATED 12-08-2010, TITLED BOUNDARY AND AS BUILT SURVEY OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO., PREPARED BY SUNDIAL LAND SURVEYING, PC.

PROPERTY DESCRIPTION KNOWN AS CHATHAM COUNTY PIN 1-0289 -01-007

ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND SITUATE, LYING AND BEING IN CHATHAM COUNTY, GEORGIA, 3RD G. M. DISTRICT, BEING A 7.15 ACRE PORTION OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO AND BEING DESCRIBED AS FOLLOWS:

BEGINNING AT A PK NAIL IN THE ASPHALT HAVING GEORGIA STATE PLAN GRID ,EAST ZONE COORDINATES N 754,972.17 AND E 998,602.42, SAID POINT BEING THE INTERSECTION OF THE NORTHERN RIGHT-OF-WAY LINE OF PRESIDENT STREET AND THE EASTERN PROPERTY LINE OF SAID PARCEL, ALSO KNOW AS ST REGIS ROAD;

EXTEND THENCE NORTH 77 DEGREES 05 MINUTES 09 SECONDS WEST
A DISTANCE OF 30.73 FEET TO AN IRON ROD FOUND;
THENCE NORTH 00 DEGREES 10 MINUTES 43 SECONDS EAST
A DISTANCE OF 143.98 FEET TO A POINT;
THENCE NORTH 75 DEGREES 47 MINUTES 47 SECONDS WEST
A DISTANCE OF 697.68 FEET TO A POINT;
THENCE NORTH 12 DEGREES 53 MINUTES 58 SECONDS EAST
A DISTANCE OF 100.65 FEET TO A POINT;
THENCE NORTH 75 DEGREES 38 MINUTES 34 SECONDS WEST
A DISTANCE OF 296.39 FEET TO AN IRON ROD FOUND;
THENCE NORTH 03 DEGREES 49 MINUTES 51 SECONDS EAST
A DISTANCE OF 147.62 FEET TO A POINT;
THENCE NORTH 07 DEGREES 47 MINUTES 42 SECONDS WEST
A DISTANCE OF 151.28 FEET TO A POINT;
THENCE SOUTH 70 DEGREES 41 MINUTES 53 SECONDS EAST
A DISTANCE OF 977.93 FEET TO A POINT;
THENCE SOUTH 72 DEGREES 36 MINUTES 42 SECONDS EAST
A DISTANCE OF 32.19 FEET TO AN IRON ROD FOUND;
THENCE SOUTH 05 DEGREES 12 MINUTES 24 SECONDS EAST
A DISTANCE OF 307.04 FEET TO A POINT;
THENCE SOUTH 00 DEGREES 08 MINUTES 23 SECONDS WEST
A DISTANCE OF 152.16 FEET TO THE POINT OF BEGINNING;

THE ABOVE DESCRIBED PARCEL CONTAINS 7.15 ACRES.

SAID TRACT IS DESIGNATED AS PIN 1-0289 -01-007 ON THAT CERTAIN PLAT OF SURVEY DATED 12-08-2010, TITLED BOUNDARY AND AS BUILT SURVEY OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO., PREPARED BY SUNDIAL LAND SURVEYING, PC.

PROPERTY DESCRIPTION KNOWN AS CHATHAM COUNTY PIN 1-0289 -01-008

ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND SITUATE, LYING AND BEING IN CHATHAM COUNTY, GEORGIA, 3RD G. M. DISTRICT, BEING A 62.78 ACRE PORTION OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO, AND BEING DESCRIBED AS FOLLOWS:

COMMENCING AT A PK NAIL IN THE ASPHALT HAVING GEORGIA STATE PLAN GRID, EAST ZONE COORDINATES N 754,972.17 AND E 998,602.42, SAID POINT BEING THE INTERSECTION OF THE NORTHERN RIGHT-OF-WAY LINE OF PRESIDENT STREET AND THE EASTERN PROPERTY LINE OF SAID PARCEL, ALSO KNOW AS ST REGIS ROAD;

EXTEND THENCE NORTH 00 DEGREES 08 MINUTES 23 SECONDS EAST
A DISTANCE OF 152.16 FEET TO A POINT;
THENCE NORTH 05 DEGREES 12 MINUTES 24 SECONDS WEST
A DISTANCE OF 307.04 FEET TO AN IRON ROD FOUND;
THENCE NORTH 72 DEGREES 36 MINUTES 42 SECONDS WEST

A DISTANCE OF 32.19 FEET TO THE POINT OF BEGINNING;
EXTEND THENCE NORTH 70 DEGREES 41 MINUTES 53 SECONDS WEST
A DISTANCE OF 977.93 FEET TO A POINT;
THENCE NORTH 07 DEGREES 47 MINUTES 42 SECONDS WEST
A DISTANCE OF 750.55 FEET TO A POINT;
THENCE NORTH 78 DEGREES 13 MINUTES 30 SECONDS WEST
A DISTANCE OF 434.25 FEET TO A POINT;
THENCE NORTH 15 DEGREES 06 MINUTES 59 SECONDS EAST
A DISTANCE OF 20.04 FEET TO A POINT;
THENCE NORTH 78 DEGREES 18 MINUTES 30 SECONDS WEST
A DISTANCE OF 189.97 FEET TO A POINT;
THENCE NORTH 15 DEGREES 06 MINUTES 59 SECONDS EAST
A DISTANCE OF 607.93 FEET TO A CONCRETE MONUMENT FOUND;
THENCE NORTH 84 DEGREES 03 MINUTES 31 SECONDS EAST
A DISTANCE OF 35.82 FEET TO A CONCRETE MONUMENT FOUND;
THENCE SOUTH 85 DEGREES 51 MINUTES 25 SECONDS EAST
A DISTANCE OF 1695.13 FEET TO A CONCRETE MONUMENT FOUND;

THENCE SOUTH 03 DEGREES 35 MINUTES 06 SECONDS EAST
A DISTANCE OF 476.09 FEET TO A CONCRETE MONUMENT FOUND;
THENCE SOUTH 70 DEGREES 39 MINUTES 34 SECONDS EAST
A DISTANCE OF 797.88 FEET TO AN IRON ROD FOUND;
THENCE SOUTH 09 DEGREES 20 MINUTES 50 SECONDS WEST
A DISTANCE OF 462.30 FEET TO A POINT;
THENCE SOUTH 28 DEGREES 45 MINUTES 01 SECONDS WEST
A DISTANCE OF 26.06 FEET TO A POINT;
ALONG A CURVE CONCAVE SOUTHERLY
HAVING A RADIUS OF 569.05 FEET
178.79 FEET ALONG SAID CURVE;
THENCE SOUTH 67 DEGREES 30 MINUTES 07 SECONDS WEST
A DISTANCE OF 69.03 FEET TO A POINT;
ALONG A CURVE CONCAVE NORTHERLY
HAVING A RADIUS OF 589.02 FEET
205.39 FEET ALONG SAID CURVE TO A CONCRETE MONUMENT FOUND;
THENCE NORTH 07 DEGREES 32 MINUTES 17 SECONDS EAST
A DISTANCE OF 17.28 FEET TO A CONCRETE MONUMENT FOUND;
ALONG A CURVE CONCAVE NORTHERLY
HAVING A RADIUS OF 572.02 FEET
247.14 FEET ALONG SAID CURVE TO A POINT;
THENCE NORTH 67 DEGREES 46 MINUTES 47 SECONDS WEST
A DISTANCE OF 245.15 FEET TO A POINT;
THENCE SOUTH 21 DEGREES 49 MINUTES 01 SECONDS WEST
A DISTANCE OF 132.23 FEET TO A PK NAIL FOUND;
THENCE SOUTH 10 DEGREES 54 MINUTES 53 SECONDS WEST
A DISTANCE OF 180.92 FEET TO A POINT;
THENCE SOUTH 10 DEGREES 23 MINUTES 23 SECONDS EAST
A DISTANCE OF 204.68 FEET TO THE POINT OF BEGINNING;

THE ABOVE DESCRIBED PARCEL CONTAINS 62.78 ACRES.

SAID TRACT IS DESIGNATED AS CHATHAM COUNTY PIN 1-0289 -01-008 ON THAT CERTAIN PLAT OF SURVEY DATED 12-08-2010, TITLED BOUNDARY AND AS BUILT SURVEY OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO., PREPARED BY SUNDIAL LAND SURVEYING, PC.

PROPERTY DESCRIPTION KNOWN AS CHATHAM COUNTY PIN 1-0289 -01-009

ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND SITUATE, LYING AND BEING IN CHATHAM COUNTY, GEORGIA, 3RD G. M. DISTRICT, BEING A 7.62 ACRE PORTION OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO, AND BEING DESCRIBED AS FOLLOWS:

COMMENCING AT A PK NAIL IN THE ASPHALT HAVING GEORGIA STATE PLAN GRID, EAST ZONE COORDINATES N 754,972.17 AND E 998,602.42, SAID POINT BEING THE INTERSECTION OF THE NORTHERN RIGHT-OF-WAY LINE OF PRESIDENT STREET AND THE EASTERN PROPERTY LINE OF SAID PARCEL, ALSO KNOW AS ST REGIS ROAD;

EXTEND THENCE NORTH 00 DEGREES 08 MINUTES 23 SECONDS EAST
A DISTANCE OF 152.16 FEET TO A POINT;
THENCE NORTH 05 DEGREES 12 MINUTES 24 SECONDS WEST
A DISTANCE OF 307.04 FEET TO A POINT;
THENCE SOUTH 72 DEGREES 32 MINUTES 47 SECONDS EAST
A DISTANCE OF 277.54 FEET TO AN IRON ROD FOUND;
THENCE NORTH 21 DEGREES 49 MINUTES 25 SECONDS EAST
A DISTANCE OF 145.34 FEET TO A CONCRETE MONUMENT FOUND;
THENCE SOUTH 67 DEGREES 14 MINUTES 16 SECONDS EAST
A DISTANCE OF 29.61 FEET TO A POINT;
THENCE NORTH 21 DEGREES 46 MINUTES 03 SECONDS EAST
A DISTANCE OF 247.41 FEET TO A POINT;
THENCE NORTH 26 DEGREES 10 MINUTES 39 SECONDS EAST
A DISTANCE OF 100.39 FEET TO A CONCRETE MONUMENT FOUND;
ALONG A CURVE CONCAVE NORTHERLY
HAVING A RADIUS OF 589.02 FEET
205.39 FEET ALONG SAID CURVE;
THENCE NORTH 67 DEGREES 30 MINUTES 07 SECONDS EAST
A DISTANCE OF 69.03 FEET TO A POINT;
ALONG A CURVE CONCAVE SOUTHERLY
HAVING A RADIUS OF 569.05 FEET
178.79 FEET ALONG SAID CURVE;
THENCE NORTH 28 DEGREES 45 MINUTES 01 SECONDS EAST
A DISTANCE OF 26.06 FEET TO A POINT;
THENCE NORTH 09 DEGREES 20 MINUTES 50 SECONDS EAST
A DISTANCE OF 462.30 FEET TO AN IRON ROD FOUND;
THENCE NORTH 70 DEGREES 39 MINUTES 33 SECONDS WEST
A DISTANCE OF 797.88 FEET TO A CONCRETE MONUMENT FOUND;
THENCE NORTH 03 DEGREES 35 MINUTES 06 SECONDS WEST
A DISTANCE OF 476.09 FEET TO A CONCRETE MONUMENT FOUND SAID POINT BEING THE **POINT OF BEGINNING**;
EXTEND THENCE NORTH 85 DEGREES 51 MINUTES 25 SECONDS WEST
A DISTANCE OF 60.50 FEET TO A IRON ROD SET;
THENCE NORTH 03 DEGREES 36 MINUTES 45 SECONDS WEST
A DISTANCE OF 157.33 FEET TO AN IRON ROD SET;
THENCE NORTH 52 DEGREES 05 MINUTES 28 SECONDS EAST
A DISTANCE OF 48.42 FEET TO AN IRON ROD SET;
THENCE NORTH 03 DEGREES 36 MINUTES 43 SECONDS WEST
A DISTANCE OF 889.78 FEET TO A POINT;
THENCE NORTH 85 DEGREES 56 MINUTES 31 SECONDS EAST
A DISTANCE OF 60.00 FEET TO A POINT;
THENCE SOUTH 03 DEGREES 36 MINUTES 45 SECONDS EAST
A DISTANCE OF 413.86 FEET TO AN IRON ROD FOUND;
THENCE NORTH 89 DEGREES 14 MINUTES 07 SECONDS EAST
A DISTANCE OF 494.82 FEET TO AN IRON ROD FOUND;
THENCE SOUTH 00 DEGREES 45 MINUTES 53 SECONDS EAST
A DISTANCE OF 550.00 FEET TO AN IRON ROD FOUND;
THENCE SOUTH 89 DEGREES 14 MINUTES 07 SECONDS WEST
A DISTANCE OF 507.52 FEET TO AN IRON ROD FOUND;
THENCE SOUTH 03 DEGREES 35 MINUTES 06 SECONDS EAST
A DISTANCE OF 120.45 FEET TO THE POINT OF BEGINNING;

THE ABOVE DESCRIBED PARCEL CONTAINS 7.62 ACRES.

SAID TRACT IS DESIGNATED AS CHATHAM COUNTY PIN 1-0289 -01-009 ON THAT CERTAIN PLAT OF SURVEY DATED 12-08-2010, TITLED BOUNDARY AND AS BUILT SURVEY OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO., PREPARED BY SUNDIAL LAND SURVEYING, PC.

PROPERTY DESCRIPTION KNOWN AS CHATHAM COUNTY PIN 1-0368 -01-013 (WEST TRACT)

ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND SITUATE, LYING AND BEING IN CHATHAM COUNTY, GEORGIA, 3RD G. M. DISTRICT, BEING A 3.16 ACRE PORTION OF LANDS OF SOUTHERN STATES PHOSPHATE & FERTILIZER CO, AND BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE MITER INTERSECTION OF THE NORTHERN RIGHT-OF-WAY LINE OF PRESIDENT STREET AND THE WESTERN RIGHT-OF-WAY LINE OF DULANY ROAD;
EXTEND THENCE NORTH 77 DEGREES 21 MINUTES 18 SECONDS WEST
A DISTANCE OF 123.81 FEET TO AN IRON ROD FOUND;
THENCE NORTH 15 DEGREES 15 MINUTES 37 SECONDS EAST
A DISTANCE OF 833.25 FEET TO A POINT;
THENCE SOUTH 74 DEGREES 44 MINUTES 23 SECONDS EAST
A DISTANCE OF 40.01 FEET TO A POINT;
THENCE NORTH 15 DEGREES 15 MINUTES 37 SECONDS EAST
A DISTANCE OF 350.00 FEET TO A POINT;
THENCE SOUTH 78 DEGREES 13 MINUTES 30 SECONDS EAST
A DISTANCE OF 21.63 FEET TO A POINT;
THENCE SOUTH 16 DEGREES 00 MINUTES 23 SECONDS WEST
A DISTANCE OF 67.02 FEET TO A POINT;
THENCE SOUTH 40 DEGREES 19 MINUTES 15 SECONDS EAST
A DISTANCE OF 67.71 FEET TO A POINT;
THENCE SOUTH 13 DEGREES 21 MINUTES 59 SECONDS WEST
A DISTANCE OF 1044.90 FEET TO A POINT;
THENCE SOUTH 58 DEGREES 21 MINUTES 59 SECONDS WEST
A DISTANCE OF 40.14 THE POINT OF BEGINNING;

HE ABOVE DESCRIBED PARCEL CONTAINS 3.16 ACRES

PROPERTY DESCRIPTION KNOWN AS CHATHAM COUNTY PIN 1-368-01-013

ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND SITUATE, LYING AND BEING IN , COUNTY OF CHATHAM, STATE OF GEORGIA, BEING KNOWN AS PARCEL A1-A BEING A PORTION OF TRACT A-1 TWICKENHAM PLANTATION, 3RD G. M. DISTRICT BEING LANDS OF SOUTHERN STATES PHOSPHATE;

BEGINNING AT THE MITER INTERSECTION OF THE NORTHERN RIGHT-OF-WAY LINE OF PRESIDENT STREET AND THE WESTERN RIGHT-OF-WAY LINE OF DULANY ROAD;

EXTEND THENCE NORTH 32 DEGREES 58 MINUTES 18 SECONDS WEST
A DISTANCE OF 44.08 FEET TO A POINT;
THENCE NORTH 13 DEGREES 21 MINUTES 59 SECONDS EAST
A DISTANCE OF 737.99 FEET TO AN IRON ROD;
THENCE SOUTH 82 DEGREES 11 MINUTES 36 SECONDS WEST
A DISTANCE OF 537.79 FEET TO A POINT;
THENCE SOUTH 07 DEGREES 47 MINUTES 42 SECONDS EAST
A DISTANCE OF 242.59 FEET TO A POINT;
THENCE NORTH 82 DEGREES 12 MINUTES 18 SECONDS EAST
A DISTANCE OF 42.00 FEET TO A POINT;
THENCE SOUTH 07 DEGREES 47 MINUTES 42 SECONDS EAST

A DISTANCE OF 270.46 FEET TO A POINT;
THENCE SOUTH 03 DEGREES 49 MINUTES 51 SECONDS WEST
A DISTANCE OF 147.62 FEET TO A POINT;
THENCE NORTH 75 DEGREES 48 MINUTES 34 SECONDS WEST
A DISTANCE OF 100.12 FEET TO A POINT;
THENCE NORTH 13 DEGREES 31 MINUTES 48 SECONDS EAST
A DISTANCE OF 15.22 FEET TO A POINT;
THENCE NORTH 76 DEGREES 59 MINUTES 50 SECONDS WEST
A DISTANCE OF 242.09 FEET TO A POINT;
THENCE SOUTH 13 DEGREES 48 MINUTES 53 SECONDS WEST
A DISTANCE OF 264.81 FEET TO A POINT;
THENCE NORTH 58 DEGREES 43 MINUTES 20 SECONDS WEST
A DISTANCE OF 52.76 FEET TO A POINT;
THENCE NORTH 73 DEGREES 06 MINUTES 10 SECONDS WEST
A DISTANCE OF 233.08 FEET TO A POINT;
THENCE ALONG A CURVE CONCAVE SOUTHERLY
HAVING A RADIUS OF 2944.79 FEET
125.37 FEET ALONG SAID CURVE TO THE POINT OF BEGINNING;

THE ABOVE DESCRIBED PARCEL CONTAINS 11.32 ACRES

Property description known as Chatham County PIN 1-368-01-014

COMMENCING AT THE INTERSECTION OF THE NORTHERN RIGHT-OF-WAY LINE OF PRESIDENT STREET AND THE WESTERN RIGHT-OF-WAY LINE OF DULANY ROAD; EXTEND THENCE NORTH 13 DEGREES 21 MINUTES 59 SECONDS EAST A DISTANCE OF 767.38 FEET TO A POINT; WHICH POINT IS THE POINT OF BEGINNING; THENCE NORTH 13 DEGREES 21 MINUTES 59 SECONDS EAST A DISTANCE OF 417.77 FEET TO A POINT; THENCE SOUTH 78 DEGREES 13 MINUTES 30 SECONDS EAST A DISTANCE OF 434.25 FEET TO A POINT; THENCE SOUTH 07 DEGREES 47 MINUTES 42 SECONDS EAST A DISTANCE OF 631.37 FEET TO A POINT; THENCE SOUTH 82 DEGREES 12 MINUTES 18 SECONDS WEST A DISTANCE OF 42.00 FEET TO A POINT; THENCE NORTH 07 DEGREES 47 MINUTES 42 SECONDS WEST A DISTANCE OF 242.59 FEET TO A POINT; THENCE NORTH 82 DEGREES 11 MINUTES 36 SECONDS WEST A DISTANCE OF 537.79 FEET TO THE POINT OF BEGINNING; THE ABOVE DESCRIBED PARCEL CONTAINS 4.88 ACRES.

/sgts.legal.warranty

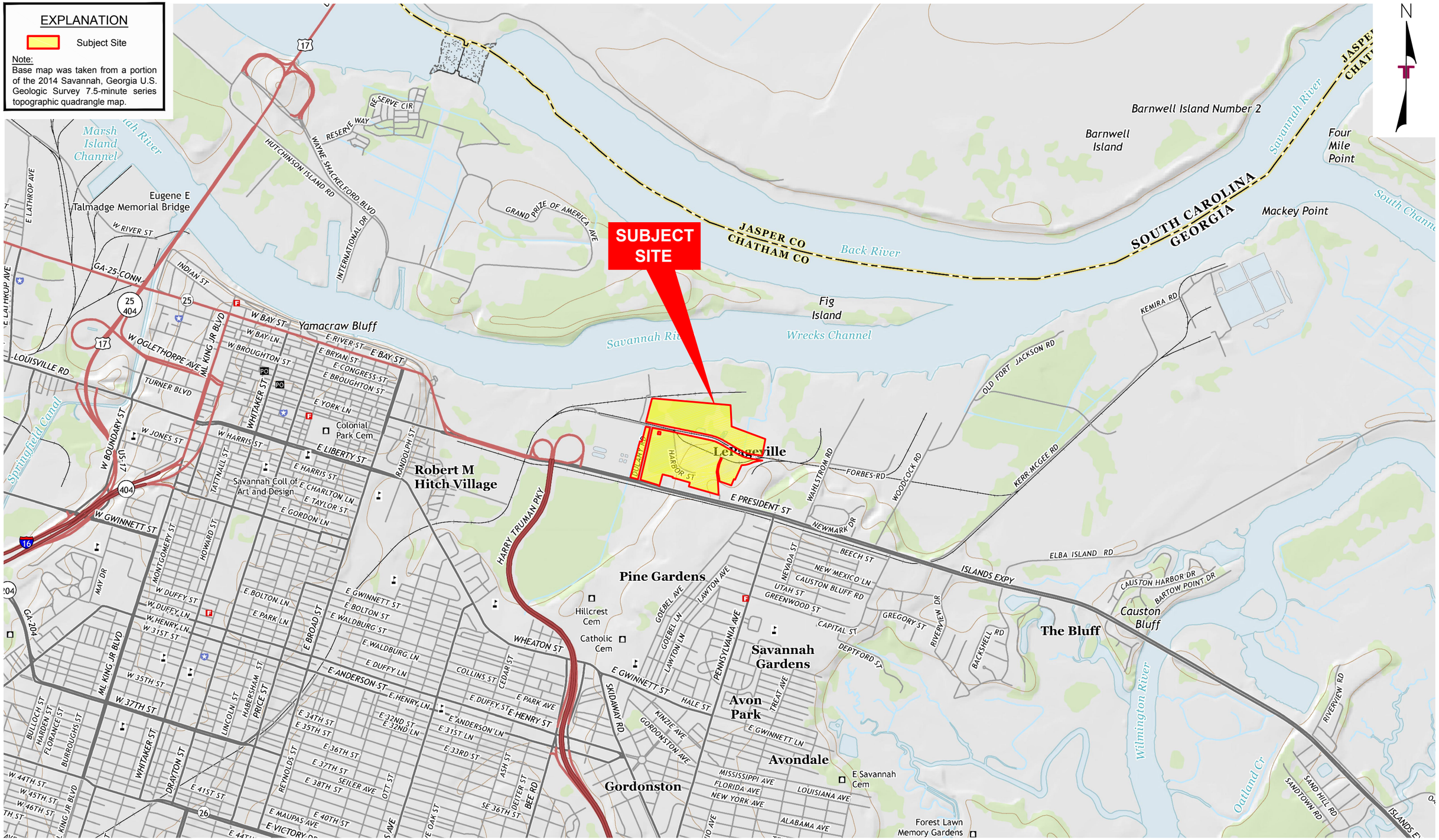
APPENDIX C

FIGURES

EXPLANATION

Subject Site

Note:
Base map was taken from a portion of the 2014 Savannah, Georgia U.S. Geologic Survey 7.5-minute series topographic quadrangle map.



Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

Project No.	ES177374
Scale:	1" = 2,000'
File Name:	ES177374 SOIL.dwg
Date:	February 20, 2018

Terracon
Consulting Engineers & Scientists
2201 Rowland Avenue Savannah, Georgia 31404
Phone (912) 629 4000 Fax. (912) 629 4001

SITE LOCATION MAP

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Figure 1

EXPLANATION

SUBJECT PARCEL BOUNDARY

ADJACENT PARCEL BOUNDARY

Note:
As of February 20, 2018, Chatham County tax assessor maps have not been updated to reflect ownership change to Seagate Terminals Savannah, LLC for the Subject Site parcels .

Map elements were graphically estimated from Bing Maps aerial imagery, Chatham County tax maps (sagis.org), and on-site observations. Parcel boundaries are approximate. Not intended for construction purposes.

N

ADJACENT PARCEL
Owner: East Coast Terminal Associates
PIN: 1-0373-02-005
±13.32 acres

ADJACENT PARCEL
Owner: Savannah Bulk Terminal LLC
PIN: 1-0369-01-004
±21.94 acres

ADJACENT PARCEL
Owner: Southern States Phosphate &
PIN: 1-0287-01-009
±7.48 acres

ADJACENT PARCEL
Owner: East Coast Terminal Associates
PIN: 1-0373-02-005
±13.32 acres

SUBJECT PARCEL
Owner: Southern States Phosphate
PIN: 1-0289-01-008
±57.11 acres

ADJACENT PARCEL
Owner: CSX Transportation Inc.
PIN: 1-0287-01-007
±68.52 acres

ADJACENT PARCEL
Owner: Yara North America Inc.
PIN: 1-0368-01-002L
±0.07 acres

ADJACENT PARCEL
Owner: Mayor & Aldermen of Savannah
PIN: 1-0368-01-006
±0.32 acres

SUBJECT PARCEL
Owner: Southern States Phosphate
PIN: 1-0368-01-014
±4.82 acres

ADJACENT PARCEL
Owner: Mayor & Aldermen of Savannah
PIN: 1-0368-01-001
±25.41 acres

SUBJECT PARCEL
Owner: Southern States Phosphate
PIN: 1-0289-01-008
±57.11 acres

SUBJECT PARCEL
Owner: Southern States Phosphate
PIN: 1-0368-01-013
±15.20 acres

DULANY AVENUE

SUBJECT PARCEL
Owner: Southern States Phosphate
PIN: 1-0368-01-013
±15.20 acres

SUBJECT PARCEL
Owner: Southern States Phosphate
PIN: 1-0289-01-005
±4.39 acres

SUBJECT PARCEL
Owner: Champion Machine & Manufacturing
PIN: 1-0369-01-002L
±0.4 acres

ADJACENT PARCEL
Owner: BASF Catalysts LLC
PIN: 1-0289-01-013
±26.68 acres

SUBJECT PARCEL
Owner: Southern States Phosphate &
PIN: 1-0289-01-007
±6.82 acres

ADJACENT PARCEL
Owner: Indchem Inc.
PIN: 1-0368-01-007
±1.56 acres

ADJACENT PARCEL
Owner: 1686 President LLC
PIN: 1-0368-01-011
±0.60 acres

ADJACENT PARCEL
Owner: Savannah Gold Club Inc.
PIN: 2-0010-09-001
±155.00 acres

ADJACENT PARCEL
Owner: Martin Joel D Jr.
& Kimberly C
PIN: 1-0368-01-012
±0.75 acres

EAST PRESIDENT STREET

0 150' 300'
1" = 300'
SCALE IN FEET

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

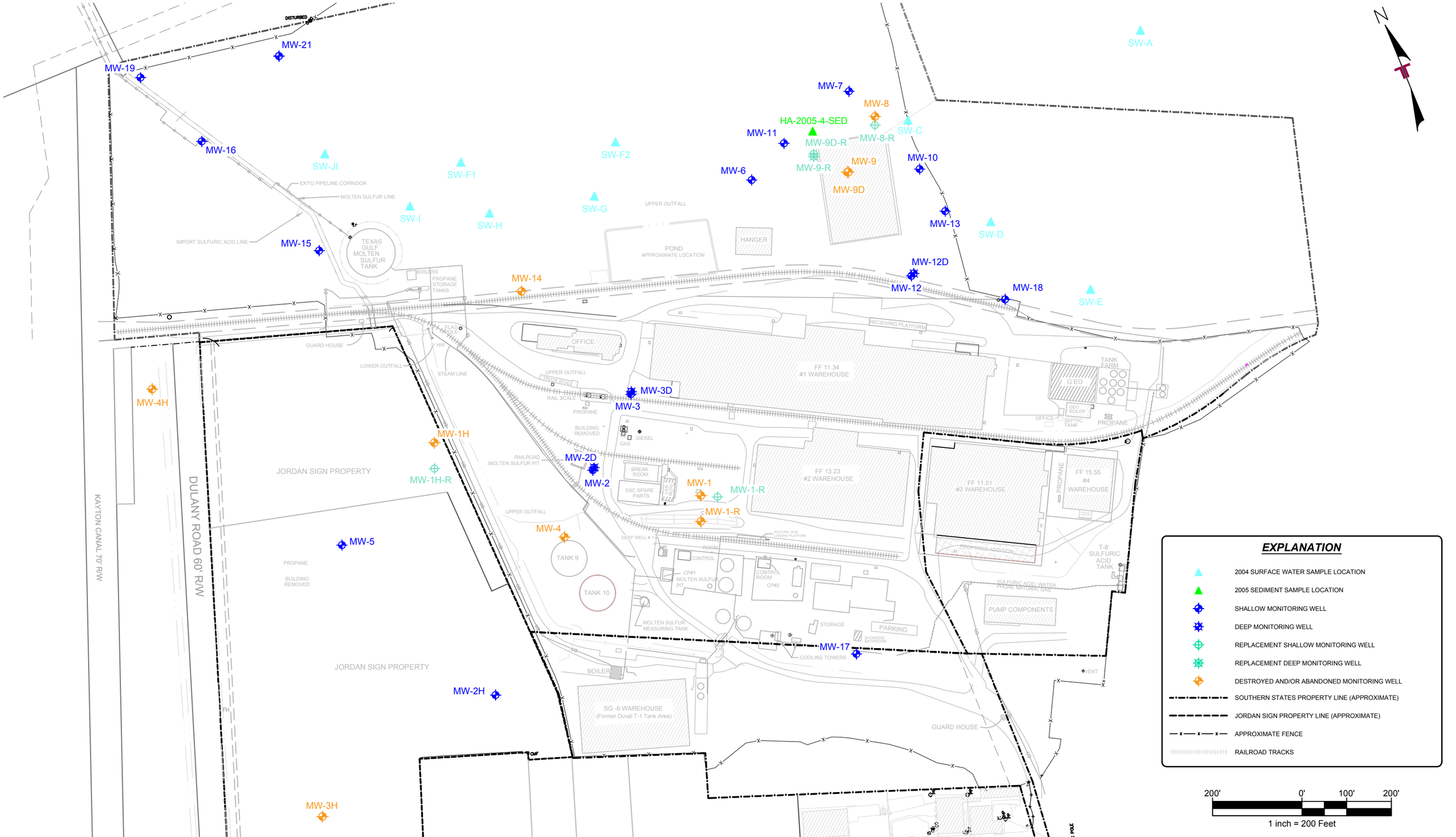
Project No.	ES177374
Scale:	1" = 300'
File Name:	ES177374 Well Survey.dwg
Date:	February 20, 2018

Terracon
Consulting Engineers & Scientists
2201 Rowland Avenue Savannah, Georgia 31404
Phone (912) 629 4000 Fax. (912) 629 4001

TAX PARCEL MAP

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Figure 2



EXPLANATION

- 2004 SURFACE WATER SAMPLE LOCATION
- 2005 SEDIMENT SAMPLE LOCATION
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- REPLACEMENT SHALLOW MONITORING WELL
- REPLACEMENT DEEP MONITORING WELL
- DESTROYED AND/OR ABANDONED MONITORING WELL
- SOUTHERN STATES PROPERTY LINE (APPROXIMATE)
- JORDAN SIGN PROPERTY LINE (APPROXIMATE)
- APPROXIMATE FENCE
- RAILROAD TRACKS

200' 0' 100' 200'

1 inch = 200 Feet

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

BASE MAP FROM THE SOUTHERN STATES PHOSPHATE PLANT AS-BUILT MAP PREPARED FOR DULANY INDUSTRIES, INC BY SUNDIAL LAND SURVEY, PC, DATED OCTOBER 16, 2012

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

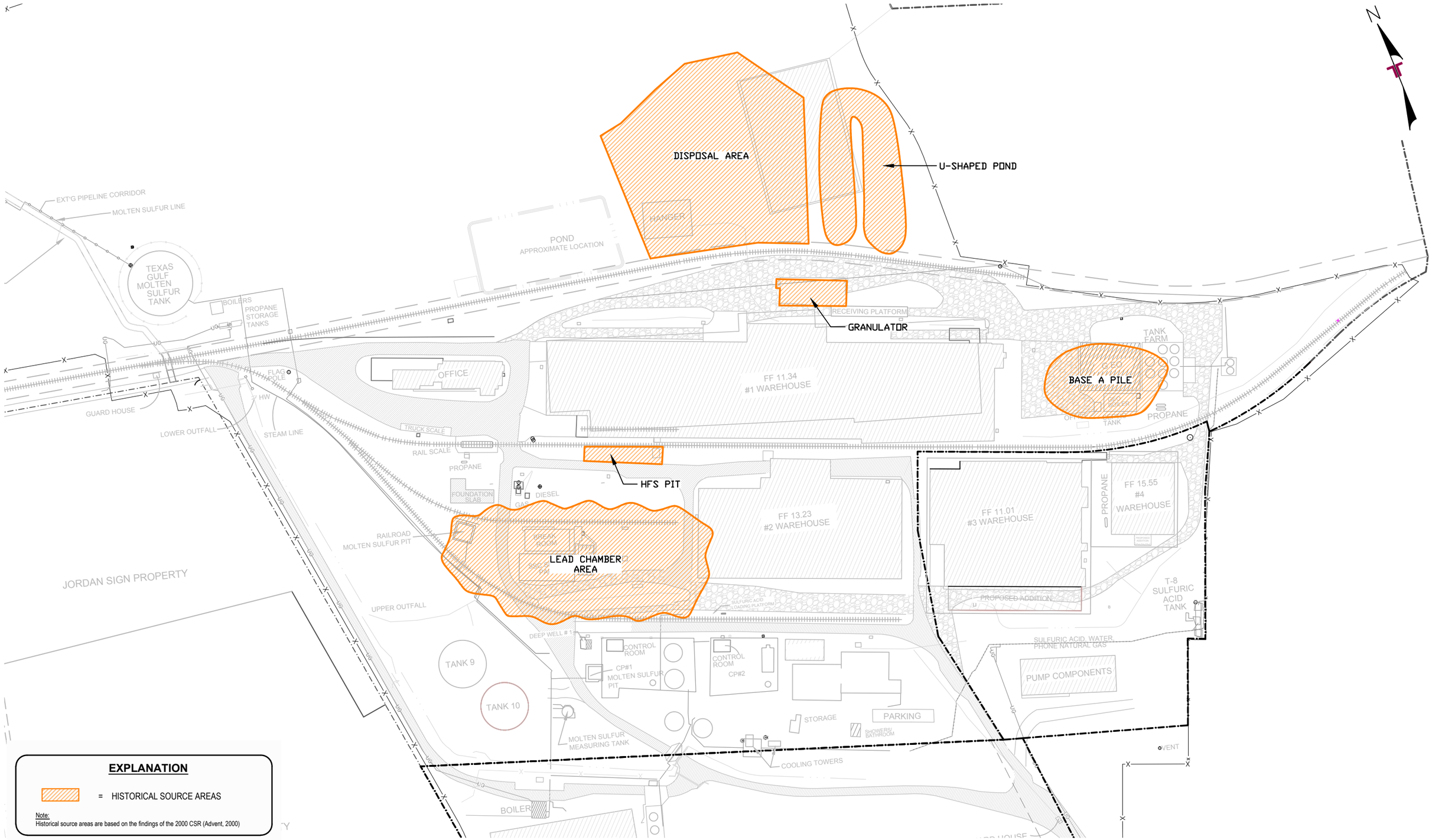
Project No.	ES177374
Scale:	1 Inch = 200 Feet
File No.	ES177374
Date:	January 9, 2018

Terracon
Consulting Engineers and Scientists
2201 ROWLAND AVENUE SAVANNAH, GA 31404
PH. (912) 629-4000 FAX. (912) 629-4001

SITE DIAGRAM

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Fig No. 3



EXPLANATION

= HISTORICAL SOURCE AREAS

Note:
Historical source areas are based on the findings of the 2000 CSR (Advent, 2000)

0 125' 150'
1" = 150'

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

Project No.	ES177374
Scale:	1" = 150'
File Name:	ES177374 SOIL.dwg
Date:	February 20, 2018

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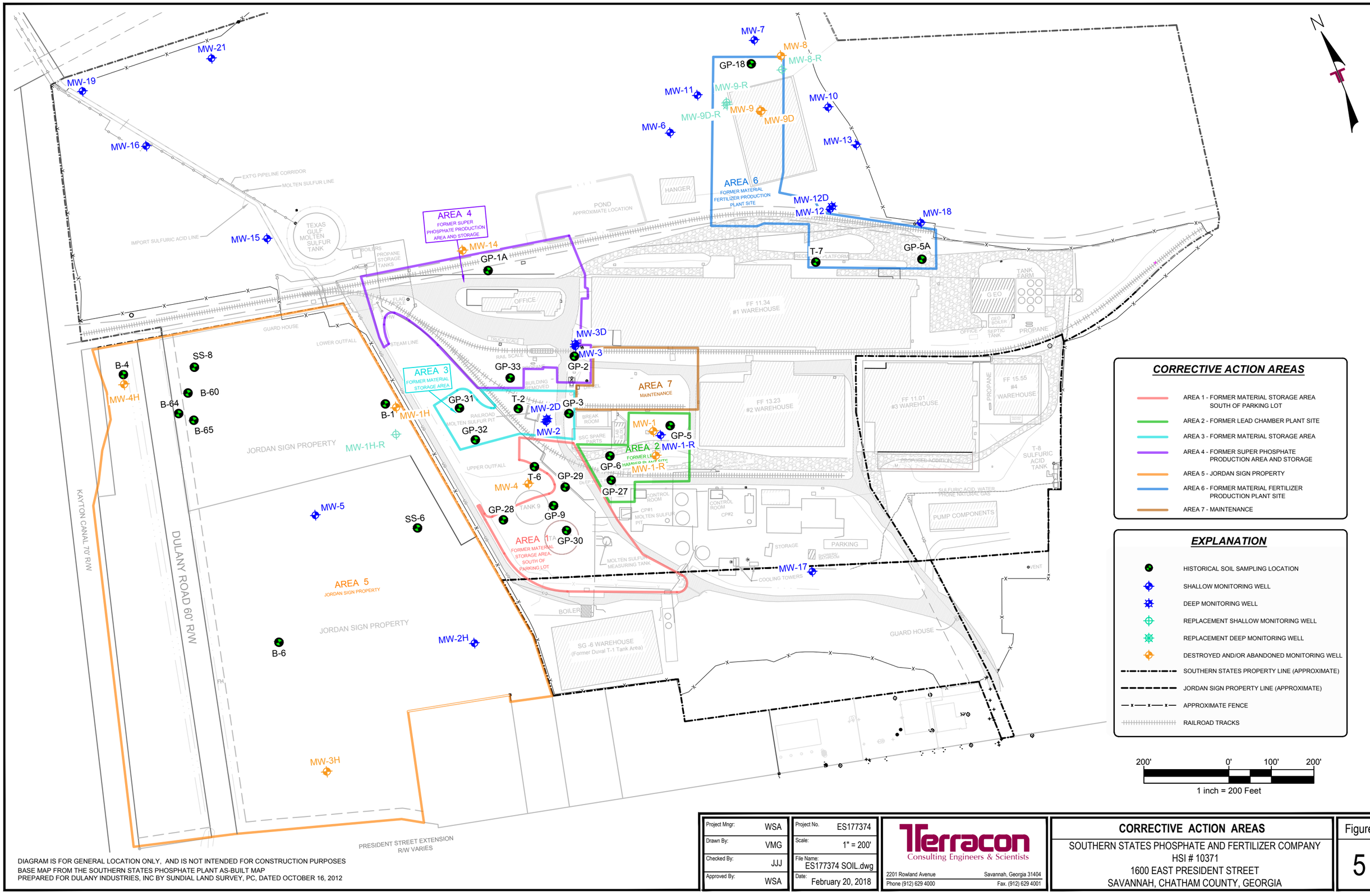
HISTORICAL SOURCE AREAS

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Figure
4



CORRECTIVE ACTION AREAS

- AREA 1 - FORMER MATERIAL STORAGE AREA SOUTH OF PARKING LOT
- AREA 2 - FORMER LEAD CHAMBER PLANT SITE
- AREA 3 - FORMER MATERIAL STORAGE AREA
- AREA 4 - FORMER SUPER PHOSPHATE PRODUCTION AREA AND STORAGE
- AREA 5 - JORDAN SIGN PROPERTY
- AREA 6 - FORMER MATERIAL FERTILIZER PRODUCTION PLANT SITE
- AREA 7 - MAINTENANCE

EXPLANATION

- HISTORICAL SOIL SAMPLING LOCATION
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- REPLACEMENT SHALLOW MONITORING WELL
- REPLACEMENT DEEP MONITORING WELL
- DESTROYED AND/OR ABANDONED MONITORING WELL
- SOUTHERN STATES PROPERTY LINE (APPROXIMATE)
- JORDAN SIGN PROPERTY LINE (APPROXIMATE)
- APPROXIMATE FENCE
- RAILROAD TRACKS

200' 0' 100' 200'

1 inch = 200 Feet

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES
BASE MAP FROM THE SOUTHERN STATES PHOSPHATE PLANT AS-BUILT MAP
PREPARED FOR DULANY INDUSTRIES, INC BY SUNDIAL LAND SURVEY, PC, DATED OCTOBER 16, 2012

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

Project No.	ES177374
Scale:	1" = 200'
File Name:	ES177374 SOIL.dwg
Date:	February 20, 2018

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CORRECTIVE ACTION AREAS

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Figure 5

EXPLANATION

- = APPROXIMATE EXCAVATION BOUNDARY
- = 2008-2017 EXCAVATION AREAS
- AREA 1 = FORMER MATERIAL STORAGE AREA SOUTH OF PARKING LOT SOUTH
- AREA 2 = FORMER LEAD CHAMBER PLANT SITE
- AREA 3 = FORMER MATERIAL STORAGE AREA NORTH AND PARKING LOT NORTH
- AREA 4 = FORMER SUPER PHOSPHATE PRODUCTION AREA AND STORAGE
- AREA 7 = MAINTENANCE

0 125' 150'
1" = 150'

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

Project No.	ES177374
Scale:	1" = 150'
File Name:	ES177374 SOIL.dwg
Date:	February 20, 2018

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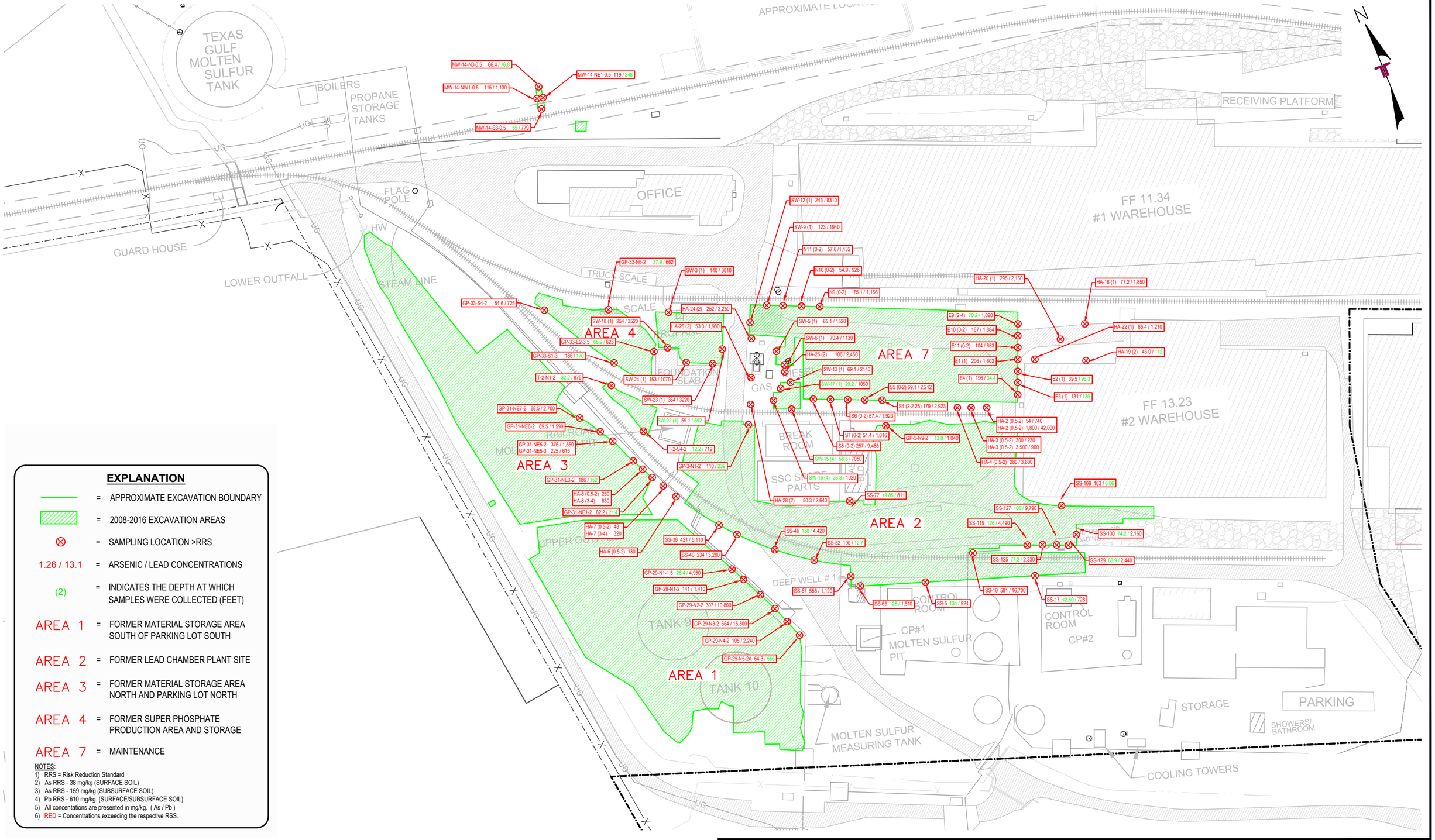
SOIL REMEDIATION AREAS

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Figure 6



EXPLANATION

- = APPROXIMATE EXCAVATION BOUNDARY
- = 2008-2016 EXCAVATION AREAS
- ⊗ = SAMPLING LOCATION >RRS
- 1.26 / 13.1 = ARSENIC / LEAD CONCENTRATIONS
- (2) = INDICATES THE DEPTH AT WHICH SAMPLES WERE COLLECTED (FEET)
- AREA 1 = FORMER MATERIAL STORAGE AREA SOUTH OF PARKING LOT SOUTH
- AREA 2 = FORMER LEAD CHAMBER PLANT SITE
- AREA 3 = FORMER MATERIAL STORAGE AREA NORTH AND PARKING LOT NORTH
- AREA 4 = FORMER SUPER PHOSPHATE PRODUCTION AREA AND STORAGE
- AREA 7 = MAINTENANCE

NOTES:
1) RRS = Risk Reduction Standard
2) As RRS - 38 mg/kg (SURFACE SOIL)
3) As RRS - 159 mg/kg (SUBSURFACE SOIL)
4) Pb RRS - 610 mg/kg. (SURFACE/SUBSURFACE SOIL)
5) All concentations are presented in mg/kg. (As / Pb)
6) RED = Concentrations exceeding the respective RSS.

0 50' 100'
1" = 100'

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

Project No.	ES177374
Scale:	1" = 100'
File Name:	ES177374 SOIL.dwg
Date:	February 20, 2018

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TYPE 5 RRS SOIL AREAS

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Figure 7

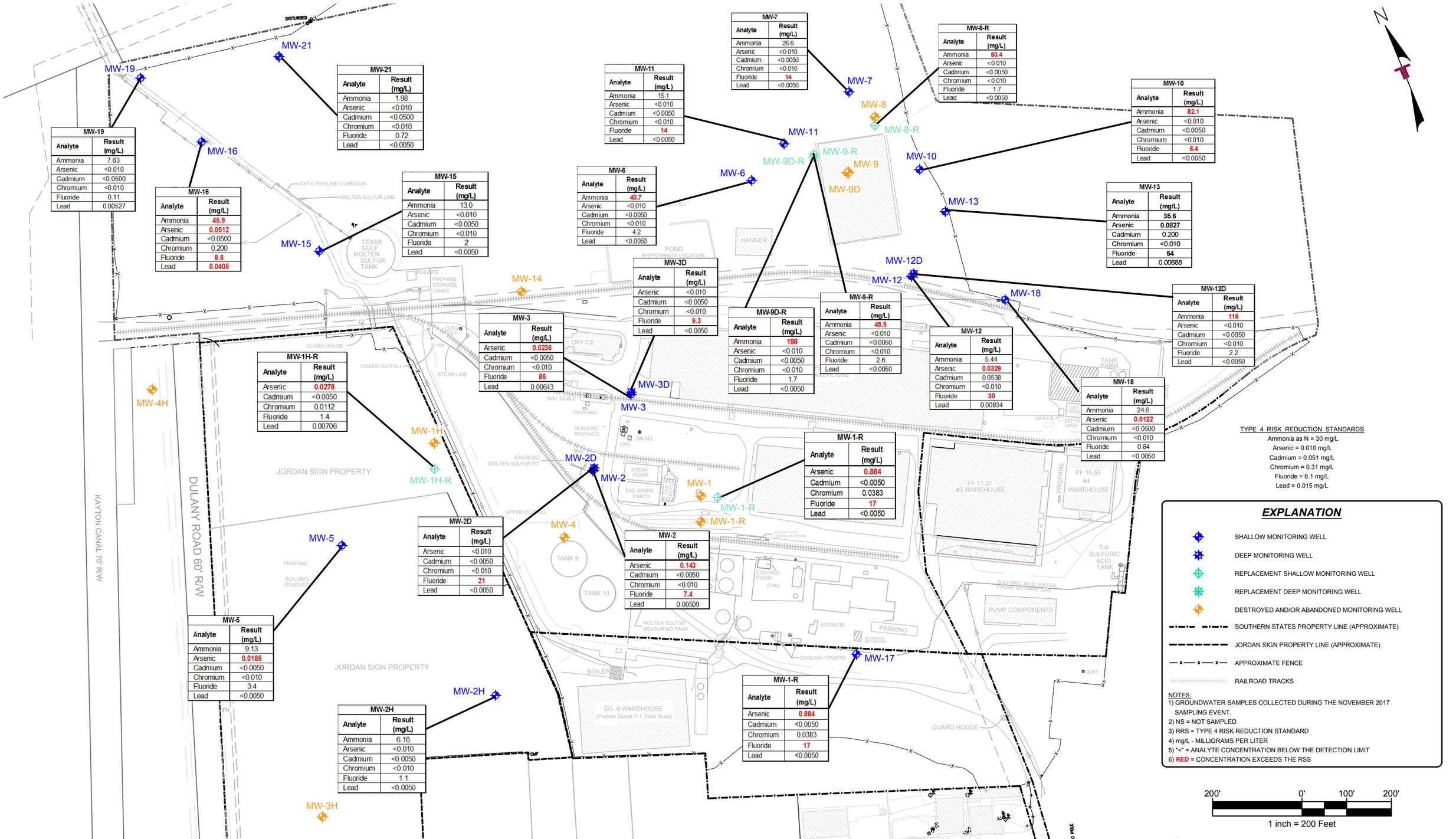

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

BASE MAP FROM THE SOUTHERN STATES PHOSPHATE PLANT AS-BUILT MAP PREPARED FOR DULANY INDUSTRIES, INC BY SUNDIAL LAND SURVEY, PC, DATED OCTOBER 16, 2012

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA
Project No.	ES177374
Scale:	1 Inch = 200 Feet
File No.	ES177374
Date:	January 9, 2018

Terracon
Consulting Engineers and Scientists
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PH. (912) 629-4000 FAX. (912) 629-4001

GROUNDWATER QUALITY MAP - NOVEMBER 2017

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Fig No. 8

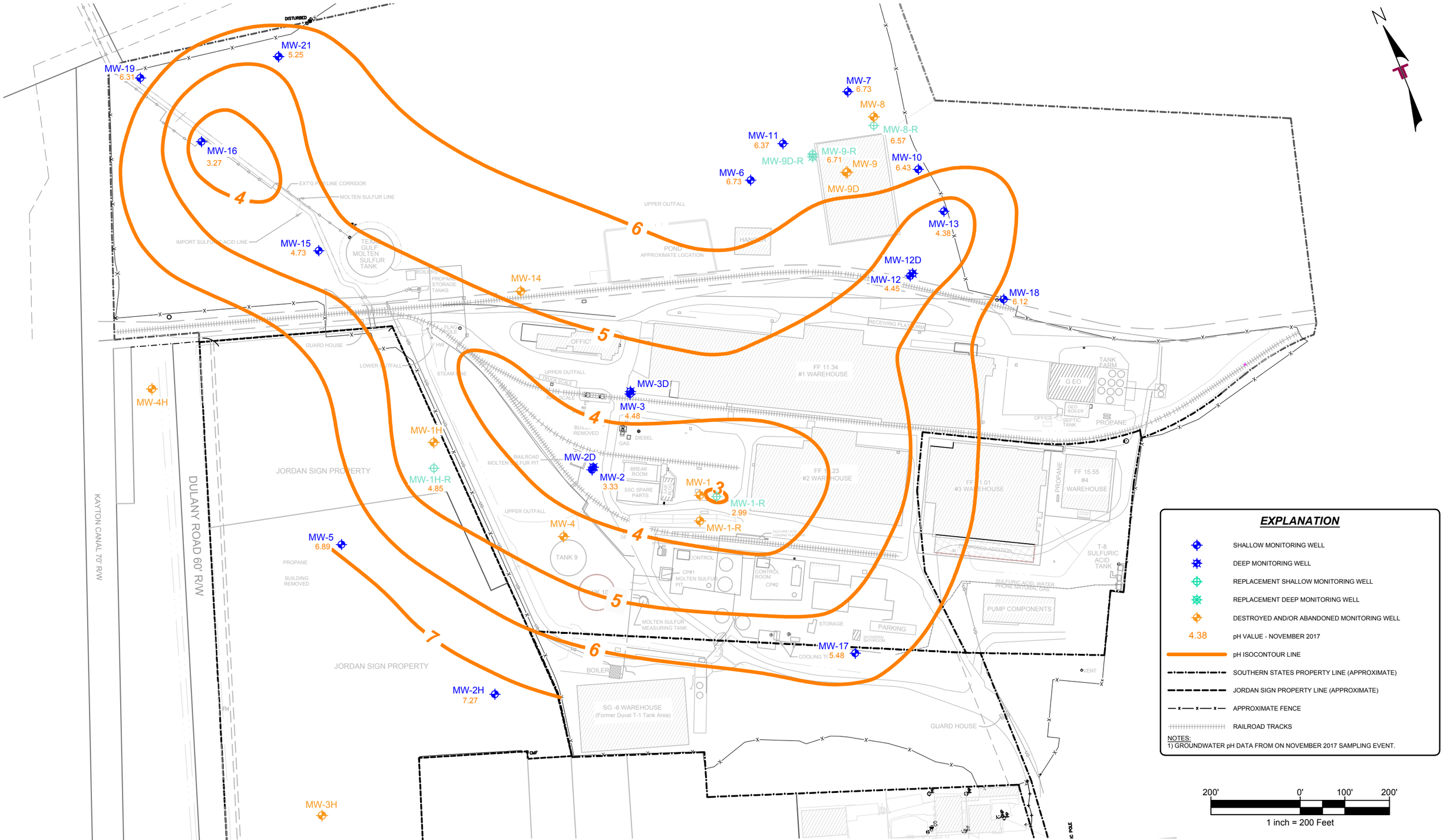

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND
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BASE MAP FROM THE SOUTHERN STATES PHOSPHATE PLANT AS-BUILT MAP
PREPARED FOR DULANY INDUSTRIES, INC BY SUNDIAL LAND SURVEY, PC, DATED OCTOBER 16, 2012

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

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Date:	January 9, 2018

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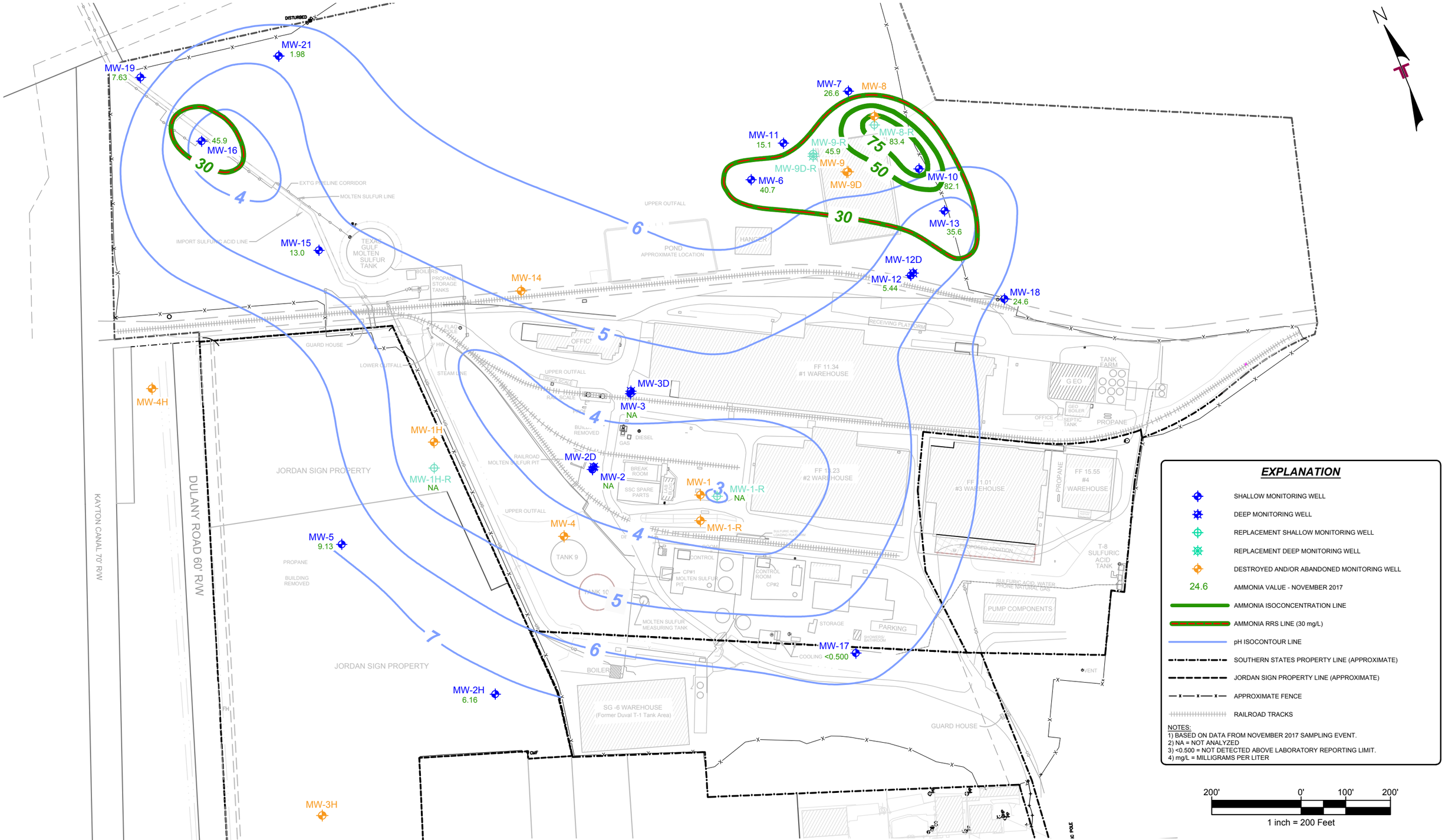
pH ISOCONTOUR MAP - NOVEMBER 2017

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Fig No.
9



EXPLANATION

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- REPLACEMENT SHALLOW MONITORING WELL
- REPLACEMENT DEEP MONITORING WELL
- DESTROYED AND/OR ABANDONED MONITORING WELL
- 24.6 — AMMONIA VALUE - NOVEMBER 2017
- AMMONIA ISOCONCENTRATION LINE
- AMMONIA RRS LINE (30 mg/L)
- pH ISOCONTOUR LINE
- SOUTHERN STATES PROPERTY LINE (APPROXIMATE)
- JORDAN SIGN PROPERTY LINE (APPROXIMATE)
- APPROXIMATE FENCE
- RAILROAD TRACKS

NOTES:
1) BASED ON DATA FROM NOVEMBER 2017 SAMPLING EVENT.
2) NA = NOT ANALYZED
3) <0.500 = NOT DETECTED ABOVE LABORATORY REPORTING LIMIT.
4) mg/L = MILLIGRAMS PER LITER

200' 0' 100' 200'
1 inch = 200 Feet

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND
IS NOT INTENDED FOR CONSTRUCTION PURPOSES

BASE MAP FROM THE SOUTHERN STATES PHOSPHATE PLANT AS-BUILT MAP
PREPARED FOR DULANY INDUSTRIES, INC BY SUNDIAL LAND SURVEY, PC, DATED OCTOBER 16, 2012

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

Project No.	ES177374
Scale:	1 Inch = 200 Feet
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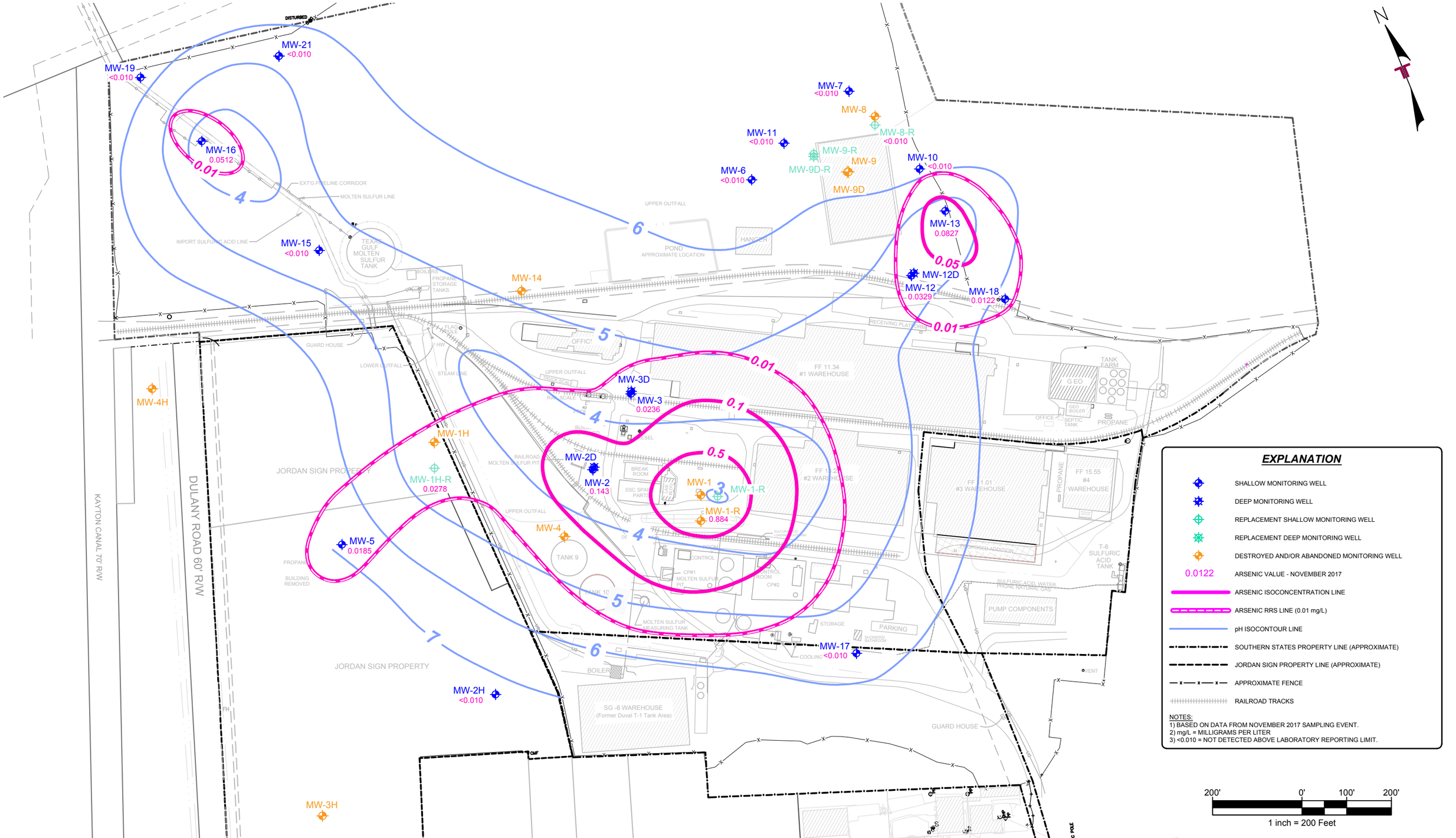
AMMONIA ISOCONTOUR MAP - NOVEMBER 2017

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Fig No. 10



EXPLANATION

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- REPLACEMENT SHALLOW MONITORING WELL
- REPLACEMENT DEEP MONITORING WELL
- DESTROYED AND/OR ABANDONED MONITORING WELL
- 0.0122 — ARSENIC VALUE - NOVEMBER 2017
- ARSENIC ISOCONCENTRATION LINE
- ARSENIC RRS LINE (0.01 mg/L)
- pH ISOCONTOUR LINE
- SOUTHERN STATES PROPERTY LINE (APPROXIMATE)
- JORDAN SIGN PROPERTY LINE (APPROXIMATE)
- APPROXIMATE FENCE
- RAILROAD TRACKS

NOTES:
1) BASED ON DATA FROM NOVEMBER 2017 SAMPLING EVENT.
2) mg/L = MILLIGRAMS PER LITER
3) <0.010 = NOT DETECTED ABOVE LABORATORY REPORTING LIMIT.

200' 0' 100' 200'
1 inch = 200 Feet

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

BASE MAP FROM THE SOUTHERN STATES PHOSPHATE PLANT AS-BUILT MAP PREPARED FOR DULANY INDUSTRIES, INC BY SUNDIAL LAND SURVEY, PC, DATED OCTOBER 16, 2012

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

Project No.	ES177374
Scale:	1 Inch = 200 Feet
File No.	ES177374
Date:	January 9, 2018

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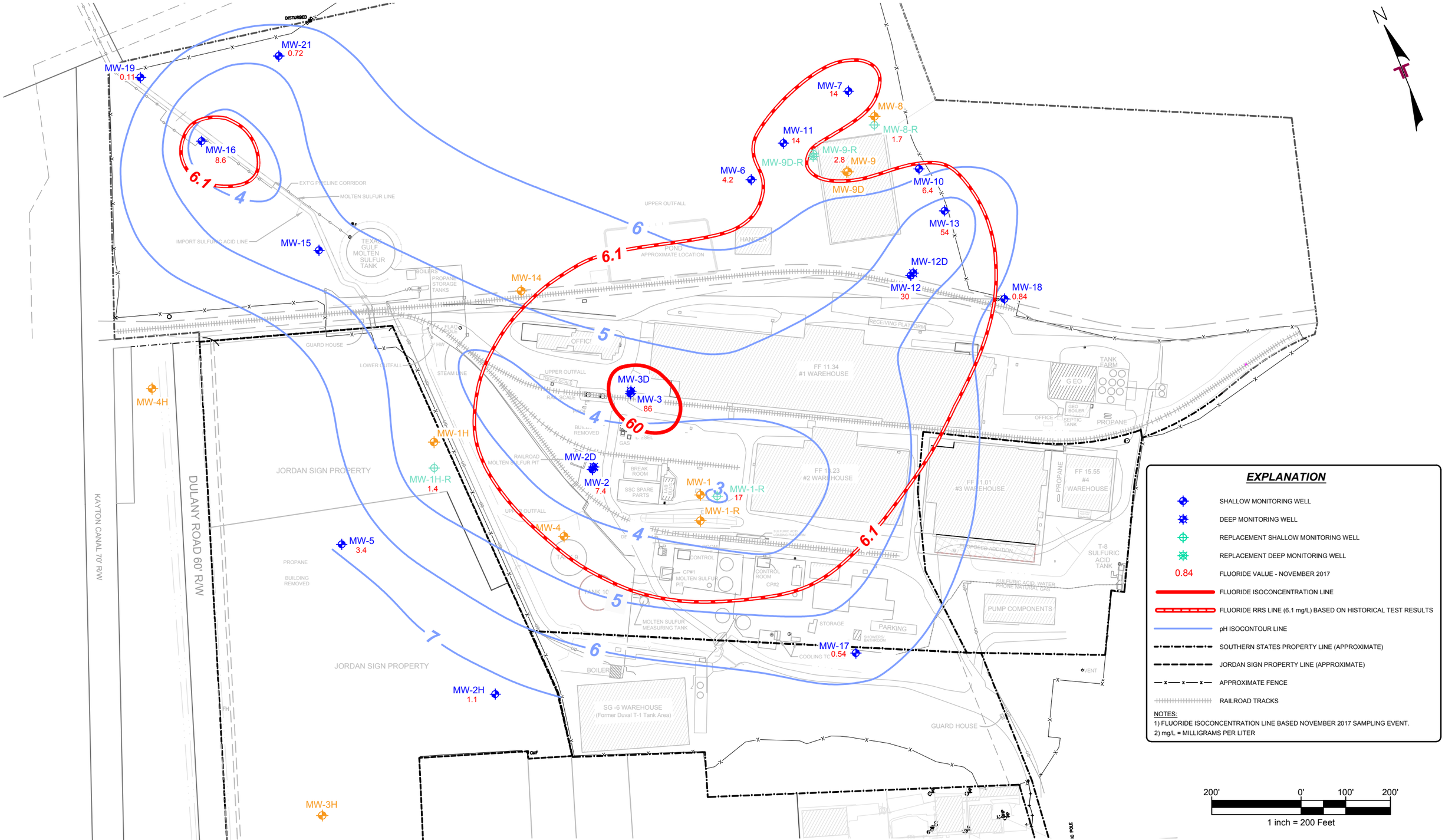
ARSENIC ISOCONTOUR MAP - NOVEMBER 2017

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Fig No. 11



EXPLANATION

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- REPLACEMENT SHALLOW MONITORING WELL
- REPLACEMENT DEEP MONITORING WELL
- 0.84 — FLUORIDE VALUE - NOVEMBER 2017
- FLUORIDE ISOCONCENTRATION LINE
- FLUORIDE RRS LINE (6.1 mg/L) BASED ON HISTORICAL TEST RESULTS
- pH ISOCONTOUR LINE
- SOUTHERN STATES PROPERTY LINE (APPROXIMATE)
- JORDAN SIGN PROPERTY LINE (APPROXIMATE)
- APPROXIMATE FENCE
- RAILROAD TRACKS

NOTES:
1) FLUORIDE ISOCONCENTRATION LINE BASED NOVEMBER 2017 SAMPLING EVENT.
2) mg/L = MILLIGRAMS PER LITER

200' 0' 100' 200'
1 inch = 200 Feet

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND
IS NOT INTENDED FOR CONSTRUCTION PURPOSES

BASE MAP FROM THE SOUTHERN STATES PHOSPHATE PLANT AS-BUILT MAP
PREPARED FOR DULANY INDUSTRIES, INC BY SUNDIAL LAND SURVEY, PC, DATED OCTOBER 16, 2012

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

Project No.	ES177374
Scale:	1 Inch = 200 Feet
File No.	ES177374
Date:	January 9, 2018

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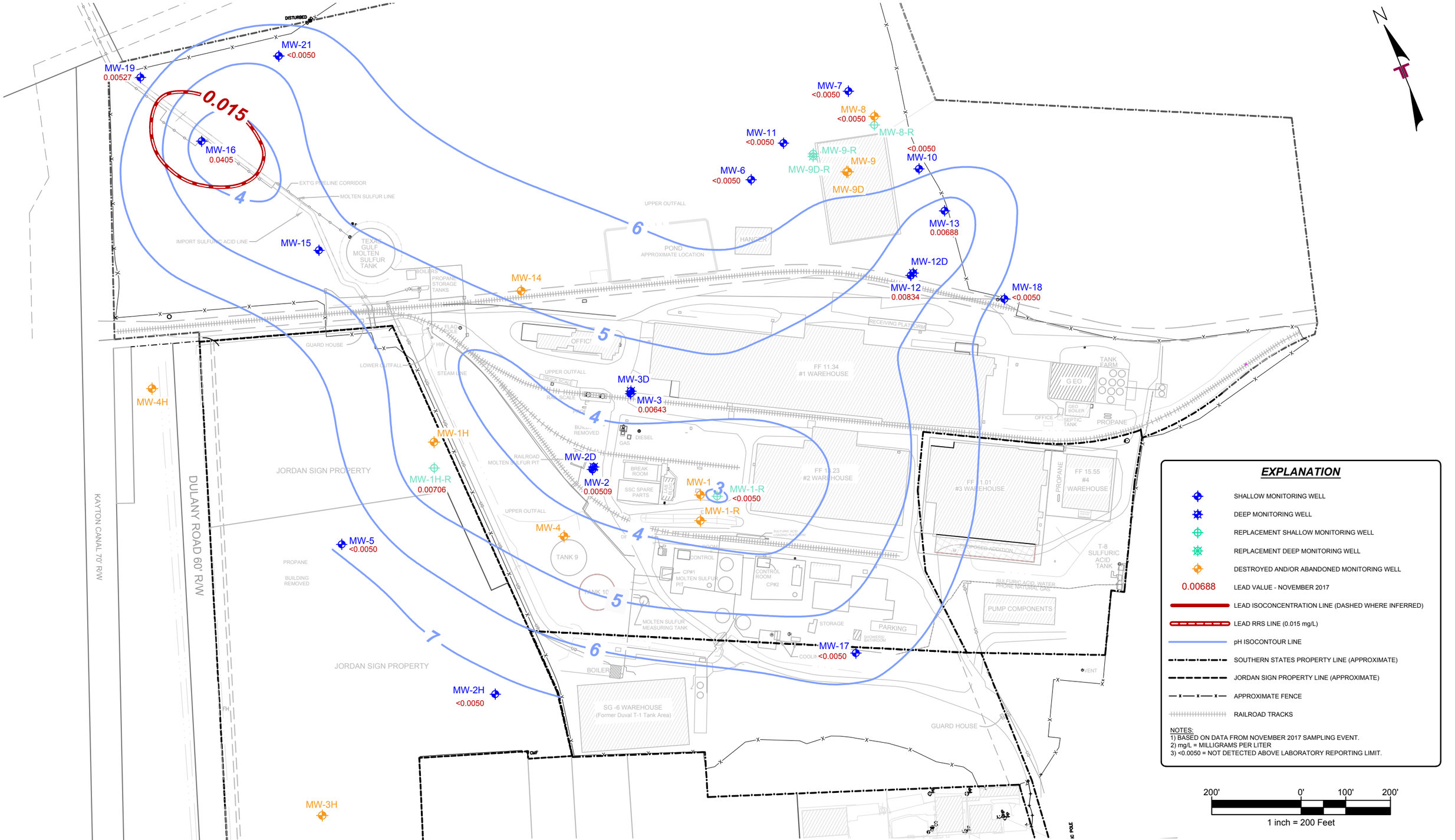
FLUORIDE ISOCONTOUR MAP - NOVEMBER 2017

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Fig No. 12



EXPLANATION

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- REPLACEMENT SHALLOW MONITORING WELL
- REPLACEMENT DEEP MONITORING WELL
- DESTROYED AND/OR ABANDONED MONITORING WELL
- 0.00688 — LEAD VALUE - NOVEMBER 2017
- LEAD ISOCONCENTRATION LINE (DASHED WHERE INFERRED)
- LEAD RRS LINE (0.015 mg/L)
- pH ISOCONTOUR LINE
- SOUTHERN STATES PROPERTY LINE (APPROXIMATE)
- JORDAN SIGN PROPERTY LINE (APPROXIMATE)
- APPROXIMATE FENCE
- RAILROAD TRACKS

NOTES:
1) BASED ON DATA FROM NOVEMBER 2017 SAMPLING EVENT.
2) mg/L = MILLIGRAMS PER LITER
3) <0.0050 = NOT DETECTED ABOVE LABORATORY REPORTING LIMIT.

200' 0' 100' 200'
1 inch = 200 Feet

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND
IS NOT INTENDED FOR CONSTRUCTION PURPOSES

BASE MAP FROM THE SOUTHERN STATES PHOSPHATE PLANT AS-BUILT MAP
PREPARED FOR DULANY INDUSTRIES, INC BY SUNDIAL LAND SURVEY, PC, DATED OCTOBER 16, 2012

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

Project No.	ES177374
Scale:	1 Inch = 200 Feet
File No.	ES177374
Date:	January 9, 2018

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Consulting Engineers and Scientists
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PH. (912) 629-4000 FAX. (912) 629-4001

LEAD ISOCONTOUR MAP - NOVEMBER 2017

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Fig No. 13

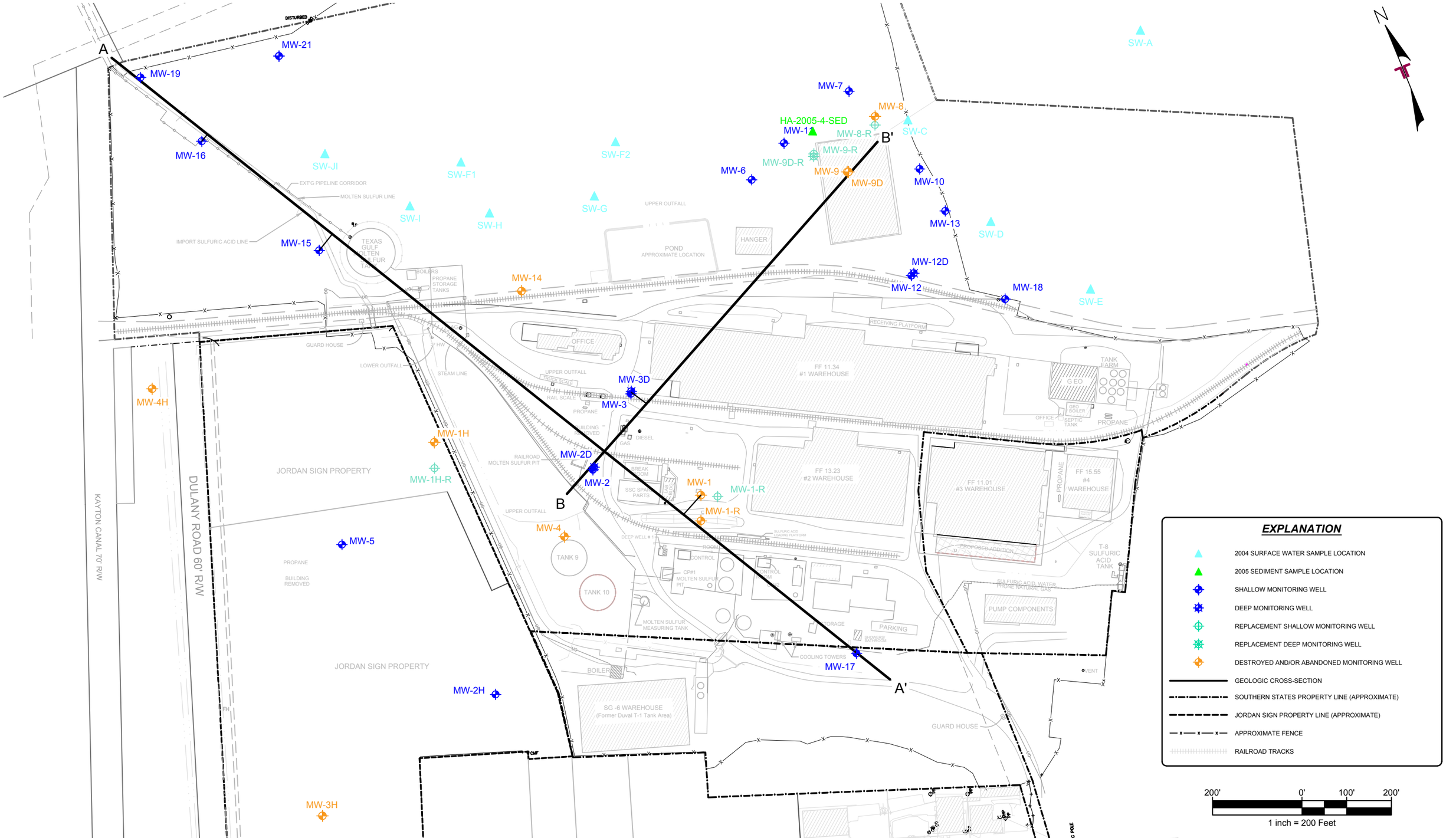

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

BASE MAP FROM THE SOUTHERN STATES PHOSPHATE PLANT AS-BUILT MAP PREPARED FOR DULANY INDUSTRIES, INC BY SUNDIAL LAND SURVEY, PC, DATED OCTOBER 16, 2012

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

Project No.	ES177374
Scale:	1 Inch = 200 Feet
File No.	ES177374
Date:	February 12, 2018

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GEOLOGIC CROSS - SECTION PLAN

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Fig No. 14

NORTHWEST

A

SOUTHEAST

A'

MW-19

MW-16
(25' OFFSET)

MW-15
(50' OFFSET)

MW-2 / 2D
(50' OFFSET)

MW-1
(50' OFFSET)

MW-17

Elevation in Feet AMSL

20'
10'
0'
-10'
-20'
-30'
-40'

0' 200' 400' 600' 800' 1,000' 1,200' 1,400' 1,600' 1,800' 2,000' 2,200' 2,400'

Horizontal Distance in Feet

EXPLANATION:

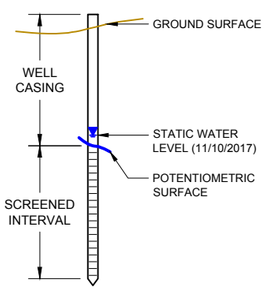
CLAY / SANDY CLAY / SILTY CLAY

GRAVEL

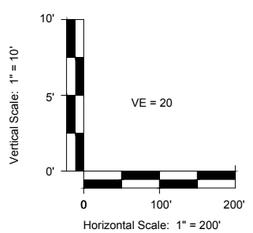
SAND / SILTY SAND / CLAYEY SAND

SILT

SILTY CLAY / CLAYEY SILT



Note:
Soil lithology and well construction details based on boring logs and cross-sections present in the 2000 Compliance Status Report (Advent, 2000).



Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

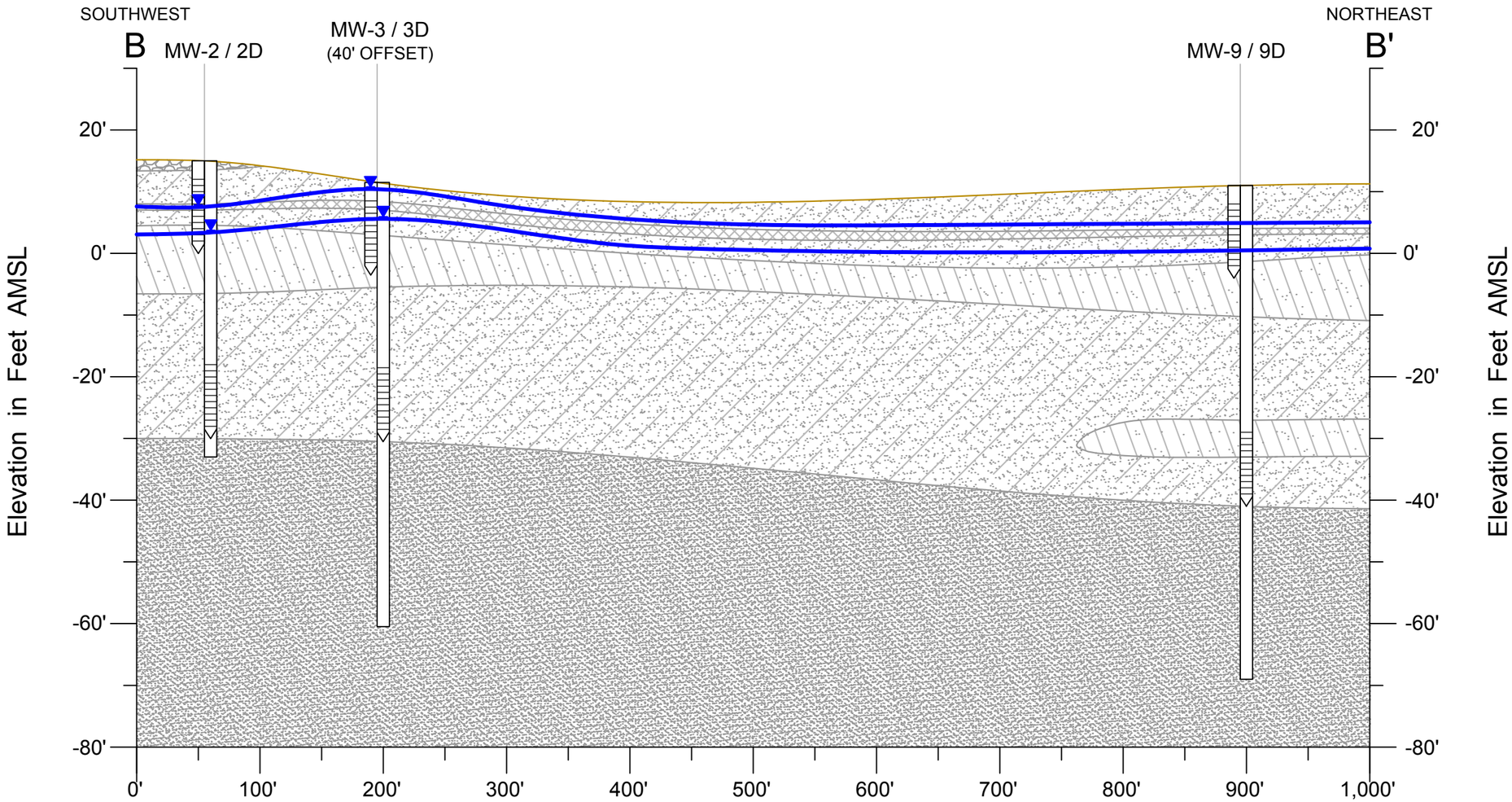
Project No.	ES177374
Scale:	AS SHOWN
File Name:	ES177374 Cross-Section.dwg
Date:	February 13, 2018

Terracon
Consulting Engineers & Scientists
2201 Rowland Avenue Savannah, Georgia 31404
Phone (912) 629 4000 Fax. (912) 629 4001

GEOLOGIC CROSS - SECTION A - A'

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Figure
15



EXPLANATION:

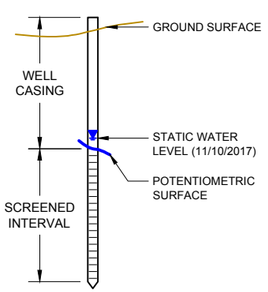
CLAY / SANDY CLAY / SILTY CLAY

GRAVEL

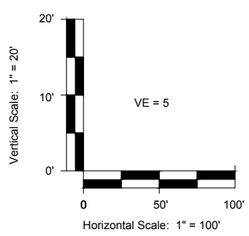
SAND / SILTY SAND / CLAYEY SAND

SILT

SILTY CLAY / CLAYEY SILT



Note:
Soil lithology and well construction details based on boring logs and cross-sections present in the 2000 Compliance Status Report (Advent, 2000).



Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

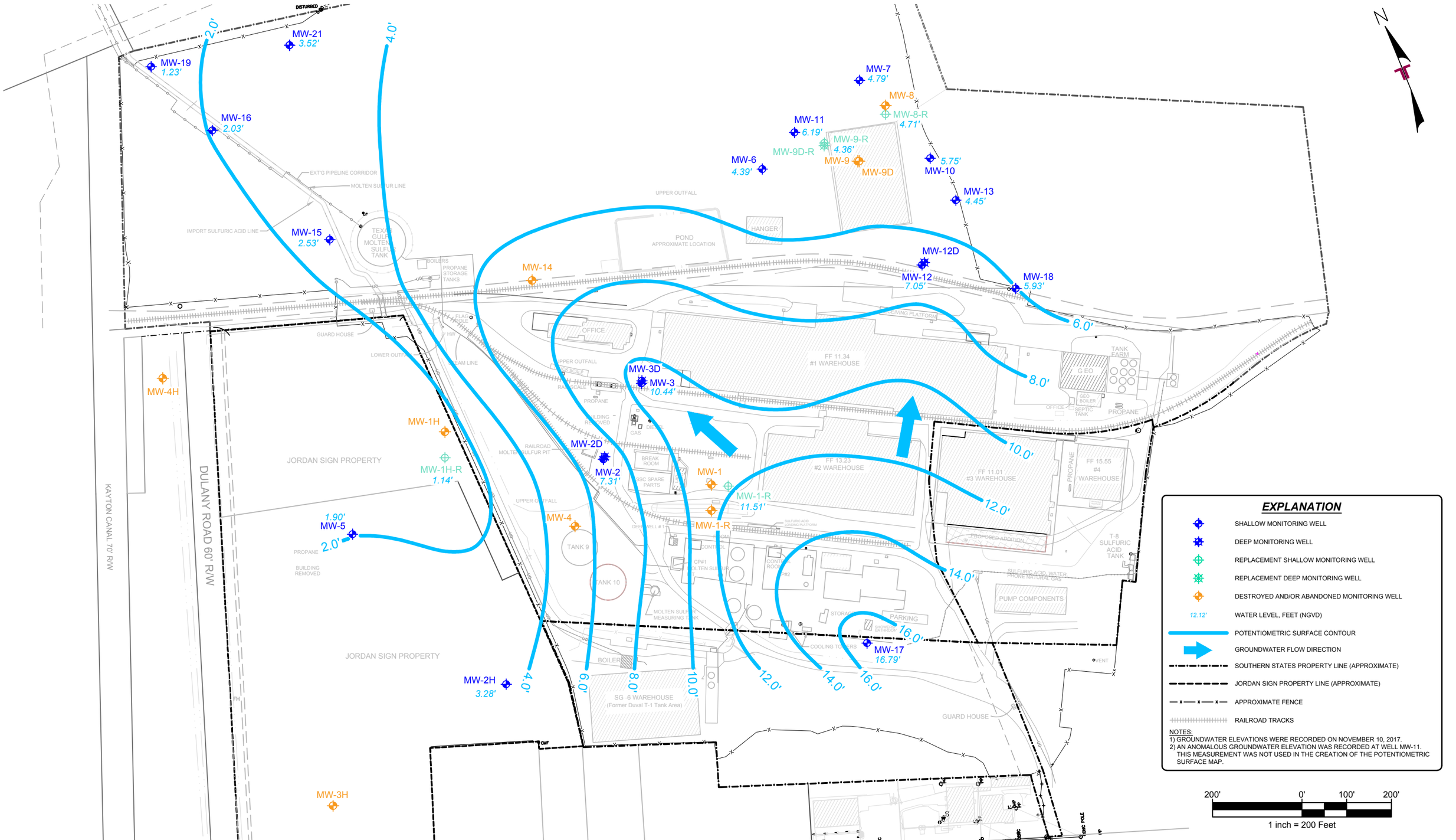
Project No.	ES177374
Scale:	AS SHOWN
File Name:	ES177374 Cross-Section.dwg
Date:	February 13, 2018

Terracon
Consulting Engineers & Scientists
2201 Rowland Avenue, Savannah, Georgia 31404
Phone (912) 629 4000, Fax. (912) 629 4001

GEOLOGIC CROSS - SECTION B - B'

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Figure 16



EXPLANATION

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- REPLACEMENT SHALLOW MONITORING WELL
- REPLACEMENT DEEP MONITORING WELL
- DESTROYED AND/OR ABANDONED MONITORING WELL
- 12.12' WATER LEVEL, FEET (NGVD)
- POTENTIOMETRIC SURFACE CONTOUR
- GROUNDWATER FLOW DIRECTION
- SOUTHERN STATES PROPERTY LINE (APPROXIMATE)
- JORDAN SIGN PROPERTY LINE (APPROXIMATE)
- APPROXIMATE FENCE
- RAILROAD TRACKS

NOTES:
1) GROUNDWATER ELEVATIONS WERE RECORDED ON NOVEMBER 10, 2017.
2) AN ANOMALOUS GROUNDWATER ELEVATION WAS RECORDED AT WELL MW-11. THIS MEASUREMENT WAS NOT USED IN THE CREATION OF THE POTENTIOMETRIC SURFACE MAP.

200' 0' 100' 200'
1 inch = 200 Feet

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

BASE MAP FROM THE SOUTHERN STATES PHOSPHATE PLANT AS-BUILT MAP PREPARED FOR DULANY INDUSTRIES, INC BY SUNDIAL LAND SURVEY, PC, DATED OCTOBER 16, 2012

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

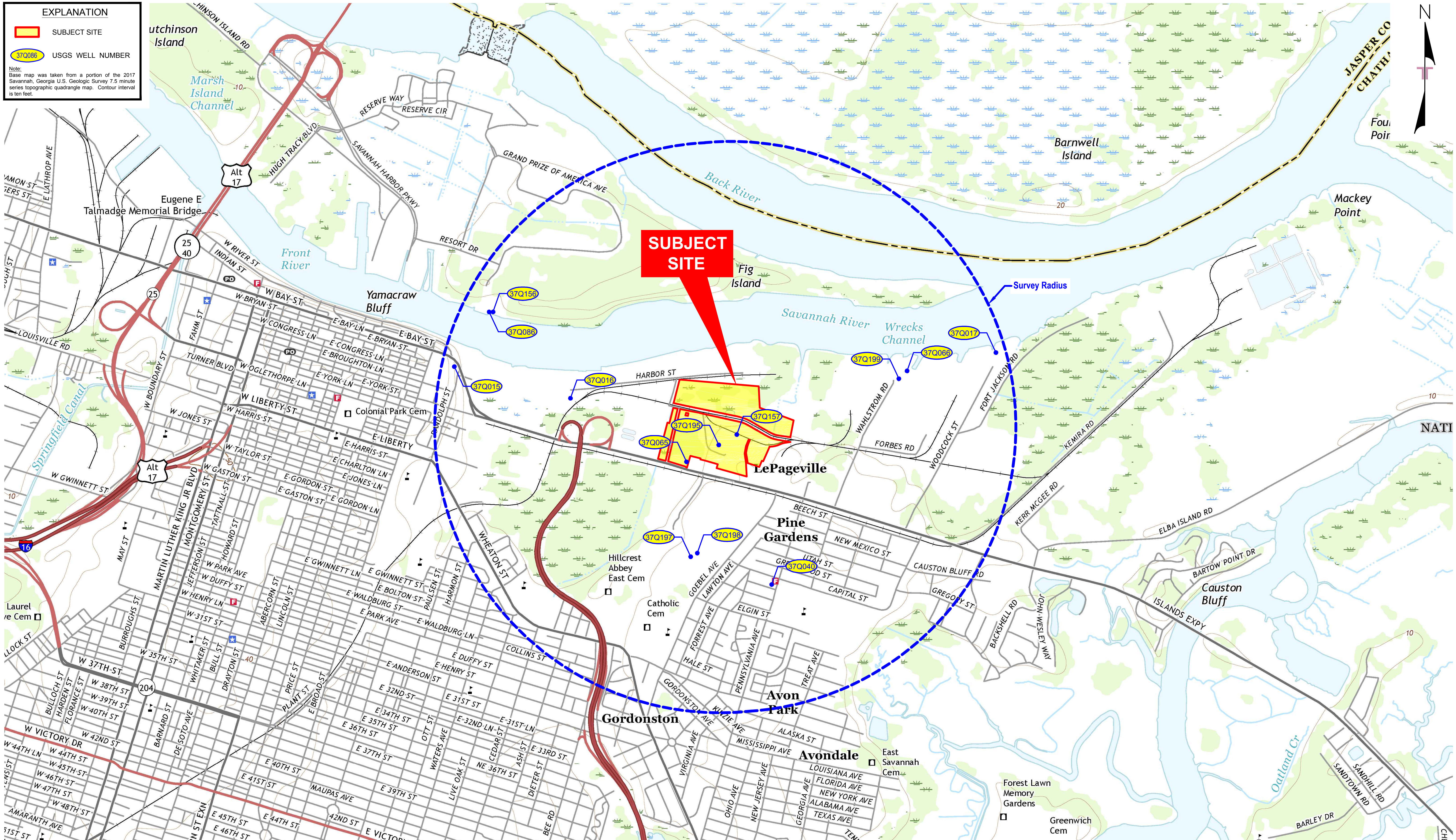
Project No.	ES177374
Scale:	1 Inch = 200 Feet
File No.	ES177374
Date:	January 9, 2018

Terracon
Consulting Engineers and Scientists
2201 ROWLAND AVENUE SAVANNAH, GA 31404
PH. (912) 629-4000 FAX. (912) 629-4001

POTENTIOMETRIC SURFACE MAP - NOVEMBER 2017

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Fig No. 17



0 1,000' 2,000'

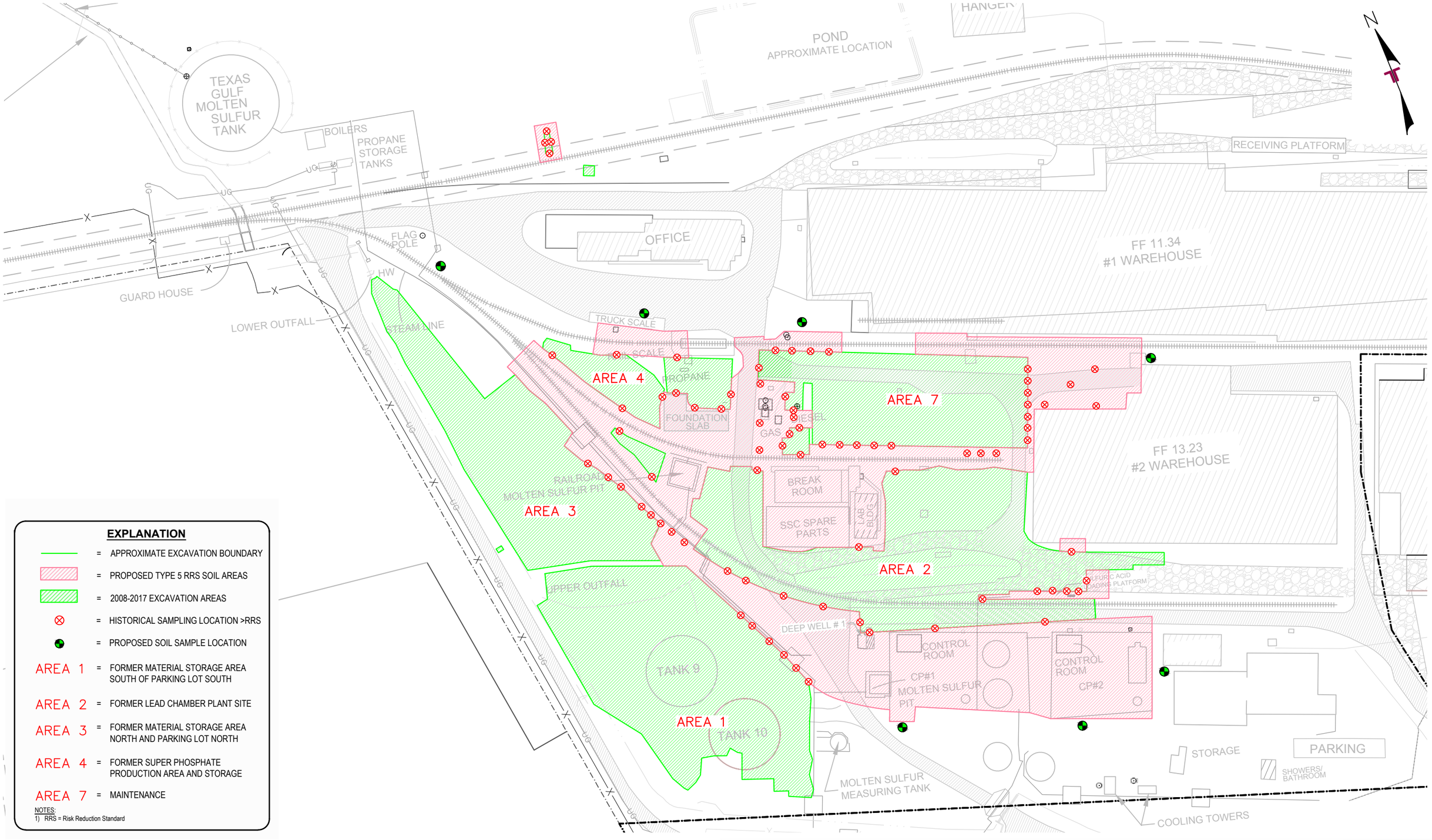
1" = 2,000'
SCALE IN FEET

Project Mngr:	WSA	Project No.	ES177374
Drawn By:	VMG	Scale:	1" = 2,000'
Checked By:	JJJ	File Name:	ES177374 Well Survey.dwg
Approved By:	WSA	Date:	February 20, 2018

Terracon
Consulting Engineers & Scientists
2201 Rowland Avenue, Savannah, Georgia 31404
Phone (912) 629 4000 Fax. (912) 629 4001

WATER WELL SURVEY
SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Figure
18



EXPLANATION

- = APPROXIMATE EXCAVATION BOUNDARY
- = PROPOSED TYPE 5 RRS SOIL AREAS
- = 2008-2017 EXCAVATION AREAS
- ⊗ = HISTORICAL SAMPLING LOCATION >RRS
- = PROPOSED SOIL SAMPLE LOCATION
- AREA 1 = FORMER MATERIAL STORAGE AREA SOUTH OF PARKING LOT SOUTH
- AREA 2 = FORMER LEAD CHAMBER PLANT SITE
- AREA 3 = FORMER MATERIAL STORAGE AREA NORTH AND PARKING LOT NORTH
- AREA 4 = FORMER SUPER PHOSPHATE PRODUCTION AREA AND STORAGE
- AREA 7 = MAINTENANCE

NOTES:
1) RRS = Risk Reduction Standard

0 50' 100'
1" = 100'

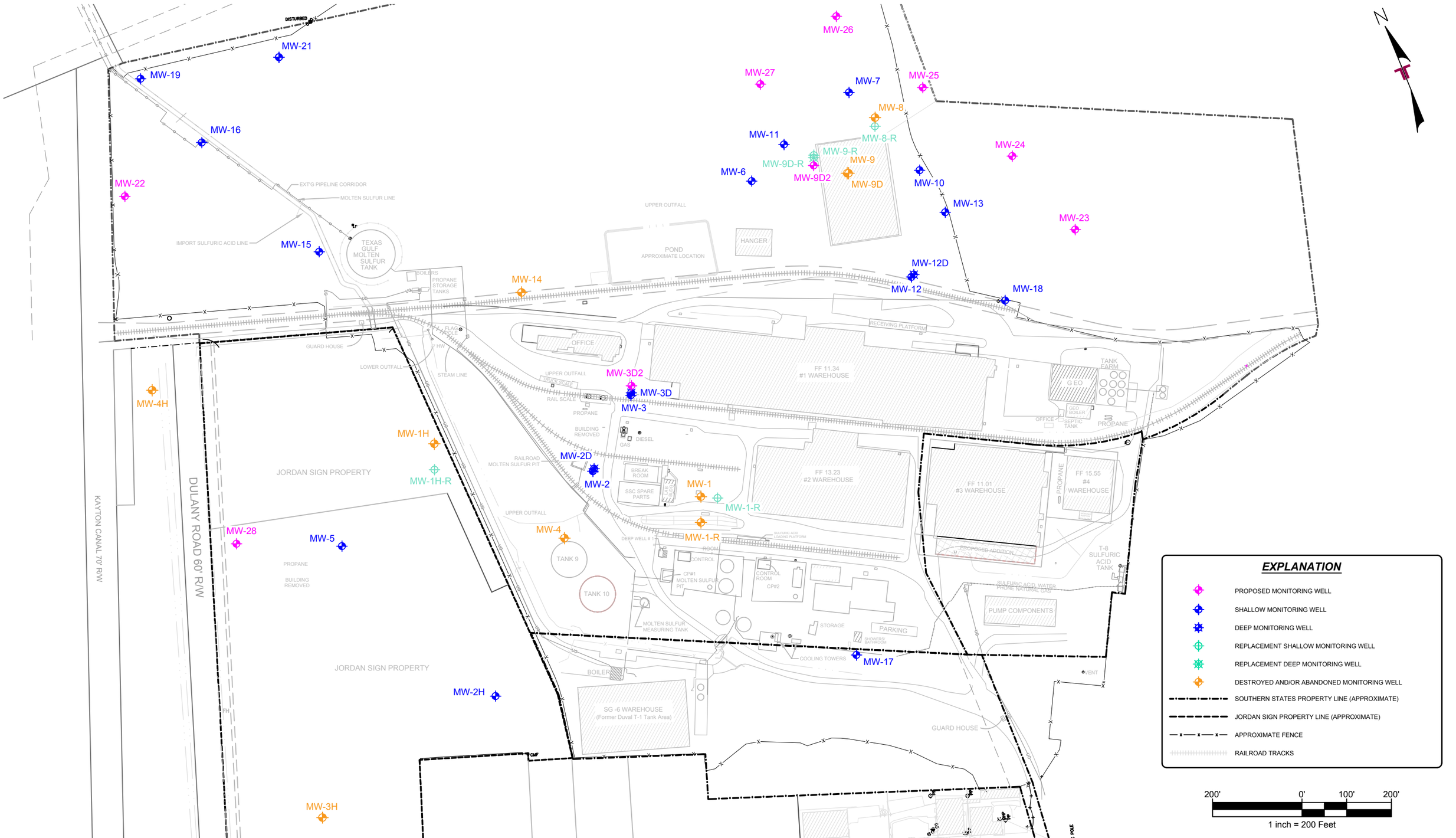
Project Mngr:	WSA	Project No.	ES177374
Drawn By:	VMG	Scale:	1" = 100'
Checked By:	JJJ	File Name:	ES177374 SOIL.dwg
Approved By:	WSA	Date:	February 20, 2018

Terracon
Consulting Engineers & Scientists
2201 Rowland Avenue Savannah, Georgia 31404
Phone (912) 629 4000 Fax. (912) 629 4001

PROPOSED VRP SOIL INVESTIGATION PLAN

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Figure 19



EXPLANATION

- PROPOSED MONITORING WELL
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- REPLACEMENT SHALLOW MONITORING WELL
- REPLACEMENT DEEP MONITORING WELL
- DESTROYED AND/OR ABANDONED MONITORING WELL
- SOUTHERN STATES PROPERTY LINE (APPROXIMATE)
- JORDAN SIGN PROPERTY LINE (APPROXIMATE)
- APPROXIMATE FENCE
- RAILROAD TRACKS

200' 0' 100' 200'

1 inch = 200 Feet

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND
IS NOT INTENDED FOR CONSTRUCTION PURPOSES

BASE MAP FROM THE SOUTHERN STATES PHOSPHATE PLANT AS-BUILT MAP
PREPARED FOR DULANY INDUSTRIES, INC BY SUNDIAL LAND SURVEY, PC, DATED OCTOBER 16, 2012

Project Mngr:	WSA
Drawn By:	VMG
Checked By:	JJJ
Approved By:	WSA

Project No.	ES177374
Scale:	1 Inch = 200 Feet
File No.	ES177374
Date:	February 20, 2018

Terracon
Consulting Engineers and Scientists
2201 ROWLAND AVENUE SAVANNAH, GA 31404
PH. (912) 629-4000 FAX. (912) 629-4001

PROPOSED VRP GROUNDWATER INVESTIGATION PLAN

SOUTHERN STATES PHOSPHATE AND FERTILIZER COMPANY
HSI # 10371
1600 EAST PRESIDENT STREET
SAVANNAH, CHATHAM COUNTY, GEORGIA

Fig No. 20

APPENDIX D

TABLES

TABLE 1

RISK REDUCTION STANDARDS - SURFACE SOIL
Southern States Phosphate and Fertilizer Company
HSI NO. 10371
Savannah, Chatham County, Georgia

Detected Regulated Substance	Surface Soil Type 3 RRS (mg/kg)	Source of Surface Soil Type 3	Surface Soil Type 4 RRS (mg/kg)	Source of Surface Soil Type 4
Ammonia	242	PRGnc-Ind	NA	NA
Arsenic	38	PRGnc-Ind	38	RAGSc
Barium	1,000	A-III	17,000	T4 Leach
Cadmium	39	NC	77	T4 Leach
Chromium IV	1,200	NC	1,200	NC
Chromium III	1,200	NC	>100%	Saturated
Copper	1,500	NC	35,000	T4 Leach
Fluoride	600	NC	18,000	T4 Leach
Lead	400	NC	610	T4 Leach
Mercury	17	NC	32	T4 Leach
Nickel	420	NC	2,600	T4 Leach
Thallium	10	NC	12	T4 Leach
Zinc	2,800	NC	39,000	T4 Leach

Notes:

RRS	Risk Reduction Standard
mg/kg	milligram per kilogram
>100%	Indicates calculated RRS is greater than the saturation concentration.
T4 Leach	Type 4 Leaching Criteria
RAGSc	Risk Assessment Guidance for Superfund (RAGS) carcinogenic equation. (Equation 6)
PRGc-Ind	RAGS Industrial
A-III	Georgia EPD Appendix III, Table 2 - Type 1 Soil Criteria
NC	Georgia EPD Appendix III Notification Criteria
NA	Not applicable. Georgia EPD agreed that calculation of a Type 4 RRS for ammonia in surface soil is not necessary.

TABLE 2

RISK REDUCTION STANDARDS - SUBSURFACE SOIL

Southern States Phosphate and Fertilizer Company

HSI NO. 10371

Savannah, Chatham County, Georgia

Detected Regulated Substance	Soil Type 3 RRS (mg/kg)	Source of Soil Type 3	Soil Type 4 RRS (mg/kg)	Source of Soil Type 4
Ammonia	3,000	T1 GWx100	NA	NA
Arsenic	41	NC	159	T3 Leach
Barium	1,000	A-III	17,000	T4 Leach
Cadmium	39	NC	77	T4 Leach
Chromium IV	1,200	NC	1,200	NC
Chromium III	1,200	NC	>100%	Saturated
Copper	1,500	NC	3,500	T4 Leach
Fluoride	600	NC	18,000	T4 Leach
Lead	400	NC	610	T4 Leach
Mercury	17	NC	32	T4 Leach
Nickel	420	NC	2,600	T4 Leach
Thallium	10	NC	12	T4 Leach
Zinc	2,800	NC	39,000	T4 Leach

Notes:

RRS	Risk Reduction Standard
mg/kg	milligram per kilogram
>100%	Indicates calculated RRS is greater than the saturation concentration.
T1 GWx100	Type 1 Groundwater RRS x 100
T3 Leach	Type 3 Leaching Criteria
T4 Leach	Type 4 Leaching Criteria
RAGSc	Risk Assessment Guidance for Superfund (RAGS) carcinogenic equation. (Equation 6)
PRGc-Ind	RAGS Industrial
A-III	Georgia EPD Appendix III, Table 2 - Type 1 Soil Criteria
NC	Georgia EPD Appendix III Notification Criteria
NA	Not applicable. Georgia EPD agreed that calculation of a Type 4 RRS for ammonia in soil is not necessary.

TABLE 3

RISK REDUCTION STANDARDS - GROUNDWATER

Southern States Phosphate and Fertilizer Company

HSI NO. 10371

Savannah, Chatham County, Georgia

Detected Regulated Substance	Groudwater Type 3 RRS (mg/L)	Source of Groundwater Type 3	Groundwater Type 4 RRS (mg/L)	Source of Groundwater Type 4
Ammonia	30	A-III	30	A-III
Arsenic	0.01	MCL	0.01	MCL
Barium	2	A-III	20	RAGSnc
Cadmium	0.005	A-III	0.051	RAGSnc
Chromium IV	0.1	A-III	0.31	RAGSnc
Copper	1.3	A-III	4.1	RAGSnc
Fluoride	4	A-III	6.1	RAGSnc
Lead	0.015	A-III	0.015	AL
Mercury*	0.002	A-III	0.031	RAGSnc
Nickel	0.1	A-III	2	RAGSnc
Thallium*	0.002	A-III	0.0082	RAGSnc
Zinc	2	A-III	31	RAGSnc

Notes:

RRS	Risk Reduction Standard
mg/L	milligram per liter
A-III	Georgia EPD Appendix III, Table 1 - Groundwater Criteria
AL	Action Level
MCL	Maximum Contaminant Level (USEPA)
RAGSc	Risk Assessment Guidance for Superfund (RAGS) noncarcinogenic equation. (Equation 7)
PRGc-Ind	RAGS Industrial
*	Mercury and Thallium were not detected at the site. These RRS are provided for use in the SSL calculations only.

TABLE 4
SUMMARY OF TYPE 5 RRS SOIL ANALYTICAL RESULTS
Southern States Phosphate and Fertilizer Company
HSI NO. 10371
Savannah, Chatham County, Georgia

Soil Sample ID	Arsenic (mg/kg)	Lead (mg/kg)
MW-14-N3-0.5	66.4	76.8
MW-14-NE1-0.5	119	248
MW-14-S3-0.5	55	779
MW-14-NW1-0.5	115	1,130
HA-6 (0.5-2)	130	na
HA-7 (0.5-2)	48	na
HA-7 (3-4)	320	na
HA-8 (0.5-2)	250	na
HA-8 (3-4)	830	na
GP-31-NE1-2	82.2	21.4
GP-31-NE3-2	186	152
GP-31-NE5-2	376	1,550
GP-31-NE5-3	225	615
GP-31-NE6-2	69.5	1,590
GP-31-NE7-2	88.5	2,700
GP-33-E2-3.5	68.9	623
GP-33-S1-3	186	170
GP-33-S4-2	54.6	725
GP-33-N6-2	37.9	662
SW-3 (1)	140	3,010
SW-18 (1)	254	3,520
SW-22 (1)	59.1	552
SW-23 (1)	364	3,220
SW-24 (1)	153	1,070
HA-24 (2)	252	3,250
HA-26 (2)	53.3	1,980
HA-28 (2)	50.3	2,640
N9 (0-2)	75.1	1,156
N10 (0-2)	54.9	928
N11 (0-2)	57.6	1,432
SW-9 (1)	123	1,940
SW-12 (1)	243	8,310
E1 (1)	206	1,602
E2 (1)	39.5	96.3
E3 (1)	131	130
E4 (1)	196	34.4
E9 (2-4)	70.2	1,020
E10 (0-2)	167	1,884
E11 (0-2)	104	653
HA-2 (0.5-2)	54	740
HA-2 (0.5-2)	1,800	42,000
HA-3 (0.5-2)	300	230
HA-3-(0.5-2)	3,500	960
HA-4 (0.5-2)	280	3,600

NOTES:

mg/kg = milligrams per kilogram

RED = Concentration exceeds Type 5 Risk Reduction Standard (RRS)

Arsenic RRS Surface Soil = 38 mg/kg

Arsenic RRS Subsurface Soil = 159 mg/kg

Lead RRS Surface / Subsurface Soil = 610 mg/kg

na = not analyzed

TABLE 4
SUMMARY OF TYPE 5 RRS SOIL ANALYTICAL RESULTS
Southern States Phosphate and Fertilizer Company
HSI NO. 10371
Savannah, Chatham County, Georgia

Soil Sample ID	Arsenic (mg/kg)	Lead (mg/kg)
S4-(2-2.25)	179	2,923
S5 (0-2)	69.1	2,212
S6 (0-2)	57.4	1,923
S7 (0-2)	51.4	1,016
S8 (0-2)	257	9,485
SW-5(1)	65.1	1,520
SW-6 (1)	70.4	1,130
SW-13 (1)	69.1	2,140
SW-15 (1)	1.42	168
SW-15 (4)	58.5	7,050
SW-16 (1)	1.65	69.8
SW-16 (4)	33.3	1,020
SW-17 (1)	29.2	1,050
HA-18 (1)	77.2	1,850
HA-19 (2)	46.0	112
HA-20 (1)	295	2,160
HA-22 (1)	86.4	1,210
HA-25 (2)	106	2,450
T-2-N1-2	32.2	876
T-2-S4-2	12.2	719
SS-38	421	5,110
SS-40	234	3,280
SS-46	138	4,420
SS-52	190	12.7
SS-65	128	1,610
SS-67	555	1,120
SS-5	134	924
SS-10	581	16,700
SS-17	<2.80	728
SS-77	<9.85	811
SS-109	163	6.06
SS-119	126	4,490
SS-125	77.2	2,330
SS-127	106	9,790
SS-129	68.9	2,440
SS-130	74.2	2,160
GP-5-N9-2	13.8	1,040
GP-3-N1-2	110	239
GP-29-N1-1.5	2.64	4,930
GP-29-N1-2	141	1,410
GP-29-N2-2	307	10,800
GP-29-N3-2	664	15,300
GP-29-N4-2	105	2,240
GP-29-N5-2A	64.3	566

NOTES:

mg/kg = milligrams per kilogram

RED = Concentration exceeds Type 5 Risk Reduction Standard (RRS)

Arsenic RRS Surface Soil = 38 mg/kg

Arsenic RRS Subsurface Soil = 159 mg/kg

Lead RRS Surface / Subsurface Soil = 610 mg/kg

TABLE 5
GROUNDWATER ANALYTICAL DATA
Southern State Phosphate and Fertilizer Company
HSI NO. 10371
Savannah, Chatham County, Georgia

Well ID	Date Sampled	Ammonia (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Zinc (mg/L)	pH (SU)	Temp (° C)	Sp. Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)
	RRS (a)	**30**	**0.01**	**20**	**0.051**	**0.31**	**4.1**	**6.1**	**0.015**	**N/A**	**2**	**31**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
MW-1	4/12/2007	3.8	**0.13**	--	--	--	--	--	**1.5**	--	--	--	--	--	--	--	--
	4/29/2008	4.3	**0.52**	<0.050 A	<0.025 A	**0.33**	3.4	<200 A	**1.6**	--	0.2	11	2.05	21.4	13.85	2.91	--
	4/16/2009	0.837	**0.332**	<0.02 A	<0.01 A	0.048	0.297	**190**	**0.704**	0.000988	0.0463	1.41	2.05	20.0	4,625	27	--
	10/29/2009	1.72	**0.171**	0.0444	<0.005	0.0168	0.0314	**63**	**0.307**	--	0.0165	0.325	2.97	23.1	1,775	6.49	--
	3/30/2010	0.393	**0.0917**	0.0577	<0.005	0.0101	0.0371	--	**0.40**	--	<0.01	0.155	2.59	18.0	1,659	8.75	--
	10/20/2010	0.57	**0.15**	0.061	<0.005	<0.01	0.022	**79**	**0.32**	--	<0.04	0.11	4.05	25.6	1,730	0.37	--
	5/19/2011	1.1	**0.37**	--	--	--	--	110 *	**0.91**	--	--	--	2.32	22.9	4,130	3.98	--
	10/4/2011	0.53	**0.11**	--	--	--	--	**56**	**0.25**	--	--	--	3.03	24.4	1,574	0.00	--
	4/18/2012	2.1	**0.096**	--	--	--	--	**75**	**0.28**	--	--	--	3.14	22.3	1,891	0.77	--
	10/16/2012	0.6	**0.180**	--	--	--	--	**57**	**0.19**	--	--	--	2.87	24.6	1,946	1.15	--
	4/17/2013	0.4	**0.120**	--	--	--	--	**92**	**0.23**	--	--	--	3.30	20.4	1,620	9.28	--
	10/21/2013	0.69	**0.0891**	--	--	--	--	**49**	**0.14**	--	--	--	2.17	23.1	1,471	1.49	278.8
	4/9/2014	<0.5	**0.105**	--	--	--	--	**130**	**0.33**	--	--	--	3.12	19.8	1,644	0.70	265.4
	11/6/2014	0.789	**0.480**	--	--	--	--	**148**	**0.213**	--	--	--	2.62	23.8	2,447	1.06	342.5
	4/17/2015	<0.500	**0.119**	--	--	--	--	**97**	**0.198**	--	--	--	3.21	18.9	1,221	1.59	290.3
	11/11/2015	<0.500	**0.102**	--	<0.0050	<0.010	--	**56.5**	**0.0395**	--	<0.010	<0.020	4.34	23.5	660	--	234.8
MW-1-R	4/26/2016	--	**12.50**	--	--	--	--	--	**0.0324**	--	--	--	3.27	23.2	9,022	7.83	182.8
	11/14/2016	--	**0.0906**	--	--	<0.010	--	--	<0.0050	--	--	--	4.70	14.2	994	6.75	272.4
	4/28/2017	3.7	**4.63**	--	--	--	--	4.1	<0.0050	--	--	--	3.75	23.4	6,451	6.93	-249.6
	11/17/2017	--	**0.884**	--	<0.0050	0.0383	--	**17**	<0.0050	--	--	--	2.99	24.6	9,722	8.83	247.7
MW-1H	4/13/2007	3.9	**0.41**	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/29/2008	4.4	**0.029**	0.19	<0.0050	<0.010	<0.010	0.74	<0.0050	--	<0.010	0.082	6.60	19.6	1,082	12.70	--
MW-1H-R	1/4/2010	4.67	**0.0919**	0.143	<0.005	0.0198	0.0879	--	**0.338**	--	<0.01	0.0892	4.78	19.6	841	42.00	--
	10/18/2010	9.5	**0.12**	0.028	<0.005	<0.01	<0.02	1.8	0.01	--	<0.04	<0.02	6.29	22.9	3,156	6.40	--
	5/19/2011	15	**0.13**	--	--	--	--	1	0.01	--	--	--	6.18	22.4	3,446	2.23	--
	10/4/2011	17	**0.15**	--	--	--	--	1.2	0.0097	--	--	--	6.08	21.4	3,657	3.02	--
	4/17/2012	17	**0.12**	--	--	--	--	1.1	<0.005	--	--	--	5.97	21.0	3,488	5.17	--
	10/17/2012	9	**0.10**	--	--	--	--	0.9	<0.01	--	--	--	6.25	18.8	4,270	2.58	--
	4/17/2013	7	**0.03**	--	--	--	--	<1	<0.01	--	--	--	5.34	21.1	1,800	4.22	--
	10/23/2013	12.0	**0.174**	--	--	--	--	<1.00	<0.005	--	--	--	5.07	20.8	2,782	4.29	-32.6
	4/15/2014	8.01	**0.0246**	--	--	--	--	<2	0.00504	--	--	--	5.42	18.8	1,484	1.15	32.5
	11/6/2014	10.3	**0.0306**	--	--	--	--	1.23 J	0.0081	--	--	--	5.54	20.6	1,989	0.20	123.9
	4/15/2015	10.6	**0.0506**	--	--	--	--	0.74 J	0.00604	--	--	--	5.62	18.1	1,995	3.47	-34.0
	11/17/2015	8.02	**0.0196**	--	<0.0050	<0.010	--	0.88	0.00757	--	<0.010	<0.020	5.21	21.0	1,688	5.24	-35.3
	4/29/2016	--	**0.0320**	--	--	--	--	--	<0.00500	--	--	--	8.52	18.6	1,623	4.40	-126.4
	11/11/2016	--	**0.0616**	--	--	--	--	--	0.0141	--	--	--	5.72	17.0	2,995	8.21	-36.7
	4/27/2017	9.72	**0.0299**	--	--	--	--	0.66	0.00977	--	--	--	5.37	18.9	1,465	2.51	-131.0
	11/15/2017	--	**0.0278**	--	<0.0050	0.0112	--	1.4	0.00706	--	--	--	4.85	19.8	1,388	5.15	58.3
MW-2	4/13/2007	4.5	**0.071**	--	--	--	--	--	0.012	--	--	--	--	--	--	--	--
	4/30/2008	24	**0.16**	0.029	<0.010 A	<0.020 A	0.088	<200 A	**0.11**	--	<0.020 A	0.52	2.88	26.5	3,338	14.20	--
	4/16/2009	8.28	**0.106**	<0.02 A	<0.01 A	<0.02 A	2.92	**36**	<0.01 A	0.00125	0.0376	1.27	3.54	23.7	2,354	4.29	--
	10/29/2009	3.42	**0.113**	0.0103	<0.005	<0.01	2.3 L	**22**	<0.005	--	0.0266	0.692	3.53	28.9	1,585	8.65	--
	3/31/2010	3.71	**0.0531**	<0.01	<0.005	<0.01	1.27		<0.005	--	0.027	0.846	2.68	24.0	1,628	11.40	--
	10/19/2010	3.8	**0.041**	0.011	<0.005	<0.01	1.9	**16**	0.0053	--	0.049	1.4	2.84	29.8	2,431	3.22	--
	5/19/2011	7.6	**0.026**	--	--	--	--	**16**	<0.005	--	--	--	3.41	26.3	2,206	6.71	--
	10/5/2011	7.5	**0.011**	--	--	--	--	**11**	0.011	--	--	--	3.41	31.8	3,256	1.48	--
	4/18/2012	15	**0.021**	--	--	--	--	**15**	<0.005	--	--	--	3.15	25.0	2,133	1.24	--
	10/15/2012	8.4	**0.030**	--	--	--	--	**9**	<0.01	--	--	--	3.11	26.9	3,040	2.61	--
	4/17/2013	9.7	<0.01	--	--	--	--	**14**	<0.01	--	--	--	3.10	24.4	2,440	0.00	--
	10/21/2013	12.8	**0.0168**	--	--	--	--	**17**	0.00501	--	--	--	2.48	28.6	2,533	2.69	378.2
	4/10/2014	13.2	**0.0191**	--	--	--	--	**15**	<0.005	--	--	--	3.50	24.0	1,871	0.56	450.6
	11/6/2014	8.24	**0.0246**	--	--	--	--	**16.4**	0.00812	--	--	--	3.29	29.6	2,282	1.01	310.3
	4/17/2015	5.65	**0.0634**	--	--	--	--	**11.0**	0.00631	--	--	--	3.35	24.2	1,638	0.51	414.2
	11/10/2015	5.33	**0.0444**	--	<0.0050	<0.010	--	4.8	0.00714	--	0.0130	0.356	3.41	28.6	1,339	3.54	389.6
	4/26/2016	--	**0.0742**	--	--	--	--	--	0.0071	--	--	--	3.32	26.1	2,045	0.81	338.6
	11/11/2016	--	**0.2320**	--	--	--	--	--	**0.0176**	--	--	--	3.37	26.4	1,880	0.93	319.9
	4/26/2017	7.35	**0.0189**	--	--	--	--	**10**	0.00821	--	--	--	3.42	27.8	1,196	1.73	461.7
	11/13/2017	--	**0.143**	--	<0.0050	<0.010	--	**7.4**	0.00509	--	--	--	3.33	28.9	1,333	0.86	458.2

TABLE 5
GROUNDWATER ANALYTICAL DATA
Southern State Phosphate and Fertilizer Company
HSI NO. 10371
Savannah, Chatham County, Georgia

Well ID	Date Sampled	Ammonia (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Zinc (mg/L)	pH (SU)	Temp (° C)	Sp. Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)
	RRS (a)	**30**	**0.01**	**20**	**0.051**	**0.31**	**4.1**	**6.1**	**0.015**	**N/A**	**2**	**31**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
MW-2D	4/13/2007	<0.1	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/30/2008	<0.20	<0.010	<0.010	<0.0050	<0.010	<0.010	0.28	<0.0050	--	<0.010	<0.020	7.00	29.0	206.5	3.14	--
	4/16/2009	<0.2	<0.01	0.015	<0.005	<0.01	<0.01	0.33	<0.005	<0.0002	<0.01	<0.02	6.93	27.1	211.1	7.51	--
	10/29/2009	2.29	<0.05	0.0887	<0.025	<0.05	<0.05	**140**	<0.025	--	<0.05	0.475	5.56	29.7	2,617	82.10	--
	3/31/2010	2.76	<0.05 A	0.0819	<0.025 A	<0.05 A	<0.05 A	--	<0.025 A	--	<0.05 A	0.748	4.73	27.2	4,313	49.30	--
	10/19/2010	1.4	<0.01	0.042	<0.005	<0.01	<0.02	**98**	0.0076	--	<0.04	0.58	3.35	28.2	4,203	19.10	--
	5/19/2011	2.3	<0.01	--	--	--	--	**83**	<0.005	--	--	--	5.27	26.9	308	5.02	--
	10/5/2011	0.15	<0.01	--	--	--	--	0.87	<0.005	--	--	--	6.73	31.1	0	6.62	--
	4/18/2012	<0.02	<0.01	--	--	--	--	**12**	<0.005	--	--	--	5.08	27.6	790	1.05	--
	10/17/2012	1.3	<0.01	--	--	--	--	**42**	<0.01	--	--	--	5.23	29.4	3,505	55.20	--
	4/17/2013	0.11	<0.01	--	--	--	--	**8.6**	<0.01	--	--	--	6.06	26.8	72	3.39	--
	10/21/2013	0.89	<0.01	--	--	--	--	**26**	<0.005	--	--	--	3.54	28.9	1,718	6.25	283.6
	4/10/2014	2.38	<0.01	--	--	--	--	**56**	<0.005	--	--	--	5.34	29.1	2,979	3.41	-16.0
	11/6/2014	2.04	<0.01	--	--	--	--	**54.9**	<0.005	--	--	--	5.28	29.0	2,713	5.13	-5.7
	4/17/2015	1.85	<0.010	--	--	--	--	**41.0**	<0.005	--	--	--	5.15	28.1	2,343	8.25	44.7
	11/10/2015	1.55	<0.010	--	<0.0050	<0.010	--	**23.5**	<0.0050	--	<0.010	0.110	5.34	28.3	1,823	6.58	32.2
	4/26/2017	0.944	<0.010	--	--	--	--	**33**	0.00613	--	<0.010	0.110	5.40	29.5	1,489	7.51	7.1
	11/13/2017	--	<0.010	--	<0.0050	<0.010	--	**21**	<0.0050	--	--	--	5.18	29.5	1,407	1.45	79.7
MW-2H	4/13/2007	3.4	<0.01	--	--	--	--	--	0.0064	--	--	--	--	--	--	--	--
	4/29/2008	5.9	<0.010	0.15	<0.0050	<0.010	<0.010	1.4	0.013	--	<0.010	0.35	7.00	16.7	1,514	6.37	--
	4/16/2009	1.55	<0.05 A	0.141	<0.025 A	<0.05 A	<0.05 A	1.2	<0.025 A	<0.0002	<0.05 A	<0.1 A	7.08	16.7	1,451	22.10	--
	10/27/2009	5.8	<0.01	0.159	<0.005	<0.01	<0.01	1.0	<0.005	--	<0.01	0.0495	7.11	20.6	2,025	2.90	--
	3/31/2010	1.37	<0.01	0.147	<0.005	<0.01	<0.01	--	0.00742	--	<0.01	0.249	6.74	15.7	1210	2.16	--
	10/18/2010	2.4	<0.01	0.15	<0.005	<0.01	<0.02	1.2	<0.005	--	<0.04	0.1	6.21	22.4	2,016	2.70	--
	4/17/2015	1.75	<0.010	--	--	--	--	1.3	<0.005	--	--	--	6.94	19.2	1,259	1.79	-136.6
	11/10/2015	1.33	<0.010	--	<0.0050	<0.010	--	0.86	**0.0162**	--	<0.010	0.0213	6.84	22.0	1,382	6.17	-130.7
	4/26/2016	--	--	--	--	--	--	--	<0.0050	--	--	--	7.10	19.1	1,313	3.83	-166.3
	11/11/2016	--	--	--	--	--	--	--	<0.0050	--	--	--	7.05	17.2	1,452	6.77	-348.2
	4/27/2017	4.27	<0.010	--	--	--	--	1.6	<0.0050	--	--	--	7.08	21.2	1,733	2.75	-305.9
	11/16/2017	6.16	<0.010	--	<0.0050	<0.010	--	1.1	<0.0050				7.27	22.3	2,254	9.80	-316.7
MW-3	4/13/2007	3	**0.076**	--	--	--	--	--	**0.061**	--	--	--	--	--	--	--	--
	4/30/2008	14	**0.29**	0.024	<0.010 A	**0.33**	0.23	**2300**	**0.31**	--	0.13	2.5	1.34	23.8	6,019	3.70	--
	4/16/2009	11.9	**0.194**	0.0478	0.014	0.118	0.219	**1300**	**0.254**	<0.0002	0.103	2.51	1.80	20.7	3,886	1.40	--
	10/29/2009	19.6	**0.69**	0.117	0.0388	**1.02**	0.826	**4300**	**0.835**	--	0.327	6.51	1.94	27.0	10.5	1.60	--
	3/31/2010	18.3	**0.488**	0.158	<0.05 A	**0.681**	0.638	--	**0.54**	--	0.279	6.36	2.30	21.4	10.47	0.65	--
	10/20/2010	18	**0.58**	0.15	0.047	**0.89**	0.9	**3500**	**0.64**	--	0.3	9.2	1.47	27.8	8,912	1.15	--
	5/19/2011	8	**0.23**	--	--	--	--	**1800**	**0.17**	--	--	--	2.53	25.2	4,579	2.26	--
	10/4/2011	<0.02	<0.01	--	--	--	--	**39**	<0.005	--	--	--	5.63	24.5	537	1.70	--
	4/18/2012	25	**0.42**	--	--	--	--	**4700**	**0.25**	--	--	--	2.25	24.4	1,275	1.00	--
	10/16/2012	9	**0.56**	--	--	--	--	**4000**	**0.40**	--	--	--	2.30	24.6	2,260	0.43	--
	4/17/2013	15	**0.58**	--	--	--	--	**4400**	**0.39**	--	--	--	2.64	23.5	11,400	8.06	--
	10/21/2013	29.2	**0.543**	--	--	--	--	**2800**	**0.362**	--	--	--	1.59	26.4	1,088	1.03	289.3
	4/10/2014	17.0	**0.196**	--	--	--	--	**1900**	**0.163**	--	--	--	2.36	21.6	4,747	0.74	-235.1
	11/6/2014	1.00	**0.018**	--	--	--	--	**100**	0.00719	--	--	--	4.39	25.3	516	0.58	167.0
	4/15/2015	14.40	**0.125**	--	--	--	--	**830**	**0.0554**	--	--	--	2.59	22.2	3,893	4.03	309.9
	11/11/2015	6.63	**0.0817**	--	0.00574	0.0421	--	**412**	**0.0575**	--	0.0296	0.842	2.75	25.4	1,897	6.08	335.8
	4/27/2016	--	**0.208**	--	0.0161	--	--	--	**0.0486**	--	--	--	2.94	23.2	3,208	1.95	281.9
	11/11/2016	--	**0.0187**	--	--	<0.010	--	--	0.0103	--	--	--	5.64	22.7	366	5.55	-102.5
	4/26/2017	<0.02	**0.0111**	--	--	--	--	**67**	0.00576	--	--	--	6.30	26.2	388	3.01	58.6
	11/13/2017	--	**0.0236**	--	<0.0050	<0.010	--	**86**	0.00643	--	--	--	4.48	25.4	545	0.43	319.2

TABLE 5
GROUNDWATER ANALYTICAL DATA
Southern State Phosphate and Fertilizer Company
HSI NO. 10371
Savannah, Chatham County, Georgia

Well ID	Date Sampled	Ammonia (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Zinc (mg/L)	pH (SU)	Temp (° C)	Sp. Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)
	RRS (a)	**30**	**0.01**	**20**	**0.051**	**0.31**	**4.1**	**6.1**	**0.015**	**N/A**	**2**	**31**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
MW-3D	4/13/2007	1.1	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/30/2008	0.72	<0.010	0.045	<0.0050	<0.010	<0.010	5.7	<0.0050	--	<0.010	<0.020	5.64	22.3	1,104	10.6	--
	4/16/2009	0.639	**0.0116**	0.0116	<0.005	<0.01	<0.01	**34**	<0.005	<0.0002	<0.01	0.277	6.45	22.2	842.6	1.81	--
	10/29/2009	0.742	<0.01	0.0945	<0.005	<0.01	<0.01	**14**	<0.005	--	<0.01	<0.02	6.27		1,377	8.00	--
	3/31/2010	0.992	<0.01	0.112	<0.005	<0.01	<0.01	--	<0.005	--	<0.01	<0.02	6.45	23.4	1,546	2.09	--
	10/19/2010	1.8	<0.01	0.049	<0.005	<0.01	<0.02	**250**	<0.005	--	<0.04	0.11	4.60	23.8	4,467	26.9	--
	5/19/2011	3.9	<0.01	--	--	--	--	**280**	<0.005	--	--	--	4.56	24.3	4,792	36.0	--
	10/5/2011	3.5	<0.01	--	--	--	--	**340**	**0.018**	--	--	--	4.58	24.9	4,998	12.0	--
	4/18/2012	0.07	<0.01	--	--	--	--	**18**	<0.005	--	--	--	5.39	24.9	565	0.50	--
	10/17/2012	1.70	<0.01	--	--	--	--	**250**	<0.01	--	--	--	4.61	20.9	1,860	47.3	--
	4/17/2013	22	<0.01	--	--	--	--	**8.2**	<0.01	--	--	--	6.98	25.2	1,570	2.01	--
	10/21/2013	8.71	<0.01	--	--	--	--	4.20	<0.005	--	--	--	5.91	24.8	1,721	0.86	72.3
	4/15/2014	4.42	<0.01	--	--	--	--	**163**	<0.005	--	--	--	5.19	21.4	3,115	9.89	-22.3
	11/8/2014	4.37	<0.01	--	--	--	--	**238**	<0.005	--	--	--	4.80	23.4	4,244	22.0	74.7
	4/16/2015	<0.500	<0.010	--	--	--	--	**85**	<0.0050	--	--	--	4.77	23.5	4,129	43.2	57.7
	11/11/2015	1.34	<0.010	--	<0.0050	<0.010	--	**6.5**	<0.0050	--	<0.010	<0.020	4.99	23.1	3,836	47.7	66.9
	4/27/2016	--	<0.010	--	--	--	--	--	<0.0050	--	--	--	5.21	23.2	3,710	39.2	-59.6
	11/11/2016	--	<0.010	--	--	--	--	--	<0.0050	--	--	--	5.40	19.1	3,143	29.1	-59.4
	4/27/2017	<0.500	<0.010	--	--	--	--	**16**	<0.0050	--	--	--	5.60	24.3	3,276	4.51	-4.0
	11/18/2017	--	<0.010	--	<0.0050	<0.010	--	**9.3**	<0.0050	--	--	--	5.71	24.5	4,099	4.26	-37.2
MW-3H	4/29/2008	0.61	<0.010	0.012	<0.0050	<0.010	<0.010	1.3	<0.0050	--	<0.010	<0.020	6.36	20.9	135.7	4.25	--
	4/15/2009	<0.2	<0.01	0.0107	<0.005	<0.01	<0.01	0.63	<0.005	<0.0002	<0.01	0.0327	6.39	19.8	105.1	9.54	--
	10/27/2009	0.595	<0.01	0.0116	<0.005	<0.01	<0.01	<1.0	<0.005	--	<0.01	<0.02	6.40	23.6	135.0	7.40	--
	3/31/2010	<0.2	<0.01	0.016	<0.005	<0.01	<0.01	--	0.00573	--	<0.01	0.0385	5.65	17.0	87.5	27.90	--
	10/18/2010	1.5	<0.01	0.03	<0.005	<0.01	<0.02	1.5	<0.005	--	<0.04	<0.02	6.30	26.4	241.4	14.00	--
MW-4	11/4/2007	2	**0.4**	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/30/2008	1.7	**0.34**	0.023	<0.0050	<0.010	<0.010	3.2	<0.0050	--	<0.010	0.28	6.75	20.2	1,559	14.80	--
	4/16/2009	1.72	**0.618**	0.028	<0.01 A	<0.02 A	<0.02 A	3.4	<0.01 A	<0.0002	<0.02 A	0.38	6.75	20.7	1,941	19.30	--
	10/29/2009	2.47	**1.46**	0.0467	<0.005	<0.01	<0.01	3.8	<0.005	--	0.0142	0.73	6.52	24.5	2,309	20.60	--
	1/4/2010	3.09	**1.06**	0.0344	<0.005	<0.01	<0.01	--	<0.005	--	0.0124	0.575	6.53	19.3	2,553	39.30	--
	10/20/2010	2.3	**1.2**	0.029	<0.005	<0.01	<0.02	6	<0.005	--	<0.04	0.55	--	--	--	--	--
	5/19/2011	2.5	**1.1**	--	--	--	--	2.3	<0.005	--	--	--	6.63	22.0	2328	9.55	--
MW-4H	4/12/2007	3.4	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/29/2008	3.5	<0.010	0.095	<0.0050	<0.010	<0.010	<0.20	<0.0050	--	<0.010	<0.020	6.20	21.0	1,042	14.20	--
	4/15/2009	2.85	<0.01	0.107	<0.005	<0.01	<0.01	0.37	<0.005	<0.0002	<0.01	<0.02	6.18	19.4	9,403	21.60	--
	10/27/2009	3.26	<0.01	0.0921	<0.005	<0.01	<0.01	<1	<0.005	--	<0.01	<0.02	6.15	22.3	925.5	5.50	--
	1/4/2010	3.13	<0.01	0.106	<0.005	<0.01	<0.01	--	<0.005	--	<0.01	<0.02	5.69	19.4	974.2	19.70	--
MW-5	4/13/2007	8.9	**0.032**	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/29/2008	8	**0.025**	0.061	<0.0050	<0.010	<0.010	**6.6**	<0.0050	--	<0.010	<0.020	6.43	20.0	137	5.02	--
	4/16/2009	5.88	**0.0338**	0.0717	<0.005	<0.01	<0.01	**6.1**	0.00976	<0.0002	<0.01	<0.02	6.59	19.6	1,285	13.80	--
	10/27/2009	8.28	**0.0212**	0.0869	<0.005	<0.01	<0.01	5.3	<0.005	--	<0.01	<0.02	6.57	21.4	1,336	16.10	--
	3/31/2010	9.02	**0.0364**	0.0828	<0.005	<0.01	<0.01	--	<0.005	--	<0.01	<0.02	5.92	17.4	1,440	4.00	--
	10/18/2010	6.8	**0.018**	0.13	<0.005	<0.01	<0.02	5.7	<0.005	--	<0.04	<0.02	5.69	24.0	1,740	5.70	--
	5/19/2011	8.3	**0.022**	--	--	--	--	5.4	<0.005	--	--	--	6.27	20.1	1,487	9.21	--
	10/4/2011	9.2	**0.03**	--	--	--	--	**6.1**	<0.005	--	--	--	6.55	22.4	1,436	4.60	--
	4/17/2012	9.3	**0.019**	--	--	--	--	5.4	<0.005	--	--	--	6.36	20.1	1,357	4.97	--
	10/17/2012	7.7	**0.031**	--	--	--	--	**6.1**	<0.01	--	--	--	6.42	19.0	2,640	8.26	--
	4/17/2013	6.5	<0.01	--	--	--	--	5.1	<0.01	--	--	--	6.52	19.4	1,610	2.29	--
	10/23/2013	6.06	**0.0298**	--	--	--	--	4.9	<0.005	--	--	--	6.15	22.1	1,635	5.01	-80.7
	4/16/2014	8.38	**0.0147**	--	--	--	--	**6.58**	<0.005	--	--	--	6.71	14.2	1,339	1.73	-78.9
	11/6/2014	9.98	**0.0151**	--	--	--	--	**6.41**	<0.005	--	--	--	6.46	20.9	1,596	0.95	91.6
	4/15/2015	10.2	**0.0330**	--	--	--	--	**12**	<0.0050	--	--	--	6.29	19.0	1,352	6.63	-102.7
	11/17/2015	7.03	**0.0173**	--	<0.0050	<0.010	--	4.7	<0.0050	--	<0.010	<0.020	7.15	20.1	1,592	3.38	-124.2
	4/29/2016	--	**0.0158**	--	--	--	--	--	--	--	--	--	6.71	19.1	1,292	9.62	187.4
	11/11/2016	--	**0.0135**	--	--	--	--	--	--	--	--	--	6.62	17.2	1,724	1.91	-105.1
	4/28/2017	8.20	**0.0127**	--	--	--	--	4.8	<0.0050	--	--	--	6.52	21.0	1,656	8.73	-156.2
	11/17/2017	9.13	**0.0185**	--	<0.0050	<0.010	--	3.4	<0.0050	--	--	--	6.89	20.7	2,410	0.73	-167.9

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GROUNDWATER ANALYTICAL DATA
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Well ID	Date Sampled	Ammonia (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Zinc (mg/L)	pH (SU)	Temp (º C)	Sp. Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)
	RRS (a)	**30**	**0.01**	**20**	**0.051**	**0.31**	**4.1**	**6.1**	**0.015**	**N/A**	**2**	**31**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
MW-6	4/12/2007	**68**	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/29/2008	**70**	<0.020 CC A	<0.020 A	<0.010 A	<0.020 A	<0.020 A	<10 A	<0.010 A	--	<0.020 A	0.049	6.59	21.2	4,341	6.21	--
	4/16/2009	18.6	<0.02 A	<0.02 A	<0.01 A	<0.02 A	<0.02 A	**9.2**	<0.01 A	<0.0002	<0.02 A	0.0576	6.73	21.6	2,597	3.68	--
	10/27/2009	24	<0.01	0.0102	<0.005	<0.01	<0.01	**7.7**	<0.005	--	<0.01	<0.02	6.79	23.0	1,590	17.00	--
	3/31/2010	15.4	<0.01	0.0106	<0.005	<0.01	<0.01	--	<0.005	--	<0.01	0.0322	6.55	20.8	1,825	15.30	--
	10/18/2010	25	<0.01	0.02	<0.005	<0.01	<0.02	**8.4**	<0.005	--	<0.04	<0.02	6.96	24.3	1,649	11.00	--
	5/18/2011	25	<0.01	--	--	--	--	5.9	<0.005	--	--	--	6.47	22.7	2,269	2.32	--
	10/5/2011	27	<0.01	--	--	--	--	**10**	<0.005	--	--	--	6.45	22.9	2,231	6.30	--
	4/18/2012	22	<0.01	--	--	--	--	**8.9**	<0.005	--	--	--	6.45	21.4	2,535	2.45	--
	10/16/2012	**38**	<0.01	--	--	--	--	**11**	<0.01	--	--	--	6.30	21.5	3,250	2.28	--
	4/16/2013	**45**	<0.01	--	--	--	--	**10**	<0.01	--	--	--	6.54	21.3	2,880	2.03	--
	10/21/2013	6.90	<0.01	--	--	--	--	**8.4**	<0.005	--	--	--	5.79	23.5	3,050	9.59	-110.5
	4/11/2014	**55.7**	<0.01	--	--	--	--	**11**	<0.005	--	--	--	6.37	20.7	3,294	1.40	-358.5
	11/4/2014	**47.1**	<0.01	--	--	--	--	**12.6**	<0.005	--	--	--	6.58	22.1	3,184	3.90	-41.6
	4/14/2015	**44.5**	<0.010	--	--	--	--	**7.3**	<0.0050	--	--	--	6.39	21.5	3,003	1.50	-129.3
	11/12/2015	**40.8**	<0.010	--	<0.0050	<0.010	--	**7.7**	<0.0050	--	<0.010	<0.020	6.50	23.2	2,515	7.77	-116.7
	4/28/2016	**44.9**	<0.010	--	--	--	--	5.9	--	--	--	--	6.47	21.1	2,996	5.54	-123.9
	11/10/2016	19.1	<0.010	--	--	<0.010	--	**8.8**	--	--	--	--	6.60	18.7	2,472	8.90	-22.1
	4/25/2017	**41.9**	<0.010	--	--	--	--	**7.2**	<0.0050	--	--	--	6.53	22.0	2,686	3.30	-123.9
	11/14/2017	**40.7**	<0.010	--	<0.0050	<0.010	--	4.2	<0.0050	--	--	--	6.73	22.5	2,972	3.52	-169.9
MW-7	4/12/2007	16	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/30/2008	18	<0.050 A	<0.050 A	<0.025 A	<0.050 A	<0.050 A	**8.8**	<0.025 A	--	0.2	1.1	5.61	22.6	2,898	12.90	--
	4/16/2009	13.2	**0.082**	<0.05 A	<0.025 A	<0.05 A	<0.05 A	**11**	<0.025 A	<0.0002	0.209	2.92	6.11	21.6	2,872	15.00	--
	10/28/2009	16.2	**0.0165**	<0.01	<0.005	<0.01	<0.01	**8.2**	<0.005	--	0.165	0.555	5.59	24.0	2,741	7.44	--
	3/31/2010	16.9	**0.0115**	<0.02 A	<0.01 A	<0.02 A	<0.02 A	--	<0.005	--	0.122	1.05	5.81	23.2	2,724	6.18	--
	10/19/2010	**35**	<0.01	<0.01	<0.005	<0.01	<0.02	**9**	<0.005	--	<0.04	0.028	6.64	25.6	3,315	3.64	--
	5/18/2011	29	<0.01	--	--	--	--	**11**	<0.005	--	--	--	6.43	22.7	3,337	2.43	--
	10/5/2011	**46**	<0.01	--	--	--	--	**11**	<0.005	--	--	--	6.51	24.0	3,739	2.20	--
	4/17/2012	**36**	<0.01	--	--	--	--	**13**	<0.005	--	--	--	6.44	21.1	3,333	4.53	--
	10/15/2012	**32**	<0.01	--	--	--	--	**14**	<0.01	--	--	--	6.32	21.8	5,910	6.32	--
	4/16/2013	**39**	<0.01	--	--	--	--	**15**	<0.01	--	--	--	6.64	25.1	3,210	5.00	--
	10/22/2013	**30**	<0.01	--	--	--	--	**8.9**	0.00551	--	--	--	5.75	22.5	3,243	1.74	-42.2
	4/11/2014	**30.5**	<0.01	--	--	--	--	**13**	<0.005	--	--	--	6.39	21.3	2,994	1.65	-38.6
	11/4/2014	19.7	<0.01	--	--	--	--	**13.9**	0.00614	--	--	--	6.13	22.3	2,888	3.10	8.6
	4/14/2015	19.0	**0.0202**	--	--	--	--	**11.0**	<0.0050	--	--	--	6.30	21.2	2,899	2.68	-31.5
	11/12/2015	13.5	**0.0146**	--	<0.0050	<0.010	--	**11.0**	<0.0050	--	0.0750	0.815	6.68	23.86	2,817	3.31	-10.7
	4/28/2016	22.4	<0.0100	--	--	--	--	--	<0.0050	--	--	--	6.47	20.33	2,713	1.27	-102.1
	11/10/2016	15.7	**0.0422**	--	--	--	--	--	0.00889	--	--	--	6.49	18.32	2,979	3.30	80.5
	4/25/2017	25.8	**0.0108**	--	--	--	--	**14**	0.00788	--	--	--	6.52	20.65	2,673	4.84	-67.7
	11/15/2017	26.6	<0.010	--	<0.0050	<0.010	--	**14**	<0.0050	--	--	--	6.73	22.00	3,655	2.01	-103.1
MW-8	4/12/2007	**71**	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/30/2008	**78**	<0.050 CC A	<0.050 A	<0.025 A	<0.050 A	<0.050 A	**7.9**	<0.025 A	--	<0.050 A	<0.10 A	5.93	14.2	4,384	4.64	--
MW-8-R	10/20/2010	**130**	<0.01	0.31	<0.005	<0.01	<0.02	2	<0.005	--	<0.04	0.077	6.67	23.6	5,953	4.35	--
	5/18/2011	**110**	<0.01	--	--	--	--	2.7	0.0062	--	--	--	6.06	19.8	4,905	7.01	--
	10/5/2011	**46**	<0.01	--	--	--	--	1.1	<0.005	--	--	--	5.88	26.1	2,568	0.00	--
	4/17/2012	**33**	<0.01	--	--	--	--	3.3	<0.005	--	--	--	5.48	19.7	1,191	9.73	--
	10/16/2012	**130**	<0.01	--	--	--	--	1.8	<0.01	--	--	--	6.47	21.1	4,308	36.20	--
	4/16/2013	**120**	<0.01	--	--	--	--	1.4	<0.01	--	--	--	6.51	28.3	2,420	8.53	--
	10/22/2013	2.34	<0.01	--	--	--	--	1.80	<0.005	--	--	--	5.53	22.7	1,561	14.70	19.9
	4/11/2014	**34.2**	<0.01	--	--	--	--	2.8	<0.005	--	--	--	6.34	17.9	1,036	5.81	36.7
	11/4/2014	**64.9**	<0.01	--	--	--	--	<2.24	<0.005	--	--	--	6.69	20.6	2,321	1.51	-26.3
	4/15/2015	**31.1**	<0.010	--	--	--	--	<2.24	<0.0050	--	--	--	6.63	22.1	1,130	2.26	19.3
	11/12/2015	0.580	<0.010	--	<0.0050	<0.010	--	<0.50	<0.0050	--	0.0140	0.114	4.82	23.4	319	1.71	159.4
	4/29/2016	8.91	<0.010	--	--	--	--	--	--	--	--	--	6.43	20.1	2,944	9.35	-118.5
	11/8/2016	**43.4**	<0.010	--	--	--	--	--	--	--	--	--	6.36	19.3	2,797	6.49	-20.9
	4/28/2017	14.0	<0.010	--	--	--	--	2.6	<0.0050	--	--	--	5.60	20.5	987	8.21	130.2
	11/15/2017	**83.4**	<0.010	--	<0.0050	<0.010	--	1.7	<0.0050	--	--	--	6.57	18.5	866	1.96	50.6

TABLE 5
GROUNDWATER ANALYTICAL DATA
Southern State Phosphate and Fertilizer Company
HSI NO. 10371
Savannah, Chatham County, Georgia

Well ID	Date Sampled	Ammonia (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Zinc (mg/L)	pH (SU)	Temp (° C)	Sp. Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)
	RRS (a)	**30**	**0.01**	**20**	**0.051**	**0.31**	**4.1**	**6.1**	**0.015**	**N/A**	**2**	**31**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
MW-9	4/12/2007	**61**	**0.12**	--	--	--	--	--	**0.14**	--	--	--	--	--	--	--	--
MW-9-R	1/4/2010	**40.6**	<0.01	0.132	<0.005	<0.01	<0.01	--	<0.005	--	<0.01	0.0209	5.81	20.5	3,602	6.06	--
	10/19/2010	**37**	**0.017**	0.14	<0.005	<0.01	<0.02	1.2	<0.005	--	<0.04	<0.02	6.54	26.3	2,583	11.40	--
	5/18/2011	**69**	<0.01	--	--	--	--	0.91	<0.005	--	--	--	6.27	23.1	4,309	5.10	--
	10/5/2011	**68**	<0.01	--	--	--	--	1.4	<0.005	--	--	--	6.20	25.4	2,810	5.04	--
	4/18/2012	**95**	<0.01	--	--	--	--	2	<0.005	--	--	--	6.33	21.0	4,404	3.73	--
	10/15/2012	**51**	<0.01	--	--	--	--	1.5	<0.01	--	--	--	5.89	25.1	2,245	1.98	--
	4/16/2013	**62**	<0.01	--	--	--	--	1	<0.01	--	--	--	6.39	23.8	2,410	0.79	--
	10/21/2013	4.89	<0.01	--	--	--	--	<1.00	<0.005	--	--	--	5.63	24.2	2,003	1.84	-69.0
	4/11/2014	**33.9**	**0.0309**	--	--	--	--	1.6	<0.005	--	--	--	6.09	20.8	1,856	2.39	-370.6
	11/4/2014	**47.9**	<0.01	--	--	--	--	<4.49	0.00544	--	--	--	6.98	21.6	3,517	20.50	-103.2
	4/14/2015	**42.2**	**0.0235**	--	--	--	--	1.5 J	<0.0050	--	--	--	6.26	19.4	1,745	6.03	-92.8
	11/12/2015	5.45	<0.010	--	<0.0050	<0.010	--	0.50	<0.0050	--	<0.010	<0.020	6.58	24.5	380	7.46	-9.8
	4/28/2016	**60.7**	<0.010	--	--	--	--	--	<0.0050	--	--	--	6.48	19.9	2,635	4.36	-124.1
	11/9/2016	**55.9**	<0.010	--	--	--	--	--	0.00568	--	--	--	6.45	19.3	2,898	7.51	-14.7
	4/24/2017	**61.1**	<0.010	--	--	--	--	**15**	<0.0050	--	--	--	6.40	21.1	2,668	6.05	-126.1
	11/15/2017	**45.9**	<0.010	--	<0.0050	<0.010	--	2.8	<0.0050	--	--	--	6.71	23.3	2,900	2.74	-49.8
MW-9D	4/12/2007	**950**	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
MW-9D-R	1/4/2010	**400**	<0.02 A	0.0805	<0.01 A	<0.02 A	<0.02 A	--	<0.01 A	--	<0.02 A	<0.04 A	6.15	24.2	9,236	1.30	--
	10/18/2010	**460**	<0.01	0.063	<0.005	<0.01	<0.02	0.23	<0.005	--	<0.04	<0.02	6.88	22.5	9,325	--	--
	5/18/2011	**380**	<0.01	--	--	--	--	<0.1	<0.005	--	--	--	6.25	24.7	9,025	0.01	--
	10/5/2011	**190**	<0.01	--	--	--	--	0.18	<0.005	--	--	--	5.82	23.0	4,907	9.90	--
	4/18/2012	**420**	<0.01	--	--	--	--	0.41	0.0062	--	--	--	6.32	22.6	8,461	2.57	--
	10/15/2012	**250**	<0.01	--	--	--	--	0.44	<0.01	--	--	--	5.94	24.3	7,298	1.42	--
	4/16/2013	**370**	<0.01	--	--	--	--	<1.0	<0.01	--	--	--	6.35	28.4	6,420	9.09	--
	10/22/2013	23.8	<0.01	--	--	--	--	<1.00	<0.005	--	--	--	5.75	21.5	7,541	3.03	-86.3
	4/11/2014	**272**	<0.01	--	--	--	--	<2	<0.005	--	--	--	6.21	22.2	7,114	2.50	-392.0
	11/5/2014	**339**	<0.01	--	--	--	--	3.28	0.00636	--	--	--	6.20	24.8	3,308	3.80	-40.3
	4/14/2015	**270**	<0.010	--	--	--	--	0.57 J	<0.0050	--	--	--	6.26	22.1	6,898	0.73	-117.6
	11/12/2015	**233**	<0.010	--	<0.0050	<0.010	--	0.69	0.0050	--	<0.010	<0.020	7.47	22.4	6,648	2.52	-24.0
	12/6/2017	**188**	<0.010	--	<0.0050	<0.010	--	1.7	<0.0050	--	--	--	6.76	21.1	6,320	0.88	-74.4
MW-10	4/11/2007	**110**	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/30/2008	**91**	<0.010 CC	0.016	<0.0050	<0.010	<0.010	4	<0.0050	--	<0.010	<0.020	6.24	--	2,416	2.10	--
	4/15/2009	**51.5**	<0.02 A	<0.02 A	<0.01 A	<0.02 A	<0.02 A	5	<0.01 A	<0.0002	<0.02 A	<0.04 A	6.62	20.1	2,696	12.20	--
	10/28/2009	**67.1**	<0.01	0.0119	<0.005	<0.01	<0.01	4.5	<0.005	--	<0.01	0.0276	6.51	24.0	2,866	23.70	--
	3/31/2010	**91.6**	<0.01	<0.01	<0.005	<0.01	<0.01	--	<0.005	--	<0.01	0.0263	6.15	20.1	2,846	9.29	--
	10/18/2010	**75**	<0.01	0.012	<0.005	<0.01	<0.02	**6.5**	<0.005	--	<0.04	<0.02	7.01	25.2	1,967	2.07	--
	5/18/2011	**67**	<0.01	--	--	--	--	5.3	<0.005	--	--	--	6.55	22.8	2,011	5.00	--
	10/5/2011	**77**	<0.01	--	--	--	--	**6.5**	<0.005	--	--	--	6.53	23.7	1,935	0.00	--
	4/18/2012	**73**	<0.01	--	--	--	--	**6.2**	<0.005	--	--	--	6.39	21.9	1,927	1.93	--
	10/16/2012	**65**	<0.01	--	--	--	--	**7.5**	<0.01	--	--	--	6.29	23.7	1,731	3.48	--
	4/16/2013	**74**	<0.01	--	--	--	--	**6.8**	<0.01	--	--	--	6.56	24.8	1,780	5.88	--
	10/22/2013	**94.3**	<0.01	--	--	--	--	3.90	<0.005	--	--	--	5.84	22.6	2,081	1.46	-87.5
	4/12/2014	**40.8**	<0.01	--	--	--	--	**6.9**	<0.005	--	--	--	6.91	20.0	958	1.40	-100.0
	11/4/2014	**73.9**	<0.01	--	--	--	--	**22**	<0.005	--	--	--	6.41	22.2	2,015	1.20	-37.2
	4/15/2015	**64.1**	<0.010	--	--	--	--	5.6	<0.0050	--	--	--	6.60	19.9	2,097	5.43	-110.5
	11/13/2015	**73.5**	<0.010	--	<0.0050	<0.010	--	**6.3**	<0.0050	--	<0.010	<0.020	7.14	22.8	2,407	2.85	-145.4
	4/29/2016	**84.9**	<0.010	--	--	--	--	--	--	--	--	--	6.56	19.8	2,281	2.07	-200.0
	11/10/2016	**87.5**	<0.010	--	--	--	--	--	--	--	--	--	6.61	18.8	2,247	3.01	-111.3
	4/25/2017	**76.1**	<0.010	--	--	--	--	4.7	0.00705	--	--	--	6.58	20.5	2,056	2.41	-176.1
	11/15/2017	**82.1**	<0.010	--	<0.0050	<0.010	--	**6.4**	<0.0050	--	--	--	6.43	21.9	2,999	5.46	-25.4

TABLE 5
GROUNDWATER ANALYTICAL DATA
Southern State Phosphate and Fertilizer Company
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Savannah, Chatham County, Georgia

Well ID	Date Sampled	Ammonia (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Zinc (mg/L)	pH (SU)	Temp (° C)	Sp. Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)
	RRS (a)	**30**	**0.01**	**20**	**0.051**	**0.31**	**4.1**	**6.1**	**0.015**	**N/A**	**2**	**31**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
MW-11	4/12/2007	**37**	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/29/2008	**37**	<0.020 CC A	<0.020 A	<0.010 A	<0.020 A	0.027	<10 A	<0.010 A	--	<0.020 A	<0.040 A	6.37	19.5	3,179	8.20	--
	4/16/2009	20.8	<0.05 A	<0.05 A	<0.025 A	<0.05 A	<0.05 A	**15**	<0.025 A	<0.0002	<0.05 A	<0.1 A	6.36	20.3	2,926	2.75	--
	10/28/2009	--	<0.01	<0.01	<0.005	<0.01	<0.01	**8.1**	<0.005	--	<0.01	<0.02	6.18	23.6	2,645	6.34	--
	3/31/2010	20.3	<0.01	<0.01	<0.005	<0.01	<0.01	--	<0.005	--	<0.01	0.0728	6.28	22.0	2,568	6.42	--
	10/18/2010	27	<0.01	<0.01	<0.005	<0.01	<0.02	**14**	<0.005	--	<0.04	<0.02	5.65	22.7	2,821	4.10	--
	5/18/2011	23	<0.01	--	--	--	--	**13**	<0.005	--	--	--	6.26	20.4	2,626	0.75	--
	10/5/2011	19	<0.01	--	--	--	--	**9.2**	<0.005	--	--	--	6.09	23.2	2,741	0.00	--
	4/18/2012	19	<0.01	--	--	--	--	**14**	<0.005	--	--	--	6.37	20.6	2,345	2.67	--
	10/16/2012	23	<0.01	--	--	--	--	**14**	<0.01	--	--	--	6.17	21.2	3,010	1.02	--
	4/16/2013	20	<0.01	--	--	--	--	**14**	<0.01	--	--	--	6.16	21.9	2,650	0.10	--
	10/21/2013	24.1	<0.01	--	--	--	--	**11**	<0.005	--	--	--	5.48	23.2	2,748	1.01	-63.6
	4/11/2014	16.5	<0.01	--	--	--	--	**14**	<0.005	--	--	--	6.28	19.8	2,278	1.23	-75.4
	11/4/2014	19.0	<0.01	--	--	--	--	**14.5**	0.00624	--	--	--	6.05	22.4	2,558	0.40	-77.2
	4/14/2015	17.1	<0.010	--	--	--	--	**12.0**	<0.0050	--	--	--	6.06	20.9	2,308	1.79	-68.3
	11/12/2015	17.0	<0.010	--	<0.0050	<0.010	--	**12.7**	0.00532	--	<0.010	<0.020	6.64	23.0	3,399	5.15	-58.9
	4/28/2016	16.9	<0.010	--	--	--	--	--	<0.00500	--	--	--	6.29	20.7	2,192	0.95	113.5
	11/10/2016	19.3	<0.010	--	--	--	--	--	0.0119	--	--	--	6.24	18.2	2,052	3.80	-19.5
	4/25/2017	16.0	<0.010	--	--	--	--	1.9	0.00504	--	--	--	6.31	21.5	2,138	3.35	-108.9
	11/14/2017	15.1	<0.010	--	<0.0050	<0.010	--	**14**	<0.0050	--	--	--	6.37	22.9	2,526	2.26	-148.0
MW-12	4/12/2007	**32**	**0.071**	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/30/2008	**40**	**0.062**	<0.050 A	<0.025 A	<0.050 A	0.33	**110**	<0.025 A	--	0.1	9.4	4.75	20.0	4,683	10.10	--
	4/15/2009	14.2	**0.093**	<0.05 A	<0.025 A	<0.05 A	0.356	**17**	<0.025 A	<0.0002	0.159	13.6	4.27	19.7	3,933	8.97	--
	10/28/2009	12.7	<0.1	<0.1	<0.05	<0.1	0.28	**18**	<0.05	--	<0.1	8.16	4.90	24.6	2,797	5.80	--
	3/31/2010	16.6	**0.0625**	<0.2 A	<0.1 A	<0.2 A	0.328	--	<0.025 A	--	<0.2 A	15.2	4.46	19.9	4,037	17.70	--
	10/19/2010	4.4	**0.063**	0.013	0.016	<0.01	0.42	**8**	0.009	--	0.11	10	4.94	25.4	4,026	2.11	--
	5/18/2011	13	**0.054**	--	--	--	--	**7.8**	<0.005	--	--	--	5.02	19.9	4,001	4.21	--
	10/5/2011	6.1	**0.055**	--	--	--	--	**9**	<0.005	--	--	--	4.74	24.5	4,073	0.00	--
	4/17/2012	12	**0.052**	--	--	--	--	**9.4**	<0.005	--	--	--	4.70	22.2	4,371	0.61	--
	10/16/2012	7.8	**0.064**	--	--	--	--	**10**	<0.01	--	--	--	4.64	24.1	5,290	6.47	--
	4/16/2013	7.5	**0.065**	--	--	--	--	**21**	<0.01	--	--	--	5.06	19.8	4,140	1.74	--
	10/22/2013	19.4	**0.0559**	--	--	--	--	**9.10**	0.00501	--	--	--	4.19	23.4	5,631	1.36	175.2
	4/14/2014	7.24	**0.0564**	--	--	--	--	**12.7**	0.00573	--	--	--	5.59	18.8	3,025	1.33	141.6
	11/5/2014	7.89	**0.0519**	--	--	--	--	**28.5**	0.00954	--	--	--	4.72	23.1	4,588	0.80	110.6
	4/16/2015	8.52	**0.0575**	--	--	--	--	**17.0**	0.00685	--	--	--	4.85	18.2	4,030	0.80	202.0
	11/13/2015	3.06	<0.0500	--	<0.0250	<0.0500	--	**22.9**	<0.0250	--	<0.0515	3.00	4.56	23.5	3,019	1.33	277.7
	4/29/2016	6.50	**0.0418**	--	--	--	--	--	0.0064	--	--	--	4.74	20.9	3,732	1.31	107.9
	11/9/2016	24.8	**0.0322**	--	--	--	--	--	0.0127	--	--	--	4.79	19.5	3,246	3.72	89.8
	4/27/2017	2.10	**0.0453**	--	--	--	--	**17**	0.00965	--	--	--	4.96	21.3	3,628	2.62	203.5
	11/16/2017	5.44	**0.0329**	--	0.00538	<0.010	--	**30**	0.00834	--	--	--	4.45	23.8	3,289	5.51	201.4
MW-12D	4/12/2007	22	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/30/2008	**78**	<0.010	0.022	<0.0050	<0.010	<0.010	1.6	<0.0050	--	<0.010	<0.020	6.65	22.2	1,184	5.24	--
	4/15/2009	12.2	<0.05 A	0.057	<0.025 A	<0.05 A	<0.05 A	0.93	<0.025 A	<0.0002	<0.05 A	<0.1 A	7.02	21.8	1,320	21.70	--
	10/28/2009	**53.5**	<0.01	0.104	<0.005	<0.01	<0.01	2.4	<0.005	--	<0.01	<0.02	6.46	23.3	2,590	71.20	--
	3/31/2010	**70.7**	<0.01	0.105	<0.005	<0.01	<0.01	--	<0.005	--	<0.01	<0.02	6.17	23.1	3,150	14.90	--
	10/19/2010	**38**	<0.01	0.039	<0.005	<0.01	<0.02	1.4	<0.005	--	<0.04	<0.02	4.72	23.8	3,133	0.73	--
	5/18/2011	**44**	<0.01	--	--	--	--	0.92	<0.005	--	--	--	6.54	21.1	2,513	30.80	--
	10/5/2011	**47**	<0.01	--	--	--	--	0.98	<0.005	--	--	--	6.47	21.6	2,310	3.38	--
	4/17/2012	13	<0.01	--	--	--	--	1.1	<0.005	--	--	--	6.28	21.9	1,592	1.35	--
	10/16/2012	**67**	<0.01	--	--	--	--	1.1	<0.01	--	--	--	6.31	23.0	3,087	9.80	--
	4/16/2013	**62**	<0.01	--	--	--	--	1.4	<0.01	--	--	--	6.49	22.7	2,580	0.75	--
	10/22/2013	28.2	<0.01	--	--	--	--	2.00	<0.005	--	--	--	5.88	21.9	2.575	5.05	-72.5
	4/14/2014	**72.8**	<0.01	--	--	--	--	1.96	<0.005	--	--	--	6.78	22.0	3,090	0.72	-47.1
	11/4/2014	**89.5**	<0.01	--	--	--	--	<2.24	<0.005	--	--	--	6.28	20.8	3,758	1.60	-23.6
	4/16/2015	**121**	<0.010	--	--	--	--	1.5 J	<0.0050	--	--	--	6.37	20.8	3,569	2.59	-55.2
	11/13/2015	**107**	<0.010	--	<0.0050	<0.010	--	1.4	<0.0050	--	<0.010	<0.020	7.62	22.0	3,105	0.72	118.5
	4/29/2016	**148**	<0.010	--	--	--	--	--	<0.0050	--	--	--	6.51	21.9	3,421	4.23	-150.2
	11/9/2016	**133**	<0.010	--	--	--	--	--	0.00676	--	--	--	6.46	17.4	3,305	4.12	-30.7
	4/27/2017	**118**	<0.010	--	--	--	--	2.0	0.00577	--	--	--	6.43	24.0	3,083	4.61	-90.0
	11/16/2017	**116**	<0.010	--	<0.0050	<0.010	--	2.2	<0.0050	--	--	--	6.23	22.6	3,304	4.47	11.1

TABLE 5
GROUNDWATER ANALYTICAL DATA
Southern State Phosphate and Fertilizer Company
HSI NO. 10371
Savannah, Chatham County, Georgia

Well ID	Date Sampled	Ammonia (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Zinc (mg/L)	pH (SU)	Temp (° C)	Sp. Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)
	RRS (a)	**30**	**0.01**	**20**	**0.051**	**0.31**	**4.1**	**6.1**	**0.015**	**N/A**	**2**	**31**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
MW-13	4/11/2007	**62**	**0.072**	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/29/2008	**48**	**0.077**	<0.020 A	**0.058**	0.021	0.16	<200 A	<0.010 A	--	0.24	17	3.62	16.2	4,505	4.82	--
	4/15/2009	18.6	**0.0712**	<0.05 A	0.0416	<0.05 A	0.247	**250**	<0.025 A	<0.0002	0.181	12.2	3.29	20.0	3,631	8.09	--
	10/28/2009	14.8	<0.1	<0.1	<0.05	<0.1	<0.1	**140**	<0.05	--	0.136	8.24	4.15	23.9	2,595	29.20	--
	3/31/2010	9.57	**0.0199**	<0.01	0.00714	<0.01	<0.01	--	<0.005	--	0.0736	5.38	3.96	19.8	2,244	6.47	--
	10/19/2010	13	**0.011**	<0.01	<0.005	<0.01	<0.02	**55**	<0.005	--	0.087	4.9	3.19	24.3	2,847	1.63	--
	5/18/2011	29	<0.01	--	--	--	--	**53**	<0.005	--	--	--	4.42	22.0	3,054	9.23	--
	10/5/2011	7.9	**0.051**	--	--	--	--	**54**	<0.005	--	--	--	4.52	22.9	3,072	9.99	--
	4/17/2012	14	**0.026**	--	--	--	--	**61**	<0.005	--	--	--	4.29	19.4	3,389	9.47	--
	10/16/2012	15	**0.040**	--	--	--	--	**65**	<0.01	--	--	--	4.28	19.0	5,030	1.14	--
	4/16/2013	19	**0.052**	--	--	--	--	**130**	<0.01	--	--	--	4.38	21.7	3,640	7.45	--
	10/21/2013	**41.0**	**0.0676**	--	--	--	--	**84**	<0.005	--	--	--	3.55	22.1	3.545	8.06	117.2
	4/12/2014	16.0	**0.0514**	--	--	--	--	**110**	<0.005	--	--	--	4.66	19.2	2,901	5.24	83.9
	11/5/2014	24.0	**0.0330**	--	--	--	--	**196**	0.00873	--	--	--	4.10	21.8	3,819	2.60	123.1
	4/15/2015	**39.6**	**0.1260**	--	--	--	--	**58**	<0.0050	--	--	--	4.25	19.9	3,586	8.82	159.5
	11/12/2015	23.2	<0.100	--	**0.0751**	<0.100	--	**16**	<0.0050	--	<0.100	7.32	4.43	23.13	3,353	6.73	182.1
	4/29/2016	**50.8**	**0.0754**	--	**0.0750**	--	--	--	<0.0050	--	--	--	4.35	20.23	2,899	--	108.2
	11/10/2016	**47.8**	**0.0780**	--	**0.0629**	--	--	--	0.0117	--	--	--	4.87	18.04	2,702	2.48	28.7
	4/25/2017	**32.8**	**0.0554**	--	0.0244	--	--	**70**	<0.0050	--	--	--	4.97	27.81	2,902	9.86	175.1
	11/16/2017	**35.6**	**0.0827**	--	0.0200	<0.010	--	**54**	0.00688	--	--	--	4.38	19.56	2,823	8.99	201.3
MW-15	4/12/2007	24	**0.014**	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/29/2008	21	<0.050 A	0.23	<0.025 A	<0.050 A	<0.050 A	<10 A	<0.025 A	--	<0.050 A	0.27	3.82	18.1	4,160	12.60	--
	4/15/2009	14.2	<0.05 A	<0.05 A	<0.025 A	<0.05 A	<0.05 A	0.34	<0.025 A	<0.0002	<0.05 A	<0.1 A	3.75	22.0	3,666	12.00	--
	10/27/2009	16.6	<0.02 A	<0.02	<0.01	<0.02	<0.02	2.2	<0.01	--	<0.02	<0.04	4.07	23.3	2,615	6.00	--
	3/30/2010	17.9	<0.02 A	<0.05 A	<0.025 A	<0.05 A	<0.05 A	--	<0.01	--	<0.05 A	<0.1 A	3.77	18.6	2,939	6.74	--
	10/19/2010	14	<0.01	0.02	<0.005	<0.01	<0.02	1	<0.005	--	<0.04	<0.02	4.15	22.7	2,893	3.31	--
	4/16/2015	10.4	<0.010	--	--	--	--	1.8 J	<0.0050	--	--	--	4.01	18.0	1,726	1.44	109.1
	11/11/2015	10.1	<0.010	--	<0.0050	<0.010	--	<0.50	<0.0050	--	<0.010	<0.020	4.23	22.7	1,149	2.93	44.2
	12/6/2017	13.0	<0.010	--	<0.0050	<0.010	--	2.0	<0.0050	--	--	--	4.73	20.3	2,075	1.24	6.6
MW-16	4/12/2007	**39**	**0.15**	--	--	--	--	--	<0.05	--	--	--	--	--	--	--	--
	4/29/2008	**40**	<0.50 CC A	<0.50 A	<0.25 A	<0.50 A	<0.50 A	<10 A	<0.25 A	--	1.3	<1.0 A	3.06	20.2	21.10	2.76	--
	4/14/2009	**48.6**	<0.5 A	<0.5 A	<0.25 A	<0.5 A	<0.5 A	<0.20	<0.25 A	<0.0002	1.41	<1 A	2.71	20.4	20.02	18.70	--
	10/28/2009	**42.5**	<0.2	<0.2	<0.1	0.207	<0.2	<1	<0.1	--	0.983	<0.4	3.10	23.3	16.85	9.58	--
	3/30/2010	**48.7**	<0.2 A	<0.2 A	<0.1 A	<0.2 A	<0.2 A	--	<0.1 A	--	0.776	<0.4 A	3.12	19.0	17.98	12.10	--
	10/19/2010	1.7	**0.057**	0.12	<0.005	0.086	<0.02	**37**	**0.022**	--	0.37	0.041	2.84	21.9	16.59	3.81	--
	5/18/2011	**36**	**0.055**	--	--	--	--	4.4	**0.029**	--	--	--	3.18	21.8	16.2	3.81	--
	10/4/2011	28	**0.056**	--	--	--	--	**18**	**0.07**	--	--	--	3.18	24.6	169,200	3.46	--
	4/17/2012	**39**	<0.2	--	--	--	--	1.6	<0.1	--	--	--	3.33	22.5	15	4.15	--
	10/17/2012	2	<0.1	--	--	--	--	**25.0**	<0.05	--	--	--	3.38	23.2	14,546	7.45	--
	4/17/2013	20	**0.14**	--	--	--	--	1.7	<0.05	--	--	--	3.53	24.0	13,900	11.80	--
	10/23/2013	28.9	**0.247**	--	--	--	--	<4.00	**0.0513**	--	--	--	2.79	20.8	15,160	2.79	-24.0
	4/11/2014	**48.2**	**0.261**	--	--	--	--	**110**	<0.05	--	--	--	3.41	19.1	1,310	1.40	-5.3
	11/6/2014	**48.1**	**0.101**	--	--	--	--	**38.7**	<0.05	--	--	--	3.34	23.0	1,430	0.65	69.4
	4/16/2015	**46.1**	**0.117**	--	--	--	--	**25**	<0.0125	--	--	--	3.23	18.0	12,890	1.77	61.5
	11/11/2015	**43.5**	<0.100	--	<0.0500	<0.100	--	**16.3**	<0.0500	--	0.302	<0.200	3.35	22.4	11,280	3.61	91.4
	4/27/2016	**47.3**	**0.164**	--	--	--	--	--	**0.0692**	--	--	--	3.55	19.6	11,870	5.92	19.6
	11/8/2016	**40.0**	**<0.25 A**	--	--	--	--	--	**<0.125 A**	--	--	--	3.25	19.3	10,440	4.76	28.2
	4/24/2017	**39.4**	**<0.25 A**	--	--	--	--	1.4	**<0.125 A**	--	--	--	3.44	21.9	9,008	8.65	54.2
	11/14/2017	**45.9**	**0.0512**	--	<0.0500	0.200	--	**8.6**	**0.0405**	--	--	--	3.27	22.0	11,746	4.41	-74.0
MW-17	4/13/2007	7.1	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/30/2008	2.6	<0.010	0.03	<0.0050	<0.010	<0.010	<0.20	<0.0050	--	<0.010	<0.020	4.90	17.7	179.7	5.79	--
	4/16/2009	1.48	<0.01	0.0328	<0.005	<0.01	<0.01	<0.20	<0.005	<0.0002	<0.01	<0.02	5.89	21.9	207.6	10.20	--
	10/29/2009	1.55	<0.01	0.0324	<0.005	<0.01	<0.01	<1	<0.005	--	<0.01	<0.02	5.47	22.3	142.1	22.20	--
	1/4/2010	0.919	<0.01	0.0266	<0.005	<0.01	<0.01	--	<0.005	--	<0.01	<0.02	5.56	22.1	120.5	4.69	--
	10/18/2010	3.9	<0.01	0.026	<0.005	<0.01	<0.02	<0.1	<0.005	--	<0.04	<0.02	5.20	28.6	115.1	2.80	--
	4/17/2015	1.79	<0.010	--	--	--	--	0.73 J	<0.0050	--	--	--	5.69	19.3	138	1.52	79.8
	11/10/2015	0.830	<0.010	--	<0.0050	<0.010	--	<0.50	<0.0050	--	<0.010	<0.020	5.43	23.2	119	2.93	241.6
	11/13/2017	<0.500	<0.010	--	<0.0050	<0.010	--	0.54	<0.0050	--	--	--	5.48	22.8	1,982	0.59	102.1

TABLE 5
GROUNDWATER ANALYTICAL DATA
Southern State Phosphate and Fertilizer Company
HSI NO. 10371
Savannah, Chatham County, Georgia

Well ID	Date Sampled	Ammonia (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Zinc (mg/L)	pH (SU)	Temp (° C)	Sp. Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)
	RRS (a)	**30**	**0.01**	**20**	**0.051**	**0.31**	**4.1**	**6.1**	**0.015**	**N/A**	**2**	**31**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
MW-18	4/13/2007	16	**0.014**	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/30/2008	23	<0.050 A	0.16	<0.025 A	<0.050 A	<0.050 A	0.34	<0.025 A	--	<0.050 A	0.14	6.29	22.9	7,297	1.27	--
	4/15/2009	20.3	<0.05 A	0.159	<0.025 A	<0.05 A	<0.05 A	0.86	<0.025 A	<0.0002	<0.05 A	<0.1 A	6.40	22.2	7,335	4.61	--
	10/28/2009	26	<0.01	0.112	<0.005	<0.01	<0.01	<1.0	<0.005	--	<0.01	<0.02	6.24	25.3	7,486	1.08	--
	3/31/2010	**39.3**	**0.0222**	0.188	<0.005	<0.01	<0.01	--	<0.005	--	<0.01	<0.02	6.38	21.5	7,959	3.86	--
	10/19/2010	**36**	<0.01	0.14	<0.005	<0.01	<0.02	0.43	<0.005	--	<0.04	<0.02	4.66	25.7	7,853	3.72	--
	5/18/2011	**45**	**0.011**	--	--	--	--	0.79	<0.005	--	--	--	6.63	22.0	8,023	2.73	--
	10/5/2011	**50**	**0.019**	--	--	--	--	1.2	<0.005	--	--	--	6.32	24.1	8,600	9.21	--
	4/17/2012	**56**	<0.01	--	--	--	--	0.87	<0.005	--	--	--	6.20	22.8	8,403	3.71	--
	10/16/2012	**55**	**0.021**	--	--	--	--	1.10	<0.01	--	--	--	6.31	21.3	9,120	4.57	--
	4/16/2013	**77**	**0.037**	--	--	--	--	<1.0	<0.01	--	--	--	6.47	21.2	7,950	4.92	--
	10/22/2013	**48.5**	**0.0123**	--	--	--	--	<4.00	<0.005	--	--	--	5.82	23.7	9,156	8.88	-198.2
	4/12/2014	**65.6**	**0.0288**	--	--	--	--	<2	<0.005	--	--	--	6.74	22.6	7,903	2.13	-220.1
	11/5/2014	**53.0**	**0.0128**	--	--	--	--	<0.898	0.00514	--	--	--	6.78	24.3	8,315	2.22	-313.7
	4/16/2015	**60.4**	**0.0162**	--	--	--	--	0.99 J	<0.0050	--	--	--	6.37	19.0	7,274	3.58	-278.1
	11/13/2015	**43.4**	**0.0132**	--	<0.0050	<0.010	--	0.98	0.00620	--	<0.010	<0.020	8.67	25.3	7,439	2.22	-189.6
	4/29/2016	**50.7**	**0.0218**	--	--	--	--	--	<0.0050	--	--	--	8.92	24.1	7,615	4.32	-283.8
	11/10/2016	**32.9**	**0.0262**	--	--	--	--	--	<0.0050	--	--	--	6.34	20.3	7,712	3.43	-296.2
	4/27/2017	24.0	**0.0112**	--	--	--	--	1.90	0.00701	--	--	--	6.34	22.1	7,480	2.79	-245.7
	11/17/2017	24.6	**0.0122**	--	<0.0050	<0.010	--	0.84	<0.0050	--	--	--	6.12	23.3	7,852	6.82	-146.1
MW-19	4/12/2007	5.5	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/29/2008	5.1	<0.010	0.28	<0.0050	<0.010	<0.010	<0.20	<0.0050	--	<0.010	<0.020	6.24	20.7	2,162	7.05	--
	4/14/2009	1.86	<0.05 A	0.21	<0.025 A	<0.05 A	<0.05 A	0.83	<0.025 A	<0.0002	<0.05 A	<0.1 A	6.18	21.0	1,958	20.60	--
	10/27/2009	5.88	<0.01	0.234	<0.005	<0.01	<0.01	<1	<0.005	--	<0.01	<0.02	6.20	22.0	2,075	1.50	--
	3/30/2010	3.84	<0.01	0.442	<0.005	<0.01	<0.01	--	<0.005	--	0.0147	0.403	6.03	19.2	3,696	23.90	--
	10/19/2010	5.7	<0.01	0.3	<0.005	<0.01	<0.02	0.21	<0.005	--	<0.04	<0.02	4.15	21.9	4,178	3.31	--
	4/17/2015	5.00	<0.010	--	--	--	--	<0.43	0.00707	--	--	--	5.99	19.1	2,196	34.4	-29.1
	11/13/2015	7.04	<0.010	--	<0.0050	<0.010	--	<0.50	0.00578	--	<0.010	<0.020	7.47	21.2	2,090	6.37	54.9
	11/14/2017	7.63	<0.010	--	<0.0050	<0.010	--	0.11	0.00527	--	--	--	6.31	21.4	2,705	2.51	-127.3
MW-21	4/12/2007	3.4	<0.01	--	--	--	--	--	<0.005	--	--	--	--	--	--	--	--
	4/29/2008	2.9	<0.010	0.051	<0.0050	<0.010	<0.010	0.7	<0.0050	--	<0.010	<0.020	5.81	17.4	1,995	3.13	--
	4/15/2009	1.45	<0.05 A	0.0725	<0.025 A	<0.05 A	<0.05 A	1.1	<0.025 A	<0.0002	<0.05 A	<0.1 A	5.65	19.2	2,804	13.80	--
	10/27/2009	2.24	<0.01	0.0541	<0.005	<0.01	<0.01	<1.0	<0.005	--	<0.01	<0.02	5.79	21.5	1,676	82.00	--
	3/30/2010	1.18	<0.01	0.0543	<0.005	<0.01	<0.01	--	<0.005	--	0.0107	<0.02	4.94	16.5	1,786	18.20	--
	10/19/2010	1.7	<0.01	0.051	<0.005	<0.01	<0.02	1.2	<0.005	--	<0.04	0.03	6.36	21.2	1,463	7.91	--
	4/16/2015	1.07	**0.0104**	--	--	--	--	0.71 J	<0.0050	--	--	--	5.36	17.0	1,800	3.10	53.2
	11/13/2015	1.16	<0.010	--	<0.0050	<0.010	--	1.8	<0.0050	--	0.0272	<0.020	7.17	20.5	1,764	3.70	66.6
	4/27/2016	--	<0.010	--	--	--	--	--	--	--	--	--	5.67	18.0	1,525	2.92	-8.1
	11/8/2016	--	<0.010	--	--	--	--	--	--	--	--	--	5.57	16.8	1,126	2.31	-9.2
	4/25/2017	0.995	<0.010	--	--	--	--	0.82	0.00658	--	--	--	5.54	18.2	1,131	4.25	-5.2
	11/15/2017	1.98	<0.010	--	<0.0050	<0.010	--	0.72	<0.0050	--	--	--	5.25	19.4	1,685	4.67	95.5
SG6-TW-1	11/17/2015	<0.500	<0.010	--	<0.0050	<0.010	--	<0.50	<0.0050	--	<0.010	0.0377	6.68	26.9	12,690	2.61	81.90

Notes:

(a) Type 4 risk reduction standards (RRS).

Bold values indicate concentrations at or in exceedance of the respective RRS.

mg/L = milligram per liter

SU	standard units
° C	degrees celsius
µS/cm	microSiemens per centimeter
NTU	nephelometric turbidity units
--	Not analyzed
<	Analyte was not detected at the indicated reporting limit.
A	Detection limit was elevated due to abundance of non-target constituent.
L	Off-scale high; the concentration of the analyte exceeds the linear range.
CC	The sample was received with insufficient preservation, though the sample was properly preserved at time of receipt or at time of sample preparation.

MW-1H, MW-8, MW-9, and MW-9D were damaged and/or abandoned as part of site development activities and were replaced in April 2010.

MW-4H was abandoned due to county improvement activities in May 2010.

MW-4 was abandoned during site redevelopment in August 2011.

MW-1 was abandoned during soil remediation activities and replaced with MW-1-R in February 2016. The original MW-1-R was abandoned and replaced with existing MW-1-R in July 2016.

TABLE 6

SUMMARY OF HISTORICAL SURFACE WATER ANALYTICAL RESULTS

Southern States Phosphate and Fertilizer Company

HSI NO. 10371

Savannah, Chatham County, Georgia

Compound	SW-A (µg/L)	SW-C (µg/L)	SW-D (µg/L)	SW-E (µg/L)	SW-F1 (µg/L)	SW-F2 (µg/L)	SW-G (µg/L)	SW-H (µg/L)	SW-I (µg/L)	SW-J1 (µg/L)
pH (SU)	**7.07**	**7.14**	**6.92**	**7.11**	**7.21**	**7.13**	**7.15**	**7.11**	**7.27**	**7.22**
Ammonia	**78**	**67**	**360**	**580**	**410**	**510**	**130**	**160**	**300**	**270**
Arsenic	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Barium	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Cadmium	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Chromium	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Copper	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Lead	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Mercury	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nickel	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Zinc	<100	<100	<100	**140**	<100	<100	<100	<100	<100	**110**

Notes:

< = Laboratory analytical result is below laboratory reporting limit

BLACK = analytical detection above the laboratory reporting limit

µg/L = micograms per liter

SU = standard units

TABLE 7

SUMMARY OF HISTORICAL SEDIMENT ANALYTICAL RESULTS

Southern States Phosphate and Fertilizer Company

HSI NO. 10371

Savannah, Chatham County, Georgia

Compound	HA-2005-4sed (mg/kg)
Metals - USEPA Methods 6010C & 7471B	
Arsenic	**6.3**
Barium	**50**
Cadmium	**0**
Chromium	**28**
Copper	**18**
Lead	**31**
Mercury	**0.058**
Nickel	**8.2**
Zinc	**84**

Notes:

< = Laboratory analytical result is below laboratory reporting limit

BLACK = analytical detection above the laboratory reporting limit

mg/kg = milligrams per kilograms

TABLE 8
WATER WELL SURVEY DATA
Southern States Phosphate and Fertilizer Company
HSI NO. 10371
Savannah, Chatham County, Georgia

USGS Well ID No.	Well Name / Owner	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Casing Depth (feet bgs)	Well Depth (feet bgs)	Aquifer
37Q015	Savannah Gas Co. 1	32.07798577	-81.0823342	241	695	Upper Floridan Aquifer
37Q016	East Coast Terminal	32.0760416	-81.0740008	260	500	Upper Floridan Aquifer
37Q017	Standard Oil Company	32.07881986	-81.0434451	230	652	Upper Floridan Aquifer
37Q040	City of Savannah Well #11	32.06465365	-81.0595563	240	697 / 714*	Upper Floridan Aquifer
37Q065	--	32.0721531	-81.0656675	617	650	Upper Floridan Aquifer
37Q066	City of Savannah Well #16	32.07770868	-81.049834	256 / 250*	650	Upper Floridan Aquifer
37Q086	--	32.08131898	-81.0798342	--	490	--
37Q156	--	32.08131899	-81.0795564	--	350	--
37Q157	--	32.07381975	-81.0620563	--	800	Upper Floridan Aquifer
37Q194	Southern States	32.07317778	-81.06335	--	--	Upper Floridan Aquifer
37Q195	Southern States	32.07317778	-81.06335	--	--	Upper Floridan Aquifer
37Q197	Savannah Golf Club	32.06635278	-81.0653694	--	--	--
37Q198	Savannah Golf Club	32.066575	-81.0648944	--	--	--
37Q199	--	32.0772222	-81.0504167	--	--	--

NOTES:

Well consturction data sources include USGS NWIS well records, DNR EPD Georgia Geologic Survey Bulletin 113: *Geology and Ground-water Resources of the Coastal Area of Georgia* (Clarke and others, 1990), and an email from the City of Savannah Water Supply and Treatment Department dated February 28, 2017.

* = Depth reported by City of Savannah

ft bgs = feet below ground surface

-- = no information available

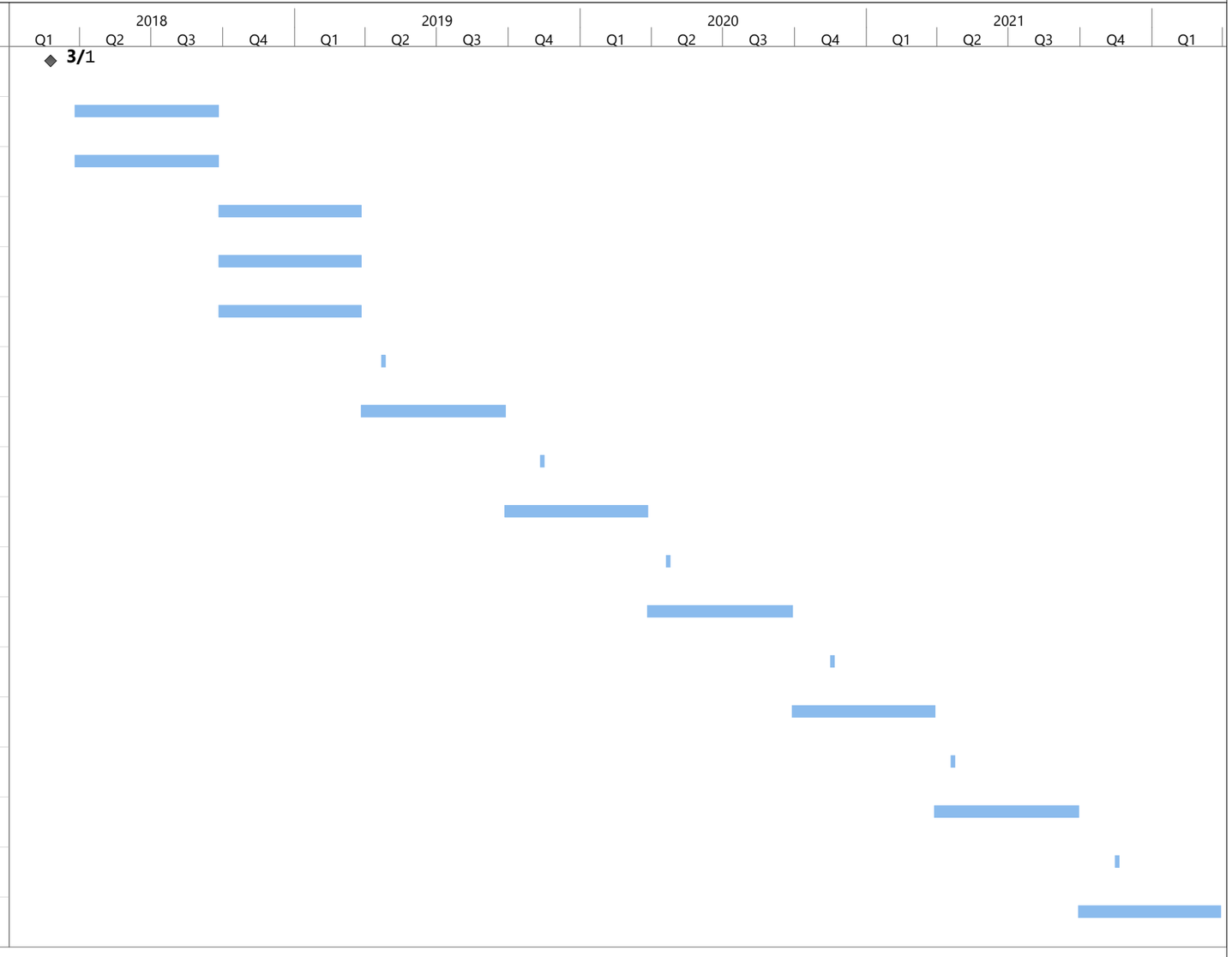
APPENDIX E

MILESTONE SCHEDULE

VRP Project Milestone Schedule

Southern States Phosphate & Fertilizer Company
1600 East President Street
Savannah, Chatham County, Georgia

ID	Task Name	Start	Finish	Duration
1	Submit VRP Application	Thur 3/1/18	Thur 3/1/18	0 wks
2	On-Site Horizontal / Vertical Delineation	Mon 3/26/18	Tue 9/25/18	26.3 wks
3	Semi-Annual Progress Report #1	Mon 3/26/18	Tue 9/25/18	26.3 wks
4	Off-Site Horizontal / Vertical Delineation	Wed 9/26/18	Tue 3/26/19	26 wks
5	Updated CSM with Final Remediation Plan	Wed 9/26/18	Tue 3/26/19	26 wks
6	Semi-Annual Progress Report #2	Wed 9/26/18	Tue 3/26/19	26 wks
7	Semi-Annual Groundwater Monitoring Event #1	Mon 4/22/19	Fri 4/26/19	1 wk
8	Semi-Annual Progress Report #3	Wed 3/27/19	Fri 9/27/19	26.5 wks
9	Semi-Annual Groundwater Monitoring Event #2	Mon 11/11/19	Fri 11/15/19	1 wk
10	Semi-Annual Progress Report #4	Fri 9/27/19	Fri 3/27/20	26.1 wks
11	Semi-Annual Groundwater Monitoring Event #3	Mon 4/20/20	Fri 4/24/20	1 wk
12	Semi-Annual Progress Report #5	Fri 3/27/20	Mon 9/28/20	26.3 wks
13	Semi-Annual Groundwater Monitoring Event #4	Mon 11/16/20	Fri 11/20/20	1 wk
14	Semi-Annual Progress Report #6	Mon 9/28/20	Mon 3/29/21	26.1 wks
15	Semi-Annual Groundwater Monitoring Event #5	Mon 4/19/21	Fri 4/23/21	1 wk
16	Semi-Annual Progress Report #7	Mon 3/29/21	Wed 9/29/21	26.5 wks
17	Semi-Annual Groundwater Monitoring Event #6	Mon 11/15/21	Fri 11/19/21	1 wk
18	VRP Compliance Status Report	Wed 9/29/21	Tue 3/29/22	26 wks



Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	