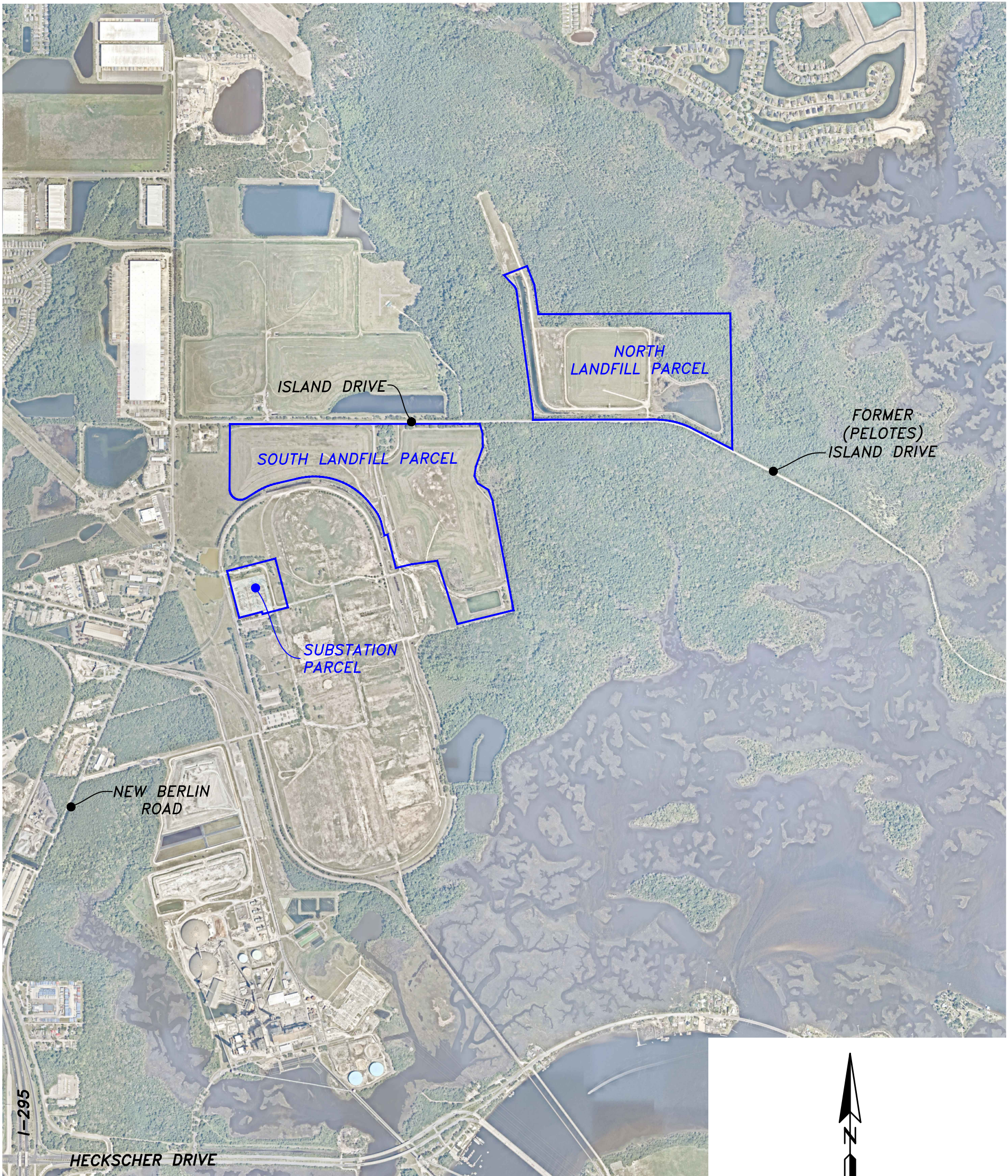


ATTACHMENTS

ATTACHMENT A: Certified Site/Facilities Delineation Map(s)

EXHIBIT TO SHOW

JEA ST. JOHNS RIVER POWER PARK CERTIFIED AREAS



GENERAL NOTES:

- 1) THIS IS NOT A SURVEY.
- 2) BACKGROUND IMAGERY OBTAINED FROM NEARMAP, DATED 04/18/2023.
- 3) AREAS SHOWN IN BLUE ARE "CERTIFIED AREAS"

ETM
SURVEYING & MAPPING

Trusted
Advisors,
Creating
Community.

14775 Old St. Augustine Rd. (904) 642-8550
Jacksonville, Florida 32258 www.etminc.com
Certificate of Authorization No: LB 3624

DATE: FEBRUARY 21, 2024 SCALE: 1"=1500'

January 5, 2024

Work Order No. 23-465.00

File No. 130A-10.00B

North Landfill Parcel

A portion of Section 6, and a portion of Section 40 of the John F. Brown Grant, Township 1 South, Range 28 East, Duval County, Florida, being more particularly described as follows:

For a Point of Reference commence at the Southwest corner of said Section 6, said corner lying on the Easterly terminus of Island Drive, a 60 foot right of way as described and recorded in Official Records Book 7773, page 2274, of said current Public Records; thence North 01°01'04" West, along the Westerly line of said Section 6 and along said Easterly terminus, 30.00 feet to the Northerly corner of said Easterly terminus; thence North 89°58'19" East, departing said Westerly line and along the former Northerly right of way line of said (Pelotes) Island Drive, said right of way closed by Ordinance 93-1861-1143 recorded in Official Records Volume 7811, page 1695, of said current Public Records 1058.32 feet to the Point of Beginning.

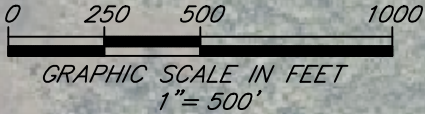
From said Point of Beginning, thence North 00°01'41" West, departing said former Northerly right of way line, 81.58 feet; thence North 07°33'39" West, 1772.27 feet to the point of curvature of a curve concave Southwesterly having a radius of 146.00 feet; thence Northwesterly along the arc of said curve, through a central angle of 35°40'18", an arc length of 90.90 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of North 25°23'48" West, 89.44 feet; thence North 43°13'57" West, 210.93 feet; thence North 68°46'52" East, 355.38 feet; thence South 21°13'08" East, 296.09 feet; thence South 07°28'22" East, 415.50 feet; thence North 89°47'43" East, 2755.42 feet; thence South 00°47'55" East, 1947.27 feet to a point lying on said former Northerly right of way line; thence Westerly along said former Northerly right of way line, the following 3 Courses: Course 1, thence North 62°27'57" West, 630.17 feet to the point of curvature of a curve concave Southerly having a radius of 1176.28 feet; Course 2, thence Westerly along the arc of said curve, through a central angle of 27°33'44", an arc length of 565.85 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of North 76°14'49" West, 560.41 feet; Course 3, thence South 89°58'19" West, 1755.83 feet to the Point of Beginning.

Containing 110.51 acres, more or less.

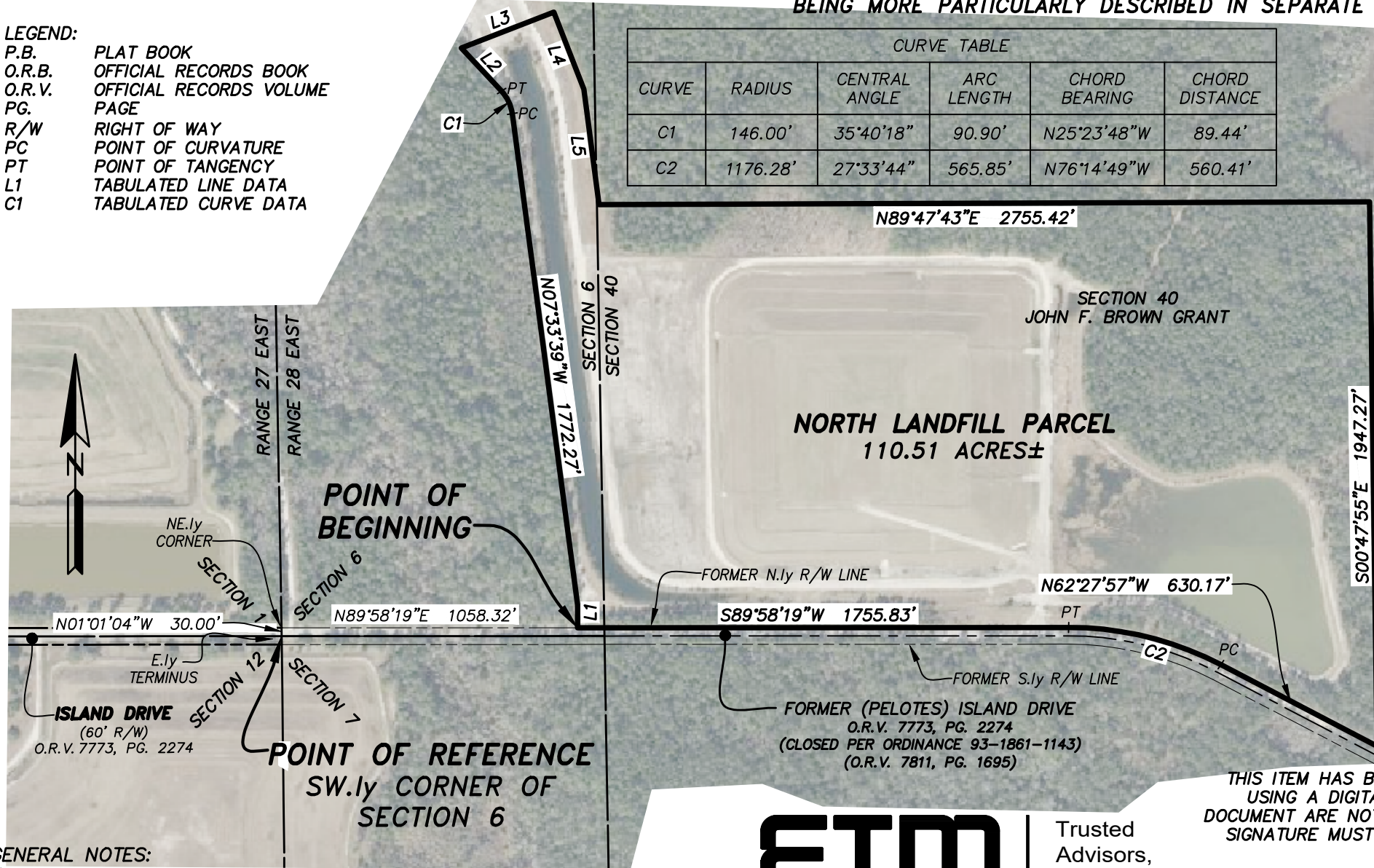
SKETCH TO ACCOMPANY DESCRIPTION OF A PORTION OF SECTION 6, AND A PORTION OF SECTION 40 OF THE JOHN F. BROWN GRANT, TOWNSHIP 1 SOUTH, RANGE 28 EAST, DUVAL COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED IN SEPARATE ATTACHMENT.

LEGEND:
P.B. PLAT BOOK
O.R.B. OFFICIAL RECORDS BOOK
O.R.V. OFFICIAL RECORDS VOLUME
PG. PAGE
R/W RIGHT OF WAY
PC POINT OF CURVATURE
PT POINT OF TANGENCY
L1 TABULATED LINE DATA
C1 TABULATED CURVE DATA

CURVE TABLE					
CURVE	RADIUS	CENTRAL ANGLE	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
C1	146.00'	35°40'18"	90.90'	N25°23'48"W	89.44'
C2	1176.28'	27°33'44"	565.85'	N76°14'49"W	560.41'



LINE TABLE		
LINE	BEARING	LENGTH
L1	N00°01'41"W	81.58'
L2	N43°13'57"W	210.93'
L3	N68°46'52"E	355.38'
L4	S21°13'08"E	296.09'
L5	S07°28'22"E	415.50'



- GENERAL NOTES:
- 1) THIS IS NOT A SURVEY.
 - 2) BEARINGS BASED ON THE FORMER SOUTHERLY RIGHT OF WAY LINE OF ISLAND DRIVE AS BEING NORTH 89°58'19" EAST.
 - 3) SECTION AND/OR LOT LINES DEPICTED HEREON ARE GRAPHIC REPRESENTATIONS ONLY UNLESS OTHERWISE DENOTED.

ETM
SURVEYING & MAPPING

14775 Old St. Augustine Rd.
Jacksonville, Florida 32258
Certificate of Authorization No: LB 3624

Trusted
Advisors,
Creating
Community.

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SCALE: 1"=500'
DATE: JANUARY 05, 2024

G. C. COLYER III
PROFESSIONAL SURVEYOR AND MAPPER
STATE OF FLORIDA LS No. 6963

January 05, 2024

Work Order No. 23-465.00

File No. 130A-10.00A

South Landfill Parcel

A portion of Section 12 and a portion of Section 43 of the John Christopher Grant, Township 1 South, Range 27 East, Duval county, Florida, together with a portion of Section 7 and a portion of Section 41 of the John Christopher Grant, Township 1 South, Range 28 East, said Duval county, Florida being more particularly described as follows:

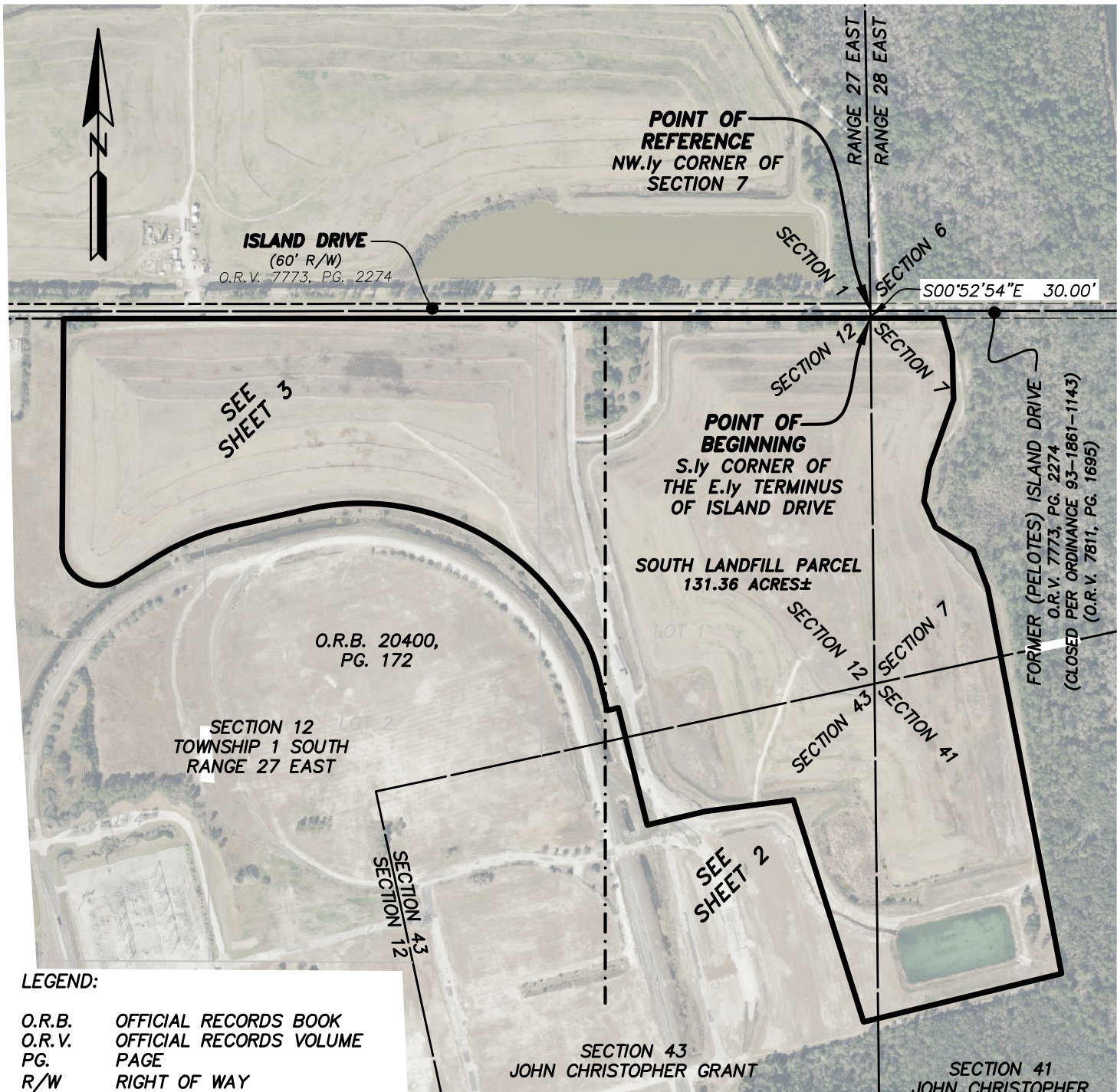
For a Point of Reference, commence at the Northwestern corner of said Section 7, said corner lying on the Easterly terminus of Island Drive, a 60 foot right of way as described and recorded in Official Records Volume 7773, page 2274, of the current Public Records of said county; thence South $00^{\circ}52'54''$ East, along the Westerly line of said Section 7 and along said Easterly terminus, a distance of 30.00 feet to the Southerly corner of said Easterly terminus and the Point of Beginning;

From said Point of Beginning, thence North $89^{\circ}58'19''$ East, departing said Westerly line and along the former Southerly right of way line of said (Pelotes) Island Drive, said right of way closed by Ordinance 93-1861-1143 recorded in Official Records Volume 7811, page 1695, of said current Public Records, 295.40 feet; thence South $15^{\circ}15'10''$ East, departing said former Southerly right of way line, 145.25 feet; thence South $01^{\circ}23'41''$ East, 142.18 feet; thence South $01^{\circ}54'33''$ East, 49.11 feet; thence South $19^{\circ}34'23''$ West, 295.88 feet; thence South $09^{\circ}02'41''$ West, 137.83 feet; thence South $23^{\circ}57'45''$ East, 116.38 feet; thence South $58^{\circ}23'33''$ East, 180.37 feet; thence South $21^{\circ}02'15''$ East, 164.58 feet; thence South $10^{\circ}49'48''$ East, 1600.26 feet; thence South $76^{\circ}17'54''$ West, 830.69 feet; thence North $17^{\circ}31'59''$ West, 949.16 feet; thence South $82^{\circ}35'32''$ West, 359.81 feet; thence South $76^{\circ}50'47''$ West, 245.08 feet; thence North $13^{\circ}52'13''$ West, 492.28 feet; thence South $76^{\circ}18'18''$ West, 46.50 feet; thence North $13^{\circ}41'42''$ West, 171.70 feet to the point of curvature of a curve concave Southwesterly having a radius of 530.00 feet; thence Northwesterly along the arc of said curve, through a central angle of $24^{\circ}08'32''$, an arc length of 223.32 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of North $25^{\circ}45'58''$ West, 221.67 feet; thence North $37^{\circ}50'15''$ West, 110.79 feet to the point of curvature of a curve concave Southerly having a radius of 1010.00 feet; thence Westerly along the arc of said curve, through a central angle of $64^{\circ}57'37''$, an arc length of 1145.11 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of North $70^{\circ}19'03''$ West, 1084.76 feet; thence South $77^{\circ}12'08''$ West, 314.90 feet to the point of curvature of a curve concave Southerly having a radius of 1000.00 feet; thence Westerly along the arc of said curve, through a central angle of $19^{\circ}10'51''$, an arc length of 334.77 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of South $67^{\circ}36'42''$ West, 333.21 feet; thence South $58^{\circ}01'17''$ West, 168.58 feet to the point of curvature of a curve concave Northeasterly having a radius of 155.00 feet; thence Northwesterly along the arc of said curve, through a central angle of $122^{\circ}18'22''$, an arc length of 330.87 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of North $60^{\circ}49'32''$ West, 271.53 feet; thence North $00^{\circ}19'39''$ East, 932.00 feet to a point lying on the Southerly right of way line of said Island Drive thence North $89^{\circ}58'19''$ East, along said Southerly right of way line, 3289.34 feet to the Point of Beginning.

Containing 131.36 acres, more or less.

SKETCH TO ACCOMPANY DESCRIPTION OF

A PORTION OF SECTION 12, AND A PORTION OF SECTION 43 OF THE JOHN CHRISTOPHER GRANT, TOWNSHIP 1 SOUTH, RANGE 27 EAST, TOGETHER WITH A PORTION OF SECTION 7, AND A PORTION OF SECTION 41 OF THE JOHN CHRISTOPHER GRANT, TOWNSHIP 1 SOUTH, RANGE 28 EAST, ALL LYING IN DUVAL COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED IN SEPARATE ATTACHMENT.



SHEET 1 OF 3

ETM
SURVEYING & MAPPING

Trusted
Advisors,
Creating
Community.

14775 Old St. Augustine Rd.
Jacksonville, Florida 32258

(904) 642-8550
www.etminc.com

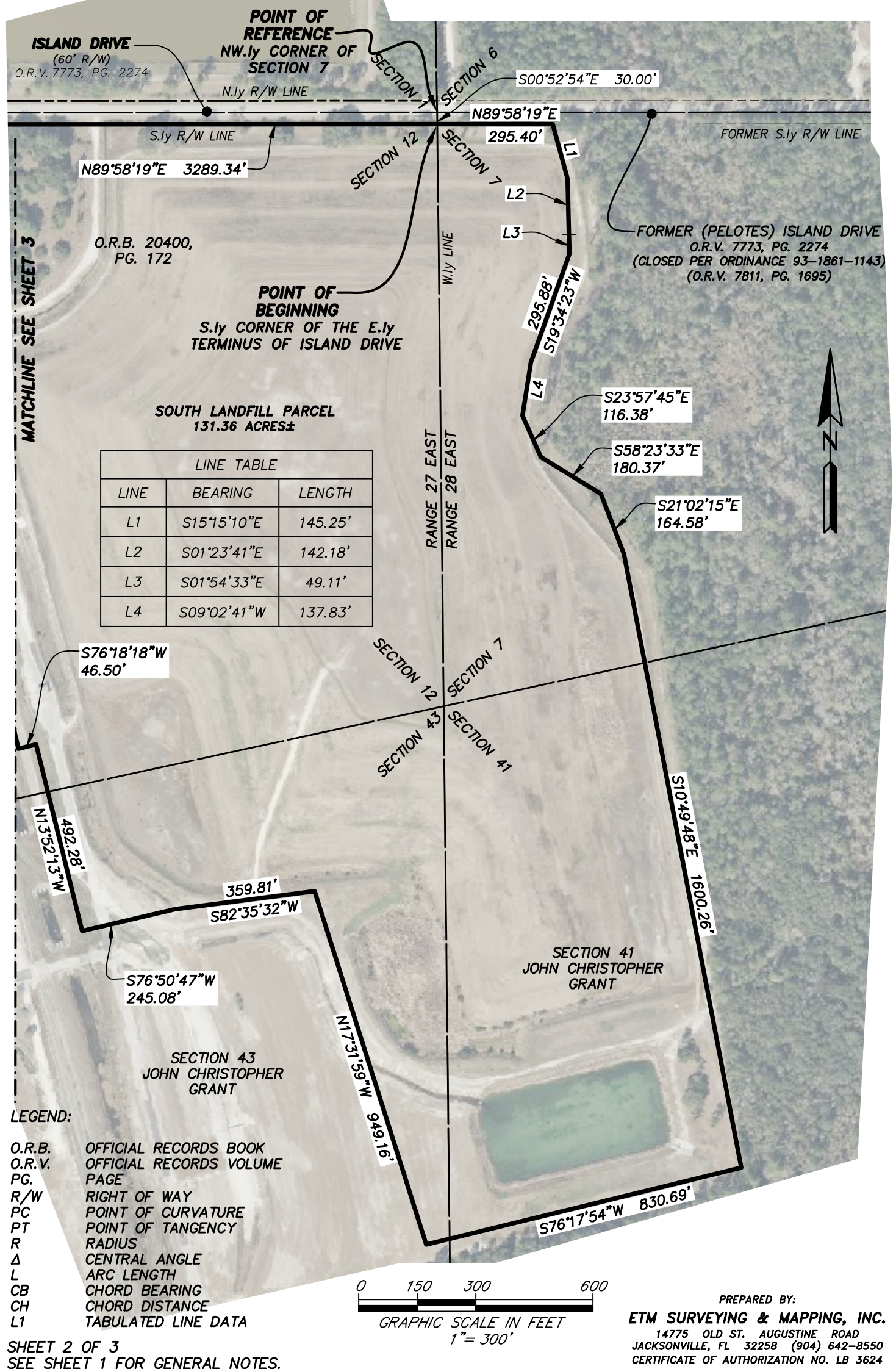
Certificate of Authorization No: LB 3624

SCALE: 1"=600'

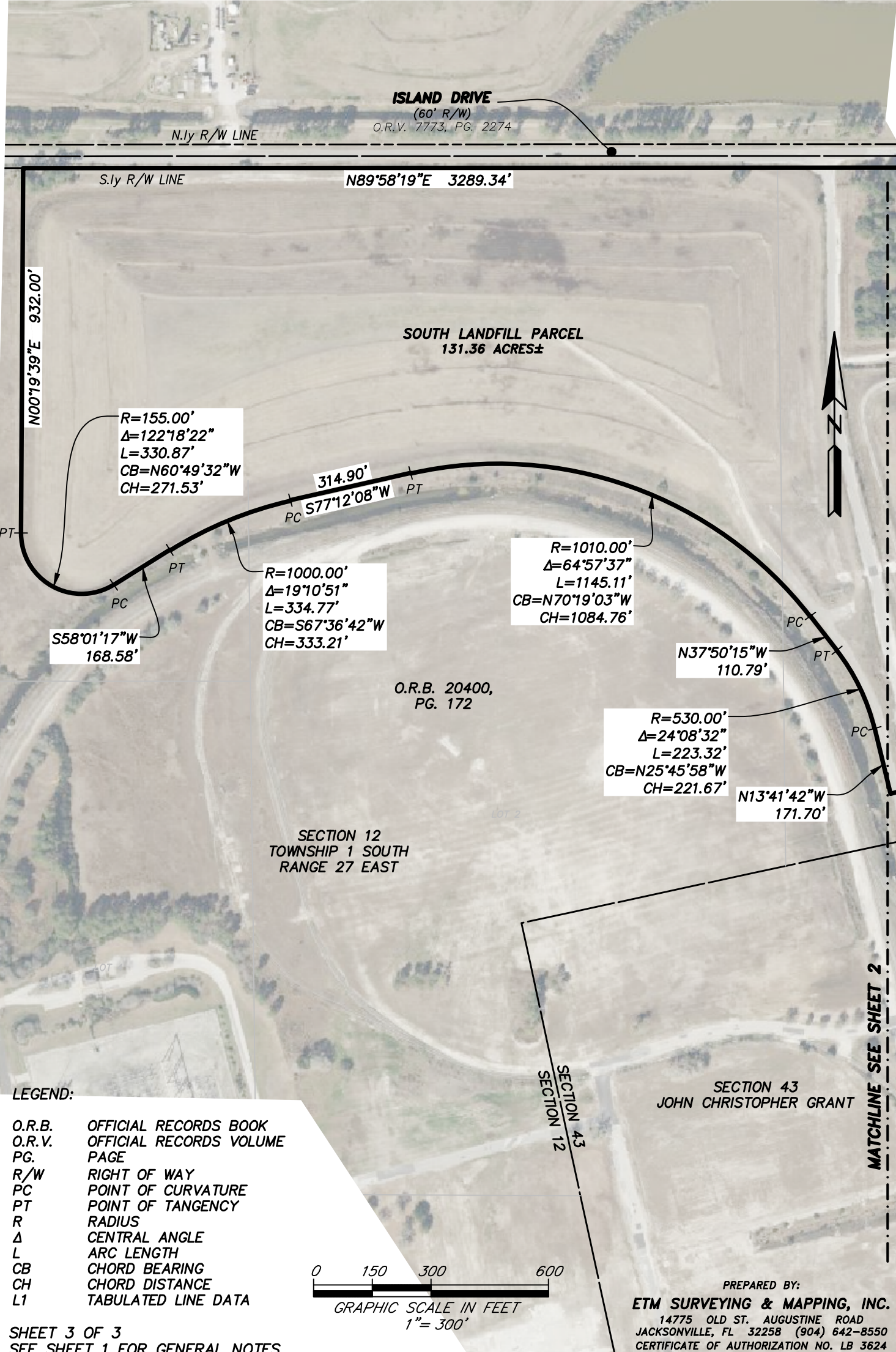
DATE: JANUARY 5, 2024

G. C. COLYER III
PROFESSIONAL SURVEYOR AND MAPPER
STATE OF FLORIDA LS No. 6963

A PORTION OF SECTION 12, AND A PORTION OF SECTION 43 OF THE JOHN CHRISTOPHER GRANT, TOWNSHIP 1 SOUTH, RANGE 27 EAST, TOGETHER WITH A PORTION OF SECTION 7, AND A PORTION OF SECTION 41 OF THE JOHN CHRISTOPHER GRANT, TOWNSHIP 1 SOUTH, RANGE 28 EAST, ALL LYING IN DUVAL COUNTY, FLORIDA.



A PORTION OF SECTION 12, AND A PORTION OF SECTION 43 OF THE JOHN CHRISTOPHER GRANT, TOWNSHIP 1 SOUTH, RANGE 27 EAST, TOGETHER WITH A PORTION OF SECTION 7, AND A PORTION OF SECTION 41 OF THE JOHN CHRISTOPHER GRANT, TOWNSHIP 1 SOUTH, RANGE 28 EAST, ALL LYING IN DUVAL COUNTY, FLORIDA.



January 5, 2024

Work Order No. 23-465.00

File No. 130A-10.00C

Substation Parcel

A portion of Section 12, Township 1 South, Range 27 East, Duval County, Florida, being a portion of those lands described and recorded in Official Records Book 20400, page 172, of the current Public Records of said county, being more particularly described as follows:

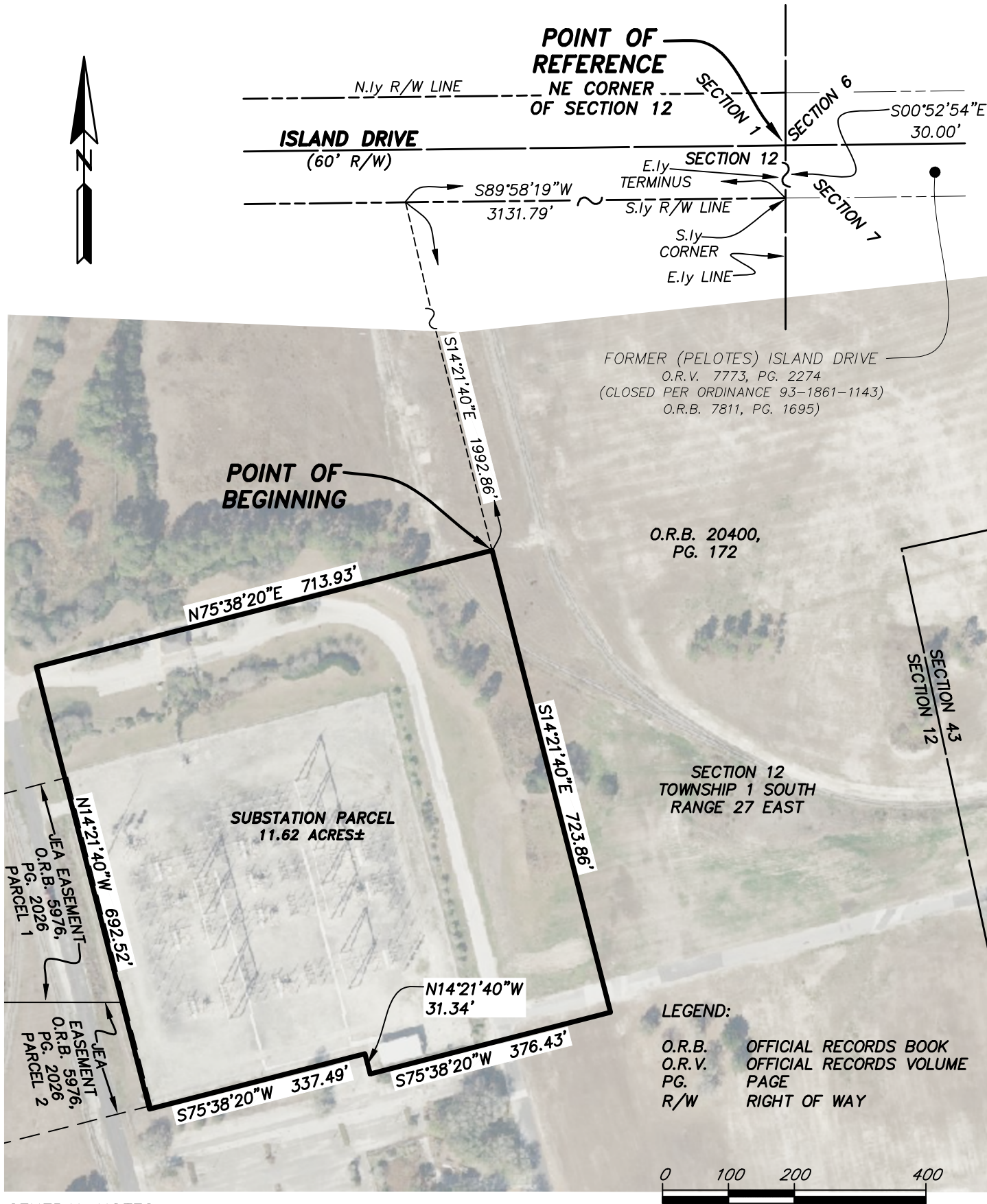
For a Point of Reference commence at the Northeast corner of said Section 12, said corner lying on the Easterly terminus of Island Drive, a 60 foot right of way as described and recorded in Official Records Volume 7773, page 2274 of said current Public Records; thence South $00^{\circ}52'44''$ East, along the Easterly line of said Section 12 and along said Easterly terminus, 30.00 feet to the Southerly corner of said Easterly terminus; thence South $89^{\circ}58'19''$ West, departing said Westerly line and along the Southerly right of way line of said Island Drive, 3131.79 feet; thence South $14^{\circ}21'40''$ East, departing said Southerly right of way line, 1992.86 feet to the Point of Beginning.

From said Point of Beginning, thence continue South $14^{\circ}21'40''$ East, 723.86 feet; thence South $75^{\circ}38'20''$ West, 376.43 feet; thence North $14^{\circ}21'40''$ West, 31.34 feet; thence South $75^{\circ}38'20''$ West, 337.49 feet; thence North $14^{\circ}21'40''$ West, 692.52 feet; thence North $75^{\circ}38'20''$ East, 713.93 feet to the Point of Beginning.

Containing 11.62 acres, more or less.

SKETCH TO ACCOMPANY DESCRIPTION OF

A PORTION OF SECTION 12, TOWNSHIP 1 SOUTH, RANGE 27 EAST,
DUVAL COUNTY, FLORIDA, BEING A PORTION OF THOSE LANDS
DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 20400,
PAGE 172, OF THE CURRENT PUBLIC RECORDS OF SAID COUNTY,
BEING MORE PARTICULARLY DESCRIBED IN SEPARATE ATTACHMENT.



GENERAL NOTES:

- 1) THIS IS NOT A SURVEY.
- 2) BEARINGS BASED ON THE SOUTHERLY RIGHT OF WAY LINE OF ISLAND DRIVE AS BEING SOUTH 89°58'19\"

ETM
SURVEYING & MAPPING

14775 Old St. Augustine Rd.
Jacksonville, Florida 32258

Certificate of Authorization No: LB 3624

Trusted
Advisors,
Creating
Community.

(904) 642-8550
www.etminc.com

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED
USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS
DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SCALE: 1"=200'

DATE: JANUARY 5, 2024

G. C. COLYER III
PROFESSIONAL SURVEYOR AND MAPPER
STATE OF FLORIDA LS No. 6963

ATTACHMENTS

ATTACHMENT B: Surface Water Management System

ATTACHMENTS

ATTACHMENT C: Mitigation Requirements/Plans

ATTACHMENTS

ATTACHMENT D: Groundwater Monitoring Requirements

DEP Summary of the Ground Water Monitoring Requirements as approved in the Revised Solid Waste and Industrial Wastewater Ground Water Monitoring Plans, Dated February 8, 2023, and Site Certification PA 81-13Q, Section B, Conditions I.B. and I.G.

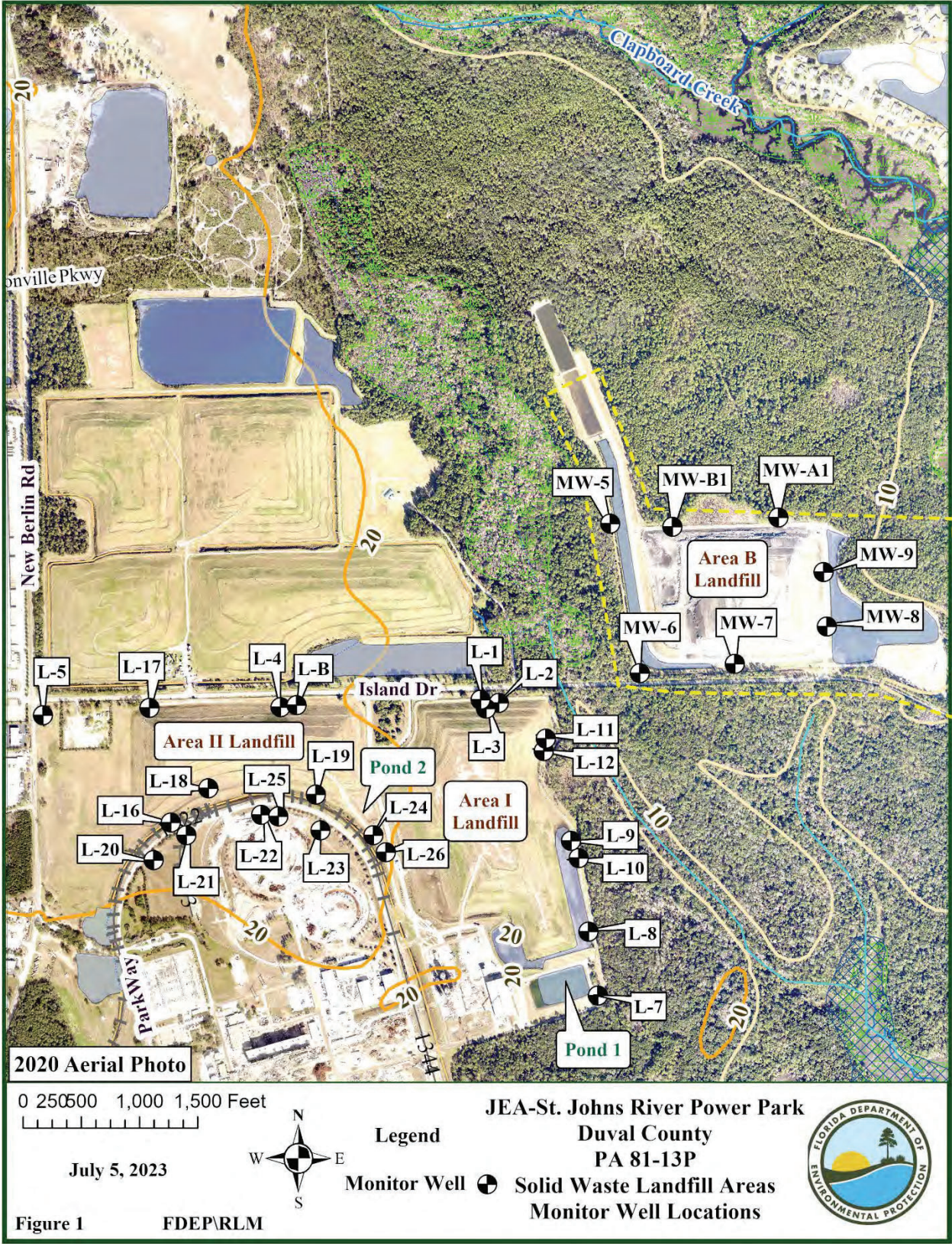
A. Solid Waste Ground Water Monitoring Plan Requirements

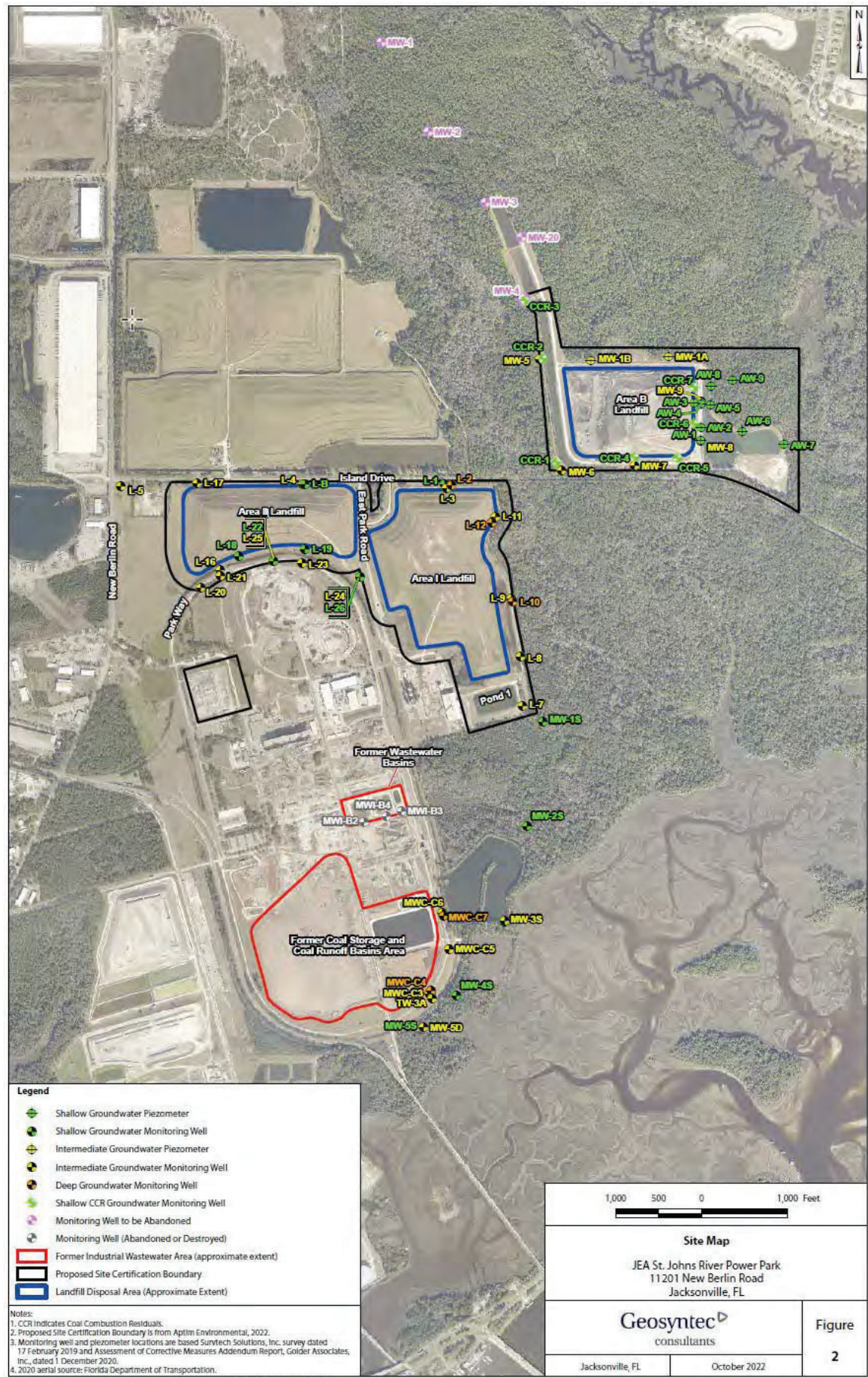
1. During the period of operation authorized by the Site Certification, the Licensee shall sample ground water at the monitoring wells identified in item B.2 below in accordance with the Site Certification and the approved ground water monitoring plan prepared in accordance with Rules 62-701 and 62-520.600, F.A.C. [62-701] [62-520.600].
2. The following tables includes the monitoring wells that shall be sampled at the solid waste landfill and runoff pond sites. The monitoring well locations are shown in Figure 1 and duplicated in Figure 2 below the tables.

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Latitude			Longitude			Depth (Feet)	Aquifer Monitored	New or Existing
		°	'	"	°	'	"			
Area I Landfill										
L-1	Area I Landfill, Background Well.	30	26	28	81	32	45	23	Surficial	Existing
L-2	Area I Landfill, Deep Background Well.	30	26	28	81	32	44	83.5	Surficial	Existing
L-3	Area I Landfill, Background Well.	30	26	27	81	32	45	49	Surficial	Existing
L-7	Area I Landfill, Compliance Well.	30	26	2	81	32	34	39.5	Surficial	Existing
L-8	Area I Landfill, Intermediate Well.	30	26	8	81	32	35	41.5	Surficial	Existing
L-9	Area I Landfill, Intermediate Well.	30	26	15	81	32	37	44.5	Surficial	Existing
L-10	Area I Landfill, Deep Intermediate Well.	30	26	14	81	32	36	81	Surficial	Existing
L-11	Area I Landfill, Intermediate Well.	30	26	24	81	32	39	39	Surficial	Existing
L-12	Area I Landfill, Deep Intermediate Well.	30	26	23	81	32	39	87.5	Surficial	Existing
Area II Landfill										
L-B	Area II Landfill, Background Well.	30	26	27	81	33	3	18.5	Surficial	Existing
L-4	Area II Landfill, Background Well.	30	26	28	81	33	4	29.5	Surficial	Existing
L-5	Area II Landfill, Background Well.	30	26	27	81	33	28	29.5	Surficial	Existing
L-16	Area II Landfill, Intermediate Well.	30	26	18	81	33	16	42	Surficial	Existing
L-17	Area II Landfill, Background Well.	30	26	27	81	33	17	29.5	Surficial	Existing
L-18	Area II Landfill, Intermediate Well.	30	26	21	81	33	12	15	Surficial	Existing

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Latitude			Longitude			Depth (Feet)	Aquifer Monitored	New or Existing
L-19	Area II Landfill, Intermediate Well.	30	26	20	81	33	1	15	Surficial	Existing
L-20	Area II Landfill, Compliance Well.	30	26	15	81	33	17	29.5	Surficial	Existing
L-21	Area II Landfill, Compliance Well.	30	26	17	81	33	14	29.5	Surficial	Existing
L-22	Area II Landfill, Compliance Well.	30	26	18	81	33	7	13	Surficial	Existing
L-23	Area II Landfill, Compliance Well.	30	26	17	81	33	1	29.6	Surficial	Existing
L-24	Area II Landfill, Compliance Well.	30	26	16	81	32	56	29.5	Surficial	Existing
L-25	Area II Landfill, Compliance Well.	30	26	18	81	33	5	29.5	Surficial	Existing
L-26	Area II Landfill, Compliance Well.	30	26	15	81	32	55	15.7	Surficial	Existing
Area B Landfill										
MW-5	Area B Landfill, Background Well.	30	26	42	81	32	32	43.3	Surficial	Existing
MW-6	Area B Landfill, Background Well.	30	26	30	81	32	30	53.5	Surficial	Existing
MW-7	Area B Landfill, Intermediate Well.	30	26	30	81	32	20	54.1	Surficial	Existing
MW-8	Area B Landfill, Intermediate Well.	30	26	33	81	32	11	53.5	Surficial	Existing
MW-9	Area B Landfill, Intermediate Well.	30	26	38	81	32	11	50.9	Surficial	Existing
MW-A1	Area B Landfill, Background Well.	30	26	43	81	32	16	53.4	Surficial	Existing
MW-B1	Area B Landfill, Background Well.	30	26	42	81	32	26	43.3	Surficial	Existing

[62-701] [62-520.600(6)]





3. The following parameters in the table below shall be sampled and analyzed at the stated frequency for each monitoring well at the Area I and II Landfills.

Parameter	Compliance Well Limit	Units	Sample Type	Monitoring Frequency
Water Level Relative to NGVD	Report	Feet	In-Situ	Annual
pH	Report	SU	In-Situ	Annual
Specific Conductance	Report	umhos/cm	In-Situ	Annual
Dissolved Oxygen	Report	mg/L	In-Situ	Annual
Aluminum, Total Recoverable	200	ug/L	Grab	Annual
Iron, Total Recoverable	300	ug/L	Grab	Annual
Temperature	Report	Celsius	In-Situ	Annual
Total Dissolved Solids	500	mg/L	Grab	Annual
Turbidity	Report	NTU	In-Situ	Annual
Sulfate, Total	250	mg/L	Grab	Annual

[62-701] [62-777] [62-520.600(11)(b)] [62-520.310(5)]

Annually = Once Per Year

4. The following parameters in the table below shall be sampled and analyzed at the stated frequency for each monitoring well at the Area B Landfill.

Parameter	Compliance Well Limit	Units	Sample Type	Monitoring Frequency*
Water Level Relative to NGVD	Report	Feet	In-Situ	Quarterly
pH	Report	SU	In-Situ	Quarterly
Specific Conductance	Report	umhos/cm	In-Situ	Quarterly
Dissolved Oxygen	Report	mg/L	In-Situ	Quarterly
Aluminum, Total Recoverable	200	ug/L	Grab	Quarterly
Arsenic, Total Recoverable	10	ug/L	Grab	Quarterly
Barium, Total Recoverable	2,000	ug/L	Grab	Quarterly
Beryllium, Total Recoverable	4	ug/L	Grab	Quarterly
Boron, Total Recoverable	Report	ug/L	Grab	Quarterly
Cadmium, Total Recoverable	5	ug/L	Grab	Quarterly
Chloride, Total	250	mg/L	Grab	Quarterly
Chromium, Total Recoverable	100	ug/L	Grab	Quarterly
Copper, Total Recoverable	1,000	ug/L	Grab	Quarterly
Iron, Total Recoverable	300	ug/L	Grab	Quarterly
Lead, Total Recoverable	15	ug/L	Grab	Quarterly
Mercury, Total Recoverable	2	ug/L	Grab	Quarterly
Nickel, Total Recoverable	100	ug/L	Grab	Quarterly
Selenium, Total Recoverable	50	ug/L	Grab	Quarterly
Sulfate, Total	250	mg/L	Grab	Quarterly
Temperature	Report	Celsius	In-Situ	Quarterly
Total Dissolved Solids	500	mg/L	Grab	Quarterly
Turbidity	Report	NTU	In-Situ	Quarterly
Vanadium, Total Recoverable	Report	ug/L	Grab	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 limits, per DEP approval.

[62-701] [62-777] [62-520.600(11)(b)] [62-520.310(5)]

Quarterly = Four Times Per Year
Annual = Once Per Year

5. Analytical Data Reports. The Licensee shall submit all groundwater sampling results on the Parameter Monitoring Report Form [DEP Form 62-520.900(2)], not DEP Form 62-620.910(10), and electronically, according to the following schedule:

SAMPLE PERIOD	REPORT DUE DATE
Quarterly Monitoring	
January 1 – March 31	April 28
April 1 – June 30	July 28
July 1 – September 30	October 28
October 1 – December 31	January 28
Annual Monitoring	
January 1 – June 30	July 28
July 1 – December 31	January 28

All ground water monitoring reports shall be submitted electronically, with one hard copy submitted to the District office, unless the Department indicates otherwise in writing. The ground water monitoring reports shall be submitted in Adobe pdf format. The ground water data Electronic Data Deliverable (EDD) shall be provided to the Department in an electronic format consistent with requirements for importing the data into the Department's databases. Ground water monitoring reports shall be signed and sealed by a Florida registered professional geologist or professional engineer with experience in hydrogeological investigations and shall include the following:

- 1) Cover letter;
- 2) Summary of exceedances and sampling problems, if any (e.g., variation from SOP field criteria);
- 3) Conclusions and recommendations;
- 4) Ground water contour maps;
- 5) Chain of custody forms;
- 6) Water levels, water elevation table;
- 7) Ground Water Monitoring Report Certification, using the appropriate Department form;
- 8) Appropriate sampling information on Form FD 9000-24 (DEP-SOP-001/01); and,
- 9) Laboratory and Field EDDs and error logs, as applicable.

All submittals in response to this specific condition shall be sent to the following addresses:

Florida Department of Environmental Protection
Compliance Solid Waste Section
8800 Baymeadows Way W., Suite 100
Jacksonville, Florida 32256-7549,
or Email to: DEP_NED@floridadep.gov

Florida Department of Environmental Protection
Solid Waste Section, MS 4565
2600 Blair Stone Road
Tallahassee, Florida, 32399-2400,
or Email to: sco@floridadep.gov

[62-701] [62-520.600(11)(b)]

6. New Well Requirements. The Licensee shall submit, the following information to the Department within 15 days of completion of construction of any new groundwater monitoring well(s) (permanent and temporary):

Well identification	Driller's Lithologic Log
Latitude/Longitude	Total well depth
Aquifer monitored	Casing diameter
Screen type and slot size	Casing type and length
Elevation at top of pipe	Well construction permit number
Elevation at land surface	Depth to groundwater

New groundwater monitoring wells shall be designed and constructed in accordance with Chapter 62-520, F.A.C., and ASTM Standard D-5092. A surveyed drawing shall be submitted showing the horizontal location of all monitoring wells by metes and bounds or equivalent surveying techniques. The surveyed drawing shall include the monitoring well identification number as well as the location and elevation of all permanent benchmark(s) and/or corner monument marker(s) at the site. The survey shall be conducted by a Florida Licensed Professional Surveyor and Mapper.

7. Compliance with groundwater standards and/or criteria shall be determined by analysis of unfiltered groundwater samples, unless the requirements of Rule 62-520.310(5), F.A.C., are satisfied. Additional samples, wells, and parameters may be required based upon subsequent analyses.
8. Groundwater samples shall be collected from the monitor wells in item B.2 for the parameters in item B.3 in accordance with DEP'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. [62-160]
9. Damaged Well Requirements. In the event any monitoring well becomes damaged or inoperable, the Licensee shall notify the Department within 72 hours and shall submit a detailed written report within seven days. The written report shall detail the problem that has occurred and remedial measures that have been taken to prevent a recurrence. Damaged wells shall be repaired or replaced within 60 days. If a monitoring well is unable to be sampled during its normal time frame, it shall be sampled within 30 days of repair or replacement and its analysis shall be submitted to the Department within 60 days of repair or replacement. All monitoring well design and replacement shall be approved by the Department prior to installation. [62-520.600] [62-4.070(3)]

B. Industrial Wastewater Ground Water Monitoring Plan Requirements:

1. Due to the removal of the Industrial Wastewater (IW) discharge sites, monitoring of the previously existing permanent IW monitor wells, and monitoring of the IW sites is no longer required. However, the facility may continue to voluntarily monitor some test wells around the IW sites outside of the Site Certification requirements for specific parameters until further notice. [62-520.600]

Guidance for Submitting Electronic Ground Water Monitoring Reports to the Solid Waste Program, ADaPT

June 15, 2021

I. General Information

Water quality monitoring reports and all groundwater, surface water, and leachate (when required) analytical results for the Solid Waste Programs can be submitted to the Department of Environmental Protection (the Department) electronically through the DEP Business Portal; <http://www.fldepportal.com/go/>. The FDEP Business Portal is the Department's preferred method of submittal. Water quality monitoring reports shall be submitted as a single file in Adobe PDF format. Unless otherwise approved by the Department, the water quality Electronic Data Deliverable (EDD) shall be compatible with software called Florida DEP Automated Data Processing Tool (ADaPT). ADaPT has been developed to evaluate and upload water quality data into the Department's Water Assurance Compliance System (WACS) database. A copy of this ADaPT software with installation instructions and EDD specifications can be downloaded from the following website address: <https://www.floridadep.gov/waste/waste/content/adapt>

II. Monitoring Report

The groundwater monitoring report shall be submitted as a single file in Adobe PDF format, along with the EDD zip file, and shall include the following items:

1. Cover letter;
2. Summary of exceedances and recommendations;
3. Groundwater contour maps;
4. Chain of custody forms;
5. Water levels, water elevation table;
6. Groundwater Monitoring Report Certification, using the appropriate Department form;
7. Appropriate sampling information on Form FD 9000-24 (DEP-SOP-001/01); and,
8. Laboratory EDDs and associated Lab EDD ErrorLogs, Field EDDs that are compatible with ADaPT software and ADaPT export file(s); all in a single zip file.

Submit all ADaPT files in a single zip file named as follows:

12345_20081128_SWzdd.zip

Please do not submit multiple documents for the monitoring report; combine all documents in a single PDF document. Submit the monitoring report in a single (text, no scanned content) PDF file named as follows:

12345_20081128_SWgwmr.pdf

III. ADaPT EDDs

The ADaPT EDD consists of four electronic deliverables: (1) a Laboratory EDD, identified as SWldd.txt; (2) a Laboratory EDD Error Log, identified as SWldd_ErrorLog.txt; (3) a Field EDD identified as SWfdd.txt; and (4) an ADaPT export identified as ADaPTSWYYYYMMDDHHMMSS.csv where YYYYMMDDHHMMSS is the year, month, day, hour, minute, and second the export file was created.

The Laboratory EDD shall be submitted in a comma separated (csv format) text file using the .txt filename extension. The Laboratory EDD file name format shall be: [WACS Facility I.D.] underscore [Begin Sampling Year, Month and Day (yyyymmdd)] underscore SWldd.txt. The period at the end would not be included. For example, with WACS Facility I.D. # 12345 where sampling started November 28 and ended December 4, 2008, the Laboratory EDD file name should be: 12345_20081128_SWldd.txt

The Field EDD shall be submitted in the same comma separated (.csv format) text file as the Laboratory EDD. The Field EDD file name format shall be: [WACS Facility I.D.] underscore [Begin Sampling Year, Month and Day (yyyymmdd)] underscore SWfdd.txt. Again, the period at the end is not included. For example, with WACS Facility I.D. # 12345, where sampling started November 28 and ended December 4, 2008, the file name should be 12345_20081128_SWfdd.txt

For confirmation sampling, add the term “_CONF” to the EDD filenames as follows:
12345_20081128_CONF_SWldd.txt for the Laboratory EDD or
12345_20081128_CONF_SWfdd.txt for the Field EDD.

For radiochemistry results, add the term “_RAD” similar to confirmation sampling indicated above.

IV. Signatures Required

Water quality monitoring reports shall be signed and sealed by a Florida registered professional geologist or professional engineer with experience in hydrogeological investigations. An electronic signed and sealed signature page may be submitted with the report provided a stamped seal is used. If a raised seal is used, ensure that the seal is legible (gray the embossed seal and scan). Otherwise, you must separately mail the signed and sealed page.

V. Process Required

Three steps are generally required. First, the Laboratory EDD, in comma separated text format, must be submitted by the laboratory. To validate the QA/QC aspects of the Laboratory EDD, the permittee shall ensure the laboratory processes the Laboratory EDD through ADaPT using both their laboratory specific library and the Department's Division of Waste Management master library and corrects all critical errors and explains all non-critical errors prior to submittal. Second, the appropriate entity (laboratory, consultant, or permittee) shall process the Field EDD through ADaPT and correct all Field EDD errors prior to submittal.

Finally, as a completeness check, the laboratory, permittee or consultant shall process both the Laboratory EDD and the Field EDD through ADaPT and confirm a successful export to disk and submit the ADaPT generated export file (ADaPTSWYYYYMMDDHHMMSS.csv).

VI. Resources

In the event help is needed to prepare these EDDs, you can contact Clark Moore, clark.b.moore@dep.state.fl.us, (850) 245-8739 or by emailing ADaPT.EDDs.and.Reports@floridadep.gov

If monitoring test site information needs updating in the WACS Oracle database, or if you need help in submitting the groundwater monitoring report, please contact the Department's Solid Waste staff at the appropriate District office:

Northwest District Office
160 Governmental Center, Suite 308
Pensacola, Florida 32502
(850) 595-8300

Northeast District Office
8800 Baymeadows Way West, Suite 100
Jacksonville, FL 32256
(904) 256-1700

Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803
(407) 897-4100

Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, Florida 33637
(813) 470-5700

Southeast District Office
3301 Gun Club Road, MSC7210-1
West Palm Beach, Florida 33406
(561) 681-6600

South District Office
P.O. Box 2549
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33902
(239) 344-5600

Florida Department of Environmental Protection

Bob Martinez Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-520.900(2)

Form Title Ground Water Monitoring
Report

Effective Date _____

DEP Application No. _____

GROUND WATER MONITORING REPORT
Rule 62-520.600(11)

PART I GENERAL INFORMATION

- (1) Facility Name _____
Address _____
City _____ Zip _____
Telephone Number () _____
- (2) The GMS Identification Number _____
- (3) DEP Permit Number _____
- (4) Authorized Representative Name _____
Address _____
City _____ Zip _____
Telephone Number () _____
- (5) Type of Discharge _____
- (6) Method of Discharge _____

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Date: _____

Signature of Owner or Authorized Representative

PART II QUALITY ASSURANCE REQUIREMENTS

Sample Organization Comp QAP # _____

Analytical Lab Comp QAP # /HRS Certification # _____

 *Comp QAP # /HRS Certification # _____

Lab Name _____

Address _____

Phone Number () _____

Facility GMS #: _____

Sampling Date/Time: _____

Test Site ID #: _____

Report Period: _____
(year/quarter)

Well Name: _____

Well Purged (Y/N):_____

Classification of Ground Water:_____

Well Type: () Background

Ground Water Elevation (NGVD): _____

() Intermediate

() Compliance

() Other

or (MSL): _____

* Attach Laboratory Reports

ATTACHMENTS

ATTACHMENT D. APPENDIX I: Solid Waste and Industrial Wastewater Groundwater Monitoring Plan



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

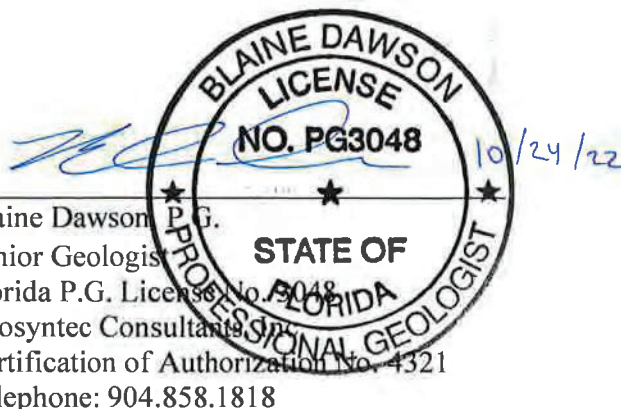


TABLE OF CONTENTS

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 81-13O, 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:

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

Path: (I:\usville-01\DATA) T:\OGIS\VR1663_S\JRP\AREA2\F\MXD\AUGUST2011\Topo_August2011.mxd 03 October 2022. Last Edited by: mhensley

Site Location Map

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

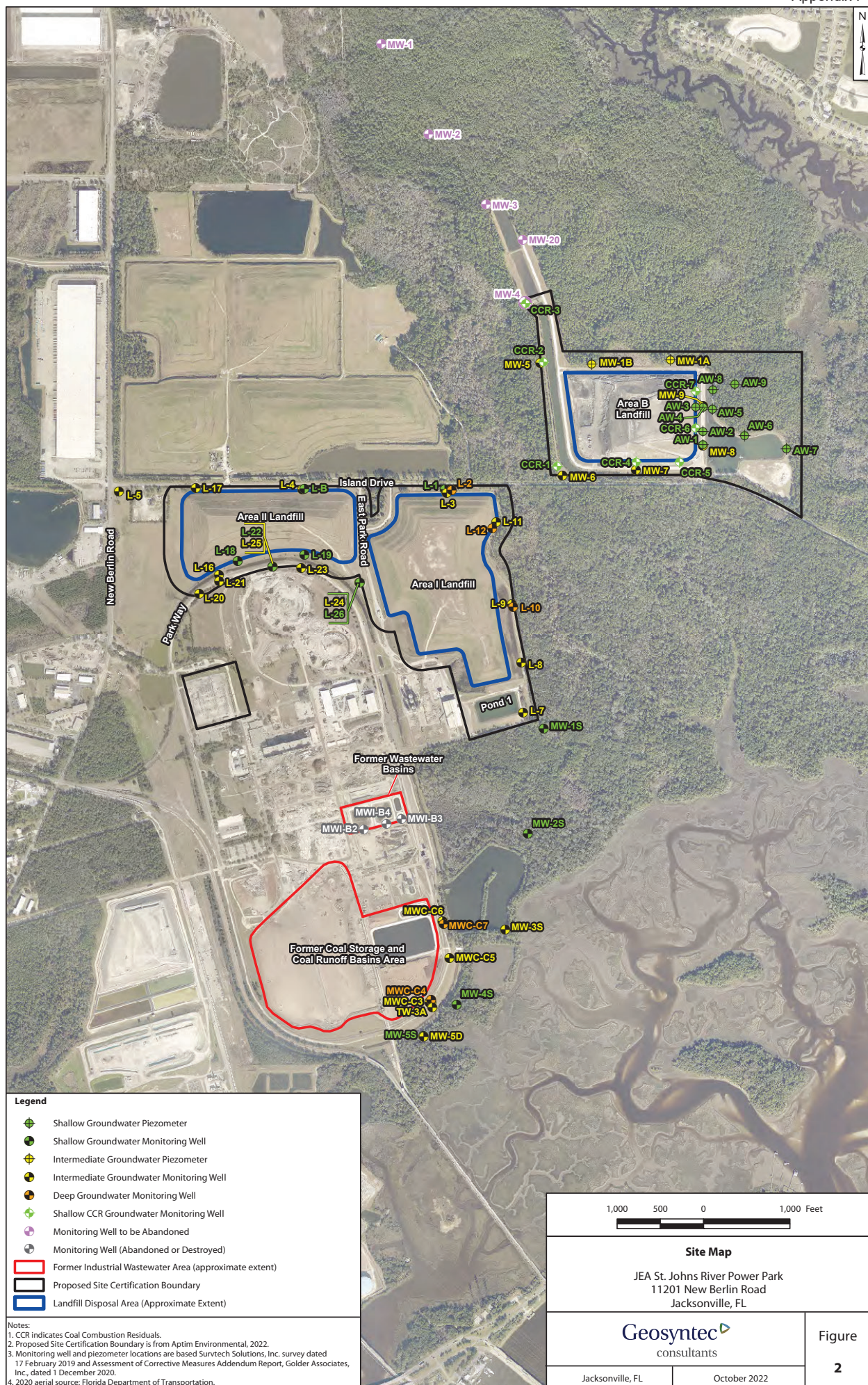
Geosyntec
consultants

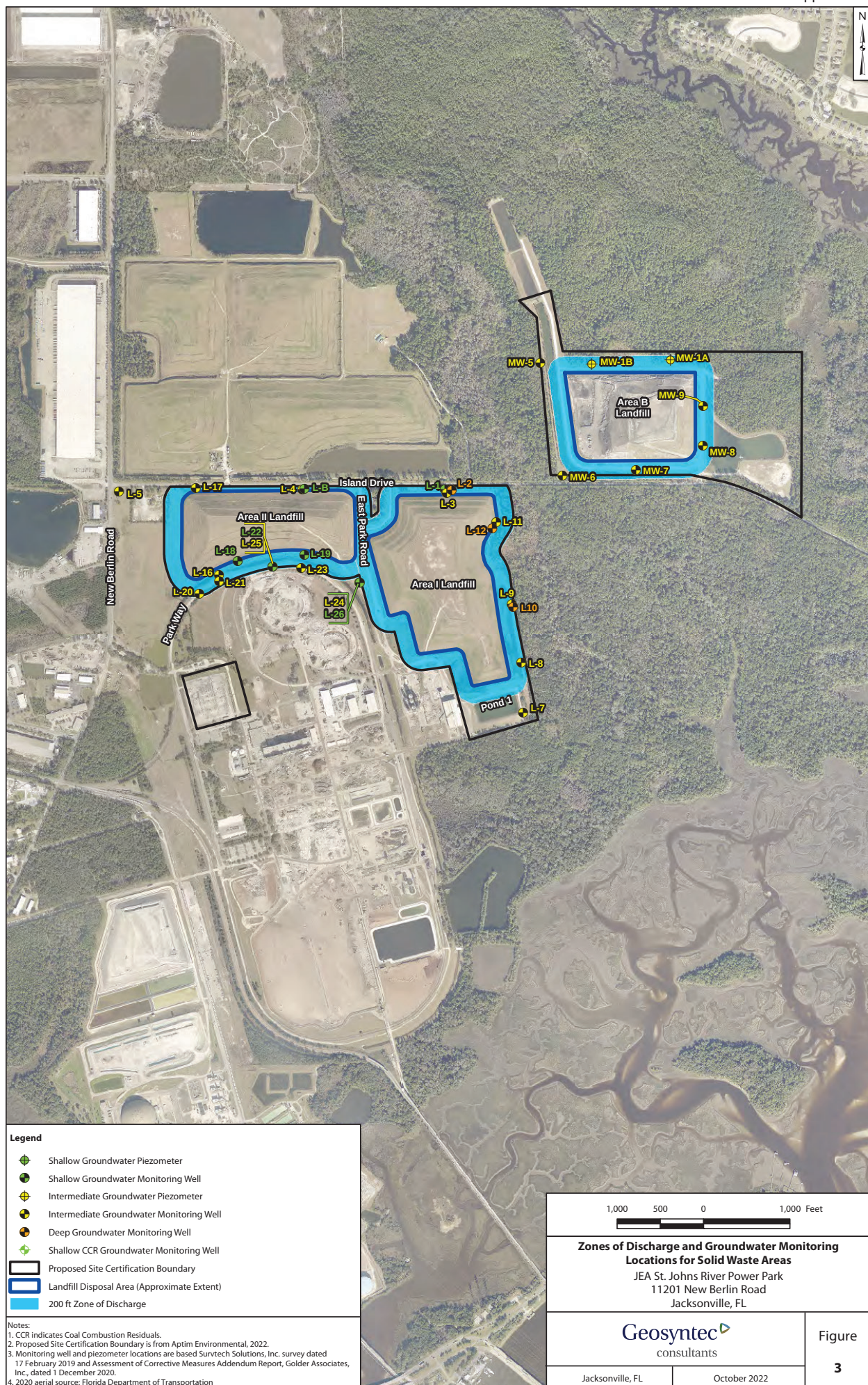
Jacksonville, FL

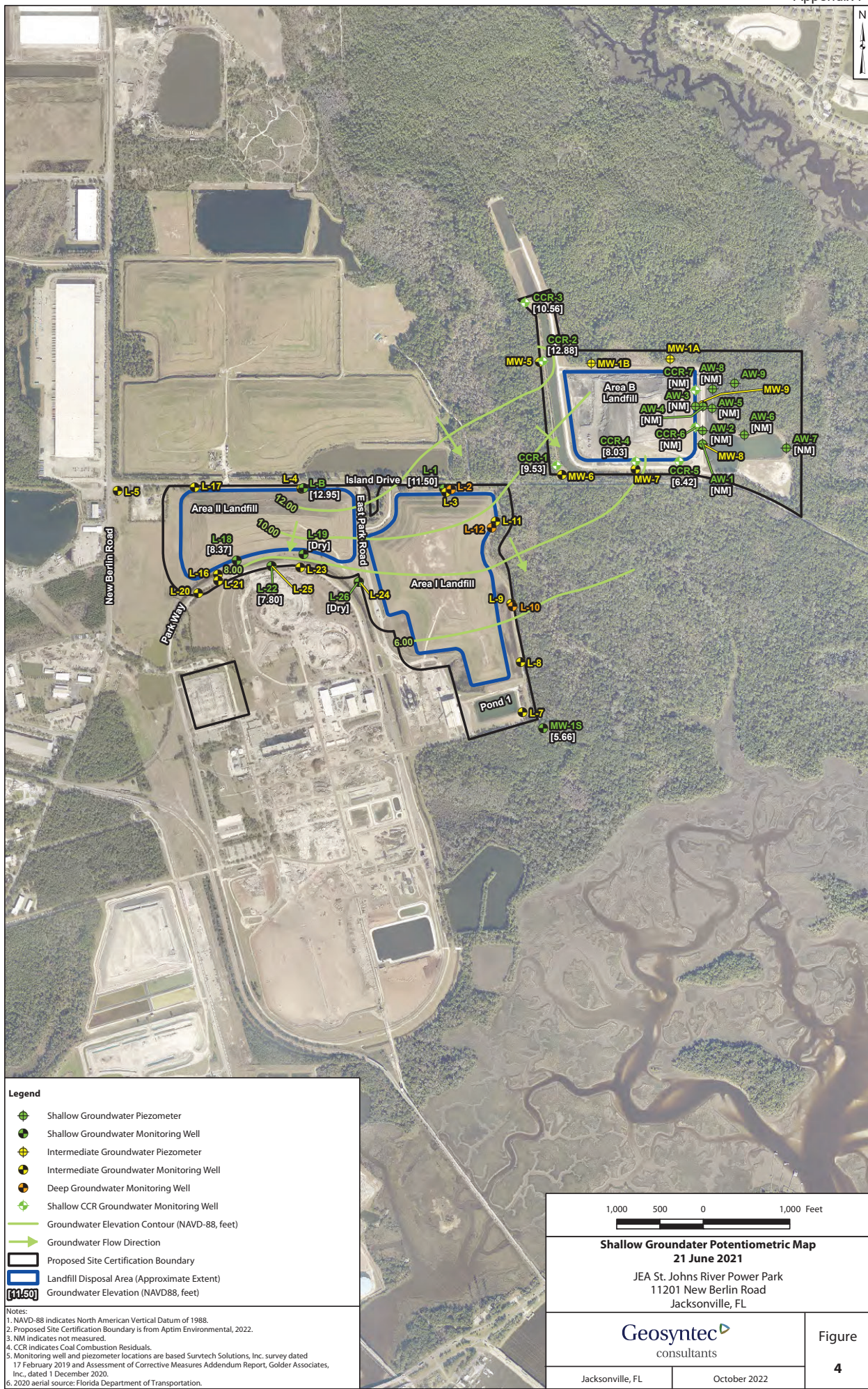
October 2022

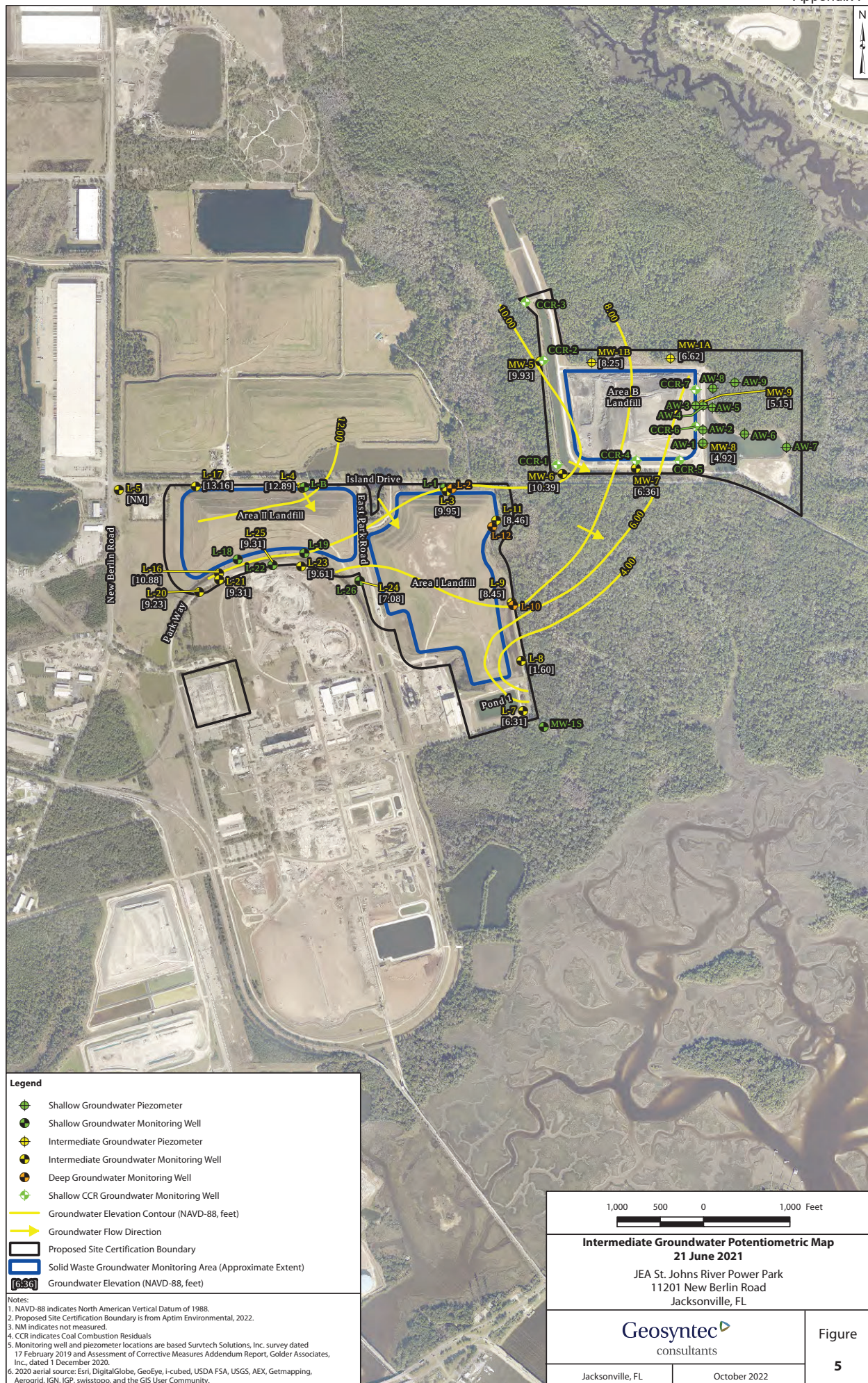
Figure

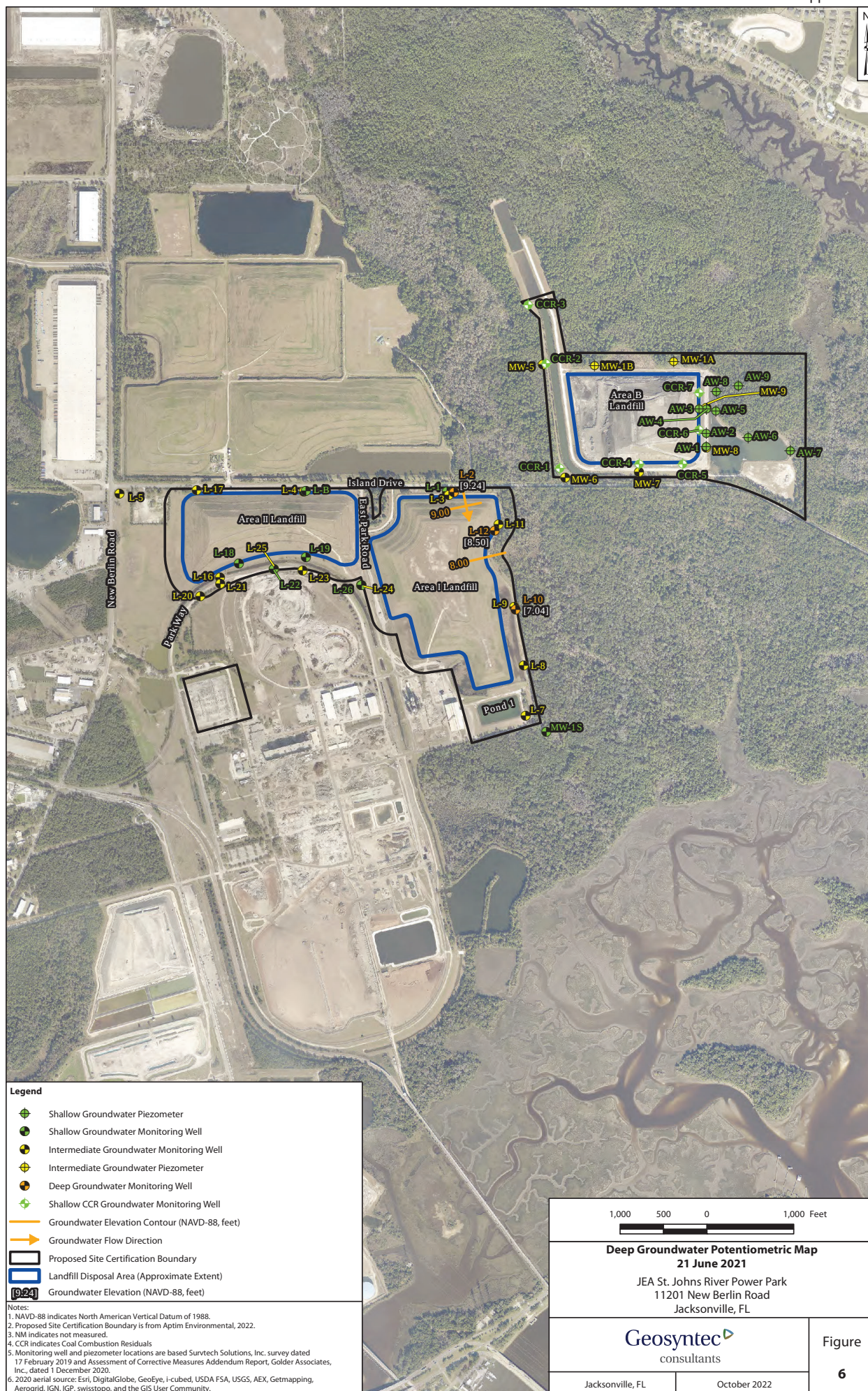
1

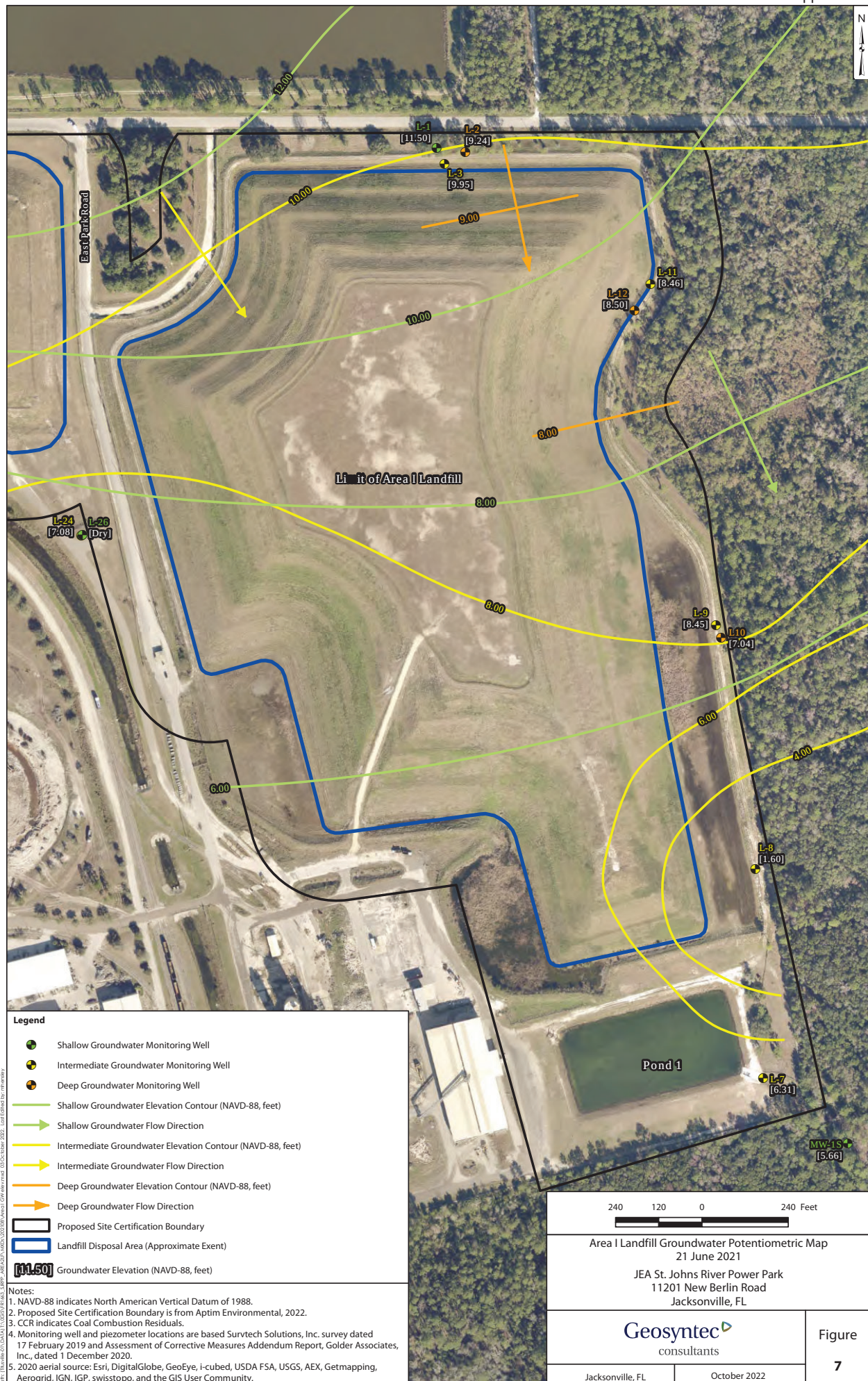


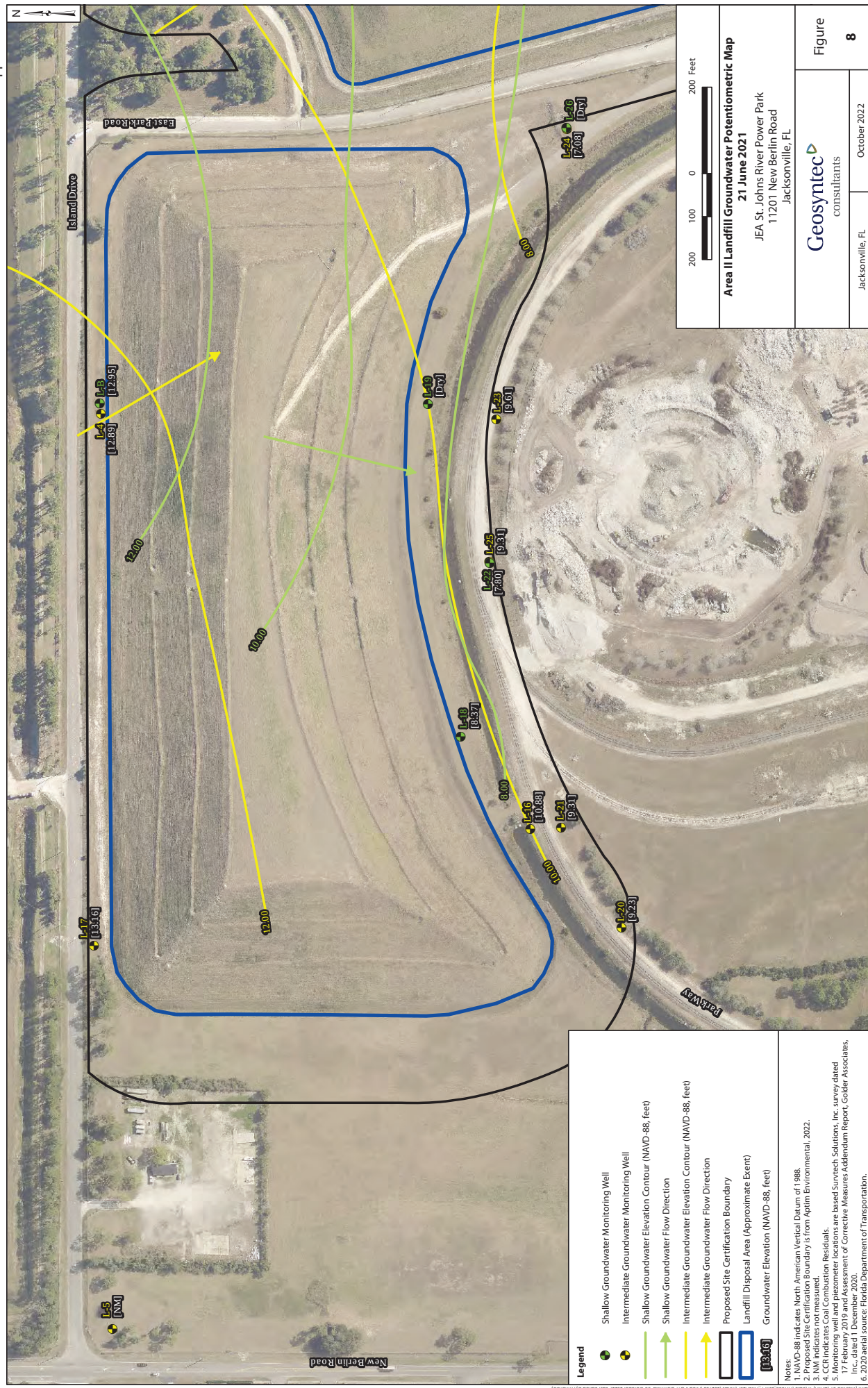
















APPENDIX A
HISTORICAL GROUNDWATER
ANALYTICAL RESULT TABLES

TABLE 1: GROUNDWATER ANALYTICAL RESULTS - FORMER INDUSTRIAL WASTEWATER AREA
Facility Name: ST. JOHNS RIVER POWER PARK

Well ID	Screen Interval (ft bbl)	Date Sampled	Aluminum (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Boron (µg/L)	Cadmium (mg/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)
MW-C3	33-43	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	---	---	---	---
		08/09/12	41.3	11.4	48.7	0.000137	NS	0.157 U	650	1.05 U	0.000912	20400	0.156 U	0.005 U	0.00069 U	1.82	0.574 U	988	2004	NS	NS	NS	NS
		11/20/17	63.8	15.4	42.1	0.00017	NS	0.0690 U	421	1.261	0.000914 U	21600	0.50 U	11.2	0.001531	0.50 U	0.154 U	92.2	1322	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
		05/13/22	NS	8.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		08/17/22	NS	5.81	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		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	0.000049 U	7.39	0.574 U	1220	2631	NS	NS	NS	NS
		11/30/17	51.4	4.981	70.4	0.000070 U	NS	0.000070 U	NS	246	8.891	6.381	0.50 U	10.2	0.000321 U	0.621	0.392 U	623	NS	NS	NS	NS	
		12/21/17	46.7	5.611	71.3	NS	NS	0.0690 U	105	0.6861	0.000914 U	22.1	0.241	17.0 U	0.000281 U	0.841	0.154 U	497	950	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	0.731	0.10 U	NS	0.661	0.050 U	485	NS	11.9 ± 2.23	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
		08/17/22	NS	10	NS	NS	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/06/18	NS	0.511	34.4	NS	593	0.050 U	NS	1.4	NS	NS	0.50 U	0.10 U	NS	0.821	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	NS	NS	NS	NS	NS
		11/21/19	1660	0.741	32.3	NS	651	0.050 U	40.7	0.901	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
		05/15/19	4330	0.601	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	5.767 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	0.651	NS	2920	0.22 U	0.090 U	NS	1.2 U	0.21 U	443	645	2.84 U ± 1.62	1.10 U ± 0.614	1.02 U ± 0.497	2.14 U ± 1.11
		11/24/20	2310	0.531	29.4	NS	637	0.050 U	44.5	1.1	NS	2950	0.22 U	0.090 U	NS	1.2 U	0.21 U	410	750	2.46 U ± 1.31	0.843 U ± 0.507	1.59 U ± 0.868	1.99 U ± 0.911
		05/07/21	3510	0.50 U	33.4	NS	620	0.050 U	47.9	0.781	NS	2460	0.22 U	0.090 U	NS	1.51	0.21 U	433	784	6.50 ± 2.32	0.785 U ± 0.463	1.33 ± 0.502	2.17 U ± 1.11
MW-15	2-12	12/10/18	NS	0.50 U	46.7	NS	53.9	0.0831	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
		05/15/19	2370	0.50 U	55.7	NS	48.61	0.0821	25.2	1.5	NS	1760	0.50 U	0.10 U	NS	0.50 U	0.050 U	38.3	115	2.3 ± 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	0.561	0.050 U	56.5	159	3.3 ± 1.74	0.690 U ± 0.493	1.11 ± 0.479	1.64 ± 0.792
		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
		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	0.923 ± 0.553	0.923 ± 0.454	1.85 U ± 1.01
		05/07/21	2120	0.50 U	26.3	NS	39.71	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	1.96 U ± 1.05	0.812 U ± 0.398	0.696 U ± 0.368	1.51 U ± 0.766
		12/06/18	NS	16.4	NS	NS	2130	0.050 U	NS	2.8	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
		05/15/19	469	15.2	34.5	NS	2720	0.050 U	44.2	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
MW-35	2-12	11/21/19	219	4.7	29.9	NS	3060	0.050 U	397	1.7	NS	104	0.50 U	0.10 U	NS	0.661	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	0.811	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	1.35 ± 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	0.544 U ± 0.284	0.840 U ± 0.423	1.93 U ± 0.977
		05/07/21	127	14.0	45.4	NS	2200	0.050 U	801	0.911	NS	147	0.22 U	0.090 U	NS	1.2 U	0.21 U	408	2370	2.79 ± 1.35	1.07 U ± 0.577	0.767 U ± 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
		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
		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	1.67 ± 0.78	5.57 ± 1.70	NS
		01/22/19	NS	NS	NS	NS	2460	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	0.951	NS	51.0	0.50 U	0.10 U	NS	0.661	0.050 U	465	2970	6.64 ± 2.47	3.66 ± 1.17	1.10 ± 0.458	4.76 ± 1.63
		11/21/19	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
MW-3D	25-30	05/14/20	643	6.6	49.5	NS	3330	0.050 U	1050	2.2	NS	226	0.331	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
		11/24/20	47.4	3.8	87.2	NS	2560	0.050 U	734	0.731	NS	13.2	0.22 U	0.090 U	NS	1.2 U	0.21 U	350	2200	4.07 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	0.901	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
		05/13/22	NS	NS	NS	NS	2500	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
		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	0.811	0.050 U	41.0	NS	3.04 ± 1.54	0.735 U ± 0.539	0.591 U ± 0.307	NS
		01/22/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		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	163	0.050 U	378	1.6	NS	4180	0.50 U	0.10 U	NS	1.1	0.050 U	138	532	2.92 U ± 1.33	0.975 U ± 0.478	0.852 ± 0.383	1.83 U ± 0.866
MW-45	2-12	05/14/20	149	7.7	49.4	NS	2630	0.050 U	245	0.811	NS	7380	0.22 U	0.090 U	NS	1.2 U	0.21 U	249	774	2.84 U ± 1.38	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	0.090 U	NS	1.2 U	0.21 U	123	473	3.11 U ± 1.38	1.01 U ± 0.532	0.890 U ± 0.364	1.85 U ± 0.886
		05/07/21	152	6.4	25.1	NS	134	0.050 U	111	1.2	NS	3040	0.22 U	0.090 U	NS	1.2 U	0.21 U	166	514	4.45 ± 2.05	1.27 ± 0.648	0.737 U ± 0.319	1.86 U ± 0.867
		12/06/18	NS	0.531	66.2	NS	142	0.050 U	NS	0.681	NS	NS	0.50 U	0									

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)
L-1	13-23	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
		09/29/16	6470	0.571	50.8	0.34	ND	4.21	NS	3140	ND	ND	31	ND	433	896	ND
		03/21/17	4123.8	0.615 U	45.7	0.364 U	0.258 U	1.751	0.914 U	2698.5	0.491 U	0.00500 U	1.751	2.721	301	648	0.9081
		09/26/17	4404.1	1.38U	58.3	0.192 U	0.698 U	2.961	0.914 U	3315.4	0.412 U	0.0170 U	1.371	2.35 U	306	701	1.111
		03/28/18	8760	0.551	56.0	5.7 J	0.05 U	2.5 U	2.5 U	2500	0.5 U	0.1 U	3.61	7.5 U	577	1024	5 U
		09/19/18	9474.6	0.5551	50.8	0.3501	0.0981 U	2.811	1.33 U	1426.5	0.460 U	0.0170 U	3.301	2.85 U	790	1214	0.911 U
		03/26/19	9424.5	0.5611	46.5	0.3021	0.0981 U	1.351	1.33 U	932.47	0.460 U	0.00575 U	1.781	2.85 U	778	1132	0.911 U
		09/19/19	9909.3	0.576	49.4	0.2931	0.0276 U	0.7401	1.33 U	1558.1	0.04901	0.00575 U	3.341	2.85 U	816	1298	0.911 U
		03/11/20	8892.8	0.558	42.0	0.3821	0.0276 U	3.331	1.931	1034.7	0.513	0.00575 U	3.311	2.85 U	655	1162	1.311
L-2	63.5-83.5	09/23/20	9215.9	0.813	52.0	0.3711	0.0597 U	4.061	1.33 U	1174.6	0.3621	0.00575 U	2.811	2.85 U	742	1220	1.211
		03/16/21	9384.0	0.709	41.1	0.3101	0.0597 U	1.241	1.33 U	857.54	0.1441	0.00600 U	1.021	2.85 U	860	1271	1.411
		03/11/20	9366.3	0.636	43.6	0.3661	0.0276 U	4.611	1.641	1270.2	0.4291	0.00575 U	3.751	2.85 U	674	1192	1.311
		09/29/16	ND	ND	34.3	ND	ND	ND	NS	1340	ND	ND	ND	ND	ND	292	ND
		03/21/17	8.521	0.615 U	33.0	0.364 U	0.258 U	0.3001	0.914 U	1194.2	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	229	1.051
		09/26/17	11.51	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	0.9411
		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	9.861	0.0499 U	33.1	0.0955 U	0.0981 U	0.342 U	1.33 U	1200.7	0.5121	0.0170 U	0.717 U	2.85 U	2.5 U	287	0.911 U
		03/26/19	4.251	0.0499 U	31.8	0.0955 U	0.0981 U	0.3631	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	4.631	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
L-3	39-49	03/11/20	15.11	0.149 U	32.5	0.06101	0.0276 U	0.711 U	1.33 U	1233.4	0.07701	0.00575 U	0.717 U	2.85 U	2.5 U	300	1.201
		09/23/20	3.621	0.149 U	33.9	0.0492 U	0.0597 U	10.41	1.33 U	1088.2	0.1381	0.00575 U	0.717 U	2.85 U	2.5 U	312	1.451
		03/16/21	1.62 U	0.149 U	33.5	0.05901	0.0597 U	0.711 U	1.33 U	943.91	0.1121	0.00600 U	0.717 U	2.85 U	2.5 U	280	0.9721
		09/29/16	86.11	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	0.5081	0.914 U	5957.7	0.491 U	0.00500 U	0.281 U	2.35 U	29.8	168	0.8261
		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	0.9441
		03/28/18	70.81	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	0.3341	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	0.9921
		03/26/19	61.7	0.0499 U	101.57	0.4121	0.0981 U	0.5961	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	0.3801	0.0276 U	0.711 U	1.33 U	6799.3	0.05001	0.00575 U	0.717 U	2.85 U	35.0	205	0.911 U
L-7	29.5-39.5	03/11/20	77.0	0.149 U	111.04	0.4841	0.0276 U	0.711 U	1.33 U	6975.4	0.04501	0.00575 U	0.717 U	2.85 U	31.9	180	0.9681
		09/23/20	68.7	0.149 U	109.64	0.3351	0.0597 U	0.711 U	1.33 U	6984.1	0.0691	0.00575 U	0.717 U	2.85 U	31.1	78	0.9891
		03/16/21	75.0	0.149 U	123.94	0.4751	0.0597 U	0.711 U	1.33 U	7998.9	0.1321	0.00600 U	0.717 U	2.85 U	41.4 J(M1)	175	0.911 U
		09/19/19	70.8	0.149 U	113.37	0.3721	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	1.741
		09/26/17	5792.7	1.38 U	21.3	1.76	0.698 U	0.298 U	10.31	1032.2	0.412 U	0.0170 U	0.281 U	2.35 U	400	657	1.941
		03/28/18	5830	0.691	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	1.411
		09/19/18	9969.5	0.999	26.3	2.88	0.0981 U	0.342 U	1.371	11741	0.460 U	0.0170 U	0.717 U	2.85 U	750	1183	1.631

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)
L-8	31.5-41.5	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
		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
		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
L-9	34.5-44.5	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
		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
		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
L-9 (DUP)	34.5-44.5	09/29/16	ND	ND	14.4	ND	ND	ND	NS	2400	ND	ND	ND	ND	ND	275	ND
L-10	71-81	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
		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
L-11	29-39	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
		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)
L-11 RS	29-39	GCTL	200	10	2000	4	5	100	1000	300	15	2	100	50	250	500	49
L-11 RS DUP	'29-39	NADC	2000	100	20000	40	50	1000	10000	3000	150	20	1000	500	2500	5000	490
		10/17/19	NS	NS	NS	NS	NS	82.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
		10/17/19	NS	NS	NS	NS	NS	72.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
		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
	77.5-87.5	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-blis = 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)
L-8	8.5-18.5	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
		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	0.561 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	134.0 I	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 I	0.5 U	37.1	0.96 I	0.05 U	2.5 U	2.5 U	3900 I	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
		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
		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
L-5	19.5-29.5	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
		09/24/20	218.01	0.737	26.0	0.352 I	0.0597 U	0.899 I	1.33 U	346.72	0.421 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 bis)	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)	
L-17	19.2-29.2	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	
		09/27/16	834	1.2	74.1	0.072 I	ND	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	0.0144 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	0.0170 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	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	0.0170 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	0.00575 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	0.00575 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	0.00575 U	0.717 U	2.85 U	132	288	2.70 I
L-18	4.7-14.7	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	
		09/27/16	5070	7.5	57	ND	0.15	ND	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	0.0215 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	0.0170 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	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	0.0170 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	0.00575 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	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	0.00575 U	1.89 I	2.85 U	2090	3327	2.65 I
L-19	4.7-14.7	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	
		09/27/16	128	ND	148	ND	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	0.0170 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	0.00575 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	
L-20	19.2-29.2	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	
		09/27/16	93 I	ND	10.3	ND	ND	ND	ND	139	ND	ND	ND	ND	ND	42	ND	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	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	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	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	145.38	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	54	0.911 U	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	0.911 U
		09/18/19	102.95	0.149 U	8.91 I	0.250 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	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	0.911 U
L-20 DUP	19.2-29.2	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	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	0.911 U
		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	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)	
L-21	19.2-29.2	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	
		09/27/16	810	ND	59.5	0.39	ND	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	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	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	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	0.0170 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	0.00575 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	0.00575 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	0.00575 U	0.717 U	2.85 U	2.5 U	65	2.74 I
L-21 (DUP)	19.2-29.2	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	
		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	ND	1090	ND	ND	ND	645	9332	ND	ND
		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	452 I	ND
		09/25/17	1697.6	16.1	30.1 I	0.192 U	0.698 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	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	ND
		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	ND
L-22	2.7-12.7	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	ND
		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	0.0900 I	1.28 I	2.85 U	504	6990	9.75 I	ND
		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	ND
		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	ND
		09/27/16	1030	1.3 I	33.5	0.66	ND	ND	4.3 I	ND	1910	0.791	ND	ND	ND	77	ND	ND
		03/22/17	650.01	0.615 U	31.1	0.364 U	0.258 U	0.914 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	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	2.6 I	2.5 U	1940	0.81	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	ND
		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	ND
L-23	19.3-29.3	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	ND
		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	ND
		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	ND
		09/27/16	4220	1 I	30.3	0.72	ND	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	ND
		09/26/17	3717.1	1.38 U	22.9	0.192 U	0.698 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	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	ND
		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	ND
		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	ND
L-24	19.2-29.2	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	ND
		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 U	0.00575 U	0.717 U	2.85 U	345	596	0.911 U	ND
		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	ND

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)
L-25	19.2-29.2	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
		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 U	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
		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-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 (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)	Total Radium (pCi/L)	
MW-1	42.44-52.44	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	—	—	
		09/21/16	142	ND	10.4	ND	ND	NS	ND	NS	ND	ND	771	ND	ND	ND	ND	6	69	ND	NS	NS
		03/26/17	138.61	0.615 U	14.21	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	88.1	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	NS
		09/13/18	140.23	0.0499 U	16.31	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	17.81	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	14.71	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1021.4	0.0760 U	0.00575 U	0.717 U	2.85 U	6.0	87	0.911 U	NS	NS	NS
MW-1 (Dup)	42.44-52.44	03/11/20	128.65	0.149 U	17.71	0.0850 U	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	18.31	0.067 U	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 U	NS	0.0597 U	NS	0.711 U	1.33 U	1407.4	0.123 U	0.00600 U	0.717 U	2.85 U	6.5	88	0.911 U	NS	NS	NS
		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
		09/21/16	61.1	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	12.01	0.364 U	NS	0.258 U	NS	0.317 U	0.914 U	1576.1	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	118	0.923 U	NS	NS	NS
		10/12/17	73.3	1.38 U	10.91	0.192 U	NS	0.698 U	NS	0.472 U	1.33 U	1390.5	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	117	0.824 U	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
MW-2	42.37-52.37	09/13/18	172.98	0.0499 U	12.41	0.0955 U	NS	0.0981 U	NS	0.366 U	1.33 U	1651.7	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	107	0.947 U	NS	NS	NS
		03/19/19	110.87	0.0499 U	10.71	0.0955 U	NS	0.0981 U	NS	0.662 U	1.33 U	1340.7	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	110	0.919 U	NS	NS	NS
		09/17/19	75.6	0.149 U	10.61	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1478.4	0.225 U	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	10.21	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1371.8	0.371 U	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	9.471	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
		03/18/21	50.3	0.149 U	9.421	0.0830 U	NS	0.0597 U	NS	0.711 U	1.33 U	1254.7	0.133 U	0.00600 U	0.717 U	2.85 U	2.5 U	104	0.911 U	NS	NS	NS
		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
MW-3	44.28-54.28	03/16/17	59.4	0.615 U	29.7	0.364 U	NS	0.298 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 U	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 U	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 U	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 U	NS	0.0981 U	NS	0.354 U	1.33 U	1104.6	0.460 U	0.00575 U	0.717 U	2.85 U	4.71	57	0.911 U	NS	NS	NS
		09/17/19	22.7	0.149 U	34.1	0.190 U	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 U	NS	0.0276 U	NS	0.711 U	1.33 U	1232.5	0.0760 U	0.00575 U	0.717 U	2.85 U	4.91	70	0.911 U	NS	NS	NS
		09/23/20	22.8	0.149 U	38.5	0.276 U	NS	0.0597 U	NS	0.711 U	1.33 U	1188.2	0.0690 U	0.00575 U	0.717 U	2.85 U	5.4	98	0.911 U	NS	NS	NS
MW-3 Dup	44.28-54.28	03/19/21	34.3	0.149 U	53.0	0.335 U	NS	0.0597 U	NS	0.711 U	1.33 U	1685.7	0.118 U	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	126 U	0.615 U	19.31	0.364 U	NS	0.258 U	NS	0.422 U	0.914 U	1371.9	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	270	1.46 U	NS	NS	NS
		10/11/17	31.2	1.38 U	18.21	0.192 U	NS	0.698 U	NS	0.722 U	0.971 U	1281.4	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	265	1.27 U	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	0.1 U	2.5 U	7.5 U	2.5 U	250	5 U	NS	NS	NS
		09/18/18	28.5	0.0499 U	17.01	0.0955 U	NS	0.0981 U	NS	0.579 U	1.33 U	1212.9	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	240	1.12 U	NS	NS	NS
		03/19/19	22.9	0.0499 U	15.61	0.0955 U	NS	0.0981 U	NS	0.688 U	1.33 U	1043.8	0.460 U	0.00700 U	0.717 U	2.85 U	2.5 U	224	1.29 U	NS	NS	NS
MW-4	36.84-46.84	09/17/19	12.41	0.149 U	14.31	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	995.19	0.0700 U	0.00575 U	0.717 U	2.85 U	2.5 U	217	0.911 U	NS	NS	NS
		03/11/20	14.71	0.149 U	15.51	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1080.6	0.0700 U	0.00575 U	0.717 U	2.85 U	2.5 U	233	1.19 U	NS	NS	NS
		09/23/20	25.3	0.149 U	14.01	0.0492 U	NS	0.0597 U	NS	0.711 U	1.33 U	932.40	0.075 U	0.00575 U	0.717 U	2.85 U	2.5 U	244	1.18 U	NS	NS	NS
		03/19/21	13.81	0.149 U	15.61	0.0530 U	NS	0.0597 U	NS	0.711 U	1.33 U	998.02	0.170 U	0.00600 U	0.717 U	2.85 U	3.01	208	1.44 U	NS	NS	NS
		09/23/20	24.5	0.149 U	38.4	0.171 U	NS	0.0597 U	NS	0.711 U	1.33 U	1208.90	0.0690 U	0.00575 U	0.717 U	2.85 U	2.5 U	72 U	0.911 U	NS	NS	NS
		09/21/16	583	1.2	23.5	0.45	NS	ND	NS	ND	ND	2090	0.54 U	ND	ND	ND	ND	72	ND	NS	NS	NS
		03/16/17	1527.1	0.615 U	26.7	0.429 U	NS	0.258 U	NS	3.37 U	0.914 U	2239.5	0.515 U	0.00500 U	0.37 U	2.35 U	2.5 U	64	5.42 U	NS	NS	NS
		10/11/17	4883.0	1.38 U	30.8	0.386 U	NS	0.698 U	NS	5.04 U	1.58 U	3006.4	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	66	7.31 U	NS	NS	NS
MW-5	33.31-43.31	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 U	22.9	0.259 U	NS	0.0981 U	NS	0.723 U	1.33 U	1253.0	0.460 U	0.0170 U	0.717 U	2.85 U	2.5 U	55	1.25 U	NS	NS	NS
		03/19/19	302.72	0.190 U	24.8	0.381 U	NS	0.0981 U	NS	0.962 U	1.33 U	1497.2	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	67	1.21 U	NS	NS	NS
		09/17/19	189.28	0.149 U	25.2	0.346 U	NS	0.0276 U	NS	0.711 U	1.33 U	1222.2	0.105 U	0.00575 U	0.717 U	2.85 U	2.81	65	0.911 U	NS	NS	NS
		03/11/20	371.02	0.212 U	27.1	0.455 U	NS	0.0276 U	NS	0.857 U	1.33 U	1678.8	0.222 U	0.00575 U	0.717 U	2.85 U	2.5 U	91	1.11 U	NS	NS	NS
		09/																				

TABLE 4: GROUNDWATER ANALYTICAL RESULTS - AREA B LANDFILL
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 (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)	
MW-6	43.50-53.50	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	---	---	---	
		09/21/16	661	1.3	39.5	ND	NS	NS	NS	3.71	7.2	2730	0.881	ND	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 U	1.201	1463.3	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	325	1.64 U	NS	NS	NS	
		10/12/17	113.71	1.38 U	37.3	0.192 U	NS	0.698 U	NS	0.613 U	1.561	1467.87	0.412 U	0.0170 U	0.281 U	2.35 U	2.5 U	317	1.27 U	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	0.0398 U	NS	0.431 U	1.391	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	0.0398 U	NS	0.515 U	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	
MW-7	44.09-54.09	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	0.460 U	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 U	0.00375 U	0.717 U	2.85 U	2.5 U	337	1.03 U	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	0.00375 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 U	NS	0.0597 U	NS	0.711 U	1.33 U	1432.9	0.130 U	0.00600 U	0.717 U	2.85 U	2.5 U	314	1.03 U	NS	NS	NS	
		03/19/19	48.6	0.0499 U	37.0	0.0955 U	NS	0.0398 U	NS	0.492 U	1.33 U	1414.4	0.460 U	0.00375 U	0.717 U	2.85 U	2.5 U	308.0	0.927 U	NS	NS	NS	
		09/21/16	ND	ND	27.5	ND	NS	ND	NS	ND	ND	1420	ND	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	0.00300 U	0.281 U	2.35 U	2.5 U	266	1.06 U	NS	NS	NS	
		10/12/17	4.39 U	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 U	2.35 U	2.5 U	258	0.786 U	NS	NS	NS	
MW-8	43.51-53.51	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	0.0398 U	NS	0.342 U	2.061	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	0.0398 U	NS	0.342 U	1.33 U	1210.7	0.460 U	0.00375 U	0.717 U	2.85 U	2.5 U	260	0.911 U	NS	NS	NS	
		09/17/19	2.40 U	0.149 U	23.0	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1114.5	0.450 U	0.00375 U	0.717 U	2.85 U	2.5 U	240	0.911 U	NS	NS	NS	
		03/11/20	2.27 U	0.149 U	22.7	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1095.1	0.0590 U	0.00375 U	0.717 U	2.85 U	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	0.00375 U	0.717 U	2.85 U	2.5 U	376	0.911 U	NS	NS	NS	
		03/19/21	5.00 U	0.149 U	22.1	0.0492 U	NS	0.0597 U	NS	0.711 U	1.33 U	1012.7	0.116 U	0.00600 U	0.717 U	2.85 U	2.71	216	0.911 U	NS	NS	NS	
		03/11/20	3.12 U	0.149 U	22.3	0.0492 U	NS	0.0276 U	NS	0.711 U	1.33 U	1012.3	0.0540 U	0.00375 U	0.717 U	2.85 U	2.5 U	239	0.911 U	NS	NS	NS	
MW-9 DUP	43.51-53.51	09/21/16	58.5 U	ND	15.8	0.21	NS	ND	NS	ND	ND	783	ND	ND	ND	ND	3.81	66	ND	NS	NS	NS	
		03/16/17	259.28	0.615 U	15.7 U	0.364 U	NS	0.258 U	NS	0.609 U	0.914 U	815.53	0.491 U	0.00300 U	0.281 U	2.35 U	4.41	25	1.29 U	NS	NS	NS	
		10/12/17	129.31	1.38 U	16.2 U	0.192 U	NS	0.698 U	NS	0.596 U	0.962 U	785.39	0.412 U	0.0170 U	0.372 U	2.35 U	4.2 U	50	0.994 U	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 U	80 U	5 U	NS	NS	NS	
		09/13/18	108.66	0.0499 U	16.5 U	0.218 U	NS	0.0398 U	NS	0.342 U	1.33 U	787.31	0.460 U	0.0170 U	0.717 U	2.85 U	3.81	60	1.04 U	NS	NS	NS	
		03/19/19	36.4	0.0499 U	16.3 U	0.222 U	NS	0.0398 U	NS	0.445 U	1.33 U	719.18	0.460 U	0.00375 U	0.717 U	2.85 U	3.5 U	54	0.924 U	NS	NS	NS	
		09/17/19	96.3	0.149 U	17.5 U	0.317 U	NS	0.0276 U	NS	0.711 U	1.33 U	850.53	0.0550 U	0.00375 U	0.717 U	2.85 U	4.0 U	62	0.911 U	NS	NS	NS	
		03/11/20	112.23	0.149 U	18.3 U	0.240 U	NS	0.0276 U	NS	0.711 U	1.33 U	894.18	0.0630 U	0.00375 U	0.717 U	2.85 U	3.7 U	49	0.911 U	NS	NS	NS	
MW-20	42.00-52.00	09/18/20	228.80	0.149 U	18.9 U	0.292 U	NS	24.2	37.4	0.711 U	NS	988.06	0.118 U	NS	NS	0.867 U	14.3	72	NS	324	1.14	1.46	
		09/22/20	52.2	0.149 U	18.1 U	0.229 U	NS	0.0597 U	NS	0.721	1.33 U	819.62	0.0448 U	0.00375 U	0.717 U	2.85 U	4.0 U	159	0.911 U	NS	NS	NS	
		03/18/21	39.0	0.149 U	29.3	0.177 U	NS	0.0597 U	NS	0.711 U	1.33 U	1561.0	0.104 U	0.00600 U	0.717 U	2.85 U	2.5 U	66	0.911 U	NS	NS	NS	
		03/11/20	120.89	0.149 U	18.9 U	0.266 U	NS	0.0276 U	NS	0.711 U	1.33 U	917.35	0.0810 U	0.00375 U	0.717 U	2.85 U	3.4 U	49	0.911 U	NS	NS	NS	
		09/21/16	92.2 U	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 U	0.914 U	799.58	0.491 U	0.00300 U	0.281 U	2.35 U	2.5 U	112	1.23 U	NS	NS	NS	
		10/12/17	163.55	1.38 U	34.6	0.192 U	NS	0.698 U	NS	0.832 U	1.14 U	860.82	0.412 U	0.0170 U	0.842 U	2.35 U	2.5 U	88	1.41 U	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	
MW-20	42.00-52.00	09/13/18	98.7	0.0499 U	37.8	0.182 U	NS	0.0398 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 U	NS	NS	NS	
		03/19/19	53.4	0.0499 U	38.9	0.173 U	NS	0.0398 U	NS	0.447 U	1.33 U	922.88	0.460 U	0.00375 U	0.717 U	2.85 U	2.5 U	92	1.09 U	NS	NS	NS	
		09/17/19	64.2	0.149 U	32.6	0.166 U	NS	0.0276 U	NS	0.711 U	1.33 U	787.05	0.0448 U	0.00375 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 U	NS	0.0276 U	NS	0.711 U	1.33 U	884.97	0.0670 U	0.00375 U	0.717 U	2.85 U	2.5 U	107	1.21 U	NS	NS	NS	
		09/18/20	858.92	0.899	34.4	0.318 U	26.2	NS	21.5	2.25 U	NS	1338.2	0.524	NS	NS	NS	0.867 U	2.5 U	72	NS	0.438	1.28	1.71
		09/22/20	507.99	0.426 U	35.7	0.267 U	NS	0.0597 U	NS	1.51	1.33 U	1054.7	0.199 U	0.00375 U	0.717 U	2.85 U	2.5 U	183.4	1.98 U	NS	NS	NS	
		03/19/21	191.51	0.245 U	36.5	0.208 U	NS	0.0597 U	NS	0.711 U	1.33 U	1048.8	0.246 U	0.00600 U	0.717 U	2.85 U	2.5 U	110	1.34 U	NS	NS	NS	
		03/19/21	211.02	0.224 U	39.2	0.220 U	NS	0.0597 U	NS	0.711 U	1.33 U	1138.7	0.235 U	0.00600 U	0.717 U	2.85 U	2.5 U	116	1.47 U	NS	NS	NS	
MW-20 DUP	42.00-52.00	09/21/16	186	0.5 U	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 U	NS	0.258 U	NS	0.298 U	0.914 U	1088.0	0.491 U	0.00300 U	0.281 U	2.35 U	76.3	172	1.36 U	NS	NS	NS	
		10/11/17	219.19	1.38 U	105.28	0.246 U	NS	0.698 U	NS	0.298 U	1.19 U	890.99	0.412 U	0.0170 U	0.717 U	2.85 U	44.4	141	1.41 U	NS	NS	NS	
		03/26/18	195	0.5 U	93.4	0.48	NS	0.05 U	NS	2.5 U	2.5 U	985	0.5 U	0.1 U	2.5 U	7.5 U	2.5 U	143	127 Q	NS	NS	NS	
		09/18/18	305.65	0.2																			

TABLE 4: GROUNDWATER ANALYTICAL RESULTS - AREA B LANDFILL
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 (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)
MW-A1	43.34-53.43	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	---	---	---
		09/21/16	58.91	ND	18.4	ND	NS	ND	NS	ND	ND	355	ND	ND	ND	ND	ND	92	ND	NS	NS	NS
		09/16/17	46.0	0.615 U	18.21	0.364 U	NS	0.258 U	NS	0.630 U	0.914 U	325.29	0.491 U	0.00500 U	0.281 U	2.35 U	2.5 U	90	1.94 U	NS	NS	NS
		10/12/17	58.0	1.38 U	18.81	0.192 U	NS	0.698 U	NS	0.802 U	1.071	330.38	0.579 U	0.0170 U	0.589 U	2.35 U	2.5 U	92	1.81	NS	NS	NS
		09/26/18	71.61	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	17.91	0.127 U	NS	0.0981 U	NS	0.440 U	1.33 U	326.91	0.460 U	0.0170 U	0.717 U	2.85 U	2.61	75	1.93 U	NS	NS	NS
		09/19/19	63.9	0.0499 U	17.31	0.0955 U	NS	0.0981 U	NS	0.758 U	1.33 U	314.38	0.460 U	0.00575 U	0.717 U	2.85 U	2.5 U	88	1.39 U	NS	NS	NS
MW-B1	33.34-43.34	09/18/19	61.2	0.149 U	19.01	0.0180 U	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 U	NS	NS	NS
		03/11/20	53.60	0.149 U	19.01	0.112 U	NS	0.0276 U	NS	0.711 U	1.33 U	331.86	0.0670 U	0.00575 U	0.717 U	2.85 U	2.5 U	87	1.51 U	NS	NS	NS
		09/23/20	82.7	0.149 U	16.61	0.0550 U	NS	0.0597 U	NS	0.795 U	1.33 U	290.83	0.0460 U	0.00575 U	0.717 U	2.85 U	2.5 U	134	1.67 U	NS	NS	NS
		09/19/21	105.32	0.149 U	16.41	0.111 U	NS	0.0597 U	NS	0.711 U	1.33 U	324.78	0.118 U	0.00600 U	0.717 U	2.85 U	2.5 U	68	1.48 U	NS	NS	NS
		09/21/16	182	ND	41	0.1000	NS	ND	NS	ND	ND	681	ND	ND	ND	ND	7	78	ND	NS	NS	NS
		09/16/17	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 U	661.23	0.412 U	0.0170 U	0.542 U	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
MW-B1 RS	33.34-43.34	09/18/18	161.46	0.110 U	45.5	0.119 U	NS	0.0981 U	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
		09/19/19	164.46	0.120 U	46.1	0.126 U	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 U	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 U	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 U	NS	0.0597 U	NS	0.95 U	1.33 U	946.63	0.0448 U	0.00575 U	0.717 U	2.85 U	7.3	114	1.17 U	NS	NS	NS
		03/19/21	246.27	0.209 U	53.2	0.150 U	NS	0.0597 U	NS	0.711 U	1.33 U	534.62	0.131 U	0.00600 U	0.717 U	2.85 U	6.9	70	0.911 U	NS	NS	NS
		05/04/21	187.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		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
MW-B1 DUP	33.34-43.34	03/26/18	163	0.5 U	45.7	0.077 U	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-bis = 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. U = 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

[illegible]

AREA II LANDFILL

TIEP WELL NO.		AREA III LANDFILL															
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				
WELL DEPTH (THIRDS)	18.5	29.5	29.5	42.0	15.0	15.0	29.5	2	13.0	29.6	29.5	29.5	15.7				
INTERVAL (ft)	8.5-18.5	19.5-29.5	19.5-29.5	32.0-42.0	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	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	14.23	14.15	20.91	14.21	20.79				
DATE	01/22/19	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-	-	-				
D1W	-	-	-	-	-	-	-	-	-	-	-	-	-				
ELE	-	-	-	-	-	-	-	-	-	-	-						

AREA B LANDFILL

[illegible]

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

FRTWELL NO.	PERIMETER WELLS											
	MW-1S	MW-2S	MW-3S	MW-4S	MW-5S	MW-5D	TW-3A					
DIAMETER (inches)	1	1	1	1	1	1	1					
WELL DEPTH (ft.BLS)	12	13	12	12	12	30	40					
SCREEN INTERVAL (ft)	2-12	3-13	2-12	2-12	2-12	25-30	30-40					
AQUIFER ZONE	Shallow Surficial	Shallow Surficial	Shallow Surficial	Shallow Surficial	Shallow Surficial	Intermediate Surficial	Intermediate Surficial					
TOC ELEVATION (ft)	11.16	11.66	11.10	12.40	11.21	11.21	NS					
DATE	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	9.19	2.02	9.25	2.10	-	-
05/05/19	6.00	5.16	9.04	2.62	9.38	1.72	9.16	1.15	9.63	1.58	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	8.55	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
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
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
											8.85	2.50
											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

Attachment D
Appendix I

Well ID	Aluminum Concentration Trend	Arsenic Concentration Trend	Barium Concentration Trend	Boron Concentration Trend	Calcium 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
Perimeter Wells																
Area B Landfill	MW-1S	No Trend	--	--	--	--	--	Stable	--	--	--	Probably Increasing	No Trend	--	NS	NS
	MW-2	--	--	NS	--	NS	--	Increasing	--	--	--	--	--	NS	NS	NS
	MW-3	--	--	NS	NS	NS	--	Decreasing	--	--	--	--	--	NS	NS	NS
	MW-4	--	--	NS	NS	NS	--	Probably Increasing	--	--	--	--	--	NS	NS	NS
	MW-5	Probably Decreasing	--	NS	--	NS	--	Decreasing	--	--	--	--	--	NS	NS	NS
	MW-6	--	--	NS	NS	NS	--	Stable	--	--	--	--	--	NS	NS	NS
	MW-7	--	--	NS	--	NS	--	Probably Decreasing	--	--	--	--	--	NS	NS	NS
Area B Landfill	MW-8	--	--	NS	--	NS	--	Decreasing	--	--	--	--	--	NS	NS	NS
	MW-9	Probably Increasing	--	NA	--	NA	--	Increasing	--	--	--	--	--	NA	NA	NA
	MW-20	Increasing	--	NS	--	NS	--	Probably Increasing	--	--	--	--	--	NS	NS	NS
	MW-A1	--	--	NS	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	NS	--	Decreasing	--	--	--	--	--	NS	NS	NS
Area I Landfill	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-3	No Trend	--	NS	--	NS	--	--	--	--	--	--	--	NS	NS	NS
	L-4	Decreasing	--	NS	--	NS	--	No Trend	--	--	--	Probably Increasing	Increasing	NS	NS	NS
	L-6	Increasing	--	NS	--	NS	--	Stable	--	--	--	--	--	NS	NS	NS
	L-7	--	--	NS	--	NS	--	No Trend	--	--	--	--	--	NS	NS	NS
	L-19	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.

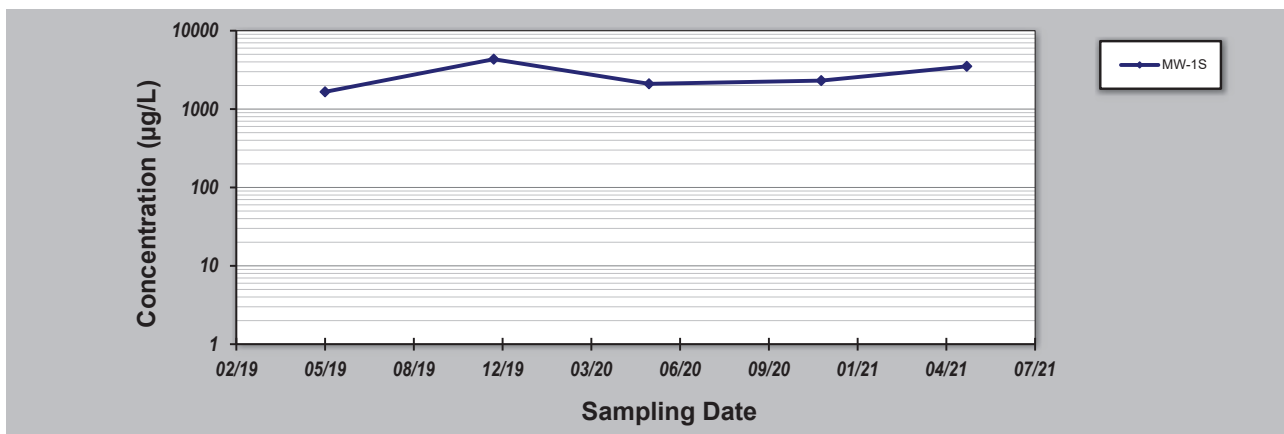
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

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

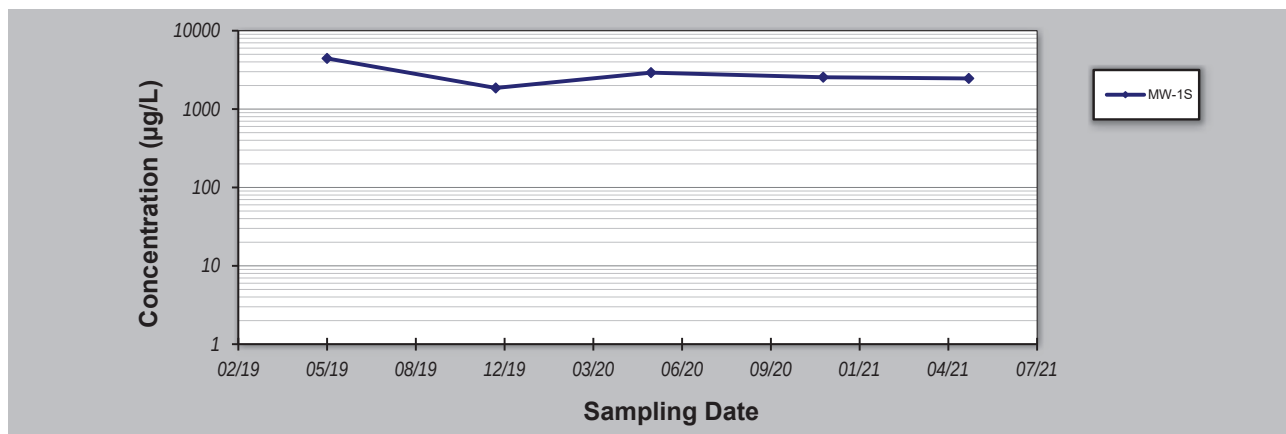
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

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

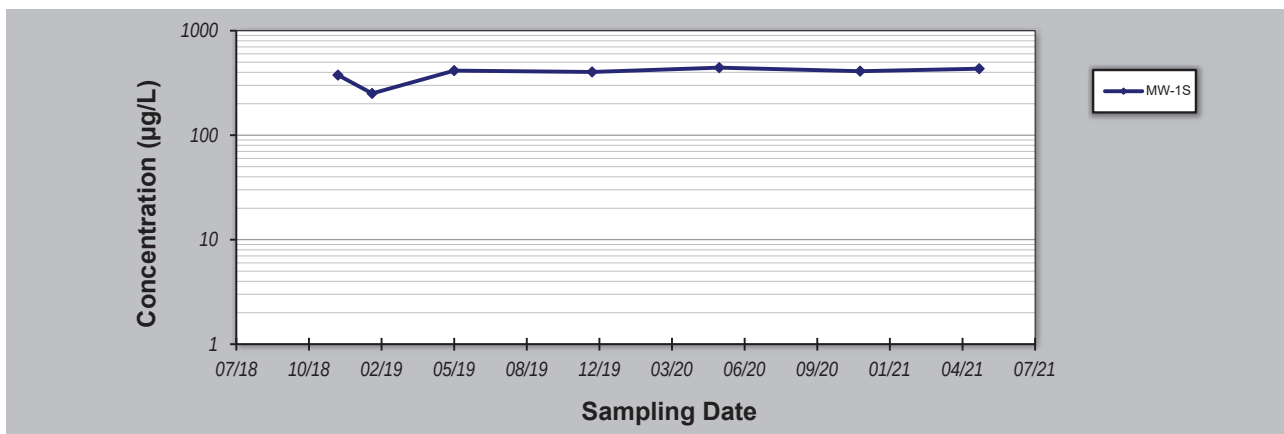
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

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.

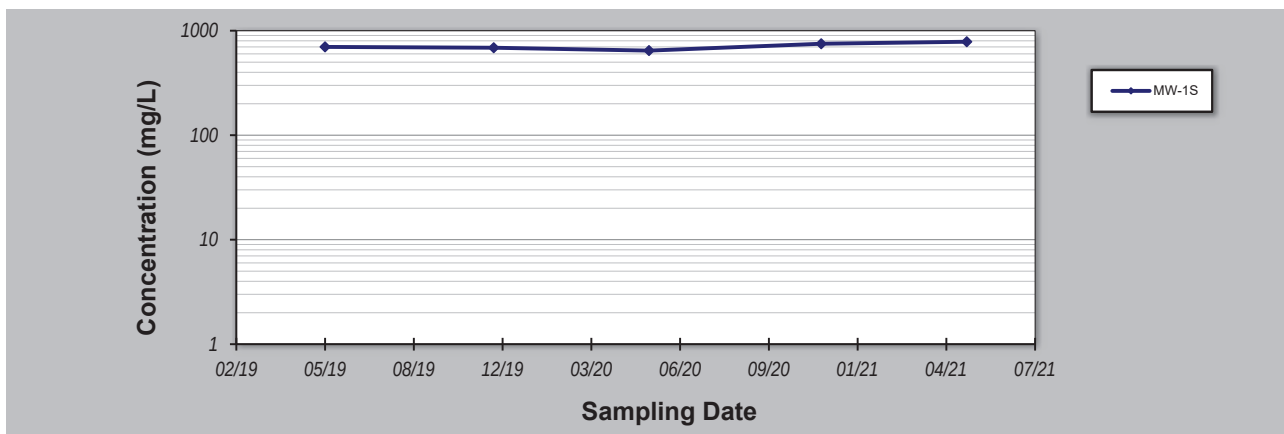
GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: 30-Aug-21	Job ID: FR8073
Facility Name: JEA SJRPP	Constituent: Total Dissolved Solids
Conducted By: Amy Langteau	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.

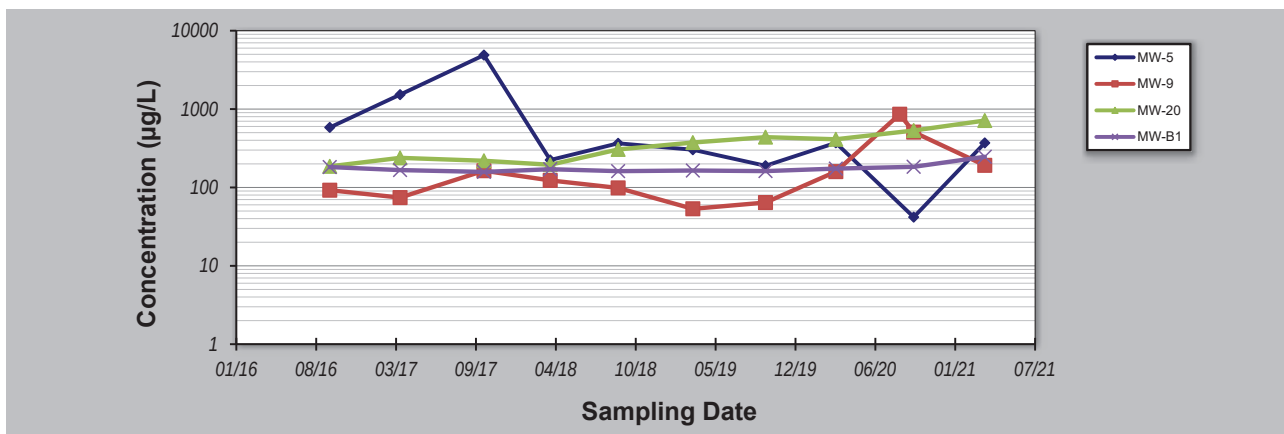
GSI Environmental Inc., www.gsi-net.com

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.

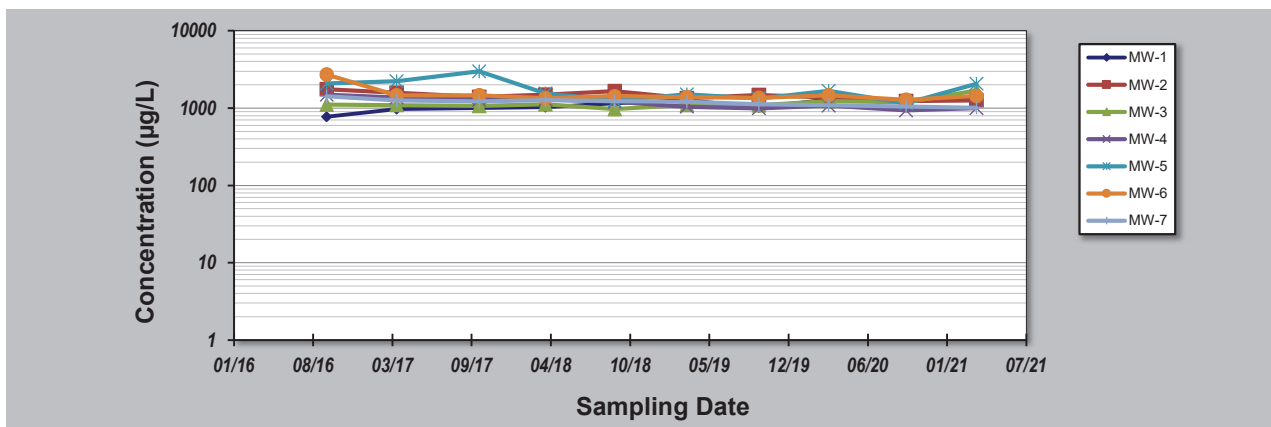
GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

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

Job ID: **FR8073**
 Constituent: **Iron**
 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.

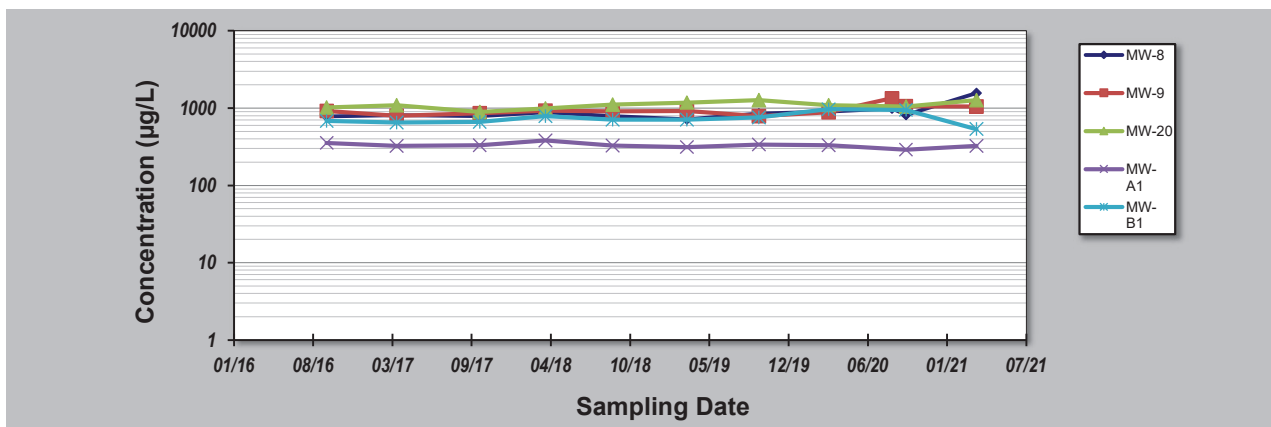
GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

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

Job ID: **FR8073**
 Constituent: **Iron**
 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.

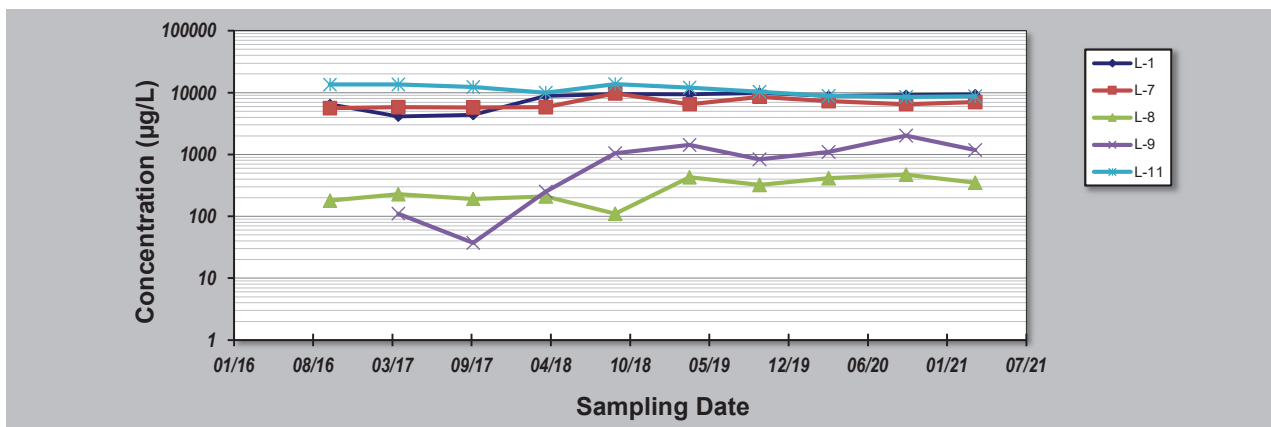
GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JEA SJRPP**
 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.

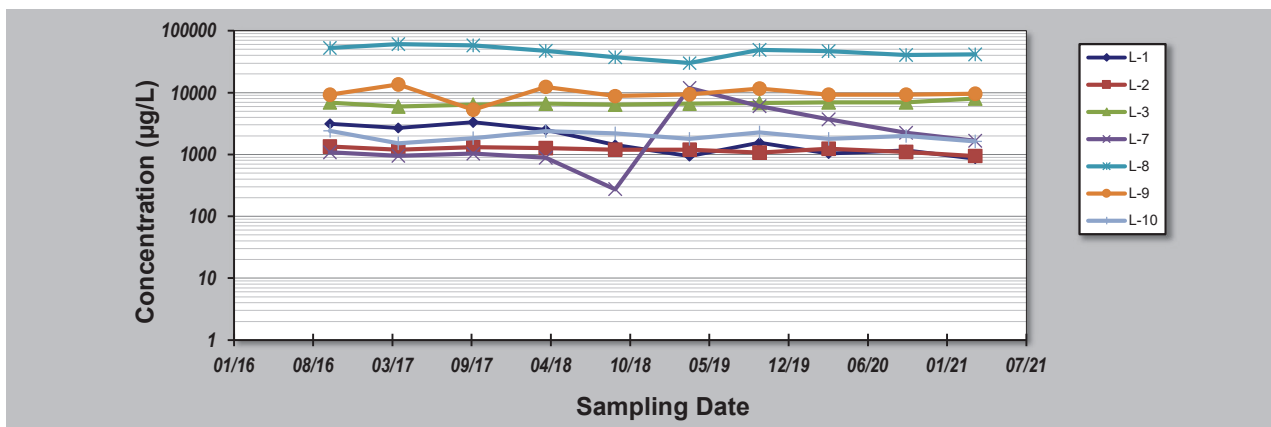
GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

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

Job ID: **FR8073**
 Constituent: **Iron**
 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

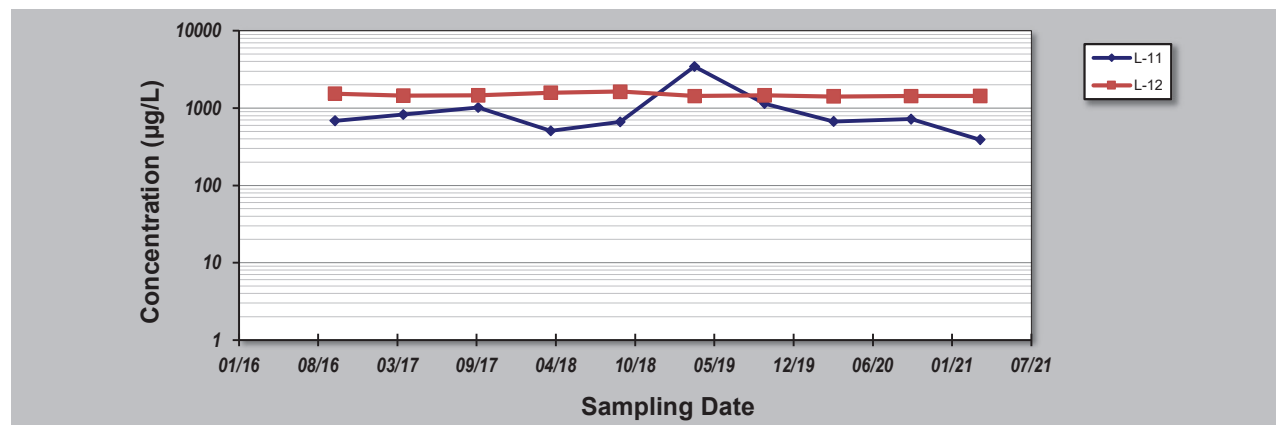
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JEa SJRPP**
 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.

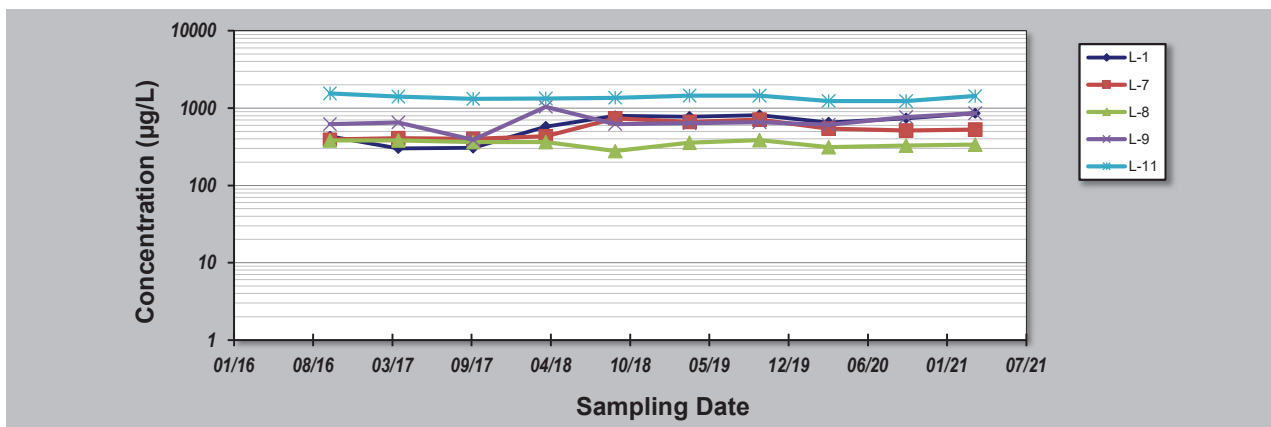
GSI Environmental Inc., www.gsi-net.com

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:

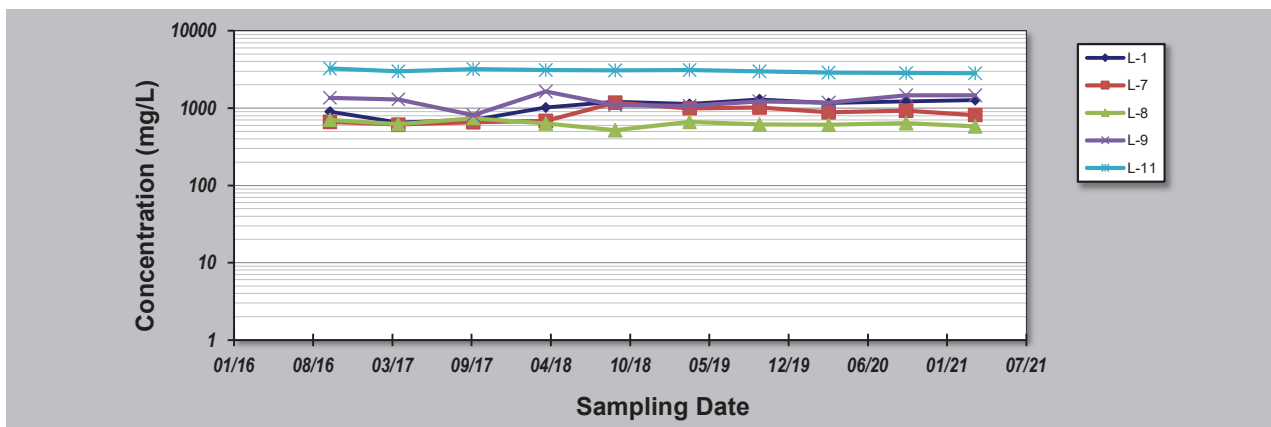
- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $> 95\%$ = Increasing or Decreasing; $\geq 90\%$ = 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			Job ID:	FR8073					
Facility Name:	JEA SJRPP			Constituent:	Total Dissolved Solids					
Conducted By:	Mary Rommer			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.

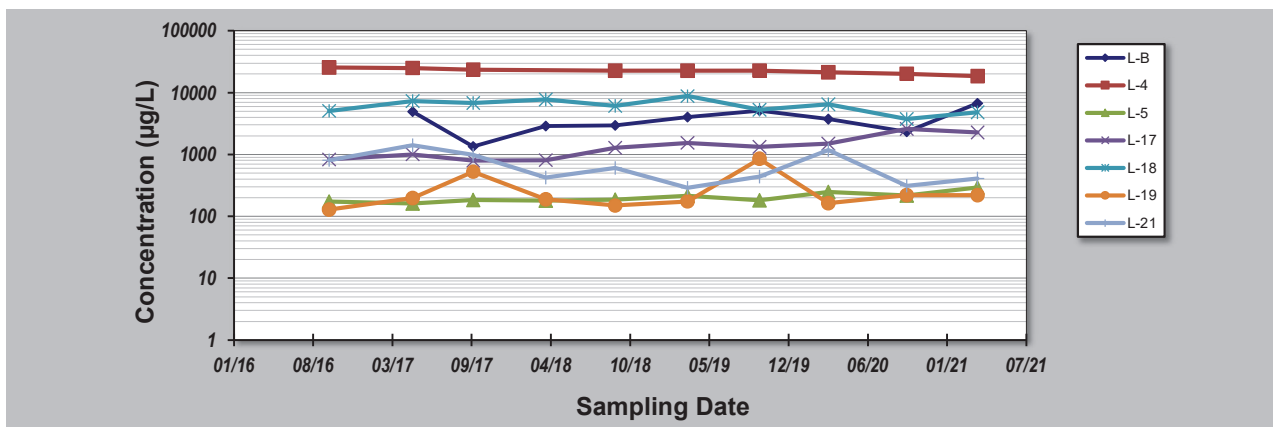
GSI Environmental Inc., www.gsi-net.com

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

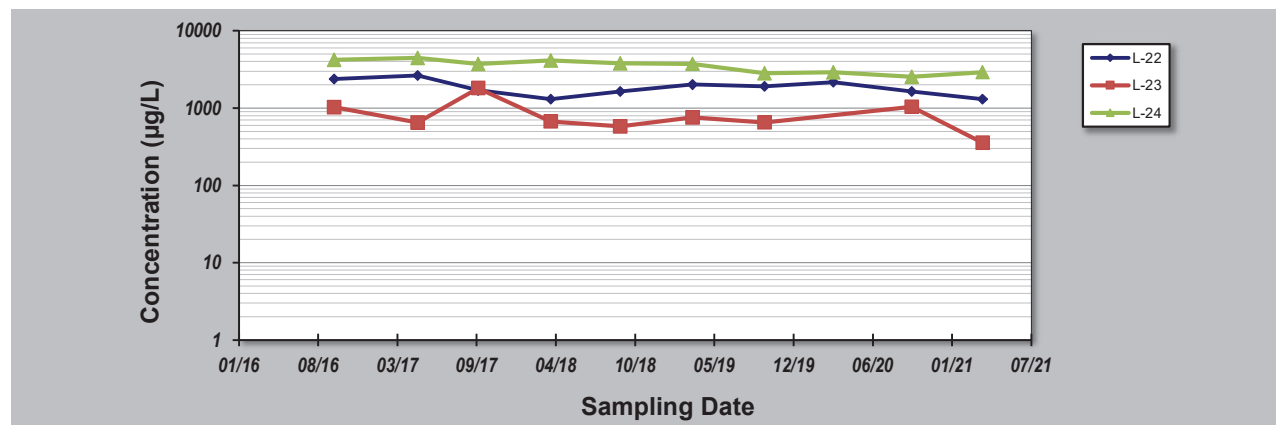
Evaluation Date: **18-Jun-21**
 Facility Name: **JEA SJRPP**
 Conducted By: **Amy Langteau**

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.

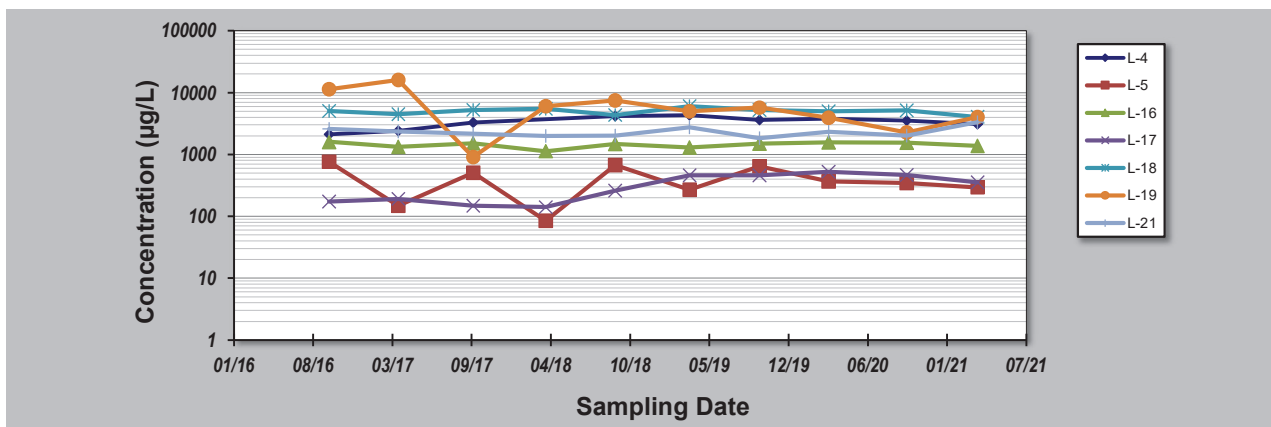
GSI Environmental Inc., www.gsi-net.com

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

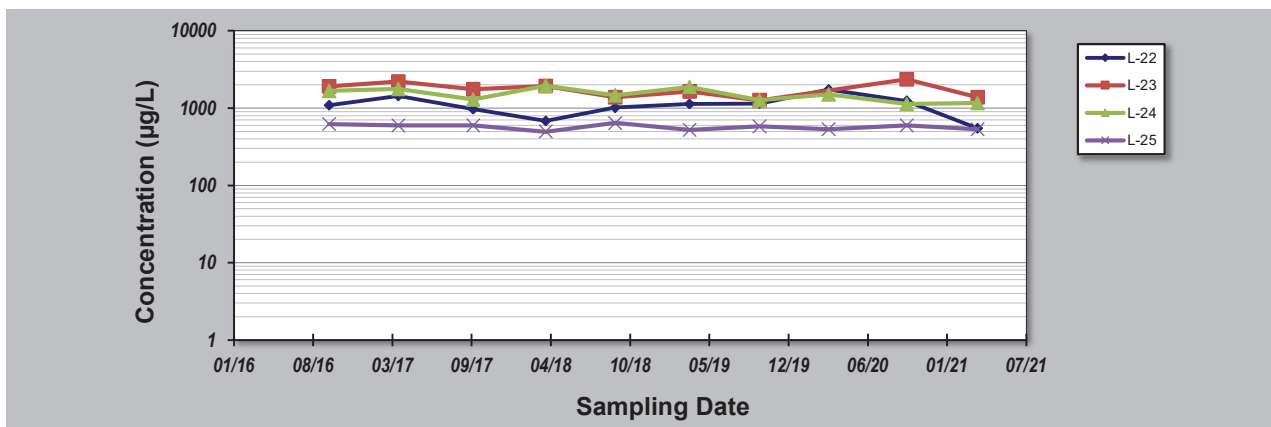
GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: 18-Jun-21		Job ID: FR8073	
Facility Name: JEASJRPP		Constituent: Iron	
Conducted By: Amy Langteau		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.

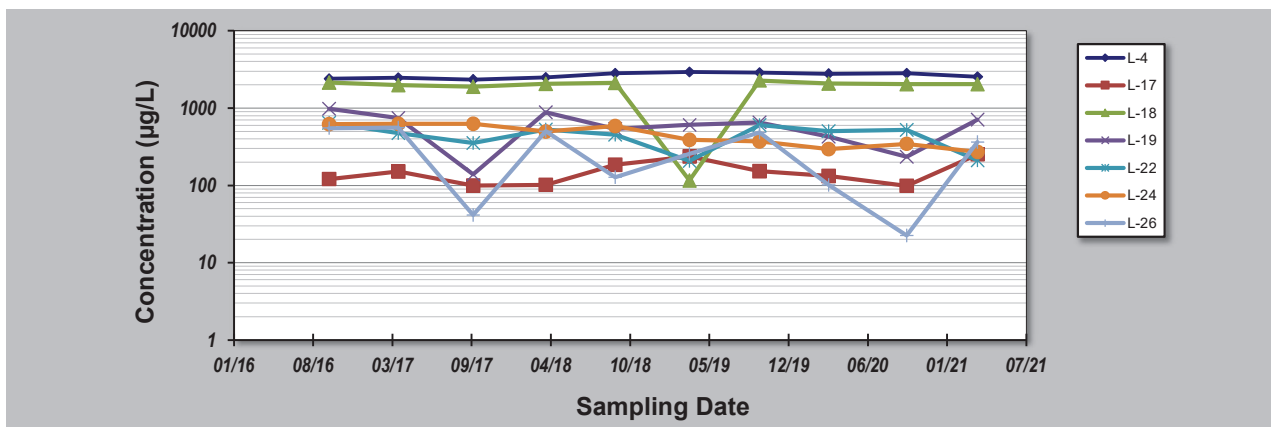
GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **18-Jun-21**
 Facility Name: **JE A SJRPP**
 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:

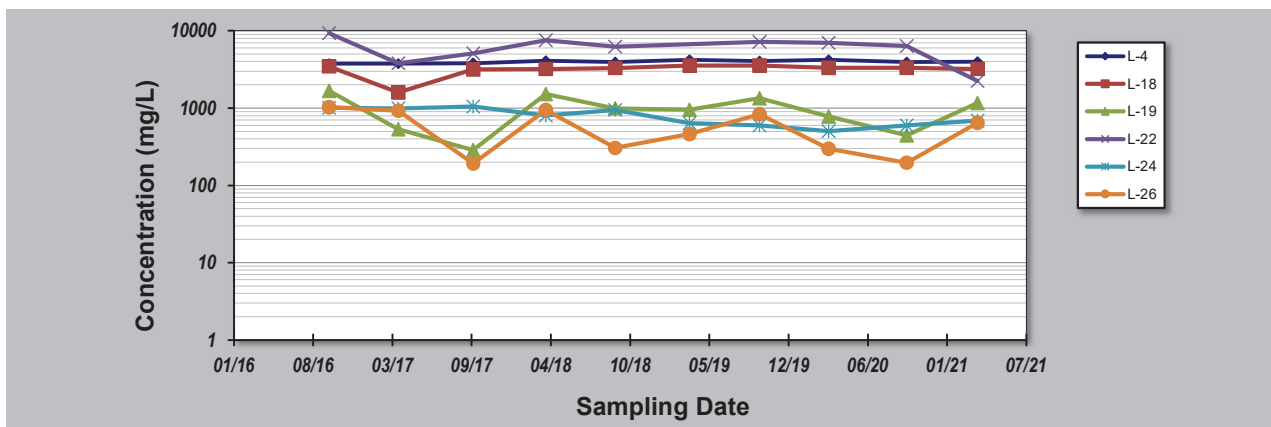
- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing ($S > 0$) or decreasing ($S < 0$): $>95\%$ = Increasing or Decreasing; $\geq 90\%$ = 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			Job ID:	FR8073					
Facility Name:	JEA SJRPP			Constituent:	Total Dissolved Solids					
Conducted By:	Amy Langteau			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