

February 8, 2023

Ms. Cindy Mulkey
Florida Department of Environmental Protection
Siting Coordination Office
2600 Blair Stone Road
Tallahassee, Florida 32399-3000

Re: JEA
St. Johns River Power Park—Units 1 & 2
Power Plant Certification No. PA 81-13P
Post-Certification Modification

Dear Ms. Mulkey:

Pursuant to Sections 403.5113 and 403.516(1)(c), Florida Statutes (F.S.); Rules 62-17.205(1) and 62-17.211(1)(b), Florida Administrative Code (F.A.C.), and Conditions of Certification A.XXI and A.XXII, please accept this letter and attachment as a request for a post-certification amendment and modification to the JEA Site Certification Application for the St. Johns River Power Park (SJRPP) located in Jacksonville, Florida.

The post-certification amendment addresses an update to Attachment D – Ground Water Monitoring Plans. More specifically, JEA seeks to replace existing Attachment D with the attached Solid Waste and Industrial Wastewater Ground Water Monitoring Plan attached hereto as **Exhibit 1**. The revised attachment has been reviewed and agreed to by the Florida Department of Environmental Protection Northeast District Office.

As you are aware, JEA has demolished the two fossil-fueled steam generating units currently reflected in the SJRPP Conditions of Certification, along with other major associated facilities, including the coal handling facilities. This proposed post-certification modification seeks to (1) update the existing Conditions of Certification to reflect the demolition of portions of the SJRPP; and (2) update the Site boundary to remove portions of the existing 1,656-acre property from the Certified Area. A redline version of the Conditions of Certification reflecting JEA's proposed changes is attached as **Exhibit 2**. Similarly, a figure showing JEA's proposed revised Site boundary is attached as **Exhibit 3**. The proposed modification will not have any effects on the environment.

Pursuant to Rule 62-17.293(1)(c)(2), F.A.C., a check in the amount of \$10,000 has been sent to the department. If you have any questions or concerns, or require additional information, please contact me at (904) 537-6948.

Sincerely,

Kevin Holbrooks

Kevin Holbrooks,
Director, Environmental Compliance



engineers | scientists | innovators

SOLID WASTE AND INDUSTRIAL WASTEWATER GROUNDWATER MONITORING PLAN

ST. JOHNS RIVER POWER PARK 11201 NEW BERLIN ROAD JACKSONVILLE, DUVAL COUNTY, FLORIDA

Prepared for

JEA

21 W. Church St.
Jacksonville, Florida 32202

Prepared by

Geosyntec Consultants, Inc.

1200 Riverplace Blvd., Suite 710
Jacksonville, Florida 32207

Project Number: FR8073

October 2022

*Solid Waste and Industrial Wastewater Groundwater Monitoring Plan
JEA – St. Johns River Power Park*

Geosyntec[®]
consultants

SOLID WASTE AND INDUSTRIAL WASTEWATER GROUNDWATER MONITORING PLAN

**ST. JOHNS RIVER POWER PARK
11201 NEW BERLIN ROAD
JACKSONVILLE, DUVAL COUNTY, FLORIDA**

Prepared for

JEA
21 W. Church St.
Jacksonville, Florida 32202

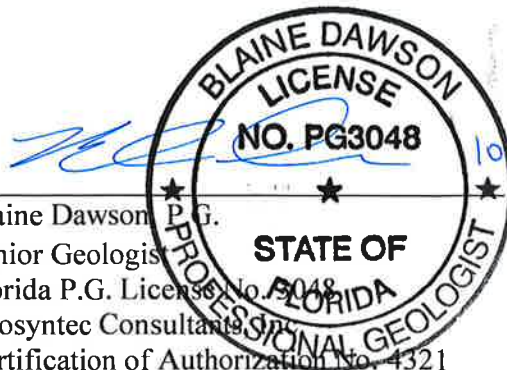
Prepared by

Geosyntec Consultants, Inc.
1200 Riverplace Blvd., Suite 710
Jacksonville, Florida 32207

I hereby certify that in my professional judgment this document satisfies the requirements set forth in Chapter 471, Florida Statutes, and other applicable rules and regulations of the state of Florida. I have completed and/or been in responsible charge of work completed by a qualified professional working directly under my supervision.

Rachel Klinger

Rachel A. Klinger, P.E., BCEE
Sr. Principal Engineer



Blaine Dawson, P.G.
Senior Geologist
Florida P.G. License No. PG3048
Geosyntec Consultants, Inc.
Certification of Authorization No. 4321
Telephone: 904.858.1818

TABLE OF CONTENTS

1.	INTRODUCTION	1
1.1	Terms of Reference	1
1.2	Background.....	1
1.3	Objectives	1
1.4	Zone of Discharge and Monitored Areas	2
1.5	Report Organization	2
2.	SITE SUMMARY	3
2.1	Ownership/Property Use.....	3
2.2	Description and Setting	3
2.2.1	Landfill Areas	3
2.3	Topography/Drainage.....	5
2.4	Regional and Local Hydrogeology.....	5
2.5	Groundwater Flow Direction and Gradient.....	6
3.	SOLID WASTE GROUNDWATER MONITORING PLAN	8
3.1	Introduction	8
3.2	Geology	8
3.3	Hydrogeology	8
3.3.1	Area I Landfill	8
3.3.2	Area II Landfill.....	8
3.3.3	Area B Landfill.....	9
3.4	Groundwater Analytical Data and Trends.....	9
3.4.1	Area I Landfill	9
3.4.2	Area II Landfill.....	10
3.4.3	Area B Landfill.....	11
3.5	Groundwater Monitoring Area Network.....	12
3.5.1	Area I Landfill	12
3.5.2	Area II Landfill.....	13
3.5.3	Area B Landfill.....	13
3.6	Groundwater Monitoring Parameters and Frequency	14
3.6.1	Groundwater Sampling.....	14
3.6.2	Parameters and Frequency – Area I and II Landfills.....	14
3.6.3	Parameters and Frequency – Area B Landfill	16
3.7	Reporting	17



3.8 Monitoring Well Installation and Abandonment.....18

4. FORMER INDUSTRIAL WASTEWATER AREA GROUNDWATER
MONITORING PLAN 19

5. REFERENCES 21

LIST OF TABLES

Table 1:	Well Construction Details – Solid Waste Areas
Table 2:	Geographical Coordinates and Well Designations – Solid Waste Areas
Table 3:	Well Construction Details – Former Industrial Wastewater Area
Table 4:	Geographical Coordinates and Well Designations – Former Industrial Wastewater Area

LIST OF FIGURES

Figure 1:	Site Location Map
Figure 2:	Site Map
Figure 3:	Zones of Discharge and Groundwater Monitoring Locations for Solid Waste Areas
Figure 4:	Shallow Groundwater Potentiometric Map (21 June 2021)
Figure 5:	Intermediate Groundwater Potentiometric Map (21 June 2021)
Figure 6:	Deep Groundwater Potentiometric Map (21 June 2021)
Figure 7:	Area I Landfill Groundwater Potentiometric Map (21 June 2021)
Figure 8:	Area II Landfill Groundwater Potentiometric Map (21 June 2021)
Figure 9:	Area B Landfill Groundwater Potentiometric Map (21 June 2021)
Figure 10:	Groundwater Monitoring for Former Industrial Wastewater Area

LIST OF APPENDICIES

Appendix A:	Historical Groundwater Analytical Result Tables
Appendix B:	Mann-Kendall Analysis

1. INTRODUCTION

1.1 Terms of Reference

This Solid Waste and Industrial Wastewater Groundwater Monitoring Plan (GMP) was prepared by Geosyntec Consultants, Inc. (Geosyntec) on behalf of JEA for the former St. Johns River Power Park (SJRPP) (Site), located at 11201 New Berlin Road in Jacksonville, Duval County, Florida in Section 12, Township 1 South, and Range 27 East, as illustrated in **Figure 1**.

1.2 Background

JEA has monitored groundwater quality at the SJRPP in accordance with the Conditions of Certification (COC) PA 81-13P for the SJRPP – Units 1 & 2 dated 30 May 2012, which provided specific plant conditions associated with groundwater monitoring at each of the solid waste disposal and industrial wastewater areas. Monitoring of these areas was performed in accordance with the Florida Department of Environmental Protection (FDEP) approved Industrial Wastewater and Solid Waste Groundwater Monitoring Plans Revision 4 dated June 2013. In addition, JEA has monitored the Area B Landfill per applicable requirements of 40 Code of Federal Regulations (CFR) Part 257, Subpart D (coal combustion residual (CCR) Rule) as CCR was received in Area B Landfill following the CCR Rule effective date of April 17, 2015.

In 2017, JEA and Florida Power and Light (FPL) began cessation of active power generation activities at the SJRPP. As part of closure and demolition, JEA is in the process of modifying the 2012 COC, including the certified Site boundaries and the groundwater monitoring associated with the areas within the certified Site boundaries. The modified certified Site boundaries will include the three solid waste landfills (Area I, Area II, and Area B) and will exclude the industrial wastewater areas previously monitored as part of the 2013 GMP. Recommendations for the monitoring of the Former Industrial Wastewater Area is discussed in Section 4.

The locations of Area I, Area II, and Area B Landfills and the Former Industrial Wastewater Area are illustrated on **Figure 2**.

1.3 Objectives

This GMP has been prepared to present the groundwater monitoring network following modification of certified Site boundaries. In accordance with Sections B.I.B.2. and B.I.G.2. of the 2012 COC, this GMP has been updated to present the methodologies necessary to monitor and evaluate groundwater quality associated with the Area I, Area II, and Area B Landfills that will be retained within the modified certified Site boundaries. Additional

changes to this GMP may be needed depending on the final modified certified Site boundaries.

1.4 Zone of Discharge and Monitored Areas

In Section B. O. of the 2012 COC, the Zone of Discharge (ZOD) for the solid waste landfills is defined as extending to a depth of 90 feet (ft) below the landfill cell at a horizontal distance of 200 feet from the edge of the landfill cell. For the solid waste landfills, Area I and II Landfills, which stopped receiving CCR prior to the effective date of the CCR Rule (April 17, 2015), the ZOD will remain 200 feet from the edge of the landfill cell. The ZOD associated with Area I and Area II Landfills is shown on **Figure 3**.

Since the Area B Landfill received CCR following the effective date of the CCR Rule, the requirements of 40 CFR Part 257, Subpart D, as amended will apply to this solid waste landfill. However, for the purposes of this GMP, the Area B Landfill will continue to be monitored in accordance with Section B. O. of the 2012 COC, inclusive of the current ZOD of 200 ft from the edge of the landfill cell. Monitoring currently in progress as part of the referenced CCR Rule will continue but be conducted separately from this GMP.

1.5 Report Organization

The remainder of this GMP is organized as follows:

- Section 2 – *Site Summary* – provides a site summary, including site description and setting, property use/ownership, site topography, site geology and hydrogeology, and surface water and drainage;
- Section 3 – *Solid Waste Groundwater Monitoring Plan* – presents details of the GMP including monitoring well locations, monitoring well construction details, water sample collection frequency, and water quality parameters for the solid waste areas including the Area I, Area II, and Area B Landfills; and
- Section 4 – *Former Industrial Wastewater Area Groundwater Monitoring Plan* – presents details of the ongoing groundwater monitoring activities in the Former Industrial Wastewater Area.
- Section 5 – *References* – provides references that were utilized in the preparation of this GMP.

2. SITE SUMMARY

2.1 Ownership/Property Use

Pursuant to the Florida Electrical Power Plant Siting Act, Sections 403.501-518, Florida Statutes (FS), the FDEP issued the COC to JEA as the owner/operator of the SJRPP. During operation, the SJRPP utilized coal in two large steam units to produce electricity. JEA is the property owner by deed.

2.2 Description and Setting

Currently, three landfill monitoring areas have been identified where groundwater monitoring will be conducted as part of this GMP. These areas include the Area I, Area II, and Area B Landfills. Each of these landfills are located adjacent to Island Drive as shown on **Figure 2**. Details for each landfill are provided below.

2.2.1 Landfill Areas

2.2.1.1 Area I Landfill

The Area I Landfill is located in the southwest corner of Island Drive and East Park Road, as illustrated in **Figure 2**. The major solid waste components in the Area I Landfill include CCRs, such as gypsum (flue gas desulfurization (FGD) byproduct) and coal combustion ash in the form of fly ash and bottom ash. Other small quantities of solid waste associated with electric power generation activities including pyrites, settled solids from the sedimentation basin/ponds and cooling towers, and dewatered solids from the former wastewater treatment facility have been disposed of in the Area I Landfill.

The Area I Landfill is closed. The final Closure Certification Report was submitted to the FDEP in April 2008 (Golder Associates 2008). The Area I Landfill occupies approximately 57 acres with an elevation of approximately 106-ft National American Vertical Datum of 1988 (NAVD88) and a side slope grade no steeper than 3 feet horizontal to 1 foot vertical (3H:1V). The top deck cover system consists of the following from top to bottom: (i) 2-ft thick protective soil layer; (ii) 30-mil and 40-mil low density polyethylene (LLDPE) geomembrane; and (iii) graded subgrade layer consisting of CCRs. The 3H:1V side slopes are covered with a 2-ft thick protective soil layer over a graded subgrade layer consisting of CCRs (Golder 2008).

Nine monitoring wells (L-1, L-2, L-3, and L-7 through L-12) comprise the groundwater monitoring network for the Area I Landfill. Three monitoring wells (L-1, L-2, and L-3) are upgradient of the Area I Landfill and six monitoring wells (L-7 through L-12) are downgradient of the Area I Landfill with L-11 and L-12 at the Northeast corner of the landfill area. The ZOD for the Area I Landfill is defined as extending to a depth of 90 feet below the Area I Landfill at a horizontal distance of 200 feet from the Area I Landfill. Based on

the ZOD definition, in accordance with Chapter 62-520, Florida Administrative Code (F.A.C.), and as previously approved in the 2013 GMP, L-1 through L-3 are designated as Background Monitoring Wells as they are located upgradient of the Area I Landfill and L-7 through L-12 are designated as Intermediate Monitoring Wells as they are located within the Area I Landfill ZOD.

2.2.1.2 Area II Landfill

The Area II Landfill is located in the southeast corner of Island Drive and East Park Road, as illustrated in **Figure 2**. The major solid waste components in the Area II Landfill include CCRs and other small quantities of solid waste associated with electric power generation activities including pyrites, settled solids from the sedimentation basin/ponds and cooling towers, and dewatered solids from the former wastewater treatment facility.

The Area II Landfill is closed. The final Closure Certification Report was submitted to the FDEP on 6 December 2011. FDEP approved the closure of the Area II Landfill in a letter dated 1 May 2012. The Area II Landfill is approximately 32 acres in size and has an average 3H:1V side slope. The elevation of the Area II Landfill is approximately 93-ft NAVD88 at the crown of the top deck. Like the Area I Landfill, the top deck cover system consists of the following from top to bottom: (i) 2-ft thick protective soil layer; (ii) 40-mil thick smooth LLDPE geomembrane; and (iii) graded subgrade layer consisting of CCRs. The 3H:1V side slopes are covered with a 2-ft thick protective soil layer over a graded subgrade layer consisting of CCRs.

Fourteen monitoring wells (L-B, L-4 [aka: MWB-L4], L-5, and L-16 through L-26) comprise the groundwater monitoring network for the Area II Landfill. Three monitoring wells (L-B, L-4 [aka: MWB-L4], and L-17 [aka: MWB-L17]) are upgradient of the Area II Landfill, L-5 is located to the west of the Area II Landfill, and nine monitoring wells (L-18 through L-26) are downgradient of the Area II Landfill. Monitoring wells L-4 (aka: MWB-L4), and L-17 (aka: MWB-L17) are also utilized for Solid Waste Monitoring.

The ZOD for the Area II Landfill is defined as extending to a depth of 90 feet below the Area II Landfill at a horizontal distance of 200 feet from the Area II Landfill. Based on the ZOD definition, in accordance with Chapter 62-520, F.A.C., and as previously approved in the 2013 GMP, L-B, L-4 (aka: MWB-L4), L-5, and L-17 (aka: MWB-L17) are designated as Background Monitoring Wells as they are located upgradient of the Area II Landfill; L-16, L-18, and L-19 are designated as Intermediate Monitoring Wells as they are located within the Area II Landfill ZOD; and L-20 through L-26 are designated as Compliance Monitoring Wells as they are located downgradient of the Area II Landfill and outside the ZOD.

2.2.1.3 Area B Landfill

The Area B Landfill is located northeast of the Area I Landfill on the north side of Island Drive, as illustrated in **Figure 2**. The Area B Landfill received CCRs and other small quantities of solid waste associated with electric power generation activities including pyrites, settled solids from the sedimentation basin/ponds and cooling towers, and dewatered solids from the former wastewater treatment facility. The closure plan associated with the Area B Landfill was submitted to FDEP in 2018, and closure activities were completed in January 2022.

According to the 2018 Closure Plan prepared by Golder Associates, Inc., the Area B Landfill is approximately 25 acres in size and has an average 3H:1V side slope. Similar to the Area I and II Landfills, the top deck cover system will consist of the following from top to bottom: (i) 2-ft thick protective soil layer; (ii) AGRU Super Gripnet 50-mil LLDPE geomembrane; and (iii) graded subgrade layer consisting of CCRs. The 3H:1V side slopes were covered with a 2-ft thick protective soil layer and AGRU Super Gripnet 50-mil LLDPE geomembrane.

Twelve monitoring wells (MW-1 through MW-9, MW-20, MW-A1, and MW-B1) comprised the groundwater monitoring network for the Area B Landfill as defined in the 2013 GMP. Seven additional monitoring wells (CCR-1 through CCR-7) and nine additional assessment wells (AW-1 through AW-9) have been installed in accordance with the CCR Rule. CCR-1 through CCR-3 were installed upgradient of the Area B Landfill and CCR-4 through CCR-7 were installed at the downgradient edge of the disposal unit.

The ZOD for the Area B Landfill is defined as extending to a depth of 90 feet below the Area B Landfill at a horizontal distance of 200 feet from the Area B Landfill. Based on the ZOD definition, in accordance with Chapter 62-520, F.A.C., and as previously approved in the 2013 GMP, MW-5, MW-6, and MW-1B are designated as Background Monitoring Wells as they are located upgradient of the Area B Landfill; MW-7, MW-8, MW-9, and MW-1A are designated as Intermediate Monitoring Wells as they are located within the Area B Landfill ZOD.

2.3 Topography/Drainage

In general, the topography in the vicinity of the SJRPP slopes gently to the east southeast towards the St. Johns River, located 1 mile south of the property. According to the United States Geologic Survey (USGS) Quadrangle topographic maps, the land surface elevation at the SJRPP is approximately 20-ft NGVD29.

2.4 Regional and Local Hydrogeology

The hydrogeology of Duval County, including near the Site, has been documented in many publications (Leve, 1966; Fairchild, 1972; Phelps, 1993 and others). As documented in Florida Geological Survey Report of Investigations No. 59, *The Shallow-Aquifer System in*

Duval County, Florida (Fairchild, 1972), the stratigraphic series, in descending order, that comprise the surficial aquifer system in Duval County (including near the Site) are the Pleistocene and Holocene deposits and the upper Miocene or Pliocene deposits. The Pleistocene and Holocene deposits comprise the water table unit and the upper Miocene or Pliocene deposits comprise the limestone unit (Phelps, 1993). The surficial aquifer is approximately 30 to 90 feet thick at the Site. Within Duval County, the Pleistocene and Holocene deposits consist of sand, tan to yellow, loose, medium to fine quartz, sometimes with shells and/or minor clay content. The upper Miocene or Pliocene deposits consist of two parts: the upper and lower. The upper part consists of tan to buff, fine to coarse sand and gray to light gray sandy clay, clayey sand, and shell beds. The lower part consists of tan to yellow, often highly sandy, porous, and cavernous with a few sections of dolomitic limestone. The thickness of the upper Miocene or Pliocene deposits ranges from 10 to 100-ft.

Underlying the surficial aquifer system deposits are the Miocene deposits comprising the Hawthorn Group, also referred to as the Intermediate Confining Unit. The Hawthorn Group consists of gray to blue-green and olive-green clay, sandy clay, and sandy limestone, well-rounded, polished, granules and pebbles of phosphate with a thickness ranging from 250 to 500-ft in Duval County. At the Site, the Hawthorn Group Formation is over 500 feet thick (Phelps, 1993). Throughout most of northeast Florida, the Hawthorn Group serves as a confining layer that minimizes movement of water between the surficial aquifer system and the underlying artesian Floridian Aquifer.

The surficial aquifer system at the Site is approximately 90-ft thick. For the purposes of the groundwater monitoring programs, the surficial aquifer has been divided into three separate zones: the shallow, intermediate, and deep. The shallow surficial aquifer zone extends from the top of the water table (10 to 12 ft below land surface [bls]) to approximately 25 ft bls. The intermediate surficial aquifer zone extends from approximately 25 ft bls to approximately 45 ft bls. The deep surficial aquifer extends from approximately 50 to 90 ft bls. **Table 1** summarizes the construction data for each monitoring well and provides the surficial aquifer zone each monitoring well is screened in.

2.5 Groundwater Flow Direction and Gradient

Groundwater potentiometric maps were generated based on June 2021 groundwater elevation data. Groundwater flow in the shallow surficial aquifer zone at the Site is generally to the south-southeast towards the St. Johns River (**Figure 4**) with an average groundwater flow gradient of approximately 0.002 ft/ft, measured between monitoring wells L-1 and MW-1S. Groundwater flow in the intermediate surficial aquifer zone is generally to the east-southeast towards the St. Johns River (**Figure 5**) with an average groundwater flow gradient of approximately 0.004 ft/ft, measured between monitoring wells L-4 and L-24. This remains consistent with historic data. Groundwater flow in the deep surficial aquifer zone is

to the south towards the St. Johns River (**Figure 6**) with an average groundwater flow gradient of approximately 0.001 ft/ft, measured between monitoring wells L-2 and L-10.

Historical data suggests that there is little to no significant seasonal variation in the direction of groundwater flow or the gradient at the Site.

3. SOLID WASTE GROUNDWATER MONITORING PLAN

3.1 Introduction

This section presents the GMP for the Area I, Area II, and Area B Landfills (**Figure 2**). This section summarizes the Site-specific geology and hydrogeology, water quality, monitoring well network, parameters, and sampling frequency for each monitored area.

3.2 Geology

Based on a lithologic log from monitoring well L-2 (located to the northeast of Area I Landfill), as documented in JEA's *Groundwater Monitoring Well Program, Design and Location Information* Report, the following stratigraphy is representative of conditions in the northern portion of the SJRPP near the Area I, Area II, and Area B Landfills:

- dense brown to dark brown silty sand from approximately 3 to 22 ft bls;
- firm grey slightly clayey fine sand from approximately 22 to 32 ft bls;
- very dense grey sand with blue-green clay seams from 32 to 42 ft bls;
- very dense grey-brown medium sand from 42 to 60 ft bls; and
- very dense interbedded tan shelly with trace quartz sand from 60 to 85 ft bls.

3.3 Hydrogeology

3.3.1 Area I Landfill

Groundwater elevations in the intermediate zone (approximately 13 to 46 ft bls) and deep zone (approximately 70 to 85 ft bls) have been recorded quarterly since 1995 in monitoring wells L-1 through L-3 and L-7 through L-12 located on the perimeter of the Area I Landfill. Based on June 2021 groundwater elevation data, groundwater flow in the shallow, intermediate, and deep zones of the surficial aquifer is generally towards the south and southeast within the Area I Landfill, as illustrated in **Figure 7**. Based on historical data, the groundwater flow direction in the intermediate and deep zones of the surficial aquifer is consistent during the spring and fall.

3.3.2 Area II Landfill

Groundwater elevations in the intermediate zone (approximately 20 to 30 ft bls) of the surficial aquifer have been recorded quarterly since 2000 in monitoring wells (L-4 [aka: MWB-L4] through L-6, and L-16) located along the perimeter of the Area II Landfill. Monitoring wells L-17 (aka: MWB-L17) through L-26 were installed in 2011 as part of the Area II Landfill closure. Groundwater elevations have been recorded in these monitoring wells quarterly since installation. Based on June 2021 groundwater elevation data,

groundwater flow in the intermediate zone and deep zone of the surficial aquifer is generally to the south and southeast within the Area II Landfill as illustrated in **Figure 8**. Based on historical data, the groundwater flow direction is generally consistent during spring and fall.

3.3.3 Area B Landfill

Groundwater elevations in the intermediate zone (approximately 40 to 50 ft bls) of the surficial aquifer have been recorded quarterly since 2009 (with the exception of 2008 when they were recorded monthly) in monitoring wells (MW-1 through MW-9, MW-A1, and MW-B1) located on the perimeter of the Area B Landfill. Groundwater elevations in piezometers AW-1 through AW-9 have been recorded quarterly following installation. AW-1 through AW-3 were installed in 2018. AW-4 through AW-8 were installed in 2019. AW-9 was installed in 2020. Based on June 2021 groundwater elevation data, groundwater flow in the shallow and intermediate zones of the surficial aquifer is generally to the east and southeast within the Area B Landfill as illustrated in **Figure 9**. This is generally consistent with historical data.

3.4 Groundwater Analytical Data and Trends

In preparation of this GMP, an evaluation of current and historical groundwater quality data was conducted to evaluate whether any revisions to the previous groundwater monitoring plan are warranted. To support any such changes, analytical data must be provided that demonstrates a revision to either the previous monitoring parameters and/or sampling frequencies is appropriate/justified based on the criteria presented in the FDEP Guidance Document SWM-04.44 titled *Changing Monitoring Parameters or Sampling Frequencies* dated 20 February 2016.

To support the proposed revisions to the groundwater monitoring plan, Mann-Kendall analyses were conducted to statistically evaluate whether or not a trend exists in the time series of analytical data available for each landfill unit with the SJRPP. A Mann-Kendall analysis is a non-parametric test which includes no underlying assumptions about the normality or seasonality of the data. The results of each analysis provide a level of confidence (in percent agreement) with the observed data trend, if present. The observations of the data and trend evaluations for each landfill are further discussed below.

3.4.1 Area I Landfill

Historical groundwater analytical results collected from the Area I Landfill over the past 5 years (2016-2021) were evaluated as part of the preparation of this GMP to identify potential trends in contaminant concentrations for refinement of the current monitoring well network. As part of the evaluations, contaminant concentrations were evaluated against those reported for the background monitoring wells, as designated in the 2013 GMP, to evaluate whether any changes in concentrations over time may be attributed to the landfill or are a reflection

of background aquifer concentrations. The historical groundwater analytical result tables for the Area I Landfill are presented in **Appendix A**.

Of the parameters analyzed, only aluminum, arsenic, beryllium, chromium, iron, sulfate, and total dissolved solids (TDS) were observed above their respective groundwater cleanup target levels (GCTLs) during the observation period. Following the observed GCTL exceedances for arsenic, beryllium, and chromium, the concentration of each of these constituents decreased back below the GCTL for at least the past three semi-annual sampling events. The remaining constituents observed above their respective GCTLs (aluminum, iron, sulfate, and TDS) were each evaluated against the previously defined background monitoring wells (L-1, L-2, and L-3) over the same time period. Concentrations of these secondary drinking water standards were generally observed below background or to be stable and/or shrinking.

To provide statistical significance to the trend evaluations, Mann-Kendall analyses were performed at each monitoring well where contaminant concentrations were observed in excess of the GCTL and analytical results for at least four sampling events were available. The Mann-Kendall analysis summary table and constituent graphs are presented in **Appendix B**.

The Mann-Kendall analysis indicates increasing or probably increasing trends were observed at monitoring wells L-1 (aluminum, sulfate, and TDS), L-3 (iron), L-7 (aluminum and sulfate), L-8 (aluminum and TDS), and L-9 (aluminum). In evaluating each of these increasing or probably increasing trends, it is important to note how they relate to the defined background monitoring wells (L-1, L-2, and L-3). At the Area I Landfill, contaminant concentrations in non-background monitoring wells, that indicated increasing or probably increasing trends, were observed below concentrations in the background monitoring wells and generally exhibited similar fluctuations in concentrations over time. This indicates these observed changes in contaminant concentrations are likely the result of changes in background aquifer conditions and not associated with the Area I Landfill.

3.4.2 Area II Landfill

Historical groundwater analytical results collected from the Area II Landfill over the past 5 years (2016-2021) were evaluated as part of the preparation of this GMP to identify potential trends in contaminant concentrations for refinement of the current monitoring well network. As part of the evaluations, contaminant concentrations were evaluated against those reported for the background monitoring wells, as designated in the 2013 GMP, to evaluate whether any changes in concentrations over time may be attributed to the landfill or are a reflection of background aquifer concentrations. The historical groundwater analytical result tables for the Area II Landfill are presented in **Appendix A**.

Of the parameters analyzed, only aluminum, arsenic, iron, sulfate, and TDS were observed above their respective GCTLs during the observation period. Each of these constituents were evaluated against the previously defined background monitoring wells (L-B, L-4, and L-17) over the same time period. Arsenic was only observed above the GCTL at the Area II Landfill in monitoring well L-22 during a singular sampling event conducted in September 2017. Following this sampling event, arsenic has been observed below the GCTL during each of the past seven semi-annual sampling events. Concentrations of the remaining secondary drinking water standards observed above the GCTLs at the Area II Landfill were generally observed below concentrations observed in the background monitoring wells or to be stable and/or shrinking.

To provide statistical significance to the trend evaluations, Mann-Kendall analyses were performed at each monitoring well where contaminant concentrations were observed in excess of the GCTL and analytical results for at least four sampling events were available. The Mann-Kendall analysis summary table and constituent graphs are presented in **Appendix B**.

The Mann-Kendall analysis indicates increasing or probably increasing trends were observed at monitoring wells L-4 (sulfate and TDS), L-5 (aluminum), and L-17 (aluminum and iron). In evaluating each of these increasing or probably increasing trends, it is important to note how they relate to the defined background monitoring wells (L-B, L-4, and L-17). At the Area II Landfill, contaminant concentrations in non-background monitoring wells, that indicated increasing or probably increasing trends, were observed below concentrations in the background monitoring wells and generally exhibited similar fluctuations in concentrations over time. This indicates these observed changes in contaminant concentrations are likely the result of changes in background aquifer conditions and not associated with the Area II Landfill.

3.4.3 Area B Landfill

Historical groundwater analytical results collected from the Area B Landfill over the past 5 years (2016-2021) were evaluated as part of the preparation of this GMP to identify potential trends in contaminant concentrations for refinement of the current monitoring well network. As part of the evaluations, contaminant concentrations were evaluated against those reported for the background monitoring wells, as designated in the 2013 GMP, to evaluate whether any changes in concentrations over time may be attributed to the landfill or are a reflection of background aquifer concentrations. The historical groundwater analytical result tables for the Area B Landfill are presented in **Appendix A**.

Of the parameters analyzed, only aluminum and iron were observed above their respective GCTLs during the observation period. Each of these constituents were evaluated against the previously defined background monitoring wells (MW-1 through MW-6, MW-A1, MW-B1,

and MW-20) over the same time period. Concentrations of these secondary drinking water standards were generally observed below concentrations observed in the background monitoring wells or to be stable and/or shrinking.

To provide statistical significance to the trend evaluations, Mann-Kendall analyses were performed at each monitoring well where contaminant concentrations were observed in excess of the GCTL and analytical results for at least four sampling events was available. The Mann-Kendall analysis summary table and constituent graphs are presented in **Appendix B**.

The Mann-Kendall analysis indicates increasing or probably increasing trends at monitoring wells MW-1 (iron), MW-3 (iron), MW-8 (iron), MW-9 (aluminum and iron), and MW-20 (aluminum and iron). In evaluating each of these increasing or probably increasing trends, it is important to note how they relate to the defined background monitoring wells (MW-1 through MW-6, MW-A1, MW-B1, and MW-20). At the Area B Landfill, contaminant concentrations in non-background monitoring wells, that indicated increasing or probably increasing trends, were observed below concentrations in the background monitoring wells and generally exhibited similar fluctuations in concentrations over time. This indicates these observed changes in contaminant concentrations are likely the result of changes in background aquifer conditions and not with the Area B Landfill.

3.5 Groundwater Monitoring Area Network

3.5.1 Area I Landfill

Nine monitoring wells (L-1, L-2, L-3, and L-7 through L-12) comprise the groundwater monitoring network for the Area I Landfill. Three monitoring wells (L-1, L-2, and L-3) are upgradient of the Area I Landfill and six monitoring wells (L-7 through L-12) are downgradient of the Area I Landfill with L-11 and L-12 at the Northeast corner of the landfill area.

The ZOD for the Area I Landfill is defined as extending to a depth of 90 feet below the Area I Landfill at a horizontal distance of 200 feet from the Area I Landfill. Based on the ZOD definition, in accordance with Chapter 62-520, Florida Administrative Code (F.A.C.), and as previously approved in the 2013 GMP, L-1 through L-3 are designated as Background Monitoring Wells as they are located upgradient of the Area I Landfill and L-7 through L-12 are designated as Intermediate Monitoring Wells as they are located within the Area I Landfill ZOD.

Well construction details for monitoring wells associated with the Area I Landfill are provided in **Table 1**. Geographical coordinates and designations for monitoring wells associated with the Area I Landfill are provided in **Table 2**.

3.5.2 Area II Landfill

Fourteen monitoring wells (L-B, L-4 [aka: MWB-L4], L-5, and L-16 through L-26) comprise the groundwater monitoring network for the Area II Landfill. Three monitoring wells (L-B, L-4 [aka: MWB-L4], and L-17 [aka: MWB-L17]) are upgradient of the Area II Landfill, L-5 is located to the west of the Area II Landfill, and nine monitoring wells (L-18 through L-26) are downgradient of the Area II Landfill. Monitoring wells L-4 (aka: MWB-L4), and L-17 (aka: MWB-L17) are also utilized for Solid Waste Monitoring.

The ZOD for the Area II Landfill is defined as extending to a depth of 90 feet below the Area II Landfill at a horizontal distance of 200 feet from the Area II Landfill. Based on the ZOD definition, in accordance with Chapter 62-520, F.A.C., and as previously approved in the 2013 GMP, L-B, L-4 (aka: MWB-L4), L-5, and L-17 (aka: MWB-L17) are designated as Background Monitoring Wells as they are located upgradient of the Area II Landfill; L-16, L-18, and L-19 are designated as Intermediate Monitoring Wells as they are located within the Area II Landfill ZOD; and L-20 through L-26 are designated as Compliance Monitoring Wells as they are located downgradient of the Area II Landfill and outside the ZOD.

Well construction details for monitoring wells associated with the Area II Landfill are provided in **Table 1**. Geographical coordinates and designations for monitoring wells associated with the Area II Landfill are provided in **Table 2**.

3.5.3 Area B Landfill

Historically, twelve monitoring wells (MW-1 through MW-9, MW-20, MW-A1, and MW-B1) comprised the groundwater monitoring network for the Area B Landfill as defined in the 2013 GMP. Seven additional monitoring wells (CCR-1 through CCR-7) and nine additional assessment wells (AW-1 through AW-9) have been installed in accordance with the CCR Rule. CCR-1 through CCR-3 were installed upgradient of the Area B Landfill and CCR-4 through CCR-7 were installed at the downgradient edge of the disposal unit. AW-1 through AW-9 were installed to assess groundwater impacts downgradient of Area B Landfill. As indicated in Section 1.2 of this GMP, the CCR wells presented above are being monitored separately from those included in this GMP.

During the development of this GMP, optimization of the current groundwater monitoring network was evaluated. From the observations gathered during the data and trend evaluations and the reduction in the final footprint of the Area B Landfill, monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-20 were identified as no longer necessary for monitoring the Area B Landfill in accordance with the COC. As such, they are recommended for abandonment in accordance with Section 3.8 of the 2013 GMP.

Seven monitoring wells (MW-5 through MW-9, MW-1A, and MW-1B) will comprise the groundwater monitoring network for the Area B Landfill pursuant to this GMP. Three

monitoring wells (MW-5, MW-6, and MW-1B) are upgradient of the Area B Landfill, MW-1A is located to the northeast of the Area B Landfill, and two monitoring wells (MW-7 and MW-8) are downgradient of the Area B Landfill.

The ZOD for the Area B Landfill is defined as extending to a depth of 90 feet below the Area B Landfill at a horizontal distance of 200 feet from the Area B Landfill. Based on the ZOD definition, in accordance with Chapter 62-520, F.A.C., and as previously approved in the 2013 GMP, MW-5, MW-6, and MW-1B are designated as Background Monitoring Wells as they are located upgradient of the Area B Landfill; MW-7, MW-8, MW-9, and MW-1A are designated as Intermediate Monitoring Wells as they are located within the Area B Landfill ZOD.

Well construction details for the existing monitoring wells associated with the Area B Landfill are provided in **Table 1**. Geographical coordinates and designations for monitoring wells associated with the Area B Landfill are provided in **Table 2**.

3.6 Groundwater Monitoring Parameters and Frequency

3.6.1 Groundwater Sampling

Groundwater samples will be collected from the following monitoring wells identified in Section 3.5. Groundwater sampling will be completed in accordance with FDEP's Standard Operating Procedures Manual for Field Sampling and shall conform to the applicable Quality Assurance/Quality Control requirements of Chapter 62-160, F.A.C. (SOPs). Water levels will be recorded before purging each monitoring well for sample collection. Groundwater elevation references shall include the top of the well casing and land surface at each monitoring well (NAVD 1988) at a precision of plus or minus 0.01 foot. Monitoring wells will be purged prior to sampling to obtain representative samples. Analyses will be conducted on unfiltered samples, unless filtered samples have been approved by the FDEP's Northeast District Office as being more representative of groundwater conditions.

3.6.2 Parameters and Frequency – Area I and II Landfills

Groundwater samples from the monitoring well network associated with the Area I and Area II Landfills will be analyzed by a certified laboratory that meets the requirements of Chapter 62-160, F.A.C., and minimum analytical detection limits will be at or below the groundwater standards and/or criteria. As was presented in Sections 3.4.1 and 3.4.2 of this GMP, the Mann-Kendall analyses provided in **Appendix B** demonstrate that each of the constituents analyzed for within the Area I and Area II Landfill monitoring well networks over the past five years (2016-2021) are either below background or stable and/or shrinking. In addition, observed exceedances of the GCTLs over the same 5-year time period have been limited to aluminum, arsenic, beryllium, chromium, iron, sulfate, and TDS. The remaining constituents previously analyzed for as part of the 2013 GMP have either not been detected in

groundwater or are observed at concentrations below background, indicating the detections are due to factors other than the landfill.

Due to the generally stable groundwater contaminant concentrations observed during the previous ten sampling events conducted over the past five years, a reduction in sampling frequency from semi-annual to annual has been included as part of this GMP. The data and trend evaluations presented in Sections 3.4.1 and 3.4.2 of this GMP demonstrate the referenced contaminant plume stability and indicate that changes in contaminant concentrations are likely the result of changes in background aquifer conditions and not associated with the Area I or II Landfills.

As the conditions for demonstrating proposed changes in monitoring parameters and sampling frequencies have been met, groundwater samples will be analyzed for the following parameters. Future removal of monitoring parameters from the list below will be made based upon two consecutive groundwater sampling events reflecting concentrations below the parameter's corresponding GCTL or concentrations in background monitoring wells.

Parameter	Units	Sample Type	Monitoring Frequency
Water Level (NGVD 88)	Feet	In-situ	Annual
pH (field)	SU	In-situ	Annual
Specific Conductance (field)	µmhos/cm	In-situ	Annual
Dissolved Oxygen (field)	mg/L	In-situ	Annual
Aluminum, Total Recoverable	µg/L	Grab	Annual
Iron, Total Recoverable	µg/L	Grab	Annual
Temperature (field)	Celsius	In-situ	Annual
Total Dissolved Solids	mg/L	Grab	Annual
Turbidity (field)	NTU	In-situ	Annual
Sulfate	mg/L	Grab	Annual

3.6.3 Parameters and Frequency – Area B Landfill

Groundwater samples from the monitoring well network associated with the Area B Landfill will be analyzed by a certified laboratory that meets the requirements of Chapter 62-160, F.A.C., and minimum analytical detection limits will be at or below the groundwater standards and/or criteria. As was presented in Section 3.4.3 of this GMP, the Mann-Kendall analyses provided in **Appendix B** demonstrate that each of the constituents analyzed for within the Area B Landfill monitoring well network over the past five years (2016-2021) are either below concentrations in the background monitoring wells or stable and/or shrinking. In addition, observed exceedances of the GCTLs over the same 5-year time period have been limited to aluminum and iron. Of the remaining constituents previously analyzed for as part of the 2013 GMP, only cadmium, chloride, chromium, and mercury exhibited a detection in groundwater at concentrations above background but below their respective GCTLs. However, each of these detected constituents was observed at concentrations similar to background and each did not exhibit an increasing trend over the same time period, indicating the detections are likely due to factors other than the landfill.

Groundwater monitoring will be performed on a quarterly basis for at least one year post-closure to evaluate groundwater impacts. Following the completion of one year of post-closure monitoring, removal of parameters, from the list below, will be made based upon two consecutive groundwater sampling events with concentrations below the GCTLs or concentrations in background monitoring wells. In addition, the frequency of monitoring will be modified to annual if groundwater concentrations one year following closure remain stable or are decreasing relative to concentrations observed pre-closure.

Until such criteria have been met, groundwater samples will be analyzed for the following parameters:

Parameter	Units	Sample Type	Monitoring Frequency*
Water Level (NGVD 88)	Feet	In-situ	Quarterly
pH (field)	SU	In-situ	Quarterly
Specific Conductance (field)	µmhos/cm	In-situ	Quarterly
Dissolved Oxygen (field)	mg/L	In-situ	Quarterly
Aluminum, Total Recoverable	µg/L	Grab	Quarterly
Arsenic, Total Recoverable	µg/L	Grab	Quarterly

Parameter	Units	Sample Type	Monitoring Frequency*
Barium, Total Recoverable	µg/L	Grab	Quarterly
Beryllium, Total Recoverable	µg/L	Grab	Quarterly
Boron, Total Recoverable	µg/L	Grab	Quarterly
Cadmium, Total Recoverable	µg/L	Grab	Quarterly
Chloride, Total Recoverable	µg/L	Grab	Quarterly
Chromium, Total Recoverable	µg/L	Grab	Quarterly
Copper, Total Recoverable	µg/L	Grab	Quarterly
Iron, Total Recoverable	µg/L	Grab	Quarterly
Lead, Total Recoverable	µg/L	Grab	Quarterly
Mercury, Total Recoverable	µg/L	Grab	Quarterly
Nickel, Total Recoverable	µg/L	Grab	Quarterly
Selenium, Total Recoverable	µg/L	Grab	Quarterly
Sulfate, Total Recoverable	µg/L	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Vanadium, Total Recoverable	µg/L	Grab	Quarterly
Temperature (field)	Celsius	In-situ	Quarterly
Turbidity (field)	NTU	In-situ	Quarterly

*Quarterly for one year post-closure, then transition to annual if groundwater concentrations remain stable or are decreasing relative to concentrations observed pre-closure. Reduction in parameters will also be made based upon two consecutive groundwater sampling events with concentrations below the GCTLs or concentrations in background monitoring wells.

3.7 Reporting

The annual Solid Waste groundwater monitoring results shall be submitted to the FDEP using the Solid Waste Electronic Data Deliverable submission procedures by the deadlines indicated in the table below. In addition, a copy of the associated laboratory analytical report will also be provided.

Sample Period	Semi-Annual	Annual	Report Deadline
(January - December)		X	January 28 th

Correspondence, reports, plans, and summaries pertaining to groundwater monitoring will be submitted electronically, unless DEP indicates otherwise in writing.

3.8 Monitoring Well Installation and Abandonment

Existing monitoring wells that are not incorporated in this GMP for Area I, II, and B Landfills may be abandoned by a licensed well driller or used as piezometers to support potentiometric groundwater map development. In addition, monitoring wells that are included in this GMP that are damaged will be abandoned and reinstalled. Documentation of monitoring well abandonment and reinstallation will be summarized in the transmittal of groundwater analytical results associated with the most recent sampling event.

4. FORMER INDUSTRIAL WASTEWATER AREA GROUNDWATER MONITORING PLAN

The Former Industrial Wastewater Area previously monitored as part of the 2013 GMP has been excluded from the modified certified Site boundaries; however, groundwater monitoring will continue based on the details presented herein.

The monitoring well network is comprised of 13 monitoring wells located downgradient of the Former Industrial Wastewater Area (**Figure 10**). Five monitoring wells (MW-1S, MW-2S, MW-3S, MW-4S, and MW-5S) are screened within the shallow zone of the surficial aquifer. Six monitoring wells (MW-3D, MW-5D, MWC-C6, MWC-C5, MWC-C3, and TW-3A) are screened within the intermediate zone of the surficial aquifer. Two monitoring wells (MWC-C4 and MWC-C7) are screened within the deep zone of the surficial aquifer. Monitoring wells MW-1S, MW-2S, MW-3S, MW-3D, MW-4S, MW-5S, and MW-5D are 1-in diameter polyvinyl chloride wells installed using a 4-in diameter auger, resulting in a 1.5-in filter pack surrounding each screened interval. Additional well construction details for monitoring wells associated with the Former Industrial Wastewater Area are provided in **Table 3**. Geographical coordinates and designations for monitoring wells are provided in **Table 4**.

Historical groundwater analytical results collected from the monitoring well network over the past 4 years (2018-2022) were evaluated to identify potential trends in contaminant concentrations and refinement of the monitoring well network. As part of the evaluations, contaminant concentrations were compared against those reported for the background monitoring wells of the upgradient Area I and II Landfills, as designated in the 2013 GMP, to evaluate whether any changes in concentrations over time may be attributed to the industrial wastewater areas or are a reflection of background aquifer concentrations. The historical groundwater analytical result tables for the industrial wastewater areas are presented in **Appendix A**.

Of the parameters analyzed, only aluminum, arsenic, boron, chloride, iron, sulfate, and TDS were observed above their respective GCTLs during the 2018-2022 monitoring time period. Each of these constituents was evaluated against the previously defined background monitoring wells for the upgradient Area I and II Landfills (L-B, L-1, L-2, L-3, L-4, and L-17) over the same time period. Arsenic is the only primary drinking water standard observed above its GCTL within the industrial wastewater areas in monitoring well TW-3A during one of the two most recent sampling events. Boron was also observed above its GCTL in monitoring wells TW-3A, MW-3S, and MW-3D; however, background data for boron was not available from historical monitoring results. Concentrations of the remaining secondary drinking water standards observed above the GCTLs at the industrial wastewater areas were generally observed below concentrations observed in the background monitoring wells or to be stable and/or shrinking. These observed contaminant concentrations are likely the result

of changes in background aquifer conditions and not associated with the industrial wastewater areas. As a result of the foregoing, monitoring for secondary drinking water standards will no longer continue and those parameters have been removed from the monitoring list associated with the industrial wastewater areas.

Based on the observed contaminant concentration trends relative to background conditions, groundwater samples will only be collected from monitoring wells exhibiting background and/or GCTL exceedances (TW-3A, MW-3S, and MW-3D). Groundwater samples will be analyzed for the following parameters until the constituent is observed below background and/or the GCTL for at least two consecutive sampling events:

Parameter	Units	Sample Type	Monitoring Frequency
Water Level (NGVD 88)	Feet	In-situ	Annual
pH (field)	SU	In-situ	Annual
Specific Conductance (field)	µmhos/cm	In-situ	Annual
Dissolved Oxygen (field)	mg/L	In-situ	Annual
Arsenic, Total Recoverable	µg/L	Grab	Annual
Boron, Total Recoverable	µg/L	Grab	Annual
Temperature (field)	Celsius	In-situ	Annual
Turbidity (field)	NTU	In-situ	Annual

The remaining monitoring wells not proposed to be sampled within the industrial wastewater areas may be abandoned by a licensed well driller or used as piezometers to support potentiometric groundwater map development. Documentation of monitoring well abandonment will be summarized in the transmittal of groundwater analytical results associated with the most recent sampling event.

5. REFERENCES

- Camp Dresser and McKee and Geosyntec Consultants, *Closure Design Plan Area II Landfill, St. Johns River Power Park*. September 2009.
- Camp Dresser and McKee and Geosyntec Consultants, *Response to First Request for Additional Information, St. Johns River Power Park*. 28 January 2010.
- Fairchild, R.W., 1972. *The Shallow-Aquifer System in Duval County, Florida*. Florida Geological Survey Report of Investigations No. 59.
- FDEP, *First Request for Additional Information, St. Johns River Power Park Area II Landfill Closure*. 12 November 2009.
- FDEP, Conditions of Certification, PA 81-130, Jacksonville Electric Authority, St. Johns River Power Park – Units 1 & 2, dated December 23, 2009.
- Geosyntec Consultants, *JEA Industrial Wastewater and Solid Waste Groundwater Monitoring Plans Revision 4*, St. Johns River Power Park. June 2013.
- Golder Associates, *Stormwater Management System Modifications, St. Johns River Power Park (Area I Landfill)*. 26 May 2009.
- Golder Associates, *Closure Construction Area I Landfill*, St. Johns River Power Park. April 2008.
- Golder Associates, *Area B Byproduct Storage Area Hydrogeological and Geotechnical Site Evaluation*, St. Johns River Power Park. April 2007.
- Golder Associates, *Monitored Natural Attenuation Evaluation*, St. Johns River Power Park. August 2021.
- JEA's *Groundwater Monitoring Well Program, Design and Location Information Report*. Date Unknown.
- JEA's *Selection of Groundwater Monitoring Well Locations for the St. Johns River Power Park*. July 1985.
- Leve, G.W., 1966. *Ground Water in Duval and Nassau Counties, Florida*. Florida Geological Survey Report of Investigations No. 43.
- Phelps, G.G., 1993. *Water Resources of Duval County, Florida*. U.S Geological Survey Water-Resources Investigations Report 93-4130.

TABLES

TABLE 1: WELL CONSTRUCTION DETAILS - SOLID WASTE AREAS
JEA St. Johns River Power Park
Jacksonville, FL

WELL NO.	DIAMETER (inches)	WELL DEPTH (ft bls)	SCREEN INTERVAL (ft bls)	TOC ELEVATION (ft - NAVD 1988)	GROUND ELEVATION (ft - NAVD 1988)	COMPLETION DATE	AQUIFER ZONE
Area I Landfill							
L-1	2	23	13-23	15.975	14.059	3/6/1986	Intermediate Surficial
L-2	2	83.5	63.5-83.5	14.549	12.716	3/6/1986	Deep Surficial
L-3	2	49	39-49	16.491	13.699	3/6/1986	Intermediate Surficial
L-7	2	39.5	29.5-39.5	15.631	13.673	5/19/1986	Intermediate Surficial
L-8	2	41.5	31.5-41.5	15.621	13.704	2/28/1986	Intermediate Surficial
L-9	2	44.5	34.5-44.5	13.048	11.131	3/5/1986	Intermediate Surficial
L-10	2	81	71-81	11.843	10.26	3/10/1986	Deep Surficial
L-11	2	39	29-39	13.441	11.566	3/10/1986	Intermediate Surficial
L-12	2	87.5	77.5-87.5	13.365	11.573	3/12/1986	Deep Surficial
Area II Landfill							
L-B	2	18.5	8.5-18.5	24.567	22.567	5/17/1988	Shallow Surficial
L-4 (aka: MWB-L4)	2	29.5	19.5-29.5	24.723	22.723	2/24/1986	Intermediate Surficial
L-5	2	29.5	19.5-29.5	26.971	24.971	2/24/1986	Intermediate Surficial
L-16	2	42	32-42	16.118	14.285	3/10/1986	Intermediate Surficial
L-17 (aka: MWB-L17)	2	29.5	19.2-29.2	26.947	24.207	8/10/2011	Intermediate Surficial
L-18	2	15	4.7-14.7	20.147	17.437	8/8/2011	Shallow Surficial
L-19	2	15	4.7-14.7	19.207	16.477	8/8/2011	Shallow Surficial
L-20	2	29.5	19.2-29.2	14.397	11.567	8/8/2011	Intermediate Surficial
L-21	2	29.5	19.2-29.2	14.267	11.567	8/10/2011	Intermediate Surficial
L-22	2	13	2.7-12.7	14.227	11.317	8/8/2011	Shallow Surficial
L-23	2	29.6	19.3-29.3	14.147	11.397	8/9/2011	Intermediate Surficial
L-24	2	29.5	19.2-29.2	20.907	18.157	8/9/2011	Intermediate Surficial
L-25	2	29.5	19.2-29.2	14.207	11.427	8/9/2011	Intermediate Surficial
L-26	2	15.7	5.4-15.4	20.787	18.027	8/8/2011	Shallow Surficial
Area B Landfill							
MW-1	2	52.44	42.44-52.44	17.67	14.95	11/6/2007	Intermediate Surficial
MW-2	2	52.37	42.37-52.37	18.39	15.72	11/7/2007	Intermediate Surficial
MW-3	2	54.28	44.28-54.28	19.36	16.35	11/13/2007	Intermediate Surficial
MW-4	2	46.84	36.84-46.84	16.33	13.90	11/7/2007	Intermediate Surficial
MW-5	2	43.31	33.31-43.31	14.70	12.01	11/8/2007	Intermediate Surficial
MW-6	2	53.50	43.50-53.50	16.01	13.53	3/14/2006	Intermediate Surficial
MW-7	2	54.09	44.09-54.09	17.44	14.82	11/13/2007	Intermediate Surficial
MW-8	2	53.51	43.51-53.51	17.08	14.34	8/25/2009	Intermediate Surficial
MW-9	2	50.89	40.89-50.89	13.86	10.93	11/5/2007	Intermediate Surficial
MW-20	2	52.00	42.00-52.00	20.64	17.81	11/7/2007	Intermediate Surficial
MW-A1	2	53.43	43.43-53.43	15.01	12.46	11/8/2007	Intermediate Surficial
MW-B1	2	43.34	33.34-43.34	14.68	12.10	11/8/2007	Intermediate Surficial

Notes:

1. ft bls = feet below land surface
2. ft-NAVD 1988 indicates measurement in feet with respect to North American Vertical Datum of 1988
3. TOC = top of casing
4. Gray shading indicates monitoring well previously abandoned

TABLE 2: GEOGRAPHICAL COORDINATES AND WELL DESIGNATIONS - SOLID WASTE AREAS
JEA St. Johns River Power Park
Jacksonville, FL

WELL NO.	WELL DESIGNATION	DATE INSTALLED	Northing Florida East (NAD 1983)	Easting Florida East (NAD 1983)
Area I Landfill				
L-1	Background	3/6/1986	2220746.17	484150.21
L-2	Background	3/6/1986	2220736.14	484230.46
L-3	Background	3/6/1986	2220703.32	484172.12
L-7	Compliance	5/19/1986	2218158.53	485058.06
L-8	Intermediate	2/28/1986	2218741.87	485036.19
L-9	Intermediate	3/5/1986	2219419.99	484926.81
L-10	Intermediate	3/10/1986	2219383.53	484941.39
L-11	Intermediate	3/10/1986	2220367.91	484744.52
L-12	Intermediate	3/12/1986	2220294.99	484700.77
Area II Landfill				
L-B	Background	5/17/1988	2220750.48	482527.71
MWB-L4 (aka: L-4)	Background	2/24/1986	2220747.90	482502.87
L-5	Background	2/24/1986	2220720.71	480380.22
L-16	Intermediate	3/10/1986	2219753.35	481539.83
MWB-L17 (aka: L-17)	Background	8/10/2011	2220763.99	481270.09
L-18	Intermediate	8/8/2011	2219915.62	481755.07
L-19	Intermediate	8/8/2011	2219990.69	482526.24
L-20	Compliance	8/8/2011	2219542.52	481311.39
L-21	Compliance	8/10/2011	2219682.81	481543.99
L-22	Compliance	8/8/2011	2219847.97	482157.59
L-23	Compliance	8/9/2011	2219832.51	482491.07
L-24	Compliance	8/9/2011	2219669.02	483163.28
L-25	Compliance	8/9/2011	2219848.52	482160.49
L-26	Compliance	8/8/2011	2219670.19	483167.08
Area B Landfill				
MW-1	--	11/6/2007	2225908.48	483416.80
MW-2	--	11/7/2007	2224863.05	483965.59
MW-3	--	11/13/2007	2224042.98	484628.21
MW-4	--	11/7/2007	2222905.52	485082.00
MW-5	Background	11/8/2007	2222214.94	485257.64
MW-6	Background	3/14/2006	2220905.86	485512.08
MW-7	Intermediate	11/13/2007	2220966.39	486362.57
MW-8	Intermediate	8/25/2009	2221255.06	487135.79
MW-9	Intermediate	11/5/2007	2221712.38	487140.00
MW-20	--	11/7/2007	2223638.91	485052.46
MW-1A	Background	11/8/2007	2222247.45	486761.88
MW-1B	Background	11/8/2007	2222197.16	485851.33

Notes:

1. -- indicates monitoring well/piezometer to be abandoned
2. NAD 1983 indicates horizontal coordinate system United State Plane North American Datum of 1983, Florida East, feet.
3. -- indicates wells not designated as background, intermediate, or compliance wells
4. Gray shading indicates monitoring well proposed for abandonment

TABLE 3: WELL CONSTRUCTION DETAILS - FORMER INDUSTRIAL WASTEWATER AREA
JEA St. Johns River Power Park
Jacksonville, FL

WELL NO.	DIAMETER (inches)	WELL DEPTH (ft bls)	SCREEN INTERVAL (ft bls)	TOC ELEVATION (ft - NAVD 1988)	GROUND ELEVATION (ft - NAVD 1988)	COMPLETION DATE	AQUIFER ZONE
Perimeter Wells							
MW-1S	1	12	2-12	11.16	8.5	12/5/2018	Shallow Surficial
MW-2S	1	13	3-13	11.66	9.4	12/4/2018	Shallow Surficial
MW-3S	1	12	2-12	11.10	8.5	12/4/2018	Shallow Surficial
MW-3D	1	30	25-30	10.92	8.7	12/4/2018	Intermediate Surficial
MW-4S	1	12	2-12	12.40	9.6	12/4/2018	Shallow Surficial
MW-5S	1	12	2-12	11.21	8.6	12/5/2018	Shallow Surficial
MW-5D	1	30	25-30	11.21	8.4	12/5/2018	Intermediate Surficial
TW-3A	1	40	30-40	NS	NS	10/13/2009	Intermediate Surficial

Notes:

1. ft bls = feet below land surface
2. ft-NAVD 1988 indicates measurement in feet with respect to North American Vertical Datum of 1988
3. TOC = top of casing
4. NS = not surveyed

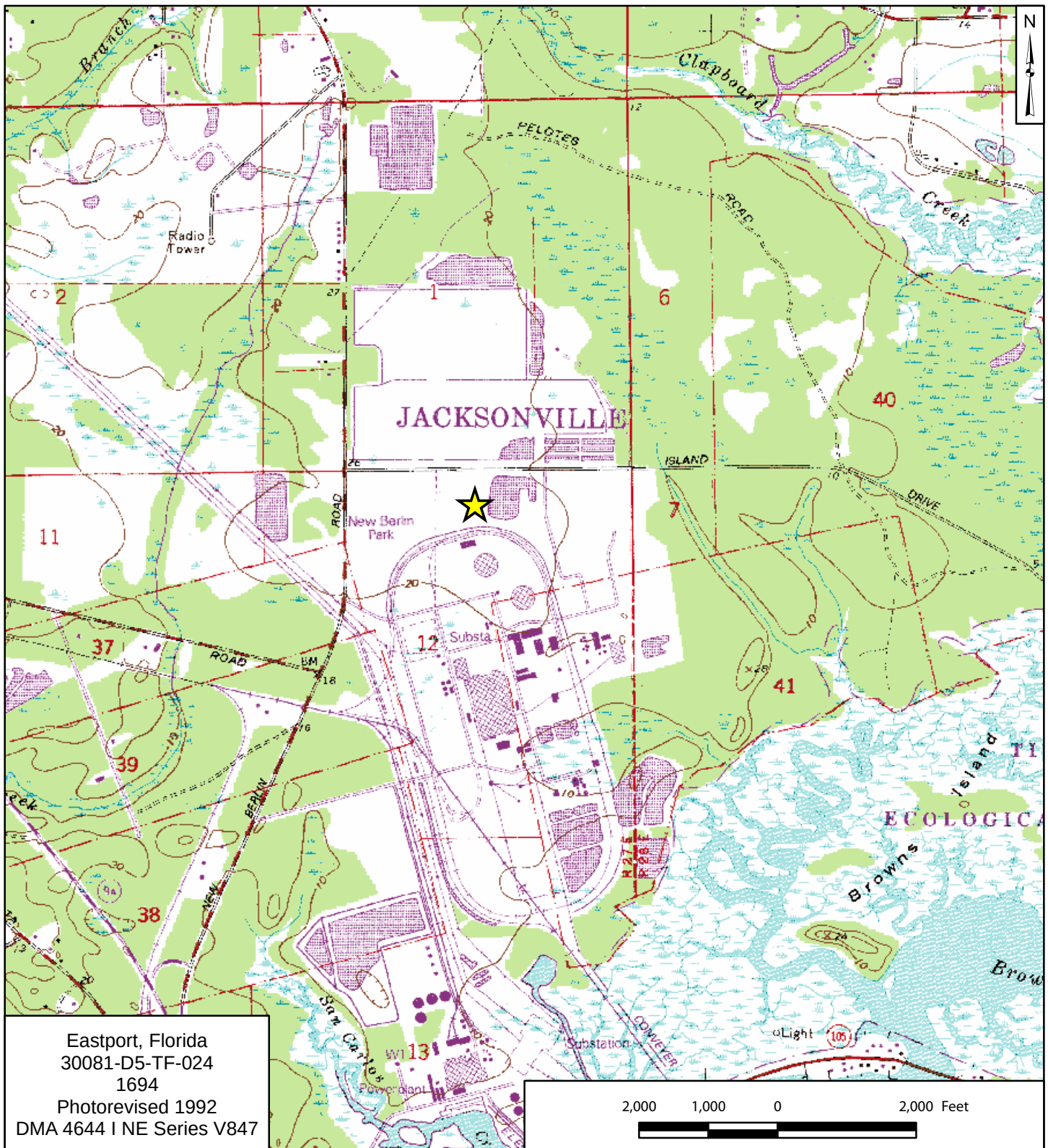
**TABLE 4: GEOGRAPHICAL COORDINATES AND WELL DESIGNATIONS -
FORMER INDUSTRIAL WASTEWATER AREA
JEA St. Johns River Power Park
Jacksonville, FL**

WELL NO.	WELL DESIGNATION	DATE INSTALLED	Northing Florida East (NAD 1983)	Easting Florida East (NAD 1983)
Perimeter Wells				
MW-1S	ND	12/5/2018	2217977.1	485293.0
MW-2S	ND	12/4/2018	2216758.1	485110.8
MW-3S	ND	12/4/2018	2215645.4	484847.8
MW-3D	ND	12/4/2018	2215650.4	484852.0
MW-4S	ND	12/4/2018	2214779.5	484286.5
MW-5S	ND	12/5/2018	2214412.7	483902.1
MW-5D	ND	12/5/2018	2214407.6	483907.1
TW-3A	ND	10/13/2009	NA	NA

Notes:

- indicates monitoring well/piezometer to be abandoned
- NAD 1983 indicates horizontal coordinate system United State Plane North American Datum of 1983, Florida East, feet.
- ND indicates wells not designated as background, intermediate, or compliance wells
- NA = not available

FIGURES



Legend



Approximate Subject Site Location



Note:

Source of Eastport, FL USGS 7.5 Minute Quadrangle:
Florida Department of Environmental Protection, Land Boundary Information
System (LABINS)

2,000 1,000 0 2,000 Feet



Site Location Map

JEA St. Johns River Power Park
11201 New Berlin Road
Jacksonville, FL

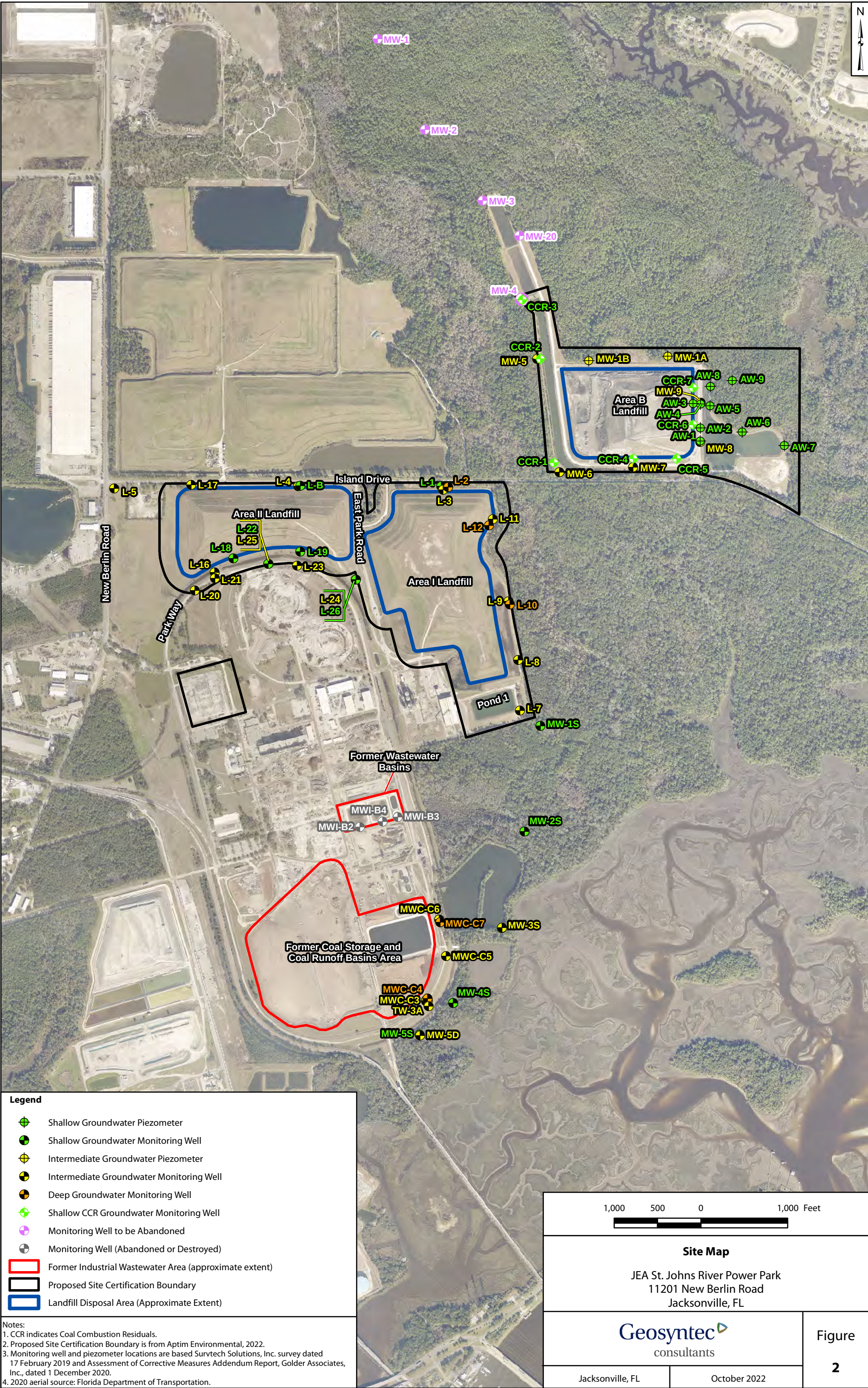
Geosyntec
consultants

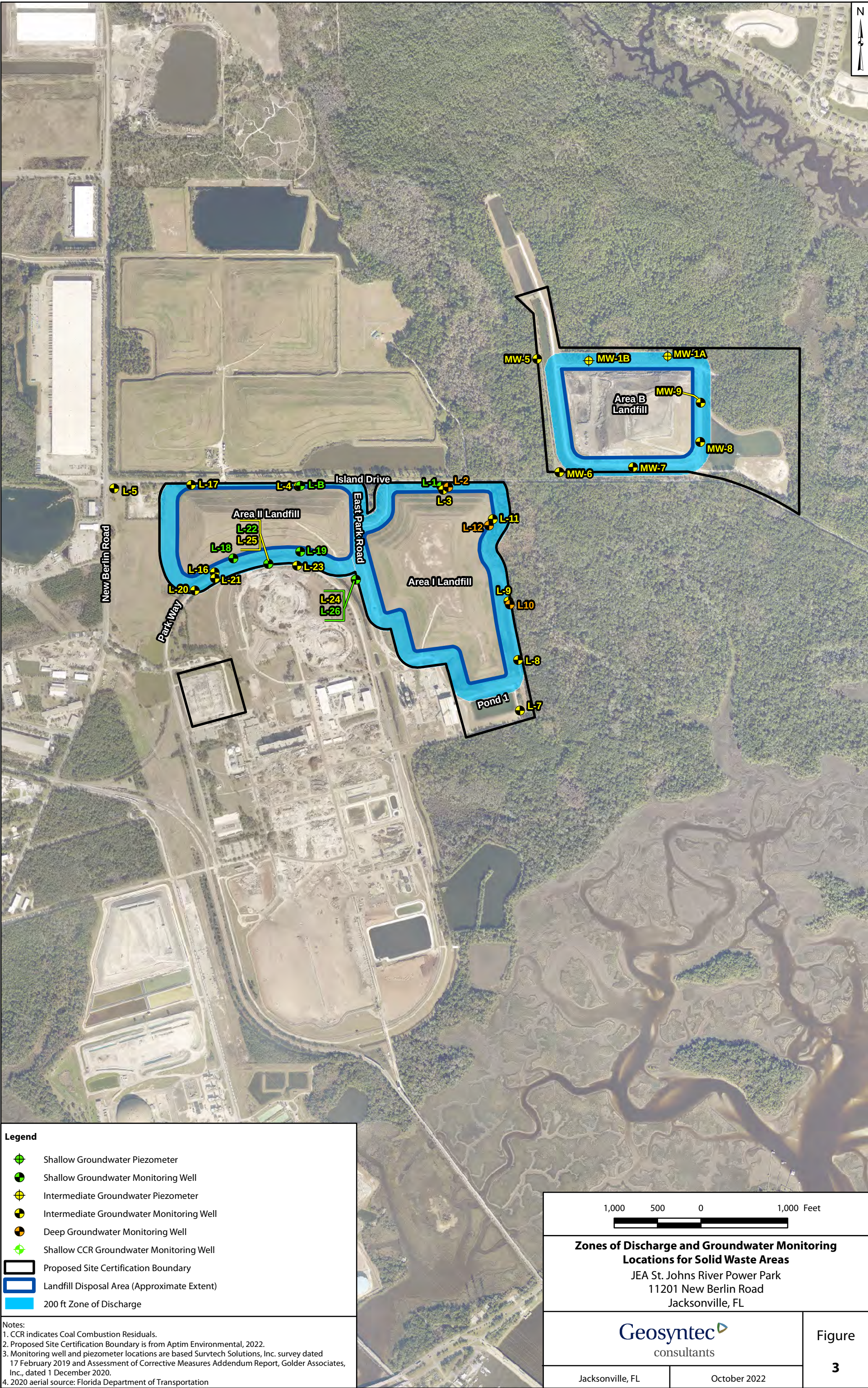
Jacksonville, FL

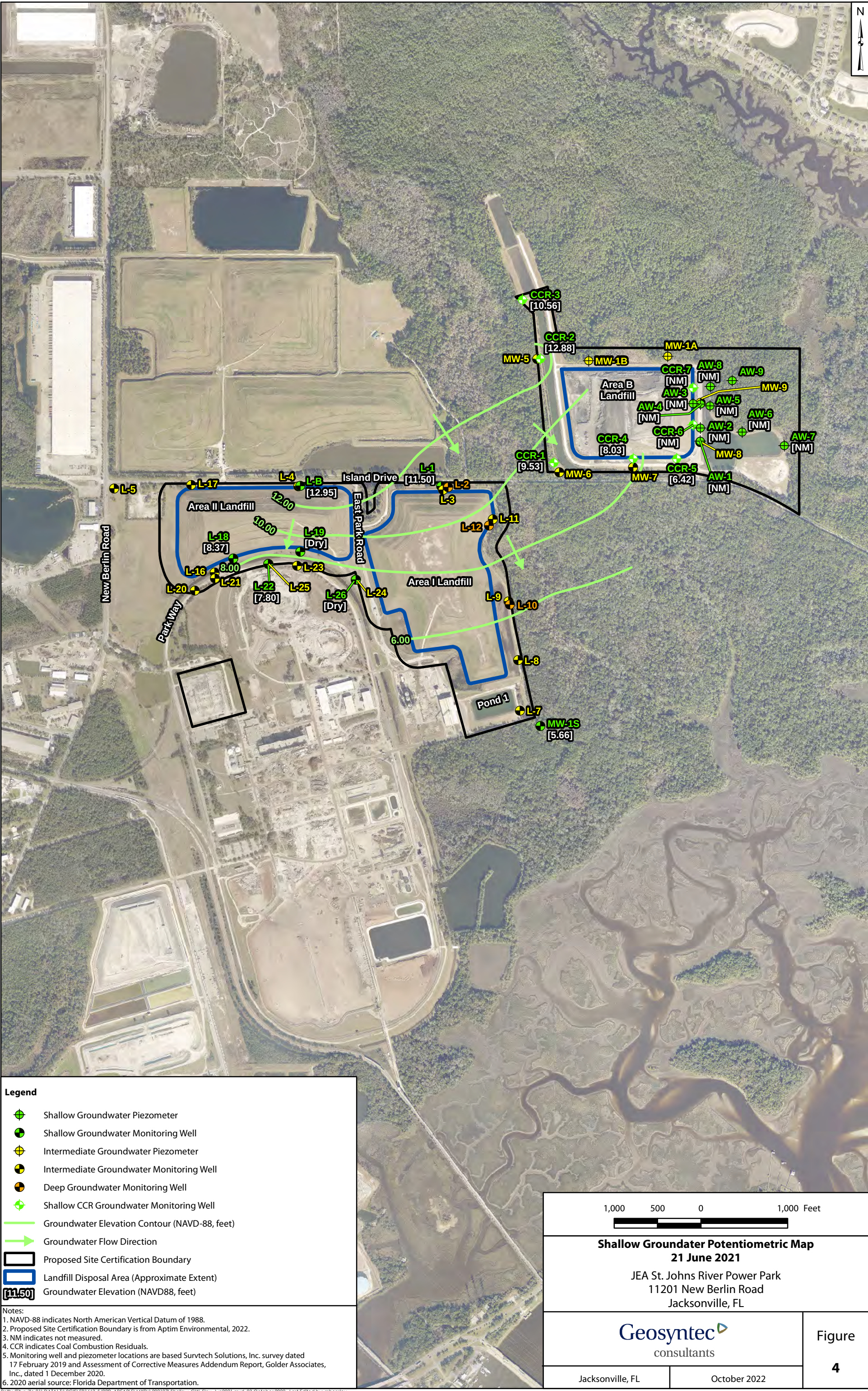
October 2022

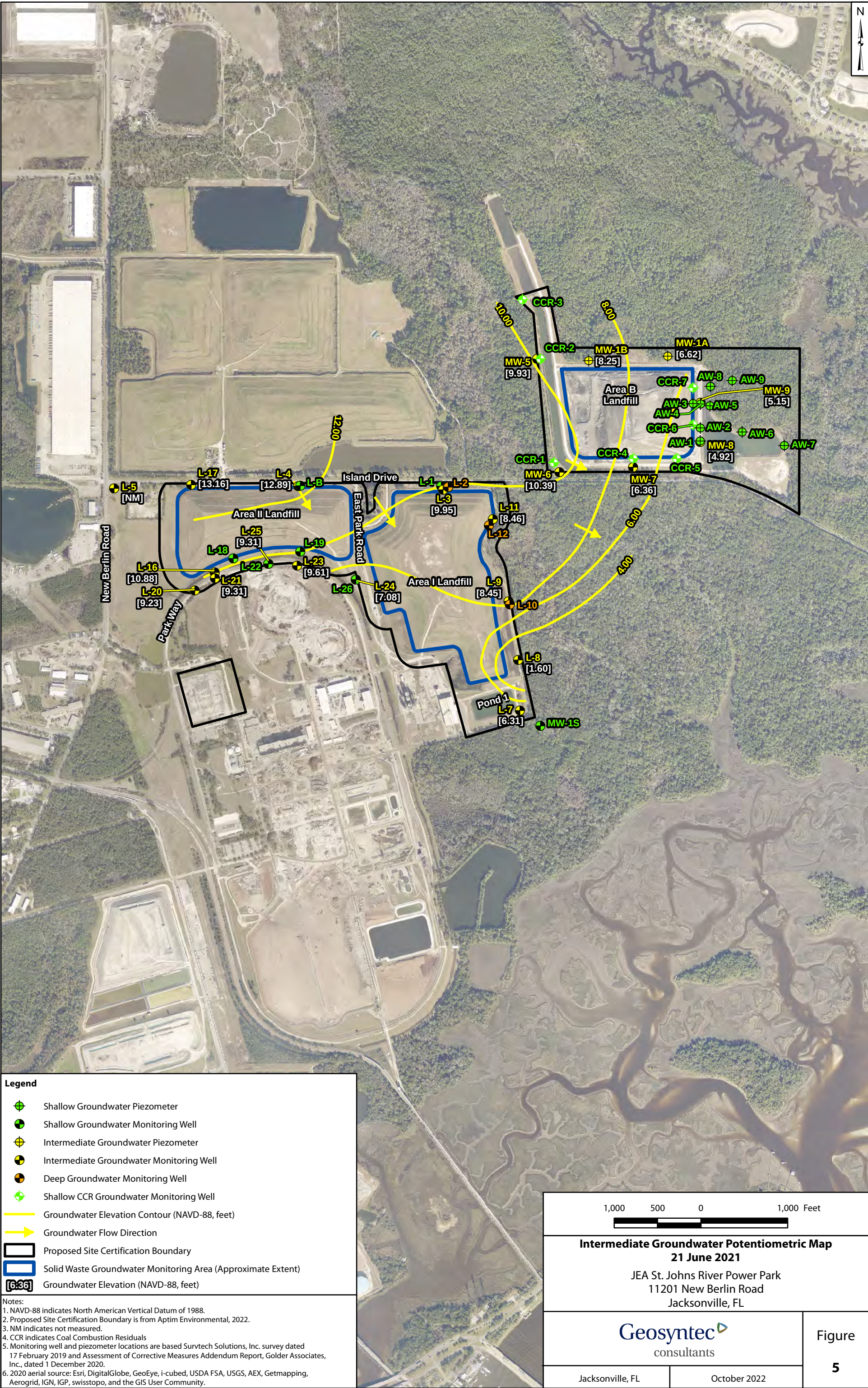
Figure

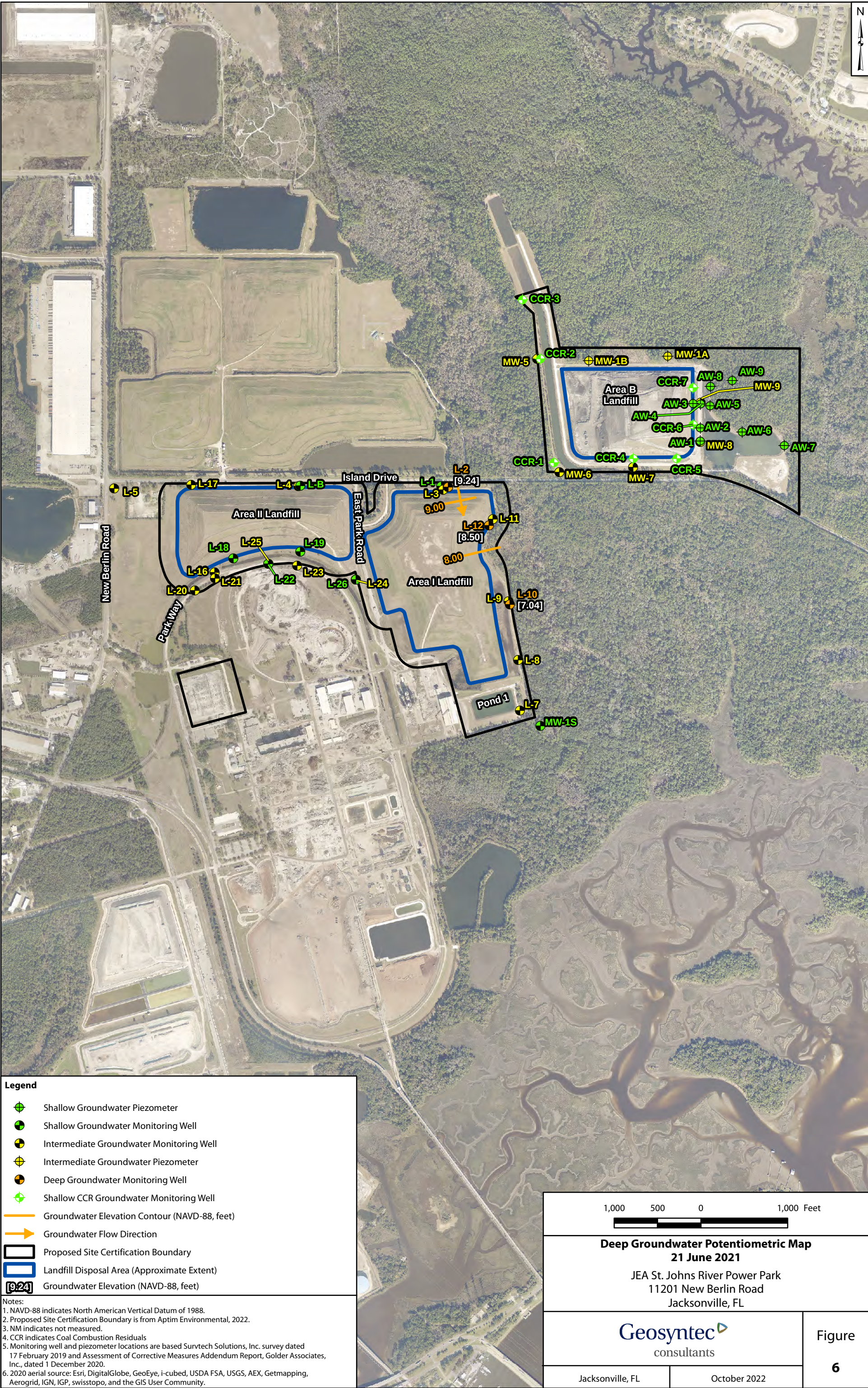
1

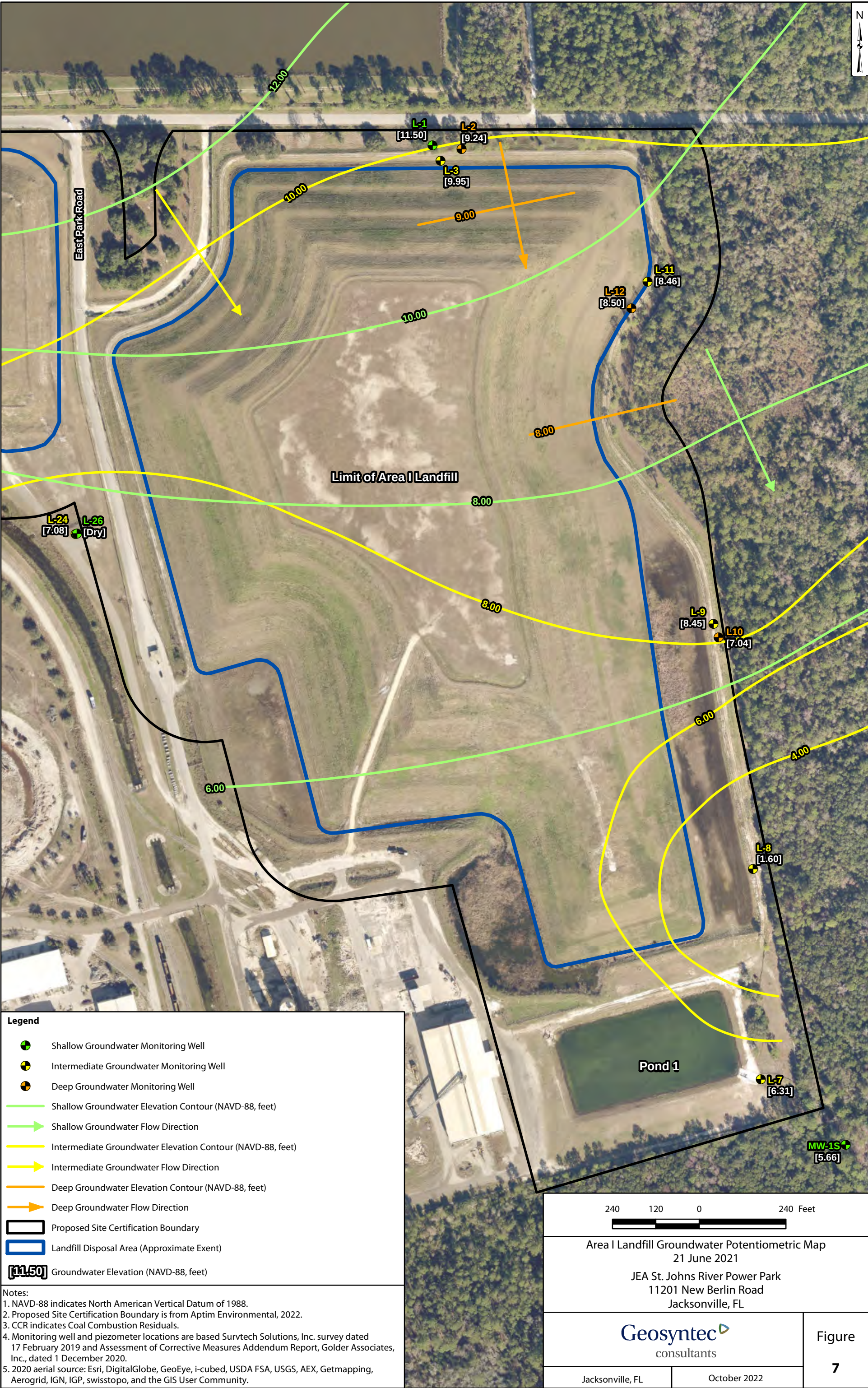


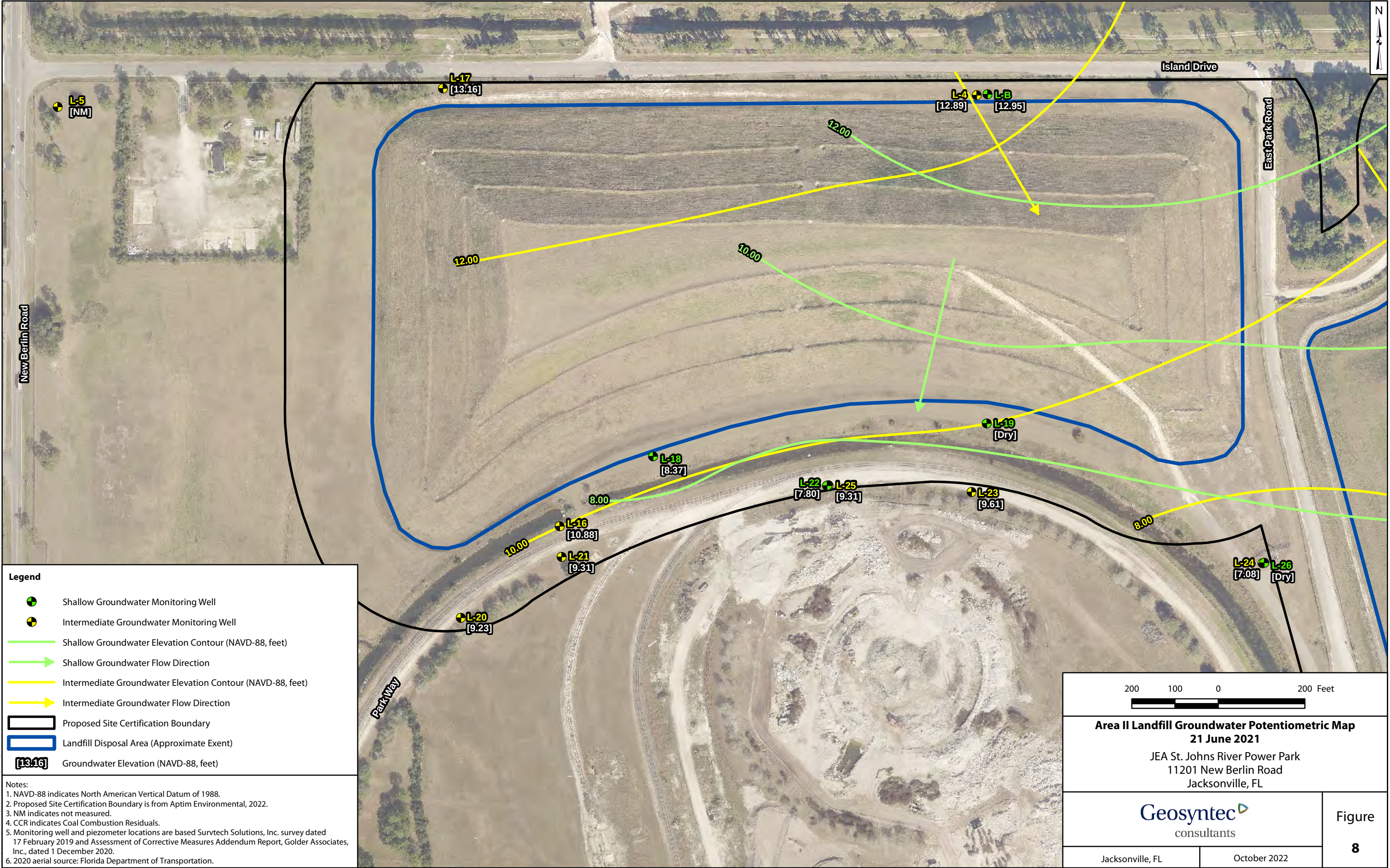


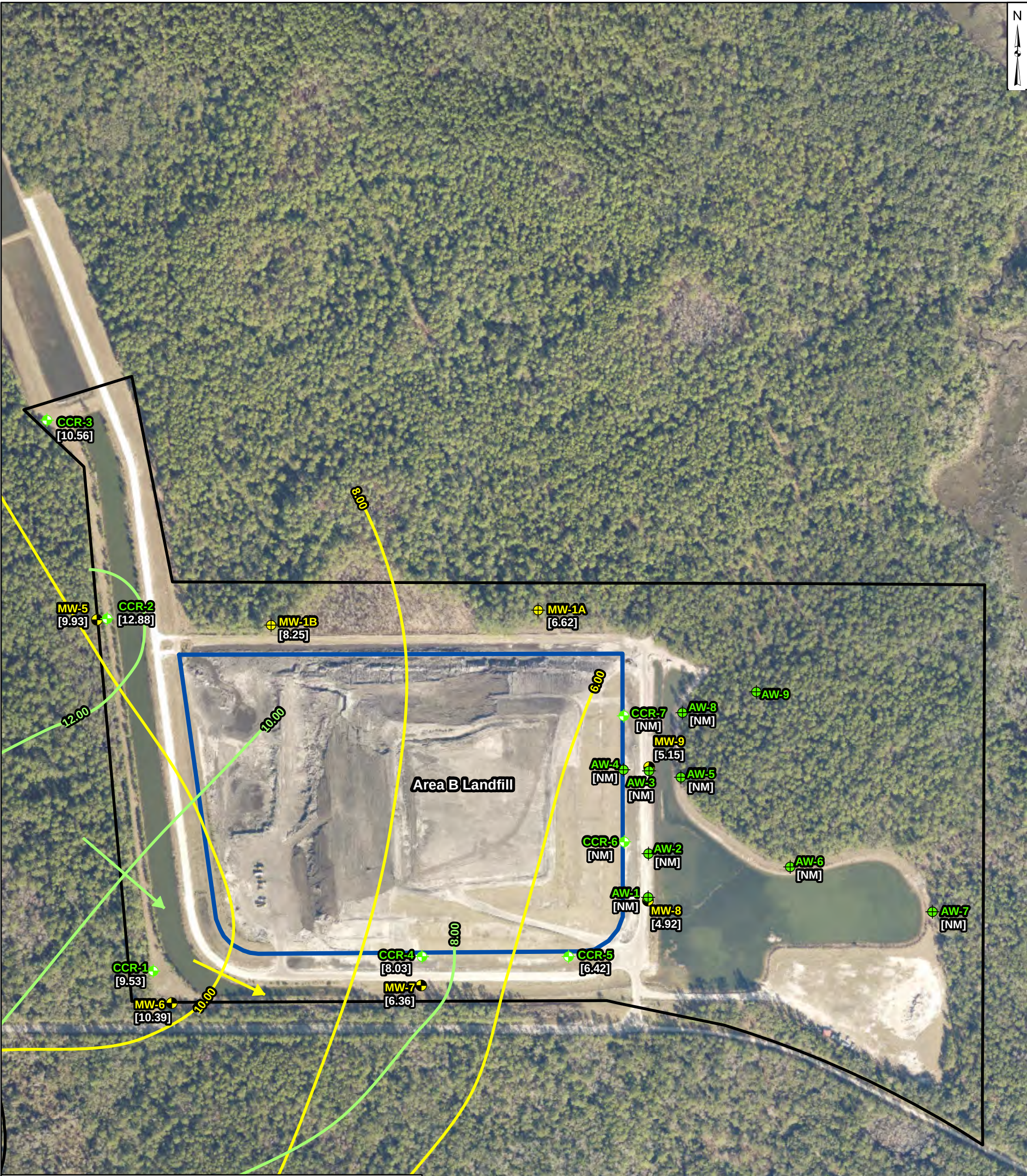












Legend

Shallow Groundwater Piezometer

Shallow Groundwater Monitoring Well

Intermediate Groundwater Piezometer

Intermediate Groundwater Monitoring Well

Deep Groundwater Monitoring Well

Shallow CCR Groundwater Monitoring Well

Shallow Groundwater Elevation Contour (NAVD-88, feet)

Shallow Groundwater Flow Direction

Intermediate Groundwater Elevation Contour (NAVD-88, feet)

Intermediate Groundwater Flow Direction

Proposed Site Certification Boundary

Landfill Disposal Area (Approximate Extent)

Groundwater Elevation (NAVD-88, feet)

Notes:

1. NAVD-88 indicates North American Vertical Datum of 1988.

2. Proposed Site Certification Boundary is from Aptim Environmental, 2022.

3. NM indicates not measured.

4. CCR indicates Coal Combustion Residuals.

5. Monitoring well and piezometer locations are based Survtech Solutions, Inc. survey dated 17 February 2019 and Assessment of Corrective Measures Addendum Report, Golder Associates, Inc., dated 1 December 2020.

6. 2020 aerial source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.

3501750350 Feet

Area B Landfill Groundwater Potentiometric Map
21 June 2021
JEA St. Johns River Power Park
11201 New Berlin Road
Jacksonville, FL

Geosyntec
consultants

Jacksonville, FL

Figure
9

October 2022



Legend

Shallow Groundwater Monitoring Well

Intermediate Groundwater Monitoring Well

Deep Groundwater Monitoring Well

Monitoring Well (Abandoned or Destroyed)

Former Industrial Wastewater Area (approximate extent)

Proposed Site Certification Boundary

Notes:

1. Proposed Site Certification Boundary is from Aptim Environmental, 2022.

2. Monitoring well and piezometer locations are based Survtech Solutions, Inc. survey dated 17 February 2019 and Assessment of Corrective Measures Addendum Report, Golder Associates, Inc., dated 1 December 2020.

3. The Coal and Limestone Storage Areas and Wastewater Basins have been decommissioned and are no longer present.

4. 2020 aerial source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.

6003000600 Feet

Groundwater Monitoring for Former Industrial Wastewater Area

JEA St. Johns River Power Park

11201 New Berlin Road

Jacksonville, FL

Geosyntec

consultants

Jacksonville, FL

October 2022

Figure

10

APPENDIX A
HISTORICAL GROUNDWATER
ANALYTICAL RESULT TABLES

TABLE 1: GROUNDWATER ANALYTICAL RESULTS - FORMER INDUSTRIAL WASTEWATER AREA

Facility Name: ST. JOHNS RIVER POWER PARK

Well ID	Screen Interval (ft-bis)	Date Sampled	Aluminum (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Boron (µg/L)	Cadmium (µg/L)	Chloride (mg/L)	Chromium (µg/L)	Copper (mg/L)	Iron (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (mg/L)	Selenium (µg/L)	Silver (µg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Gross Alpha (pCi/L)	Radium-226 (pCi/L)	Radium-228 (pCi/L)	Total Radium (pCi/L)	
		GCTL	200	10	2000	0.004	1400	5	250	100	1	300	15	2	0.1	50	100	250	500	15	---	---	---	5
		NADC	2000	100	20000	0.04	14000	50	2500	1000	10	3000	150	20	1	500	1000	2500	5000	---	---	---	---	---
MWC-C3	33-43	08/09/12	41.3	11.4	48.7	0.000137	NS	0.157 U	450	1.05 U	0.000912	20400	0.156 U	0.005 U	0.00049 U	1.82	0.574 U	988	2004	NS	NS	NS	NS	NS
		11/30/17	63.8	15.4	42.1	0.00017	NS	0.0690 U	421	1.26 I	0.000914 U	32600	0.50 U	11.2	0.00153 I	0.50 U	0.154 U	92.2	1322	NS	NS	NS	NS	NS
		12/13/17	NS	11000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/21/17	60.9	16.8	43.7	0.00027 I	NS	0.0690 U	220	1.12 I	0.000914 U	30300	0.24 U	17.0 U	0.00127 I	0.89 I	0.154 U	588	1226	NS	NS	NS	NS	NS
		05/13/22	NS	8.3 I	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.011 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
		08/17/22	NS	5.8 I	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MWI-B4	19.5-29.5	08/14/12	15.5	3.12 U	260	0.096	NS	0.157 U	378	1.05 U	0.002	22.7	0.156 U	0.005 U	0.00049 U	7.39	0.574 U	1220	2631	NS	NS	NS	NS	NS
		11/30/17	51.4	4.98 I	70.4	0.000070 U	NS	U	246	8.89 I	0.0016	6.38 I	0.50 U	10.2	0.000352 I	0.62 I	0.392 I	623	NS	NS	NS	NS	NS	
		12/21/17	46.7	5.61 I	71.3	NS	NS	0.0690 U	105	0.686 I	0.000914 U	2.21 I	0.24 I	17.0 U	0.000281 U	0.84 I	0.154 U	497	950	NS	NS	NS	NS	NS
TW-3A	30-40	12/05/18	NS	25.7	63.5	NS	2350	0.050 U	NS	1.6	NS	NS	0.73 I	0.10 U	NS	0.66 I	0.050 U	485	NS	11.9 ± 3.23	2.94 ± 0.953	1.19 ± 0.473	4.13 ± 1.43	
		05/13/22	NS	14	NS	NS	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		08/17/22	NS	10	NS	NS	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-15	2-12	12/06/18	NS	0.51 I	34.4	NS	593	0.050 U	NS	1.4	NS	NS	0.50 U	0.10 U	NS	0.82 I	0.050 U	376	NS	2.63 ± 1.74	1.99 ± 0.784	1.06 ± 0.443	3.05 ± 1.23	
		01/22/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	251	NS	NS	NS	NS	NS
		05/15/19	1660	0.74 I	32.3	NS	651	0.050 U	40.7	0.90 I	NS	4430	0.50 U	0.10 U	NS	1.5	0.050 U	415	700	2.95 U ± 1.85	1.72 ± 0.865	1.17 ± 0.441	2.89 ± 1.31	
		11/21/19	4330	0.60 I	38.4	NS	660	0.050 U	44.6	1.3	NS	1860	0.50 U	0.10 U	NS	1.7	0.050 U	403	687	5.27 ± 2.08	0.967 U ± 0.696	1.37 U ± 0.563	2.34 ± 1.26	
		05/14/20	2100	0.50 U	27.8	NS	596	0.050 U	46.3	0.65 I	NS	2920	0.22 U	0.090 U	NS	1.2 U	0.21 U	443	645	2.84 U ± 1.62	1.12 U ± 0.614	1.02 U ± 0.497	2.14 U ± 1.11	
		11/24/20	2310	0.53 I	29.4	NS	637	0.050 U	44.5	1.1	NS	2550	0.22 U	0.090 U	NS	1.2 U	0.21 U	410	750	2.46 U ± 1.51	0.745 U ± 0.511	0.841 U ± 0.457	1.59 U ± 0.968	
MW-25	3-13	05/07/21	3510	0.50 U	33.4	NS	620	0.050 U	47.9	0.78 I	NS	2460	0.22 U	0.090 U	NS	1.5 I	0.21 U	433	784	6.50 ± 2.32	0.843U ± 0.603	1.33 ± 0.502	2.17 U ± 1.11	
		12/10/18	NS	0.50 U	46.7	NS	53.9	0.083 I	NS	2.7	NS	NS	0.50 U	0.10 U	NS	0.50 U	0.050 U	21.4	NS	1.71 ± 0.602	0.546 U ± 0.420	0.750 U ± 0.384	1.30 U ± 0.804	
		01/22/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		05/15/19	2370	0.50 U	55.7	NS	48.6 I	0.082 I	25.2	1.5	NS	1760	0.50 U	0.10 U	NS	0.50 U	0.050 U	38.3	115	2.34 ± 1.23	0.778 U ± 0.449	0.825 U ± 0.390	1.60 U ± 0.839	
		11/21/19	968	0.50 U	94.1	NS	51.3	0.050 U	53.3	1.6	NS	2860	0.50 U	0.10 U	NS	0.56 I	0.050 U	56.5	159	3.23 ± 1.74	0.690 U ± 0.493	1.11 ± 0.479	1.64 ± 0.972	
		05/14/20	1930	0.50 U	85.3	NS	54.9	0.050 U	41.7	1.4	NS	1680	0.22 U	0.090 U	NS	1.2 U	0.21 U	46.1	139	2.28 ± 0.835	0.797 U ± 0.447	1.47 U ± 0.705	2.27 U ± 1.15	
MW-35	2-12	11/24/20	3230	0.50 U	62.2	NS	54.4	0.050 U	25.2	1.9	NS	1070	0.22 U	0.090 U	NS	1.2 U	0.21 U	26.3	147	1.14 ± 0.585	1.05 U ± 0.553	0.923 ± 0.454	1.85 U ± 1.01	
		05/07/21	2120	0.50 U	26.3	NS	39.7 I	0.050 U	17.6	1.5	NS	676	0.22 U	0.090 U	NS	1.2 U	0.21 U	14.7	76	1.96U ± 1.05	0.812U ± 0.398	0.696U ± 0.368	1.51 U ± 0.766	
		12/06/18	NS	7.0	16.4	NS	2130	0.050 U	NS	2.8	NS	NS	NS	0.50 U	0.10 U	NS	1.1	0.050 U	208	NS	1.88 U ± 1.14	0.539 ± 0.385	0.740 U ± 0.321	1.28 U ± 0.706
		01/22/19	NS	NS	NS	NS	2510	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		05/15/19	469	15.2	34.5	NS	2720	0.050 U	442	3.3	NS	3120	0.50 U	0.10 U	NS	1.4	0.050 U	407	1480	5.50 ± 1.81	1.28 ± 0.780	0.678 U ± 0.352	1.96 U ± 1.13	
		11/22/19	219	4.7	29.9	NS	3060	0.050 U	397	1.7	NS	104	0.50 U	0.10 U	NS	0.83 I	0.050 U	394	1460	2.17 U ± 1.19	1.06 U ± 0.475	0.646 U ± 0.345	1.71 U ± 0.820	
		05/14/20	106	3.2	107	NS	2580	0.050 U	937	0.81 I	NS	35.7	0.22 U	0.090 U	NS	1.2 U	0.21 U	375	2150	4.48 ± 1.88	1.82 ± 0.796	1.53 ± 0.631	3.34 ± 1.43	
		11/24/20	358	9.0	17.5	NS	3150	0.050 U	281	2.0	NS	41.8	0.22 U	0.090 U	NS	1.2 U	0.21 U	291	1580	2.45 U ± 1.52	1.09 U ± 0.554	0.840 U ± 0.423	1.93 U ± 0.977	
		05/07/21	127	14.0	45.4	NS	2200	0.050 U	801	0.91 I	NS	147	0.22 U	0.090 U	NS	1.2 U	0.21 U	408	2370	2.79 ± 1.35	1.07U ± 0.577	0.767U ± 0.412	1.84 U ± 0.989	
		05/13/22	NS	5.5	NS	NS	2900	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3D	25-30	08/17/22	NS	1.8	NS	NS	4400	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/06/18	NS	2.0	163	NS	2490	0.050 U	NS	2.5	NS	NS	0.50 U	0.10 U	NS	0.50 U	0.050 U	452	NS	7.71 ± 2.27	3.90 ± 1.12	1.67 ± 0.578	5.57 ± 1.70	
		01/22/19	NS	NS	NS	NS	2460	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		05/15/19	76.0	4.1	172	NS	2610	0.050 U	1200	0.95 I	NS	51.0	0.50 U	0.10 U	NS	0.66 I	0.050 U	465	2970	6.66 ± 2.47	3.66 ± 1.17	1.10 ± 0.458	4.76 ± 1.63	
		11/22/19	212	3.3	124	NS	2480	0.050 U	944	1.2	NS	41.3	0.50 U	0.10 U	NS	1.0 U	0.050 U	363	2270	5.98 ± 1.97	2.15 ± 0.910	1.67 ± 0.539	3.82 ± 1.45	
		05/14/20	663	6.6	49.5	NS	3330	0.050 U	1050	2.2	NS	226	0.33 I	0.090 U	NS	1.2 U	0.21 U	518	2450	2.67 U ± 1.42	1.03 U ± 0.557	1.11 U ± 0.533	2.14 U ± 1.09	
MW-4S	2-12	11/24/20	47.4	3.8	87.2	NS	2560	0.050 U	734	0.73 I	NS	13.2	0.22 U	0.090 U	NS	1.2 U	0.21 U	350	2200	4.02 U ± 2.05	0.878 ± 0.634	1.39 ± 0.564	2.26 ± 1.20	
		05/07/21	60.8	3.5	95.4	NS	2590	0.050 U	737	0.90 I	NS	16.2	0.22 U	0.090 U	NS	1.2 U	0.21 U	349	2000	4.45 ± 1.67	1.27 ± 0.631	1.30 ± 0.469	2.57 ± 1.10	
		05/13/22	NS	NS	NS	NS	2500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		08/17/22	NS	NS	NS	NS	2200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/06/18	NS	8.1	30.6	NS	102	0.050 U	NS	2.1	NS	NS	0.50 U	0.10 U	NS	0.81 I	0.050 U	41.0	NS	3.04 ± 1.54	0.735 U ± 0.539	0.591 U ± 0.307	1.33 U ± 0.846	
		01/22/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5S	2-12	05/16/19	327	8.6	20.6	NS	87.8	0.050 U	115	1.3	NS	3580	0.50 U	0.10 U	NS	0.50 U	0.050 U	88.6	334	2.69 U ± 1.88	0.672 U ± 0.403	0.768 U ± 0.348	1.44 U ± 0.751	
		11/22/19	479	6.5	56.0	NS	107	0.050 U	178	1.6	NS	4180	0.50 U	0.10 U	NS	1.1	0.050 U	138	532	2.52 U ± 1.38	0.975 U ± 0.478	0.852 ± 0.383	1.83 U ± 0.86	
		05/14/20	149	7.7	49.4	NS	163	0.050 U	245	0.81 I	NS	7380	0.22 U	0.090 U	NS	1.2 U	0.21 U	249	774	2.84 U ± 1.33	0.813 U ± 0.585	2.67 U ± 1.20	3.48 U ± 1.79	
		11/24/20	341	7.5	20.2	NS	132	0.050 U	128	1.5	NS	3910	0.22 U	0.09.										

TABLE 2: GROUNDWATER ANALYTICAL RESULTS - AREA I LANDFILL

Facility Name: ST. JOHNS RIVER POWER PARK

Well ID	Screen Interval (ft bls)	Date Sampled	Aluminum (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Copper (µg/L)	Iron (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Vanadium (µg/L)
		GCTL	200	10	2000	4	5	100	1000	300	15	2	100	50	250	500	49
		NADC	2000	100	20000	40	50	1000	10000	3000	150	20	1000	500	2500	5000	490
L-1	13-23	09/29/16	6470	0.57 I	50.8	0.34	ND	4.2 I	NS	3140	ND	ND	3 I	ND	433	896	ND
		03/21/17	4123.8	0.615 U	45.7	0.364 U	0.258 U	1.75 I	0.914 U	2698.5	0.491 U	0.00500 U	1.75 I	2.72 I	301	648	0.908 I
		09/26/17	4404.1	1.38U	58.3	0.192 U	0.698 U	2.96 I	0.914 U	3315.4	0.412 U	0.0170 U	1.37 I	2.35 U	306	701	1.11 I
		03/28/18	8760	0.55 I	56.0	5.7 J	0.05 U	2.5 U	2.5 U	2500	0.5 U	0.1 U	3.6 I	7.5 U	577	1024	5 U
		09/19/18	9474.6	0.555 I	50.8	0.350 I	0.0981 U	2.81 I	1.33 U	1426.5	0.460 U	0.0170 U	3.30 I	2.85 U	790	1214	0.911 U
		03/26/19	9424.5	0.561 I	46.5	0.302 I	0.0981 U	1.35 I	1.33 U	932.47	0.460 U	0.00575 U	1.78 I	2.85 U	778	1132	0.911 U
		09/19/19	9909.3	0.576	49.4	0.293 I	0.0276 U	0.740 I	1.33 U	1558.1	0.0490 I	0.00575 U	3.34 I	2.85 U	816	1298	0.911 U
		03/11/20	8892.8	0.558	42.0	0.382 I	0.0276 U	3.33 I	1.93 I	1034.7	0.513	0.00575 U	3.31 I	2.85 U	655	1162	1.31 I
		09/23/20	9215.9	0.813	52.0	0.371 I	0.0597 U	4.06 I	1.33 U	1174.6	0.362 I	0.00575 U	2.81 I	2.85 U	742	1220	1.21 I
L-1 DUP	13-23	03/16/21	9384.0	0.709	41.1	0.310 I	0.0597 U	1.24 I	1.33 U	857.54	0.144 I	0.00600 U	1.02 I	2.85 U	860	1271	1.41 I
		03/11/20	9366.3	0.636	43.6	0.366 I	0.0276 U	4.61 I	1.64 I	1270.2	0.429 I	0.00575 U	3.75 I	2.85 U	674	1192	1.31 I
L-2	63.5-83.5	09/29/16	ND	ND	34.3	ND	ND	ND	NS	1340	ND	ND	ND	ND	ND	292	ND
		03/21/17	8.52 I	0.615 U	33.0	0.364 U	0.258 U	0.300 I	0.914 U	1194.2	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	229	1.05 I
		09/26/17	11.5 I	1.38 U	32.5	0.192 U	0.698 U	0.298 U	0.914 U	1318.9	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	262	0.941 I
		03/28/18	50 U	0.5 U	33.6	0.07 U	0.05 U	2.5 U	2.5 U	1260	0.5 U	0.1 U	2.5 U	7.5 U	2.5 U	284	5 U
		09/19/18	9.86 I	0.0499 U	33.1	0.0955 U	0.0981 U	0.342 U	1.33 U	1200.7	0.512 I	0.0170 U	0.717 U	2.85 U	2.5 U	287	0.911 U
		03/26/19	4.25 I	0.0499 U	31.8	0.0955 U	0.0981 U	0.363 I	1.33 U	1198.4	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	290	0.911 U
		09/19/19	4.63 I	0.149 U	33.2	0.0492 U	0.0276 U	0.711 U	1.33 U	1071.6	0.0448 U	0.00575 U	0.717 U	2.85 U	2.5 U	303	0.911 U
		03/11/20	15.1 I	0.149 U	32.5	0.0610 I	0.0276 U	0.711 U	1.33 U	1233.4	0.0770 I	0.00575 U	0.717 U	2.85 U	2.5 U	300	1.20 I
		09/23/20	3.62 I	0.149 U	33.9	0.0492 U	0.0597 U	10.4 I	1.33 U	1088.2	0.138 I	0.00575 U	0.717 U	2.85 U	2.5 U	312	1.45 I
L-3	39-49	03/16/21	1.62 U	0.149 U	33.5	0.0590 I	0.0597 U	0.711 U	1.33 U	943.91	0.112 I	0.00600 U	0.717 U	2.85 U	2.5 U	280	0.972 I
		09/29/16	86.1 I	ND	109	0.35	ND	ND	NS	6920	ND	ND	ND	ND	30.5	168	ND
		03/21/17	74.0	0.615 U	99.3	0.364 U	0.258 U	0.508 I	0.914 U	5957.7	0.491 U	0.00500 U	0.281 U	2.35 U	29.8	168	0.826 I
		09/26/17	75.4	1.38 U	101.29	0.192 U	0.698 U	0.298 U	0.914 U	6403.8	0.412 U	0.0170 U	0.281 U	2.35 U	29.7	145	0.944 I
		03/28/18	70.8 I	0.5 U	104	0.35	0.05 U	2.5 U	2.5 U	6610	0.5 U	0.1 U	2.5 U	7.5 U	29.1	160	5 U
		09/19/18	72.4	0.0499 U	105.77	0.334 I	0.0981 U	0.342 U	1.33 U	6412.9	0.460 U	0.0170 U	0.717 U	2.85 U	30.7	200	0.992 I
		03/26/19	61.7	0.0499 U	101.57	0.412 I	0.0981 U	0.596 I	1.33 U	6612.2	0.460 U	0.00575 U	0.717 U	2.85 U	33.4	200	0.911 U
		09/19/19	69.3	0.149 U	110.93	0.380 I	0.0276 U	0.711 U	1.33 U	6799.3	0.0500 I	0.00575 U	0.717 U	2.85 U	35.0	205	0.911 U
		03/11/20	77.0	0.149 U	111.04	0.484 I	0.0276 U	0.711 U	1.33 U	6975.4	0.0450 I	0.00575 U	0.717 U	2.85 U	31.9	180	0.968 I
L-3 DUP	39-49	09/23/20	68.7	0.149 U	109.64	0.335 I	0.0597 U	0.711 U	1.33 U	6984.1	0.069 I	0.00575 U	0.717 U	2.85 U	31.1	78	0.989 I
		03/16/21	75.0	0.149 U	123.94	0.475 I	0.0597 U	0.711 U	1.33 U	7998.9	0.132 I	0.00600 U	0.717 U	2.85 U	41.4 J(M1)	175	0.911 U
L-7	29.5-39.5	09/19/19	70.8	0.149 U	113.37	0.372 I	0.0276 U	0.711 U	1.33 U	6875.6	0.0448 U	0.00575 U	0.717 U	2.85 U	31.9	190	0.911 U
		09/28/16	5620	1.7	22	2.5	ND	ND	NS	1080	ND	ND	ND	ND	392	661	ND
		03/21/17	5847.6	0.615 U	22.3	2.01	0.258 U	0.298 U	0.914 U	948.58	0.491 U	0.00500 U	0.281 U	2.35 U	406	612	1.74 I
		09/26/17	5792.7	1.38 U	21.3	1.76	0.698 U	0.298 U	10.3 I	1032.2	0.412 U	0.0170 U	0.281 U	2.35 U	400	657	1.94 I
		03/28/18	5830	0.69 I	22.3	2.9	0.05 U	2.5 U	2.5 U	890	0.5 U	0.1 U	2.5 U	7.5 U	433	679	5 U
		09/19/18	9730.5	1.03	79.2	2.82	0.0981 U	0.342 U	1.33 U	273.89	0.460 U	0.0170 U	0.717 U	2.85 U	739	1180	1.41 I
		09/19/18	9969.5	0.999	26.3	2.88	0.0981 U	0.342 U	1.37 I	11741	0.460 U	0.0170 U	0.717 U	2.85 U	750	1183	1.63 I
		03/26/19	6491.5	0.794	18.9 I	2.59	0.0981 U	0.386 I	1.62 I	11929	0.460 U	0.00575 U	0.717 U	2.85 U	663	995	1.35 I
		09/19/19	8598.9	0.946	21.3	2.42	0.0276 U	0.711 U	1.33 U	6022.1	0.0610 I	0.00575 U	0.717 U	2.85 U	712	1023	1.20 I
		03/11/20	7300.6	0.889	20.5	2.54	0.0276 U	0.711 U	1.43 I	3692.0	0.0860 I	0.00900 I	0.717 U	3.43 I	544	882	2.12 I
		09/23/20	6490.0	0.878	19.4 I	1.94	0.0597 U	0.711 U	1.33 U	2254.9	0.055 I	0.00575 U	0.717 U	2.85 U	515	928	2.19 I
		03/22/21	7041.0	0.903	20.3	2.36	0.0597 U	0.711 U	1.33 U	1663.7	0.0448 U	0.00600 U	0.717 U	2.85 U	528	812	2.56 I

TABLE 2: GROUNDWATER ANALYTICAL RESULTS - AREA I LANDFILL

Facility Name: ST. JOHNS RIVER POWER PARK

Well ID	Screen Interval (ft bls)	Date Sampled	Aluminum (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Copper (µg/L)	Iron (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Vanadium (µg/L)
		GCTL	200	10	2000	4	5	100	1000	300	15	2	100	50	250	500	49
		NADC	2000	100	20000	40	50	1000	10000	3000	150	20	1000	500	2500	5000	490
L-8	31.5-41.5	09/29/16	178	6.5	23.7	3.8	ND	ND	NS	52800	ND	ND	ND	14.5 I	381	707	ND
		03/21/17	226.76	0.615 U	28.9	3.66	0.258 U	0.298 U	0.914 U	61185	0.491 U	0.00500 U	0.281 U	2.35 U	382	618	0.960 I
		09/26/17	191.84	1.38 U	21.2	3.69	0.698 U	0.298 U	0.914 U	58087	0.412 U	0.0170 U	0.281 U	2.35 U	362	740	0.783 U
		03/28/18	209	1.5	23.5	0.07 U	0.05 U	2.5 U	4.8 I	47400	0.5 U	0.1 U	2.5 U	7.5 U	366	630	5 U
		09/19/18	109.58	0.899	22.4	2.49	0.0981 U	0.342 U	1.33 U	37386	0.460 U	0.0170 U	0.717 U	2.85 U	278	519	1.79 I
		03/26/19	428.84	1.21	28.1	3.97	0.0981 U	0.477 I	1.33 U	30079	0.460 U	0.00575 U	0.717 U	2.85 U	358	662	0.911 U
		09/19/19	320.29	1.18	30.7	3.28	0.0276 U	0.711 U	1.33 U	49466	0.0640 I	0.00575 U	0.717 U	7.18 I	385	614	0.911 U
		03/10/20	413.14	1.42	65.9	3.42	0.0330 I	0.827 I	1.66 I	46893	0.242 I	0.00575 U	0.717 U	3.98 I	311	608	1.93 I
		09/23/20	472.67	1.69	49.0	2.57	0.0597 U	0.711 U	1.33 U	40561	0.16 I	0.00575 U	0.717 U	3.03 I	327	636	1.97 I
L-9	34.5-44.5	03/22/21	350.20	1.61	32.2	3.01	0.0597 U	0.711 U	1.33 U	41412	0.0860 I	0.00600 U	0.717 U	4.32 I	335	582	0.911 U
		09/29/16	ND	3.9	2.3	1.3	0.098 I	ND	NS	9230	ND	ND	ND	ND	620	1361	ND
		03/21/17	110.38	0.615 U	30.1	1.66	0.258 U	0.891 I	1.02 I	13576	0.491 U	0.00500 U	0.281 U	2.35 U	652	1303	1.34 I
		09/27/17	37.2	1.38 U	13.4	0.290 I	0.698 U	0.298 U	0.914 U	5318.7	0.412 U	0.0170 U	0.281 U	2.35 U	388	808	0.783 U
		03/28/18	250	0.5 U	30.6 I	5.5	0.05 I	5 U	5 U	12400	0.5 U	0.1 U	5 U	15 U	1040	1643	10 U
		09/19/18	1049.6	1.65	21.9	2.2	0.0981 U	0.554 I	1.33 U	8762.7	0.460 U	0.0170 U	0.717 U	2.85 U	621	1094	2.91 I
		03/26/19	1431.9	2.41	21.4	3.23	0.0981 U	1.39 I	1.33 U	9410.3	0.460 U	0.00575 U	0.717 U	2.85 U	640	1063	5.08 I
		09/19/19	840.01	2.06	23.9	1.99	0.0276 U	0.793 I	1.33 U	11698	0.218 I	0.00575 U	0.717 U	2.85 U	660	1217	4.91 I
		03/12/20	1094.3	1.81	24.6	2.20	0.0276 U	0.866 I	1.33 U	9283.2	0.268 I	0.00575 U	0.717 U	2.85 U	611	1170	3.79 I
L-9 (DUP)	34.5-44.5	09/23/20	2007.9	2.41	25.0	2.65	0.0597 U	0.817 I	1.33 U	9266.7	0.115 I	0.00575 U	0.717 U	2.85 U	763	1458	4.02 I
		03/22/21	1178.2	2.34	26.4	1.92	0.0597 U	0.711 U	1.33 U	9546.8	0.258 I	0.00600 U	0.717 U	2.85 U	858 M6	1456	1.82 I
L-10	71-81	03/21/17	112.36	0.615 U	29.6	1.62	0.258 U	0.859 I	1.00 I	13273	0.491 U	0.00500 U	0.281 U	2.35 U	641	1293	1.33
		09/27/17	36.5	1.38 U	13.3	0.244	0.698 U	0.298 U	0.914 U	5106.5	0.412 U	0.0170 U	0.281 U	2.35 U	405	828	0.783 U
		09/29/16	ND	ND	14.4	ND	ND	ND	NS	2400	ND	ND	ND	ND	ND	275	ND
		03/21/17	1.26 U	0.615 U	12.1 I	0.364 U	0.258 U	0.298 U	0.914 U	1518.8	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	259	0.783 U
		09/27/17	4.74 I	1.38 U	13.1 I	0.192 U	0.698 U	0.298 U	0.914 U	1830.4	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	278	0.783 U
		03/28/18	50 U	0.5 U	15.4	0.07 U	0.05 U	2.5 U	2.5 U	2380	0.5 U	0.1 U	2.5 U	7.5 U	2.5 U	261	5 U
		09/19/18	3.91 U	0.0499 U	15.5 I	0.0955 U	0.0981 U	0.342 U	1.69 I	2185.5	0.738	0.0170 U	0.717 U	2.85 U	2.5 U	287	0.911 U
		03/26/19	8.00 I	0.0499 U	15.0 I	0.0955 U	0.0981 U	0.342 U	1.63 I	1780.8	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	284	0.911 U
		09/19/19	4.25 I	0.149 U	16.9 I	0.0492 U	0.0276 U	0.711 U	1.33 U	2266.2	0.195 I	0.00575 U	0.717 U	2.85 U	2.5 U	297	0.911 U
L-11	29-39	03/10/20	4.93 I	0.156 I	15.1 I	0.0492 U	0.0276 U	0.711 U	1.44 I	1776.5	0.202 I	0.00575 U	0.717 U	2.85 U	2.5 U	287	0.911 U
		09/23/20	5.94 I	0.149 U	15.8 I	0.0492 U	0.0597 U	0.711 U	1.33 U	1994.7	0.048 I	0.00575 U	0.717 U	2.85 U	2.6 I	334	0.911 U
		03/22/21	1.62 U	0.149 U	14.6 I	0.0492 U	0.0597 U	0.711 U	1.33 U	1627.2	0.133 I	0.00600 U	0.717 U	2.85 U	4.9 I	276	0.911 U
		09/29/16	13500	4.6	46.7	2.9	ND	3.8 I	NS	686	ND	ND	ND	ND	1550	3269	ND
		03/21/17	13565	10.1 I	49.2	2.43	0.258 U	13.1 I	1.50 I	827.25	0.491 U	0.00500 U	0.281 U	2.35 U	1410	2988	0.783 U
		09/27/17	12259	16.8	35.7 I	3.40	0.698 U	7.94 I	1.83 U	1021.4	0.412 U	0.0170 U	0.562 U	4.71 U	1320	3196	1.57 U
		03/28/18	9940	3.5	40.6	1.10	0.05 U	3.4 I	2.5 U	508	0.5 U	0.1 U	2.5 U	7.5 U	1330	3114	5 U
		09/19/18	13737	3.94	36.6	2.50	0.0981 U	10.6 I	1.33 U	663.54	0.460 U	0.0170 U	0.717 U	2.85 U	1360	3093	0.911 U
		03/26/19	12046	4.69	41.3	2.07	0.0981 U	429.90	3.53 I	3442.8	0.460 U	0.00575 U	48.2	2.85 U	1450	3103	0.911 U
L-11	29-39	09/19/19	10314	5.01	42.8	1.86	0.0276 U	110.04	1.33 U	1144.5	0.116 I	0.00575 U	14.1 I	2.85 U	1450	2993	0.911 U
		03/12/20	8868.5	4.73	38.3	2.30	0.0276 U	16.4 I	1.74 I	670.98	0.117 I	0.00575 U	2.73 I	2.85 U	1240	2870	0.911 U
		09/23/20	8511.3	4.33	36.9	2.02	0.0597 U	5.80 I	1.33 U	718.93	0.062 I	0.00575 U	1.14 I	2.85 U	1230	2843	0.911 U
		03/16/21	8683.3	5.45	39.5	1.90	0.0597 U	3.25 I	1.33 U	390.75	0.172 I	0.00600 U	0.717 U	2.85 U	1430	2819	0.911 U

TABLE 2: GROUNDWATER ANALYTICAL RESULTS - AREA I LANDFILL

Facility Name: ST. JOHNS RIVER POWER PARK

Well ID	Screen Interval (ft bls)	Date Sampled	Aluminum (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Copper (µg/L)	Iron (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Vanadium (µg/L)
		GCTL	200	10	2000	4	5	100	1000	300	15	2	100	50	250	500	49
		NADC	2000	100	20000	40	50	1000	10000	3000	150	20	1000	500	2500	5000	490
L-11 RS	29-39	10/17/19	NS	NS	NS	NS	NS	82.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
L-11 RS DUP	'29-39	10/17/19	NS	NS	NS	NS	NS	72.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
L-12	77.5-87.5	09/29/16	64.2 I	ND	20	ND	ND	ND	NS	1540	ND	ND	ND	8.4 I	ND	297	ND
		03/21/17	15.8 I	0.615 U	16.5 I	0.364 U	0.258 U	0.298 U	0.914 U	1449.6	0.491 U	0.00500 U	0.281 U	3.49 I	2.5 U	291	0.783 U
		09/27/17	1.26 U	1.38 U	16.2 I	0.192 U	0.698 U	0.298 U	0.914 U	1459.8	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	292	0.783 U
		03/28/18	50 U	0.5 U	17.4	0.07 U	0.05 U	2.5 U	2.5 U	1580	0.5 U	0.1 U	2.5 U	7.5 U	2.5 U	264	5 U
		09/19/18	3.91 U	0.0499 U	18.6 I	0.0955 U	0.0981 U	0.342 U	1.47 I	1633.6	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	280	0.911 U
		03/26/19	3.91 U	0.0499 U	16.1 I	0.0955 U	0.0981 U	0.342 U	1.33 U	1433.1	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	270	0.911 U
		09/19/19	1.62 U	0.149 U	17.0 I	0.0492 U	0.0276 U	0.711 U	1.33 U	1463.7	0.0470 I	0.00575 U	0.717 U	2.85 U	2.5 U	290	0.911 U
		03/12/20	4.47 I	0.149 U	16.6 I	0.0500 I	0.0276 U	0.711 U	1.33 U	1415.7	0.0690 I	0.00575 U	0.717 U	2.85 U	2.5 U	277	0.911 U
		09/23/20	4.79 I	0.149 U	15.9 I	0.077 I	0.0597 U	0.711 U	1.33 U	1432.8	0.0650 I	0.00575 U	0.717 U	2.85 U	2.5 U	312	0.911 U
		03/16/21	1.62 U	0.149 U	16.7 I	0.0730 I	0.0597 U	0.711 U	1.33 U	1439.8	0.111 I	0.00600 U	0.717 U	2.85 U	2.5 U	284	0.911 U

Notes:

1. NS indicates Not Sampled.
2. Results highlighted in yellow indicate an exceedance of the groundwater cleanup target level (GCTL) pursuant to Chapter 62-777, Florida Administrative Code (FAC).
3. Results highlighted in orange indicate an exceedance of the Natural Attenuation Default Source Concentrations (NADCs) specified in Table V of Chapter 62-777, FAC.
4. ft-bls = feet below land surface
5. mg/L = milligrams per liter
6. µg/L = micrograms per liter
7. Dup indicates duplicate.
8. U = indicates the constituent was not detected above the reported value.
9. I = indicates the constituent was detected between the method detection limit (MDL) and the practical quantitation limit (PQL).
10. ND indicates analyte Not Detected.

TABLE 3: GROUNDWATER ANALYTICAL RESULTS - AREA II LANDFILL

Facility Name: ST. JOHN'S RIVER POWER PARK

Well ID	Screen Interval (ft bls)	Date Sampled	Aluminum (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Copper (µg/L)	Iron (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Vanadium (µg/L)
		GCTL	200	10	2000	4	5	100	1000	300	15	2	100	50	250	500	49
		NADC	2000	100	20000	40	50	1000	10000	3000	150	20	1000	500	2500	5000	490
L-B	8.5-18.5	04/26/17	4893.8	0.732 I	34.5	0.364 U	0.258 U	0.871 I	0.914 U	70.5	0.491 U	0.00500 U	0.281 U	2.43 I	481	848	2.80 I
		09/26/17	1347.8	1.38 U	20.0	0.192 U	0.698 U	0.661 I	0.914 U	28.1	0.412 U	0.0170 U	0.281 U	3.66 I	217	467	7.25 I
		03/28/18	2880.0	0.56 I	20.6	0.16	0.05 U	2.5 U	2.5 U	72.8	0.5 U	0.1 U	2.5 U	7.5 U	317	593	6.5 I
		09/19/18	2953.1	0.779	19.2 I	0.174 I	0.0981 U	0.735 I	1.33 U	66.3	0.460 U	0.0170 U	0.717 U	2.85 U	403	671	5.90 I
		03/21/19	4031.4	0.533 I	13.5 I	0.103 I	0.0981 U	1.51 I	1.33 U	68.0	0.460 U	0.00600 I	0.717 U	2.85 U	476	665	10.3 I
		09/18/19	5139.0	0.595	21.2	0.130 I	0.0276 U	0.823 I	1.33 U	62.2	0.0870 I	0.00575 U	0.717 U	2.85 U	598	870	9.89 I
		03/10/20	3720.7	0.639	17.9 I	0.167 I	0.0276 U	0.849 I	1.47 I	134.01	0.0830 I	0.00575 U	0.717 U	2.85 U	415	703	6.22 I
		09/24/20	2322.8	1.06	16.9 I	0.205 I	0.0597 U	3.08 I	1.33 U	65.8	0.387 I	0.00575 U	0.717 U	2.85 U	171	418	12.6 I
		03/22/21	6729.6	3.08	14.2 I	0.132 I	0.0597 U	2.27 I	1.40 I	125.59	0.353 I	0.0130	0.717 U	2.85 U	207	436	12.4 I
L-4	19.5-29.5	09/27/16	25500	ND	34.3	0.8	ND	ND	ND	2110	ND	ND	ND	ND	2400	3768	ND
		03/21/17	24964	0.615 U	33.6	0.571 I	0.258 U	0.453 I	1.06 I	2397.9	0.491 U	0.00500 U	0.313 I	5.54 I	2470	3754	0.783 U
		09/26/17	23519	1.38 U	35.2	0.279 I	0.698 U	0.298 U	0.914 U	3270.6	0.412 U	0.0170 U	0.281 U	5.70 I	2340	3804	0.783 U
		03/28/18	22200 J	0.5 U	37.1	0.96 J	0.05 U	2.5 U	2.5 U	3900 J	0.5 U	0.1 U	2.5 U	7.5 U	2490	4090	5 U
		09/19/18	22567	0.468 I	37.1	0.632	0.0981 U	0.342 U	1.33 U	4180.0	0.460 U	0.0170 U	0.717 U	5.10 I	2820	3940	0.911 U
		03/26/19	22645	0.414 I	33.8	0.674	0.0981 U	1.07 I	1.33 U	4306.8	0.460 U	0.00575 U	0.766 I	2.85 U	2940	4214	0.911 U
		09/18/19	22693	0.681	31.9	0.551	0.0276 U	0.711 U	1.33 U	3617.2	0.150 I	0.00575 U	4.28 I	2.85 U	2870	4070	0.911 U
		03/11/20	21301	0.657	32.7	0.658	0.0276 U	0.711 U	1.78 I	3781.3	0.223 I	0.00575 U	4.08 I	2.85 U	2790	4220	0.911 U
		09/24/20	20208	0.425 I	31.8	0.767	0.0597 U	0.711 U	1.33 U	3529.4	0.335 I	0.00575 U	1.97 I	2.85 U	2820	3945	0.911 U
L-4 DUP		03/22/21	18614	0.561	30.9	0.631	0.0597 U	0.711 U	1.33 U	3117.1	0.233 I	0.00600 U	1.46 I	2.85 U	2540	3980	1.16 I
L-5	19.5-29.5	09/18/19	24724	0.534	34.4	0.659	0.0276 U	0.711 U	1.33 U	4593.6	0.111 I	0.00575 U	4.52 I	2.85 U	2910	4210	0.911 U
		09/28/16	174	0.89 I	32.2	ND	ND	ND	NS	763	ND	ND	ND	ND	51.3	147	ND
		03/21/17	160.97	0.615 U	27.6	0.364 U	0.258 U	0.298 U	0.914 U	148.47	0.491 U	0.00500 U	0.281 U	2.35 U	46.1	110	1.31 I
		09/26/17	183.75	1.38 U	28.2	0.192 U	0.698 U	0.298 U	0.914 U	504.75	0.412 U	0.0170 U	0.281 U	2.35 U	51.1	57	1.46 I
		03/28/18	178	0.5 U	27.8	0.07 U	0.05 U	2.5 U	2.5 U	84.8	0.5 U	0.1 U	2.5 U	7.5 U	41	119	5 U
		09/19/18	185.85	0.663	28.2	0.0955 U	0.0981 U	0.342 U	1.33 U	673.60	0.460 U	0.0170 U	0.717 U	2.85 U	45.7	133	1.51 I
		03/26/19	213.30	0.552 I	30.3	0.0955 U	0.0981 U	0.590 I	5.96 I	269.06	1.15	0.00575 U	0.717 U	2.85 U	53.5	137	1.02 I
		09/19/19	181.99	0.987	30.5	0.0492 U	0.0276 U	0.711 U	1.33 U	641.87	0.0720 I	0.00575 U	0.717 U	2.85 U	56.7	142	0.911 U
		03/10/20	248.49	1.1	27.5	0.0790 I	0.0276 U	0.711 U	1.33 U	366.83	0.252 I	0.00575 U	0.717 U	2.85 U	39.9	117	1.44 I
L-5 DUP	19.5-29.5	09/24/20	218.01	0.737	26.0	0.352 I	0.0597 U	0.899 I	1.33 U	346.72	0.121 I	0.00575 U	0.717 U	2.85 U	37.4	152	1.36 I
		03/23/21	291.69	0.719	31.9	0.0890 I	0.0597 U	0.711 U	1.33 U	294.55	0.234 I	0.00600 U	0.717 U	2.85 U	39.8	120	1.70 I
		03/23/21	273.97	0.759	31.2	0.0860 I	0.0597 U	0.711 U	1.38 I	263.86	0.325 I	0.00600 U	0.717 U	2.85 U	40.0	129	1.88 I
L-16	32-42	09/27/16	92.1 I	ND	27.6	ND	ND	ND	ND	1600	ND	ND	ND	ND	ND	60	ND
		03/22/17	96.8	0.615 U	23.8	0.364 U	0.258 U	0.696 I	0.914 U	1335.6	0.491 U	0.0183 I	0.281 U	2.35 U	2.5 U	76	0.923 I
		09/25/17	73.4	1.38 U	25.3	0.192 U	0.698 U	0.537 I	0.914 U	1512.0	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	36	0.925 I
		03/28/18	52.5 I	0.5 U	22.6	0.07 U	0.05 U	2.5 U	2.5 U	1130.0	0.5 U	0.1 U	2.5 U	7.5 U	2.5 U	60	5 U
		09/18/18	75.7	0.0499 U	26.5	0.0955 U	0.0981 U	0.735 I	1.33 U	1469.7	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	75	0.911 U
		03/26/19	54.1	0.0499 U	24.3	0.0955 U	0.0981 U	0.854 I	1.33 U	1295.2	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	62	0.911 U
		09/19/19	64.1	0.149 U	27.7	0.0590 I	0.0276 U	0.711 U	1.33 U	1495.2	0.0448 U	0.00575 U	0.717 U	2.85 U	2.5 U	85	0.911 U
		03/10/20	68.9	0.180 I	27.0	0.113 I	0.0276 U	0.724 I	1.33 U	1564.6	0.0510 I	0.00575 U	0.717 U	2.85 U	2.5 U	68	0.911 U
		09/24/20	78.2	0.149 U	27.9	0.0492 U	0.0597 U	1.24 I	1.33 U	1558.2	0.062 I	0.00575 U	0.717 U	2.85 U	2.5 U	64	0.988 I
		03/22/21	72.0	0.149 U	26.3	0.0980 I	0.0597 U	0.711 U	1.33 U	1379.2	0.0560 I	0.00600 U	0.717 U	2.85 U	2.5 U, J(M1)	58	1.08 I

TABLE 3: GROUNDWATER ANALYTICAL RESULTS - AREA II LANDFILL

Facility Name: ST. JOHN'S RIVER POWER PARK

Well ID	Screen Interval (ft bls)	Date Sampled	Aluminum (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Copper (µg/L)	Iron (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Vanadium (µg/L)
		GCTL	200	10	2000	4	5	100	1000	300	15	2	100	50	250	500	49
		NADC	2000	100	20000	40	50	1000	10000	3000	150	20	1000	500	2500	5000	490
L-17	19.2-29.2	09/27/16	834	1.2	74.1	0.072 I	ND	ND	ND	172	ND	ND	ND	ND	121	257	ND
		03/22/17	1004.4	0.615 U	75.4	0.364 U	0.258 U	0.547 I	0.914 U	191.87	0.491 U	0.0144 I	0.281 U	3.39 I	151	266	2.16 I
		09/26/17	797.70	1.38 U	61.4	0.192 U	0.698 U	0.298 U	0.914 U	147.55	0.412 U	0.0170 U	0.281 U	2.35 U	99.9	244	1.36 I
		03/28/18	811.00	0.65 I	61.4	0.07 U	0.05 U	2.5 U	2.5 U	141	0.5 U	0.1 U	2.5 U	7.5 U	102	246	5 U
		09/19/18	1282.1	0.993	74.7	0.0955 U	0.0981 U	0.342 U	1.33 U	257.86	0.460 U	0.0170 U	0.717 U	2.85 U	185	359	1.52 I
		03/26/19	1546.3	2.01	69.3	0.144 I	0.0981 U	0.365 I	1.33 U	459.81	0.460 U	0.00575 U	0.717 U	2.85 U	237	423	1.87 I
		09/18/19	1329.7	2.43	56.1	0.118 I	0.0276 U	0.711 U	1.33 U	458.63	0.0448 U	0.00575 U	0.717 U	2.85 U	153	300	1.76 I
		03/10/20	1498.1	2.68	54.4	0.140 I	0.0276 U	0.711 U	1.33 U	526.1	0.0690 I	0.00575 U	0.717 U	2.85 U	132	288	2.70 I
		09/24/20	2589.9	1.4	57	0.148 I	0.0597 U	1.74 I	1.33 U	468.2	0.197 I	0.00575 U	0.717 U	2.85 U	98.9	258	2.54 I
		03/23/21	2265.3	0.727	75.3	0.123 I	0.0597 U	0.711 U	1.33 U	353.96	0.0448 U	0.00600 U	0.717 U	2.85 U	252	462	1.77 I
L-18	4.7-14.7	09/27/16	5070	7.5	57	ND	0.15	ND	5.4	5040	ND	ND	ND	ND	2140	3470	9.7 I
		03/22/17	7291.6	4.45 I	47.3	0.364 U	1.13 I	0.459 I	0.914 U	4450.7	0.491 U	0.0215 I	0.628 I	2.70 I	1990	1597	3.35 I
		09/26/17	6797.1	5.42	55.7	0.192 U	1.20 I	0.298 U	0.914 U	5255.1	0.412 U	0.0170 U	0.281 U	2.35 U	1890	3178	5.34 I
		03/28/18	7760	2.4	44	0.35 U	0.098 I	2.5 U	2.5 U	5490	0.5 U	0.1 U	2.5 U	7.5 U	2060	3206	5 U
		09/18/18	6072.9	4.41	56.8	0.177 I	0.516 I	0.708 I	1.33 U	4340.8	0.460 U	0.0170 U	0.717 U	2.85 U	2130	3310	0.911 U
		03/20/19	8803.4	2.45	49.8	0.237 I	0.401 I	0.999 I	1.35 I	6019.3	0.460 U	0.00575 U	0.717 U	2.85 U	116	3528	0.911 U
		09/18/19	5310.1	4.58	58.8	0.201 I	0.426 I	0.711 U	1.33 U	5224.1	0.0448 U	0.00575 U	1.74 I	2.85 U	2280	3550	2.14 I
		03/10/20	6473.5	3.17	51.4	0.245 I	0.388 I	0.711 U	1.33 U	4973.3	0.0590 I	0.00575 U	1.89 I	2.85 U	2090	3327	2.65 I
		09/24/20	3763.1	3.9	53.7	0.179 I	0.466 I	0.711 U	1.33 U	5177.0	0.058 I	0.00575 U	0.964 I	2.85 U	2050	3322	3.28 I
		03/22/21	4823.4	1.46	48.9	0.137 I	0.242 I	0.711 U	1.33 U	4044.8	0.0620 I	0.00600 U	0.717 U	2.85 U	2040	3222	2.67 I
L-19	4.7-14.7	09/27/16	128	ND	148	ND	ND	ND	ND	11400	ND	ND	ND	ND	982	1670	ND
		03/22/17	195.61	0.615 U	191.21	0.364 U	0.258 U	0.429 I	1.15 I	15999	0.491 U	0.0145 I	0.281 I	8.27 I	746	531	0.783 U
		09/26/17	526.27	1.38 U	32.9	0.192 U	0.698 U	0.566 I	0.914 U	908.44	0.412 U	0.0170 U	0.281 U	20.0 I	139	287	2.54 I
		03/28/18	188	0.5 U	141	0.14 U	0.05 U	2.5 U	2.5 U	6030.0	0.5 U	0.1 U	2.5 U	8.4 I	882	1520	5 U
		09/18/18	149.18	0.124 I	112.08	0.108 I	0.0981 U	0.342 U	1.39 I	7466.0	0.460 U	0.0170 U	0.717 U	8.74 I	537	993	0.911 I
		03/20/19	174.48	0.169 I	99.6	0.162 I	0.0981 I	0.611 I	1.33 U	4979.4	0.460 U	0.00575 U	0.717 U	7.38 I	606	953	0.911 U
		09/19/19	848.83	0.574	81.9	0.299 I	0.0276 U	1.06 I	1.33 U	5745.4	0.0530 I	0.00575 U	0.897 I	11.6 I	653	1340	2.55 I
		03/10/20	163.35	0.296 I	65.0	0.174 I	0.0430 I	0.711 U	1.97 I	3940.2	0.0930 I	0.00575 U	0.717 U	16.4 I	428	780	1.64 I
		09/24/20	220.42	0.149 U	34.4	0.093 I	0.0597 U	0.711 U	1.33 U	2262.2	0.077 I	0.00575 U	0.717 U	11.5 I	235	444	3.78 I
		03/22/21	219.96	0.158 I	100.02	0.130 I	0.0597 U	0.711 U	1.33 U	4010.3	0.0840 I	0.00600 U	0.717 U	8.76 I	711	1166	4.32 I
L-20	19.2-29.2	09/27/16	93 I	ND	10.3	ND	ND	ND	ND	139	ND	ND	ND	42.0	ND	42	ND
		03/22/17	74.3	0.615 U	9.61 I	0.364 U	0.258 U	0.298 U	0.914 U	137.43	0.491 U	0.0127 I	0.281 U	3.31 I	2.5 U	20	0.783 U
		09/25/17	79.1	1.38 U	9.25 I	0.192 U	0.698 U	0.298 U	0.914 U	138.17	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	39	0.783 U
		03/27/18	121	0.5 U	9.5 I	0.07 U	0.05 U	2.5 U	2.5 U	158	0.5 U	0.1 U	2.5 U	7.5 U	2.5 U	58	5 U
		09/18/18	110.40	0.0499 U	9.07 I	0.0955 U	0.0981 U	0.342 U	1.33 U	149.38	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	54	0.911 U
		03/21/19	163.72	0.0499 U	8.82 I	0.0955 U	0.0981 U	0.455 I	1.33 U	171.88	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	43	0.911 U
		09/18/19	102.95	0.149 U	8.91 I	0.120 I	0.0276 U	0.711 U	1.33 U	136.36	0.122 I	0.00575 U	0.717 U	2.85 U	2.5 U	36	0.911 U
		03/10/20	116.15	0.175 I	8.78 I	0.103 I	0.0276 U	0.711 U	1.33 U	150.84	0.0710 I	0.00575 U	0.717 U	2.85 U	2.5 U	41	0.911 U
		09/24/20	110.95	0.149 U	9.03 I	0.0492 U	0.0597 U	0.711 U	1.33 U	144.73	0.057 I	0.00575 U	0.717 U	2.85 U	2.5 U	39	0.911 U
		03/22/21	148.06	0.149 U	8.75 I	0.0610 I	0.0597 U	0.711 U	1.33 U	145.68	0.0650 I	0.00600 U	0.717 U	2.85 U	2.5 U	39	0.911 U
L-20 DUP	19.2-29.2	03/10/20	119.6	0.155 I	8.59 I	0.0660 I	0.0276 U	0.711 U	1.33 U	147.83	0.0610 I	0.00575 U	0.717 U	2.85 U	2.5 U	38	0.911 U

TABLE 3: GROUNDWATER ANALYTICAL RESULTS - AREA II LANDFILL

Facility Name: ST. JOHN'S RIVER POWER PARK

Well ID	Screen Interval (ft bls)	Date Sampled	Aluminum (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Copper (µg/L)	Iron (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Vanadium (µg/L)
		GCTL	200	10	2000	4	5	100	1000	300	15	2	100	50	250	500	49
		NADC	2000	100	20000	40	50	1000	10000	3000	150	20	1000	500	2500	5000	490
L-21	19.2-29.2	09/27/16	810	ND	59.5	0.39	ND	3 I	ND	2590	ND	ND	ND	ND	ND	58	ND
		03/22/17	1408.2	0.615 U	45.6	0.364 U	0.258 U	2.79 I	0.914 U	2339.5	0.491 U	0.0111 I	0.281 U	2.35 U	2.5 U	23	3.66 I
		09/25/17	986.06	1.38 U	43.6	0.192 U	0.698 U	1.81 I	0.914 U	2169.1	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	65	2.97 I
		03/27/18	422	0.5 U	43.8	0.31	0.05 U	2.5 U	2.5 U	2000	0.5 U	0.1 U	2.5 U	7.5 U	2.5 U	60	5 U
		09/18/18	603.69	0.0700 I	43.4	0.273 I	0.0981 U	1.30 I	1.33 U	2009.8	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	65	1.83 I
		03/20/19	289.41	0.0640 I	48.8	0.332 I	0.0981 U	1.02 I	1.33 U	2746.9	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	57	0.922 I
		09/18/19	438.28	3.89	41.9	0.0492 U	0.0276 U	0.963 I	1.33 U	1832.6	0.0448 U	0.00575 U	0.717 U	2.85 U	2.5 U	106	0.911 U
		03/10/20	1177.4	0.441 I	46.0	0.355 I	0.0276 U	2.18 I	1.33 U	2332.4	0.456 I	0.00575 U	0.717 U	2.85 U	2.5 U	65	2.74 I
		09/24/20	313.04	0.149 U	46.5	0.256 I	0.0597 U	0.888 I	1.33 U	2014.4	0.103 I	0.00575 U	0.717 U	2.85 U	2.5 U	84	1.36 I
		03/22/21	408.97	0.149 U	52.7	0.349 I	0.0597 U	1.04 I	1.33 U	3321.4	0.154 I	0.00600 U	0.717 U	2.85 U	2.5 U	50	1.77 I
L-21 (DUP)	19.2-29.2	03/22/17	1310.8	0.615 U	44.5	0.364 U	0.258 U	2.53	0.914 U	2254.4	0.728	0.0136	0.281 U	2.35 U	2.5 U	32	3.46
		09/25/17	1029.7	1.38 U	43.3	0.192 U	0.698 U	1.86	0.914 U	2185.2	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	77	2.94
		09/27/16	2380	0.64 I	149	0.1	ND	ND	ND	1090	ND	ND	ND	ND	645	9332	ND
L-22	2.7-12.7	03/22/17	2636.5	7.04 I	75.9	0.364 U	0.258 U	0.824 I	0.914 U	1442.9	0.491 U	0.0223 I	0.281 U	3.44 I	475	3806	4.52 I
		09/25/17	1697.6	16.1	3.01 I	0.192 U	0.698 U	0.298 U	0.914 U	974.72	0.412 U	0.0170 U	0.281 U	3.25 I	352	5076	4.39 I
		03/27/18	1310	1	74	0.07 U	0.05 U	2.5 U	2.5 U	682	0.5 U	0.1 U	2.5 U	7.5 U	530	7550	5 U
		09/18/18	1643.1	0.759	77.5	0.0955 U	0.0981 U	0.380 I	1.33 U	1011.8	0.460 U	0.0170 U	0.717 U	4.04 I	455	6230	0.979 I
		03/20/19	2016.3	0.539 I	73.9	0.0955 U	0.0981 U	0.755 I	1.33 U	1131.8	0.460 U	0.00575 U	0.717 U	2.85 U	208	--	1.69 I
		09/18/19	1905.9	1.14	81.4	0.0710 I	0.0276 U	0.912 I	1.33 U	1151.5	0.156 I	0.00575 U	1.17 I	2.85 U	604	7170	6.08 I
		03/10/20	2172.1	0.987	80.0	0.0940 I	0.0276 U	0.976 I	1.33 U	1735.3	0.0760 I	0.00900 I	1.28 I	2.85 U	504	6990	9.75 I
		09/24/20	1639.8	0.582	64.2	0.0820 I	0.0597 U	1.40 I	1.33 U	1241.4	0.0730 I	0.00575 U	0.717 U	2.85 U	523	6340	3.90 I
		03/22/21	1307.9	0.959	19.9 I	0.0690 I	0.0597 U	0.816 I	1.33 U	546.14	0.115 I	0.00600 U	0.717 U	2.85 U	211	2240	6.95 I
		09/27/16	1030	1.3 I	33.5	0.66	ND	4.3 I	ND	1910	0.79 I	ND	ND	ND	ND	77	ND
L-23	19.3-29.3	03/22/17	650.01	0.615 U	31.1	0.364 U	0.258 U	2.40	0.914 U	2207.3	0.491 U	0.0145 I	0.281 U	2.35 U	2.5 U	36	4.01 I
		09/25/17	1812.0	1.38 U	29.2	0.192 U	0.698 U	2.07 I	0.914 U	1751.6	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	44	2.64 I
		03/27/18	674.0	0.77 I	30.8	0.56	0.05 U	2.6 I	2.5 U	1940	0.8 I	0.1 U	2.5 U	7.5 U	2.5 U	68	5 U
		09/18/18	581.22	0.270 I	27.0	0.355 I	0.0981 U	1.51 I	1.33 U	1377.2	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	60	2.28 I
		03/20/19	753.23	0.298 I	29.6	0.380 I	0.0981 I	1.73 I	1.33 U	1642.2	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	55	2.06 I
		09/18/19	655.67	0.231 I	28.3	0.427 I	0.0276 U	1.38 I	1.33 U	1260.7	0.225 I	0.00575 U	0.717 U	2.85 U	2.5 U	59	1.75 I
		09/24/20	1045.0	0.740	33.1	0.514	0.0597 U	3.09 I	1.33 U	2363.9	0.704	0.00575 U	0.717 U	2.85 U	2.5 U	66	4.55 I
		03/22/21	356.44	0.253 I	30.8	0.438 I	0.0597 U	1.09 I	1.33 U	1378.8	0.238 I	0.00600 U	0.717 U	2.85 U	2.5 U	41	1.96 I
L-24	19.2-29.2	09/27/16	4220	1 I	30.3	0.72	ND	ND	ND	1680	ND	ND	ND	ND	619	1010	ND
		03/22/17	4475.1	0.764 I	28.0	0.469 I	0.258 U	0.392 I	0.914 U	1774.2	0.491 U	0.0148 I	0.281 U	2.35 U	627	997	1.65 I
		09/26/17	3717.1	1.38 U	22.9	0.192 U	0.698 U	0.298 U	0.914 U	1288.5	0.412 U	0.0170 U	0.281 U	2.35 U	626	1050	0.783 U
		03/28/18	4130	0.5 U	24.2	1.2	0.05 U	2.5 U	2.5 U	1950	0.5 U	0.1 U	2.5 U	7.5 U	497	803	5 U
		09/18/18	3788.8	0.387 I	22.8	0.547 I	0.0981 U	0.342 U	1.33 U	1455.8	0.460 U	0.0170 U	0.717 U	2.85 U	587	947	0.911 U
		03/20/19	3735.3	0.329 I	21.7	0.811	0.0981 U	0.342 U	1.33 U	1878.6	0.460 U	0.00575 U	0.717 U	2.85 U	388	638	0.911 U
		09/18/19	2829.0	0.286 I	21.9	0.623	0.0276 U	0.711 U	1.33 U	1276.0	0.0448 U	0.00575 U	0.717 U	2.85 U	371	596	0.911 U
		03/09/20	2900.9	0.460 I	23.1	0.839	0.0276 U	0.711 U	1.33 U	1506.5	0.0448 U	0.00575 U	0.717 U	2.85 U	295	505	1.04 I
		09/24/20	2550.7	0.272 I	23.9	0.47 I	0.0597 U	0.711 U	1.33 U	1126.7	0.0550 I	0.00575 U	0.717 U	2.85 U	345	596	0.911 U
		03/22/21	2911.6	0.311 I	24.4	0.598	0.0597 U	0.711 U	1.33 U	1160.8	0.0448 U	0.00600 U	0.717 U	2.85 U	272	690	1.29 I

TABLE 3: GROUNDWATER ANALYTICAL RESULTS - AREA II LANDFILL

Facility Name: ST. JOHN'S RIVER POWER PARK

Well ID	Screen Interval (ft bls)	Date Sampled	Aluminum (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Copper (µg/L)	Iron (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Vanadium (µg/L)
		GCTL	200	10	2000	4	5	100	1000	300	15	2	100	50	250	500	49
		NADC	2000	100	20000	40	50	1000	10000	3000	150	20	1000	500	2500	5000	490
L-25	19.2-29.2	09/27/16	140	ND	31.9	0.2	ND	ND	ND	624	ND	ND	ND	ND	ND	38	ND
		03/22/17	88.2	0.615 U	30.4	0.364 U	0.258 U	0.45	0.914 U	598.53	0.491 U	0.0136 I	0.281 U	2.35 U	2.5 U	29	1.53
		09/25/17	248.99	1.38 U	28.9	0.192 U	0.698 U	0.298 U	0.914 U	597.94	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	37	0.783 U
		03/27/18	51.1 I	0.5 U	28.5	0.19	0.05 U	2.5 U	2.5 I	496	0.5 U	0.1 U	2.5 U	7.5 U	2.5 U	64	5 U
		09/18/18	160.23	0.0500 I	29.1	0.156 I	0.0981 U	0.342 U	1.33 U	642.37	0.460 U	0.0170 U	0.717 U	2.85 U	4.2 I	59	0.940 I
		03/21/19	84.3	0.0499 U	28.9	0.165 I	0.0981 U	0.380 I	1.33 U	522.96	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	38	0.911 U
		09/18/19	120.52	0.149 U	28.9	0.204 I	0.0276 U	0.711 U	1.33 U	581.37	0.0620 I	0.00575 U	0.717 U	2.85 U	2.5 U	41	0.911 U
		03/10/20	87.2	0.226 I	29.1	0.248 I	0.0276 U	0.711 U	1.33 U	532.98	0.0820 I	0.00575 U	0.717 U	2.85 U	2.5 U	39	0.911 U
		09/24/20	111.53	0.149 U	28.5	0.203 I	0.0597 U	1.54 I	1.33 U	599.2	0.0660 I	0.00575 U	0.717 U	2.85 U	2.5 U	46	0.911 U
		03/22/21	97.7	0.149 U	29.5	0.168 U	0.0597 U	0.711 U	1.33 U	531.79	0.0740 I	0.00600 U	0.717 U	2.85 U	2.5 U	37	0.911 U
L-26	5.4-15.4	09/27/16	78.3 I	0.74 I	29.4	ND	ND	ND	ND	93.1	ND	ND	ND	ND	551	1025	ND
		03/22/17	173.99	1.45 I	26.7	0.364 U	0.258 U	0.660 I	0.914 U	151.64	0.491 U	0.0153 I	0.788 I	2.35 U	559	925	2.47 I
		09/26/17	224.74	1.38 U	6.36 I	0.192 U	0.698 U	0.323 I	0.914 U	58.0	0.412 U	0.0170 U	0.281 U	2.35 U	41.3	192	4.89 I
		03/28/18	79.2 I	2.7	29	0.07 UJ	0.05 U	2.5 U	2.5 U	78.3	0.5 U	0.1 U	2.5 U	7.5 U	504	947	5 U
		09/18/18	137.47	2.12	10.6 I	0.0955 U	0.0981 U	0.342 U	1.33 U	181.25	0.460 U	0.0170 U	0.717 U	2.85 U	128	305	2.03 I
		03/21/19	149.04	2.12	14.2 I	0.0955 U	0.0981 U	0.342 U	1.33 U	113.2	0.460 U	0.00575 U	0.717 U	2.85 U	255	462	1.37 I
		09/18/19	42.5	2.59	28.9	0.0492 U	0.0276 U	0.711 U	1.33 U	145.99	0.0448 U	0.00575 U	0.717 U	2.85 U	482	829	0.911 U
		03/09/20	280.75	3.10	9.06 I	0.0510 I	0.0276 U	0.711 U	1.33 U	447.83	0.147 I	0.00575 U	0.717 U	2.85 U	101	296	5.08 I
		09/24/20	178.40	2.46	5.18 I	0.0492 U	0.0597 U	0.711 U	1.33 U	132.68	0.0710 I	0.00575 U	0.717 U	2.85 U	22.5	196	3.83 I
		03/22/21	84.0	2.03	20.4	0.0492 U	0.0597 U	0.711 U	1.33 U	230.51	0.0510 I	0.00600 U	0.717 U	2.85 U	366	646	2.96 I
L-26 DUP	5.4-15.4	03/21/19	180.43	2.29	14.5 I	0.0955 U	0.0981 U	0.398 I	1.33 U	173.15	0.460 U	0.00575 U	0.717 U	2.85 U	261	478	1.64 I

Notes:

1. NS indicates Not Sampled.
2. Dup indicates duplicate.
3. ft bls = feet below land surface.
4. Results highlighted in yellow indicate an exceedance of the groundwater cleanup target level (GCTL) pursuant to Chapter 62-777, Florida Administrative Code (FAC).
5. Results highlighted in orange indicate an exceedance of the Natural Attenuation Default Source Concentrations (NADCs) specified in Table V of Chapter 62-777, FAC.
6. µg/L = micrograms per liter.
7. mg/L = milligrams per liter.
8. U = indicates the constituent was not detected above the reported value.
9. I = indicates the constituent was detected between the method detection limit (MDL) and the practical quantitation limit (PQL).
10. ND indicates analyte Not Detected.

TABLE 4: GROUNDWATER ANALYTICAL RESULTS - AREA B LANDFILL

Facility Name: ST. JOHNS RIVER POWER PARK

Well ID	Screen Interval (ft-bls)	Date Sampled	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium	Chloride	Chromium	Copper	Iron	Lead	Mercury	Nickel	Selenium	Sulfate	Total Dissolved Solids	Vanadium	Radium-226	Radium-228	Total Radium	
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(µg/L)	(pCi/L)	(pCi/L)	(pCi/L)
			GCTL	200	10	2000	4	1400	5	250	100	1000	300	15	2	100	50	250	500	49	---	---	5
NADC	2000	100	20000	40	14000	50	2500	1000	10000	3000	150	20	1000	500	2500	5000	490	---	---	---			
MW-1	42.44-52.44	09/21/16	142	ND	10.4	ND	NS	ND	NS	ND	ND	771	ND	ND	ND	ND	6	69	ND	NS	NS	NS	
		03/16/17	138.61	0.615 U	14.2 I	0.364 U	NS	0.258 U	NS	0.298 U	0.914 U	971.77	0.491 U	0.00500 U	0.281 U	2.35 U	6.9	72	0.783 U	NS	NS	NS	
		03/26/18	88 I	0.5 U	14.5	0.07 U	NS	0.05 U	NS	2.5 U	2.5 U	1030	0.5 U	0.1 U	2.5 U	7.5 U	6.5	80 Q	NS	NS	NS		
		09/13/18	140.23	0.0499 U	16.3 I	0.0955 U	NS	0.0981 U	NS	0.342 U	1.33 U	1159.5	0.460 U	0.0170 U	0.717 U	2.85 U	6.9	86	0.911 U	NS	NS	NS	
		03/19/19	120.08	0.0499 U	17.8 I	0.0955 U	NS	0.0981 U	NS	0.342 U	1.33 U	1265.9	0.460 U	0.00575 U	0.717 U	2.85 U	6.3	78	0.911 U	NS	NS	NS	
		09/17/19	111.42	0.149 U	14.7 I	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1021.4	0.0760 I	0.00575 U	0.717 U	2.85 U	6.0	87	0.911 U	NS	NS	NS	
		03/11/20	128.65	0.149 U	17.7 I	0.0850 I	NS	0.0276 U	NS	0.711 U	1.33 U	1294.0	0.0448 U	0.00575 U	0.717 U	2.85 U	6.4	93	0.911 U	NS	NS	NS	
		09/22/20	105.35	0.149 U	18.3 I	0.067 I	NS	0.0597 U	NS	0.711 U	1.33 U	1219.3	0.0448 U	0.00575 U	0.717 U	2.85 U	7.1	102	0.911 U	NS	NS	NS	
		03/18/21	118.35	0.149 U	20.5	0.0600 I	NS	0.0597 U	NS	0.711 U	1.33 U	1407.4	0.123 I	0.00600 U	0.717 U	2.85 U	6.5	88	0.911 U	NS	NS	NS	
MW-1 (DUP)	42.44-52.44	03/16/17	133.88	0.615 U	14.1	0.364 U	NS	0.258 U	NS	0.298 U	0.914 U	971.51	0.491 U	0.00500 U	0.281 U	2.35 U	6.7	70	0.783 U	NS	NS	NS	
MW-2	42.37-52.37	09/21/16	61 I	ND	11.5	ND	NS	ND	NS	ND	ND	1760	ND	ND	ND	ND	ND	136	ND	NS	NS	NS	
		03/16/17	94.6	0.615 U	12.0 I	0.364 U	NS	0.258 U	NS	0.317 I	0.914 U	1576.1	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	118	0.923 I	NS	NS	NS	
		10/12/17	73.3	1.38 U	10.9 I	0.192 U	NS	0.698 U	NS	0.472 I	1.13 I	1390.5	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	117	0.824 I	NS	NS	NS	
		03/26/18	50 U	0.5 U	10.6	0.07 U	NS	0.05 U	NS	2.5 U	2.5 U	1490	0.5 U	0.1 U	2.5 U	7.5 U	2.5 U	188 Q	5 U	NS	NS	NS	
		09/13/18	172.98	0.0499 U	12.4 I	0.0955 U	NS	0.0981 U	NS	0.366 I	1.33 U	1651.7	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	107	0.947 I	NS	NS	NS	
		03/19/19	110.87	0.0499 U	10.7 I	0.0955 U	NS	0.0981 U	NS	0.662 I	1.33 U	1340.7	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	110	0.919 I	NS	NS	NS	
		09/17/19	75.6	0.149 U	10.6 I	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1478.4	0.225 I	0.00575 U	0.717 U	2.85 U	2.5 U	133	0.911 U	NS	NS	NS	
		03/11/20	64.3	0.149 U	10.2 I	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1371.8	0.371 I	0.00575 U	0.717 U	2.85 U	2.5 U	134	0.911 U	NS	NS	NS	
		09/22/20	48.2	0.149 U	9.47 I	0.0492 U	NS	0.0597 U	NS	0.711 U	1.33 U	1229.1	0.0448 U	0.00575 U	0.717 U	2.85 U	2.5 U	329	0.911 U	NS	NS	NS	
MW-2 (DUP)	42.37-52.37	03/18/21	50.3	0.149 U	9.42 I	0.0830 I	NS	0.0597 U	NS	0.711 U	1.33 U	1254.7	0.133 I	0.00600 U	0.717 U	2.85 U	2.5 U	104	0.911 U	NS	NS	NS	
MW-3	44.28-54.28	10/12/17	76.4	1.38 U	11.1	0.192 U	NS	0.698 U	NS	0.436	1.53	1429.9	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	117	0.849	NS	NS	NS	
		09/21/16	ND	ND	29	0.16	NS	ND	NS	ND	ND	1110	ND	ND	ND	ND	5	78	ND	NS	NS	NS	
		03/16/17	59.4	0.615 U	29.7	0.364 U	NS	0.258 U	NS	0.298 U	0.914 U	1097.1	0.491 U	0.00500 U	0.281 U	2.35 U	5.8	52	0.783 U	NS	NS	NS	
		10/11/17	52.5	1.38 U	29.4	0.192 U	NS	0.698 U	NS	0.356 I	0.914 U	1066.7	0.412 U	0.0170 U	0.281 U	2.35 U	5.3	53	0.783 U	NS	NS	NS	
		03/27/18	50 U	0.5 U	30.1	0.07 U	NS	0.05 U	NS	2.5 U	2.5 U	1120	0.5 U	0.1 I	2.5 U	7.5 U	5.1	55	5 U	NS	NS	NS	
		09/18/18	38.5	0.0499 U	28.9	0.160 I	NS	0.0981 U	NS	0.342 U	1.33 U	972.28	0.460 U	0.0170 U	0.717 U	2.85 U	5.1	51	0.911 U	NS	NS	NS	
		03/19/19	45.1	0.0499 U	34.6	0.190 I	NS	0.0981 U	NS	0.354 I	1.33 U	1104.6	0.460 U	0.00575 U	0.717 U	2.85 U	4.7 I	57	0.911 U	NS	NS	NS	
		09/17/19	22.7	0.149 U	34.1	0.190 I	NS	0.0276 U	NS	0.711 U	1.33 U	1084.2	0.0448 U	0.00575 U	0.717 U	2.85 U	5.2	60	0.911 U	NS	NS	NS	
		03/11/20	24.9	0.149 U	39.1	0.262 I	NS	0.0276 U	NS	0.711 U	1.33 U	1232.5	0.0760 I	0.00575 U	0.717 U	2.85 U	4.9 I	70	0.911 U	NS	NS	NS	
MW-3 Dup	44.28-54.28	09/23/20	22.8	0.149 U	38.5	0.276 I	NS	0.0597 U	NS	0.711 U	1.33 U	1188.2	0.0690 I	0.00575 U	0.717 U	2.85 U	5.4	98	0.911 U	NS	NS	NS	
MW-4	36.84-46.84	03/19/21	34.3	0.149 U	53.0	0.335 I	NS	0.0597 U	NS	0.711 U	1.33 U	1685.7	0.118 I	0.00600 U	0.717 U	2.85 U	8.6	64	0.911 U	NS	NS	NS	
		03/27/18	50 U	0.5 U	29.6	0.22	NS	0.05 U	NS	2.5 U	2.5 U	1080	0.5 U	0.1 U	2.5 U	7.5 U	5.1	3 U	5 U	NS	NS	NS	
		09/21/16	ND	ND	20.3	ND	NS	ND	NS	ND	ND	1490	ND	ND	ND	ND	ND	270	ND	NS	NS	NS	
		03/16/17	1.26 U	0.615 U	19.3 I	0.364 U	NS	0.258 U	NS	0.422 I	0.914 U	1371.9	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	270	1.46 I	NS	NS	NS	
		10/11/17	31.2	1.38 U	18.2 I	0.192 U	NS	0.698 U	NS	0.722 I	0.971 I	1281.4	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	265	1.27 I	NS	NS	NS	
		03/27/18	50 U	0.5 U	18.2	0.07 U	NS	0.05 U	NS	2.5 U	2.5 U	1290	0.5 U	2	2.5 U	7.5 U	2.5 U	250	5 U	NS	NS	NS	
		09/18/18	28.5	0.0499 U	17.0 I	0.0955 U	NS	0.0981 U	NS	0.579 I	1.33 U	1212.9	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	240	1.12 I	NS	NS	NS	
		03/19/19	22.9	0.0499 U	15.6 I	0.0955 U	NS	0.0981 U	NS	0.688 I	1.33 U	1043.8	0.460 U	0.00700 I	0.717 U	2.85 U	2.5 U	224	1.29 I	NS	NS	NS	
		09/17/19	12.4 I	0.149 U	14.3 I	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	995.19	0.0700 I	0.00575 U	0.717 U	2.85 U	2.5 U	217	0.911 U	NS	NS	NS	
MW-4 Dup	36.84-46.84	03/11/20	14.7 I	0.149 U	15.5 I	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1080.6	0.0710 I	0.00575 U	0.717 U	2.85 U	2.5 U	233	1.19 I	NS	NS	NS	
MW-5	33.31-43.31	09/23/20	25.3	0.149 U	14.0 I	0.0492 U	NS	0.0597 U	NS	0.711 U	1.33 U	932.40	0.075 I	0.00575 U	0.717 U	2.85 U	2.5 U	244	1.18 I	NS	NS	NS	
		03/19/21	13.8 I	0.149 U	15.6 I	0.0530 I	NS	0.0597 U	NS	0.711 U	1.33 U	998.02	0.170 I	0.00600 U	0.717 U	2.85 U	3.0 I	208	1.44 I	NS	NS	NS	
		09/23/20	24.5	0.149 U	38.4	0.171 I	NS	0.0597 U	NS	0.711 U	1.33 U	1208.90	0.0690 I	0.00575 U	0.717 U	2.85 U	2.5 U	72 V	0.911 U	NS	NS	NS	
		09/21/16	583	1.2	23.5	0.45	NS	ND	NS	ND	ND	2090	0.54 I	ND	ND	ND	ND	72	ND	NS	NS	NS	
		03/16/17	1527.1	0.615 U	26.7	0.429 I	NS	0.258 U	NS	3.37 I	0.914 U	2239.5	0.515 I	0.00500 U	0.37 I	2.35 U	2.5 U	64	5.42 I	NS	NS	NS	
		10/11/17	4883.0	1.38 U	30.8	0.386 I	NS	0.698 U	NS	5.04 I	1.58 I	3006.4	0.412 U	0.0170 U	0.925 I	2.35 U	2.5 U	66	7.31 I	NS	NS	NS	
		03/27/18	224.00	0.5 U	23.3	0.43	NS	0.05 U	NS	2.5 U	2.5 U	1550.0	0.5 U	0.31	2.5 U	7.5 U	2.5 U	65	5 U	NS	NS	NS	
		09/18/18	365.79	0.119 I	22.9	0.259 I	NS	0.0981 U	NS	0.723 I	1.33 U	1253.0	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	55	1.25 I	NS	NS	NS	
		03/19/19	302.72	0.190 I	24.8	0.381 I	NS	0.0981 U	NS	0.962 I	1.33 U	1497.2	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	67	1.21 I	NS	NS	NS	
MW-5 DUP	33.31-43.31	09/17/19	189.28	0.149 U	25.2	0.346 I	NS	0.0276 U	NS	0.711 U	1.33 U	1322.2	0.105 I	0.00575 U	0.717 U	2.85 U	2.8 I	65	0.911 U	NS	NS	NS	
MW-5</																							

TABLE 4: GROUNDWATER ANALYTICAL RESULTS - AREA B LANDFILL

Facility Name: ST. JOHNS RIVER POWER PARK

Well ID	Screen Interval (ft-bls)	Date Sampled	Aluminum	Arsenic	Barium	Beryllium	Boron	Cadmium	Chloride	Chromium	Copper	Iron	Lead	Mercury	Nickel	Selenium	Sulfate	Total Dissolved Solids	Vanadium	Radium-226	Radium-228	Total Radium	
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	(pCi/L)	(pCi/L)	(pCi/L)
			GCTL	200	10	2000	4	1400	5	250	100	1000	300	15	2	100	50	250	500	49	---	---	5
NADC	2000	100	20000	40	14000	50	2500	1000	10000	3000	150	20	1000	500	2500	5000	490	---	---	---			
MW-6	43.50-53.50	09/21/16	661	1.3	39.5	ND	NS	NS	NS	3.7 I	7.2	2730	0.88 I	ND	ND	ND	284	ND	NS	NS	NS		
		03/16/17	182.67	0.615 U	35.9	0.364 U	NS	0.258 U	NS	0.732 I	1.20 I	1463.3	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	325	1.64 I	NS	NS	NS	
		10/12/17	113.71	1.38 U	37.3	0.192 U	NS	0.698 U	NS	0.613 I	1.56 I	1467.87	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	317	1.27 I	NS	NS	NS	
		03/27/18	50 U	0.5 U	36	0.07 U	NS	0.05 U	NS	2.5 U	2.5 U	1340	0.5 U	1.4	2.5 U	7.5 U	2.5 U	310	5 U	NS	NS	NS	
		09/18/18	55.3	0.0499 U	38.3	0.0955 U	NS	0.0981 U	NS	0.431 I	1.39 I	1427.1	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	311	0.911 U	NS	NS	NS	
		03/19/19	47.9	0.0499 U	36.7	0.0955 U	NS	0.0981 U	NS	0.515 I	1.33 U	1377.0	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	308	0.911 U	NS	NS	NS	
		09/17/19	49.8	0.149 U	35.5	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1356.9	0.0460 I	0.00575 U	0.717 U	2.85 U	2.5 U	327	0.911 U	NS	NS	NS	
		03/11/20	30.7	0.149 U	37.6	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1461.9	0.0610 I	0.00575 U	0.717 U	2.85 U	2.5 U	337	1.03 I	NS	NS	NS	
		09/22/20	76.3	0.149 U	35.5	0.0492 U	NS	0.0597 U	NS	0.711 U	1.33 U	1284.1	0.0448 U	0.00575 U	0.717 U	2.85 U	2.5 U	409	0.911 U	NS	NS	NS	
		03/19/21	20.2	0.149 U	38.2	0.0680 I	NS	0.0597 U	NS	0.711 U	1.33 U	1432.9	0.130 I	0.00600 U	0.717 U	2.85 U	2.5 U	314	1.03 I	NS	NS	NS	
MW-6 Dup	43.50-53.50	03/19/19	48.6	0.0499 U	37.0	0.0955 U	NS	0.0981 U	NS	0.492 I	1.33 U	1414.4	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	308.0	0.927 I	NS	NS	NS	
MW-7	44.09-54.09	09/21/16	ND	ND	27.5	ND	NS	ND	NS	ND	ND	1420	ND	ND	ND	ND	278.0	ND	NS	NS	NS		
		03/16/17	1.26 U	0.615 U	25.3	0.364 U	NS	0.258 U	NS	0.298 U	0.914 U	1258.8	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	266	1.06 I	NS	NS	NS	
		10/12/17	4.39 I	1.38 U	24.7	0.192 U	NS	0.698 U	NS	0.298 U	0.914 U	1217.8	0.412 U	0.0170 U	0.282 I	2.35 U	2.5 U	258	0.786 I	NS	NS	NS	
		03/27/18	50 U	0.5 U	25.5	0.07 U	NS	0.05 U	NS	2.5 U	2.5 U	1260	0.5 U	2.9	2.5 U	7.5 U	2.5 U	262	5 U	NS	NS	NS	
		09/13/18	3.91 U	0.0499 U	25.3	0.0955 U	NS	0.0981 U	NS	0.342 U	2.06 I	1228.6	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	295	0.911 U	NS	NS	NS	
		03/19/19	3.91 U	0.0499 U	24.8	0.0955 U	NS	0.0981 U	NS	0.342 U	1.33 U	1210.7	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	260	0.911 U	NS	NS	NS	
		09/17/19	2.40 I	0.149 U	23.0	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1114.5	0.0450 I	0.00575 U	0.717 U	2.85 U	2.5 U	240	0.911 U	NS	NS	NS	
		03/11/20	2.27 I	0.149 U	22.7	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1095.1	0.0590 I	0.00575 U	0.717 U	3.08 I	2.5 U	244	0.911 U	NS	NS	NS	
		09/22/20	64.2	0.149 U	22.0	0.0492 U	NS	0.0597 U	NS	0.711 U	1.33 U	1052.3	0.0448 U	0.00575 U	0.717 U	2.85 U	2.5 U	376	0.911 U	NS	NS	NS	
		03/19/21	5.00 I	0.149 U	22.1	0.0492 U	NS	0.0597 U	NS	0.711 U	1.33 U	1012.7	0.116 I	0.00600 U	0.717 U	2.85 U	2.7 I	216	0.911 U	NS	NS	NS	
MW-7 DUP	44.09-54.09	03/11/20	3.12 I	0.149 U	22.3	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1012.3	0.0540 I	0.00575 U	0.717 U	2.85 U	2.5 U	239	0.911 U	NS	NS	NS	
MW-8	43.51-53.51	09/21/16	58.5 I	ND	15.8	0.21	NS	ND	NS	ND	ND	783	ND	ND	ND	ND	3.8 I	66	ND	NS	NS	NS	
		03/16/17	259.28	0.615 U	15.7 I	0.364 U	NS	0.258 U	NS	0.609 I	0.914 U	815.53	0.491 U	0.00500 U	0.281 U	2.35 U	4.4 I	25	1.29 I	NS	NS	NS	
		10/12/17	129.31	1.38 U	16.2 I	0.192 U	NS	0.698 U	NS	0.596 I	0.962 I	785.39	0.412 U	0.0170 U	0.372 I	2.35 U	4.2 I	50	0.994 I	NS	NS	NS	
		03/27/18	165	0.5 U	17.4	0.2	NS	0.05 U	NS	2.5 U	2.5 U	887	0.5 U	0.1 U	2.5 U	7.5 U	4 I	80 I	5 U	NS	NS	NS	
		09/13/18	108.66	0.0499 U	16.5 I	0.218 I	NS	0.0981 U	NS	0.342 U	1.33 U	787.31	0.460 U	0.0170 U	0.717 U	2.85 U	3.8 I	60	1.04 I	NS	NS	NS	
		03/19/19	36.4	0.0499 U	16.3 I	0.217 I	NS	0.0981 U	NS	0.445 I	1.33 U	719.18	0.460 U	0.00575 U	0.717 U	2.85 U	3.5 I	54	0.924 I	NS	NS	NS	
		09/17/19	96.3	0.149 U	17.5 I	0.322 I	NS	0.0276 U	NS	0.711 U	1.33 U	850.53	0.0550 I	0.00575 U	0.717 U	2.85 U	4.0 I	62	0.911 U	NS	NS	NS	
		03/11/20	112.23	0.149 U	18.3 I	0.240 I	NS	0.0276 U	NS	0.711 U	1.33 U	894.18	0.0630 I	0.00575 U	0.717 U	2.85 U	3.7 I	49	0.911 U	NS	NS	NS	
		08/18/20	228.90	0.149 U	18.9 I	0.292 U	NS	24.2	37.4	0.711 U	NS	988.06	0.118 I	NS	NS	0.867 U	14.3	72	NS	324	1.14	1.46	
		09/22/20	52.2	0.149 U	18.1 I	0.229 I	NS	0.0597 U	NS	0.72 I	1.33 U	819.62	0.0448 U	0.00575 U	0.717 U	2.85 U	4.0 I	159	0.911 U	NS	NS	NS	
MW-8 DUP	43.51-53.51	03/18/21	39.0	0.149 U	29.3	0.177 I	NS	0.0597 U	NS	0.711 U	1.33 U	1561.0	0.104 I	0.00600 U	0.717 U	2.85 U	2.5 U	66	0.911 U	NS	NS	NS	
MW-8 DUP	43.51-53.51	03/11/20	120.89	0.149 U	18.9 I	0.266 I	NS	0.0276 U	NS	0.711 U	1.33 U	917.35	0.0810 I	0.00575 U	0.717 U	2.85 U	3.4 I	49	0.911 U	NS	NS	NS	
MW-9	40.89-50.89	09/21/16	92.2 I	ND	37.2	0.22	NS	ND	NS	ND	ND	918	ND	ND	ND	ND	ND	98	ND	NS	NS	NS	
		03/16/17	74.2	0.615 U	33.8	0.364 U	NS	0.258 U	NS	0.517 I	0.914 U	799.58	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	112	1.23 I	NS	NS	NS	
		10/12/17	163.55	1.38 U	34.6	0.192 U	NS	0.698 U	NS	0.832 I	1.14 I	860.82	0.412 U	0.0170 U	0.842 I	2.35 U	2.5 U	88	1.41 I	NS	NS	NS	
		03/27/18	123	0.5 U	37.6	0.17	NS	0.05 U	NS	2.5 U	2.5 U	929	0.5 U	0.1 U	2.5 U	7.5 U	2.5 U	102	5 U	NS	NS	NS	
		09/13/18	98.7	0.0499 U	37.8	0.182 I	NS	0.0981 U	NS	0.342 U	1.33 U	911.23	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	151	1.42 I	NS	NS	NS	
		03/19/19	53.4	0.0499 U	38.9	0.173 I	NS	0.0981 U	NS	0.447 I	1.33 U	922.88	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	92	1.09 I	NS	NS	NS	
		09/17/19	64.2	0.149 U	32.6	0.166 I	NS	0.0276 U	NS	0.711 U	1.33 U	787.05	0.0448 U	0.00575 U	0.717 U	2.85 U	2.5 U	104	0.911 U	NS	NS	NS	
		03/11/20	159.03	0.149 U	36.6	0.183 I	NS	0.0276 U	NS	0.711 U	1.33 U	884.97	0.0670 I	0.00575 U	0.717 U	2.85 U	2.5 U	107	1.21 I	NS	NS	NS	
		08/18/20	858.92	0.899	34.4	0.318 I	26.2	NS	21.5	2.25 I	NS	1338.2	0.524	NS	NS	0.867 U	2.5 U	72	NS	0.438	1.28	1.71	
		09/22/20	507.99	0.426 I	35.7	0.267 I	NS	0.0597 U	NS	1.51 I	1.33 U	1054.7	0.199 I	0.00575 U	0.717 U	2.85 U	2.5 U	183 J4	1.98 I	NS	NS	NS	
MW-9 DUP	40.89-50.89	03/19/21	191.51	0.245 I	36.5	0.208 I	NS	0.0597 U	NS	0.711 U	1.33 U	1048.8	0.246 I	0.00600 U	0.717 U	2.85 U	2.5 U	110	1.34 I	NS	NS	NS	
MW-9 DUP	40.89-50.89	03/19/21	211.02	0.224 I	39.2	0.220 I	NS	0.0597 U	NS	0.711 U	1.33 U	1138.7	0.235 I	0.00600 U	0.717 U	2.85 U	2.5 U	116	1.47 I	NS	NS	NS	
MW-20	42.00-52.00	09/21/16	186	ND	94.9	0.52	NS	ND	NS	ND	ND	1020	ND	ND	ND	ND	26.3	98	ND	NS	NS	NS	
		03/16/17	238.55	0.615 U	134.14	0.579 I	NS	0.258 U	NS	0.298 U	0.914 U	1088.0	0.491 U	0.00500 U	0.281 U	2.35 U	76.3	172	1.36 I	NS	NS	NS	
		10/11/17	219.19	1.38 U	105.28	0.246 I	NS	0.698 U	NS	0.298 U	1.19 I	890.99	0.412 U	0.0170 U	0.374 I	2.35 U	44.4	145	1.41 I	NS	NS	NS	
		03/tr																					

TABLE 4: GROUNDWATER ANALYTICAL RESULTS - AREA B LANDFILL

Facility Name: ST. JOHNS RIVER POWER PARK

Well ID	Screen Interval (ft-bls)	Date Sampled	Aluminum (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Boron (µg/L)	Cadmium (µg/L)	Chloride (mg/L)	Chromium (µg/L)	Copper (µg/L)	Iron (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Vanadium (µg/L)	Radium-226 (pCi/L)	Radium-228 (pCi/L)	Total Radium (pCi/L)
		GCTL	200	10	2000	4	1400	5	250	100	1000	300	15	2	100	50	250	500	49	---	---	5
		NADC	2000	100	20000	40	14000	50	2500	1000	10000	3000	150	20	1000	500	2500	5000	490	---	---	---
MW-A1	43.43-53.43	09/21/16	58.9 I	ND	18.4	ND	NS	ND	NS	ND	ND	355	ND	ND	ND	ND	ND	92	ND	NS	NS	NS
		03/16/17	46.0	0.615 U	18.2 I	0.364 U	NS	0.258 U	NS	0.630 I	0.914 U	325.29	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	90	1.94 I	NS	NS	NS
		10/12/17	58.0	1.38 U	18.8 I	0.192 U	NS	0.698 U	NS	0.802 I	1.07 I	330.38	0.579 I	0.0170 U	0.589 I	2.35 U	2.5 U	92	1.8 I	NS	NS	NS
		03/26/18	71.6 I	0.5 U	18.9	0.07 U	NS	0.05 U	NS	2.5 U	2.5 U	380	0.5 U	0.1 U	2.5 U	7.5 U	2.5 U	80 Q	5 U	NS	NS	NS
		09/18/18	85.0	0.0499 U	17.9 I	0.127 I	NS	0.0981 U	NS	0.440 I	1.33 U	326.91	0.460 U	0.0170 U	0.717 U	2.85 U	2.6 I	75	1.93 I	NS	NS	NS
		03/19/19	63.9	0.0499 U	17.3 I	0.0955 U	NS	0.0981 U	NS	0.758 I	1.33 U	314.38	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	88	1.39 I	NS	NS	NS
		09/18/19	61.2	0.149 U	19.0 I	0.0180 I	NS	0.0276 U	NS	0.711 U	1.33 U	338.66	0.0448 U	0.00575 U	0.717 U	2.85 U	2.5 U	84	1.19 I	NS	NS	NS
		03/11/20	53.60	0.149 U	19.0 I	0.112 I	NS	0.0276 U	NS	0.711 U	1.33 U	331.86	0.0670 I	0.00575 U	0.717 U	2.85 U	2.5 U	87	1.51 I	NS	NS	NS
		09/23/20	82.7	0.149 U	16.6 I	0.0550 I	NS	0.0597 U	NS	0.795 I	1.33 U	290.83	0.0460 I	0.00575 U	0.717 U	2.85 U	2.5 U	134	1.67 I	NS	NS	NS
		03/19/21	105.32	0.149 U	16.4 I	0.111 I	NS	0.0597 U	NS	0.711 U	1.33 U	324.78	0.118 I	0.00600 U	0.717 U	2.85 U	2.5 U	68	1.48 I	NS	NS	NS
MW-B1	33.34-43.34	09/21/16	182	ND	41	0.1000	NS	ND	NS	ND	ND	681	ND	ND	ND	ND	7	78	ND	NS	NS	NS
		03/16/17	166.66	0.615 U	41.7	0.364 U	NS	0.258 U	NS	0.298 U	0.914 U	650.71	0.491 U	0.00500 U	0.281 U	2.35 U	7.1	82	0.783 U	NS	NS	NS
		10/12/17	157.90	1.38 U	43.3	0.192 U	NS	0.698 U	NS	0.298 U	1.06 I	661.23	0.412 U	0.0170 U	0.542 I	2.35 U	6.8	87	0.783 U	NS	NS	NS
		03/26/18	171.00	0.5 U	46	0.07 U	NS	0.05 U	NS	2.5 U	2.5 U	786	0.5 U	0.1 U	2.5 U	7.5 U	6.9	95 Q	5 U	NS	NS	NS
		09/18/18	161.46	0.110 I	45.5	0.119 I	NS	0.0981 I	NS	0.342 U	1.33 U	709.41	0.460 U	0.0170 U	0.717 U	2.85 U	7.1	76	0.911 U	NS	NS	NS
		03/19/19	164.46	0.120 I	46.1	0.126 I	NS	0.0981 U	NS	0.342 U	1.33 U	709.69	0.460 U	0.00575 U	0.717 U	2.85 U	6.9	97	0.911 U	NS	NS	NS
		09/18/19	161.88	0.149 U	48.5	0.136 I	NS	0.0276 U	NS	0.711 U	1.33 U	758.29	0.0448 U	0.00575 U	0.717 U	2.85 U	6.7	87	0.911 U	NS	NS	NS
		03/11/20	174.02	0.149 U	49.6	0.155 I	NS	0.0276 U	NS	0.711 U	1.33 U	970.12	0.0448 U	0.00575 U	0.717 U	2.85 U	6.3	83	0.911 U	NS	NS	NS
		09/23/20	183.35	0.149 U	49.3	0.111 I	NS	0.0597 U	NS	9.95 I	1.33 U	946.63	0.0448 U	0.00575 U	0.717 U	2.85 U	7.3	114	1.17 I	NS	NS	NS
		03/19/21	246.27	0.209 I	53.2	0.150 I	NS	0.0597 U	NS	0.711 U	1.33 U	534.62	0.131 I	0.00600 U	0.717 U	2.85 U	6.9	70	0.911 U	NS	NS	NS
MW-B1 RS	33.34-43.34	05/04/21	187.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-B1 DUP	33.34-43.34	09/21/16	191	ND	40.9	0.11	NS	ND	NS	ND	ND	674	ND	ND	ND	ND	7.2	92	ND	NS	NS	NS
		03/26/18	163	0.5 U	45.7	0.077 I	NS	0.05 U	NS	2.5 U	2.5 U	747	0.5 U	0.1 U	2.5 U	7.5 U	7.3	88 Q	5 U	NS	NS	NS

Notes:

1. NS indicates Not Sampled.
2. Results highlighted in yellow indicate an exceedance of the groundwater cleanup target level (GCTL) pursuant to Chapter 62-777, Florida Administrative Code (FAC).
3. Results highlighted in orange indicate an exceedance of the Natural Attenuation Default Source Concentrations (NADCs) specified in Table V of Chapter 62-777, FAC.
4. ft-bls = feet below land surface
5. µg/L = micrograms per liter
6. pCi/L = picocuries per liter
7. --- indicates GCTL or NADC not available
8. J4 indicates value is an estimated result.
9. I = indicates the constituent was detected between the method detection limit (MDL) and the practical quantitation limit (PQL).
10. U = indicates the constituent was not detected above the reported value.
11. ND indicates analyte Not Detected.
12. Q identifier shown in the analytical report however no distinction for it provided.

TABLE 5: MONITORING WELL CONSTRUCTION AND GROUNDWATER ELEVATION DATA
Facility Name: ST. JOHNS RIVER POWER PARK

	AREA I LANDFILL																	
FDEP WELL NO.	L-1		L-2		L-3		L-7		L-8		L-9		L-10		L-11		L-12	
DIAMETER (inches)	2		2		2		2		2		2		2		2		2	
WELL DEPTH (ft BLS)	23.0		83.5		49.0		39.5		41.5		44.5		81.0		39.0		87.5	
SCREEN INTERVAL (ft)	13.0-23.0		63.5-83.5		39.0-49.0		29.5-39.5		31.5-41.5		34.5-44.5		71.0-81.0		29.0-39.0		77.5-87.5	
AQUIFER ZONE	Intermediate Surficial		Deep Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Deep Surficial		Intermediate Surficial		Deep Surficial	
TOC ELEVATION (ft)	15.98		14.55		16.49		15.63		15.62		13.05		11.84		13.44		13.37	
DATE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE
01/22/19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/05/19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/21/19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/14/20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09/25/20	3.05	12.93	2.98	11.57	4.45	12.04	7.35	8.28	12.02	3.60	3.52	9.53	2.95	8.89	2.88	10.56	2.75	10.62
11/24/20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/21/21	4.48	11.50	5.31	9.24	6.54	9.95	9.32	6.31	14.02	1.60	4.6	8.45	4.80	7.04	4.98	8.46	4.87	8.50

	AREA II LANDFILL																											
FDEP WELL NO.	L-B		L-4 (MWB-L4)		L-5		L-16		L-17 (MWB-L17)		L-18		L-19		L-20		L-21		L-22		L-23		L-24		L-25		L-26	
DIAMETER (inches)	2		2		2		2		2		2		2		2		2		2		2		2		2		2	
WELL DEPTH (ft BLS)	18.5		29.5		29.5		42.0		29.5		15.0		15.0		29.5		29.5		13.0		29.6		29.5		29.5		15.7	
SCREEN INTERVAL (ft)	8.5-18.5		19.5-29.5		19.5-29.5		32.0-42.0		19.2-29.2		4.7-14.7		4.7-14.7		19.2-29.2		19.2-29.2		2.7-12.7		19.3-29.3		19.2-29.2		19.2-29.2		5.4-15.4	
AQUIFER ZONE	Shallow Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Shallow Surficial		Shallow Surficial		Intermediate Surficial		Intermediate Surficial		Shallow Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Shallow Surficial	
TOC ELEVATION (ft)	24.57		24.72		26.97		16.12		26.95		20.15		19.21		14.40		14.27		14.23		14.15		20.91		14.21		20.79	
DATE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE
01/22/19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/05/19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/21/19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/14/20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09/25/20	10.03	14.54	10.26	14.46	8.48	18.49	5.47	10.65	12.60	14.35	10.99	9.16	12.10	7.11	3.76	10.64	3.47	10.80	6.72	7.51	3.93	10.22	12.96	7.95	3.40	10.81	12.78	8.01
11/24/20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/21/21	11.62	12.95	11.83	12.89	-	-	5.24	10.88	13.79	13.16	11.78	8.37	DRY	-	5.17	9.23	4.96	9.31	6.43	7.80	4.54	9.61	13.83	7.08	4.90	9.31	DRY	-

	AREA B LANDFILL																							
FDEP WELL NO.	MW-1		MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-8		MW-9		MW-20		MW-1A		MW-1B	
DIAMETER (inches)	2		2		2		2		2		2		2		2		2		2		2		2	
WELL DEPTH (ft BLS)	52.44		52.37		54.28		46.84		43.31		53.50		54.09		53.51		50.89		52.00		53.43		43.34	
SCREEN INTERVAL (ft)	42.44-52.44		42.37-52.37		44.28-54.28		36.84-46.84		33.31-43.31		43.50-53.50		44.09-54.09		43.51-53.51		40.89-50.89		42.00-52.00		43.43-53.43		33.34-43.34	
AQUIFER ZONE	Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial		Intermediate Surficial	
TOC ELEVATION (ft)	17.67		18.39		19.36		16.33		14.70		16.01		17.44		17.08		13.86		20.64		15.01		14.68	
DATE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE
01/22/19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/05/19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/21/19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/14/20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09/25/20	4.62	13.05	5.12	13.27	5.60	13.76	3.58	12.75	3.09	11.61	6.00	10.01	8.34	9.10	8.30	8.78	5.58	8.28	6.84	13.80	5.30	9.71	3.68	11.00
11/24/20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/21/21	-	-	-	-	9.16	10.20	6.69	9.64	4.77	9.93	5.62	10.39	11.08	6.36	12.16	4.92	8.71	5.15	10.45	10.19	8.39	6.62	6.43	8.25

TABLE 5: MONITORING WELL CONSTRUCTION AND GROUNDWATER ELEVATION DATA
Facility Name: ST. JOHNS RIVER POWER PARK

	PERIMETER WELLS															
FDEP WELL NO.	MW-1S		MW-2S		MW-3S		MW-3D		MW-4S		MW-5S		MW-5D		TW-3A	
DIAMETER (inches)	1		1		1		1		1		1		1		1	
WELL DEPTH (ft BLS)	12		13		12		30		12		12		30		40	
SCREEN INTERVAL (ft)	2-12		3-13		2-12		25-30		2-12		2-12		25-30		30-40	
AQUIFER ZONE	Shallow Surficial		Shallow Surficial		Shallow Surficial		Intermediate Surficial		Shallow Surficial		Shallow Surficial		Intermediate Surficial		Intermediate Surficial	
TOC ELEVATION (ft)	11.16		11.66		11.10		10.92		12.40		11.21		11.21		NS	
DATE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE	DTW	ELE
01/22/19	5.30	5.86	8.25	3.41	9.32	1.78	9.76	1.16	10.89	1.51	9.19	2.02	9.25	2.10	-	-
05/05/19	6.00	5.16	9.04	2.62	9.38	1.72	9.16	1.76	11.15	1.25	9.63	1.58	9.57	1.78	-	-
11/21/19	4.71	6.45	8.08	3.58	8.80	2.30	9.87	1.05	9.99	2.41	8.42	2.79	8.55	2.80	-	-
05/14/20	5.80	5.36	8.90	2.76	9.60	1.50	10.25	0.67	10.93	1.47	9.55	1.66	9.60	1.75	-	-
09/25/20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/24/20	5.49	5.67	7.96	3.70	9.13	1.97	9.93	0.99	10.42	1.98	8.74	2.47	8.85	2.50	-	-
06/21/21	5.50	5.66	9.09	2.57	9.57	1.53	10.28	0.64	11.08	1.32	9.4	1.81	9.44	1.77	11.61	-

- Notes:**
- 1. DTW = depth to water (feet below top-of-casing [TOC])
 - 2. ELE = elevation in feet relative to NGVD 1929 datum
 - 3. TOC = top of casing elevation in feet relative to NGVD 1929 datum
 - 4. ft BLS = feet below land surface
 - 5. NS = not surveyed
 - 6. - = not measured
 - 7. DRY = no water observed in well

APPENDIX B

MANN-KENDALL ANALYSIS

Mann-Kendall Analysis Summary
St. Johns River Power Park Jacksonville, Florida

Perimeter Wells	Well ID	Aluminum Concentration Trend	Arsenic Concentration Trend	Barium Concentration Trend	Boron Concentration Trend	Cadmium Concentration Trend	Chloride Concentration Trend	Chromium Concentration Trend	Iron Concentration Trend	Lead Concentration Trend	Mercury Concentration Trend	Selenium Concentration Trend	Sulfate Concentration Trend	TDS Concentration Trend	Radium-226 Concentration Trend	Radium-228 Concentration Trend	Total Radium Concentration Trend
Area B Landfill	MW-1S	No Trend	--	--	--	--	--	--	Stable	--	--	--	Probably Increasing	No Trend	NS	NS	NS
	MW-1	--	--	--	NS	--	NS	--	Increasing	--	--	--	--	--	NS	NS	NS
	MW-2	--	--	--	NS	--	NS	--	Decreasing	--	--	--	--	--	NS	NS	NS
	MW-3	--	--	--	NS	--	NS	--	Probably Increasing	--	--	--	--	--	NS	NS	NS
	MW-4	--	--	--	NS	--	NS	--	Decreasing	--	--	--	--	--	NS	NS	NS
	MW-5	Probably Decreasing	--	--	NS	--	NS	--	Stable	--	--	--	--	--	NS	NS	NS
	MW-6	--	--	--	NS	--	NS	--	Probably Decreasing	--	--	--	--	--	NS	NS	NS
	MW-7	--	--	--	NS	--	NS	--	Decreasing	--	--	--	--	--	NS	NS	NS
	MW-8	--	--	--	NS	--	NA	--	Increasing	--	--	--	--	--	NA	NA	NA
	MW-9	Probably Increasing	--	--	NA	--	NA	--	Probably Increasing	--	--	--	--	--	NA	NA	NA
	MW-20	Increasing	--	--	NS	--	NS	--	Probably Increasing	--	--	--	--	--	NS	NS	NS
Area I Landfill	MW-A1	--	--	--	NS	--	NS	--	Stable	--	--	--	--	--	NS	NS	NS
	MW-B1	No Trend	--	--	NS	--	NS	--	No Trend	--	--	--	--	--	NS	NS	NS
	L-1	Increasing	--	--	NS	--	NS	--	Decreasing	--	--	--	Increasing	Increasing	NS	NS	NS
	L-2	--	--	--	NS	--	NS	--	Decreasing	--	--	--	--	--	NS	NS	NS
	L-3	--	--	--	NS	--	NS	--	Increasing	--	--	--	--	--	NS	NS	NS
	L-7	Probably Increasing	--	--	NS	--	NS	--	No Trend	--	--	--	Probably Increasing	No Trend	NS	NS	NS
	L-8	Increasing	--	--	NS	--	NS	--	Decreasing	--	--	--	Stable	Probably Decreasing	NS	NS	NS
	L-9	Increasing	--	--	NS	--	NS	--	No Trend	--	--	--	No Trend	No Trend	NS	NS	NS
	L-10	--	--	--	NS	--	NS	--	Stable	--	--	--	--	--	NS	NS	NS
	L-11	Decreasing	--	--	NS	--	NS	--	Stable	--	--	--	Stable	Decreasing	NS	NS	NS
	L-12	--	--	--	NS	--	NS	--	Stable	--	--	--	--	--	NS	NS	NS
Area II Landfill	L-B	No Trend	--	--	NS	--	NS	--	--	--	--	--	--	--	NS	NS	NS
	L-4	Decreasing	--	--	NS	--	NS	--	No Trend	--	--	--	Probably Increasing	Increasing	NS	NS	NS
	L-5	Increasing	--	--	NS	--	NS	--	Stable	--	--	--	--	--	NS	NS	NS
	L-16	--	--	--	NS	--	NS	--	No Trend	--	--	--	--	--	NS	NS	NS
	L-17	Increasing	--	--	NS	--	NS	--	Increasing	--	--	--	No Trend	--	NS	NS	NS
	L-18	Stable	--	--	NS	--	NS	--	Stable	--	--	--	Stable	No Trend	NS	NS	NS
	L-19	No Trend	--	--	NS	--	NS	--	Decreasing	--	--	--	Stable	Stable	NS	NS	NS
	L-20	--	--	--	NS	--	NS	--	--	--	--	--	--	--	NS	NS	NS
	L-21	Probably Decreasing	--	--	NS	--	NS	--	Stable	--	--	--	--	--	NS	NS	NS
	L-22	Probably Decreasing	--	--	NS	--	NS	--	No Trend	--	--	--	Stable	Stable	NS	NS	NS
	L-23	Stable	--	--	NS	--	NS	--	Stable	--	--	--	--	--	NS	NS	NS
	L-24	Decreasing	--	--	NS	--	NS	--	Probably Decreasing	--	--	--	Decreasing	Decreasing	NS	NS	NS
	L-25	--	--	--	NS	--	NS	--	Stable	--	--	--	--	--	NS	NS	NS
	L-26	--	--	--	NS	--	NS	--	--	--	--	--	Probably Decreasing	Stable	NS	NS	NS

Notes:

1. Statistical analyses were not completed for wells with concentrations below Groundwater Cleanup Target Levels (GCTLs) for at least two most recent consecutive events.

2. If the concentration of a constituent was reported below the laboratory method detection limit (MDL), then one-half of the MDL was used in the analyses.

3. -- indicates statistical analysis was not completed because concentrations were below GCTLs for at least two most recent consecutive events.

4. TDS = Total Dissolved Solids

5. Yellow highlighting indicates increasing trend

6. NA indicates not analyzed due to well having insufficient number of independent sampling events for Mann-Kendall trend analysis.

7. NS indicates constituent not sampled for.

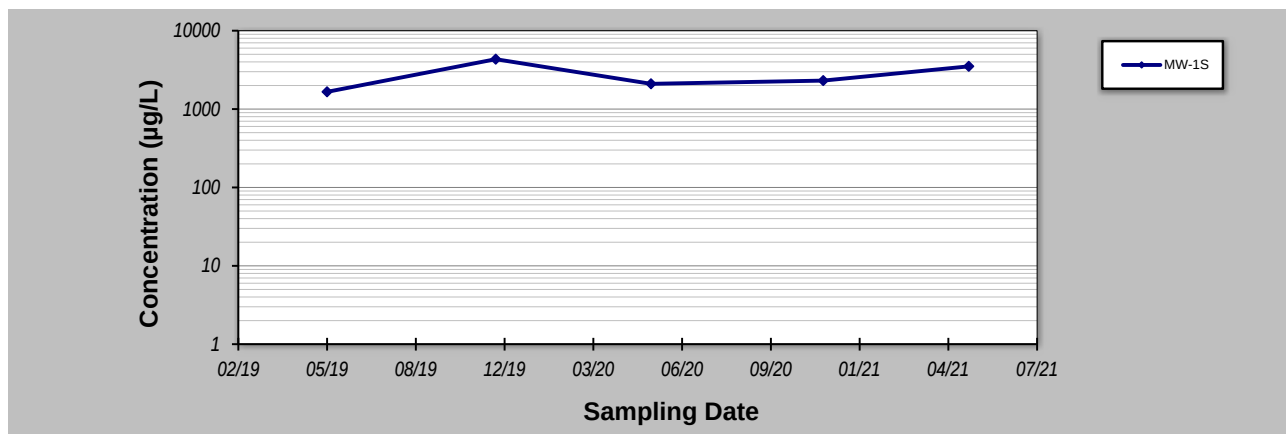
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **30-Aug-21**
 Facility Name: **JEA SJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Aluminum**
 Concentration Units: **µg/L**

Sampling Point ID: **MW-1S**

Sampling Event	Sampling Date	ALUMINUM CONCENTRATION (µg/L)					
1	May-19	1660					
2	Nov-19	4330					
3	May-20	2100					
4	Nov-20	2310					
5	May-21	3510					
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Coefficient of Variation:		0.40					
Mann-Kendall Statistic (S):		4					
Confidence Factor:		75.8%					
Concentration Trend:		No Trend					



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com

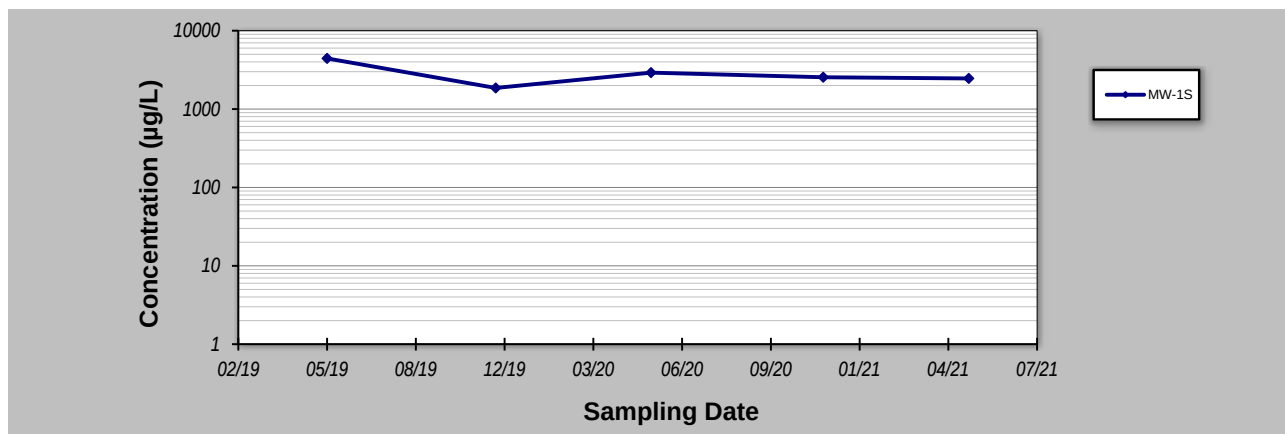
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **30-Aug-21**
 Facility Name: **JEA SJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Iron**
 Concentration Units: **µg/L**

Sampling Point ID: **MW-1S**

Sampling Event	Sampling Date	IRON CONCENTRATION (µg/L)					
1	May-19	4430					
2	Nov-19	1860					
3	May-20	2920					
4	Nov-20	2550					
5	May-21	2460					
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Coefficient of Variation:		0.34					
Mann-Kendall Statistic (S):		-4					
Confidence Factor:		75.8%					
Concentration Trend:		Stable					



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com

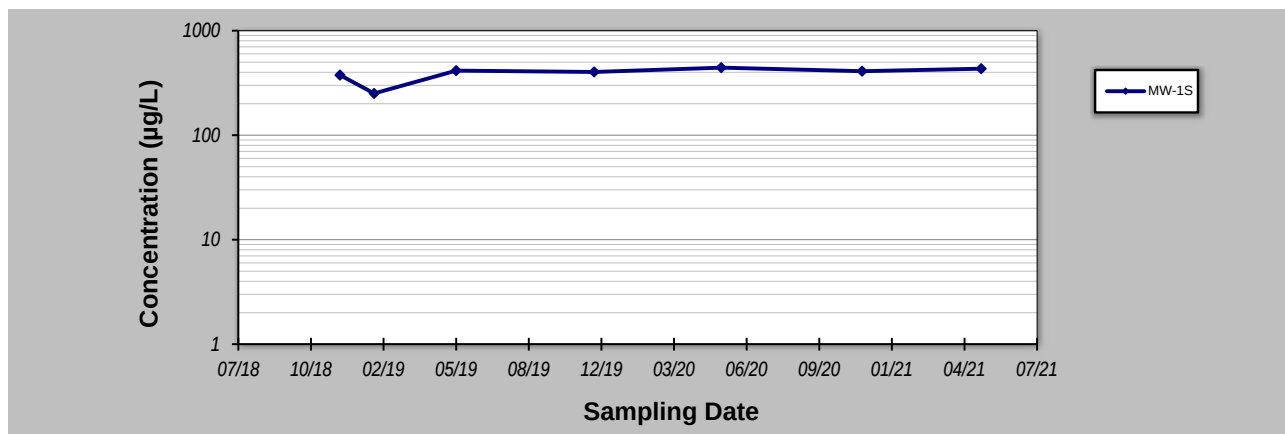
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **30-Aug-21**
 Facility Name: **JEA SJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Sulfate**
 Concentration Units: **µg/L**

Sampling Point ID: **MW-1S**

Sampling Event	Sampling Date	SULFATE CONCENTRATION (µg/L)					
1	Dec-18	376					
2	Jan-19	251					
3	May-19	415					
4	Nov-19	403					
5	May-20	443					
6	Nov-20	410					
7	May-21	433					
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Coefficient of Variation:		0.17					
Mann-Kendall Statistic (S):		11					
Confidence Factor:		93.2%					
Concentration Trend:		Prob. Increasing					



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com

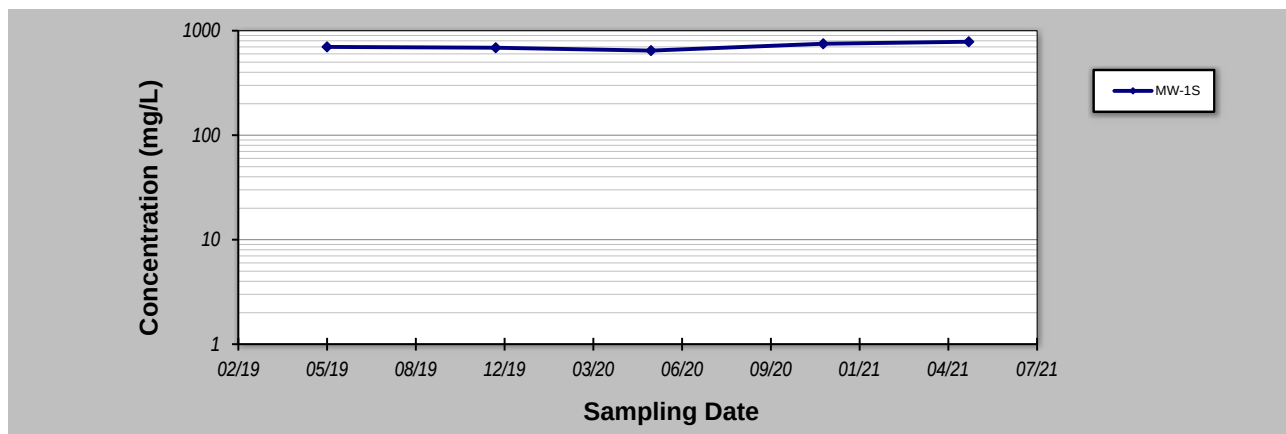
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **30-Aug-21**
 Facility Name: **JEA SJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Total Dissolved Solids**
 Concentration Units: **mg/L**

Sampling Point ID: **MW-1S**

Sampling Event	Sampling Date	TOTAL DISSOLVED SOLIDS CONCENTRATION (mg/L)					
1	May-19	700					
2	Nov-19	687					
3	May-20	645					
4	Nov-20	750					
5	May-21	784					
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Coefficient of Variation:		0.08					
Mann-Kendall Statistic (S):		4					
Confidence Factor:		75.8%					
Concentration Trend:		No Trend					



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

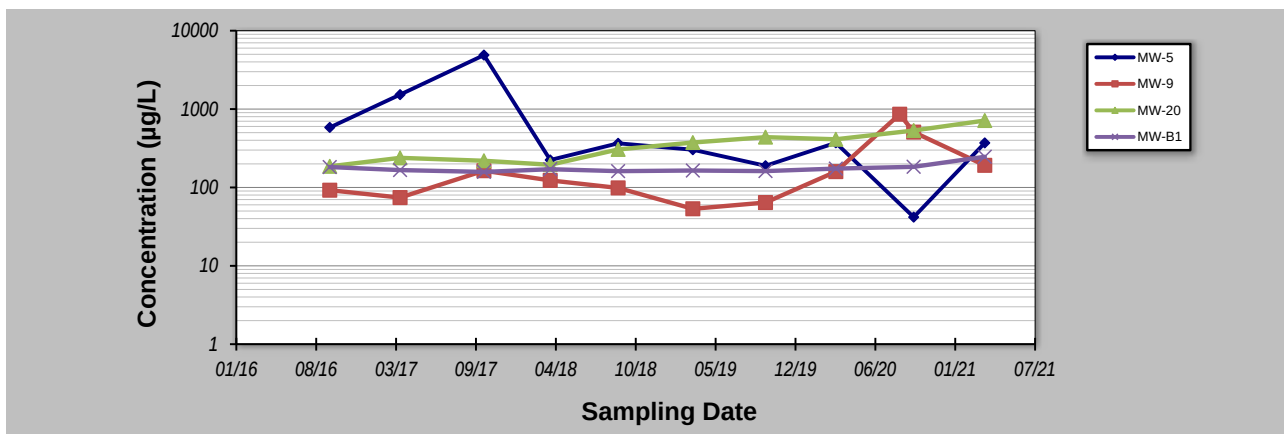
GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **27-Aug-21**
 Facility Name: **JEA SJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Aluminum**
 Concentration Units: **µg/L**

Sampling Point ID:		MW-5	MW-9	MW-20	MW-B1			
Sampling Event	Sampling Date	ALUMINUM CONCENTRATION (µg/L)						
1	Sep-16	583	92.2	186	182			
2	Mar-17	1527.1	74.2	238.55	166.66			
3	Oct-17	4883.00	163.55	219.19	157.9			
4	Mar-18	224	123	195	171			
5	Sep-18	365.79	98.7	305.65	161.46			
6	Mar-19	302.72	53.4	374.04	164.46			
7	Sep-19	189.28	64.2	438.53	161.88			
8	Mar-20	371.02	159.03	411.91	174.02			
9	Aug-20	NS	858.92	NS	NS			
10	Sep-20	41.80	507.99	532.58	183.35			
11	Mar-21	370.01	191.51	714.37	246.27			
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		1.65	1.14	0.47	0.15			
Mann-Kendall Statistic (S):		-17	19	37	15			
Confidence Factor:		92.2%	91.8%	>99.9%	89.2%			
Concentration Trend:		Prob. Decreasing	Prob. Increasing	Increasing	No Trend			



Notes:

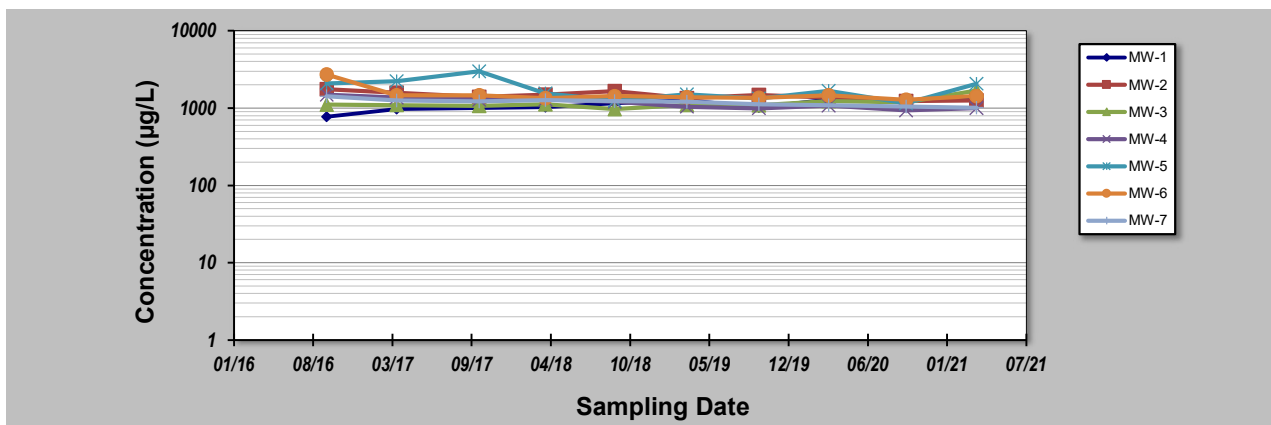
- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $>95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date:	18-Jun-21			Job ID:	FR8073			
Facility Name:	JEA SJRPP			Constituent:	Iron			
Conducted By:	Amy Langteau			Concentration Units:	µg/L			
Sampling Point ID:	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	
Sampling Event	Sampling Date	IRON CONCENTRATION (µg/L)						
1	Sep-16	771	1760	1110	1490	2090	2730	1420
2	Mar-17	971.77	1576.1	1097.1	1371.9	2239.5	1463.3	1258.8
3	Oct-17	NS	1390.5	1066.7	1281.4	3006.4	1467.87	1217.8
4	Mar-18	1030	1490	1120	1290	1550	1340	1260
5	Sep-18	1159.5	1651.7	972.28	1212.9	1253	1427.1	1228.6
6	Mar-19	1265.9	1340.7	1104.6	1043.8	1497.2	1377	1210.7
7	Sep-19	1021.4	1478.4	1084.2	995.19	1322.2	1356.9	1114.5
8	Mar-20	1294	1371.8	1232.5	1080.6	1678.8	1461.9	1095.1
9	Sep-20	1219.3	1229.1	1188.2	932.4	1149.7	1284.1	1052.3
10	Mar-21	1407.4	1254.7	1685.7	998.02	2073.2	1432.9	1012.7
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:	0.17	0.12	0.17	0.16	0.32	0.28	0.10	
Mann-Kendall Statistic (S):	26	-29	17	-35	-15	-19	-39	
Confidence Factor:	99.7%	99.5%	92.2%	100.0%	89.2%	94.6%	>99.9%	
Concentration Trend:	Increasing	Decreasing	Prob. Increasing	Decreasing	Stable	Prob. Decreasing	Decreasing	



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $>95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com

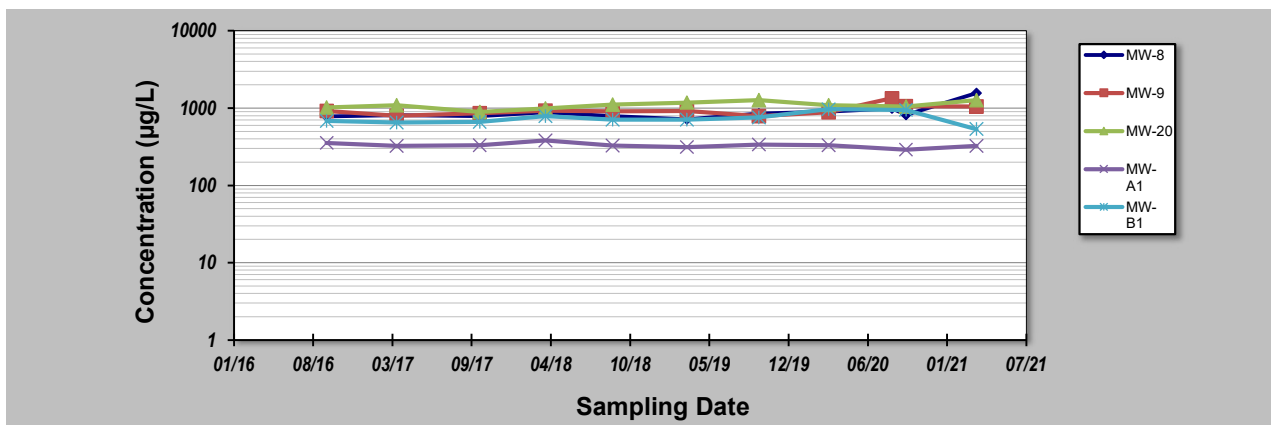
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: 18-Jun-21		Job ID: FR8073	
Facility Name: JEASJRPP		Constituent: Iron	
Conducted By: Amy Langteau		Concentration Units: µg/L	

Sampling Point ID:		MW-8	MW-9	MW-20	MW-A1	MW-B1		
--------------------	--	-------------	-------------	--------------	--------------	--------------	--	--

Sampling Event	Sampling Date	IRON CONCENTRATION (µg/L)					
1	Sep-16	783	918	1020	355	681	
2	Mar-17	815.53	799.58	1088	325.29	650.71	
3	Oct-17	785.39	860.82	890.99	330.38	661.23	
4	Mar-18	887	929	985	380	786	
5	Sep-18	787.31	911.23	1111	326.91	709.41	
6	Mar-19	719.18	922.88	1182.1	314.38	709.69	
7	Sep-19	850.53	787.05	1273.9	338.66	758.29	
8	Mar-20	894.18	884.97	1095.8	331.86	970.12	
9	Aug-20	988.06	1338.2	NS	NS	NS	
10	Sep-20	819.62	1054.7	1048.8	290.83	946.63	
11	Mar-21	1561	1048.8	1264.7	324.78	534.62	
12							
13							
14							
15							
16							
17							
18							
19							
20							

Coefficient of Variation:	0.26	0.16	0.11	0.07	0.18	
Mann-Kendall Statistic (S):	29	19	19	-15	15	
Confidence Factor:	98.7%	91.8%	94.6%	89.2%	89.2%	
Concentration Trend:	Increasing	Prob. Increasing	Prob. Increasing	Stable	No Trend	



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com

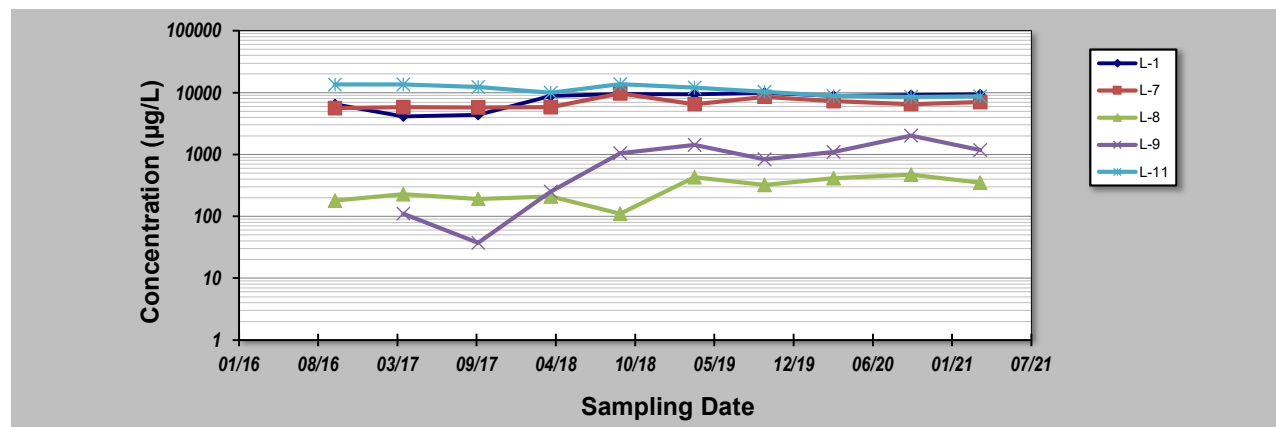
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JEASJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Aluminum**
 Concentration Units: **µg/L**

Sampling Point ID: **L-1** **L-7** **L-8** **L-9** **L-11**

Sampling Event	Sampling Date	ALUMINUM CONCENTRATION (µg/L)					
1	Sep-16	6470	5620	178.0	ND	13500	
2	Mar-17	4123.8	5847.6	226.76	110.38	13565	
3	Sep-17	4404.1	5792.7	191.84	37.2	12259	
4	Mar-18	8760	5830	209.0	250	9940	
5	Sep-18	9474.6	9730.5	109.58	1049.6	13737	
6	Mar-19	9424.5	6491.5	428.84	1431.9	12046	
7	Sep-19	9909.3	8598.9	320.29	840.01	10314	
8	Mar-20	8892.8	7300.6	413.14	1094.3	8868.5	
9	Sep-20	9215.9	6490	472.67	2007.9	8511.3	
10	Mar-21	9384	7041	350.2	1178.2	8683.3	
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Coefficient of Variation:		0.27	0.20	0.43	0.74	0.19	
Mann-Kendall Statistic (S):		21	19	23	24	-29	
Confidence Factor:		96.4%	94.6%	97.7%	99.4%	99.5%	
Concentration Trend:		Increasing	Prob. Increasing	Increasing	Increasing	Decreasing	



Notes:

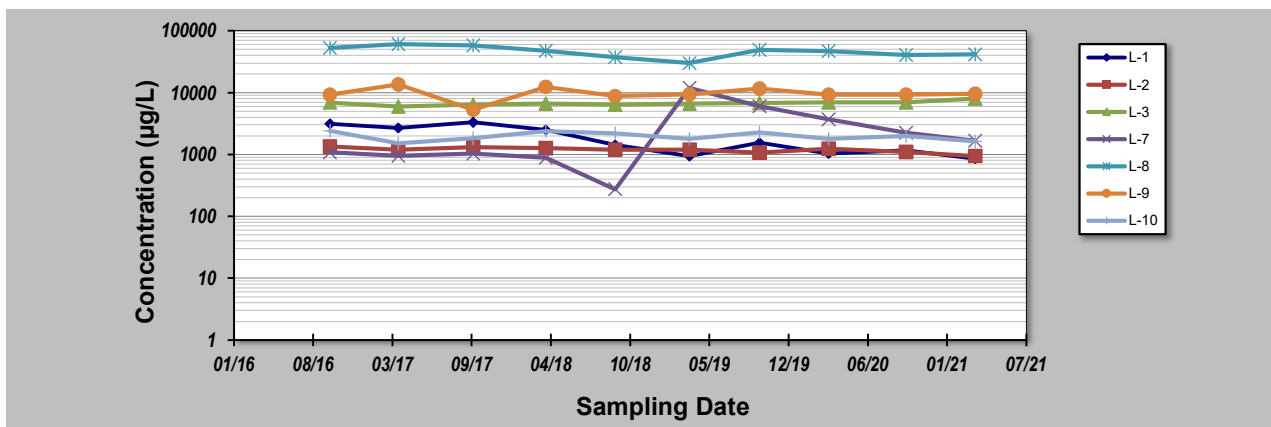
- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date:	18-Jun-21			Job ID:	FR8073			
Facility Name:	JEA SJRPP			Constituent:	Iron			
Conducted By:	Amy Langteau			Concentration Units:	µg/L			
Sampling Point ID:		L-1	L-2	L-3	L-7	L-8	L-9	L-10
Sampling Event	Sampling Date	IRON CONCENTRATION (µg/L)						
1	Sep-16	3140	1340	6920	1080	52800	9230	2400
2	Mar-17	2698.5	1194.2	5957.7	948.58	61185	13576	1518.8
3	Sep-17	3315.4	1318.9	6403.8	1032.2	58087	5318.7	1830.4
4	Mar-18	2500	1260	6610	890	47400	12400	2380
5	Sep-18	1426.5	1200.7	6412.9	273.89	37386	8762.7	2185.5
6	Mar-19	932.47	1198.4	6612.2	11929	30079	9410.3	1780.8
7	Sep-19	1558.1	1071.6	6799.3	6022.1	49466	11698	2266.2
8	Mar-20	1034.7	1233.4	6975.4	3692	46893	9283.2	1776.5
9	Sep-20	1174.6	1088.2	6984.1	2254.9	40561	9266.7	1994.7
10	Mar-21	857.54	943.91	7998.9	1663.7	41412	9546.8	1627.2
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.51	0.10	0.08	1.20	0.20	0.23	0.16
Mann-Kendall Statistic (S):		-31	-27	31	7	-21	1	-13
Confidence Factor:		99.8%	99.2%	99.8%	70.0%	96.4%	50.0%	85.4%
Concentration Trend:		Decreasing	Decreasing	Increasing	No Trend	Decreasing	No Trend	Stable



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com

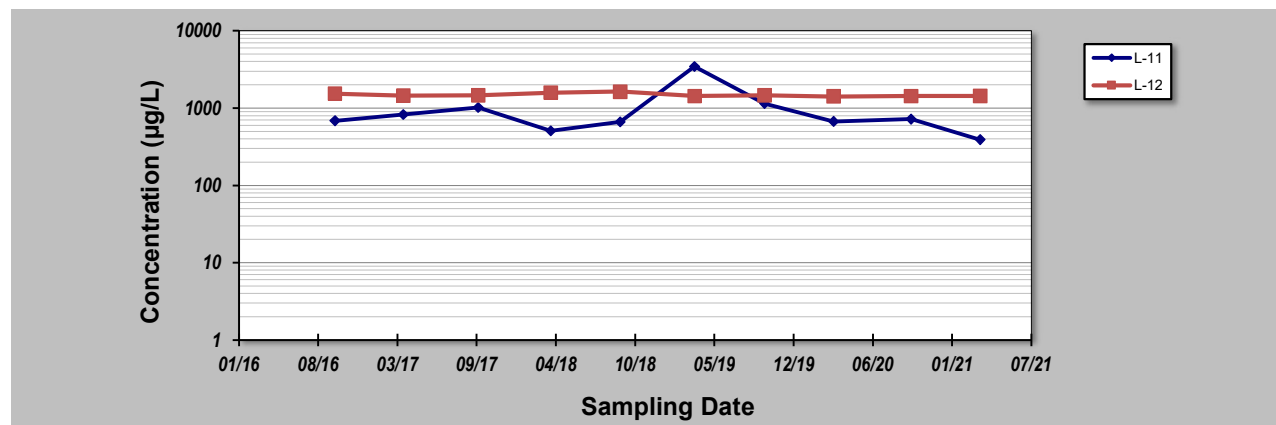
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JEASJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Iron**
 Concentration Units: **µg/L**

Sampling Point ID: **L-11** **L-12**

Sampling Event	Sampling Date	IRON CONCENTRATION (µg/L)							
1	Sep-16	686	1540						
2	Mar-17	827.25	1449.6						
3	Sep-17	1021.4	1459.8						
4	Mar-18	508	1580						
5	Sep-18	663.54	1633.6						
6	Mar-19	3442.8	1433.1						
7	Sep-19	1144.5	1463.7						
8	Mar-20	670.98	1415.7						
9	Sep-20	718.93	1432.8						
10	Mar-21	390.75	1439.8						
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
Coefficient of Variation:		0.88	0.05						
Mann-Kendall Statistic (S):		-5	-15						
Confidence Factor:		63.6%	89.2%						
Concentration Trend:		Stable	Stable						



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com

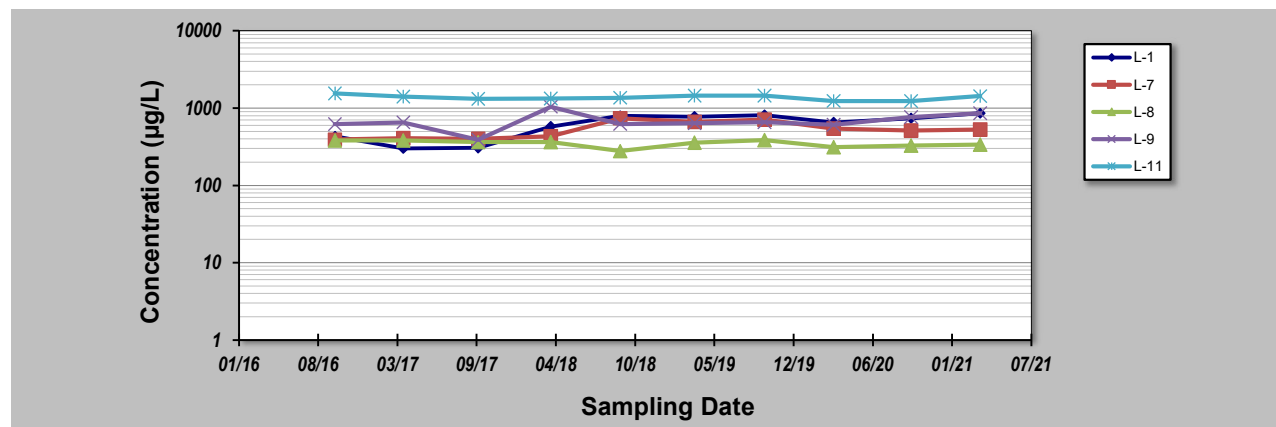
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JEA SJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Sulfate**
 Concentration Units: **µg/L**

Sampling Point ID: **L-1** **L-7** **L-8** **L-9** **L-11**

Sampling Event	Sampling Date	SULFATE CONCENTRATION (µg/L)					
1	Sep-16	433	392	381	620	1550	
2	Mar-17	301	406	382	652	1410	
3	Sep-17	306	400	362	388	1320	
4	Mar-18	577	433	366	1040	1330	
5	Sep-18	790	739	278	621	1360	
6	Mar-19	778	663	358	640	1450	
7	Sep-19	816	712	385	660	1450	
8	Mar-20	655	544	311	611	1240	
9	Sep-20	742	515	327	763	1230	
10	Mar-21	860	528	335	858	1430	
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Coefficient of Variation:		0.34	0.25	0.10	0.25	0.07	
Mann-Kendall Statistic (S):		27	17	-15	15	-10	
Confidence Factor:		99.2%	92.2%	89.2%	89.2%	78.4%	
Concentration Trend:		Increasing	Prob. Increasing	Stable	No Trend	Stable	



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

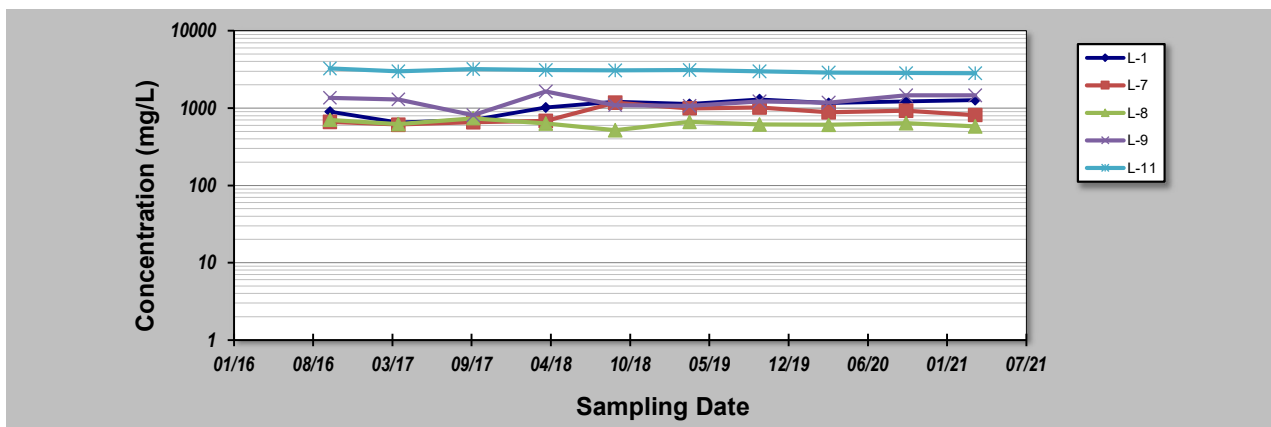
GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JEASJRPP**
 Conducted By: **Mary Rommer**

Job ID: **FR8073**
 Constituent: **Total Dissolved Solids**
 Concentration Units: **mg/L**

Sampling Point ID:		L-1	L-7	L-8	L-9	L-11		
Sampling Event	Sampling Date	TOTAL DISSOLVED SOLIDS CONCENTRATION (mg/L)						
1	Sep-16	896	661	707	1361	3269		
2	Mar-17	648	612	618	1303	2988		
3	Sep-17	701	657	740	808	3196		
4	Mar-18	1024	679	630	1643	3114		
5	Sep-18	1214	1180	519	1094	3093		
6	Mar-19	1132	995	662	1063	3103		
7	Sep-19	1298	1023	614	1217	2993		
8	Mar-20	1162	882	608	1170	2870		
9	Sep-20	1220	928	636	1458	2843		
10	Mar-21	1271	812	582	1456	2819		
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.22	0.23	0.10	0.19	0.05		
Mann-Kendall Statistic (S):		31	15	-17	5	-33		
Confidence Factor:		99.8%	89.2%	92.2%	63.6%	99.9%		
Concentration Trend:		Increasing	No Trend	Prob. Decreasing	No Trend	Decreasing		



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

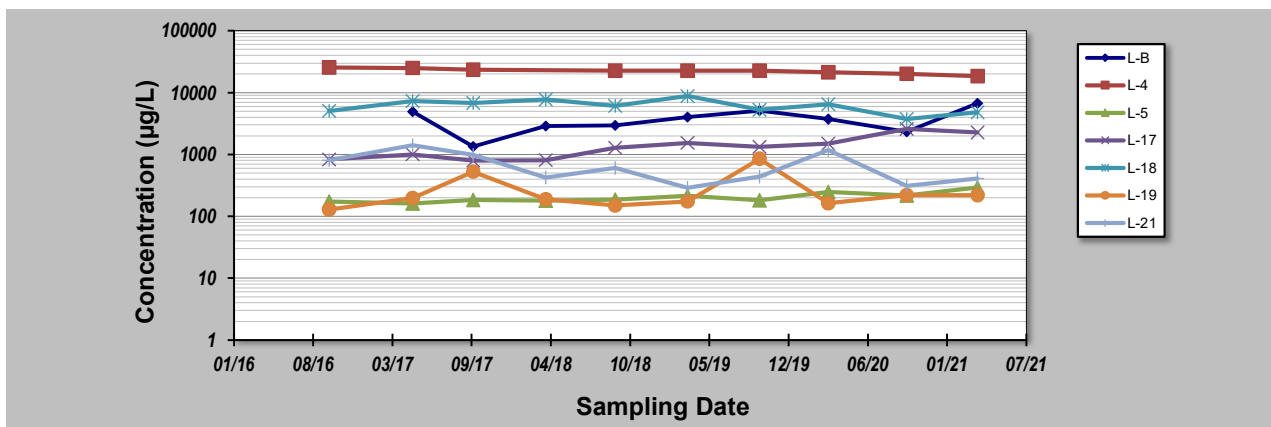
GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JEASJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Aluminum**
 Concentration Units: **µg/L**

Sampling Point ID:		L-B	L-4	L-5	L-17	L-18	L-19	L-21
Sampling Event	Sampling Date	ALUMINUM CONCENTRATION (µg/L)						
1	Sep-16	NS	25500	174	834	5070	128	810
2	Apr-17	4893.8	24964	160.97	1004.4	7291.6	195.61	1408.2
3	Sep-17	1347.8	23519	183.75	797.7	6797.1	526.27	986.06
4	Mar-18	2880.00	22200 J	178	811	7760	188	422
5	Sep-18	2953.1	22567	185.85	1282.1	6072.9	149.18	603.69
6	Mar-19	4031.4	22645	213.3	1546.3	8803.4	174.48	289.41
7	Sep-19	5139	22693	181.99	1329.7	5310.1	848.83	438.28
8	Mar-20	3720.7	21301	248.49	1498.1	6473.5	163.35	1177.4
9	Sep-20	2322.8	20208	218.01	2589.9	3763.1	220.42	313.04
10	Mar-21	6729.6	18614	291.69	2265.3	4823.4	219.96	408.97
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.43	0.10	0.20	0.44	0.24	0.81	0.57
Mann-Kendall Statistic (S):		10	-30	33	31	-13	9	-17
Confidence Factor:		82.1%	100.0%	99.9%	99.8%	85.4%	75.8%	92.2%
Concentration Trend:		No Trend	Decreasing	Increasing	Increasing	Stable	No Trend	Prob. Decreasing



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com

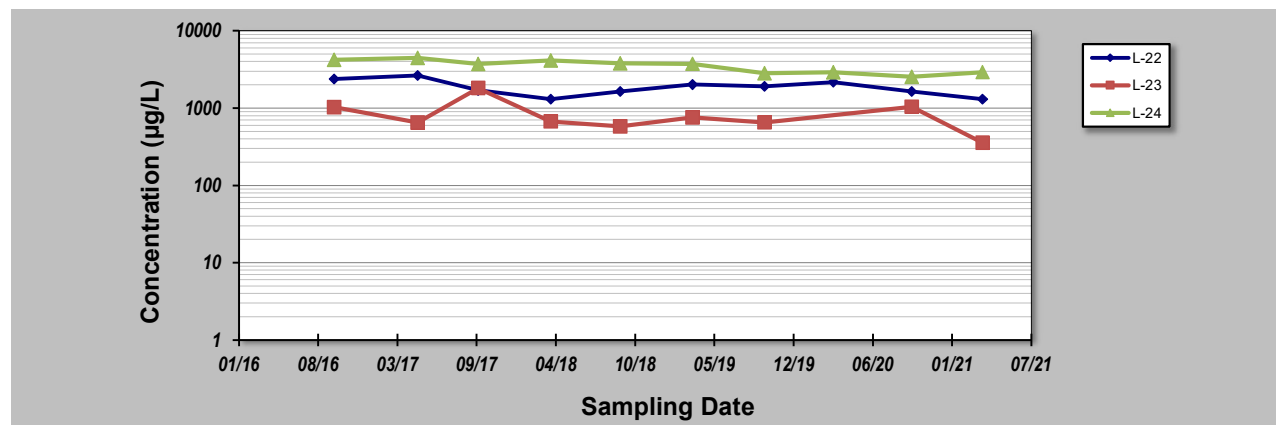
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JEASJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Aluminum**
 Concentration Units: **µg/L**

Sampling Point ID: **L-22** **L-23** **L-24**

Sampling Event	Sampling Date	ALUMINUM CONCENTRATION (µg/L)						
1	Sep-16	2380	1030	4220				
2	Apr-17	2636.5	650.01	4475.1				
3	Sep-17	1697.6	1812	3717.1				
4	Mar-18	1310.00	674	4130				
5	Sep-18	1643.1	581.22	3788.8				
6	Mar-19	2016.3	753.23	3735.3				
7	Sep-19	1905.9	655.67	2829				
8	Mar-20	2172.1	NS	2900.9				
9	Sep-20	1639.8	1045	2550.7				
10	Mar-21	1307.9	356.44	2911.6				
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.23	0.50	0.19				
Mann-Kendall Statistic (S):		-17	-8	-29				
Confidence Factor:		92.2%	76.2%	99.5%				
Concentration Trend:		Prob. Decreasing	Stable	Decreasing				



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

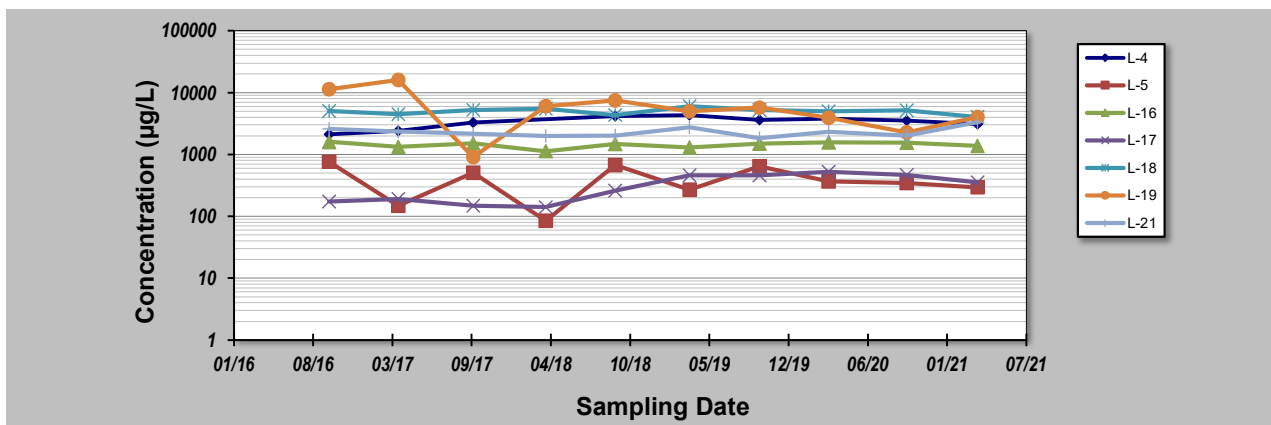
GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JEASJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Iron**
 Concentration Units: **µg/L**

Sampling Point ID:		L-4	L-5	L-16	L-17	L-18	L-19	L-21
Sampling Event	Sampling Date	IRON CONCENTRATION (µg/L)						
1	Sep-16	2110	763	1600	172	5040	11400	2590
2	Mar-17	2397.9	148.47	1335.6	191.87	4450.7	15999	2339.5
3	Sep-17	3270.6	504.75	1512	147.55	5255.1	908.44	2169.1
4	Mar-18	3900 J	84.8	1130	141	5490	6030	2000
5	Sep-18	4180	673.6	1469.7	257.86	4340.8	7466	2009.8
6	Mar-19	4306.8	269.06	1295.2	459.81	6019.3	4979.4	2746.9
7	Sep-19	3617.2	641.87	1495.2	458.63	5224.1	5745.4	1832.6
8	Mar-20	3781.3	366.83	1564.6	526.1	4973.3	3940.2	2332.4
9	Sep-20	3529.4	346.72	1558.2	468.2	5177	2262.2	2014.4
10	Mar-21	3117.1	294.55	1379.2	353.96	4044.8	4010.3	3321.4
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.22	0.56	0.10	0.48	0.12	0.71	0.19
Mann-Kendall Statistic (S):		8	-7	1	23	-7	-21	-1
Confidence Factor:		76.2%	70.0%	50.0%	97.7%	70.0%	96.4%	50.0%
Concentration Trend:		No Trend	Stable	No Trend	Increasing	Stable	Decreasing	Stable



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com

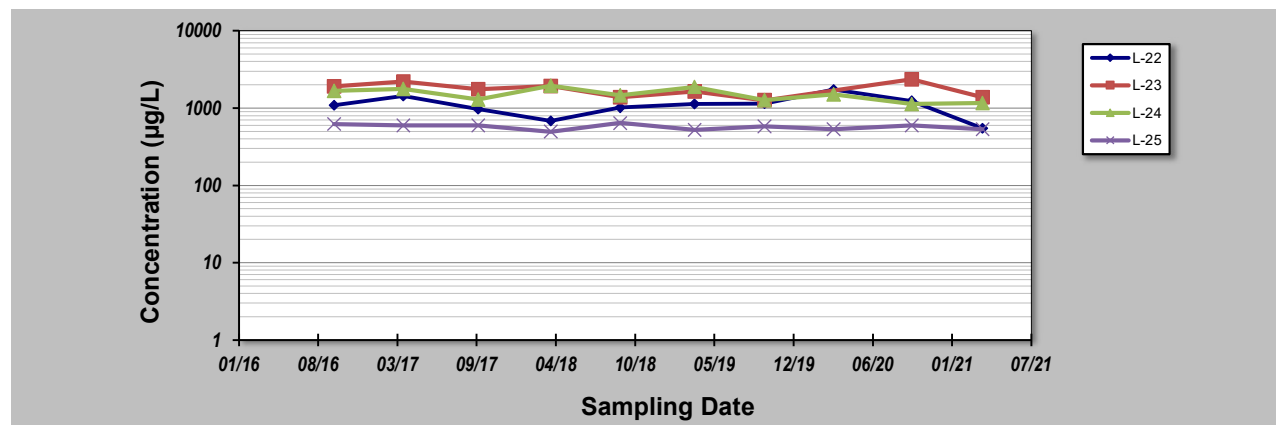
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JEASJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Iron**
 Concentration Units: **µg/L**

Sampling Point ID: **L-22** **L-23** **L-24** **L-25**

Sampling Event	Sampling Date	IRON CONCENTRATION (µg/L)							
1	Sep-16	1090	1910	1680	624				
2	Mar-17	1442.9	2207.3	1774.2	598.53				
3	Sep-17	974.72	1751.6	1288.5	597.94				
4	Mar-18	682	1940	1950	496				
5	Sep-18	1011.8	1377.2	1455.8	642.37				
6	Mar-19	1131.8	1642.2	1878.6	522.96				
7	Sep-19	1151.5	1260.7	1276	581.37				
8	Mar-20	1735.3	NS	1506.5	532.98				
9	Sep-20	1241.4	2363.9	1126.7	599.2				
10	Mar-21	546.14	1378.8	1160.8	531.79				
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
Coefficient of Variation:		0.31	0.22	0.20	0.08				
Mann-Kendall Statistic (S):		5	-10	-19	-11				
Confidence Factor:		63.6%	82.1%	94.6%	81.0%				
Concentration Trend:		No Trend	Stable	Prob. Decreasing	Stable				



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

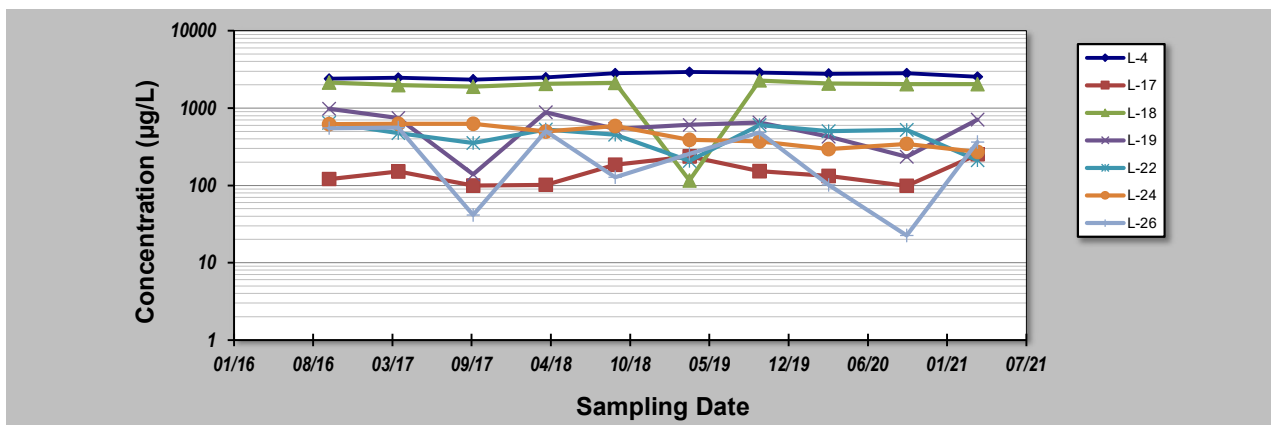
GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JEASJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Sulfate**
 Concentration Units: **µg/L**

Sampling Point ID:		L-4	L-17	L-18	L-19	L-22	L-24	L-26
Sampling Event	Sampling Date	SULFATE CONCENTRATION (µg/L)						
1	Sep-16	2400	121	2140	982	645	619	551
2	Mar-17	2470	151	1990	746	475	627	559
3	Sep-17	2340	99.9	1890	139	352	626	41.3
4	Mar-18	2490	102	2060	882	530	497	504
5	Sep-18	2820	185	2130	537	455	587	128
6	Mar-19	2940	237	116	606	208	388	255
7	Sep-19	2870	153	2280	653	604	371	482
8	Mar-20	2790	132	2090	428	504	295	101
9	Sep-20	2820	98.9	2050	235	523	345	22.5
10	Mar-21	2540	252	2040	711	211	272	366
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.08	0.36	0.33	0.45	0.33	0.31	0.72
Mann-Kendall Statistic (S):		18	9	-3	-13	-9	-37	-17
Confidence Factor:		93.4%	75.8%	56.9%	85.4%	75.8%	>99.9%	92.2%
Concentration Trend:		Prob. Increasing	No Trend	Stable	Stable	Stable	Decreasing	Prob. Decreasing



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $>95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

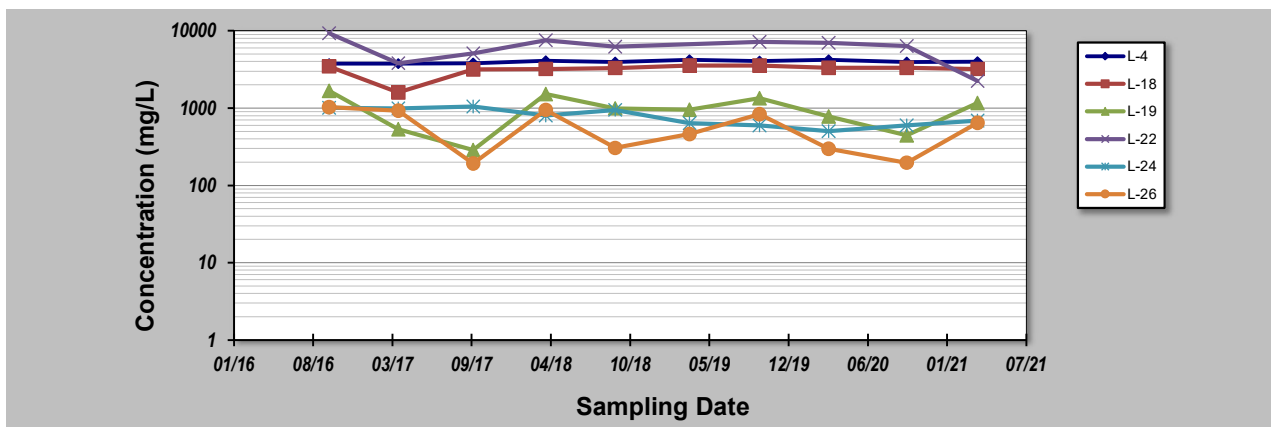
GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JEASJRPP**
 Conducted By: **Amy Langteau**

Job ID: **FR8073**
 Constituent: **Total Dissolved Solids**
 Concentration Units: **mg/L**

Sampling Point ID:		L-4	L-18	L-19	L-22	L-24	L-26	
Sampling Event	Sampling Date	TOTAL DISSOLVED SOLIDS CONCENTRATION (mg/L)						
1	Sep-16	3768	3470	1670	9332	1010	1025	
2	Mar-17	3754	1597	531	3806	997	925	
3	Sep-17	3804	3178	287	5076	1050	192	
4	Mar-18	4090	3206	1520	7550	803	947	
5	Sep-18	3940	3310	993	6230	947	305	
6	Mar-19	4214	3528	953	NS	638	462	
7	Sep-19	4070	3550	1340	7170	596	829	
8	Mar-20	4220	3327	780	6990	505	296	
9	Sep-20	3945	3322	444	6340	596	196	
10	Mar-21	3980	3222	1166	2240	690	646	
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.04	0.18	0.48	0.35	0.26	0.57	
Mann-Kendall Statistic (S):		21	11	-7	-8	-28	-15	
Confidence Factor:		96.4%	81.0%	70.0%	76.2%	99.4%	89.2%	
Concentration Trend:		Increasing	No Trend	Stable	Stable	Decreasing	Stable	



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = Probably Increasing or Probably Decreasing; $< 90\%$ and $S > 0$ = No Trend; $< 90\%$, $S \leq 0$, and $COV \geq 1$ = No Trend; $< 90\%$ and $COV < 1$ = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com