Johnson, Sabrina O

From: Guilbeault, Ken <KGuilbeault@SCSEngineers.com>
Sent: Wednesday, July 25, 2018 11:18 AM
To: Morgan, Steve; Madden, Melissa
Cc: Byer, Kimberly; Ruiz, Larry; Pelley, Cindy; Curtis, Bob; O'Neill, Joseph; Chamberlain, Justin; Schipfer, Andy; Hsu, Benjamin; Townsel, Michael; Tafuni, Steven; SWD_Waste
Subject: Hillsborough County - Southeast County Landfill - 2018 Technical Water Quality Monitoring Report - WACS ID 41193
Attachments: 41193_2018_SCLF_TechnicalReport_Final.pdf

Dear Mr. Morgan,

Please find attached an electronic copy of the 2018 Technical Groundwater Monitoring Report for the Southeast County Landfill. Should you or anyone copied on this e-mail have any questions or wish to discuss the information submitted, please feel free to call me directly at (813) 804-6716. Thank you.

Ken Guilbeault, P.G.
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SCS ENGINEERS

SOUTHEAST COUNTY LANDFILL TECHNICAL WATER QUALITY MONITORING REPORT FEBRUARY 2016 THROUGH FEBRUARY 2018

Prepared for:

Public Works Department
Solid Waste Management Division
15960 County Road 672
Lithia, Florida, 33547

Prepared by:

SCS ENGINEERS
3922 Coconut Palm Drive, Suite 102
Tampa, Florida 33619
(813) 621-0080

July 25, 2018
File No. 09215600.06

SOUTHEAST COUNTY LANDFILL
TECHNICAL
WATER QUALITY MONITORING
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7/25/2018

Kenneth E. Guilbeault, P.G.
PG License No. 2907

July 25, 2018
File No. 09215600.06

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Appendices

1 INTRODUCTION

SCS Engineers (SCS) prepared this technical water quality monitoring report for the Southeast County Landfill (SCLF) on behalf of Hillsborough County Public Works Department Solid Waste Management Division (County). The SCLF is located at 15960 County Road 672, Lithia, Florida 33547.

This report was prepared in general accordance with Florida Department of Environmental Protection (FDEP) Permit/Certification No. 35435-025-SO/MM, Water Quality Monitoring Plan (WQMP), and Chapter 62-701.510(8)(b) Florida Administrative Code (FAC). This report includes a summary and evaluation of the groundwater and surface water analytical data from monitoring events performed at the SCLF from February 2016 through the most recent monitoring event, February 2018. Locations of monitoring sites are shown on Figure 1 included in Appendix A.

Field work, sampling methodologies, data evaluation, data Quality Assurance/Quality Control (QA/QC) were conducted in accordance with FAC Chapter 62-160 Standard Operating Procedures (DEP-SOP-001/01), the SCLF WQMP, and the SCLF site permit. Laboratory analyses were performed in accordance with Chapter 62-160, FAC DEP-SOP-002/01, the SCLF WQMP, and the site permits. The laboratories used were certified by the Florida Department of Health Environmental Laboratory Certification Program (DoH ELCP).

During the February 2016 groundwater monitoring event at the SCLF, elevated readings were observed by the County for select parameters at monitoring well TH-67 located east of the Phase II disposal area. TH-67 is a detection well approximately 45 feet east of Phase II and monitors the surficial aquifer at the SCLF. Since that time, the SWMD and its engineering Consultant, SCS, have been conducting investigations of potential causes for the elevated readings and have installed additional measures to mitigate the concern.

Accordingly, the County responded with the following major activities:

1. Initiated additional leachate removal measures, such as installation of supplemental vertical dewatering wells, pumping from LFG extraction wells, construction of a cut-off trench, and jet-cleaning of leachate collection pipes, to assist with the removal of leachate from within the landfill;

2. Began quarterly collection of groundwater samples for select parameters (field parameters, total dissolved solids, chloride, ammonia nitrogen, and sodium) from select monitoring wells (TH-20B, TH-38B, TH-66A, TH-67, and TH-79) and installed additional wells (TH-80, TH-81, TH-82, and TH-83) to monitor and evaluate the progress of groundwater quality restoration in the affected area;

3. Installed piezometers throughout the SCLF to attempt to assess the presence of liquid and its estimated depth at those locations; and,

4. Removed a total average of approximately 42,000 gallons per day (GPD) of leachate, from the supplemental locations mentioned above, since August of 2017.

2 GROUNDWATER FLOW EVALUATION

Potentiometric maps of the surficial aquifer were prepared by the County from surficial aquifer well data for each of the sampling events (Appendix A). Groundwater flow typically is perpendicular to the water level contours. The potentiometric maps are prepared with a 2 foot contour interval. The general direction of flow are to the northwest and west, which is consistent with the historical data.

3 GROUNDWATER AND SURFACE WATER QUALITY

GROUNDWATER QUALITY

Water quality data for the groundwater parameters monitored during this reporting period were evaluated in accordance with Chapter 62-701.510(8)(b), FAC. Selected data tables and graphs are presented to support the evaluation of the adequacy of the water quality monitoring frequency and sampling locations.

Appendix B includes tables listing water quality detections and exceedances. In accordance with Chapter 62-701, FAC, groundwater results were compared to the Primary Drinking Water Standards (PDWS) and Secondary Drinking Water Standards (SDWS) listed in Chapter 62-550, FAC. For this technical report, Groundwater Cleanup Target Levels (GCTLs) in Rule 62-777, FAC were used for constituents that do not have a PDWS or SDWS as a screening tool for potential anomalies in the concentration data that may require further consideration or review. Exceedances of one or more parameters over the technical report monitoring period were evaluated in accordance with the permit.

Graphs of water quality data and water quality trends for select detected constituents are included in Appendix C. Graphs of trends in concentrations are provided for constituents that frequently exceeded their respective drinking water standard and/or exhibited significant trends (by visual review of the graphs, not statistical analysis) in their concentrations over time. Laboratory analytical data from February 2016 through February 2018 semi-annual events were used in the graphs of water quality data. The following section discusses exceedances and includes related trends.

Metals Exceedances and Trends

Metals with concentrations in excess of applicable PDWS, SDWS, and/or GCTLs for at least one sampling event in the technical report period of record include:

- Arsenic
- Iron
- Sodium
- Vanadium

These exceedances are discussed below and are included in Appendix B. Applicable trends are discussed based on the time series plots in Appendix C.

Arsenic

The FDEP PDWS of 10 micrograms per liter (µg/L) for arsenic was exceeded at surficial aquifer monitoring wells TH-38B (May 2016), TH-58 (February 2016 through February 2018) and TH-65 (February 2016 through February 2018). Based on the overall groundwater quality, the presence of arsenic in the groundwater is related to the dissolution of naturally-occurring arsenic

from soil due to oxidation-reduction changes. The trend chart for arsenic is included in Appendix C. Downward trends of arsenic are apparent in monitoring well TH-58.

Iron

The concentration of iron in the groundwater ranged from an estimated 39 **I** µg/L to 40,000 µg/L in the surficial aquifer and from undetected to 780 µg/ L in the Floridan aquifer. The SDWS of 300 µg/l for iron was exceeded at all locations except for Floridan aquifer monitoring wells TH-19, TH-40, and TH-78. Concentration ranges for these wells are consistent with site data for iron. The trend chart (Appendix C) indicates iron concentrations decreasing or staying constant in the surficial aquifer at the SCLF for the technical reporting period.

The iron concentrations along the northwest side of Section 9 have been elevated since the initial sampling of groundwater in the area, which was conducted prior to waste filling in that expansion area of the landfill. As previously discussed, the elevated iron is likely attributable to the imported soils used under and outside the liner during construction of Section 9. The potential sources of the elevated iron concentrations at various locations of the site have been evaluated, and there appears to be several contributing factors. Based on the overall groundwater quality results, the County maintains the position that the source(s) of elevated iron concentrations within the surficial aquifer groundwater at the Southeast County Landfill site are naturally occurring and not attributable to the landfill.

Iron was observed above the SDWS in upper Floridan aquifer monitoring well TH-72 at a concentration of 0.78 mg/l and is consistent with historical water quality values. The iron in this well may be naturally occurring in the formation or potentially attributable to the waste in the throat of the repaired sinkhole.

Sodium

The sodium FDEP PDWS of 160 mg/L was exceeded in monitoring well TH-67 (April 2016, May 2016, February 2017, and May 2017), TH-79 (February 2017, May 2017, and August 2017), and TH-81 (March 2017 and May 2017). The sodium concentrations decreased to below the PDWS for the past two monitoring events. The trend chart for sodium is included in Appendix C. As outlined through the consent agreement, the corrective actions at the site are directly contributing to the declining sodium trends in the surficial aquifer wells near Phase II.

Vanadium

The vanadium FDEP GCTL of 49 µg/L was exceeded in detection well MW-61A during the August 2017 monitoring event. This concentration appears to be an outlier. Vanadium was not detected above the GCTL in the February 2018 monitoring event. Vanadium will be monitored in subsequent monitoring events to confirm this was an outlier data point.

Organic Parameters Exceedances and Trends

Organic parameters were not detected above their respective PDWS, SDWS, and GCTLs. These parameters will continue to be monitored to confirm that concentrations remain below their respective regulatory standards.

Inorganic Parameters Exceedances and Trends

Inorganic parameters with concentrations in excess of applicable PDWS, SDWS, and/or GCTLs for at least one sampling event in the technical report period of record include:

- Ammonia
- Chloride
- pH
- Total Dissolved Solids (TDS)

These parameters are discussed below.

Ammonia

The FDEP GCTL of 2.8 milligrams per liter (mg/L) for ammonia was exceeded at surficial aquifer monitoring well TH-67 (May 2016, November 2016, February 2017, and May 2017), Floridan aquifer monitoring well TH-72 (February 2016 through February 2018), and evaluation monitoring wells TH-79 (November 2016 through February 2018), TH-81 (March 2017), TH-82 (March 2017 and June 2017), and TH-83 (January 2018 and February 2018). Per FDEP Memorandum dated December 3, 2012, addressing the subject "Monitoring and Evaluation of Ammonia in Groundwater at Solid Waste Management Facilities SMW-13.10," the ammonia GCTL is no longer enforced where there is no threat to surface water. There were no exceedances for unionized ammonia at the surface water locations. Therefore, the ammonia detection at TH-67, TH-72, TH-79, TH-81, TH-82, and TH-83 are not considered exceedances. The source of the elevated ammonia at TH-72 is attributable to waste in the throat of the repaired sinkhole.

Chloride

Chloride exceeded the SDWS of 250 mg/L in surficial aquifer monitoring well TH-67 (February 2016 through May 2017), TH-71A (February 2017 through February 2018), Floridan aquifer monitoring TH-72 (February 2016 through February 2018), and evaluation monitoring wells TH-79 (November 2016 through August 2017), and TH-81 (March 2017 and May 2017). The chloride concentrations at TH-71A shows a declining concentration that is slightly above the SDWS. The chloride concentrations in TH-79 and TH-81 have declined to below the SDWS. The trend chart for chloride is included in Appendix C. The corrective actions, as addressed through the Consent Agreement are contributing to the declining trends in the wells east of Phase II.

The source of the elevated chloride at TH-72 is attributable to waste in the throat of the repaired sinkhole and the injected grout materials for subsurface stabilization and/or remediation of the large karst feature.

pH

Each of the 16 surficial aquifer detection and background water quality monitoring wells continue to exhibit pH values below the SDWS acceptable range of 6.5 to 8.5 pH units. The pH values range from 4.45 to 6.9 pH units across the site. The pH values in the surficial aquifer have historically been observed below the acceptable range, and the background water quality recorded prior to construction and operation of the landfill established pH below the acceptable range. The recent data remains consistent with the historical data set and background water quality.

Each of the four upper Floridan/Limestone aquifer monitoring wells, exhibited pH values within the acceptable range, which is consistent with the historical data set for the site. No unusual conditions or changes in the pH values within any of the detection or background water quality monitoring wells or surface water sites were observed.

Total Dissolved Solids

Total dissolved solids (TDS) exceeded the SDWS of 500 mg/L in surficial monitoring wells TH-67 (February 2016 through May 2017) and TH-71A (February 2016 through February 2018) and Floridan aquifer monitoring well TH-72 (February 2016 through February 2018), and evaluation monitoring wells TH-79 (November 2016 through February 2018), TH-80 (May 2017 and August 2017), and TH-81 (March 2017 and May 2017). TDS has decreased to below the SDWS in TH-80 and TH-81 (August 2017) during November and August 2017 monitoring events, respectively. The trend chart for chloride is included in Appendix C. The corrective actions at the site are contributing to the declining trend of this parameter.

The source of the elevated TDS at TH-71A from the iron bacteria developing in this well. (Prior to the timeframe of this report, TDS began to exceed in February 2013. At the time, it was believed there was some influence of surface runoff from the egress road to the working face. Stormwater was eventually diverted away from this location and towards the western ditch. The County will continue to closely evaluate the water quality changes across the site, with a focus on the three detection wells (TH-69A, TH-70A, and TH-71A) down gradient of Section 9.

The source of the elevated TDS at TH-72 is attributable to waste in the throat of the repaired sinkhole and the injected grout materials for subsurface stabilization and/or remediation of the large karst feature.

SURFACE WATER QUALITY

Surface water quality data for the groundwater parameters monitored during this reporting period were evaluated in accordance with Chapter 62-701.510(8)(b), FAC. Selected data tables are

presented to support the evaluation of the adequacy of the water quality monitoring frequency and sampling locations.

Exceedances

Appendix B includes tables listing water quality detections and exceedances. In accordance with Chapter 62-701, FAC, surface water results were compared to the Criteria for Surface Water Quality (CSWQ), listed in Chapter 62-302.530. Exceedances of one or more parameters over the technical report monitoring period were evaluated in accordance with the permit.

Parameters with concentrations in excess of applicable CSWQ for at least one sampling event in the technical report period of record include:

- Iron
- Fecal Coliform
- Dissolved Oxygen

These exceedances are discussed below and are based on the exceedance tables included in Appendix B.

Iron

The FDEP CSWQ of 1,000 µg/L for iron was exceeded at surface water monitoring site Mine Cut 1D (February 2018) and SW-3C2 (August 2017). The detection of iron at SW-3C2 during August 2017 appears to be an anomaly as concentrations were below the CSWQ in the subsequent monitoring event. With the exception of August 2017, the down gradient monitoring location, identified as SW-3C2, continues to remain in compliance for surface water discharged off site into Long Flat Creek.

Fecal Coliform

The FDEP CSWQ of 800 col/100 ml for fecal coliform was exceeded at surface water monitoring site SW-3B2B (February 2018). The down gradient monitoring location, identified as SW-3C2, continues to remain in compliance for surface water discharged off site into Long Flat Creek.

Dissolved Oxygen

The FDEP CSWQ of greater than (>) 5.0 mg/L for dissolved oxygen was exceeded at upgradient surface water monitoring location SW-3A (February 2017 through February 2018) and Mine Cut 1D (February 2016 through February 2018), and SW-3B2B (August 2017). With exception to August 2017, the down gradient monitoring location, identified as SW-3C2, continues to remain in compliance for surface water discharged off site into Long Flat Creek. The recent data remains consistent with the historical data set and background water quality.

ERRATIC AND POORLY CORRELATED DATA

No other erratic or poorly correlated data were observed in the water quality substantive analyses.

4 ADEQUACY OF MONITORING PROGRAM

This section assesses the adequacy of the monitoring program in observing the potential effects of the SCLF operations on groundwater and surface water quality.

The existing monitoring wells were located based on groundwater flow direction. Locations were selected to monitor hydraulically up-gradient groundwater and groundwater that potentially could be affected by the presence of the landfill.

MONITORING SITE GEOGRAPHIC LOCATION

Geographic location is guided by the direction of lateral groundwater flow in the aquifers beneath the SCLF. Typically, background wells would be located at the hydraulically up-gradient end of the flow arrows with compliance wells located at the down-gradient end within or at the edge of the Zone of Discharge (ZOD) detection wells. The following discusses the locations of monitoring wells in each aquifer.

Currently, there is one surficial aquifer background monitoring well at the SCLF for Phase I-VI (TH-22A). This monitoring well is located hydraulically upgradient from the landfill and provides sufficient surficial aquifer background data for the SCLF.

Currently, there is one surficial aquifer background monitoring well at the SCLF for Sections 7-9 (TH-36A). This monitoring well is located hydraulically up gradient from the landfill and provides sufficient surficial aquifer background data for the SCLF.

Currently, there is one Floridan aquifer background monitoring well at the SCLF site (TH-19). This monitoring well is located hydraulically up gradient from the landfill and provides sufficient Floridan aquifer background data for the SCLF.

The geographic location of the detection wells and surface water sites appears to be adequate and effective in monitoring groundwater quality variations and meet the spacing requirements in Chapter 62-701.510, FAC. The screen locations at each of the surficial aquifer and Floridan aquifer locations adequately monitor the surficial aquifer and Floridan aquifer for water quality purposes.

MONITORING FREQUENCY

Groundwater and surface water monitoring frequency for the SCLF is semi-annual provides sufficient data to evaluate trends in concentrations and plan appropriate evaluation monitoring where necessary. There have been no findings that indicate a need to modify the routine sampling frequency; therefore, the SCLF will maintain the current groundwater quality monitoring frequency.

MONITORING PARAMETERS

Current routine monitoring parameters include various volatile organic, metals, and inorganic constituents required by Chapter 62-550 and 62-701 and expected waste characteristics. There have been no findings or observations that indicate a need to modify the routine parameter list. Consequently, the SCLF will maintain the current groundwater quality monitoring parameters.

SUMMARY OF SINKHOLE RELATED DETECTIONS

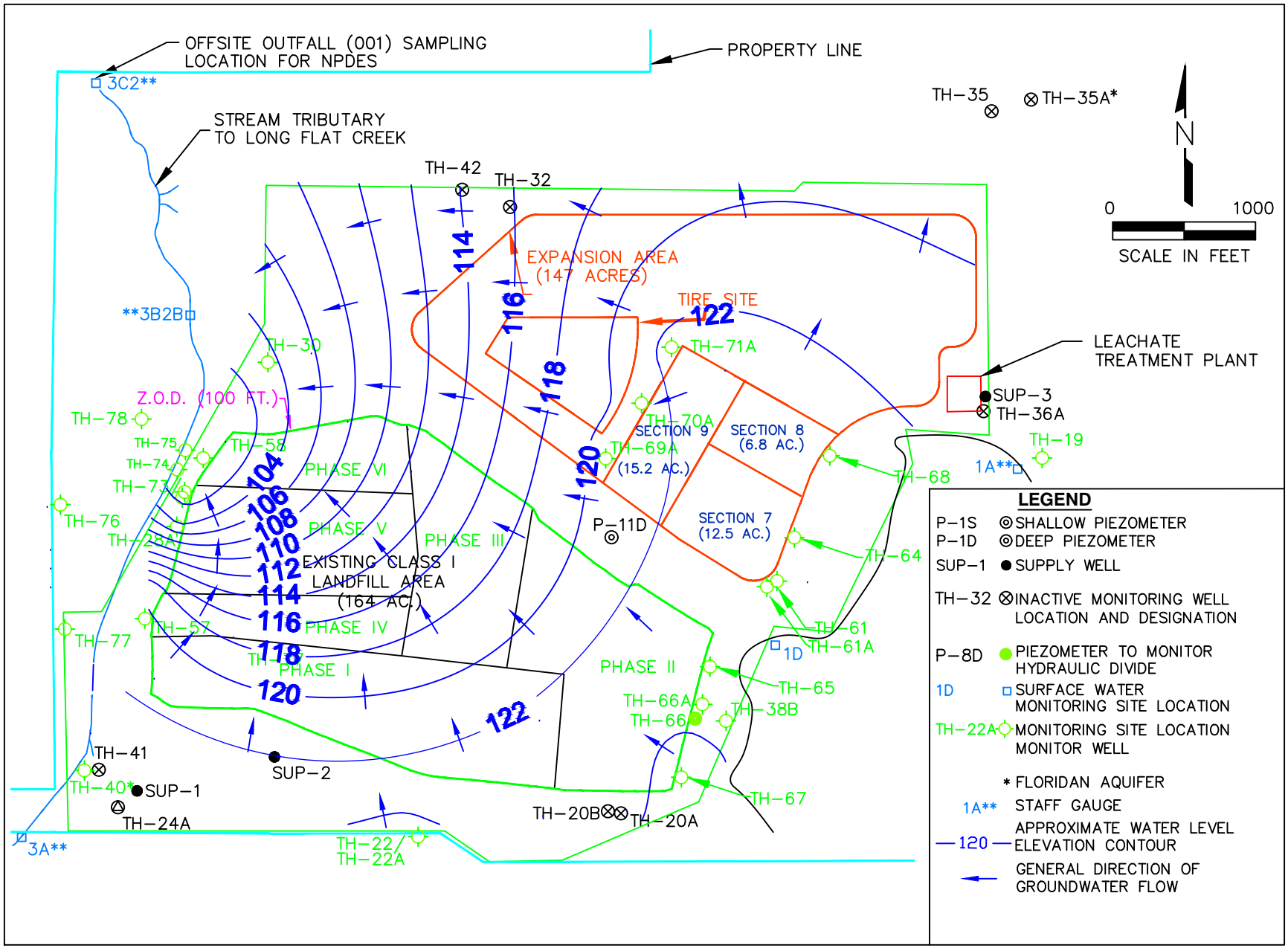
Based on review of the groundwater monitoring data, TH-72 appears to be the only well affected by the sinkhole that occurred in 2010. The monitoring plan was recently modified to add monitoring wells TH-72 and TH-78. TH-72 is located immediately adjacent to the sinkhole and TH-78 is located downgradient. Groundwater impacts have not been observed at TH-78. Thus, as long as the sinkhole repair remains stable, we do not anticipate future impacts at TH-78.

SUMMARY OF CORRECTION ACTION PLAN (CAP) RELATED DETECTIONS

Based on review of the groundwater monitoring data, the corrective actions taken by the County to improve water in the select wells east of the Phase II disposal area, are contributing to declining trends from the initial exceedances of sodium, chloride, and TDS.

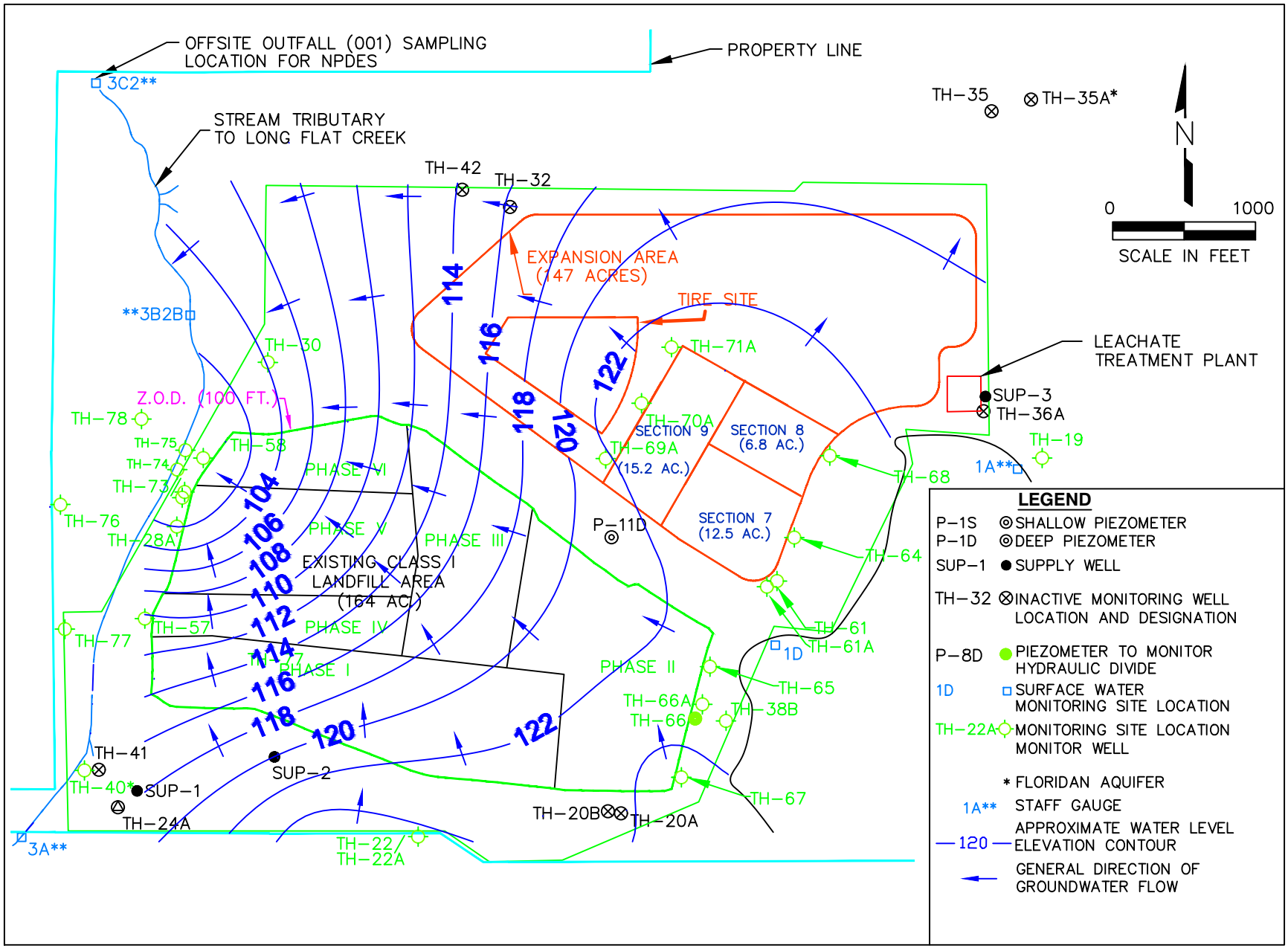
APPENDIX A

FIGURES



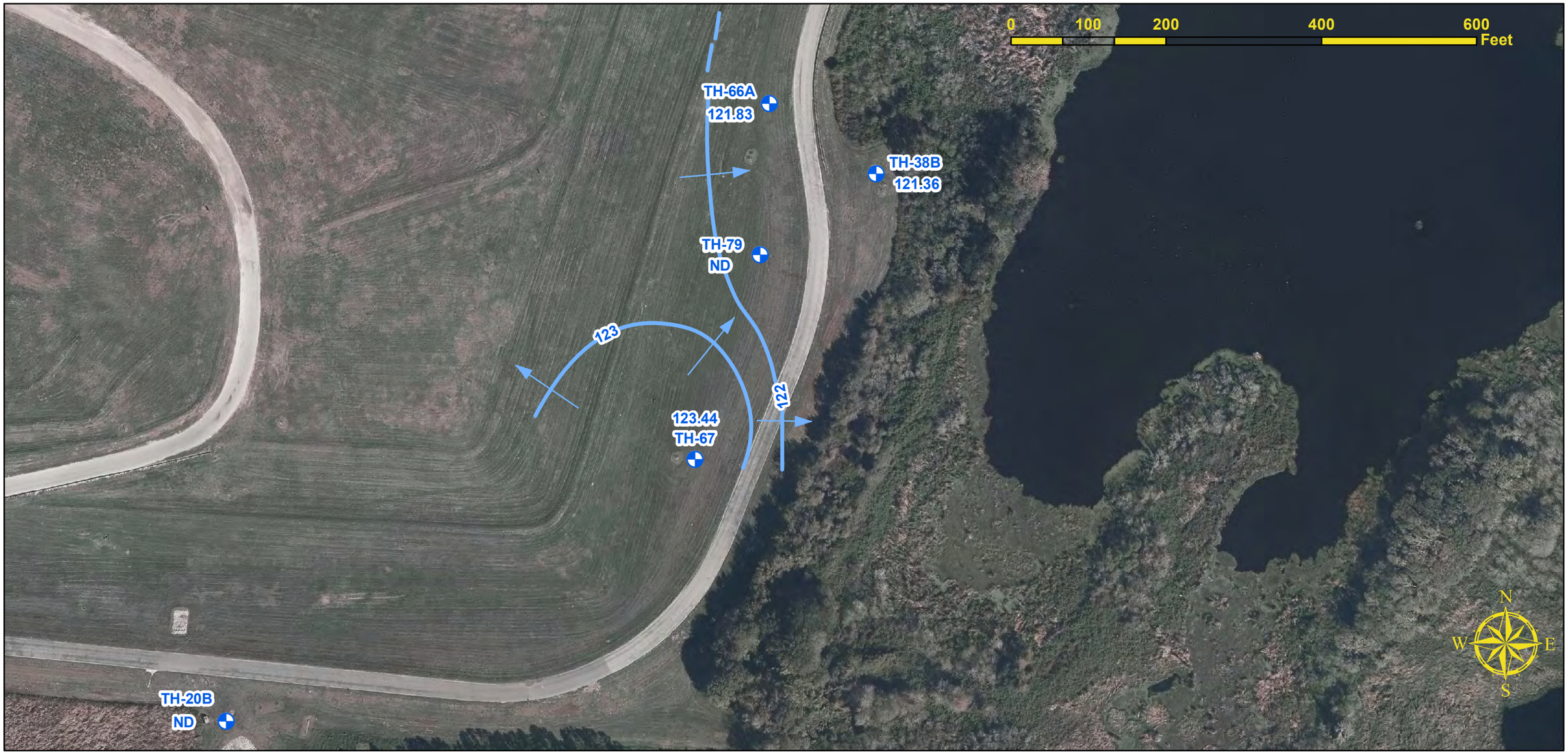
Southeast County Landfill

Groundwater Elevation Contour Diagram – February 22, 2016



Southeast County Landfill

Groundwater Elevation Contour Diagram – August 8, 2016



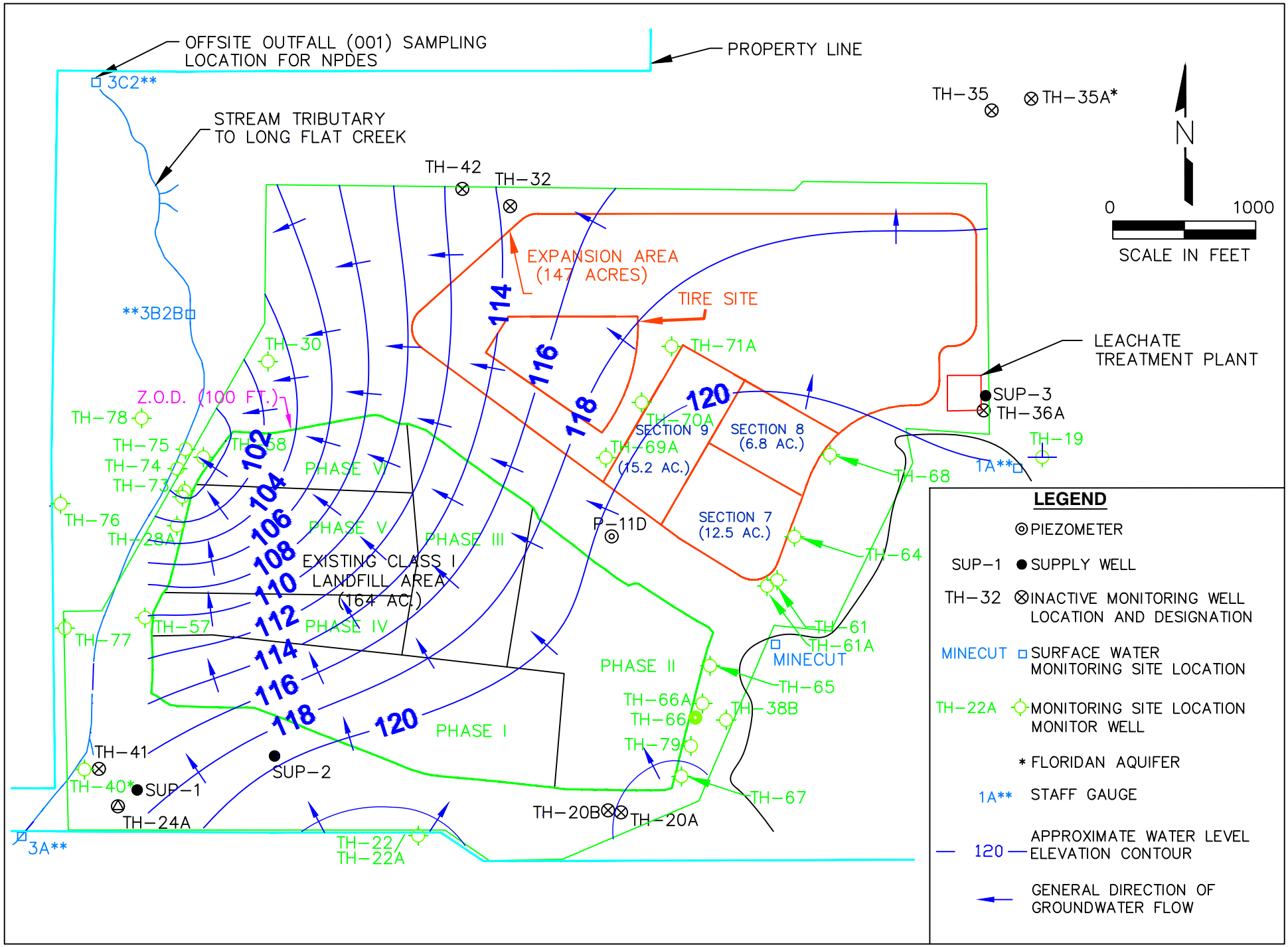
SOUTHEAST COUNTY LANDFILL
SURFICIAL AQUIFER GROUNDWATER CONTOUR MAP
NOVEMBER 2016

2016 AERIAL PHOTO

Legend

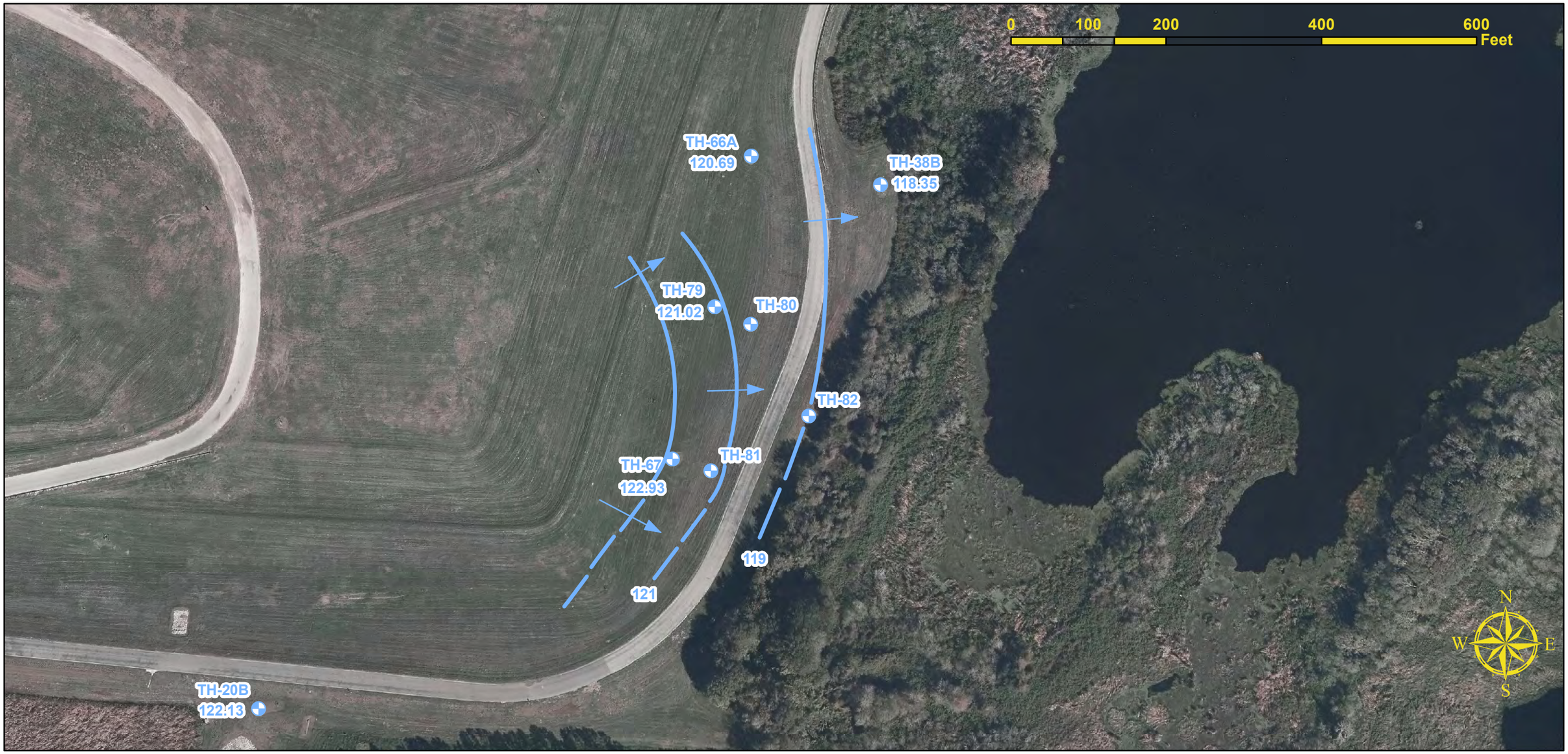
Exisiting Monitoring Wells

Hillsborough County Florida
EST. 1834
SM



Southeast County Landfill

Surficial Aquifer Groundwater Elevation Contour Diagram – February 6, 2017



SOUTHEAST COUNTY LANDFILL
SURFICIAL AQUIFER GROUNDWATER CONTOUR MAP

February 8, 2017

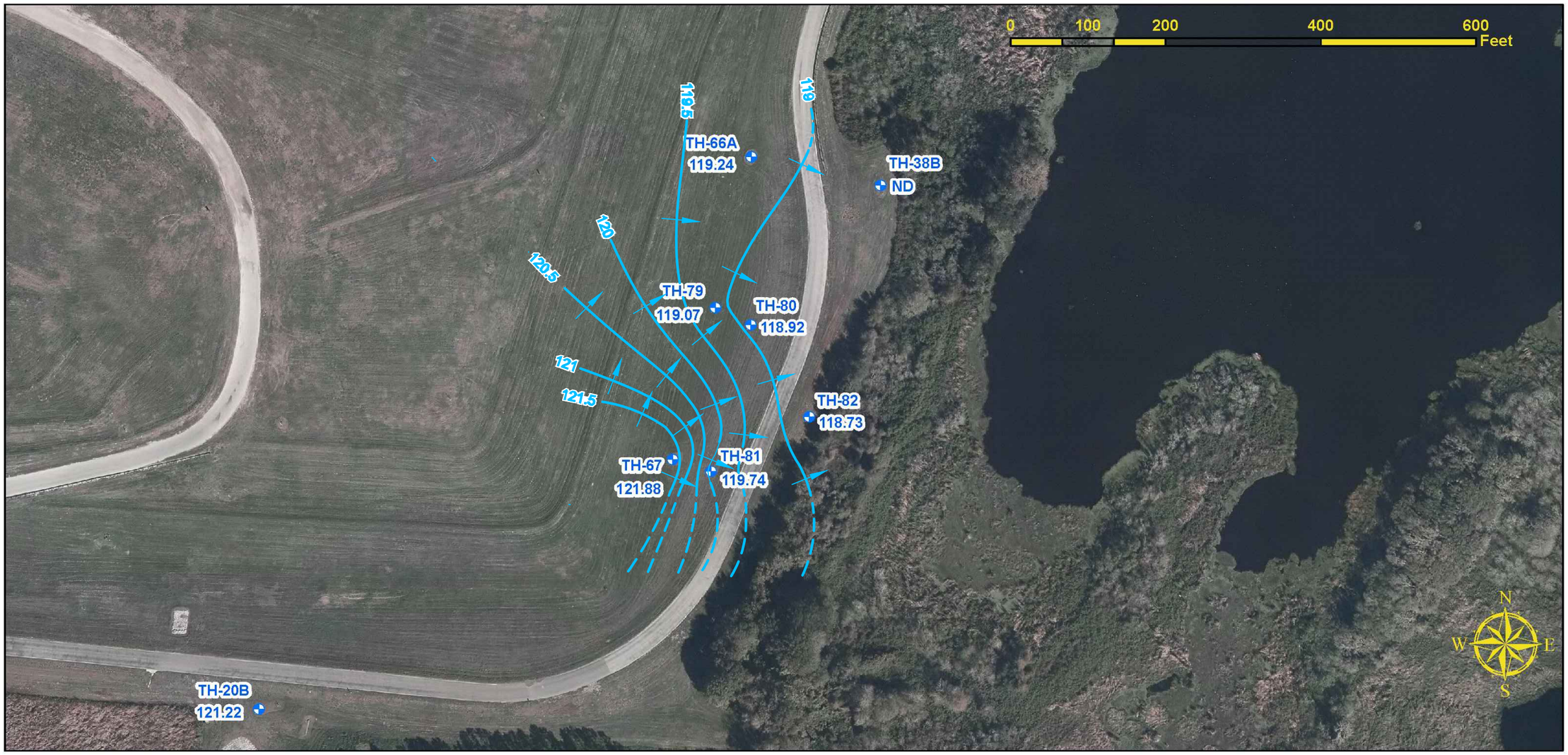
2016 AERIAL PHOTO

Legend

Existing Monitoring Wells

Direction Of Flow

Hillsborough County Florida
EST. 1834
SM



SOUTHEAST COUNTY LANDFILL
SURFICIAL AQUIFER GROUNDWATER CONTOUR MAP

MAY 31,2017

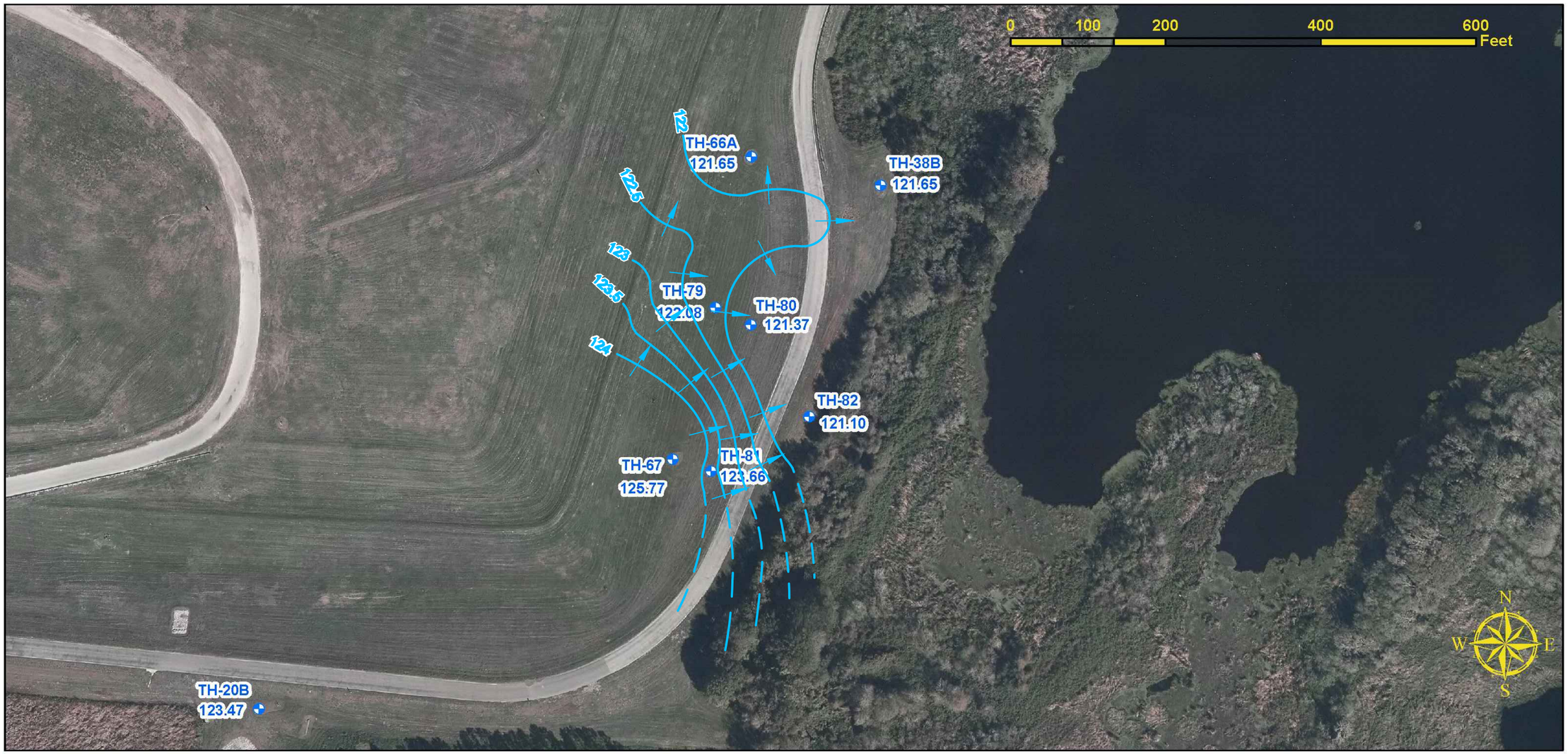
2016 AERIAL PHOTO

Legend

Existing Monitoring Wells

Direction Of Flow

Hillsborough County Florida
EST. 1834
SM



SOUTHEAST COUNTY LANDFILL
SURFICIAL AQUIFER GROUNDWATER CONTOUR MAP

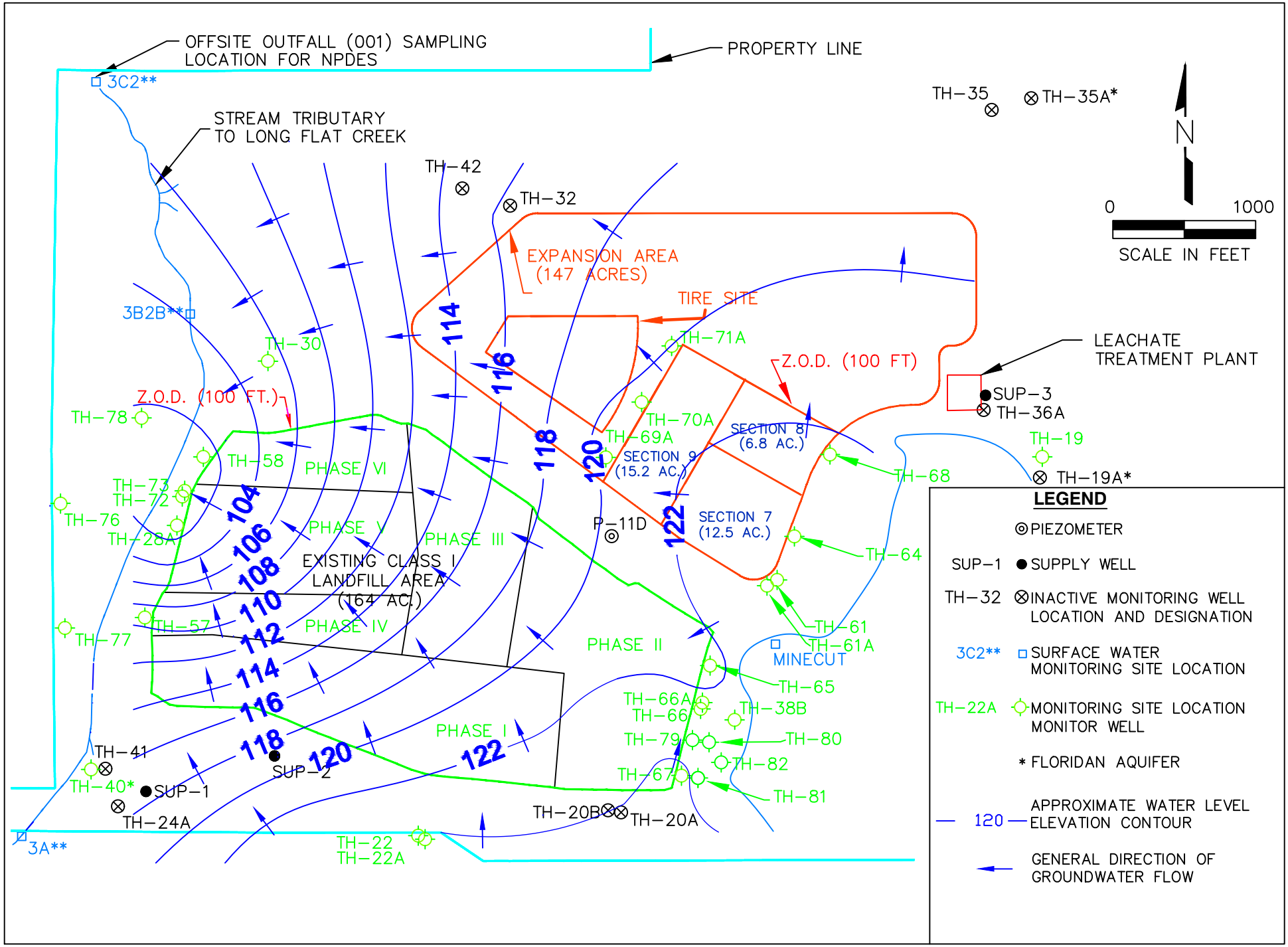
JULY 20, 2017

2016 AERIAL PHOTO

Legend

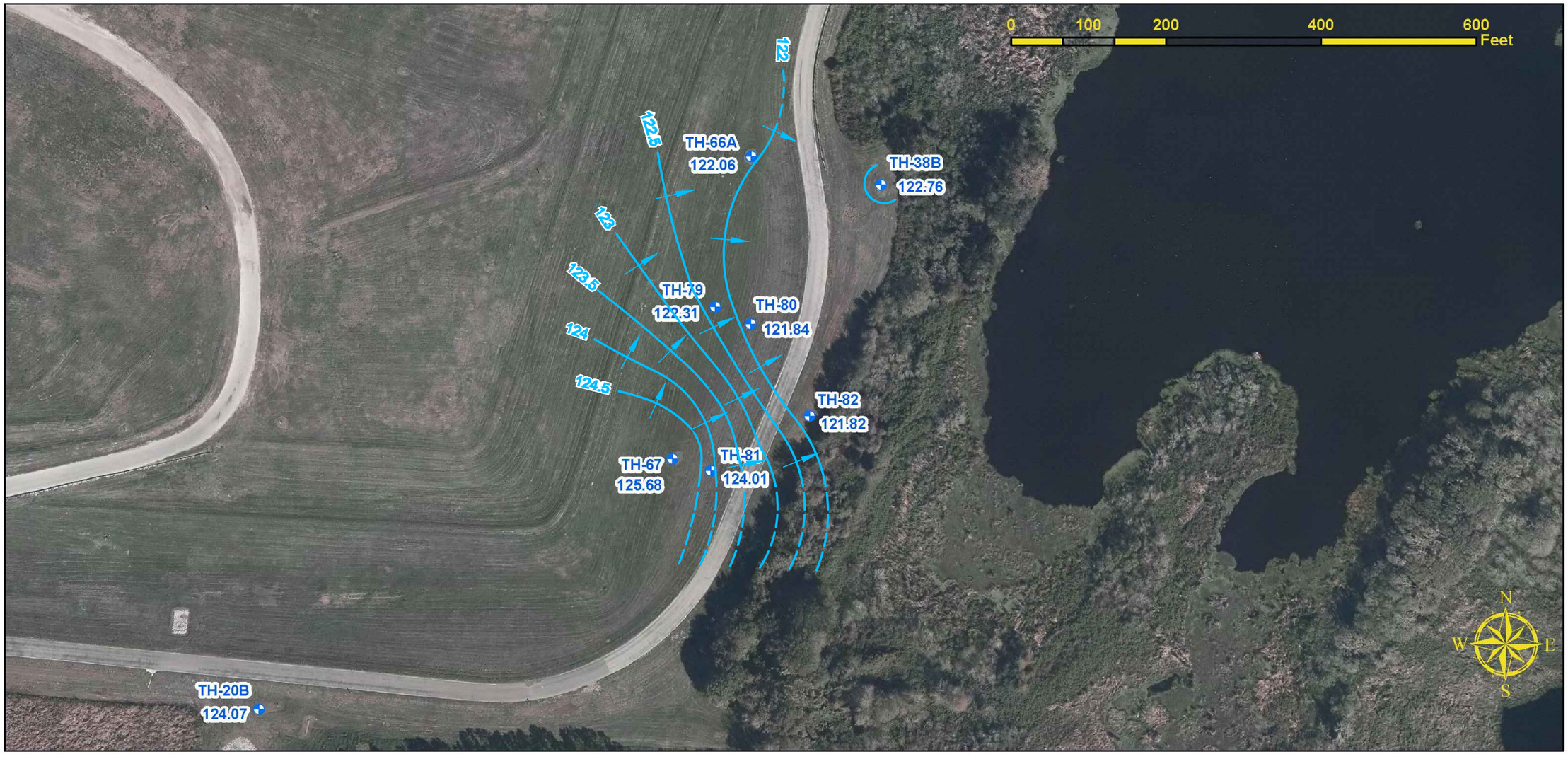
- Existing Monitoring Wells
- Direction Of Flow

Hillsborough County Florida
EST. 1834
SM



Southeast County Landfill

Surficial Aquifer Groundwater Elevation Contour Diagram – August 7, 2017



SOUTHEAST COUNTY LANDFILL
SURFICIAL AQUIFER GROUNDWATER CONTOUR MAP

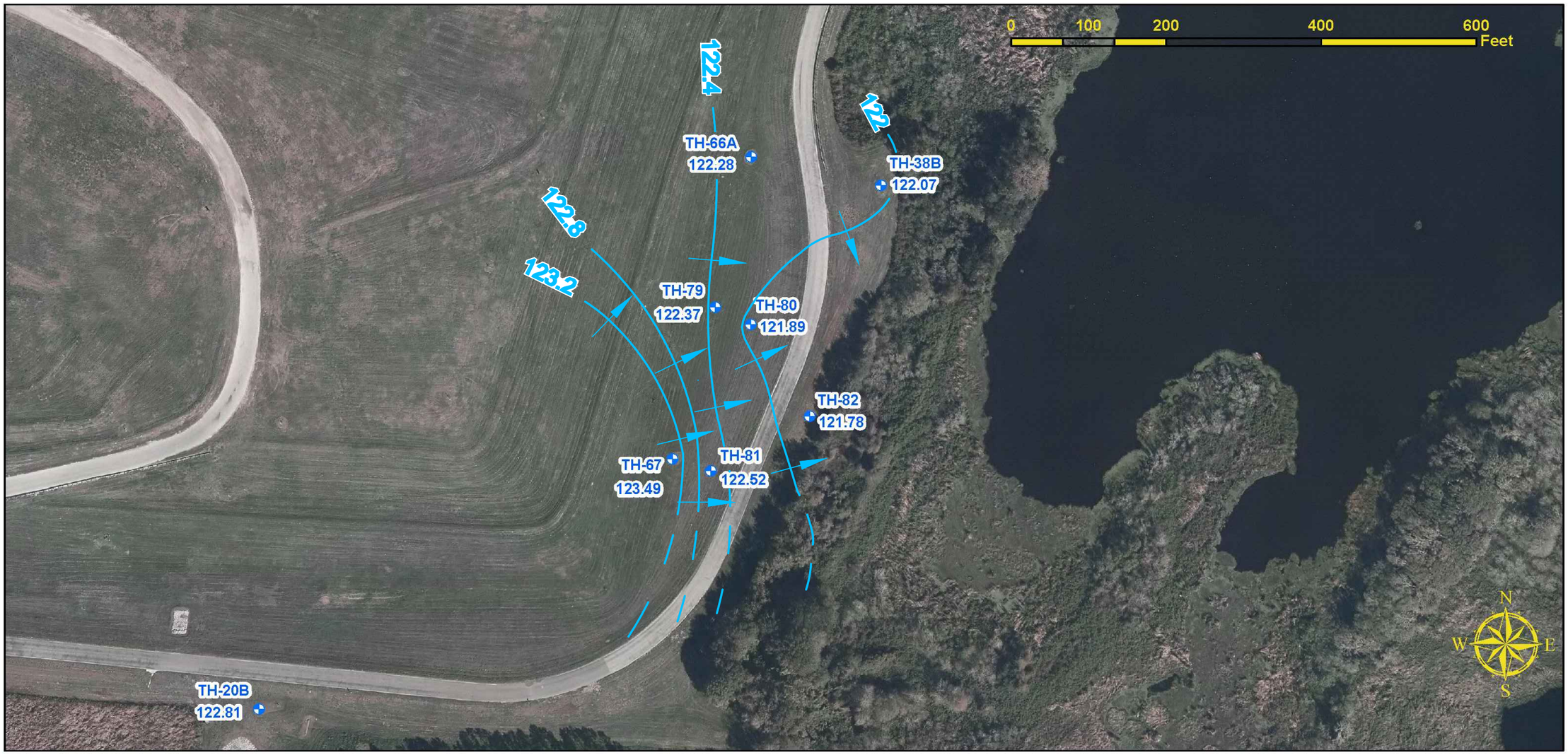
AUGUST 3, 2017

2016 AERIAL PHOTO

Legend

- Existing Monitoring Wells
- Direction Of Flow

Hillsborough County Florida
EST. 1834
SM



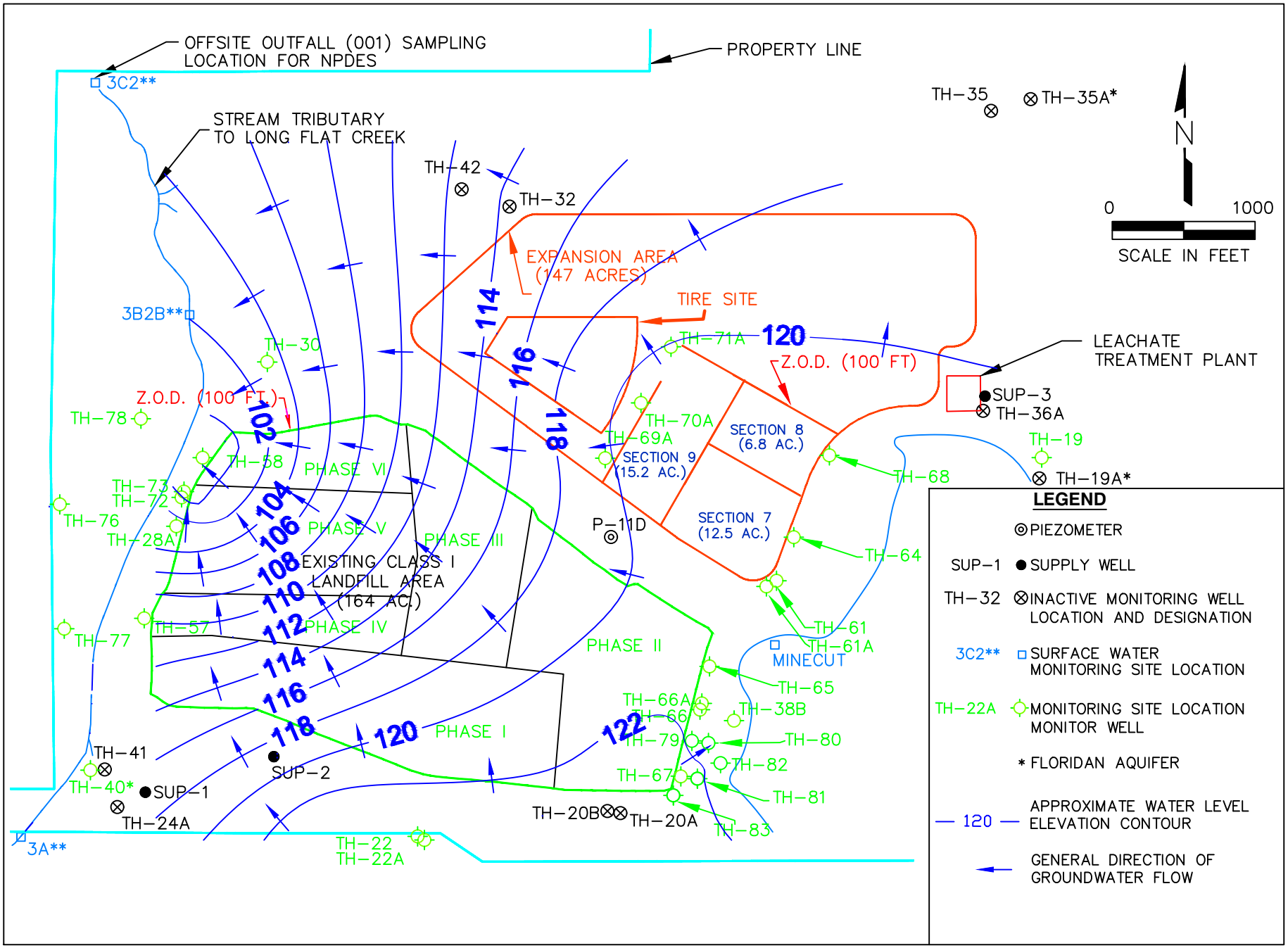
SOUTHEAST COUNTY LANDFILL
SURFICIAL AQUIFER GROUNDWATER CONTOUR MAP
NOVEMBER 8, 2017

2016 AERIAL PHOTO

Legend

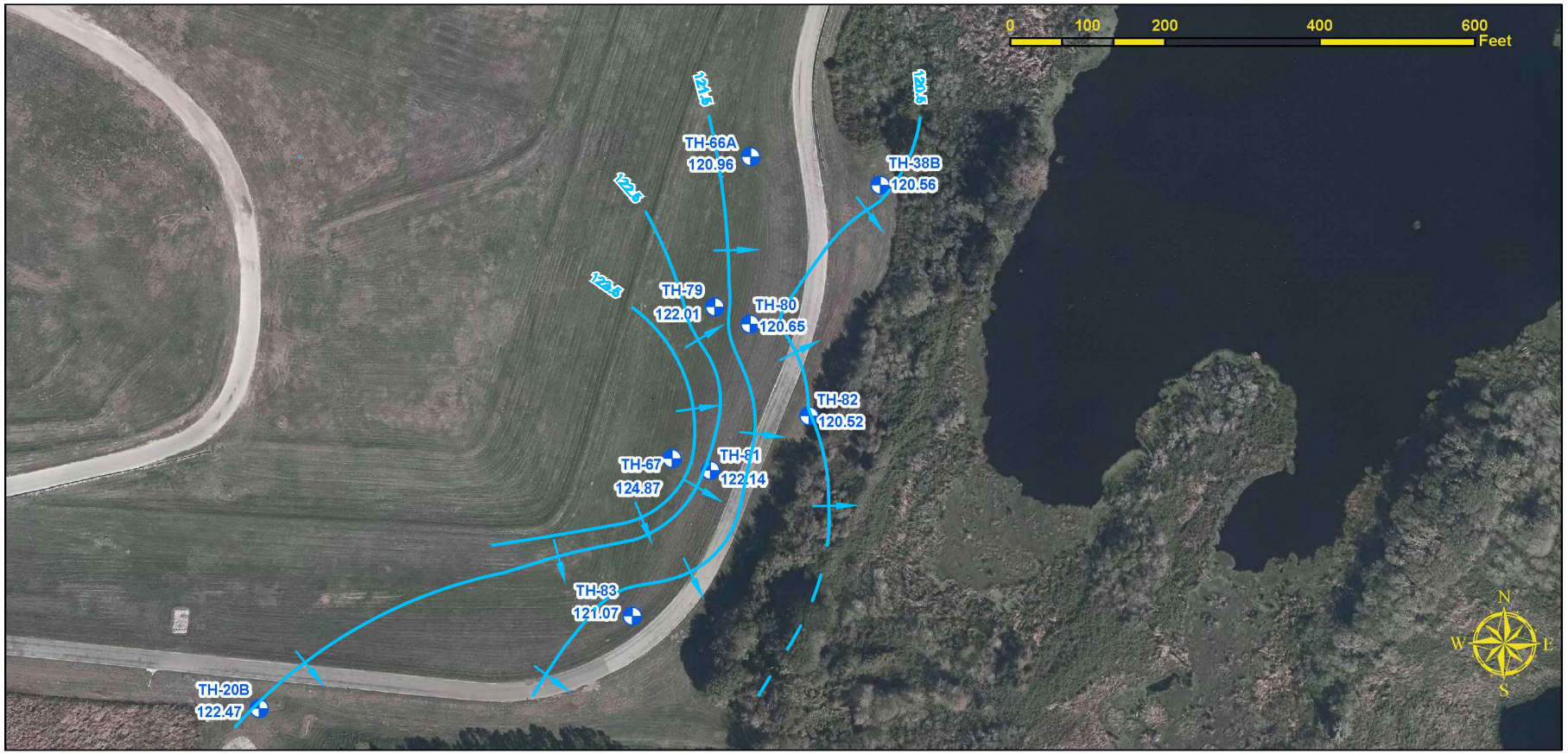
- Existing Monitoring Wells
- Direction Of Flow

Hillsborough County Florida
EST. 1834
SM



Southeast County Landfill

Surficial Aquifer Groundwater Elevation Contour Diagram – February 12, 2018



SOUTHEAST COUNTY LANDFILL
SURFICIAL AQUIFER GROUNDWATER
CONTOUR MAP
FEBRUARY 7,2018

2016 AERIAL PHOTO

Legend

Existing Monitoring Wells

Direction Of Flow

Hillsborough County Florida

APPENDIX B

TABLES OF EXCEEDANCES AND DETECTIONS

Groundwater Summary of Detected Parameters, TH-19

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1 **U**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.046 **U**	0.046 **U**	0.046 **U**	0.046 **U**
Arsenic	PDWS	10	ug/L	0.077 **U**	0.077 **U**	0.077 **U**	0.084 **I**
Barium	PDWS	2000	ug/L	5.4	5.2	4.9	5.2
Beryllium	PDWS	4	ug/L	0.13 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.028 **U**	0.028 **U**	0.028 **U**
Chromium	PDWS	100	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.11 **U**
Cobalt	GCTL	140	ug/L	0.19 **U**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.11 **U**
Iron	SDWS	300	ug/L	30 **U**	21 **U**	21 **U**	21 **U**
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.11 **U**
Selenium	PDWS	50	ug/L	0.58 **U**	0.58 **U**	0.58 **U**	0.58 **U**
Silver	SDWS	100	ug/L	0.027 **U**	0.027 **U**	0.031 **I**	0.027 **U**
Sodium	PDWS	160	mg/L	13	14	14	14
Thallium	PDWS	2	ug/L	0.057 **U**	0.057 **U**	0.057 **U**	0.057 **U**
Vanadium	GCTL	49	ug/L	0.71 **U**	0.71 **U**	0.71 **U**	0.71 **U**
Zinc	SDWS	5000	ug/L	25	6.2 **I**	8.7 **I**	7.4 **U**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	0.22	0.2	0.26	0.22
Chloride	SDWS	250	mg/L	9.1	8.1	7.8	8.3
Nitrate (N)	PDWS	10	mg/L	0.18 **U**	0.18 **U**	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	240	230	250	240
Field Parameters							
Conductivity	NS	NS	umhos/cm	446	472	399	419.2
Dissolved Oxygen	NS	NS	mg/L	0.14	0.16	0.13	0.24
Oxidation Reduction Potential	NS	NS	mV	---	-120.4	-82.1	-117.2
pH	SDWS	6.5-8.5	SU	7.26	7.21	7.25	7.4
Temperature, Water	NS	NS	Degrees C	23.46	23.46	23.51	23.6
Turbidity	NS	NS	NTU	0.63	0.49	1.02	0.36

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target l
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-20

Parameter	Standard	MCL	Unit	May-16	Nov-16	Feb-17	Jun-17	Aug-17	Nov-17	Feb-18
Volatile Organic Compounds										
Acetone	GCTL	6300	ug/L	1 **U**	---	---	---	---	---	---
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	---	---	---	---	---	---
Metals										
Antimony	PDWS	6	ug/L	0.92	---	---	---	---	---	---
Arsenic	PDWS	10	ug/L	7.5	---	---	---	---	---	---
Barium	PDWS	2000	ug/L	2.8	---	---	---	---	---	---
Beryllium	PDWS	4	ug/L	0.11 **U**	---	---	---	---	---	---
Cadmium	PDWS	5	ug/L	0.028 **U**	---	---	---	---	---	---
Chromium	PDWS	100	ug/L	0.94 **I**	---	---	---	---	---	---
Cobalt	GCTL	140	ug/L	0.44 **I**	---	---	---	---	---	---
Copper	SDWS	1000	ug/L	0.25 **I**	---	---	---	---	---	---
Iron	SDWS	300	ug/L	7300	---	---	---	---	---	---
Lead	PDWS	15	ug/L	0.24 **U**	---	---	---	---	---	---
Mercury	PDWS	2	ug/L	0.084 **U**	---	---	---	---	---	---
Nickel	PDWS	100	ug/L	1.6	---	---	---	---	---	---
Selenium	PDWS	50	ug/L	1.9 **I**	---	---	---	---	---	---
Silver	SDWS	100	ug/L	0.034 **I**	---	---	---	---	---	---
Sodium	PDWS	160	mg/L	35	15	31	24	14	10	29
Thallium	PDWS	2	ug/L	0.057 **U**	---	---	---	---	---	---
Vanadium	GCTL	49	ug/L	8.7	---	---	---	---	---	---
Zinc	SDWS	5000	ug/L	10	---	---	---	---	---	---
General Chemistry										
Ammonia (N)	GCTL	2.8	mg/L	2.2	1.5	1.2	1.2	1.7	1.3	1.2
Chloride	SDWS	250	mg/L	92	63	83	38	34	18	89
Nitrate (N)	PDWS	10	mg/L	0.18 **U**	---	---	---	---	---	---
Residues- Filterable (TDS)	SDWS	500	mg/L	310	200	230	130	150	130	280
Field Parameters										
Conductivity	NS	NS	umhos/cm	473	332	427	275	294	192.9	394.8
Dissolved Oxygen	NS	NS	mg/L	0.23	0.27	0.18	0.19	0.1	2	0.37
Oxidation Reduction Potential	NS	NS	mV	-9.6	31.2	-41.7	36.9	-34	-26.7	-2.4
pH	SDWS	6.5-8.5	SU	5.67	5.43	5.82	5.52	5.72	5.95	5.68
Temperature, Water	NS	NS	Degrees C	23.47	25.47	23.77	23.92	25.51	25.9	22.9
Turbidity	NS	NS	NTU	1.39	4.14	3.77	1.37	2.82	4.3	2.99

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-22A

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1.7 **I**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.061 **I**	0.046 **U**	0.046 **U**	0.11 **U**
Arsenic	PDWS	10	ug/L	0.29 **I**	0.34 **I**	0.28 **I**	0.26 **I**
Barium	PDWS	2000	ug/L	33	41	36	31
Beryllium	PDWS	4	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.028 **U**	0.028 **U**	0.064 **U**
Chromium	PDWS	100	ug/L	1.9 **I**	2.7	1.6 **I**	1.8 **I**
Cobalt	GCTL	140	ug/L	0.19 **U**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.11 **U**	0.22 **I**	4.7	0.35 **U**
Iron	SDWS	300	ug/L	710	1400	580	1000
Lead	PDWS	15	ug/L	0.24 **U**	0.65 **I**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **I**
Nickel	PDWS	100	ug/L	0.15 **I**	0.11 **U**	0.37 **I**	0.98 **U**
Selenium	PDWS	50	ug/L	0.67 **I**	0.58 **U**	0.58 **U**	0.58 **U**
Silver	SDWS	100	ug/L	0.027 **U**	0.027 **U**	0.027 **U**	0.1 **U**
Sodium	PDWS	160	mg/L	3.8	3.7	3.3	3.4
Thallium	PDWS	2	ug/L	0.057 **U**	0.057 **U**	0.057 **U**	0.057 **U**
Vanadium	GCTL	49	ug/L	1.8 **I**	2 **I**	1.7 **I**	1.6 **I**
Zinc	SDWS	5000	ug/L	11	7.9 **I**	7.4 **U**	8.4 **I**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	0.45	0.39	0.28	0.3
Chloride	SDWS	250	mg/L	8.3	10	8.5	8.1
Nitrate (N)	PDWS	10	mg/L	0.1 **U**	0.18 **U**	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	130	140	120	120
Field Parameters							
Conductivity	NS	NS	umhos/cm	200	217	187	178.1
Dissolved Oxygen	NS	NS	mg/L	0.16	0.18	0.12	1.58
Oxidation Reduction Potential	NS	NS	mV	---	36.2	24.8	40.2
pH	SDWS	6.5-8.5	SU	4.45	4.71	4.46	4.64
Temperature, Water	NS	NS	Degrees C	20.94	21.47	24.46	20.9
Turbidity	NS	NS	NTU	15.5	12	10.18	8.41

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-28A

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1 **U**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.046 **U**	0.046 **U**	0.046 **U**	0.055 **I**
Arsenic	PDWS	10	ug/L	1.6	1.5	1.4	1.5
Barium	PDWS	2000	ug/L	1.6	1.1	1.3	1.7
Beryllium	PDWS	4	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.028 **U**	0.028 **U**	0.028 **U**
Chromium	PDWS	100	ug/L	0.95 **I**	0.91 **I**	1.1 **I**	1.2 **I**
Cobalt	GCTL	140	ug/L	0.51	0.46 **I**	0.55	0.38 **I**
Copper	SDWS	1000	ug/L	0.11 **U**	0.23 **I**	0.11 **I**	0.19 **I**
Iron	SDWS	300	ug/L	4400	3500	3800	4800
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.42 **I**	0.2 **I**	1.4	0.54 **I**
Selenium	PDWS	50	ug/L	1.2 **I**	0.58 **U**	0.58 **U**	0.58 **U**
Silver	SDWS	100	ug/L	0.027 **U**	0.027 **U**	0.042 **I**	0.027 **U**
Sodium	PDWS	160	mg/L	23	18	18	24
Thallium	PDWS	2	ug/L	0.1 **I**	0.088 **I**	0.092 **I**	0.07 **I**
Vanadium	GCTL	49	ug/L	1.3 **I**	1.3 **I**	1.4 **I**	1.4 **I**
Zinc	SDWS	5000	ug/L	9 **I**	8.1 **I**	7.4 **U**	7.4 **U**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	2.1	1.6	1.6	2.2
Chloride	SDWS	250	mg/L	76	57	49	77
Nitrate (N)	PDWS	10	mg/L	0.18 **U**	0.39	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	190	130	220	220
Field Parameters							
Conductivity	NS	NS	umhos/cm	371	298	249	365.3
Dissolved Oxygen	NS	NS	mg/L	0.48	1.28	0.22	1.94
Oxidation Reduction Potential	NS	NS	mV	--	-77.2	-48.2	34.9
pH	SDWS	6.5-8.5	SU	5	5.24	5.02	5.16
Temperature, Water	NS	NS	Degrees C	26.72	27.11	28.12	27.4
Turbidity	NS	NS	NTU	0.77	3.78	2.3	1.29

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-36A

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1 **U**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.078 **I**	0.086 **I**	0.66 **I**	0.079 **I**
Arsenic	PDWS	10	ug/L	0.48 **I**	0.37 **I**	0.47 **I**	0.75 **I**
Barium	PDWS	2000	ug/L	5.2	5.4	4.9	5.7
Beryllium	PDWS	4	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.028 **U**	0.028 **U**	0.028 **U**
Chromium	PDWS	100	ug/L	0.66 **I**	0.75 **I**	0.64 **I**	0.88 **I**
Cobalt	GCTL	140	ug/L	0.19 **U**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.48 **I**	0.16 **I**	0.3 **I**	0.18 **I**
Iron	SDWS	300	ug/L	180	120	55 **I**	350
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.14 **I**	0.11 **U**	0.31 **I**	0.31 **I**
Selenium	PDWS	50	ug/L	0.58 **U**	0.58 **U**	0.85 **I**	0.58 **U**
Silver	SDWS	100	ug/L	0.084 **I**	0.027 **U**	0.028 **I**	0.027 **U**
Sodium	PDWS	160	mg/L	2.1	3.8	4.2	15
Thallium	PDWS	2	ug/L	0.059 **I**	0.057 **U**	0.067 **I**	0.057 **U**
Vanadium	GCTL	49	ug/L	1.7 **I**	3.5	37	2.5
Zinc	SDWS	5000	ug/L	12	8.3 **I**	7.4 **U**	8.4 **I**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	0.22	0.07 **I**	0.02 **U**	0.38
Chloride	SDWS	250	mg/L	3.7 **I**	5.5	18	19
Nitrate (N)	PDWS	10	mg/L	0.1 **I**	0.18 **U**	0.29	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	130	92	140	190
Field Parameters							
Conductivity	NS	NS	umhos/cm	210	212	226	304.6
Dissolved Oxygen	NS	NS	mg/L	0.83	0.99	0.74	1.95
Oxidation Reduction Potential	NS	NS	mV	--	8.3	131.1	52
pH	SDWS	6.5-8.5	SU	5.68	5.42	5.54	5.36
Temperature, Water	NS	NS	Degrees C	25.02	25.42	25.45	25.7
Turbidity	NS	NS	NTU	1.03	6.84	4.68	3.17

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-38B

Parameter	Standard	MCL	Unit	May-16	Nov-16	Feb-17	Aug-17	Nov-17	Feb-18
Volatile Organic Compounds									
Acetone	GCTL	6300	ug/L	1 **U**	--	--	--	--	--
Tetrachloroethene	PDWS	3	ug/L	0.88 **I**	--	--	--	--	--
Metals									
Antimony	PDWS	6	ug/L	1.5	--	--	--	--	--
Arsenic	PDWS	10	ug/L	13	--	--	--	--	--
Barium	PDWS	2000	ug/L	11	--	--	--	--	--
Beryllium	PDWS	4	ug/L	0.11 **U**	--	--	--	--	--
Cadmium	PDWS	5	ug/L	0.18 **I**	--	--	--	--	--
Chromium	PDWS	100	ug/L	1.4 **I**	--	--	--	--	--
Cobalt	GCTL	140	ug/L	1.4	--	--	--	--	--
Copper	SDWS	1000	ug/L	0.58 **I**	--	--	--	--	--
Iron	SDWS	300	ug/L	620	--	--	--	--	--
Lead	PDWS	15	ug/L	0.37 **I**	--	--	--	--	--
Mercury	PDWS	2	ug/L	0.084 **U**	--	--	--	--	--
Nickel	PDWS	100	ug/L	2.1	--	--	--	--	--
Selenium	PDWS	50	ug/L	3.7 **I**	--	--	--	--	--
Silver	SDWS	100	ug/L	0.027 **U**	--	--	--	--	--
Sodium	PDWS	160	mg/L	2.8	3	3.6	2.7	2.8	3.4
Thallium	PDWS	2	ug/L	0.2 **I**	--	--	--	--	--
Vanadium	GCTL	49	ug/L	110	--	--	--	--	--
Zinc	SDWS	5000	ug/L	2 **U**	--	--	--	--	--
General Chemistry									
Ammonia (N)	GCTL	2.8	mg/L	0.79	0.66	1.4	0.14	0.23	2.2
Chloride	SDWS	250	mg/L	4.2 **I**	4.2 **I**	8.2	3.4 **I**	3.9 **I**	6.4
Nitrate (N)	PDWS	10	mg/L	0.18 **U**	--	--	--	--	--
Residues- Filterable (TDS)	SDWS	500	mg/L	65	45	57	73	30	83
Field Parameters									
Conductivity	NS	NS	umhos/cm	70	61	103	46	49.6	79.2
Dissolved Oxygen	NS	NS	mg/L	1.5	0.76	2.02	0.96	1.27	0.86
Oxidation Reduction Potential	NS	NS	mV	175.5	22.9	6.2	158	28.1	70.7
pH	SDWS	6.5-8.5	SU	4.95	4.73	5.45	4.69	5.16	5.22
Temperature, Water	NS	NS	Degrees C	24.78	25.37	23.93	26.66	26.1	23.5
Turbidity	NS	NS	NTU	8.75	16	16.5	46.6	11.2	3.6

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-40

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1 **U**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.046 **U**	0.11 **I**	0.046 **U**	0.13 **I**
Arsenic	PDWS	10	ug/L	0.077 **U**	0.083 **I**	0.077 **U**	0.077 **U**
Barium	PDWS	2000	ug/L	5.7	5.5	5.7	5.5
Beryllium	PDWS	4	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.028 **U**	0.028 **U**	0.033 **I**
Chromium	PDWS	100	ug/L	0.13 **I**	0.11 **U**	0.11 **U**	0.11 **U**
Cobalt	GCTL	140	ug/L	0.19 **U**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.11 **U**
Iron	SDWS	300	ug/L	36 **I**	31 **I**	30 **I**	31 **I**
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.22 **I**	0.11 **U**	0.11 **U**	0.11 **U**
Selenium	PDWS	50	ug/L	0.58 **U**	0.58 **U**	0.58 **U**	0.58 **U**
Silver	SDWS	100	ug/L	0.027 **U**	0.027 **U**	0.027 **U**	0.027 **U**
Sodium	PDWS	160	mg/L	17	16	17	18
Thallium	PDWS	2	ug/L	0.057 **U**	0.057 **U**	0.057 **U**	0.057 **U**
Vanadium	GCTL	49	ug/L	0.71 **U**	0.71 **U**	0.71 **U**	0.71 **U**
Zinc	SDWS	5000	ug/L	7.4 **I**	7.8 **I**	7.4 **U**	9.8 **I**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	0.35	0.26	0.34	0.32
Chloride	SDWS	250	mg/L	14	13	13	15
Nitrate (N)	PDWS	10	mg/L	0.18 **U**	0.18 **U**	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	230	220	230	240
Field Parameters							
Conductivity	NS	NS	umhos/cm	410	453	380	393.4
Dissolved Oxygen	NS	NS	mg/L	0.21	0.2	0.12	1.03
Oxidation Reduction Potential	NS	NS	mV	--	-66.4	-82.1	-102.9
pH	SDWS	6.5-8.5	SU	7.46	8.01	7.32	7.47
Temperature, Water	NS	NS	Degrees C	23.53	23.46	23.58	23.6
Turbidity	NS	NS	NTU	0.57	0.55	0.64	0.45

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-57

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1 **U**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.046 **U**	0.046 **U**	0.38 **I**	0.072 **I**
Arsenic	PDWS	10	ug/L	0.16 **I**	0.13 **I**	1.2	0.17 **I**
Barium	PDWS	2000	ug/L	11	11	28	7.5
Beryllium	PDWS	4	ug/L	0.13 **U**	0.11 **U**	0.12 **I**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.028 **U**	0.18 **I**	0.03 **I**
Chromium	PDWS	100	ug/L	0.5 **I**	0.42 **I**	0.86 **I**	0.69 **I**
Cobalt	GCTL	140	ug/L	0.19 **U**	0.19 **U**	0.34 **I**	0.19 **U**
Copper	SDWS	1000	ug/L	0.11 **U**	0.11 **U**	0.26 **I**	0.11 **U**
Iron	SDWS	300	ug/L	470	310	390	530
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.11 **U**	0.11 **U**	1	0.15 **I**
Selenium	PDWS	50	ug/L	0.94 **I**	0.58 **U**	2.8 **I**	0.58 **U**
Silver	SDWS	100	ug/L	0.027 **U**	0.027 **U**	0.07 **I**	0.027 **U**
Sodium	PDWS	160	mg/L	13	13	42	17
Thallium	PDWS	2	ug/L	0.057 **U**	0.057 **U**	0.11 **I**	0.057 **U**
Vanadium	GCTL	49	ug/L	0.93 **I**	0.73 **I**	6	1.1 **I**
Zinc	SDWS	5000	ug/L	23	6.8 **I**	7.4 **U**	7.4 **U**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	1	1	0.58	1.5
Chloride	SDWS	250	mg/L	64	68	140	63
Nitrate (N)	PDWS	10	mg/L	0.18 **U**	0.18 **U**	1.4	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	170	140	470	160
Field Parameters							
Conductivity	NS	NS	umhos/cm	290	309	701	290.2
Dissolved Oxygen	NS	NS	mg/L	0.11	0.23	0.3	1.18
Oxidation Reduction Potential	NS	NS	mV	--	-187.3	-21	-93
pH	SDWS	6.5-8.5	SU	5.03	5.25	5.01	5.21
Temperature, Water	NS	NS	Degrees C	27.51	27.65	28.11	28
Turbidity	NS	NS	NTU	0.51	0.58	1.48	0.56

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-58

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1 **U**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.22 **I**	0.046 **U**	0.46 **I**	0.063 **I**
Arsenic	PDWS	10	ug/L	24	16	16	13
Barium	PDWS	2000	ug/L	16	14	11	20
Beryllium	PDWS	4	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.088 **I**	0.028 **U**	0.03 **I**	0.028 **U**
Chromium	PDWS	100	ug/L	1.8 **I**	1.6 **I**	1.3 **I**	1.5 **I**
Cobalt	GCTL	140	ug/L	0.19 **U**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.24 **I**	0.24 **I**	0.13 **I**	0.11 **U**
Iron	SDWS	300	ug/L	3700	5100	3900	1600
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.41 **I**	0.11 **U**	0.36 **I**	0.34 **I**
Selenium	PDWS	50	ug/L	1.6 **I**	0.58 **U**	5.2	0.58 **U**
Silver	SDWS	100	ug/L	0.12 **I**	0.027 **U**	0.041 **I**	0.027 **U**
Sodium	PDWS	160	mg/L	13	8.3	9.1	30
Thallium	PDWS	2	ug/L	0.3	0.2 **I**	0.41	0.23
Vanadium	GCTL	49	ug/L	6.9	4.3	23	5.8
Zinc	SDWS	5000	ug/L	7.2 **I**	6 **I**	7.4 **U**	7.4 **U**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	1.3	1.1	1	1.2
Chloride	SDWS	250	mg/L	29	17	34	81
Nitrate (N)	PDWS	10	mg/L	0.18 **U**	0.18 **U**	1.3	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	220	170	210	320
Field Parameters							
Conductivity	NS	NS	umhos/cm	424	402	366	592
Dissolved Oxygen	NS	NS	mg/L	0.4	1.08	0.63	1.53
Oxidation Reduction Potential	NS	NS	mV	--	-60.4	10	-39.7
pH	SDWS	6.5-8.5	SU	5.65	6.1	5.66	5.79
Temperature, Water	NS	NS	Degrees C	26.4	26.73	27.41	27.2
Turbidity	NS	NS	NTU	2.12	2.92	2.38	1.56

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-61

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1.3 **I**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.054 **I**	0.082 **I**	0.1 **I**	0.11 **U**
Arsenic	PDWS	10	ug/L	0.51 **I**	0.39 **I**	3	0.53 **I**
Barium	PDWS	2000	ug/L	5.9	6.3	7.1	5.9
Beryllium	PDWS	4	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.054 **I**	0.028 **U**	0.064 **U**
Chromium	PDWS	100	ug/L	0.93 **I**	1.1 **I**	0.9 **I**	0.96 **I**
Cobalt	GCTL	140	ug/L	0.19 **U**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.16 **I**	0.22 **I**	0.8	0.51 **I**
Iron	SDWS	300	ug/L	340	280	960	290
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.18 **I**	0.11 **U**	0.59 **I**	0.98 **U**
Selenium	PDWS	50	ug/L	0.58 **U**	0.58 **U**	0.61 **I**	0.58 **U**
Silver	SDWS	100	ug/L	0.027 **U**	0.027 **U**	0.03 **I**	0.1 **U**
Sodium	PDWS	160	mg/L	4.4	3.7	3.8	3.7
Thallium	PDWS	2	ug/L	0.057 **U**	0.057 **U**	0.057 **U**	0.057 **U**
Vanadium	GCTL	49	ug/L	1.7 **I**	3.2	2.4	2.9
Zinc	SDWS	5000	ug/L	12	7.3 **I**	37	9.3 **I**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	0.12	0.1 **I**	0.12	0.08 **I**
Chloride	SDWS	250	mg/L	6.4	7	5.3	5.7
Nitrate (N)	PDWS	10	mg/L	0.1 **U**	0.18 **U**	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	110	75	120	75
Field Parameters							
Conductivity	NS	NS	umhos/cm	165	155	177	134.4
Dissolved Oxygen	NS	NS	mg/L	0.14	0.36	0.57	0.24
Oxidation Reduction Potential	NS	NS	mV	--	-133.6	-37.2	-60.9
pH	SDWS	6.5-8.5	SU	5.5	5.6	5.45	5.53
Temperature, Water	NS	NS	Degrees C	25.13	25.84	25.83	25.6
Turbidity	NS	NS	NTU	1.83	2.42	3.37	1.28

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-61A

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1.5 **I**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	5.4	0.36 **I**	4.4	0.25 **I**
Arsenic	PDWS	10	ug/L	0.93 **I**	0.35 **I**	0.78 **I**	0.29 **I**
Barium	PDWS	2000	ug/L	5.4	11	7.7	5.7
Beryllium	PDWS	4	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.048 **I**	0.35 **I**	1.5	0.13 **I**
Chromium	PDWS	100	ug/L	0.97 **I**	1.9 **I**	0.95 **I**	1.2 **I**
Cobalt	GCTL	140	ug/L	0.23 **I**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.71	2.1	3	1.2
Iron	SDWS	300	ug/L	930	410	39 **I**	750
Lead	PDWS	15	ug/L	0.24 **U**	0.4 **I**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.67 **I**	2.4	4.1	2.3
Selenium	PDWS	50	ug/L	0.71 **I**	0.7 **I**	2.9 **I**	0.86 **I**
Silver	SDWS	100	ug/L	0.027 **U**	0.027 **U**	0.027 **U**	0.1 **U**
Sodium	PDWS	160	mg/L	4.4	4.2	3.3	4.2
Thallium	PDWS	2	ug/L	0.08 **I**	0.057 **U**	0.11 **I**	0.057 **U**
Vanadium	GCTL	49	ug/L	21	17	120	13
Zinc	SDWS	5000	ug/L	13	17	19	31
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	0.13	0.26	0.18	0.21
Chloride	SDWS	250	mg/L	7.1	7.6	4.9 **I**	6.6
Nitrate (N)	PDWS	10	mg/L	0.1 **U**	0.18 **U**	0.21	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	190	160	140	150
Field Parameters							
Conductivity	NS	NS	umhos/cm	303	320	207	276.2
Dissolved Oxygen	NS	NS	mg/L	1.06	1.31	0.75	0.35
Oxidation Reduction Potential	NS	NS	mV	--	-162.1	34	-124.3
pH	SDWS	6.5-8.5	SU	5.85	5.91	5.74	5.77
Temperature, Water	NS	NS	Degrees C	23.84	26.08	26.97	25.5
Turbidity	NS	NS	NTU	3.88	8.75	7.28	1.86

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-64

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1 **U**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.16 **I**	0.32 **I**	0.41 **I**	0.31 **I**
Arsenic	PDWS	10	ug/L	0.33 **I**	0.47 **I**	0.93 **I**	0.59 **I**
Barium	PDWS	2000	ug/L	27	53	35	30
Beryllium	PDWS	4	ug/L	0.19 **I**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.92	0.69	0.23 **I**	0.54
Chromium	PDWS	100	ug/L	0.88 **I**	2.5	1.8 **I**	1.4 **I**
Cobalt	GCTL	140	ug/L	0.19 **U**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.32 **I**	1.3	0.91	0.54 **I**
Iron	SDWS	300	ug/L	890	990	740	550
Lead	PDWS	15	ug/L	0.24 **U**	1.2	0.87	0.33 **I**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.22 **I**	0.11 **U**	0.22 **I**	0.98 **U**
Selenium	PDWS	50	ug/L	0.65 **I**	1.4 **I**	1.3 **I**	0.94 **I**
Silver	SDWS	100	ug/L	0.027 **U**	0.027 **U**	0.034 **I**	0.1 **U**
Sodium	PDWS	160	mg/L	9.9	8.6	7.8	8.7
Thallium	PDWS	2	ug/L	0.057 **U**	0.057 **U**	0.057 **U**	0.057 **U**
Vanadium	GCTL	49	ug/L	8.6	10	15	10
Zinc	SDWS	5000	ug/L	10	8.7 **I**	7.4 **U**	8.5 **I**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	0.25	0.04 **I**	0.08 **I**	0.025 **U**
Chloride	SDWS	250	mg/L	20	17	13	14
Nitrate (N)	PDWS	10	mg/L	0.1 **I**	0.18 **U**	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	180	120	140	140
Field Parameters							
Conductivity	NS	NS	umhos/cm	315	296	217	237.8
Dissolved Oxygen	NS	NS	mg/L	0.24	0.77	0.13	0.74
Oxidation Reduction Potential	NS	NS	mV	--	16.3	-34.7	85.8
pH	SDWS	6.5-8.5	SU	4.76	5.13	5.2	4.9
Temperature, Water	NS	NS	Degrees C	25.49	26.17	27.43	26.2
Turbidity	NS	NS	NTU	12.7	138	26.3	14.7

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-65

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1 **U**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.088 **I**	0.084 **I**	0.071 **I**	0.11 **U**
Arsenic	PDWS	10	ug/L	12	19	24	23
Barium	PDWS	2000	ug/L	1.1	1.1	0.96	0.97
Beryllium	PDWS	4	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.028 **U**	0.032 **I**	0.064 **U**
Chromium	PDWS	100	ug/L	2	2 **I**	1.9 **I**	2 **I**
Cobalt	GCTL	140	ug/L	0.64	1.6	0.66	1.4
Copper	SDWS	1000	ug/L	0.11 **U**	0.18 **I**	1.2	0.35 **U**
Iron	SDWS	300	ug/L	1700	590	3300	1800
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.89	1.5	1.4	1.7 **I**
Selenium	PDWS	50	ug/L	1.1 **I**	0.87 **I**	2.2 **I**	0.89 **I**
Silver	SDWS	100	ug/L	0.027 **U**	0.027 **U**	0.027 **U**	0.1 **U**
Sodium	PDWS	160	mg/L	12	11	11	11
Thallium	PDWS	2	ug/L	0.19 **I**	0.66	0.16 **I**	0.081 **I**
Vanadium	GCTL	49	ug/L	3.8	4.1	3.1	3.6
Zinc	SDWS	5000	ug/L	11	9.1 **I**	7.4 **I**	9.3 **I**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	1.2	1.2	1.1	0.95
Chloride	SDWS	250	mg/L	18	21	15	16
Nitrate (N)	PDWS	10	mg/L	0.1 **U**	0.18 **U**	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	170	130	150	110
Field Parameters							
Conductivity	NS	NS	umhos/cm	256	262	226	227.6
Dissolved Oxygen	NS	NS	mg/L	0.43	0.34	0.11	1.19
Oxidation Reduction Potential	NS	NS	mV	--	-152.3	-81.6	-89.9
pH	SDWS	6.5-8.5	SU	5.51	5.57	5.5	5.46
Temperature, Water	NS	NS	Degrees C	22.36	25.15	25.47	24.6
Turbidity	NS	NS	NTU	5.99	3.15	8.47	2.45

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-66

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1 **U**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.52 **I**	0.12 **I**	0.21 **I**	0.11 **U**
Arsenic	PDWS	10	ug/L	2.5	3.2	4.7	3.6
Barium	PDWS	2000	ug/L	1.7	2.2	1.9	1.7
Beryllium	PDWS	4	ug/L	0.17 **I**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.11 **I**	0.028 **U**	0.028 **U**	0.064 **U**
Chromium	PDWS	100	ug/L	0.85 **I**	0.83 **I**	1.1 **I**	0.93 **I**
Cobalt	GCTL	140	ug/L	0.38 **U**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.22 **U**	0.11 **U**	0.12 **I**	0.35 **U**
Iron	SDWS	300	ug/L	2800	3600	2800	3000
Lead	PDWS	15	ug/L	0.48 **U**	0.24 **U**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.3 **I**	0.27 **I**	0.37 **I**	0.98 **U**
Selenium	PDWS	50	ug/L	1.2 **U**	0.58 **U**	0.58 **U**	0.58 **U**
Silver	SDWS	100	ug/L	0.12 **I**	0.029 **I**	0.027 **U**	0.1 **U**
Sodium	PDWS	160	mg/L	6	6.3	5.7	4.9
Thallium	PDWS	2	ug/L	0.15 **I**	0.057 **U**	0.057 **U**	0.057 **U**
Vanadium	GCTL	49	ug/L	1.6 **I**	1.6 **I**	2	2.2
Zinc	SDWS	5000	ug/L	6.8 **I**	7 **I**	19	7.4 **I**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	0.52	0.46	0.38	0.26
Chloride	SDWS	250	mg/L	12	43	9.4	9.2
Nitrate (N)	PDWS	10	mg/L	0.18 **U**	0.18 **U**	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	160	170	140	72
Field Parameters							
Conductivity	NS	NS	umhos/cm	309	337	210	232.5
Dissolved Oxygen	NS	NS	mg/L	0.14	0.28	0.09	0.32
Oxidation Reduction Potential	NS	NS	mV	--	-12.4	-61.5	-26.7
pH	SDWS	6.5-8.5	SU	5.96	5.97	5.73	5.84
Temperature, Water	NS	NS	Degrees C	23	24.09	25.67	24.1
Turbidity	NS	NS	NTU	0.86	6.17	1.96	4.75

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-66A

Parameter	Standard	MCL	Unit	Feb-16	May-16	Nov-16	Feb-17	May-17	Aug-17	Aug-17	Nov-17	Feb-18	Feb-18
Volatile Organic Compounds													
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	--	4.6 **I**	--	--	1 **U**	--	--	1 **U**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	--	0.52 **U**	--	--	0.52 **U**	--	--	0.6 **U**
Metals													
Antimony	PDWS	6	ug/L	5.9	0.46 **I**	--	0.54 **I**	--	--	0.36 **I**	--	--	0.32 **I**
Arsenic	PDWS	10	ug/L	3	4.7	--	0.077 **U**	--	--	1.9	--	--	2
Barium	PDWS	2000	ug/L	2.4	2	--	3.4	--	--	2.9	--	--	2.4
Beryllium	PDWS	4	ug/L	0.11 **U**	0.11 **U**	--	0.11 **U**	--	--	0.11 **U**	--	--	0.18 **U**
Cadmium	PDWS	5	ug/L	0.034 **I**	0.052 **I**	--	0.028 **U**	--	--	0.028 **U**	--	--	0.064 **U**
Chromium	PDWS	100	ug/L	0.51 **I**	0.5 **I**	--	0.11 **U**	--	--	0.71 **I**	--	--	0.59 **I**
Cobalt	GCTL	140	ug/L	0.42 **I**	0.8	--	0.53	--	--	1.7	--	--	0.47 **I**
Copper	SDWS	1000	ug/L	0.76	0.87	--	0.48 **I**	--	--	1.4	--	--	0.91
Iron	SDWS	300	ug/L	340	960	--	820	--	--	1300	--	--	670
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	--	0.24 **U**	--	--	0.24 **U**	--	--	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.084 **U**	--	0.05 **U**	--	--	0.05 **U**	--	--	0.05 **U**
Nickel	PDWS	100	ug/L	1.8	1.6	--	1.8	--	--	4.3	--	--	2
Selenium	PDWS	50	ug/L	1.2 **I**	0.93 **I**	--	0.58 **U**	--	--	1.1 **I**	--	--	0.68 **I**
Silver	SDWS	100	ug/L	0.027 **U**	0.036 **I**	--	0.027 **U**	--	--	0.027 **U**	--	--	0.1 **U**
Sodium	PDWS	160	mg/L	8.7	9.5	21	22	20	15	13	15	12	10
Thallium	PDWS	2	ug/L	0.52	0.087 **I**	--	0.057 **U**	--	--	0.066 **I**	--	--	0.057 **U**
Vanadium	GCTL	49	ug/L	89	17	--	20	--	--	9.1	--	--	18
Zinc	SDWS	5000	ug/L	8.7 **I**	2 **U**	--	6.8 **I**	--	--	21	--	--	8.6 **I**
General Chemistry													
Ammonia (N)	GCTL	2.8	mg/L	0.12	0.34	0.44	0.47	0.57	0.02 **U**	0.05 **I**	0.88	0.09 **I**	0.29
Chloride	SDWS	250	mg/L	15	15	92	76	52	16	21	24	24	22
Nitrate (N)	PDWS	10	mg/L	0.1 **U**	0.18 **U**	--	0.18 **U**	--	--	0.2	--	--	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	180	180	320	300	230	250	220	160	210	120
Field Parameters													
Conductivity	NS	NS	umhos/cm	313	334	512	580	513	376	362	342.1	315.6	320.1
Dissolved Oxygen	NS	NS	mg/L	0.5	0.65	0.33	0.64	1.13	0.09	0.18	1.93	0.46	0.33
Oxidation Reduction Potential	NS	NS	mV	--	69.7	3	-69.2	30.3	-102.9	-113.2	-158.7	-43.6	-96.4
pH	SDWS	6.5-8.5	SU	6.12	6.03	5.82	6.18	6.09	5.88	5.92	6.09	5.87	5.85
Temperature, Water	NS	NS	Degrees C	21.5	24.55	25.44	23.68	27.67	26.63	27.33	25.9	22.5	23.6
Turbidity	NS	NS	NTU	1.35	0.86	0.49	1.06	2.17	1.81	1.53	1.89	0.89	1.11

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-67

Parameter	Standard	MCL	Unit	Feb-16	Apr-16	May-16	Nov-16	Feb-17	May-17	Aug-17	Aug-17	Nov-17	Feb-18	Feb-18
Volatile Organic Compounds														
Acetone	GCTL	6300	ug/L	1 **U**	--	1 **U**	--	6.3	--	--	1 **U**	--	--	2.2
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	--	0.52 **U**	--	0.52 **U**	--	--	0.52 **U**	--	--	0.6 **U**
Metals														
Antimony	PDWS	6	ug/L	1	--	1.2	--	0.22 **I**	--	--	2.8	--	--	1.5
Arsenic	PDWS	10	ug/L	0.53 **I**	--	0.85 **I**	--	0.55 **I**	--	--	1.7	--	--	0.37 **I**
Barium	PDWS	2000	ug/L	21	--	17	--	10	--	--	5.4	--	--	5
Beryllium	PDWS	4	ug/L	0.11 **U**	--	0.56 **U**	--	0.56 **U**	--	--	0.11 **U**	--	--	0.18 **U**
Cadmium	PDWS	5	ug/L	2.6	--	0.69	--	0.028 **U**	--	--	0.32 **I**	--	--	0.33 **I**
Chromium	PDWS	100	ug/L	0.35 **I**	--	1.5 **I**	--	1.4 **I**	--	--	0.53 **I**	--	--	1 **I**
Cobalt	GCTL	140	ug/L	12	--	2.2	--	2.8	--	--	2.2	--	--	0.22 **I**
Copper	SDWS	1000	ug/L	2.4	--	1.1	--	0.18 **I**	--	--	3.6	--	--	3.6
Iron	SDWS	300	ug/L	2300	--	10000	--	28000	--	--	500	--	--	170
Lead	PDWS	15	ug/L	0.24 **U**	--	0.24 **U**	--	0.24 **U**	--	--	0.24 **U**	--	--	0.29 **I**
Mercury	PDWS	2	ug/L	0.084 **U**	--	0.084 **U**	--	0.05 **U**	--	--	0.05 **U**	--	--	0.05 **U**
Nickel	PDWS	100	ug/L	23	--	26	--	14	--	--	5.9	--	--	3.3
Selenium	PDWS	50	ug/L	12	--	21	--	0.58 **U**	--	--	0.82 **I**	--	--	1.3 **I**
Silver	SDWS	100	ug/L	0.027 **U**	--	0.054 **I**	--	0.078 **I**	--	--	0.027 **U**	--	--	0.1 **U**
Sodium	PDWS	160	mg/L	120	440	360	49	300	380	8.4	10	38	6.3	15
Thallium	PDWS	2	ug/L	0.67	--	0.34	--	0.057 **U**	--	--	0.43	--	--	0.18 **I**
Vanadium	GCTL	49	ug/L	5.6	--	16	--	7.1	--	--	7.5	--	--	12
Zinc	SDWS	5000	ug/L	1300	--	250	--	9.8 **U**	--	--	120	--	--	71
General Chemistry														
Ammonia (N)	GCTL	2.8	mg/L	1.5	--	36	11	12	14	0.02 **U**	0.08 **I**	1.5	0.025 **U**	0.13
Chloride	SDWS	250	mg/L	620	1100	910	600	870	790	13	21	79	12	20
Nitrate (N)	PDWS	10	mg/L	0.11 **I**	--	0.18 **U**	--	0.18 **U**	--	--	0.18 **U**	--	--	1
Residues- Filterable (TDS)	SDWS	500	mg/L	1600	2400	2200	1400	1800	2000	150	140	280	140	150
Field Parameters														
Conductivity	NS	NS	umhos/cm	1780	3932	3973	2166	3830	3630	215	253	497.4	207.7	253.5
Dissolved Oxygen	NS	NS	mg/L	1.05	0.49	0.42	3.04	2.13	0.26	0.31	0.24	2.06	5.97	2.58
Oxidation Reduction Potential	NS	NS	mV	--	--	-7.9	99.5	-41.7	-12.1	43.2	2	-9.5	103.7	111.5
pH	SDWS	6.5-8.5	SU	5.98	5.99	6.18	6.21	6.44	6.32	6.29	6.32	6.43	6.54	6.6
Temperature, Water	NS	NS	Degrees C	20.81	22.73	24.63	25.23	24.52	25.25	26.79	27.15	25.4	22.2	21.6
Turbidity	NS	NS	NTU	10.11	2.32	7.64	5.29	8.72	7.64	16.5	3.28	5.05	7.76	5.97

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-68

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1.4 **I**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.13 **I**	0.7 **I**	0.76	0.13 **I**
Arsenic	PDWS	10	ug/L	1.9	2	3.8	1.8
Barium	PDWS	2000	ug/L	8	15	20	5.5
Beryllium	PDWS	4	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.033 **I**	0.35 **I**	1.3	0.064 **U**
Chromium	PDWS	100	ug/L	3.3	5.9	7.9	2.8
Cobalt	GCTL	140	ug/L	0.19 **U**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.6 **I**	2.3	7.5	0.73 **I**
Iron	SDWS	300	ug/L	420	420	820	370
Lead	PDWS	15	ug/L	0.42 **I**	1.3	0.57 **I**	0.24 **U**
Mercury	PDWS	2	ug/L	0.13	0.27	0.24	0.13
Nickel	PDWS	100	ug/L	0.2 **I**	0.11 **U**	0.61 **I**	0.98 **U**
Selenium	PDWS	50	ug/L	1.3 **I**	2.1 **I**	8.6	0.75 **I**
Silver	SDWS	100	ug/L	0.027 **U**	0.034 **I**	0.045 **I**	0.1 **U**
Sodium	PDWS	160	mg/L	11	8.4	8.9	8.1
Thallium	PDWS	2	ug/L	0.057 **U**	0.057 **U**	0.057 **U**	0.057 **U**
Vanadium	GCTL	49	ug/L	5.5	6.6	9.3	2.9
Zinc	SDWS	5000	ug/L	10	9 **I**	9.2 **I**	7.9 **I**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	0.29	0.08 **I**	0.17	0.1
Chloride	SDWS	250	mg/L	28	16	19	15
Nitrate (N)	PDWS	10	mg/L	0.1 **U**	0.18 **U**	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	220	170	180	180
Field Parameters							
Conductivity	NS	NS	umhos/cm	210	287	241	224.2
Dissolved Oxygen	NS	NS	mg/L	0.83	1.88	1.69	2.01
Oxidation Reduction Potential	NS	NS	mV	--	99.7	-32.1	-31.1
pH	SDWS	6.5-8.5	SU	5.68	5.24	5.58	5.61
Temperature, Water	NS	NS	Degrees C	25.12	26.88	28.88	26.3
Turbidity	NS	NS	NTU	1.03	66.2	29.2	19.1

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-69A

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1 **U**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.051 **I**	0.059 **I**	0.046 **U**	0.11 **U**
Arsenic	PDWS	10	ug/L	0.47 **I**	0.31 **I**	0.22 **I**	0.36 **I**
Barium	PDWS	2000	ug/L	4.7	3.6	5.7	4.7
Beryllium	PDWS	4	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.028 **U**	0.028 **U**	0.064 **U**
Chromium	PDWS	100	ug/L	0.69 **I**	0.56 **I**	0.43 **I**	0.58 **I**
Cobalt	GCTL	140	ug/L	0.19 **U**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.17 **I**	0.11 **U**	0.25 **I**	0.35 **U**
Iron	SDWS	300	ug/L	3800	3300	5700	4600
Lead	PDWS	15	ug/L	0.35 **I**	0.24 **U**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.12 **I**	0.11 **U**	0.25 **I**	0.98 **U**
Selenium	PDWS	50	ug/L	1.2 **I**	0.58 **U**	0.58 **U**	0.58 **U**
Silver	SDWS	100	ug/L	0.027 **U**	0.027 **U**	0.027 **U**	0.1 **U**
Sodium	PDWS	160	mg/L	17	16	17	15
Thallium	PDWS	2	ug/L	0.057 **U**	0.057 **U**	0.057 **U**	0.057 **U**
Vanadium	GCTL	49	ug/L	0.94 **I**	0.71 **U**	0.71 **U**	0.71 **U**
Zinc	SDWS	5000	ug/L	11	5.8 **I**	7.4 **U**	7.4 **U**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	0.52	0.35	0.36	0.32
Chloride	SDWS	250	mg/L	59	52	50	49 **J**
Nitrate (N)	PDWS	10	mg/L	0.1 **U**	0.18 **U**	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	290	230	410	280
Field Parameters							
Conductivity	NS	NS	umhos/cm	590	545	606	549
Dissolved Oxygen	NS	NS	mg/L	0.33	0.51	0.12	0.77
Oxidation Reduction Potential	NS	NS	mV	--	-45.4	-87.9	-42.2
pH	SDWS	6.5-8.5	SU	6.06	6.23	6.06	6.12
Temperature, Water	NS	NS	Degrees C	24.84	25.64	25.85	25.9
Turbidity	NS	NS	NTU	9.86	1.73	11.3	4.98

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-70A

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	2.4 **I**	1 **U**	2.3
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.046 **U**	0.16 **I**	0.046 **U**	0.11 **U**
Arsenic	PDWS	10	ug/L	2.6	2.3	3.1	4.9
Barium	PDWS	2000	ug/L	5.5	6.4	7.8	17
Beryllium	PDWS	4	ug/L	0.11 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.028 **U**	0.028 **U**	0.064 **U**
Chromium	PDWS	100	ug/L	0.37 **I**	0.41 **I**	0.43 **I**	0.7 **I**
Cobalt	GCTL	140	ug/L	0.19 **U**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.11 **U**	0.15 **I**	0.11 **U**	0.42 **I**
Iron	SDWS	300	ug/L	24000	13000	30000	39000
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	0.24 **U**	0.3 **I**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.39 **I**	0.21 **I**	0.67 **I**	0.98 **U**
Selenium	PDWS	50	ug/L	0.7 **I**	0.58 **U**	0.58 **U**	0.58 **U**
Silver	SDWS	100	ug/L	0.14 **I**	0.027 **U**	0.027 **U**	0.1 **U**
Sodium	PDWS	160	mg/L	9.6	11	12	11
Thallium	PDWS	2	ug/L	0.057 **U**	0.057 **U**	0.057 **U**	0.064 **I**
Vanadium	GCTL	49	ug/L	0.72 **I**	1.4 **I**	1.2 **I**	6.3
Zinc	SDWS	5000	ug/L	8.6 **I**	6.8 **I**	24	12
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	2	1.3	1.4	1.3
Chloride	SDWS	250	mg/L	56	58	50	45
Nitrate (N)	PDWS	10	mg/L	0.11 **I**	0.18 **U**	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	320	300	300	290
Field Parameters							
Conductivity	NS	NS	umhos/cm	712	673	608	590
Dissolved Oxygen	NS	NS	mg/L	0.11	1.53	0.26	1.3
Oxidation Reduction Potential	NS	NS	mV	--	-1.9	-69.2	-11
pH	SDWS	6.5-8.5	SU	6.36	6.38	6.27	6.31
Temperature, Water	NS	NS	Degrees C	25.4	26.15	25.7	25.9
Turbidity	NS	NS	NTU	10.1	42.4	31.8	117

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-71A

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	May-17	Aug-17	Feb-18
Volatile Organic Compounds								
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	--	1 **U**	1.5 **I**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	--	0.52 **U**	0.6 **U**
Metals								
Antimony	PDWS	6	ug/L	0.087 **I**	0.19 **I**	--	0.1 **I**	0.16 **I**
Arsenic	PDWS	10	ug/L	2.6	3.4	--	3.4	2.8
Barium	PDWS	2000	ug/L	13	17	--	17	14
Beryllium	PDWS	4	ug/L	0.13 **U**	0.11 **U**	--	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.028 **U**	--	0.031 **I**	0.064 **U**
Chromium	PDWS	100	ug/L	0.56 **I**	0.71 **I**	--	0.65 **I**	0.68 **I**
Cobalt	GCTL	140	ug/L	0.29 **I**	0.21 **I**	--	0.19 **U**	0.23 **I**
Copper	SDWS	1000	ug/L	0.11 **U**	0.11 **U**	--	0.22 **I**	0.35 **U**
Iron	SDWS	300	ug/L	27000	36000	--	40000	37000
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	--	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	--	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	1.6	1.4	--	1.8	1.5 **I**
Selenium	PDWS	50	ug/L	3 **I**	0.58 **U**	--	0.58 **U**	0.58 **U**
Silver	SDWS	100	ug/L	0.027 **U**	0.031 **I**	--	0.027 **U**	0.1 **U**
Sodium	PDWS	160	mg/L	31	40	39	42	44
Thallium	PDWS	2	ug/L	0.057 **U**	0.057 **U**	--	0.057 **U**	0.057 **U**
Vanadium	GCTL	49	ug/L	2.4	5.7	--	4.9	11
Zinc	SDWS	5000	ug/L	12	6 **I**	--	17	7.9 **I**
General Chemistry								
Ammonia (N)	GCTL	2.8	mg/L	2.1	1.8	2.1	1.9	1.8
Chloride	SDWS	250	mg/L	210	300	280	280	260
Nitrate (N)	PDWS	10	mg/L	0.18 **U**	0.18 **U**	--	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	660	880	940	1500	840
Field Parameters								
Conductivity	NS	NS	umhos/cm	1335	1578	1619	1524	1435
Dissolved Oxygen	NS	NS	mg/L	0.15	0.2	0.13	0.08	0.34
Oxidation Reduction Potential	NS	NS	mV	--	-42.8	-48	-54.7	-58.6
pH	SDWS	6.5-8.5	SU	6.1	6.22	6.1	6.13	6.14
Temperature, Water	NS	NS	Degrees C	24.64	24.73	24.03	25.04	24.9
Turbidity	NS	NS	NTU	2.87	5.65	5.24	8.47	9.13

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-72

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1.2 **I**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.056 **I**	0.081 **I**	0.091 **U**	0.062 **I**
Arsenic	PDWS	10	ug/L	0.24 **I**	0.22 **I**	0.18 **I**	0.13 **I**
Barium	PDWS	2000	ug/L	39	33	27	28
Beryllium	PDWS	4	ug/L	0.13 **U**	0.22 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.029 **I**	0.056 **U**	0.028 **U**
Chromium	PDWS	100	ug/L	0.62 **I**	0.46 **I**	0.37 **I**	0.33 **I**
Cobalt	GCTL	140	ug/L	0.22 **I**	0.22 **I**	0.38 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.48 **I**	0.13 **I**	1.2 **I**	0.12 **I**
Iron	SDWS	300	ug/L	780	620	570	520
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	0.48 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	2.4	1.3	2	1.4
Selenium	PDWS	50	ug/L	7.6	0.58 **U**	1.2 **U**	0.58 **U**
Silver	SDWS	100	ug/L	0.027 **U**	0.042 **I**	0.054 **U**	0.027 **U**
Sodium	PDWS	160	mg/L	160	150	120	110
Thallium	PDWS	2	ug/L	0.057 **U**	0.057 **U**	0.11 **U**	0.057 **U**
Vanadium	GCTL	49	ug/L	0.8 **I**	0.83 **I**	6.1	0.74 **I**
Zinc	SDWS	5000	ug/L	27	6.5 **I**	7.4 **U**	7.4 **U**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	16	12	13	12
Chloride	SDWS	250	mg/L	440	380	310 **J**	280
Nitrate (N)	PDWS	10	mg/L	0.18 **U**	0.18 **U**	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	1100	1000	1100	880
Field Parameters							
Conductivity	NS	NS	umhos/cm	2224	2070	1701	1638
Dissolved Oxygen	NS	NS	mg/L	0.22	0.82	1.02	1.6
Oxidation Reduction Potential	NS	NS	mV	--	-159	-101.3	-117
pH	SDWS	6.5-8.5	SU	6.54	7.2	6.64	6.71
Temperature, Water	NS	NS	Degrees C	23.55	23.54	23.69	23.7
Turbidity	NS	NS	NTU	0.56	0.82	1.75	0.57

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-78

Parameter	Standard	MCL	Unit	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds							
Acetone	GCTL	6300	ug/L	1 **U**	1 **U**	1 **U**	1 **U**
Tetrachloroethene	PDWS	3	ug/L	0.52 **U**	0.52 **U**	0.52 **U**	0.6 **U**
Metals							
Antimony	PDWS	6	ug/L	0.046 **U**	0.046 **U**	0.046 **U**	0.046 **U**
Arsenic	PDWS	10	ug/L	0.17 **I**	0.15 **I**	0.15 **I**	0.17 **I**
Barium	PDWS	2000	ug/L	83	86	68	63
Beryllium	PDWS	4	ug/L	0.13 **U**	0.11 **U**	0.11 **U**	0.18 **U**
Cadmium	PDWS	5	ug/L	0.028 **U**	0.028 **U**	0.028 **U**	0.028 **U**
Chromium	PDWS	100	ug/L	0.23 **I**	0.19 **I**	0.26 **I**	0.11 **U**
Cobalt	GCTL	140	ug/L	0.19 **U**	0.19 **U**	0.19 **U**	0.19 **U**
Copper	SDWS	1000	ug/L	0.11 **U**	0.11 **U**	0.15 **I**	0.13 **I**
Iron	SDWS	300	ug/L	210	220	200	230
Lead	PDWS	15	ug/L	0.24 **U**	0.24 **U**	0.24 **U**	0.24 **U**
Mercury	PDWS	2	ug/L	0.084 **U**	0.05 **U**	0.05 **U**	0.05 **U**
Nickel	PDWS	100	ug/L	0.21 **I**	0.11 **U**	0.21 **I**	0.11 **U**
Selenium	PDWS	50	ug/L	0.58 **U**	0.58 **U**	0.58 **U**	0.58 **U**
Silver	SDWS	100	ug/L	0.027 **U**	0.027 **U**	0.041 **I**	0.027 **U**
Sodium	PDWS	160	mg/L	31	31	32	34
Thallium	PDWS	2	ug/L	0.057 **U**	0.057 **U**	0.057 **U**	0.057 **U**
Vanadium	GCTL	49	ug/L	0.71 **U**	0.71 **U**	0.71 **U**	0.71 **U**
Zinc	SDWS	5000	ug/L	26	7.1 **I**	7.4 **U**	7.4 **U**
General Chemistry							
Ammonia (N)	GCTL	2.8	mg/L	0.15	0.23	0.29	0.27
Chloride	SDWS	250	mg/L	35	33	30	33
Nitrate (N)	PDWS	10	mg/L	0.18 **U**	0.18 **U**	0.18 **U**	0.18 **U**
Residues- Filterable (TDS)	SDWS	500	mg/L	300	280	300	290
Field Parameters							
Conductivity	NS	NS	umhos/cm	551	568	515	512
Dissolved Oxygen	NS	NS	mg/L	0.11	0.13	0.11	0.19
Oxidation Reduction Potential	NS	NS	mV	--	-201.6	-224.4	-222.4
pH	SDWS	6.5-8.5	SU	8	9.16	8.13	8.35
Temperature, Water	NS	NS	Degrees C	23.18	23.13	23.47	23.5
Turbidity	NS	NS	NTU	1.26	1.88	2.85	2.08

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-79

Parameter	Standard	MCL	Unit	Nov-16	Feb-17	May-17	Aug-17	Nov-17	Feb-18
Volatile Organic Compounds									
Acetone	GCTL	6300	ug/L	--	--	--	--	--	--
Tetrachloroethene	PDWS	3	ug/L	--	--	--	--	--	--
Metals									
Antimony	PDWS	6	ug/L	--	--	--	--	--	--
Arsenic	PDWS	10	ug/L	--	--	--	--	--	--
Barium	PDWS	2000	ug/L	--	--	--	--	--	--
Beryllium	PDWS	4	ug/L	--	--	--	--	--	--
Cadmium	PDWS	5	ug/L	--	--	--	--	--	--
Chromium	PDWS	100	ug/L	--	--	--	--	--	--
Cobalt	GCTL	140	ug/L	--	--	--	--	--	--
Copper	SDWS	1000	ug/L	--	--	--	--	--	--
Iron	SDWS	300	ug/L	--	--	--	--	--	--
Lead	PDWS	15	ug/L	--	--	--	--	--	--
Mercury	PDWS	2	ug/L	--	--	--	--	--	--
Nickel	PDWS	100	ug/L	--	--	--	--	--	--
Selenium	PDWS	50	ug/L	--	--	--	--	--	--
Silver	SDWS	100	ug/L	--	--	--	--	--	--
Sodium	PDWS	160	mg/L	140	650	730	280	120	100
Thallium	PDWS	2	ug/L	--	--	--	--	--	--
Vanadium	GCTL	49	ug/L	--	--	--	--	--	--
Zinc	SDWS	5000	ug/L	--	--	--	--	--	--
General Chemistry									
Ammonia (N)	GCTL	2.8	mg/L	30	35	32	8.8	4.5	3.8
Chloride	SDWS	250	mg/L	500	1200	1000	430	180 **J**	150
Nitrate (N)	PDWS	10	mg/L	--	--	--	--	--	--
Residues- Filterable (TDS)	SDWS	500	mg/L	1500	2700	2600	1200	590	560
Field Parameters									
Conductivity	NS	NS	umhos/cm	2740	4980	5212	2221	1183	956
Dissolved Oxygen	NS	NS	mg/L	0.25	1.73	1.23	1.67	4.39	3.33
Oxidation Reduction Potential	NS	NS	mV	1.4	-20.3	-40.6	-30.8	-27.7	-15
pH	SDWS	6.5-8.5	SU	6.09	6.4	6.29	6.19	6.28	6.11
Temperature, Water	NS	NS	Degrees C	24.03	21.77	25.49	28.04	24.9	20.7
Turbidity	NS	NS	NTU	27.6	60.2	12	2.66	2.81	7.97

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-80

Parameter	Standard	MCL	Unit	Mar-17	May-17	Aug-17	Nov-17	Feb-18
Volatile Organic Compounds								
Acetone	GCTL	6300	ug/L	--	--	--	--	--
Tetrachloroethene	PDWS	3	ug/L	--	--	--	--	--
Metals								
Antimony	PDWS	6	ug/L	--	--	--	--	--
Arsenic	PDWS	10	ug/L	--	--	--	--	--
Barium	PDWS	2000	ug/L	--	--	--	--	--
Beryllium	PDWS	4	ug/L	--	--	--	--	--
Cadmium	PDWS	5	ug/L	--	--	--	--	--
Chromium	PDWS	100	ug/L	--	--	--	--	--
Cobalt	GCTL	140	ug/L	--	--	--	--	--
Copper	SDWS	1000	ug/L	--	--	--	--	--
Iron	SDWS	300	ug/L	--	--	--	--	--
Lead	PDWS	15	ug/L	--	--	--	--	--
Mercury	PDWS	2	ug/L	--	--	--	--	--
Nickel	PDWS	100	ug/L	--	--	--	--	--
Selenium	PDWS	50	ug/L	--	--	--	--	--
Silver	SDWS	100	ug/L	--	--	--	--	--
Sodium	PDWS	160	mg/L	37	55	92	63	62
Thallium	PDWS	2	ug/L	--	--	--	--	--
Vanadium	GCTL	49	ug/L	--	--	--	--	--
Zinc	SDWS	5000	ug/L	--	--	--	--	--
General Chemistry								
Ammonia (N)	GCTL	2.8	mg/L	1.5	0.74	0.64	0.36	0.52
Chloride	SDWS	250	mg/L	130	170	210	110	110
Nitrate (N)	PDWS	10	mg/L	--	--	--	--	--
Residues- Filterable (TDS)	SDWS	500	mg/L	500	630	680	370	410
Field Parameters								
Conductivity	NS	NS	umhos/cm	889	1090	1055	714	733
Dissolved Oxygen	NS	NS	mg/L	0.38	0.16	0.05	3.24	0.79
Oxidation Reduction Potential	NS	NS	mV	-10.7	34.2	-120.4	-100.7	13.8
pH	SDWS	6.5-8.5	SU	5.67	5.63	5.69	5.95	5.69
Temperature, Water	NS	NS	Degrees C	24.49	25.26	25.17	25.7	24.9
Turbidity	NS	NS	NTU	16	10.6	37	17.3	2.49

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-81

Parameter	Standard	MCL	Unit	Mar-17	May-17	Aug-17	Nov-17	Feb-18
Volatile Organic Compounds								
Acetone	GCTL	6300	ug/L	--	--	--	--	--
Tetrachloroethene	PDWS	3	ug/L	--	--	--	--	--
Metals								
Antimony	PDWS	6	ug/L	--	--	--	--	--
Arsenic	PDWS	10	ug/L	--	--	--	--	--
Barium	PDWS	2000	ug/L	--	--	--	--	--
Beryllium	PDWS	4	ug/L	--	--	--	--	--
Cadmium	PDWS	5	ug/L	--	--	--	--	--
Chromium	PDWS	100	ug/L	--	--	--	--	--
Cobalt	GCTL	140	ug/L	--	--	--	--	--
Copper	SDWS	1000	ug/L	--	--	--	--	--
Iron	SDWS	300	ug/L	--	--	--	--	--
Lead	PDWS	15	ug/L	--	--	--	--	--
Mercury	PDWS	2	ug/L	--	--	--	--	--
Nickel	PDWS	100	ug/L	--	--	--	--	--
Selenium	PDWS	50	ug/L	--	--	--	--	--
Silver	SDWS	100	ug/L	--	--	--	--	--
Sodium	PDWS	160	mg/L	250	280	37	8.2	21
Thallium	PDWS	2	ug/L	--	--	--	--	--
Vanadium	GCTL	49	ug/L	--	--	--	--	--
Zinc	SDWS	5000	ug/L	--	--	--	--	--
General Chemistry								
Ammonia (N)	GCTL	2.8	mg/L	4.1	2.3	0.52	0.025 **U**	0.33
Chloride	SDWS	250	mg/L	810	670	62	15	27
Nitrate (N)	PDWS	10	mg/L	--	--	--	--	--
Residues- Filterable (TDS)	SDWS	500	mg/L	2000	1500	230	100	130
Field Parameters								
Conductivity	NS	NS	umhos/cm	2723	2476	493	216.8	194.9
Dissolved Oxygen	NS	NS	mg/L	0.53	0.72	1.77	1.73	2.12
Oxidation Reduction Potential	NS	NS	mV	24.9	17.7	68.5	76	71.7
pH	SDWS	6.5-8.5	SU	6	6.05	6.12	5.95	6.15
Temperature, Water	NS	NS	Degrees C	23.7	25.81	28.68	26.5	22.1
Turbidity	NS	NS	NTU	16.1	27.5	22.7	13	14.5

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-82

Parameter	Standard	MCL	Unit	Mar-17	Jun-17	Aug-17	Nov-17	Feb-18
Volatile Organic Compounds								
Acetone	GCTL	6300	ug/L	--	--	--	--	--
Tetrachloroethene	PDWS	3	ug/L	--	--	--	--	--
Metals								
Antimony	PDWS	6	ug/L	--	--	--	--	--
Arsenic	PDWS	10	ug/L	--	--	--	--	--
Barium	PDWS	2000	ug/L	--	--	--	--	--
Beryllium	PDWS	4	ug/L	--	--	--	--	--
Cadmium	PDWS	5	ug/L	--	--	--	--	--
Chromium	PDWS	100	ug/L	--	--	--	--	--
Cobalt	GCTL	140	ug/L	--	--	--	--	--
Copper	SDWS	1000	ug/L	--	--	--	--	--
Iron	SDWS	300	ug/L	--	--	--	--	--
Lead	PDWS	15	ug/L	--	--	--	--	--
Mercury	PDWS	2	ug/L	--	--	--	--	--
Nickel	PDWS	100	ug/L	--	--	--	--	--
Selenium	PDWS	50	ug/L	--	--	--	--	--
Silver	SDWS	100	ug/L	--	--	--	--	--
Sodium	PDWS	160	mg/L	11	9	2.8	4.5	5.4
Thallium	PDWS	2	ug/L	--	--	--	--	--
Vanadium	GCTL	49	ug/L	--	--	--	--	--
Zinc	SDWS	5000	ug/L	--	--	--	--	--
General Chemistry								
Ammonia (N)	GCTL	2.8	mg/L	4.9	4.7	0.02 **U**	1.4	0.69
Chloride	SDWS	250	mg/L	25	22	4.3 **I**	8.4	41
Nitrate (N)	PDWS	10	mg/L	--	--	--	--	--
Residues- Filterable (TDS)	SDWS	500	mg/L	130	94	65	68	140
Field Parameters								
Conductivity	NS	NS	umhos/cm	239	210	82	83	174.3
Dissolved Oxygen	NS	NS	mg/L	0.23	0.7	4.11	1.28	1.17
Oxidation Reduction Potential	NS	NS	mV	-147.1	41.9	177.2	-17.5	107.3
pH	SDWS	6.5-8.5	SU	5.69	5.48	4.73	5.3	5.07
Temperature, Water	NS	NS	Degrees C	26.16	25.5	27.84	27.4	24.1
Turbidity	NS	NS	NTU	-18	33.4	34.3	27.4	4.56

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Groundwater Summary of Detected Parameters, TH-83

Parameter	Standard	MCL	Unit	Jan-18	Feb-18
Volatile Organic Compounds					
Acetone	GCTL	6300	ug/L	--	--
Tetrachloroethene	PDWS	3	ug/L	--	--
Metals					
Antimony	PDWS	6	ug/L	--	--
Arsenic	PDWS	10	ug/L	--	--
Barium	PDWS	2000	ug/L	--	--
Beryllium	PDWS	4	ug/L	--	--
Cadmium	PDWS	5	ug/L	--	--
Chromium	PDWS	100	ug/L	--	--
Cobalt	GCTL	140	ug/L	--	--
Copper	SDWS	1000	ug/L	--	--
Iron	SDWS	300	ug/L	--	--
Lead	PDWS	15	ug/L	--	--
Mercury	PDWS	2	ug/L	--	--
Nickel	PDWS	100	ug/L	--	--
Selenium	PDWS	50	ug/L	--	--
Silver	SDWS	100	ug/L	--	--
Sodium	PDWS	160	mg/L	98	58
Thallium	PDWS	2	ug/L	--	--
Vanadium	GCTL	49	ug/L	--	--
Zinc	SDWS	5000	ug/L	--	--
General Chemistry					
Ammonia (N)	GCTL	2.8	mg/L	6.5	4.7
Chloride	SDWS	250	mg/L	170	62
Nitrate (N)	PDWS	10	mg/L	--	--
Residues- Filterable (TDS)	SDWS	500	mg/L	430	290
Field Parameters					
Conductivity	NS	NS	umhos/cm	1504	537
Dissolved Oxygen	NS	NS	mg/L	1.12	1.02
Oxidation Reduction Potential	NS	NS	mV	6.7	10.6
pH	SDWS	6.5-8.5	SU	6.9	6.55
Temperature, Water	NS	NS	Degrees C	22.7	23.1
Turbidity	NS	NS	NTU	5.05	4.78

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. GCTL = Groundwater Clean-Up Target Level (62-777 F.A.C.)
4. NS = No numeric standard has been set for this analyte.
5. --- = Parameter not analyzed.
6. mg/L = milligrams per liter
7. ug/L = micrograms per liter
8. NTU = nephelometric turbidity units
9. umhos/cm = micromhos per centimeter
10. mV = millivolts
11. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
12. Degrees C = degrees Celsius
13. **U** = Analyte concentration was below the laboratory detection limit (value shown).
14. **I** = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
15. **V** = Analyte was detected in the sample and associated method blank.

Surface Water Summary of Detected Parameters, Mine Cut-1D

Parameter	MCL	Units	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds						
1,1,2-Trichloroethane	16	ug/L	0.4 **U**	2.1	0.46 **U**	0.46 **U**
Acetone	1700	ug/L	1 **U**	2.4 **I**	1 **U**	3
Carbon tetrachloride	4.42	ug/L	0.57 **U**	2.3	0.57 **U**	0.6 **U**
trans-1,3-Dichloropropene	NS	ug/L	0.42 **U**	0.96 **I**	0.29 **U**	0.2 **U**
Toluene	480	ug/L	0.45 **U**	0.45 **U**	0.45 **U**	2.3
Metals						
Antimony	4300	ug/L	0.17 **I**	0.2 **I**	0.62 **I**	0.19 **I**
Arsenic	50	ug/L	0.29 **I**	0.21 **I**	0.96 **I**	0.39 **I**
Barium	NS	ug/L	3.2	4.8	10	13
Cadmium	See below	ug/L	0.028 **U**	0.038 **I**	0.06 **I**	0.064 **U**
Calculated Cadmium MCL	Calculated	ug/L	0.29	0.29	0.29	0.35
Chromium	See below	ug/L	0.22 **I**	0.78 **I**	0.56 **I**	0.56 **I**
Calculated Chromium MCL	Calculated	ug/L	93.18	93.18	93.18	113.52
Cobalt	NS	ug/L	0.19 **U**	0.19 **U**	0.22 **I**	0.29 **I**
Copper	See below	ug/L	0.18 **I**	0.32 **I**	0.85	0.35 **U**
Calculated Copper MCL	Calculated	ug/L	10.12	10.12	10.12	12.44
Iron	1000	ug/L	220	360	650	5100
Lead	See below	ug/L	0.24 **U**	0.24 **U**	0.36 **I**	0.24 **U**
Calculated Lead MCL	Calculated	ug/L	3.59	3.59	3.59	4.88
Nickel	See below	ug/L	0.43 **I**	0.11 **U**	0.78 **I**	0.98 **U**
Calculated Nickel MCL	Calculated	ug/L	56.54	56.54	56.54	69.34
Selenium	5	ug/L	1.5 **I**	0.58 **U**	0.58 **U**	0.58 **U**
Silver	0.07	ug/L	0.027 **U**	0.027 **U**	0.027 **U**	0.1 **U**
Vanadium	NS	ug/L	0.71 **U**	1 **I**	1.1 **I**	0.71 **U**
Zinc	See below	ug/L	7.7 **I**	7.1 **I**	7.4 **U**	11
Calculated Zinc MCL	Calculated	ug/L	129.89	129.89	129.89	159.34
General Chemistry						
Ammonia- Un-ionized (NH3)	0.02	mg/L	0.025 **U**	0.000037 **U**	0.00066 **I**	0.00012 **I**
BOD	NS	mg/L	3	4.2	7	7.3
COD	NS	mg/L	45 **I**	90	120	67
Chlorophyll a	NS	ug/L	21	53	34	15
Coliform Fecal	800	#/100 mL	24	560	100 **B**	10 **B**
Hardness	NS	mg/L	110	110	110	140
Nitrate (N)	NS	mg/L	0.18 **U**	0.18 **U**	1.6	0.18 **U**
Nitrogen- Total	NS	mg/L	0.97	1.7	---	1.6
Phosphorus- Total	NS	mg/L	1.9	2.1	1.8	2.6
Residues- Filterable (TDS)	NS	mg/L	260	260	300	390
Carbon- Total Organic	NS	mg/L	14	15	17	16
Residues- Nonfilterable (TSS)	NS	mg/L	6	15	9.8	24
Field Parameters						
Conductivity	1275	umhos/cm	411	457	1140	578
Dissolved Oxygen	>5	mg/L	1.39	0.29	1.5	0.11
Oxidation Reduction Potential	NS	mV	---	-28.6	-28.6	-53.7
pH	6.0-8.5	SU	6.76	6.46	6.83	6.15
Temperature, Water	NS	deg C	20.1	20.92	29.19	20.7
Turbidity	<29	NTU	4.19	20.1	6.91	13.3

Notes:

1. Parameter MCL is a Surface Water Criterion (Chapter 62-302 F.A.C.).
2. Parameter MCL is calculated by the following formula: CrIII < e^(0.819*[ln Hardness]+0.6848).
3. Parameter MCL is calculated by the following formula: Cu < e^(0.8545*[ln Hardness]-1.702).
4. Parameter MCL is calculated by the following formula: Ni < e^(0.846*[ln Hardness]+0.0584).
5. Parameter MCL is calculated by the following formula: Zn < e^(0.8473*[ln Hardness]+0.884).
6. Turbidity MCL is 29 NTUs over background levels
7. MCL = Maximum Contamination Level.
8. Shaded = Sample result above the MCL.
9. mg/L = milligrams per liter.
10. ug/L = micrograms per liter.
11. umhos/cm = micromhos/centimeter
12. NTU = nephelometric turbidity units.
13. NS = No numeric standard has been set for this analyte.
14. mV = millivolts
15. **I** = Analyte detected below quantitation limits.
16. **U** = Analyte concentration was below the laboratory detection limit (value shown).
17. **V** = Analyte was detected in the sample and associated method blank.
18. **B** = Results based upon colony counts outside the acceptable range.

Surface Water Summary of Detected Parameters, Stream-3A

Parameter	MCL	Units	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds					
1,1,2-Trichloroethane	16	ug/L	0.4 **U**	0.46 **U**	0.46 **U**
Acetone	1700	ug/L	1 **U**	1 **U**	1.4 **I**
Carbon tetrachloride	4.42	ug/L	0.57 **U**	0.57 **U**	0.6 **U**
trans-1,3-Dichloropropene	NS	ug/L	0.42 **U**	0.29 **U**	0.2 **U**
Toluene	480	ug/L	0.45 **U**	0.45 **U**	0.45 **U**
Metals					
Antimony	4300	ug/L	0.11 **I**	0.064 **I**	0.11 **U**
Arsenic	50	ug/L	0.27 **I**	0.41 **I**	0.25 **I**
Barium	NS	ug/L	5.2	23	9.5
Cadmium	See below	ug/L	0.028 **U**	0.028 **U**	0.064 **U**
Calculated Cadmium MCL	Calculated	ug/L	0.25	0.27	0.21
Chromium	See below	ug/L	0.41 **I**	0.62 **I**	0.49 **I**
Calculated Chromium MCL	Calculated	ug/L	80.49	86.18	7.05
Cobalt	NS	ug/L	0.19 **U**	0.24 **I**	0.19 **U**
Copper	See below	ug/L	0.63 **I**	0.77	0.35 **U**
Calculated Copper MCL	Calculated	ug/L	8.69	9.33	7.05
Iron	1000	ug/L	170	110	71 **I**
Lead	See below	ug/L	0.24 **U**	0.24 **U**	0.24 **U**
Calculated Lead MCL	Calculated	ug/L	2.86	3.18	2.09
Nickel	See below	ug/L	0.11 **U**	0.38 **I**	0.98 **U**
Calculated Nickel MCL	Calculated	ug/L	48.61	52.16	39.51
Selenium	5	ug/L	0.58 **U**	0.65 **I**	0.58 **U**
Silver	0.07	ug/L	0.027 **U**	0.027 **U**	0.1 **U**
Vanadium	NS	ug/L	1.9 **I**	1.2 **I**	0.71 **U**
Zinc	See below	ug/L	7.9 **I**	7.8 **I**	11
Calculated Zinc MCL	Calculated	ug/L	111.64	119.82	90.71
General Chemistry					
Ammonia- Un-ionized (NH3)	0.02	mg/L	0.000034 **U**	0.00006 **U**	0.000023 **U**
BOD	NS	mg/L	2 **U**	2 **U**	2 **U**
COD	NS	mg/L	58	30 **I**	39 **I**
Chlorophyll a	NS	ug/L	6.7	2.7	4.3
Coliform Fecal	800	#/100 mL	50	1 **U**	340
Hardness	NS	mg/L	92	100	72
Nitrate (N)	NS	mg/L	0.18 **U**	0.18 **U**	0.18 **U**
Nitrogen- Total	NS	mg/L	0.15	---	0.51
Phosphorus- Total	NS	mg/L	1.1	0.046 **U**	1.1
Residues- Filterable (TDS)	NS	mg/L	200	180	180
Carbon- Total Organic	NS	mg/L	12	9.1	13
Residues- Nonfilterable (TSS)	NS	mg/L	1 **U**	1 **U**	1.8
Field Parameters					
Conductivity	1275	umhos/cm	367	304	236.4
Dissolved Oxygen	>5	mg/L	0.09	2.69	2.41
Oxidation Reduction Potential	NS	mV	-217.7	75.1	129.3
pH	6.5-8.5	SU	6.53	6.42	6.25
Temperature, Water	NS	deg C	17.71	29.07	21
Turbidity	<29	NTU	2.47	2.74	0.97

Notes:

1. Parameter MCL is a Surface Water Criterion (Chapter 62-302 F.A.C.).
2. Parameter MCL is calculated by the following formula: CrIII < e^(0.819*[ln Hardness]+0.6848).
3. Parameter MCL is calculated by the following formula: Cu < e^(0.8545*[ln Hardness]-1.702).
4. Parameter MCL is calculated by the following formula: Ni < e^(0.846*[ln Hardness]+0.0584).
5. Parameter MCL is calculated by the following formula: Zn < e^(0.8473*[ln Hardness]+0.884).
6. Turbidity MCL is 29 NTUs over background levels
7. MCL = Maximum Contamination Level.
8. Shaded = Sample result above the MCL.
9. mg/L = milligrams per liter.
10. ug/L = micrograms per liter.
11. umhos/cm = micromhos/centimeter
12. NTU = nephelometric turbidity units.
13. NS = No numeric standard has been set for this analyte.
14. mV = millivolts
15. **I** = Analyte detected below quantitation limits.
16. **U** = Analyte concentration was below the laboratory detection limit (value shown).
17. **V** = Analyte was detected in the sample and associated method blank.
18. **B** = Results based upon colony counts outside the acceptable range.

Surface Water Summary of Detected Parameters, Stream-3B2B

Parameter	MCL	Units	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds					
1,1,2-Trichloroethane	16	ug/L	0.4 **U**	0.46 **U**	0.46 **U**
Acetone	1700	ug/L	1.7 **I**	1 **U**	1.6 **I**
Carbon tetrachloride	4.42	ug/L	0.57 **U**	0.57 **U**	0.6 **U**
trans-1,3-Dichloropropene	NS	ug/L	0.42 **U**	0.29 **U**	0.2 **U**
Toluene	480	ug/L	0.45 **U**	0.45 **U**	0.45 **U**
Metals					
Antimony	4300	ug/L	0.058 **I**	0.079 **I**	0.11 **I**
Arsenic	50	ug/L	0.42 **I**	0.83 **I**	0.37 **I**
Barium	NS	ug/L	15	18	7.4
Cadmium	See below	ug/L	0.028 **U**	0.028 **U**	0.064 **U**
Calculated Cadmium MCL	Calculated	ug/L	0.26	0.26	0.25
Chromium	See below	ug/L	0.6 **I**	0.73 **I**	0.59 **I**
Calculated Chromium MCL	Calculated	ug/L	83.35	83.35	80.49
Cobalt	NS	ug/L	0.19 **U**	0.19 **U**	0.19 **U**
Copper	See below	ug/L	0.29 **I**	0.76	0.39 **I**
Calculated Copper MCL	Calculated	ug/L	9.01	9.01	8.69
Iron	1000	ug/L	170	470	500
Lead	See below	ug/L	0.24 **U**	0.24 **U**	0.24 **U**
Calculated Lead MCL	Calculated	ug/L	3.02	3.02	2.86
Nickel	See below	ug/L	0.72 **I**	0.45 **I**	0.98 **U**
Calculated Nickel MCL	Calculated	ug/L	50.39	50.39	48.61
Selenium	5	ug/L	0.58 **U**	0.58 **U**	0.58 **U**
Silver	0.07	ug/L	0.027 **U**	0.027 **U**	0.1 **U**
Vanadium	NS	ug/L	0.91 **I**	1.7 **I**	1.2 **I**
Zinc	See below	ug/L	11	7.4 **U**	11
Calculated Zinc MCL	Calculated	ug/L	115.74	115.74	111.64
General Chemistry					
Ammonia- Un-ionized (NH3)	0.02	mg/L	0.000088 **U**	0.00029 **I**	0.000082 **I**
BOD	NS	mg/L	2 **U**	2 **U**	18
COD	NS	mg/L	28 **I**	42 **I**	43 **I**
Chlorophyll a	NS	ug/L	1 **U**	1 **U**	1.1 **I**
Coliform Fecal	800	#/100 mL	224	40 **B**	6300
Hardness	NS	mg/L	96	96	92
Nitrate (N)	NS	mg/L	0.18 **U**	4.2	0.18 **U**
Nitrogen- Total	NS	mg/L	0.48	---	0.88
Phosphorus- Total	NS	mg/L	0.28	0.25	0.86
Residues- Filterable (TDS)	NS	mg/L	250	160	180
Carbon- Total Organic	NS	mg/L	8.3	11	13
Residues- Nonfilterable (TSS)	NS	mg/L	2 **U**	4.2	2.2
Field Parameters					
Conductivity	1275	umhos/cm	452	291	257.6
Dissolved Oxygen	>5	mg/L	5.33	3.74	5.28
Oxidation Reduction Potential	NS	mV	77.2	37.1	93.5
pH	6.5-8.5	SU	6.78	6.7	6.51
Temperature, Water	NS	deg C	22.83	26.96	20.7
Turbidity	<29	NTU	1.69	4.62	1.64

Notes:

1. Parameter MCL is a Surface Water Criterion (Chapter 62-302 F.A.C.).
2. Parameter MCL is calculated by the following formula: CrIII < e^(0.819*[ln Hardness]+0.6848).
3. Parameter MCL is calculated by the following formula: Cu < e^(0.8545*[ln Hardness]-1.702).
4. Parameter MCL is calculated by the following formula: Ni < e^(0.846*[ln Hardness]+0.0584).
5. Parameter MCL is calculated by the following formula: Zn < e^(0.8473*[ln Hardness]+0.884).
6. Turbidity MCL is 29 NTUs over background levels
7. MCL = Maximum Contamination Level.
8. Shaded = Sample result above the MCL.
9. mg/L = milligrams per liter.
10. ug/L = micrograms per liter.
11. umhos/cm = micromhos/centimeter
12. NTU = nephelometric turbidity units.
13. NS = No numeric standard has been set for this analyte.
14. mV = millivolts
15. **I** = Analyte detected below quantitation limits.
16. **U** = Analyte concentration was below the laboratory detection limit (value shown).
17. **V** = Analyte was detected in the sample and associated method blank.
18. **B** = Results based upon colony counts outside the acceptable range.

Surface Water Summary of Detected Parameters, Stream-3C2

Parameter	MCL	Units	Feb-16	Feb-17	Aug-17	Feb-18
Volatile Organic Compounds						
1,1,2-Trichloroethane	16	ug/L	0.4 **U**	0.4 **U**	0.46 **U**	0.46 **U**
Acetone	1700	ug/L	1 **U**	1.6 **I**	1 **U**	1.1 **I**
Carbon tetrachloride	4.42	ug/L	0.57 **U**	0.57 **U**	0.57 **U**	0.6 **U**
trans-1,3-Dichloropropene	NS	ug/L	0.42 **U**	0.42 **U**	0.29 **U**	0.2 **U**
Toluene	480	ug/L	0.45 **U**	0.45 **U**	0.45 **U**	0.45 **U**
Metals						
Antimony	4300	ug/L	0.15 **I**	0.14 **I**	0.3 **I**	0.13 **I**
Arsenic	50	ug/L	0.43 **I**	0.38 **I**	1.4	0.42 **I**
Barium	NS	ug/L	6.2	8.6	6.9	6
Cadmium	See below	ug/L	0.045 **I**	0.028 **U**	0.028 **U**	0.064 **U**
Calculated Cadmium MCL	Calculated	ug/L	0.23	0.27	0.24	0.23
Chromium	See below	ug/L	0.81 **I**	1.5 **I**	0.69 **I**	0.68 **I**
Calculated Chromium MCL	Calculated	ug/L	71.79	86.18	74.71	71.79
Cobalt	NS	ug/L	0.19 **U**	0.19 **U**	0.33 **I**	0.19 **U**
Copper	See below	ug/L	0.69 **I**	0.29 **I**	0.38 **I**	0.5 **I**
Calculated Copper MCL	Calculated	ug/L	7.71	9.33	8.04	7.71
Iron	1000	ug/L	190	85 **I**	1200	280
Lead	See below	ug/L	0.24 **U**	0.24 **U**	0.24 **U**	0.24 **U**
Calculated Lead MCL	Calculated	ug/L	2.39	3.18	2.55	2.39
Nickel	See below	ug/L	0.63 **I**	0.11 **U**	0.83	0.98 **U**
Calculated Nickel MCL	Calculated	ug/L	43.19	52.16	45.01	43.19
Selenium	5	ug/L	0.79 **I**	0.58 **U**	0.58 **U**	0.58 **U**
Silver	0.07	ug/L	0.027 **U**	0.027 **U**	0.027 **U**	0.1 **U**
Vanadium	NS	ug/L	1.3 **I**	1.5 **I**	2.1	1.3 **I**
Zinc	See below	ug/L	13	45	7.4 **U**	12
Calculated Zinc MCL	Calculated	ug/L	99.18	119.82	103.36	99.18
General Chemistry						
Ammonia- Un-ionized (NH3)	0.02	mg/L	0.025 **U**	0.00014 **U**	0.000087 **U**	0.000068 **U**
BOD	NS	mg/L	4.1	2 **U**	2 **U**	2 **U**
COD	NS	mg/L	33 **I**	45 **I**	40 **I**	49 **I**
Chlorophyll a	NS	ug/L	2.1	1 **U**	1.3	1 **U**
Coliform Fecal	800	#/100 mL	62	---	30 **B**	60
Hardness	NS	mg/L	80	100	84	80
Nitrate (N)	NS	mg/L	0.18 **U**	0.18 **U**	0.18 **U**	0.18 **U**
Nitrogen- Total	NS	mg/L	0.43	0.21	---	0.49
Phosphorus- Total	NS	mg/L	0.5	0.43	0.77	0.65
Residues- Filterable (TDS)	NS	mg/L	160	240	190	200
Carbon- Total Organic	NS	mg/L	12	9.2	12	13
Residues- Nonfilterable (TSS)	NS	mg/L	3	1 **U**	2.8	1.2
Field Parameters						
Conductivity	1275	umhos/cm	248	390	354	267.6
Dissolved Oxygen	>5	mg/L	7.8	7.13	2.47	6.47
Oxidation Reduction Potential	NS	mV	---	140.1	20	31.3
pH	6.5-8.5	SU	7.17	7.03	6.61	6.66
Temperature, Water	NS	deg C	18.64	20.83	28.15	23.1
Turbidity	<29	NTU	2.4	1.08	6.2	1.79

Notes:

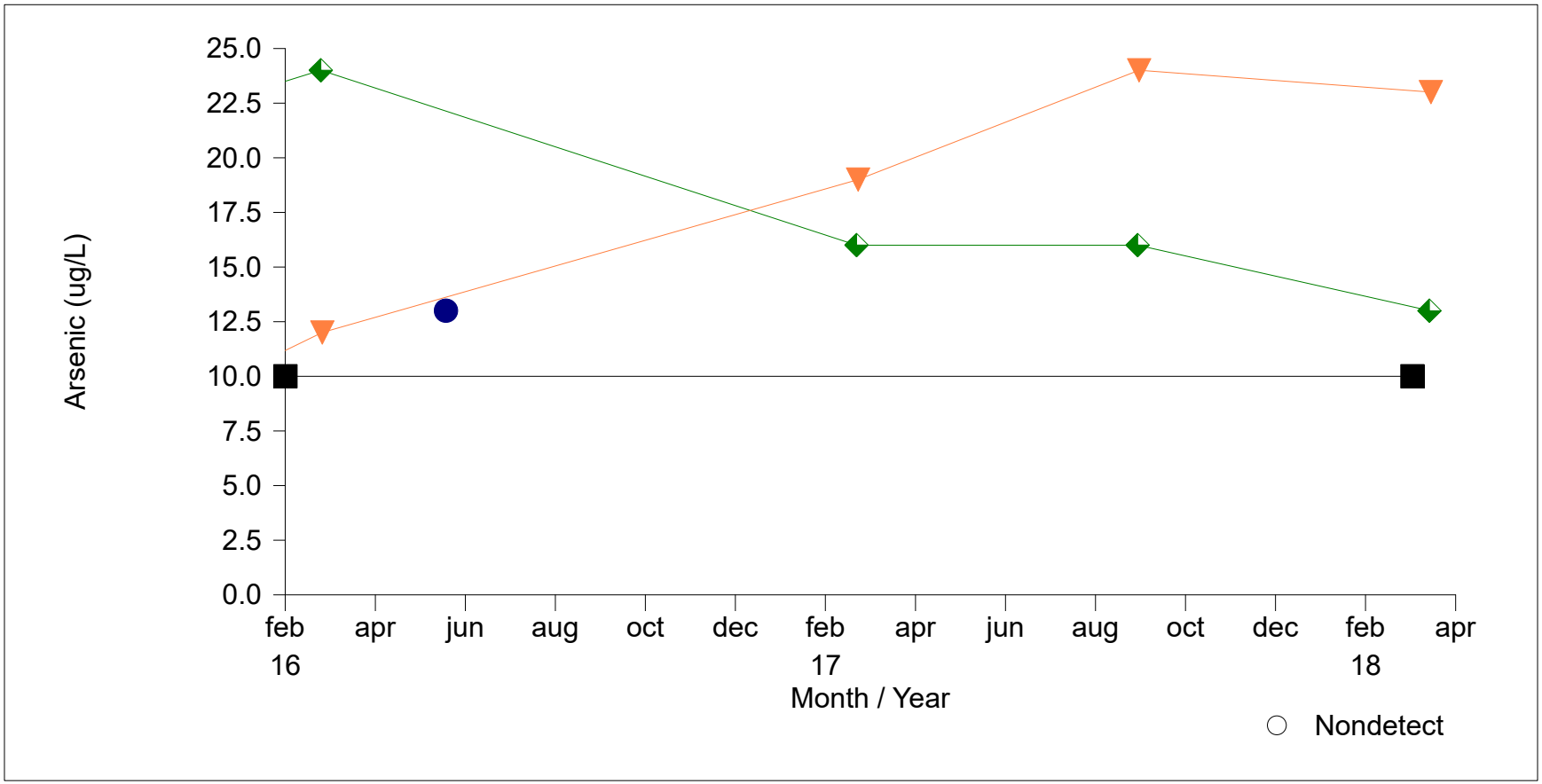
1. Parameter MCL is a Surface Water Criterion (Chapter 62-302 F.A.C.).
2. Parameter MCL is calculated by the following formula: CrIII < e^(0.819*[ln Hardness]+0.6848).
3. Parameter MCL is calculated by the following formula: Cu < e^(0.8545*[ln Hardness]-1.702).
4. Parameter MCL is calculated by the following formula: Ni < e^(0.846*[ln Hardness]+0.0584).
5. Parameter MCL is calculated by the following formula: Zn < e^(0.8473*[ln Hardness]+0.884).
6. Turbidity MCL is 29 NTUs over background levels
7. MCL = Maximum Contamination Level.
8. Shaded = Sample result above the MCL.
9. mg/L = milligrams per liter.
10. ug/L = micrograms per liter.
11. umhos/cm = micromhos/centimeter
12. NTU = nephelometric turbidity units.
13. NS = No numeric standard has been set for this analyte.
14. mV = millivolts
15. **I** = Analyte detected below quantitation limits.
16. **U** = Analyte concentration was below the laboratory detection limit (value shown).
17. **V** = Analyte was detected in the sample and associated method blank.
18. **B** = Results based upon colony counts outside the acceptable range.

APPENDIX C

TIME SERIES PLOTS OF WATER QUALITY TRENDS

Southeast County Landfill

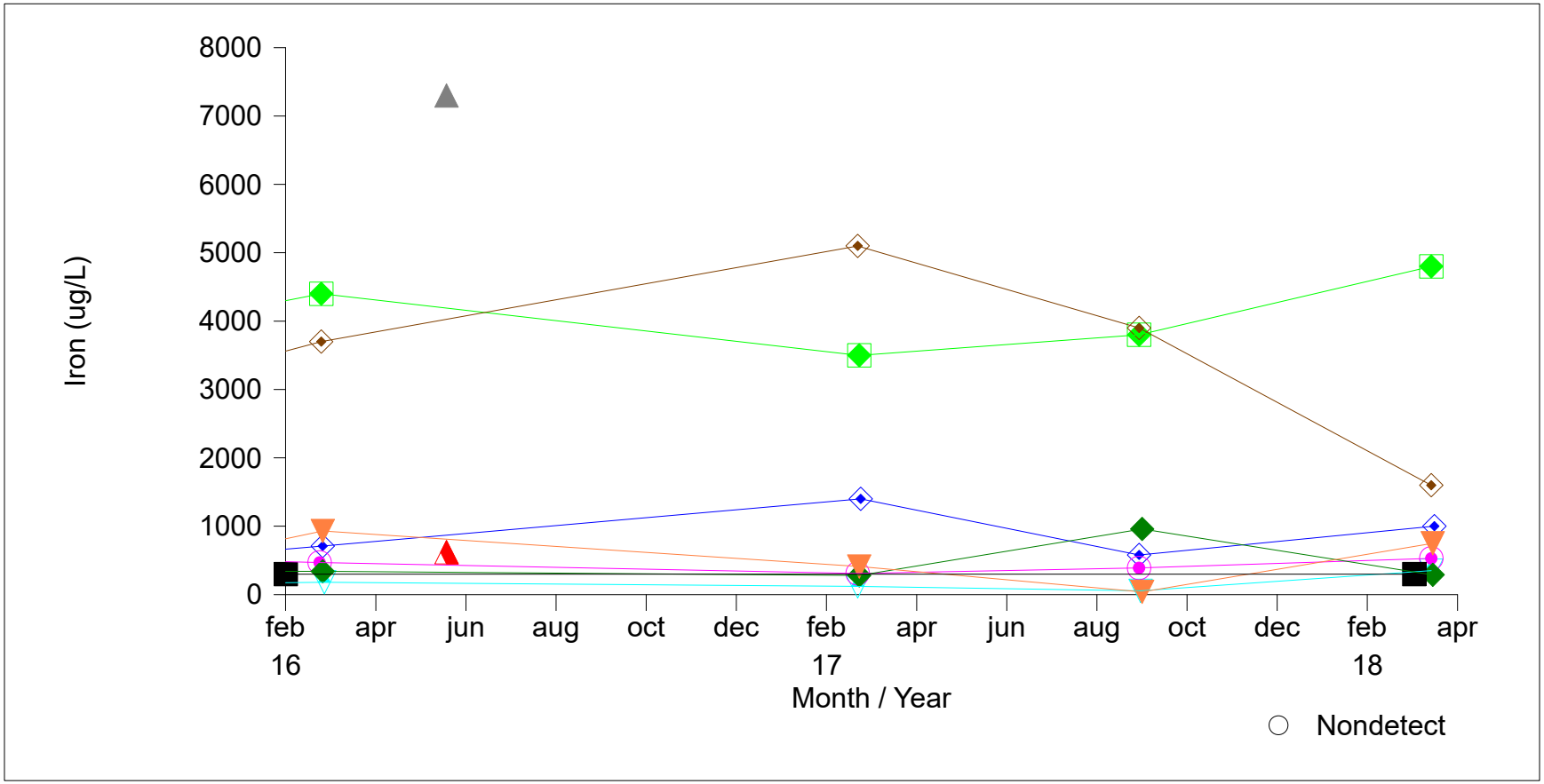
Arsenic Exceedances at Surficial Wells



Prepared by: SCS Engineers

Southeast County Landfill

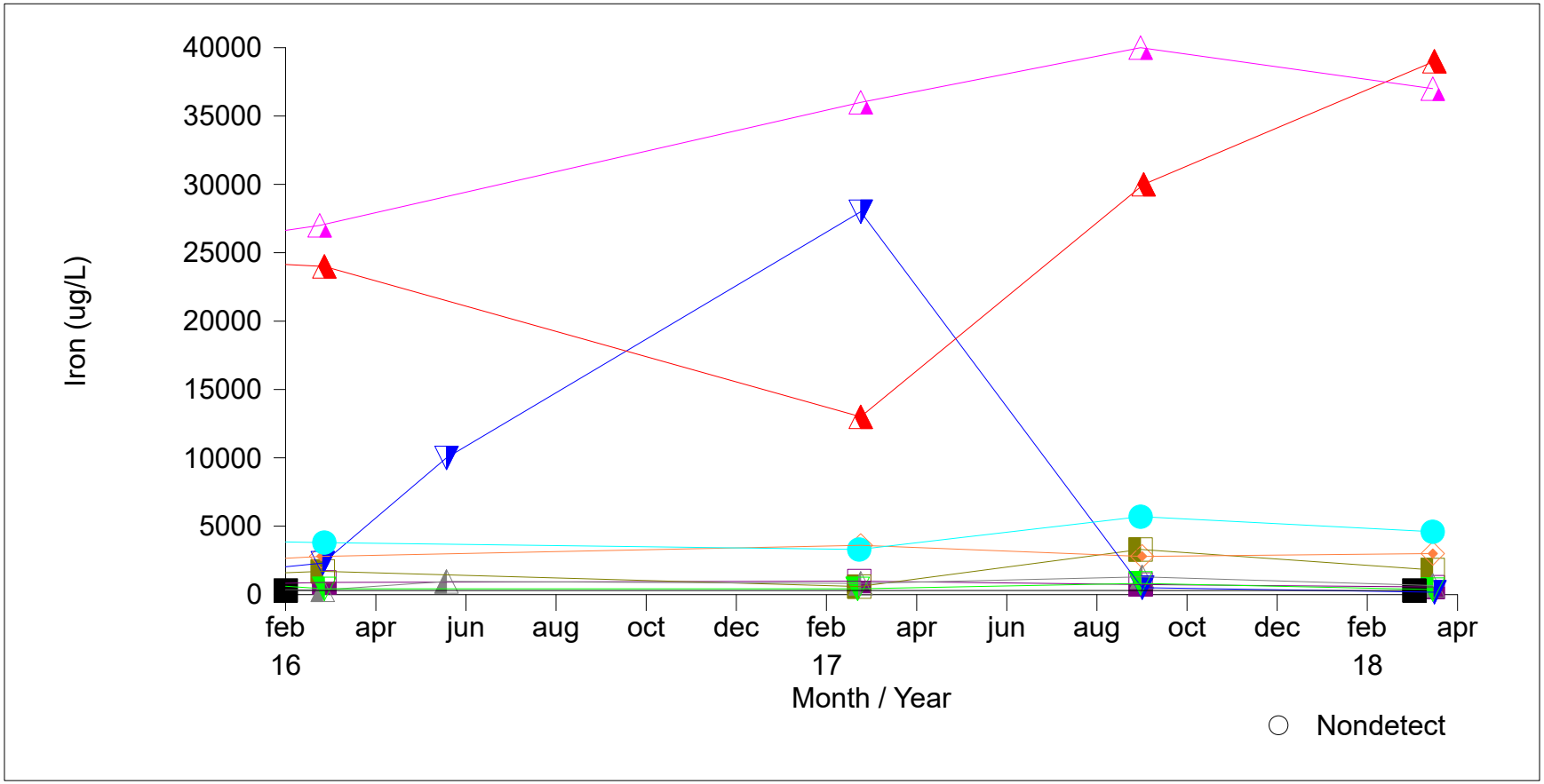
Iron Exceedances at Surficial Wells



Prepared by: SCS Engineers

Southeast County Landfill

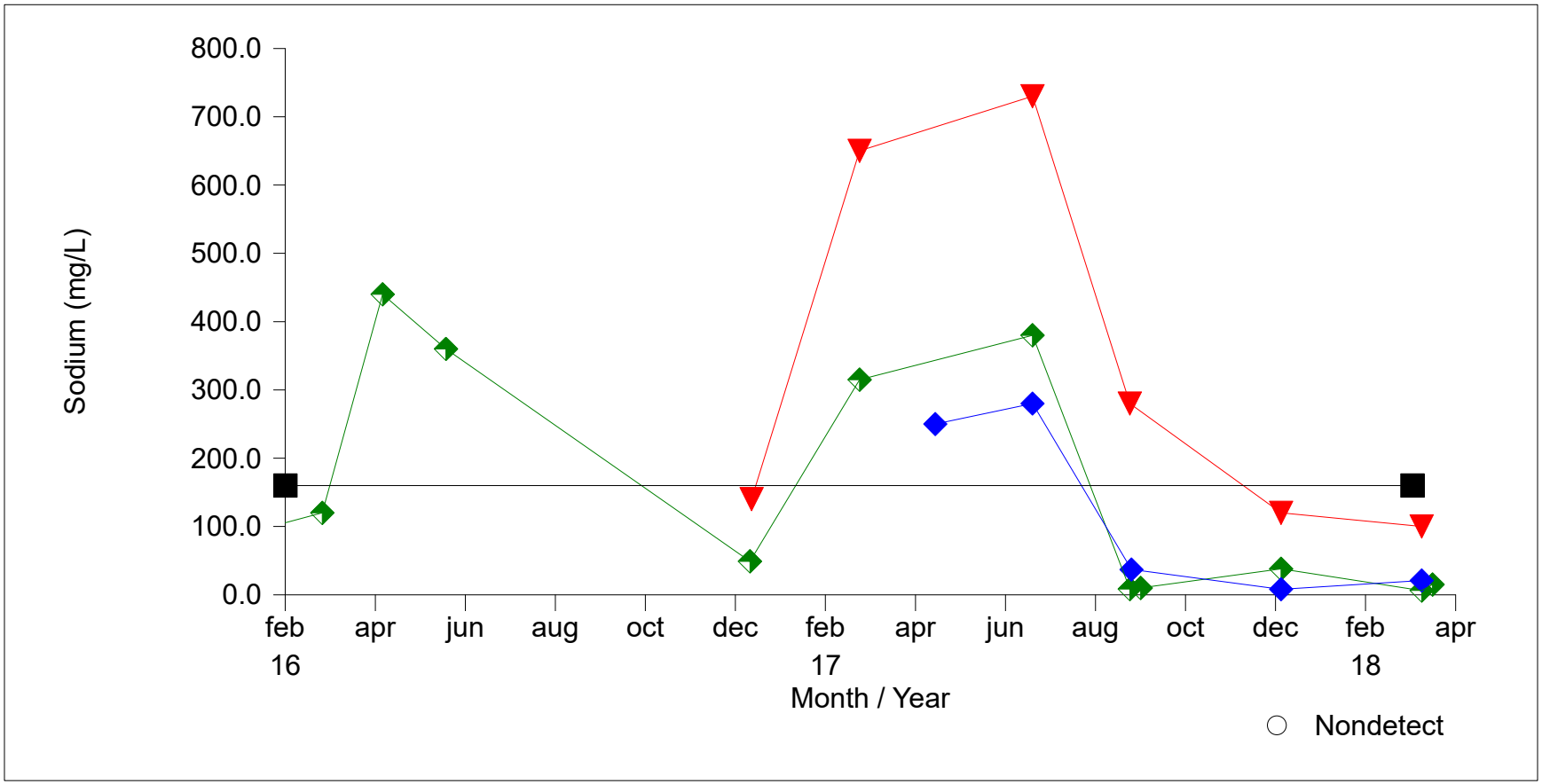
Iron Exceedances at Surficial Wells



Prepared by: SCS Engineers

Southeast County Landfill

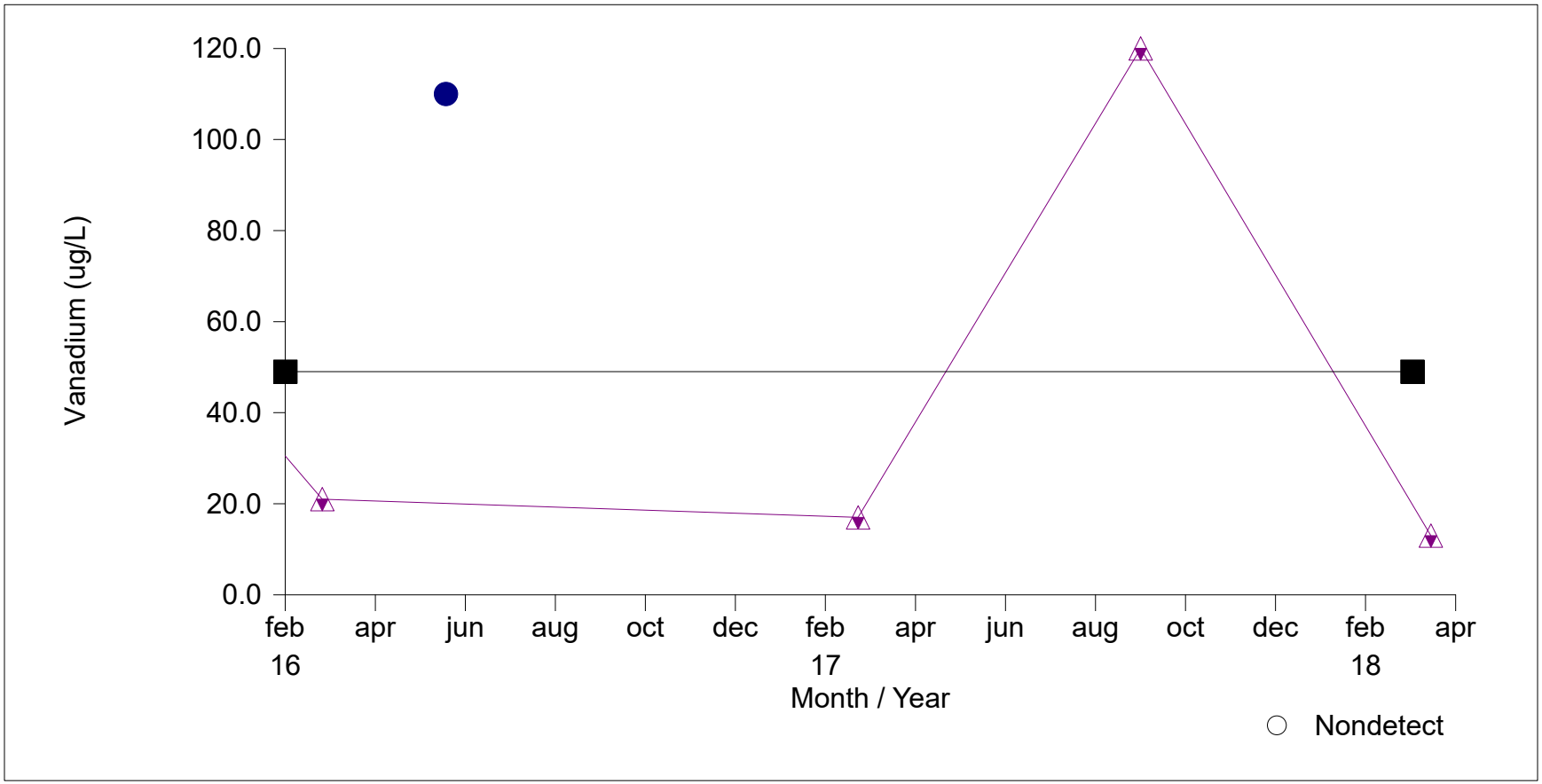
Sodium Exceedances at Surficial Wells



Prepared by: SCS Engineers

Southeast County Landfill

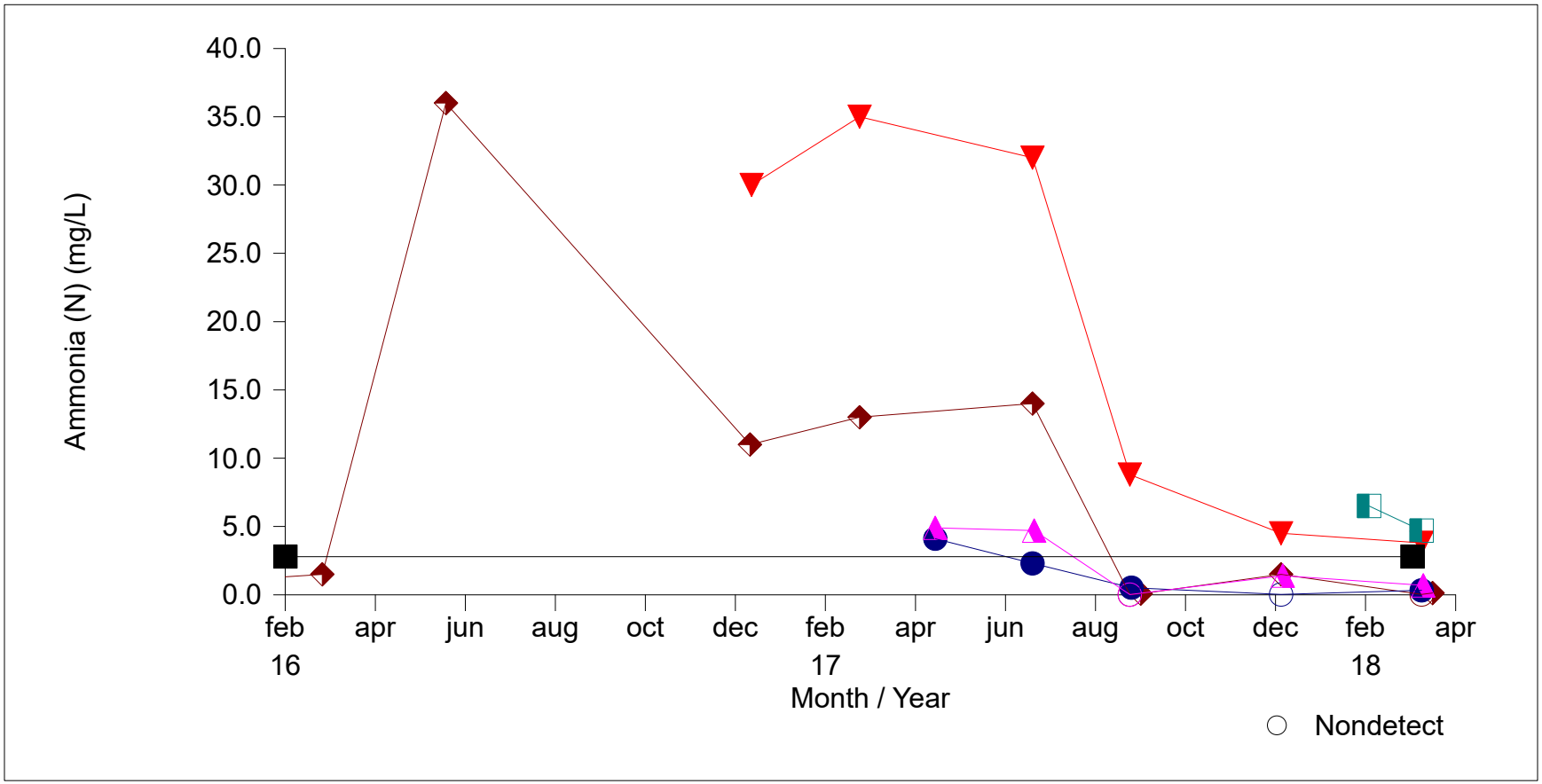
Vanadium Exceedances at Surficial Wells



Prepared by: SCS Engineers

Southeast County Landfill

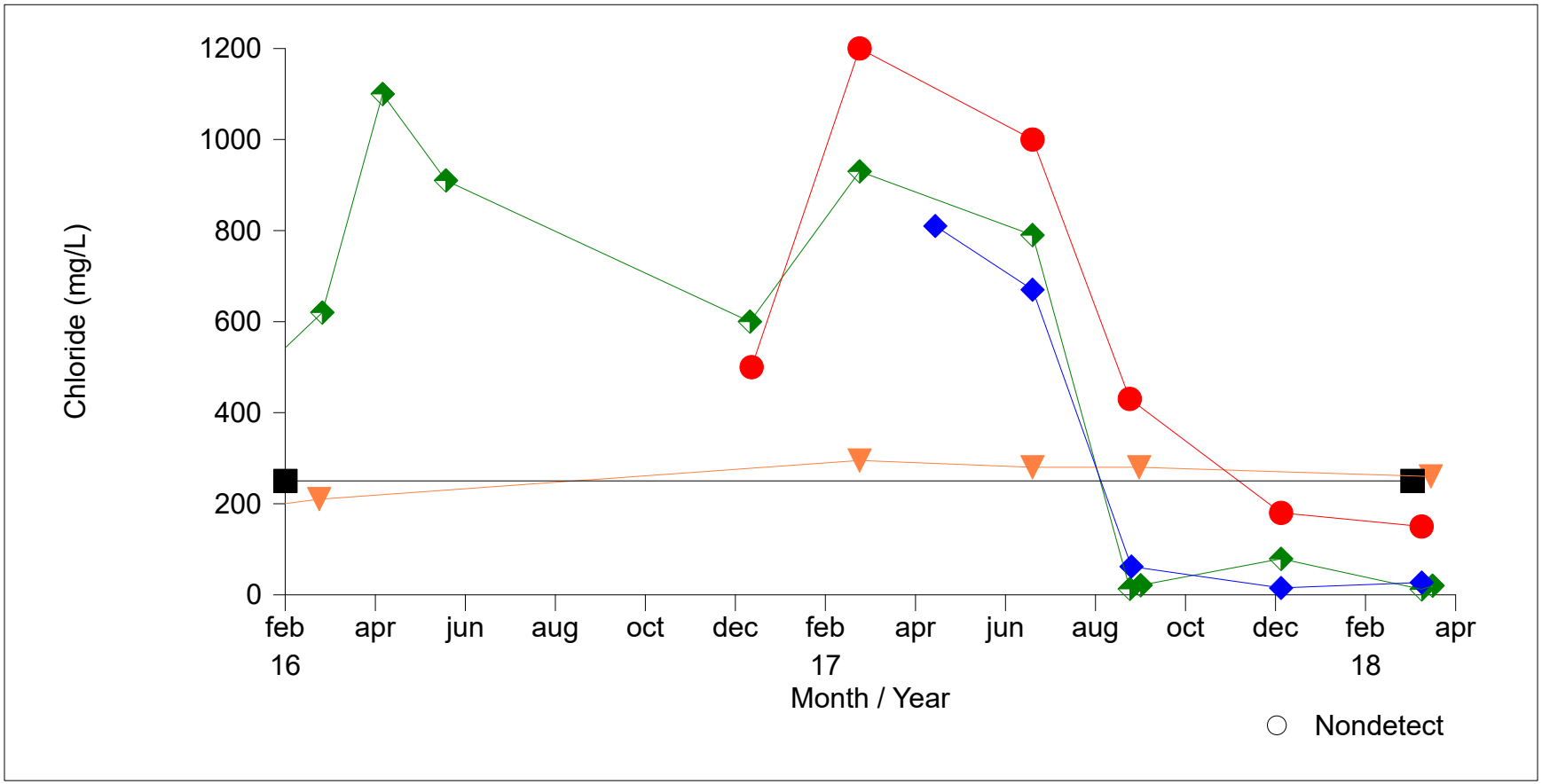
Ammonia (N) Exceedances at Surficial Wells



Prepared by: SCS Engineers

Southeast County Landfill

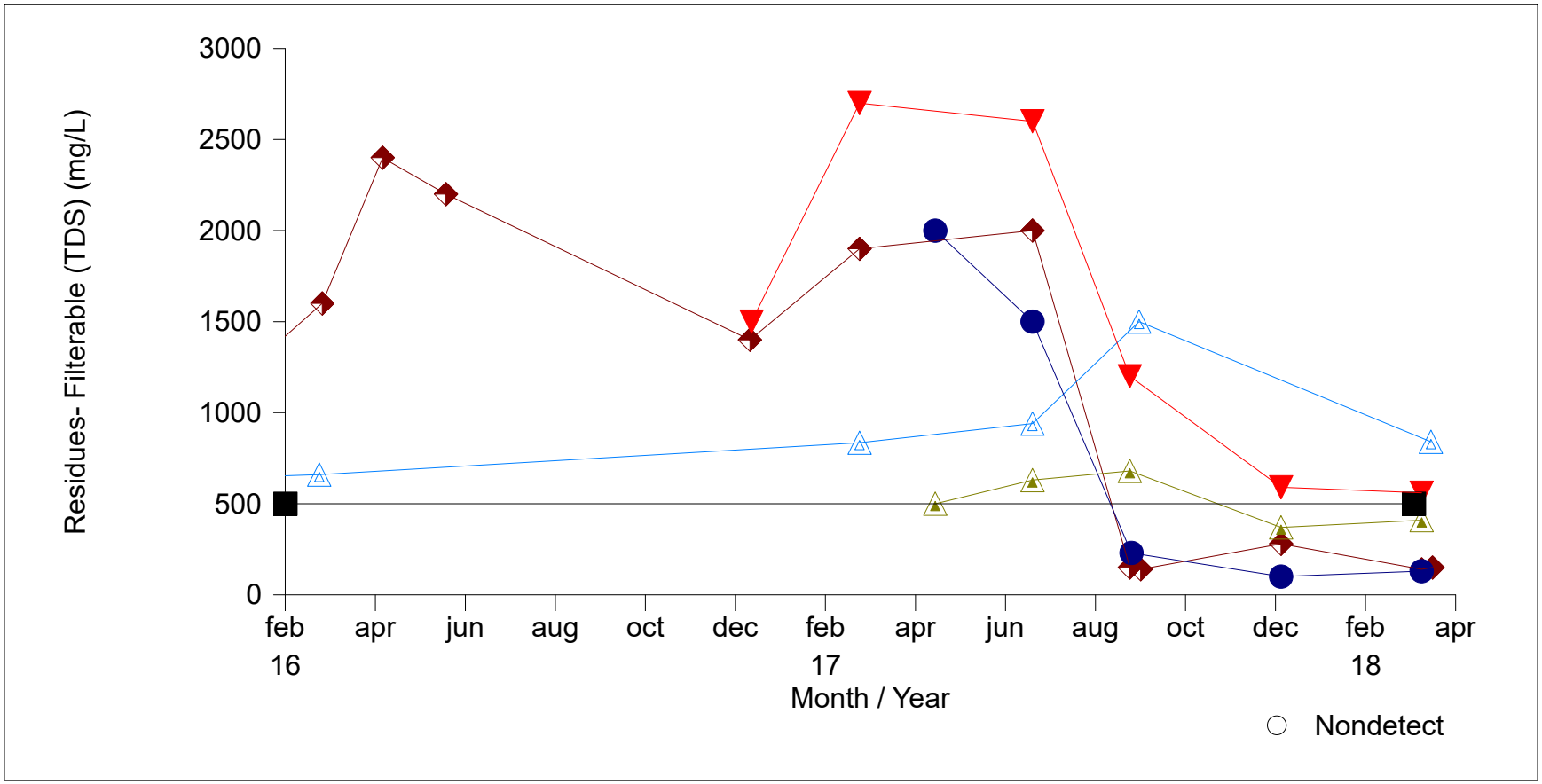
Time Series Plot for Chloride



Prepared by: SCS Engineers

Southeast County Landfill

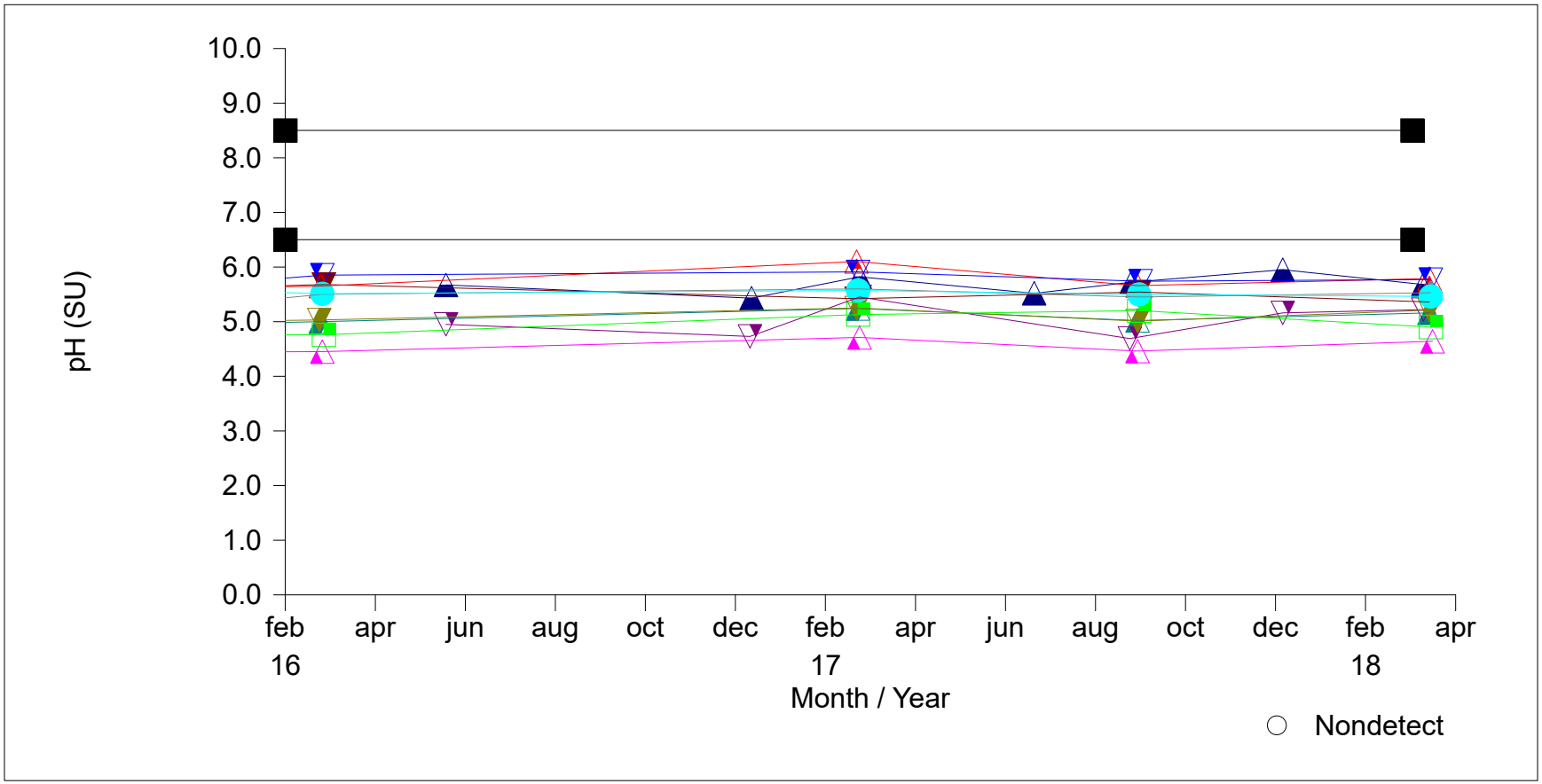
Total Dissolved Solids Exceedances at Surficial Wells



Prepared by: SCS Engineers

Southeast County Landfill

pH Exceedances at Surficial Wells

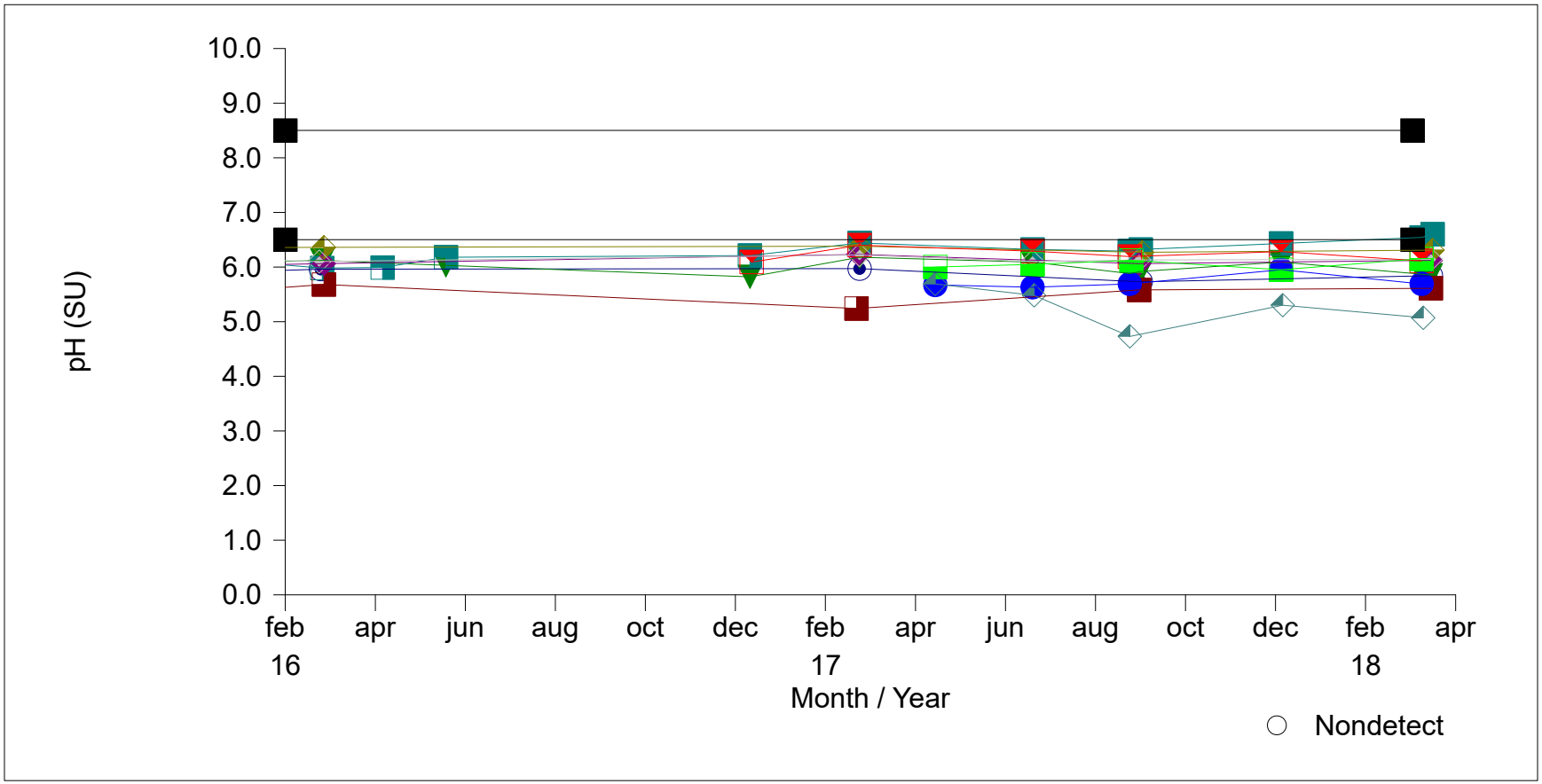


TH-20B	TH-36A	TH-58	TH-64	Upper pH SDWS
TH-22A	TH-38B	TH-61	TH-65	
TH-28A	TH-57	TH-61A	Lower pH SDWS	

Prepared by: SCS Engineers

Southeast County Landfill

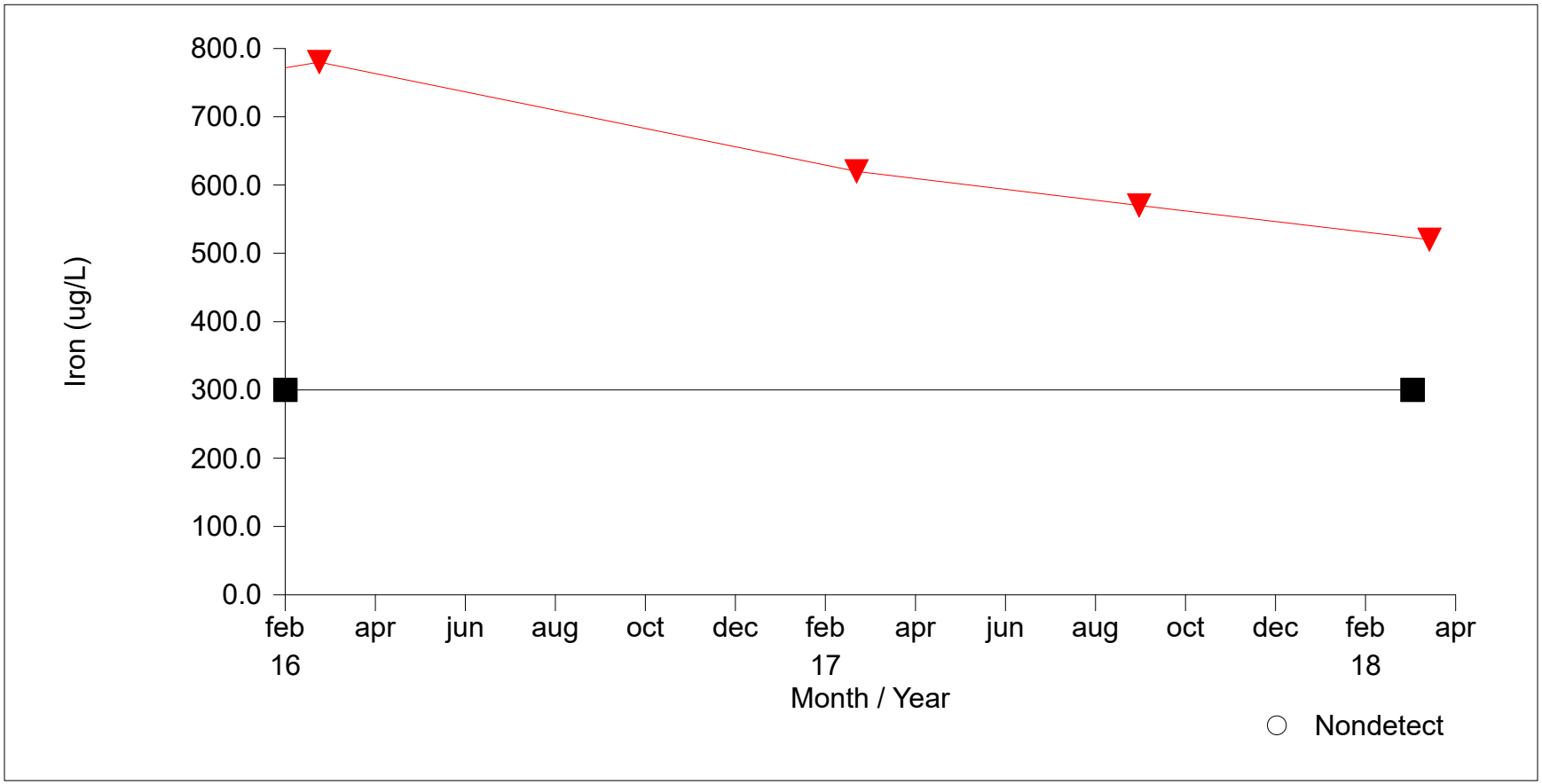
pH Exceedances at Surficial Wells



Prepared by: SCS Engineers

Southeast County Landfill

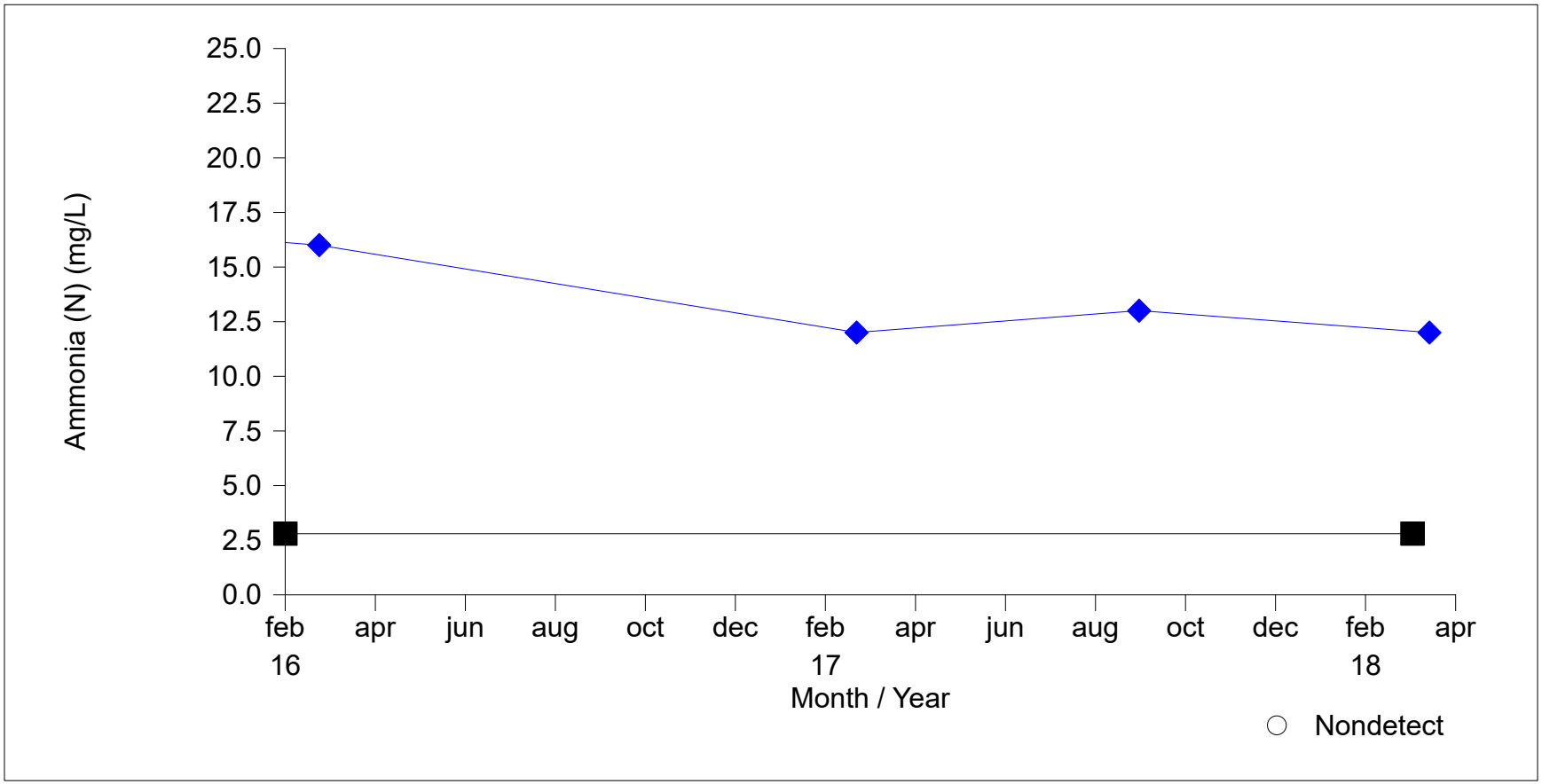
Iron Exceedances at Floridan Well TH-72



Prepared by: SCS Engineers

Southeast County Landfill

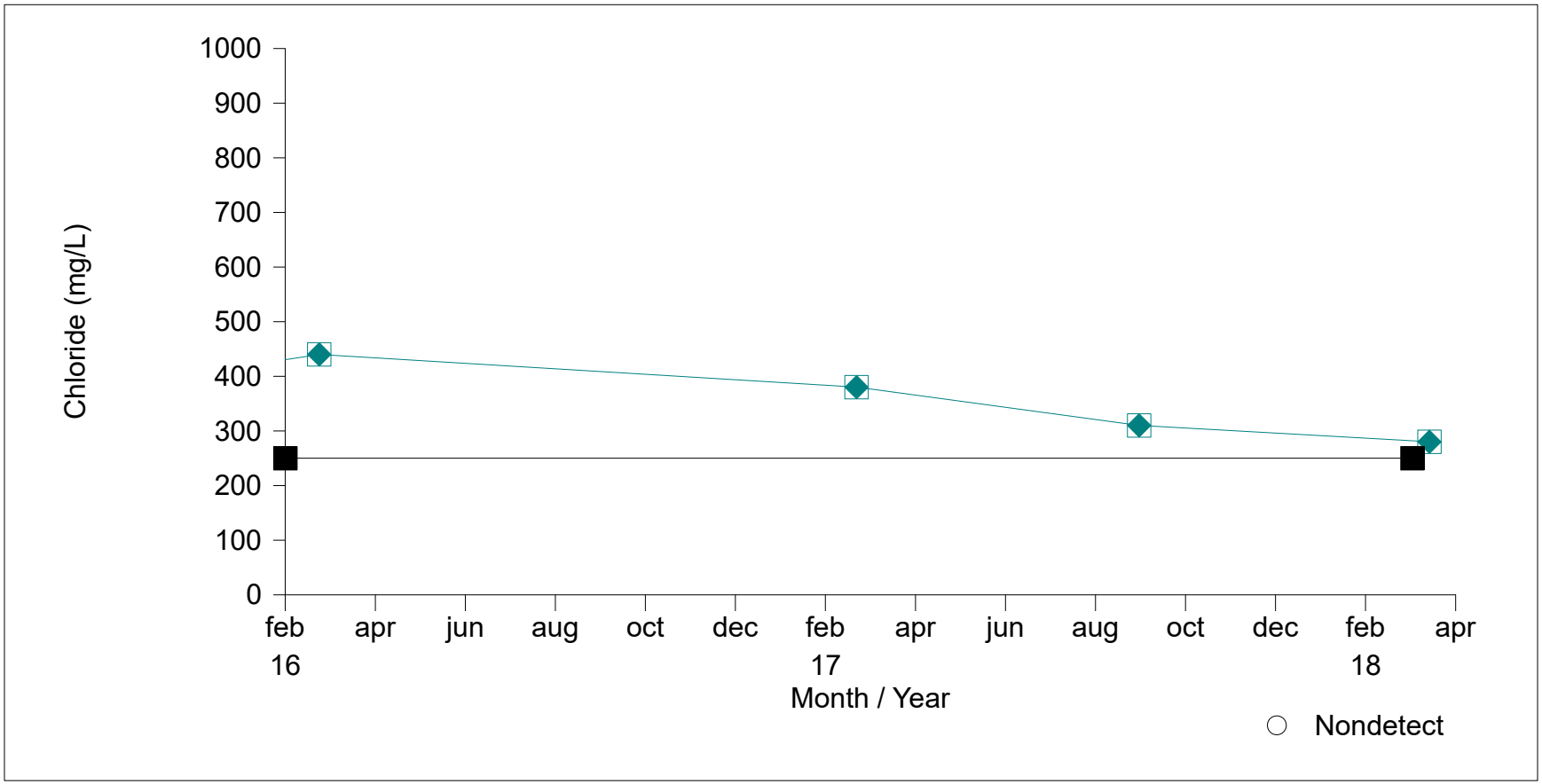
Ammonia (N) Exceedances at Floridan Well TH-72



Prepared by: SCS Engineers

Southeast County Landfill

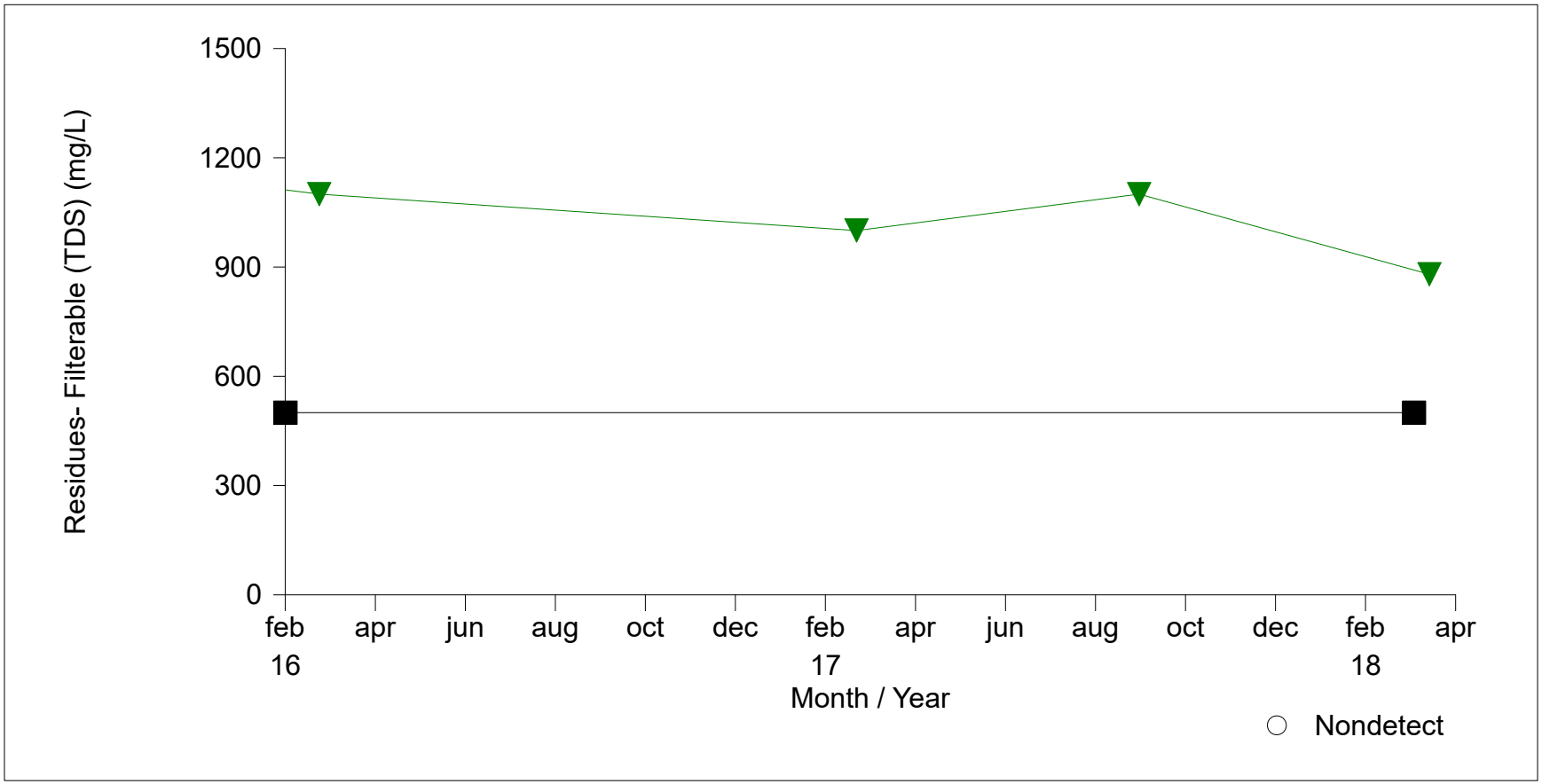
Chloride Exceedances at Floridan Well TH-72



Prepared by: SCS Engineers

Southeast County Landfill

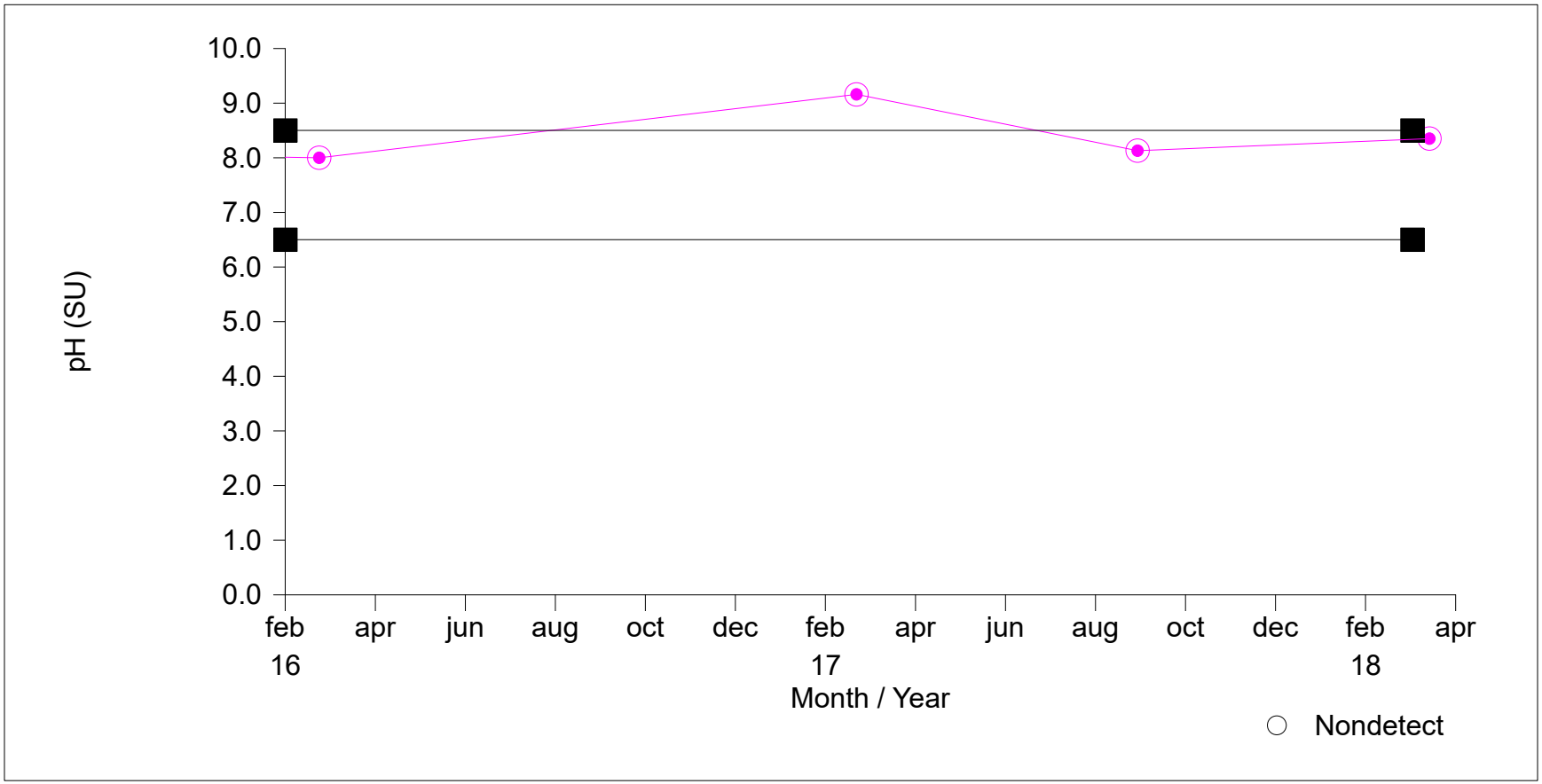
Total Dissolved Solids Exceedances at Floridan Well TH-72



Prepared by: SCS Engineers

Southeast County Landfill

pH Exceedances at Floridan Well TH-78



Prepared by: SCS Engineers