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WATER QUALITY MONITORING PLAN EVALUATION REPORT West Pasco Class III Landfill

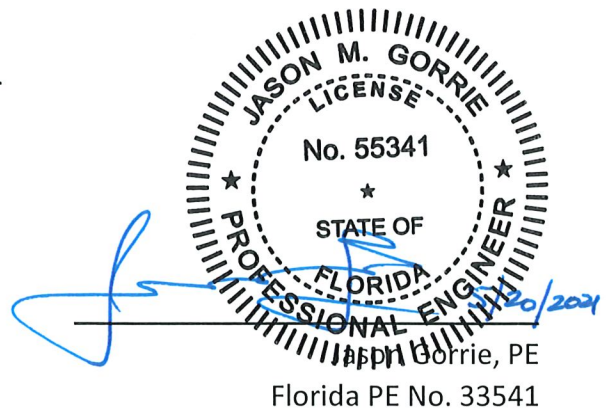
Prepared for:

Pasco County Utilities
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Prepared by:

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May 2021



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Section 1

Introduction

1.1 Purpose

This Technical Report evaluating the Water Quality Monitoring Plan (WQMP) for the West Pasco Class III Landfill has been prepared by JMG Engineering, Inc. on behalf of Pasco County Utilities, the owner and operator of the landfill. This report summarizes and interprets the water quality monitoring performed in accordance with the WQMP for the West Pasco Class III Landfill and in accordance with the requirements of Chapter 62-701.510(8)(b) of the Florida Administrative Code (FAC). The current permit that authorizes the activities at the landfill (26254-003-SO/T3) was issued on November 22, 2013. This Technical Report presents the results from the second half of 2018 through the second half of 2020 and incorporates five monitoring events, which are summarized in **Table 1.1**.

Table 1.1
Summary of Semi-Annual Sampling Events During Evaluation Period

Sampling Event	Sampling Dates
Second Half 2018	November 5 – November 26
First Half 2019	April 11 – April 30
Second Half 2019	October 10 – November 7
First Half 2020	April 6 – May 4
Second Half 2020	October 7 – October 30

The WQMP for the landfill was submitted in October 2013 and has been incorporated by reference into the current Operating Permit. The Plan specifies semi-annual sampling of monitoring wells comprising the monitoring well network. The wells within the monitoring network are listed in Table 2-1 of this Report.

1.2 Project Background

The landfill is located approximately ten miles west of the Gulf of Mexico (**Figure 1-1**) and is an integral unit of the Pasco County Resource Recovery Facility. The West Pasco Class III Landfill is permitted under Chapters 62-4 and 62-701, Florida Administrative Code (F.A.C.). The site is equipped with a geosynthetic liner and leachate collection system. Collected leachate is directed to one of two underground storage tanks referred to as Tank #1 and Tank #2 and is piped directly to the Shady Hills Advanced Wastewater Treatment Facility. The Class III disposal unit is primarily a construction and demolition (C & D) disposal unit. C & D debris is described as materials generally considered to be not water soluble and non-hazardous in nature, including but not limited to steel, glass, brick, concrete, asphalt material, pipe, gypsum wallboard, and lumber, from construction, destruction, or renovation projects. Yard trash and/or lot clearing debris are not accepted for disposal in the Class III unit.

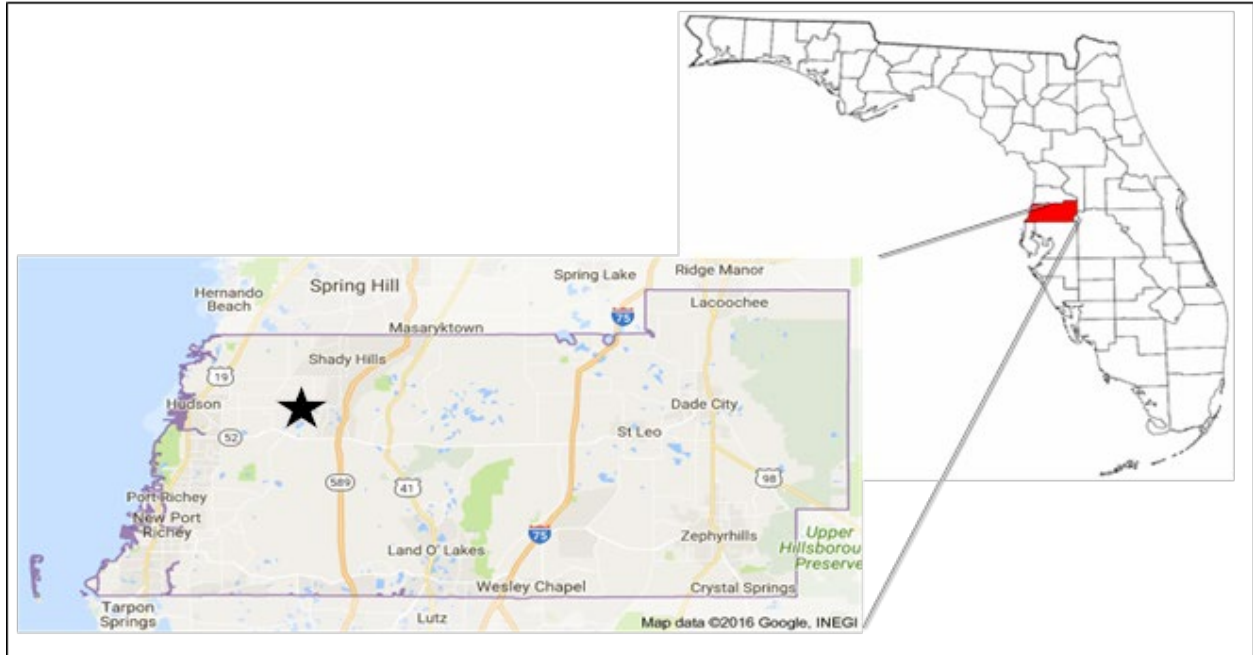


Figure 1-1
Vicinity Map of West Pasco Class III Landfill

1.3 Hydrogeologic Setting

According to the original geotechnical evaluation prepared in 1988¹, the hydrogeologic setting of the landfill site is defined by two primary water bearing units: 1) the Surficial Aquifer System, and 2) the Floridan Aquifer System. Boreholes collected as part of the 1988 study identify the following units beneath the landfill site:

- Surficial sands that comprise the surficial aquifer when saturated
- Limestone that comprises the Upper Floridan aquifer, and

1.4 Report Organization

The remainder of this Technical Report is organized in accordance with the requirements of Chapter 62-701.510(8)(b), FAC and Specific Conditions E.10 and E.11 of Permit No. 26254-003-SO/T3, as follows:

- Section 2 presents a summary of groundwater sampling and quality;
- Section 3 presents an interpretation of groundwater levels and measurement and an evaluation of groundwater flowrates, and;
- Section 4 provides Conclusions and Recommendations on the adequacy of the current GWMP

In addition to the embedded tables within the Report, **Appendix A** includes tabulated results from the groundwater and sampling field-measured parameters and laboratory analytical results. Figures depicting an interpretation of the groundwater potentiometric surface of the surficial aquifer and the

¹ See *Geotechnical/Hydrogeologic Investigation, Proposed Class III Sanitary Landfill, Hays Road Site, Pasco County, Florida*, Jammal & Associates, Inc., May 26, 1987

Section 1 - Introduction

Floridan aquifer that were previously submitted during semi-annual reporting are included in **Appendix B**. Graphical trend plots of pollutant concentrations associated with each monitoring well are included in **Appendix C**. Hydrographs of each monitoring well are included in **Appendix D**.

Section 2

Evaluation of Groundwater Quality

2.1 Sampling Requirements

Routine groundwater samples were collected semi-annually from the following locations identified in the WQMP and Permit No. 26254-003-SO/T3.

Table 2-1
Groundwater Monitoring Network

Well ID	WACS ID #	Aquifer	Designation
2MW-3A	19671	Surficial	Piezometer
2MW-7	2343	Surficial	Background
2MW-8	2344	Surficial	Piezometer
2MW-9	2345	Surficial	Piezometer
2MW-10	2346	Surficial	Piezometer
4MW-3A	19670	Floridan	Piezometer
4MW-7	2340	Floridan	Background
4MW-8	2341	Floridan	Piezometer
4MW-9	2342	Floridan	Piezometer
4MW-21	23065	Floridan	Detection
4MW-22	23066	Floridan	Detection
4MW-23	23067	Floridan	Detection

2.2 Monitoring Data

The wells identified in Table 2-1 were sampled on a semi-annual basis by Pasco County Environmental Laboratory Services personnel on the dates identified in Table 1-1. All sampling was conducted in accordance with the Standard Operating Procedures (SOPs) described in DEP-SOP-001-01, effective July 30, 2014, and all analysis was conducted by laboratories that hold certificates from the Florida Department of Health Environmental Laboratory Certification Program described at 64E-1, F.A.C. Collected samples were analyzed for the following parameters:

Field Parameters	Laboratory Parameters
Static Water Level Before Purging	Total Ammonia – N
Specific Conductivity	Chlorides
pH	Nitrate
Dissolved Oxygen	Total Dissolved Solids (TDS)
Turbidity	Parameters listed in 40 CFR 258, Appendix I
Temperature	Iron
Colors and Sheens	Mercury
	Sodium

2.3 Monitoring Results

Complete results of the routine monitoring and analysis have been provided to FDEP in ADaPT format for each of the sampling events identified in Table 1-1. The remainder of this report will address only those parameters that exceeded the Maximum Contaminant Level (MCL) established by rule 62-550, F.A.C. For a complete listing of the results of all parameters (inclusive of results below the MCL), please refer to the ADaPT database or to the semi-annual reports previously supplied to the FDEP.

2.3.1 Surficial Aquifer

Previous studies undertaken at the site indicate that the surficial aquifer is predominantly absent, but when present can be observed anywhere between 5 feet below ground surface (bgs) to approximately 15 feet bgs. The wells designated as 2MW-3A through 2MW-10 constitute the monitoring network for the surficial aquifer. **Figure 2-1** presents the approximate locations of the Surficial Aquifer Monitoring Network.

2.3.1.1 Background Well

Monitoring Well 2MW-7 serves as the background well for the surficial aquifer. Throughout the evaluation period 2MW-7 was consistently dry. Accordingly, there were no observed exceedances of an MCL during the evaluation period.

2.3.1.2 Piezometers

As with the Background Well, each of the four piezometers were consistently dry throughout the monitoring period. No samples were obtained for any of the piezometers throughout the evaluation period.

2.3.1.3 Detection Wells

There are no surficial aquifer detection and/or compliance wells in the Water Quality Monitoring Plan.

2.3.2 Upper Floridan Aquifer

Previous studies undertaken at the site indicate that the piezometric surface of the Floridan aquifer begins at about 30 feet bgs (or approximately 33 ft NGVD). The wells designated as 4MW-3A through 4MW-23 constitute the monitoring network for the Floridan aquifer. **Figure 2-2** presents the approximate locations of the Floridan Aquifer Monitoring Network.

2.3.2.1 Background Well

Monitoring Well 4MW-7 serves as the background well for the Floridan aquifer. There were no observed exceedances of an MCL in the Background Well during the evaluation period.

2.3.2.2 Piezometers

Though not required by either the Water Quality Monitoring Plan or Permit No. 26254-003-SO/T3, several of the piezometers were sampled and analyzed during the evaluation period. There were no observed exceedances of an MCL in the Floridan piezometers during the evaluation period.

2.3.1.2 Detection Wells

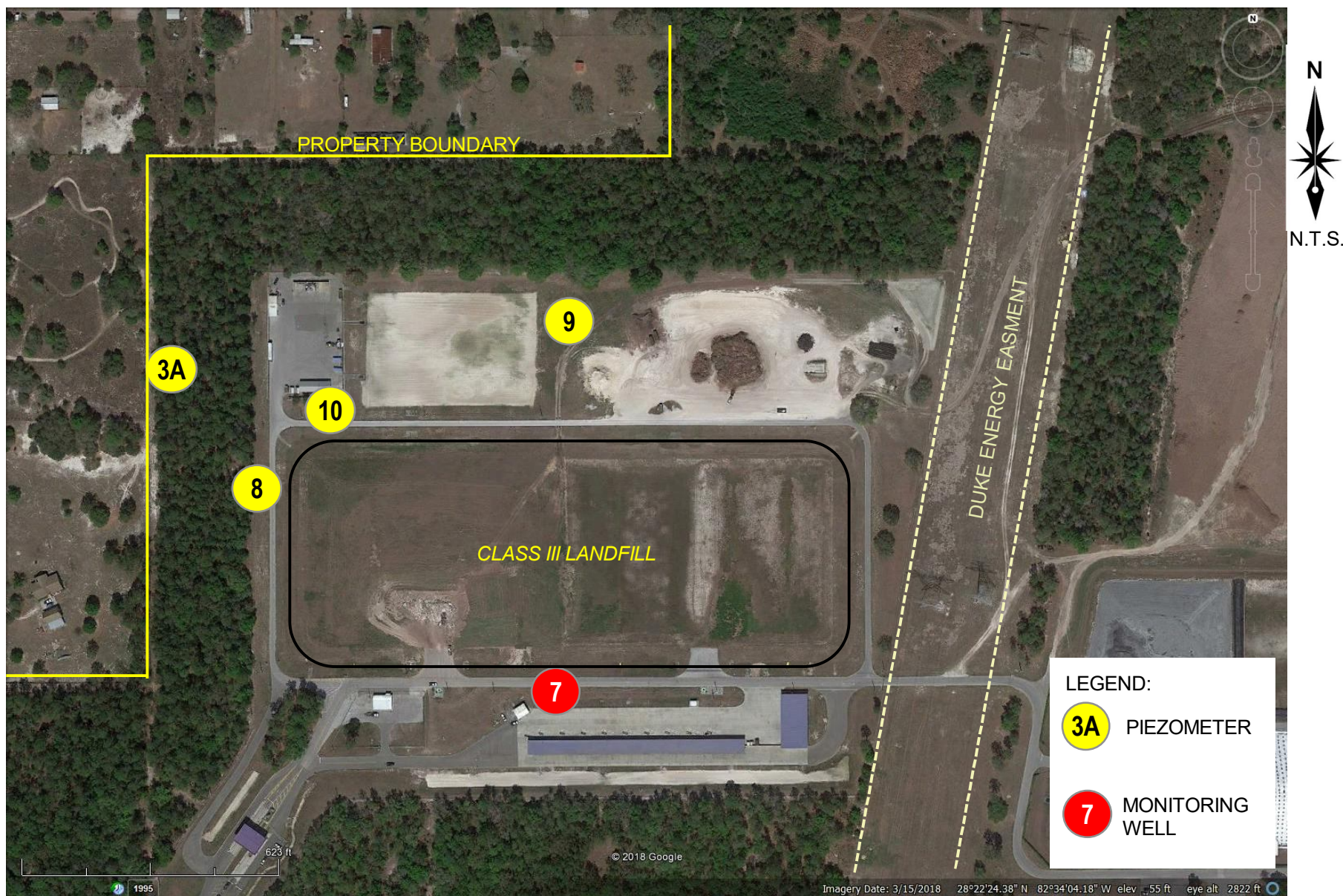
The three detection wells (4MW-21, 4MW-22, and 4MW-23) were sampled semi-annually throughout the evaluation period. There were sporadic exceedances of an MCL for pH and iron throughout the evaluation period. This is consistent with historic data for the site and the larger region as a whole.

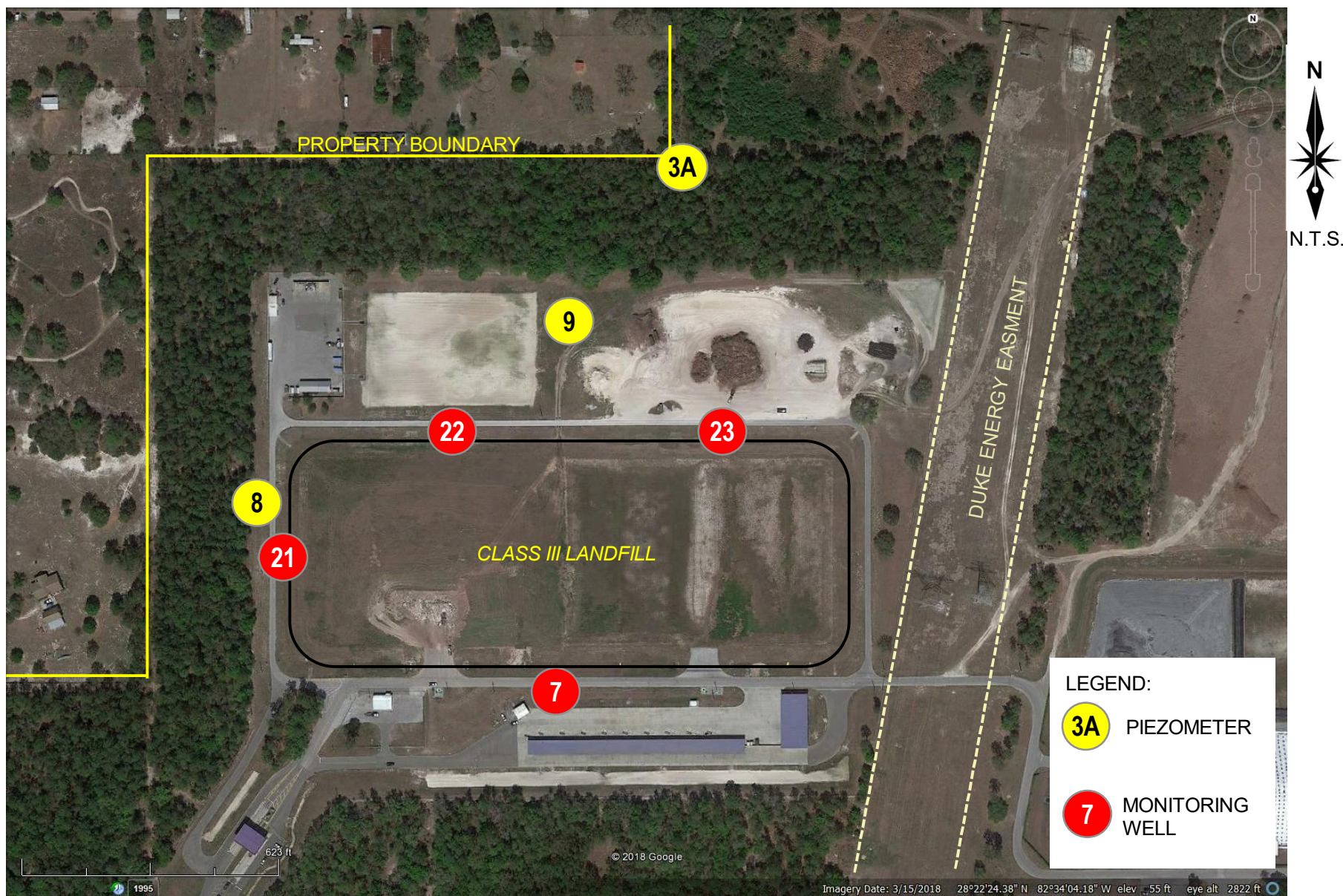
2.4 General Groundwater Quality and Correlations

The Figures in **Appendix C** present a temporal trend of contaminants that were detected during the evaluation period. Generally speaking, the surficial aquifer monitoring wells remained consistently dry throughout the evaluation period. Results from the Floridan aquifer monitoring wells (also presented in Appendices A and C) remain relatively clean and are discussed in further detail below.

2.4.1 Floridan Aquifer

The groundwater quality in the Floridan aquifer remained consistent with the quality observed in previous evaluations. Sporadic exceedances for pH and iron were observed but the exceedances are not considered to be an impact from the landfill. The groundwater quality of the Floridan aquifer in the vicinity of the landfill is considered good.





Section 3

Evaluation of Groundwater Flow Conditions

Groundwater levels are measured semi-annually as part of the routine groundwater monitoring activities at the site, as described in the approved Water Quality Monitoring Plan, dated October 2013. The range of measured water levels for the 2018 - 2020 period are presented in **Appendix D**. Review of the hydrographs for each well indicates that while the water level elevations fluctuate with season, the relationship between water levels in the monitoring well network is generally consistent and the potentiometric surface of the Floridan aquifer has remained relatively constant throughout the period.

3.1 Groundwater Levels

3.1.1 Surficial Aquifer

All monitoring wells and piezometers associated with the surficial aquifer were consistently dry throughout the entire evaluation period.

3.1.2 Floridan Aquifer

The elevation of the potentiometric surface of the Floridan aquifer at the site is relatively constant across the monitoring well network. With few exceptions, the gradient between monitoring wells is relatively small. Not surprisingly, the elevations exhibit seasonal variability, with the highest readings during the 2nd Half of each year and the lowest elevations being observed in the 1st Half. For a detailed presentation of the groundwater levels in the Floridan aquifer during the evaluation period, refer to the hydrographs in **Appendix D**.

3.2 Groundwater Flowrate and Movement

As stated previously, the Class III Landfill is a single component of the overall West Pasco Solid Waste Facility campus. A Water Quality Monitoring Plan Evaluation Report (WQMPER) for the adjacent Class I Landfill (which shares the WACS code with the Class III Landfill) was recently completed by Pasco County and submitted to the Department in August of 2020. Because the Class I Landfill WQMPER utilized data from the Class III Monitoring Well Network in conjunction with data from the Class I Monitoring Well Network, the findings and conclusions related to groundwater flowrate and movement are hereby incorporated by reference and summarized below.

As detailed in the Class I WQMPER, the hydraulic gradient for each semi-annual monitoring event and aquifer (surficial and Floridan) was estimated using a three-point solution with groundwater level data from the previously prepared groundwater contour maps. The average gradient for the Floridan aquifer calculated for the evaluation period was 0.0013. No gradient was calculated for the surficial aquifer because it is predominantly non-existent.

Section 3 - Evaluation of Groundwater Flow Conditions

Horizontal groundwater flow rates were then estimated using site-specific constants derived during previous studies. To estimate the horizontal groundwater flow rate, the average linear velocity of each groundwater unit was calculated using the following equation:

$$v = \frac{Ki}{n}$$

where:

v = average linear groundwater velocity

K = hydraulic conductivity (CDM, 2010)

i = hydraulic gradient

n = effective porosity (assumed)

Using a Floridan aquifer hydraulic conductivity value of 9.0 feet/day and an effective porosity value of 15 percent resulted in an average groundwater flowrate in the Floridan aquifer of 30 feet/year. For more detail, please refer to “Water Quality Monitoring Plan Evaluation Report Semester I 2018 through Semester I 2020 West Pasco Resource Recovery – Class I Landfill WACS ID 45799” prepared by Pasco County Utilities and dated August 2020.

Section 4 – Conclusions and Recommendations

The data and findings presented in Sections 1 through 3 above, in combination with the data presented in Appendices A through D, have been prepared consistent with the requirements of Rule 62-701.510(8)(b), F.A.C. The following conclusions and recommendations are based upon an evaluation of the data collected during the first half of 2015 through the first half of 2018.

4.1 Groundwater Quality – Surficial Aquifer

- The surficial aquifer was insufficiently saturated during the evaluation period and no groundwater samples were able to be obtained.

4.2 Groundwater Quality – Floridan Aquifer

- The sporadic detections of iron and low pH conditions is considered to be naturally occurring and not associated with any leachate releases.
- No trends or correlations within the dataset were identified.

4.3 Groundwater Elevations

- The surficial aquifer at the site remains unsaturated.
- Floridan aquifer groundwater elevations were relatively consistent across the monitoring well network and exhibited a no long term trends (upward or downward) during the evaluation period.

4.4 Groundwater Movement

- Groundwater in the Floridan aquifer generally flows from southeast to northwest.
- The calculated average rate of groundwater movement within the Floridan aquifer is approximately 30 feet per year.

4.5 Recommendations

The existing monitoring network and sampling frequency is considered to be adequate for the West Pasco Class III Landfill.

Appendix A

Tabulated Results

APPENDIX A-1 Detected Contaminants Floridan Aquifer

Well No.	Parameter	Units	2H18	1H19	2H19	1H20	2H20
4MW-3A	Nitrate	mg/l			0.47		0.04
	Sodium	mg/l	11	11	18	12	11
	turbidity	NTU	2.5	15.9	0	1.3	2.2
	chloride	mg/l	23.6	26	39	28	24
	iron	mg/l	132	130	180	130	130
	pH	S.U.	7.19	7.39	7.45	7.19	7.12
	TDS	mg/l	216	250	260	470	180
	DO	mg/l	0.68	1.42	3.95	2.09	2.33
	Spec. Conductance	umhos/cm	459	447	454	447	445
	Ammonia	mg/l		0.13	0.17	0.12	0.11
	Arsenic	ug/l					
	Barium	ug/l	10.4	10	13	11	5.9
	Cadmium	ug/l					
	Chromium	ug/l					
	Copper	ug/l					
	Lead	ug/l			2.4		
	Mercury	ug/l					
	Nickel	ug/l			1.5		2.6
	Selenium	ug/l					11
	Silver	ug/l					
	Vanadium	ug/l			4.7		
	Zinc	ug/l					

empty fields indicate that the contaminant was not detected

APPENDIX A-1 Detected Contaminants Floridan Aquifer

Well No.	Parameter	Units	2H18	1H19	2H19	1H20	2H20
4MW-7	Nitrate	mg/l		0.27	0.59	0.28	0.013
	Sodium	mg/l	4.6	4.9	4.7	5.2	4.9
	turbidity	NTU	2.4	14.8	0	0	2.1
	chloride	mg/l	12.5	14	13	15	13
	iron	mg/l	13				
	pH	S.U.	7.18	7.36	7.25	7.27	7.2
	TDS	mg/l	188	200	200	180	170
	DO	mg/l	1.49	1.68	2.4	1.83	2.74
	Spec. Conductance	umhos/cm	346	342	357	362	366
	Ammonia	mg/l					
	Arsenic	ug/l					
	Barium	ug/l	8.5	9	8.9	8.8	8.9
	Beryllium	ug/l					
	Cadmium	ug/l				0.47	
	Chromium	ug/l					
	Copper	ug/l					
	Lead	ug/l					
	Mercury	ug/l					
	Nickel	ug/l					
	Selenium	ug/l					
	Silver	ug/l					
	Vanadium	ug/l	1.1			7.1	
	Zinc	ug/l					

empty fields indicate that the contaminant was not detected

APPENDIX A-1 Detected Contaminants Floridan Aquifer

Well No.	Parameter	Units	2H18	1H19	2H19	1H20	2H20
4MW-8	Nitrate	mg/l					
	Sodium	mg/l	4	4.3	4.4	4.6	4.5
	turbidity	NTU	1.6	13.9	0	2.7	1.7
	chloride	mg/l	9.5	10	9.9	11	11
	iron	mg/l					
	pH	S.U.	7.19	7.28	7.16	7.3	7.13
	TDS	mg/l	209	200	200	200	180
	DO	mg/l	2.11	1.46	2.11	1.8	1.83
	Spec. Conductance	umhos/cm	393	357	388	335	389
	Ammonia	mg/l					
	Arsenic	ug/l					
	Barium	ug/l	7.2	7.7	8.5	8	7.5
	Beryllium	ug/l					
	Cadmium	ug/l					
	Chromium	ug/l					
	Copper	ug/l					
	Lead	ug/l					
	Mercury	ug/l					
	Nickel	ug/l					
	Selenium	ug/l					
	Silver	ug/l					
	Vanadium	ug/l					
	Zinc	ug/l					

empty fields indicate that the contaminant was not detected

APPENDIX A-1 Detected Contaminants Floridan Aquifer

Well No.	Parameter	Units	2H18	1H19	2H19	1H20	2H20
4MW-9	Nitrate	mg/l	0.39	0.37	0.48	0.33	0.52
	Sodium	mg/l	11	9.8	9.9	10	
	turbidity	NTU	2	15.1	0	0	1.2
	chloride	mg/l	25	28	27	30	
	iron	mg/l					
	pH	S.U.	7.28	7.27	7.41	7.27	7.12
	TDS	mg/l	220	240	260	250	
	DO	mg/l	1.74	1.44	2.24	1.69	2.14
	Spec. Conductance	umhos/cm	484	414	449	441	444
	Ammonia	mg/l					
	Acetone	ug/l					
	Arsenic	ug/l		2.2	1.9	1.9	
	Barium	ug/l	9.1	9.1	9.4	9.1	
	Beryllium	ug/l					
	Cadmium	ug/l					
	Chromium	ug/l					
	Copper	ug/l					
	Lead	ug/l					
	Mercury	ug/l					
	Nickel	ug/l					
	Selenium	ug/l					
	Silver	ug/l					
	Vanadium	ug/l					
	Zinc	ug/l					

empty fields indicate that the contaminant was not detected

APPENDIX A-1 Detected Contaminants Floridan Aquifer

Well No.	Parameter	Units	2H18	1H19	2H19	1H20	2H20
4MW-21	Nitrate	mg/l	6.1	5.7	5.6		0.08
	Sodium	mg/l	4.8	5.1	5.1	5.3	7
	turbidity	NTU	11.9	29.7	4.2		3.3
	chloride	mg/l	8.5	9.4	9.5	9.9	17
	iron	mg/l		640	82	11	42
	pH	S.U.	5.34	5.34	4.82		7
	TDS	mg/l	89	99	80	84	230
	DO	mg/l	5.16	6.71	7.33		2.2
	Spec. Conductance	umhos/cm	130	70	144		472
	Ammonia	mg/l					
	Arsenic	ug/l					
	Barium	ug/l	8.9	11	9	10	12
	Beryllium	ug/l					
	Cadmium	ug/l	1	1.2	1.2	1.1	0.64
	Chromium	ug/l		5		1.3	
	Copper	ug/l					
	Lead	ug/l					
	Mercury	ug/l					
	Nickel	ug/l		2.9	0.87	1.9	
	Selenium	ug/l					
	Silver	ug/l					
	Vanadium	ug/l	2.5				
	Zinc	ug/l					6.8

empty fields indicate that the contaminant was not detected

APPENDIX A-1 Detected Contaminants Floridan Aquifer

Well No.	Parameter	Units	2H18	1H19	2H19	1H20	2H20
4MW-22	Nitrate	mg/l	0.06	0.091	0.016	0.04	6.33
	Sodium	mg/l	6.3	6.6	6.5		
	turbidity	NTU	5.9	15.3	0	0.06	1.7
	chloride	mg/l	15.5	19	17		
	iron	mg/l	164	70			340
	pH	S.U.	7.08	7.06	7.08	7.08	5.26
	TDS	mg/l	258	240	250		
	DO	mg/l	4.5	1.46	2.01	2.72	5.86
	Spec. Conductance	umhos/cm	441	433	487	457	144
	Ammonia	mg/l	49				
	Arsenic	ug/l		3.4			
	Barium	ug/l	11.1	11	11		
	Beryllium	ug/l					
	Cadmium	ug/l					
	Chromium	ug/l					
	Copper	ug/l					
	Lead	ug/l					
	Mercury	ug/l					
	Nickel	ug/l		0.83			
	Selenium	ug/l					
	Silver	ug/l					
	Vanadium	ug/l					
	Zinc	ug/l					

empty fields indicate that the contaminant was not detected

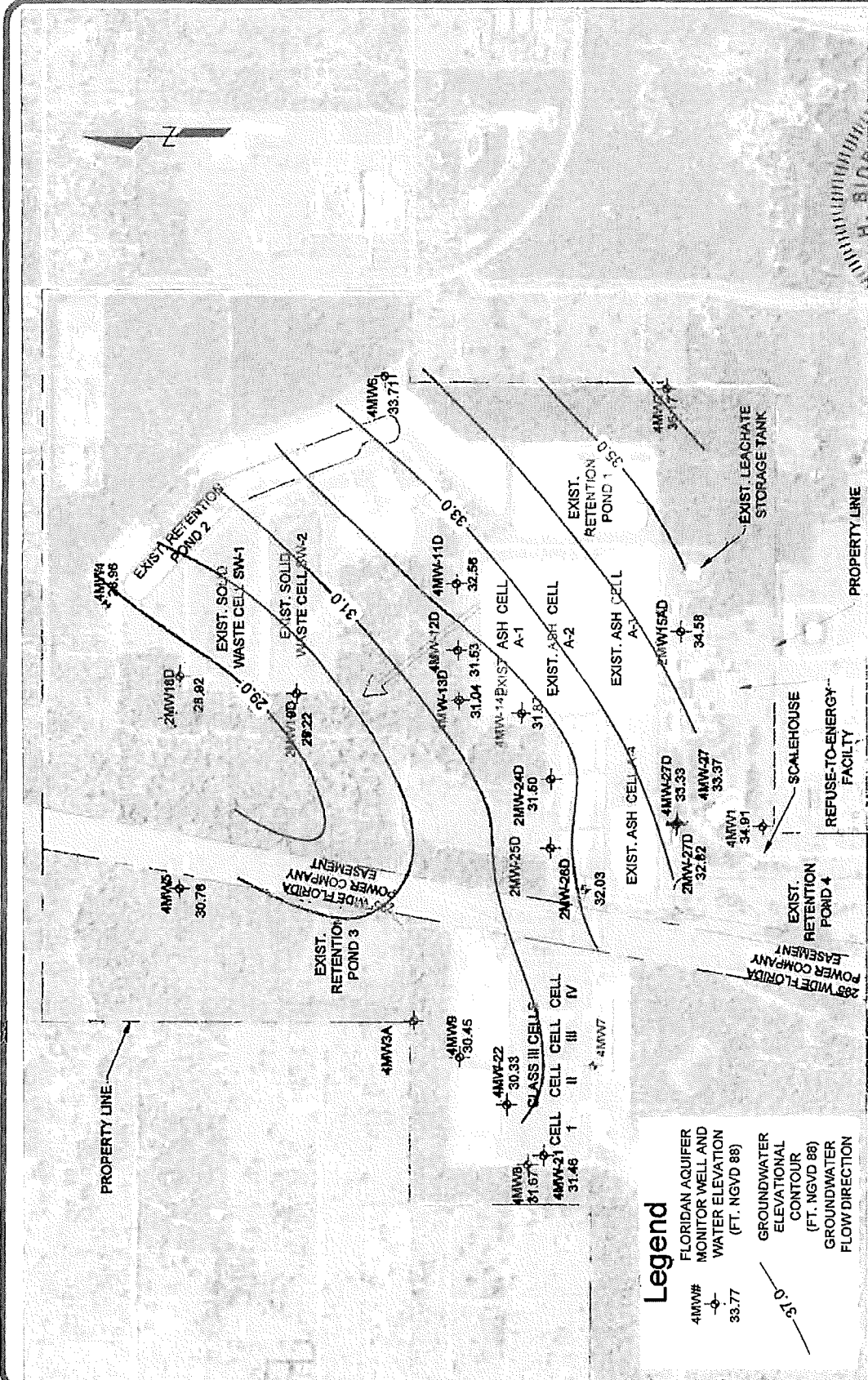
APPENDIX A-1 Detected Contaminants Floridan Aquifer

Well No.	Parameter	Units	2H18	1H19	2H19	1H20	2H20
4MW-23	Nitrate	mg/l				0.04	
	Sodium	mg/l			2.2	2.5	2.5
	turbidity	NTU			15.4	0.5	6.1
	chloride	mg/l			58	62	62
	iron	mg/l			730	440	530
	pH	S.U.			7.18	7.24	7.24
	TDS	mg/l			310	310	290
	DO	mg/l			1.67	1.85	2.5
	Spec. Conductance	umhos/cm			534	538	552
	Ammonia	mg/l					
	Arsenic	ug/l			3.8	2.6	2
	Barium	ug/l			7.6	8.8	9.8
	Beryllium	ug/l					
	Cadmium	ug/l					
	Chromium	ug/l			1.5		
	Copper	ug/l					
	Lead	ug/l					
	Mercury	ug/l					
	Nickel	ug/l			1.9		
	Selenium	ug/l					
	Silver	ug/l					
	Vanadium	ug/l					
	Zinc	ug/l					

empty fields indicate that the contaminant was not detected

Appendix B

Groundwater Maps



Legend

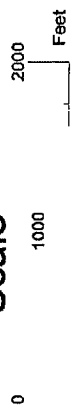
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- 33.77
- 31.0
- GROUNDWATER ELEVATIONAL CONTOUR (FT. NGVD 88)
- GROUNDWATER FLOW DIRECTION

WEST PASCO RESOURCE RECOVERY FACILITY

Floridan Aquifer
Groundwater Contour Map
2nd Semiannual 2018



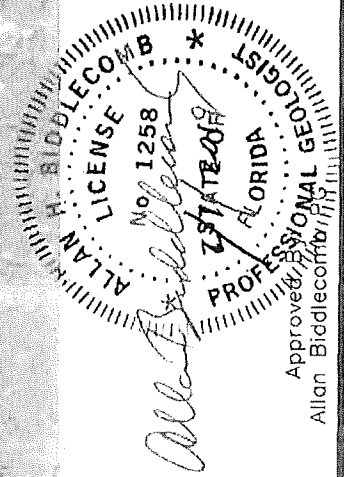
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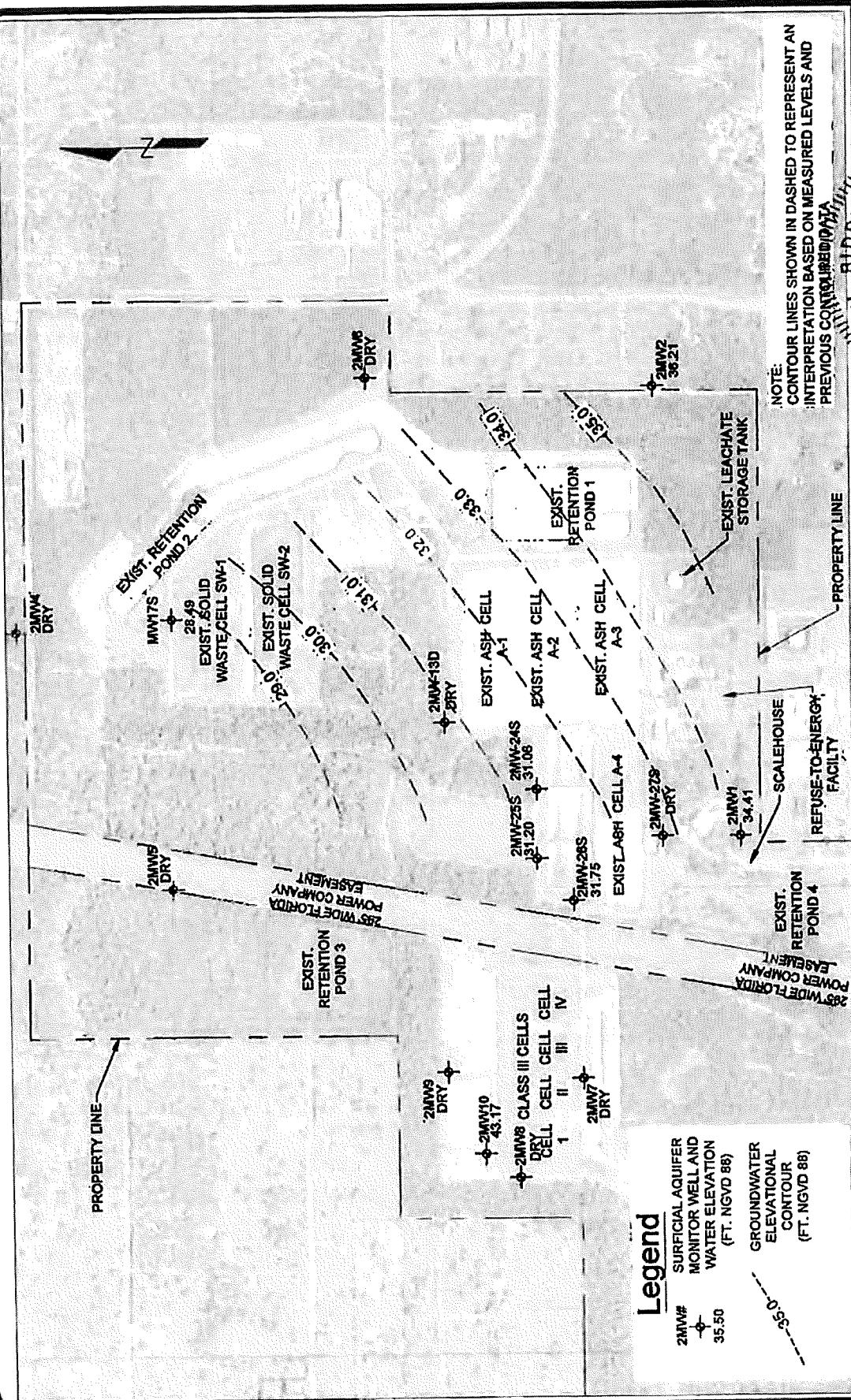
Project Number: Date Measured:

18-1100

November 5, 2018



Approved: Allan Biddlecomb



ALLAN H. BIDDLECOM
 LICENSE
 No. 12588
 State of FLORIDA
 PROFESSIONAL GEOLOGIST
 Applied By: Allan Biddlecom
 Date: 6/20/2019

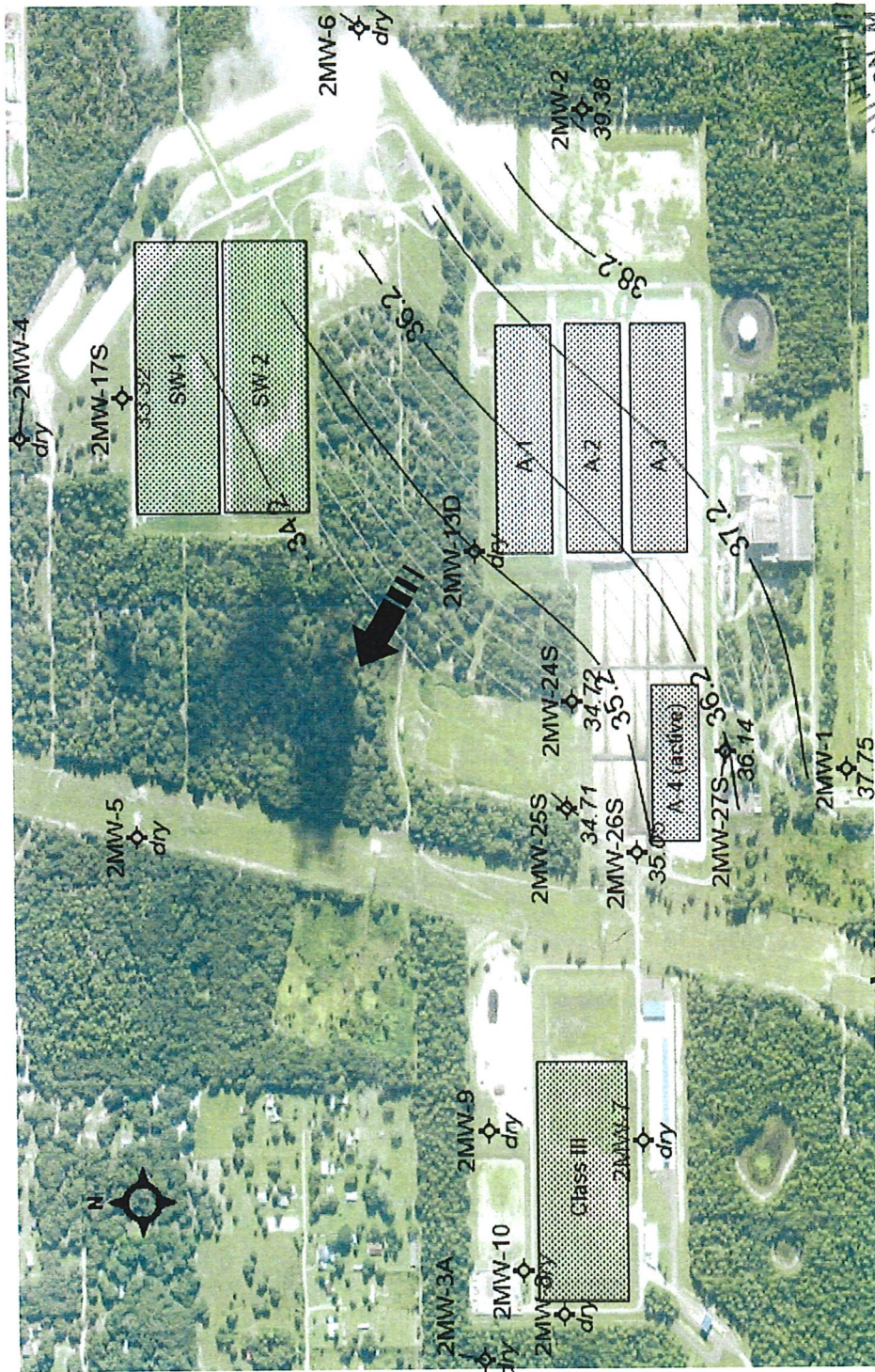
WEST PASCO RESOURCE RECOVERY FACILITY

Surficial Aquifer Groundwater Contour Map

2nd Qtr 2019

Scale: 0 1000 2000 Feet

Project Number: 18-701.00 Date Measured: April 10, 2019



Legend:

4MW-22



71.7

Monitoring Well Designation

Observed Groundwater

Elevation (FT NGVD 1988)

72

Groundwater Elevation Contour
(FT NGVD 1988)

Waste Disposal Area

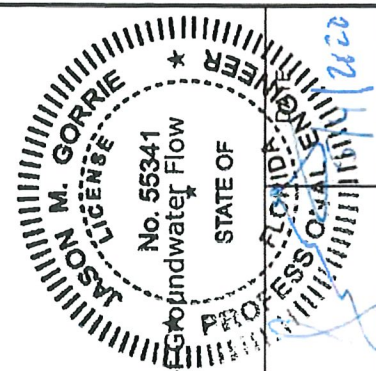
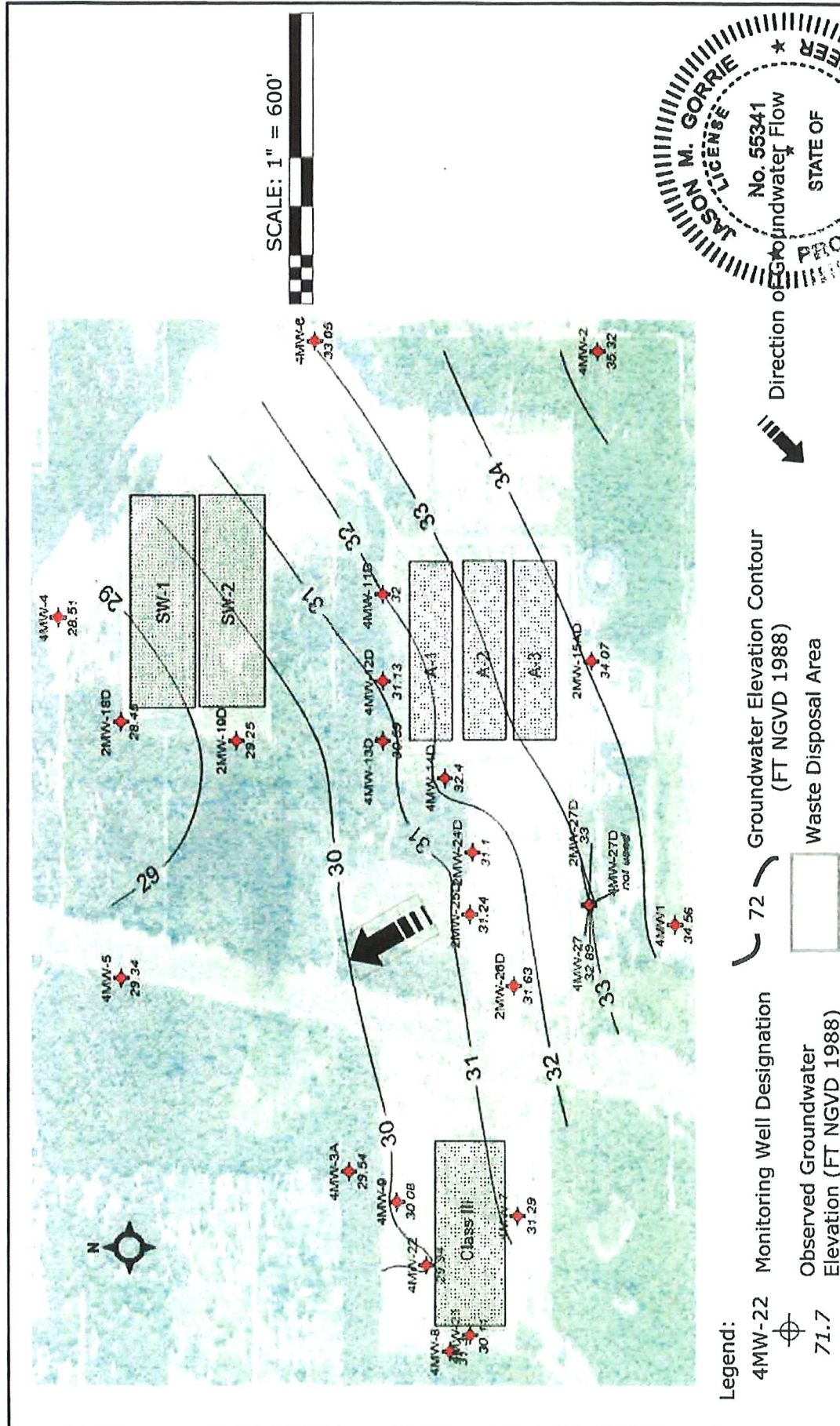


Direction of Groundwater Flow

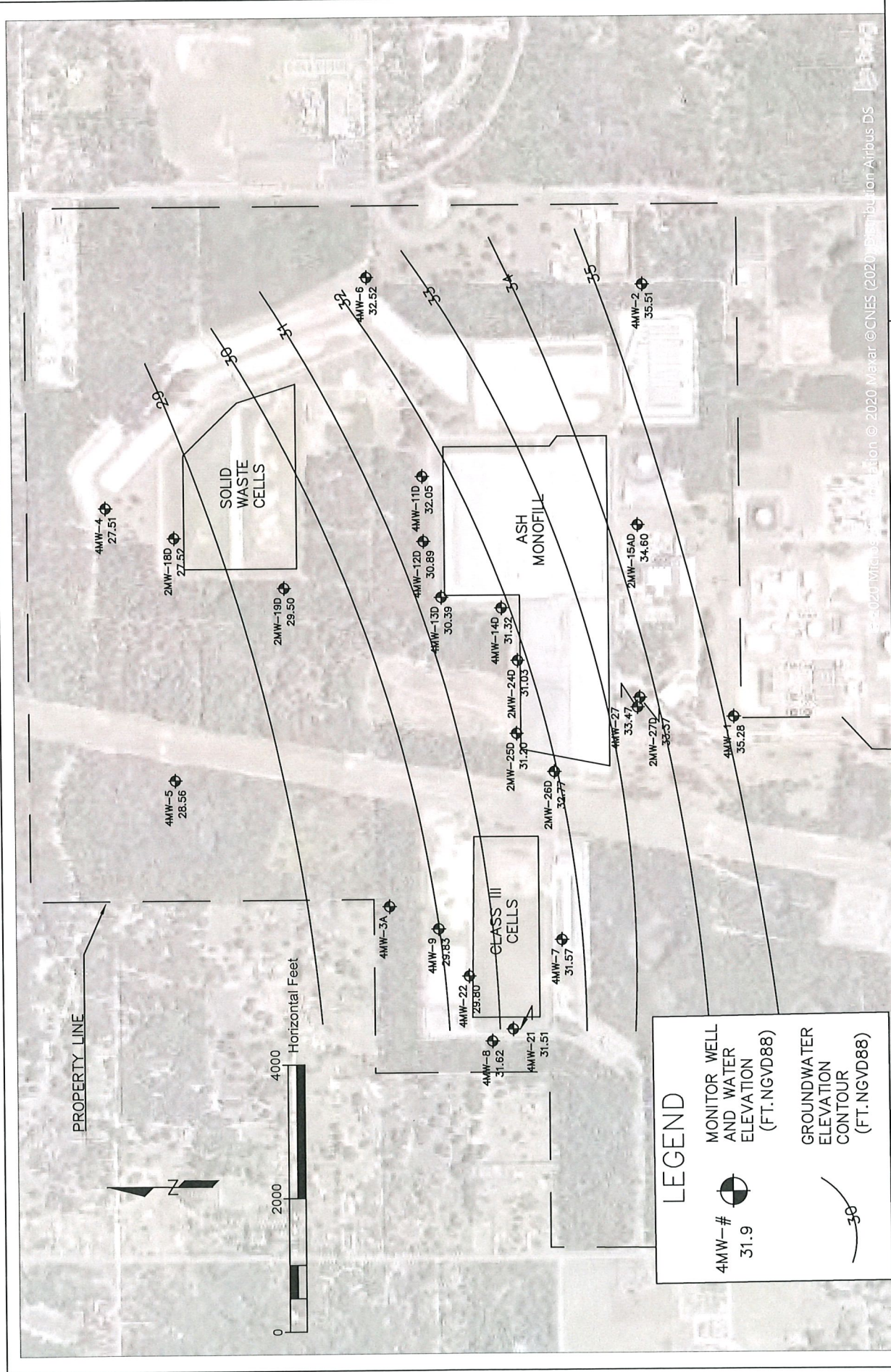
SCALE: 1" = 600'



<p>POTENTIOMETRIC SURFACE OF THE SURFICIAL AQUIFER</p> <p>WEST PASCO SOLID WASTE FACILITY</p>		<p>PREPARED BY Jason M. Gorrie, P.E.</p>	<p>DATE 11/14/19</p>
<p>DATA SOURCE Pasco County Environmental Laboratory 10/8/2019</p>		<p>STATE OF FLORIDA PROFESSIONAL ENGINEER</p>	<p>COMPLIANCE PERIOD 4th Qtr 2019</p>



POTENTIOMETRIC SURFACE OF THE FLORIDAN AQUIFER		PREPARED BY Jason M. Gorrie, P.E.	DATA SOURCE Pasco County Environmental Laboratory 4/1/2020	COMPLIANCE PERIOD 1st Half 2020
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WEST PASCO RESOURCE RECOVERY

FACILITY

Floridan Groundwater Map

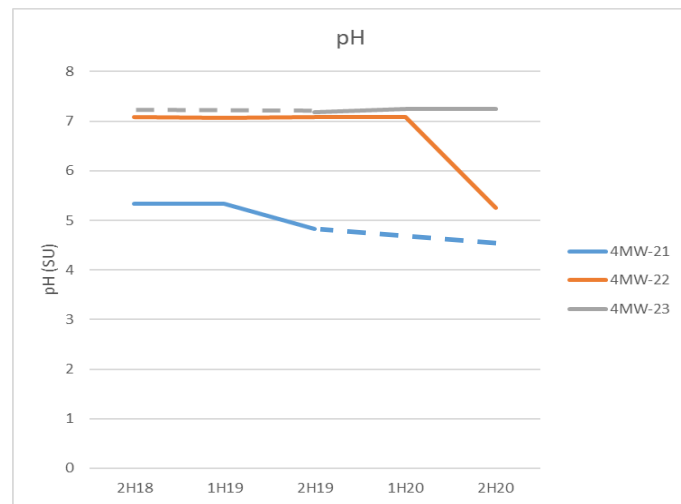
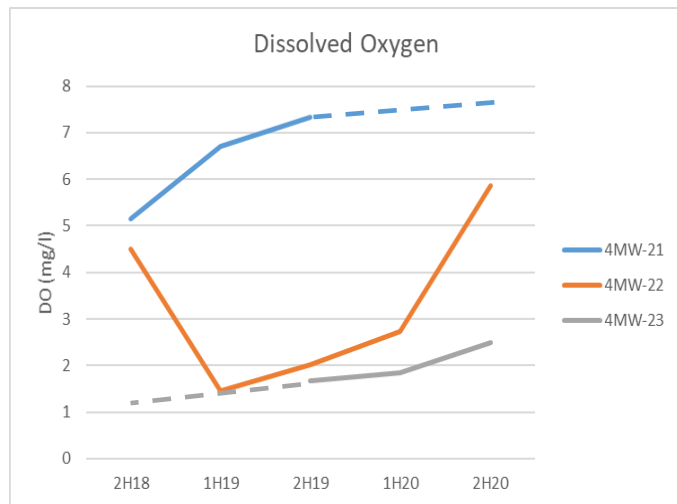
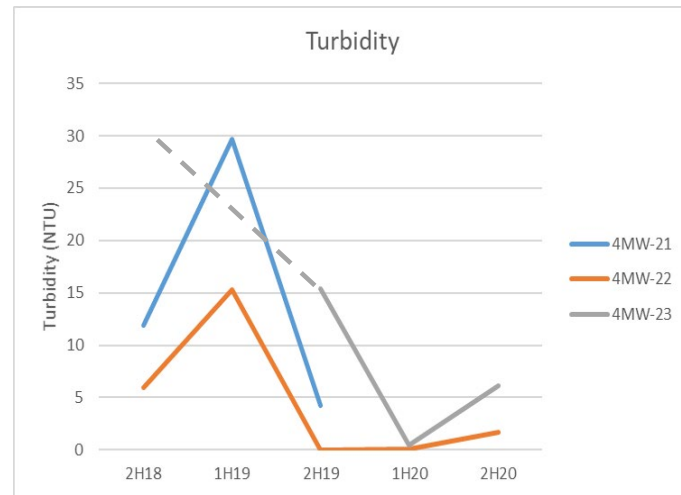
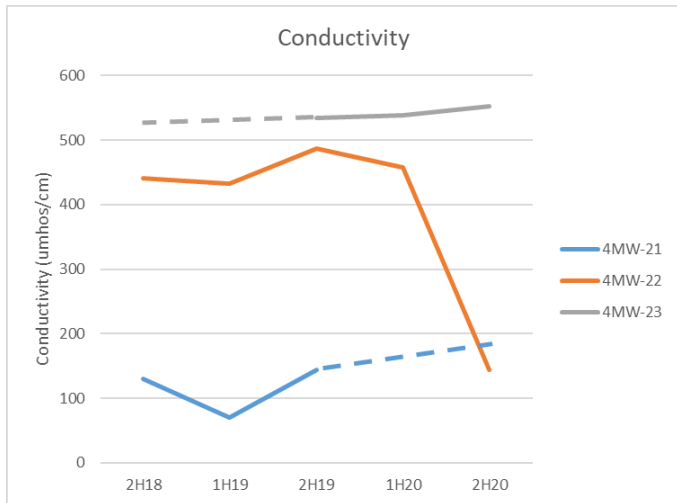
2nd Semi-Annual 2020



APPROVED FOR SIGNATURE
JASON GORRIE, PE

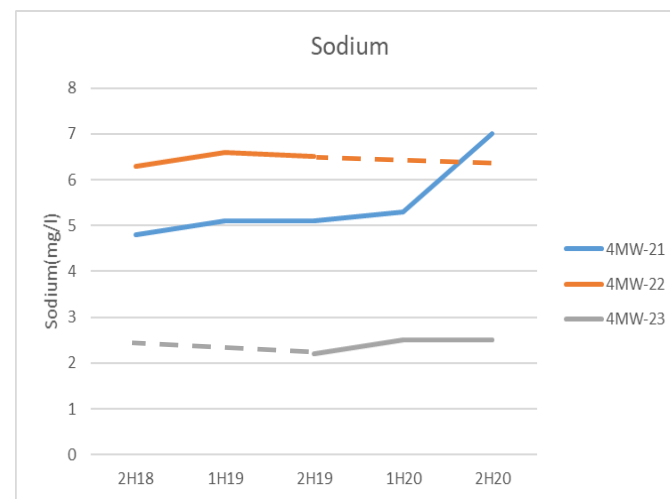
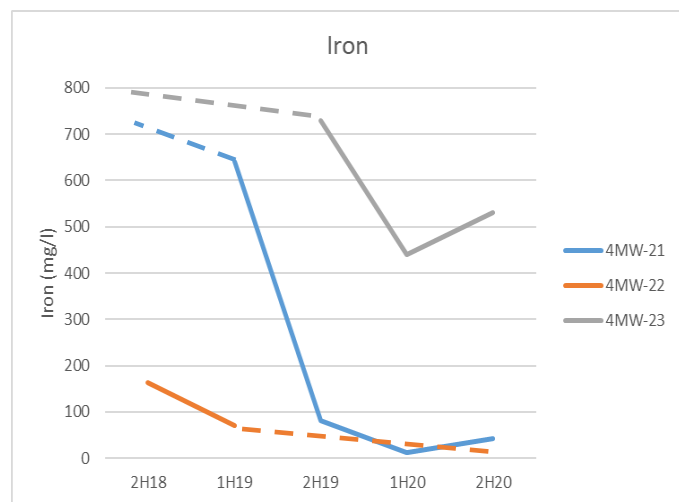
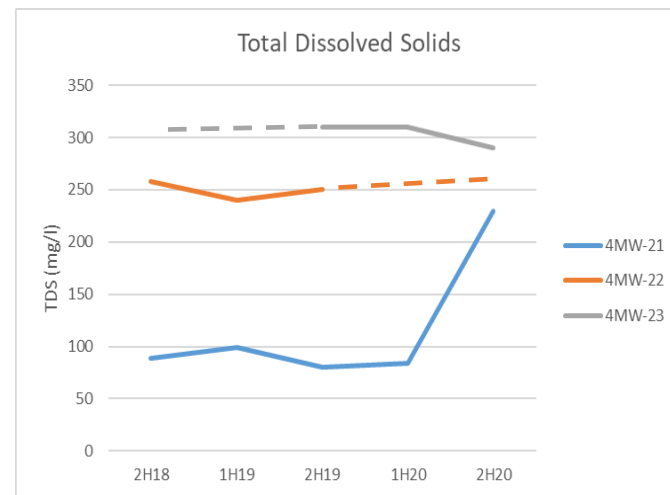
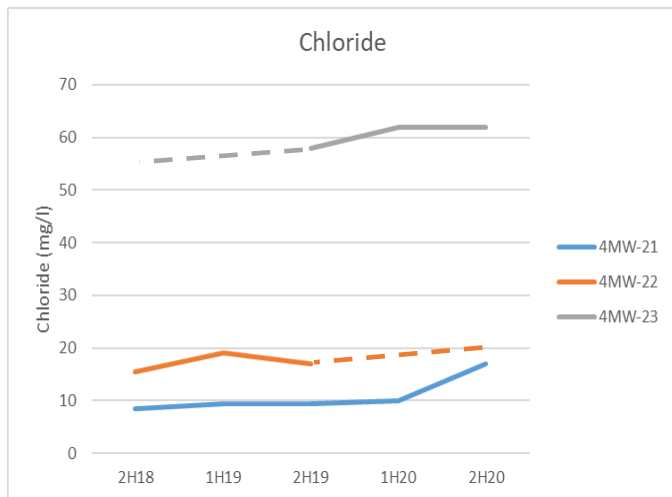
Appendix C

Contaminant Trends



dashed lines denote inferred result to account for missing data

Appendix C-1 Field Parameter Trends Floridan Aquifer Monitoring Well – West Pasco Class III 2nd Half 2018 through 2nd Half 2020



dashed lines denote inferred result to account for missing data

Appendix C-2
Select Laboratory Parameter Trends
Floridan Aquifer Monitoring Well – West Pasco Class III
2nd Half 2018 through 2nd Half 2020

Appendix D

Well Hydrographs



Monitoring Well 4MW-3A

West Pasco Class III Landfill

Well Type: piezometer

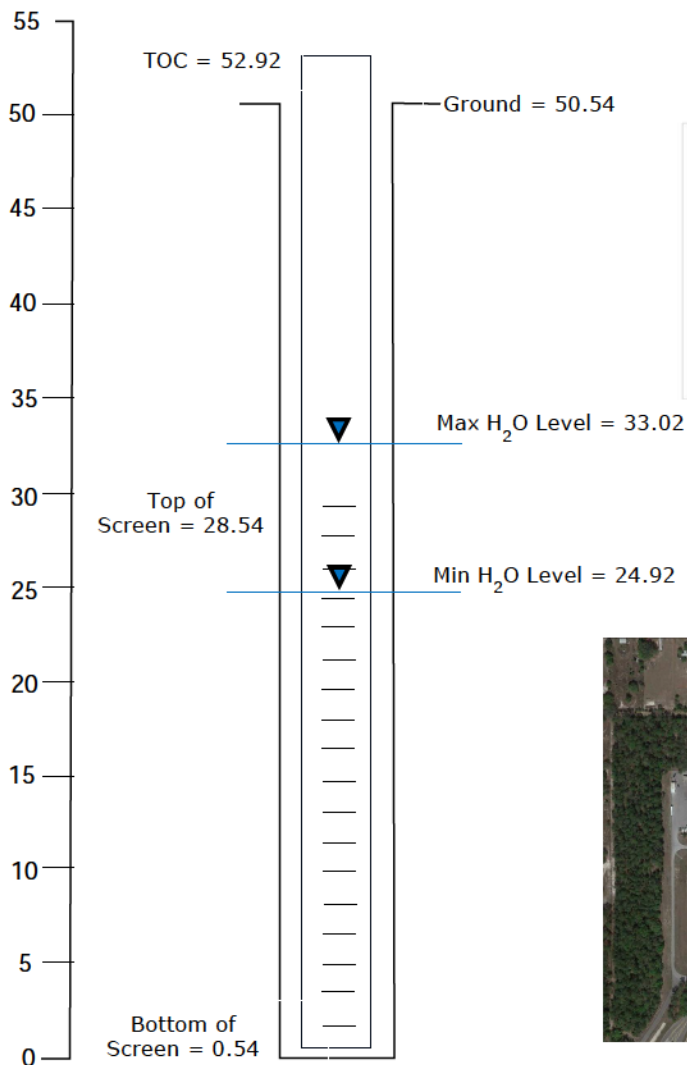
Aquifer Monitored: Floridan

WACS ID: 19670

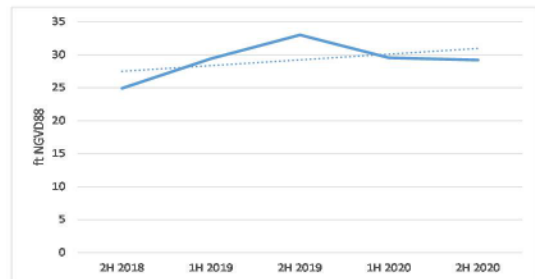
2nd Half 2018 - 2nd Half 2020

Elevation
(ft NGVD 88)

Well
Construction
Details



Water Level Trend
(2018 - 2020)





Monitoring Well 4MW-7

West Pasco Class III Landfill

Well Type: background

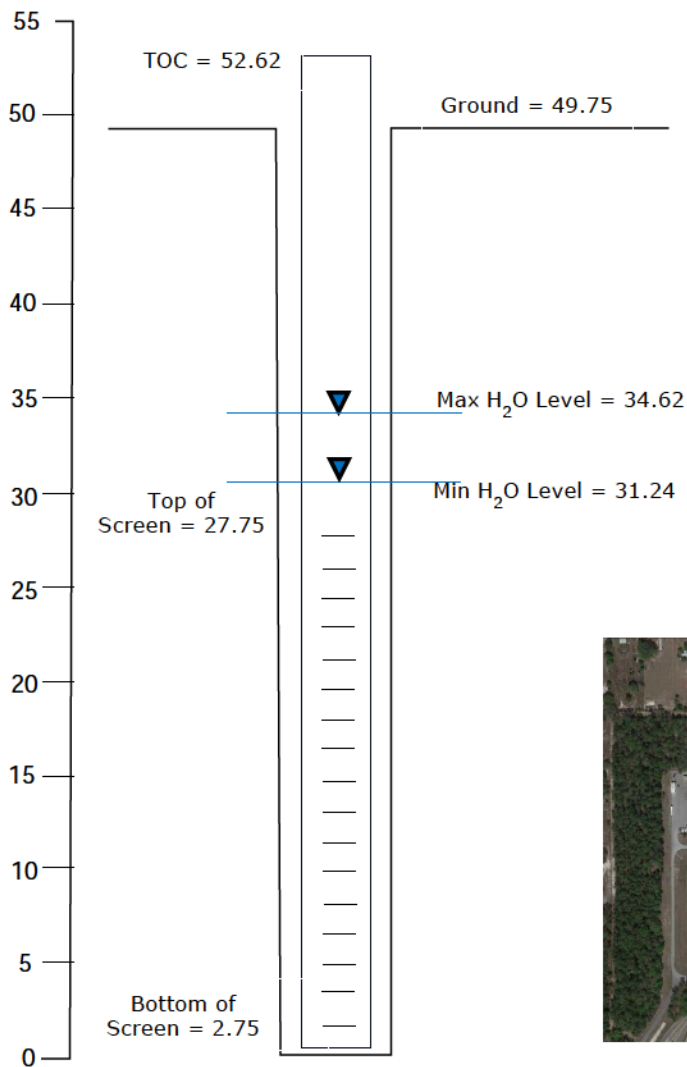
Aquifer Monitored: Floridan

WACS ID: 2340

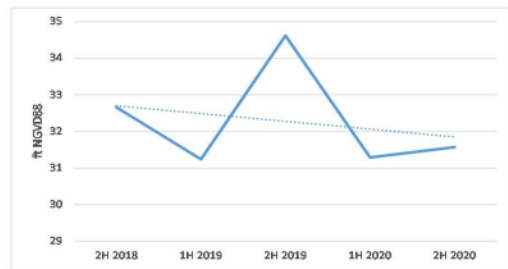
2nd Half 2018 - 2nd Half 2020

Elevation
(ft NGVD 88)

Well
Construction
Details



Water Level Trend
(2018 - 2020)





Monitoring Well 4MW-8

West Pasco Class III Landfill

Well Type: piezometer

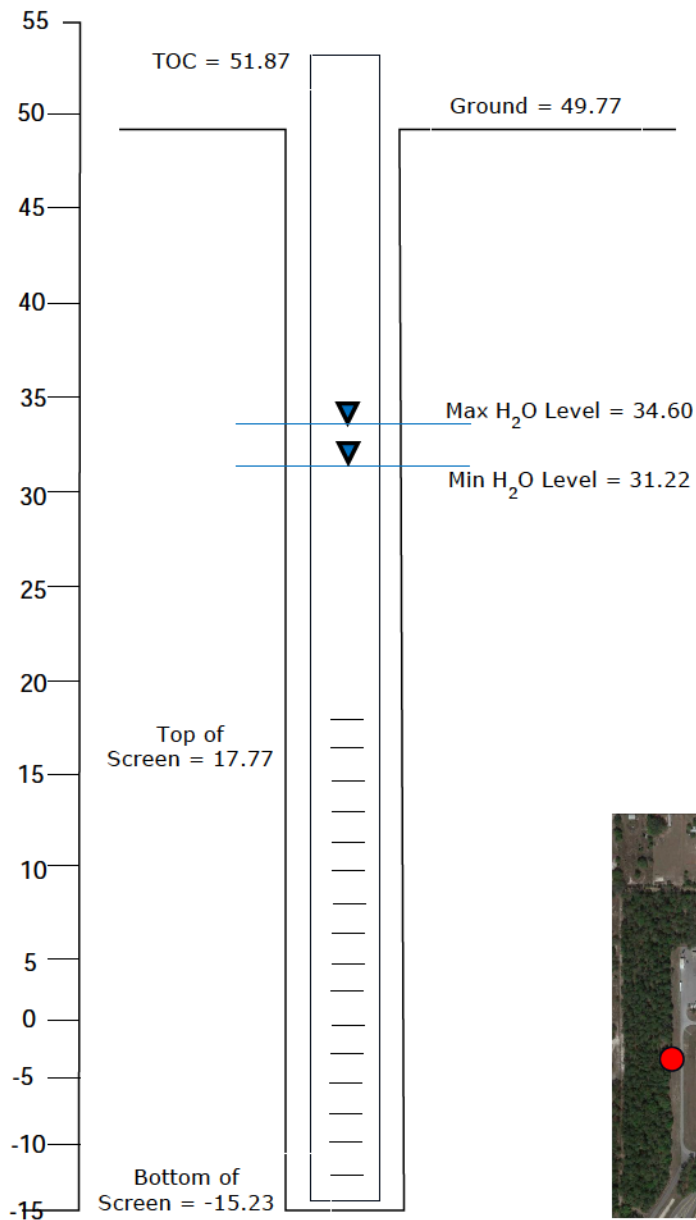
Aquifer Monitored: Floridan

WACS ID: 2341

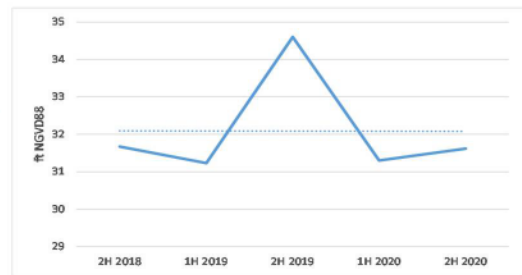
2nd Half 2018 - 2nd Half 2020

Elevation
(ft NGVD 88)

Well
Construction
Details



Water Level Trend
(2018 - 2020)





Monitoring Well 4MW-9

West Pasco Class III Landfill

Well Type: piezometer

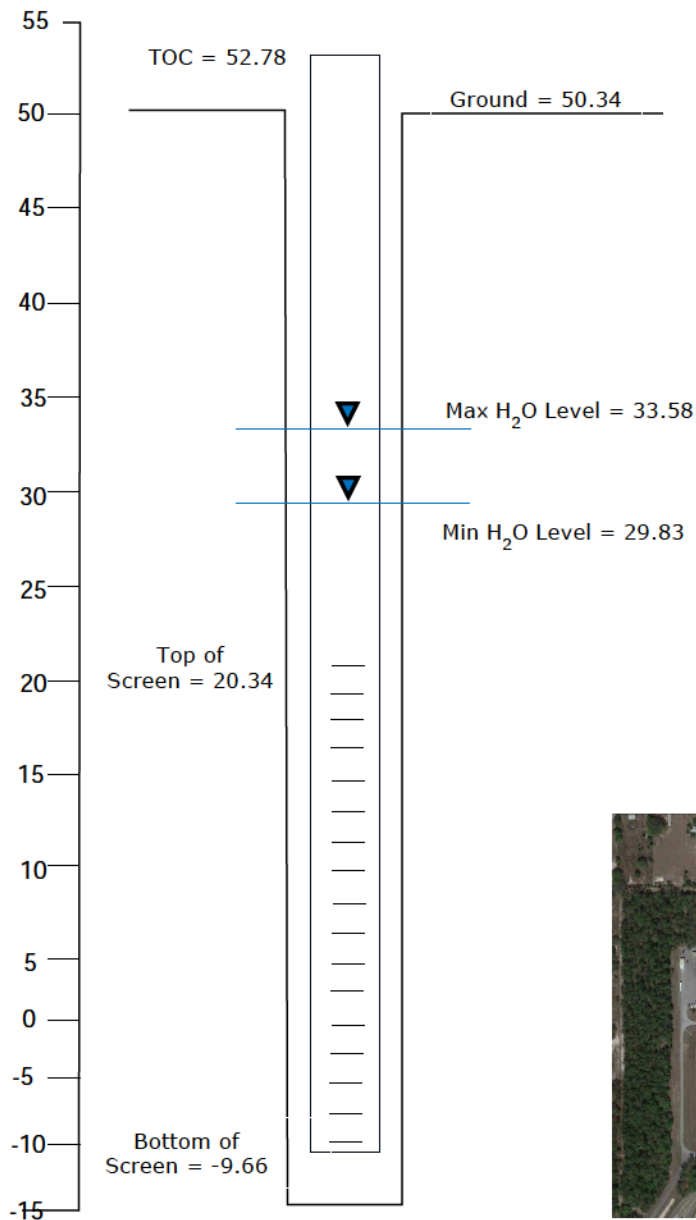
Aquifer Monitored: Floridan

WACS ID: 2342

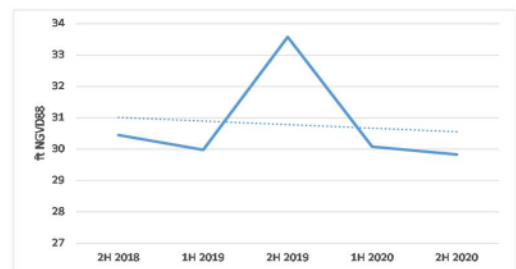
2nd Half 2018 - 2nd Half 2020

Elevation
(ft NGVD 88)

Well
Construction
Details



Water Level Trend
(2018 - 2020)





Monitoring Well 4MW-21

West Pasco Class III Landfill

Well Type: detection

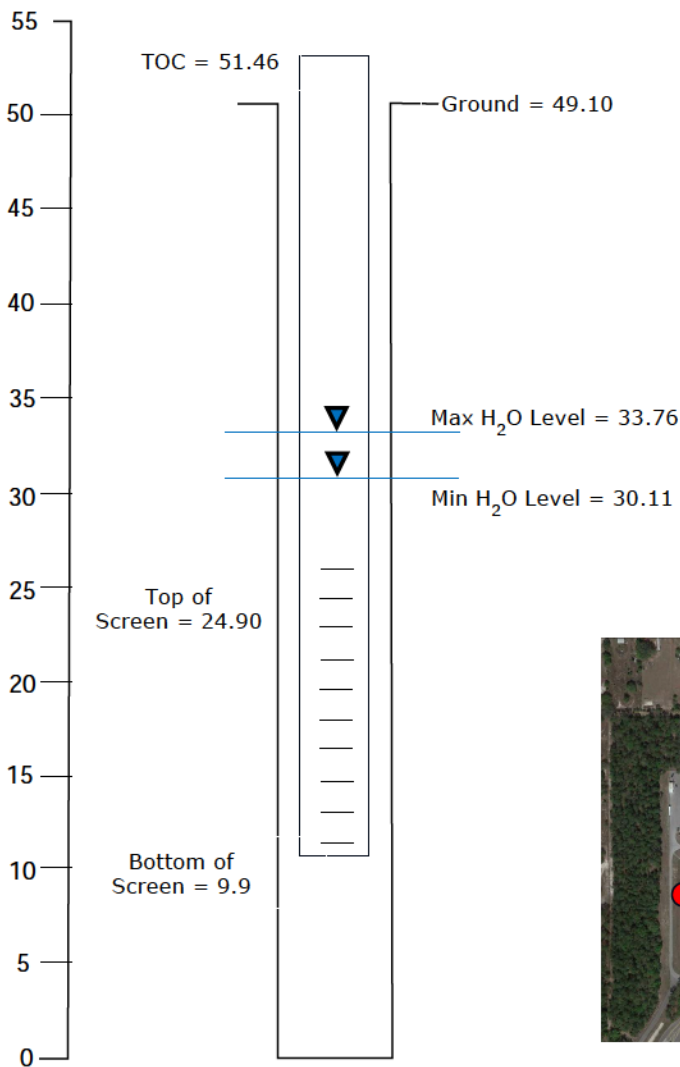
Aquifer Monitored: Floridan

WACS ID: 23065

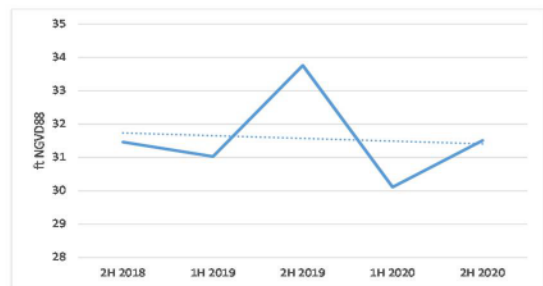
2nd Half 2018 - 2nd Half 2020

Elevation
(ft NGVD 88)

Well
Construction
Details



Water Level Trend
(2018 - 2020)





Monitoring Well 4MW-22

West Pasco Class III Landfill

Well Type: detection

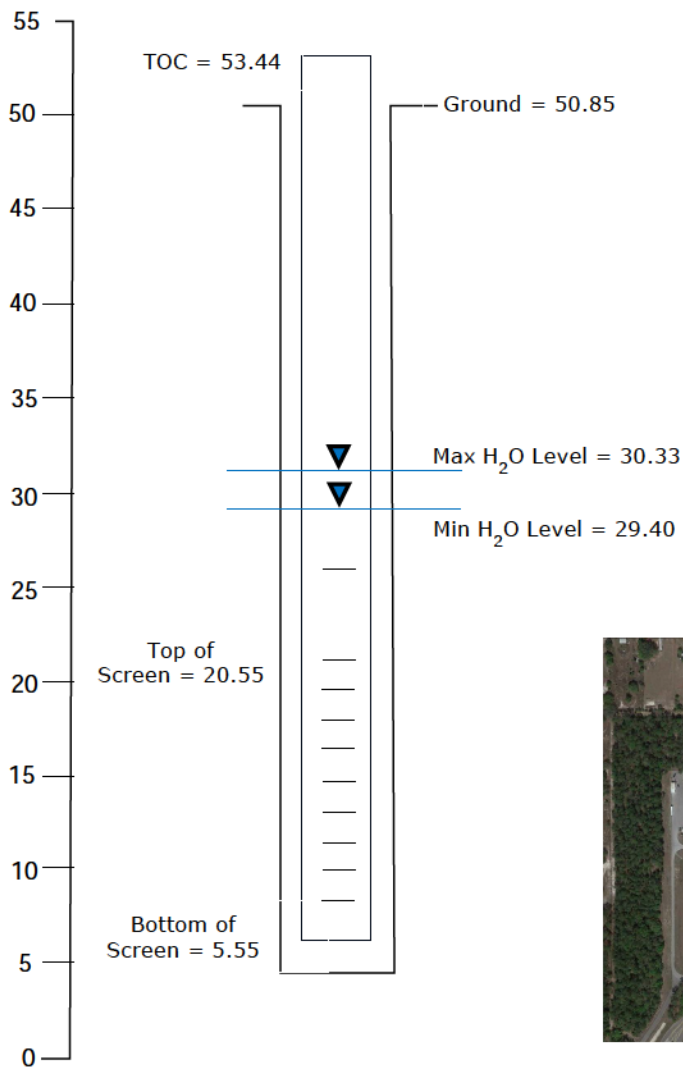
Aquifer Monitored: Floridan

WACS ID: 23066

2nd Half 2018 - 2nd Half 2020

Elevation
(ft NGVD 88)

Well Construction Details



Water Level Trend (2018 - 2020)

