SARASOTA COUNTY
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
WATER QUALITY MONITORING – FINAL PHASE 1 REPORT
TECHNICAL REPORT
SECOND SEMIANNUAL 2015 THROUGH SECOND SEMIANNUAL 2017

WACS Facility ID: 51614
FDEP Permit Modification No.: 0130542-028-SO-IM

FDEP Due Date: June 2018

Prepared for:

Sarasota County – Solid Waste Operations

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Professional Engineering Certificate of Authorization #1841

Professional Geology Certificate of Authorization #133

June 2018

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INTRODUCTION

Sarasota County Solid Waste Operations owns and operates the Sarasota County Central County Solid Waste Disposal Complex (CCSWDC). The current Florida Department of Environmental Protection (FDEP) permit for the site is Permit No. 0130542-022-SO-01, Permit Modification No. 0130542-028-SO-IM. The permit was issued on January 6, 2014; the permit modification was issued on May 2, 2017.

This Technical Report is required by the permit and is referred to as the "Final Phase 1 Report". The report covers the Second Semiannual 2015 through the Second Semiannual 2017 sampling events and is due to FDEP during the month of June 2018. The information in this report focuses on the time period referenced above – which is referred to as the "report period" throughout the text of this document.

The CCSWDC includes the operation and maintenance of a Class I landfill with leachate collection and storage. The site includes a closed Phase I landfill cell (approximately 55 acres) and an active Phase II landfill cell (approximately 63 acres). The groundwater and surface water monitoring network in place at this time is for monitoring these areas of the site. The CCSWDC includes other support facilities and functions and the County solid waste administration building. Also included are a yard waste processing facility, a C&D processing facility, a Household Hazardous Waste and Citizen's Convenience Center, and a waste tire processing facility.

The groundwater and surface water monitoring requirements are described in the permit in Section 2 – D. Water Quality Monitoring Requirements and in Appendix 3. – Monitoring Plan Implementation Schedule (MPIS).

As described in permit Section 2 – D. Water Quality Monitoring Requirements – Specific Conditions No. 1 and 2, the CCSWDC has a Primary Zone of Discharge (ZOD) and a Secondary ZOD. The Primary ZOD is a "typical" ZOD, 100-feet from the limits of the landfilled areas. The Secondary ZOD is defined as a downgradient boundary line connecting the Natural Attenuation Monitoring (NAM) wells.

The permit also establishes site-specific alternative background concentrations for four parameters as listed in Specific Condition 3 – Iron, Total Dissolved Solids, Sodium, and Chloride.

The Primary ZOD shall not have Class G-II water quality standards and the site-specific alternative background concentrations exceeded outside of the ZOD boundary, except for Ammonia-N, Arsenic, Iron, Total Dissolved Solids, and Manganese. Additionally, at the Primary ZOD, the alternative background concentrations for Sodium and Chloride are established for compliance purposes.

The Secondary ZOD shall not have Class G-II water quality standards and the alternative background concentrations of Iron, Total Dissolved Solids, Sodium, and Chloride exceeded at the ZOD boundary.

Class G-II water quality standards are defined as the FDEP Primary Drinking Water Standards (PDWS), Secondary Drinking Water Standards (SDWS), and the Chapter 62-777 Florida Administrative Code (FAC) Groundwater Cleanup Target Levels (GCTL).

The history of the groundwater quality monitoring work at the CCSWDC is extensive. Significant information, investigations, and reports are available in the record. In particular, major studies were historically conducted at the site to determine the causes of elevated Ammonia, Arsenic, and Iron concentrations in groundwater at the facility. The studies indicated that the elevated concentrations of these and other constituents were the result of reductive dissolution conditions created in the site groundwater by development of the landfill property. The reductive dissolution conditions are found throughout areas of the site where fill material has been placed and where the natural environment has been altered. The reductive dissolution issue appears to be especially enhanced near areas where landfill-liner has been placed. The studies also noted that reductive dissolution conditions should be reduced or reversed as groundwater flows away from the landfill through undeveloped portions of the property. The FDEP has acknowledged the existence of the reductive dissolution phenomenon and included provisions for a Primary and Secondary ZOD in the permit (paraphrased from *Sarasota County, 2013* and *Atkins, 2015*).

During the report period, Consent Order OGC Case No. 08-1728 was closed out by a letter from FDEP dated July 13, 2017. The Order was satisfactorily completed by Sarasota County.

This Technical Report focuses on water quality information during the report period and historical water quality trends. This report conforms with the requirements of the permit and Chapter 62-701.510(8)(b) FAC. The following is a summary of the rule and the location of the associated information within this report:

- Tabular displays of any data, which show that a monitoring parameter has been detected (Attachment 4, 5, and 6), and graphical displays of any leachate key indicator parameter detected (Attachment 7), including hydrographs for all monitoring wells (Attachment 3).
- Trend analyses of any monitoring parameters consistently detected (Section 4.6 and Attachment 9).
- Comparisons among shallow, middle, and deep zone wells (Section 4.7).
- Comparisons between background water quality and the water quality in detection and compliance wells (Section 4.0).
- Correlations between related parameters such as Total Dissolved Solids and Specific Conductance (Section 4.8).
- Discussion of erratic or poorly correlated data (Section 4.9).
- An interpretation of the groundwater contour maps, including an evaluation of groundwater flow rates (Section 3.0).
- An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based on site conditions (Section 3.0).

1 PHYSICAL LOCATION AND GEOLOGICAL SETTING

1.1 SITE LOCATION

The Sarasota County Central County Solid Waste Disposal Complex (CCSWDC) is in Sarasota County, Florida, approximately 12 miles southeast of the City of Sarasota. The facility property address is 4000 Knights Trail Road, Nokomis, Florida 34275. The facility administration building and scale facilities are at approximately Latitude 27° 11' 33" North and Longitude 82° 23' 45" West. The FDEP permit lists the facility location as Latitude 27° 12' 11" North and Longitude 82° 23' 16" West, which is the approximate center of the closed Phase I landfill cell.

1.2 REGIONAL HYDROGEOLOGICAL SETTING

An extensive site investigation was conducted before the facility was developed and is presented in the document; *Geotechnical Evaluation, Hydrogeological Survey and Groundwater Monitoring Plan Sarasota Central Landfill Complex, Sarasota County, Florida – Ardaman & Associates, Inc., March 10, 1992*. The information provided in this Section 1.2 is largely derived from that document and represents only abridged summaries of the detailed information found in that report.

The general geologic characteristics of the site surficial unit are undifferentiated sediments consisting of sand with varying amounts of silt and clay and fossiliferous sands and shell beds. These sediments generally contain the surficial aquifer – which is the aquifer of concern at the facility. Below these undifferentiated sediments is the Peace River Formation, which comprises the upper Hawthorn Group. Below this unit is the Arcadia Formation, which is the lower Hawthorn Group carbonate section. Below these formations is the Tampa Member. Below these units are the Suwannee, Ocala, and Avon Park Limestones that form the Floridan Aquifer. The surficial, intermediate, and Floridan aquifer systems represent the three hydrogeologic systems at the site.

The surficial aquifer system consists of approximately 10 to 15 feet or more of sandy undifferentiated sediments. The direction of groundwater movement in the surficial aquifer is locally controlled by natural surface drainage and man-made drainage features.

The intermediate aquifer system consists of all the sediments (formations) that are between the surficial aquifer system and the Floridan Aquifer system. These sediments limit the exchange of groundwater between the surficial and Floridan aquifers systems.

The Floridan Aquifer system is found at an approximate elevation of -450 feet National Geodetic Vertical Datum (NGVD) in the area of the facility. The direction of groundwater flow within the Floridan Aquifer at the site is northwest.

1.3 SITE-SPECIFIC HYDROGEOLOGICAL SETTING

The permitted groundwater monitoring wells and piezometers at the facility are installed into the surficial aquifer.

2 SITE-SPECIFIC MONITORING PROGRAM

The groundwater monitoring and surface water monitoring requirements are outlined in Appendix 3 – Monitoring Plan Implementation Schedule (MPIS) of the FDEP permit. The MPIS monitoring network Table 1 references 10 groundwater monitoring wells, two piezometers, and two surface water stations. Table 2 of the MPIS references four Natural Attenuation Monitoring (NAM) wells. Table 2-1 summarizes the monitoring points and their designations. Attachment 1 provides a site map.

Table 2-1 Monitoring Sites

Testsite Name	Testsite WACS ID	Designation	Aquifer
MW-1R	20585	Background	Surficial
MW-8A	21453	Detection	Surficial
MW-9	4509	Detection	Surficial
MW-10R	4510	Detection	Surficial
MW-15	23031	Detection	Surficial
MW-16	23032	Detection	Surficial
MW-17	23033	Detection	Surficial
MW-18R	29095	Detection	Surficial
MW-19A	27140	Detection	Surficial
MW-20A	27141	Detection	Surficial
NAM-1	29091	NAM	Surficial
NAM-2	29092	NAM	Surficial
NAM-3	29093	NAM	Surficial
NAM-4	29094	NAM	Surficial
MW-3	4503	Piezometer	Surficial
MW-5	4505	Piezometer	Surficial
Pond 1 (STW-1)	28824	Surface Water	Surface Water
Pond 2 (STW-2)	28825	Surface Water	Surface Water

Section II, Specific Condition No. 3 of the MPIS requires semiannual sampling of the background and detection wells listed in Table 2-1 for the parameters listed in Table 2-2.

Table 2-2 Background and Detection Wells Semiannual Monitoring Parameter List

Field Parameters	Laboratory Parameters
Static water level in wells before purging	Total Ammonia as N
Dissolved Oxygen	Chloride
pH	Iron
Specific Conductivity	Mercury
Temperature	Nitrate
Turbidity	Sodium
Colors and sheens (by observation)	Manganese
	Sulfate
	Total Dissolved Solids
	Parameters listed in 40 CFR Part 258 Appendix I

Section II, Specific Condition No. 4 of the MPIS requires semiannual sampling of the Natural Attenuation Monitoring wells listed in Table 2-1 for the parameters listed in Table 2-3.

Table 2-3 NAM Wells Semiannual Monitoring Parameter List

Field Parameters	Laboratory Parameters
Static water level in wells before purging	Total Ammonia as N
Dissolved Oxygen	Iron
pH	Manganese
Specific Conductivity	Arsenic
Temperature	Total Dissolved Solids
Turbidity	
Colors and sheens (by observation)	

Section III, Specific Condition No. 2 of the MPIS requires semiannual sampling of the surface water monitoring sites listed in Table 2-1 for the parameters listed in Table 2-4.

Table 2-4 Semiannual Surface Water Monitoring Parameter List

Field Parameters	Laboratory Parameters	
Surface Water Elevation	Unionized Ammonia as N	Total Organic Carbon
Specific Conductivity	Total Hardness as CaCO3	Total Dissolved Solids
pH	Total Nitrogen	Total Suspended Solids
Dissolved Oxygen	Iron	Fecal Coliform
Turbidity	Mercury	Total Phosphorus as P
Temperature	Nitrate	Chlorophyll A
Colors and sheens (by observation)	Biochemical Oxygen Demand (BOD5)	Chemical Oxygen Demand (COD)
	Parameters listed in 40 CFR Part 258 Appendix I	

Appendix 3 of the FDEP permit, the MPIS in Section V, Sub-section D, Specific Condition No. 5 references that total depths of the groundwater monitoring wells must be made at the time of each Technical Report or every 5 years. Sarasota County has collected this information, and it is provided in Attachment 3 of this report.

Appendix 3 of the FDEP permit, the MPIS in Section V, Sub-section F, Specific Condition No. 8 references collection of water levels in other monitoring wells, piezometers, and surface water staff gauges. This information is collected semiannually and reported as required by the permit.

3 WATER QUALITY MONITORING PROGRAM EVALUATION

3.1 REGULATORY REQUIREMENTS

This MPIS "Final Phase 1 Report" Technical Report was prepared by Jones Edmunds and is submitted on behalf of Sarasota County. This report conforms to the requirements outlined in Chapter 62-701.510(8)(b), FAC, and meets the requirements outlined in Appendix 3, MPIS Section H, Specific Condition No. 10 of the FDEP permit.

This report summarizes groundwater analytical data, surface water analytical data, and groundwater and surface water elevation data collected at the facility from the Second Semiannual 2015 through the Second Semiannual 2017 sampling events. This period is referred to as the "report period" throughout this document.

Table 3-1 shows the dates of the sampling events summarized in this report.

Table 3-1 Summary of Sampling Events during the Report Period

Sampling Event	Sampling Date
Second Semiannual 2015 (15S2)	November 2015
First Semiannual 2016 (16S1)	March – April 2016
Second Semiannual 2016 (16S2)	October – November 2016
First Semiannual 2017 (17S1)	March 2017
Second Semiannual 2017 (17S2)	October 2017

Additionally, resampling events were conducted on January 7, 2016 and April 28, 2017 for selected monitoring stations and parameters.

3.2 ADEQUACY OF MONITORING WELL LOCATIONS

3.2.1 GROUNDWATER FLOW DIRECTION – HORIZONTAL WELL PLACEMENT

Attachment 2 includes groundwater contour maps from continuous-round water-level measurements collected during the semiannual monitoring events during the report period. The groundwater contour maps show a south to southwest flow across the site. This direction of groundwater flow parallels the generalized original land surface topography and is consistent with historical observations.

According to the groundwater flow direction shown in the groundwater contour maps, the existing groundwater monitoring network is adequately positioned to monitor groundwater quality within the surficial aquifer from the Phase I and Phase II landfill cells.

3.2.2 GROUNDWATER ELEVATIONS AND HYDROGRAPHS

The permitted and sampled groundwater monitoring wells at the facility are screened in the surficial aquifer. Vertical positioning of the monitoring wells is appropriate to detect potential groundwater contamination from the waste-filled landfill cells at the facility.

Attachment 3 provides historical and report-period hydrographs for the surficial aquifer wells. Table 3-2 provides well construction information and report period minimum and maximum water level measurements.

Groundwater elevations – in the groundwater monitoring wells that require sampling by the permit – ranged from 12.81 to 21.12 feet NGVD over the report period. The highest groundwater elevations for the report period were generally recorded during the First Semiannual 2016 sampling event and the lowest were recorded during the First Semiannual 2017 sampling event.

Table 3-2 Monitoring Well Information and Groundwater Elevation Fluctuation During the Report Period

Well	Well Type	Top-of-Casing Elevation (feet NGVD)	Screened Interval Elevation (feet NGVD)		Groundwater Elevation (feet NGVD)	
			Top	Bottom	Maximum	Minimum
MW-1R	BG	24.428	19.43	9.43	21.12	16.72
MW-8A	DE	35.400	23.65	13.65	19.76	17.55
MW-9	DE	32.08	NA	NA	19.78	17.47
MW-10R	DE	39.49	NA	NA	19.60	17.35
MW-15	DE	44.320	23.92	14.42	19.92	17.49
MW-16	DE	43.730	23.63	14.13	18.96	16.85
MW-17	DE	46.150	23.65	14.15	18.09	16.11
MW-18R	DE	28.330	19.83	9.83	18.52	16.28
MW-19A	DE	27.52	20.02	10.02	18.99	15.68
MW-20A	DE	27.38	19.88	9.88	18.06	15.11
NAM-1	NAM	19.87	15.37	5.37	17.49	14.14
NAM-2	NAM	20.02	15.52	5.52	17.26	13.72
NAM-3	NAM	20.62	16.12	6.12	18.07	14.31
NAM-4	NAM	22.66	16.56	6.56	16.29	12.81

Notes:

1) NA = Not Available.

2) Maximum and Minimum groundwater elevations shown above are from the continuous-round measurements collected before sampling during the semiannual compliance groundwater monitoring events.

3) Well Types:

BG = Background Well.
DE = Detection Well.
NAM = Natural Attenuation Monitoring Well.

3.3 ADEQUACY OF MONITORING FREQUENCY

3.3.1 AVERAGE HORIZONTAL GROUNDWATER VELOCITY CALCULATIONS

The information for the approximation of horizontal groundwater flow velocity within the surficial aquifer monitored by the permitted background, detection, and NAM monitoring wells at the CCSWDC is summarized in this section.

An approximation of horizontal groundwater velocity can be calculated using a modified form of Darcy's equation:

$$v_x = -(K/n)i$$

where: v_x = average horizontal groundwater velocity (feet/day)
K_h = horizontal hydraulic conductivity (feet/day)
i = hydraulic gradient (ratio)
n = effective porosity (percent – entered into the equation as a decimal)

Information for the variables required in this equation were obtained in part from the document; *Geotechnical Evaluation, Hydrogeological Survey and Groundwater Monitoring Plan Sarasota Central Landfill Complex, Sarasota County, Florida – Ardaman & Associates, Inc., March 10, 1992*. The information discussed below was used to determine the variables.

3.3.2 HORIZONTAL HYDRAULIC CONDUCTIVITY

Horizontal hydraulic conductivity (K_h) data were obtained from *Ardaman, 1992 – Table 3 – Monitor Well Construction Details and Insitu Hydraulic Conductivity Results*.

Numerous monitoring wells were installed during this study and hydraulic conductivity testing was conducted on many of the wells. For the purposes of this Technical Report, we used monitoring well data from the referenced study that were located in areas around the present day Phase I and Phase II landfills. These included monitoring wells P-4, P-5, P-6, P-10, P-11, P-12, P-13, and P-14S from the *Ardaman, 1992* study.

The hydraulic conductivity values of the geologic media at the screened interval of the monitoring wells were reported in centimeters per second (cm/sec). These values were converted to feet/day as shown below.

Ardaman, 1992 Well	Horizontal Hydraulic Conductivity (cm/sec)	Horizontal Hydraulic Conductivity (ft/day)
P-4	0.00089	2.52
P-5	Not Available	Not Available
P-6	0.0035	9.92
P-10	0.0033	9.35
P-11	Not Available	Not Available
P-12	Not Available	Not Available
P-13	0.0039	11.06
P-14S	0.0072	20.41

The *Ardaman, 1992* study states:

> *Typically the horizontal hydraulic conductivity ranged between 2 feet/day and 20 feet/day. The horizontal hydraulic conductivity for the fine sand to silty fine sand ranged between 2.5 and 159 feet/day with an average of 33 feet/day from six tests. The horizontal hydraulic conductivity for the silty to clayey fine sands ranged between 4.8 and 54 feet/day with an average of 17 feet/day from six tests.*

For the area around the landfill, the horizontal hydraulic conductivity tests on the wells ranged from 2.52 to 20.41 feet/day as shown in the above table. This information generally agrees with the statement above. Calculations for the approximation of horizontal groundwater velocity within the surficial aquifer for this Technical Report include these two values.

It should be noted that the screened intervals for the monitoring wells on which hydraulic conductivity tests were conducted in the *Ardaman, 1994* study were generally 5 feet in length. The well screen length of currently permitted present day groundwater monitoring wells in the approximate vicinity of the *Ardaman, 1994* wells (referenced in the table above) is generally 10 feet. As a generalization, the wells tested by *Ardaman, 1994* were screened over a below-ground-level interval roughly equivalent to the mid-to-lower 5-foot portion of the currently permitted groundwater monitoring well's 10-foot screened interval. Considering this information, it is evident that horizontal hydraulic conductivity tests conducted on the existing permitted groundwater monitoring wells may yield different data. However, the information provided by the *Ardaman, 1994* study is used herein for generalized calculations of horizontal groundwater velocity.

3.3.3 Hydraulic Gradient

Groundwater elevation data over the report period indicate that groundwater flow is generally south to southwest with respect to the landfilled areas. Early information provided in the *Ardaman, 1*994 report, before development of the facility, indicate similar groundwater flow patterns.

Regional land-surface topographic contours indicate slightly higher ground surface elevations northeast of the site and lower ground surface elevations southwest of the site. Because shallow surficial aquifer groundwater flow often corresponds to ground surface elevation and topography, this also supports the generalized southwest groundwater flow patterns in the vicinity of the site.

With development of a landfill, it is not uncommon to observe changes in groundwater flow patterns as compared to the original undisturbed site within a shallow surficial aquifer because of modifications to the original undisturbed topography and changes in the original undisturbed drainage patterns. During the report period from Second Semiannual 2015 through Second Semiannual 2017 groundwater flow in the surficial aquifer was generally south to southwest from the Phase I and Phase II landfilled areas. During the report period, the wells reporting the highest groundwater elevations varied from one sampling event to another. The highest groundwater elevations were at times reported in the background well MW-1R, piezometer MW-3 on the east portion of the site, or the detection (or compliance) wells along the south side of the Phase I and Phase II areas.

For the purposes of horizontal groundwater velocity calculations, hydraulic gradient (*i*) for the surficial aquifer at the site was determined using groundwater elevation (GWE) differences and the distance between groundwater monitoring wells MW-3 to NAM-1, from MW-9 to NAM-2, and from MW-16 to NAM-4 for each sampling event. These flow paths are typically approximately perpendicular to the groundwater contours and reflect groundwater flow paths from high to low areas of groundwater elevation across the site. Hydraulic gradient was calculated with the following equation:

$$\text{Hydraulic Gradient } (i) = \frac{\text{(GWE in Upgradient Well) – (GWE in Downgradient Well)}}{\text{Distance between wells}}$$

3.3.4 Effective Porosity

Fetter (2001) describes effective porosity as the porosity available for fluid flow. The difference between total porosity and effective porosity only arises when the sediments become cemented and hydraulic dead-ends are produced. For unconsolidated sediments, effective porosity is the total porosity.

Effective porosity can be approximated based upon information provided in the *Ardaman, 1994* report. Detailed analyses of the soils are provided in the report for the borings conducted across the site. For the soil borings associated with the wells discussed above used for the hydraulic conductivity values – the soils over the screened intervals are generally classified as silty and/or clayey fine sands. These soils are classified in the *Ardaman, 1994* report as "SM", "SP", or "SC" soils and/or combinations thereof. The prevailing soil classification over the wells discussed above appears to be "SM". Groundwater in the surficial aquifer at the site can reasonably be assumed to flow through these types of materials.

Table 1, Default Low-Density Soil Characteristics, in Schroeder et al. (1994) provides the following effective porosity values for these soils:

- SM = Total Porosity = 0.437 to 0.473
- SP = Total Porosity = 0.417
- SC = Total Porosity = 0.398 to 0.430

Based on this information and "averaging" for the varied soil classifications, the total porosity (and effective porosity for unconsolidated sediments) is estimated as 0.44 for the soils in this area of the site.

3.3.5 Groundwater Flow Velocity Calculation

The parameters for the horizontal groundwater flow velocity calculation are tabulated and provided in Attachment 3.

The calculated average horizontal groundwater flow velocity (feet/year) over the report period using the low and high hydraulic conductivity values described above are shown below.

- MW-3 to NAM-1 1.8 feet/year (low) 13.8 feet/year (high)
- MW-9 to NAM-2 1.7 feet/year (low) 13.6 feet/year (high)
- MW-16 to NAM-4 3.3 feet/year (low) 26.3 feet/year (high)

Considering these horizontal groundwater flow velocities, groundwater in the surficial aquifer at the site flows an approximate maximum of 13 feet during a 6-month period. The semiannual monitoring frequency for the surficial aquifer appears sufficient based on the calculated average horizontal groundwater velocities.

These calculated horizontal groundwater flow velocities agree reasonably well with information presented by SCS Engineers in *Groundwater Monitoring Plan Evaluation, June 28, 2002*, where they estimated groundwater flow to be approximately 7 to 33 feet/year in the surficial aquifer at the site.

4 GROUNDWATER QUALITY

4.1 PARAMETERS REPORTED AT OR OUTSIDE GROUNDWATER STANDARDS

FDEP groundwater standards (Class G-II water quality standards) include the Primary Drinking Water Standards (PDWS), Secondary Drinking Water Standards (SDWS), and Chapter 62-777, FAC, Groundwater Cleanup Target Levels (GCTL). In addition, site-specific background water-quality concentrations for the facility have been established for Chloride, Sodium, TDS, and Iron and are provided in Table 4.1.

Table 4-1 Background Water-Quality Concentrations

Parameter	Background Concentration
Total Dissolved Solids (TDS)	1,924 mg/L
Chloride	643 mg/L
Sodium	456 mg/L
Iron	6,300 µg/L

Note: mg/L = milligrams per liter.
µg/L = micrograms per liter.

The term "background" is used in two manners in this report, one is a reference to the background well and groundwater parameter concentrations found in the background well; the other is a reference to the permit-specified "Background Water-Quality Concentrations" – or similar reference – for the specific parameters found in Table 4-1.

Section 2, Sub-section D, Specific Condition No. 1 of Permit Modification 0130542-028-SO-IM allows for exceedance of groundwater and background water-quality standards at the Primary Zone of Discharge (ZOD) for Ammonia-Nitrogen, Arsenic, Iron, Total Dissolved Solids (TDS), and Manganese. Exceedances of these five parameters are monitored for compliance purposes in the NAM wells at the Secondary ZOD.

Attachment 4 provides a summary table of parameters that exceeded applicable groundwater standards during the report period for the background and detection wells and a separate summary table for exceedances in the NAM wells. Exceedances of Ammonia-Nitrogen, Arsenic, Iron, Total Dissolved Solids (TDS), and Manganese standards included in the summary table for the background and detection wells are for comparison and informational purposes only.

Table 4-2 lists the parameters that were reported at or outside FDEP groundwater standards and/or the site-specific background water-quality concentrations in the monitoring wells during the report period. These parameters and others routinely detected at the facility are discussed in Sections 4.3 through 4.5.

Table 4-2 Parameters At or Outside Applicable Groundwater Standards

Field and Indicator Parameters:	pH
	Ammonia-Nitrogen
	Total Dissolved Solids (TDS)
Metals:	Arsenic
	Iron
	Manganese
Volatile Organic Compounds (VOCs):	Cis-1,3-Dichloropropene*

*Single detection that was not confirmed by resample.

4.2 Tabular and Graphical Displays

Attachment 5 provides summary tables of parameters reported above the laboratory detection limit. Attachment 6 provides summary tables of all data during the report period. Attachment 7 provides report period graphs of field parameters and laboratory parameters consistently reported above the laboratory detection limits. Attachment 8 provides scatter plots for related parameters. Attachment 9 provides historical trend graphs for selected parameters.

4.3 Field and Indicator Parameters

The SDWS for pH ranges from 6.5 to 8.5 standard units (SU). The pH levels in background well MW-1R ranged from 6.24 to 6.88 SU during the report period. Levels in the detection wells were similar to or slightly lower than in the background well, ranging from 5.68 to 6.91 SU. Similar levels were reported in the NAM wells, ranging from 6.39 to 7.27 SU.

Ammonia-Nitrogen was consistently reported in detection wells MW-8A, MW-9, MW-10R, MW-15, MW-16, MW-17, and MW-18R above the GCTL of 2.8 mg/L. The highest concentrations were reported in MW-16 and MW-17, ranging from 27.8 to 39.2 mg/L. These concentrations are acceptable according to the Primary ZOD permit conditions. Concentrations in background well MW-1R ranged from 0.087 to 0.93 mg/L. Concentrations in the NAM wells were similar to those in the background well, ranging from 0.052 to 0.45 mg/L during the report period, all below the GCTL.

Conductivity in background well MW-1R ranged from 369 to 600 micromhos per centimeter (µmhos/cm) during the report period. Conductivity values in the detection wells were generally higher than in the background well. However, detection wells MW-18R, MW-19A, and MW-20A reported Conductivity values more comparable to, and only slightly above, background well values. The highest values were reported in MW-15 (2,786 to 3,924 µmhos/cm) and MW-16 (2,302 to 2,439 µmhos/cm). Conductivity values in the NAM wells were higher than the background well concentrations, ranging from 572 to 1,011 µmhos/cm during the report period.

Chloride concentrations in background well MW-1R ranged from 9.8 to 30.7 mg/L during the report period. Concentrations in detection wells MW-10R and MW-17 were higher than background well concentrations, ranging from 77.2 to 89.4 mg/L. The highest Chloride concentrations were reported in detection wells MW-15 and MW-16, ranging from 142 to

185 mg/L. All reported concentrations were below the site-specific Chloride background concentration of 643 mg/L. Chloride is not monitored in the NAM wells.

TDS concentrations in background well MW-1R ranged from 254 to 371 mg/L during the report period. Concentrations in detection wells MW-8A, MW-9, MW-10R, MW-16, and MW-17 were higher than background well concentrations, ranging from 646 mg/L in MW-8A to 1,850 mg/L in MW-17. The highest TDS concentrations were reported in detection well MW-15, ranging from 1,740 to 2,550 mg/L. TDS concentrations in the NAM wells were similar to those reported in background well MW-1R, ranging from 311 to 600 mg/L. The site-specific background concentration for TDS is 1,924 mg/L. All concentrations were below the site-specific background concentration except for those reported in detection well MW-15. The concentrations reported in MW-15 are acceptable according to the Primary ZOD permit conditions.

4.4 METALS

Arsenic concentrations above the PDWS of 10 µg/L were reported one or more times in NAM wells NAM-2 and NAM-4. Arsenic concentrations in NAM-2 ranged from 6.8 to 11.0 µg/L and in NAM-4 from 8.8 to 20.8 µg/L. These concentrations are not acceptable according to the Secondary ZOD permit conditions. Arsenic concentrations in background well MW-1R were below the laboratory reporting limit for all but the Second Semiannual 2016 sampling event when it was reported at 8.4 I µg/L. Arsenic was also reported one or more times in all detection wells at the site. The highest Arsenic concentrations were reported in detection wells MW-15, MW-16, and MW-17, ranging from 46.2 to 87.6 µg/L. These concentrations are acceptable according to the Primary ZOD permit conditions.

Barium below the PDWS of 2000 µg/L was reported in the background well and in all detection wells. Background well concentrations ranged from 33.9 to 49.8 µg/L. Concentrations in detection wells MW-8A, MW-9, MW-10R, MW-16, and MW-17 were slightly higher than background well concentrations, ranging from 42.1 µg/L in MW-8A to 112 µg/L in MW-9. The highest Barium concentrations were reported in detection well MW-15, ranging from 262 to 397 µg/L. Concentrations in the other detection wells MW-18R, MW-19A, and MW-20 were similar to those reported in MW-1R. Barium is not monitored in the NAM wells.

Iron was consistently reported in the background well and in all detection wells during the report period. Iron concentrations in background well MW-1R ranged from 1,100 to 4,460 µg/L. Concentrations in MW-20A ranged from 3,570 to 9,960 µg/L, slightly higher than background well concentrations in MW-1R. Concentrations in the remainder of the detection wells ranged from 5,880 to 94,200 µg/L. The highest Iron concentrations were reported in MW-17 ranging from 77,100 to 94,200 µg/L. Iron concentrations in the NAM wells ranged from 877 to 6,170 µg/L with the highest concentrations being reported in NAM-3 (4,910 to 6,170 µg/L). The site-specific background concentration for Iron is 6,300 µg/L. The NAM well concentrations were below the site-specific background concentration. Although most of the detection well concentrations were above the site-specific background concentration, these concentrations are acceptable according to the Primary ZOD permit conditions.

Manganese was consistently reported in background well MW-1R and in all of the detection wells during the report period. The concentrations in background well MW-1R ranged from 10.6 to 97.2 µg/L. With the exception of MW-15, all detection well concentrations were

comparable to, or only slightly higher than, background concentrations in MW-1R. The highest concentrations were reported in MW-15, ranging from 487 to 747 µg/L. Manganese concentrations in the NAM wells were lower than those reported in background well MW-1R, ranging from below the laboratory detection limit to 8.5 µg/L. All NAM well Manganese concentrations are acceptable and the detection well concentrations above the SDWS of 50 µg/L are acceptable according to the Primary ZOD permit conditions.

Sodium in background well MW-1R ranged from 8.7 to 28.9 mg/L. Sodium concentrations in detection wells MW-8A, MW-9, MW-18R, MW-19A, and MW-20A were comparable to those reported in the background well, ranging from 4.0 to 42.8 mg/L. Concentrations in detection wells MW-10R, MW-15, MW-16, and MW-17 were elevated compared to the other detection wells. The highest concentrations were reported in detection well MW-16, ranging from 171 to 212 mg/L during the report period. The site-specific background concentration for Sodium is 456 mg/L; all concentrations were below the site-specific background concentration. Sodium is not monitored in the NAM wells.

4.5 VOCs

Low-level Toluene was reported in the background well and all of the detection wells during the First Semiannual 2016 sampling event. Consistent low-level detections in all wells for only one sampling event may indicate the results are caused by laboratory or sampling cross-contamination rather than being indicative of groundwater quality conditions. Toluene was also reported in the trip blanks and equipment blanks for this sampling event indicating that these concentrations were not representative of groundwater quality conditions.

Chloromethane was reported several times at low-level concentrations in MW-15. Elevated levels of Conductivity, TDS, Chloride, Arsenic, Barium, Iron, and Manganese indicate a high ionic-strength (salt content) in this well. Elevated salts can result in positive interferences during VOC sample extraction and analysis. Chloromethane was not reported in the trip blank for this sample. However, if the result was caused by matrix interference from the sample – Chloromethane would not be expected in the trip blank.

Cis-1,3-Dichloropropene was reported above the GCTL of 0.4 µg/L in background well MW-1R during the Second Semiannual 2015 sampling event. MW-1R was resampled for Cis-1,3-Dichloropropene in January 2016 and the results of the resample were below the laboratory detection limit. Results of the four subsequent sampling events were also below the laboratory detection limit and the single exceedance appears to be anomalous data.

4.6 Groundwater Quality Trends

Attachment 9 provides long-term concentration trend graphs of selected parameters. The discussions below are not necessarily based on the slope of the trend line on the graph but on an interpretive evaluation of the trends based on overall concentration ranges and data fluctuations over time.

4.6.1 Background and Detection Wells

- Field pH is relatively stable in all wells with very slight increasing trends in MW-10R and MW-15. The pH in many of the wells increased during the First Semiannual 2017 sampling event but returned to previous historical ranges during the following event.

- Ammonia-Nitrogen appears to be decreasing in MW-8A and MW-18R. Ammonia-Nitrogen is increasing in MW-15. Concentrations in MW-16 and MW-17 increased until 2015 then appear to have stabilized at elevated levels.
- Conductivity has been decreasing very gradually in MW-8A. Conductivity is also decreasing in MW-18R. Conductivity has been gradually increasing in MW-10R, MW-17, and MW-19A.
- TDS is decreasing gradually in MW-1R, MW-8A, MW-16, MW-18R, and MW-20A. TDS peaked in MW-9 in 2012 then decreased to previous historical ranges.
- Chloride is decreasing in MW-1R, MW-8A, and MW-16. A recent decreasing trend was noted in MW-15. A very gradual increase in concentration was observed in MW-10R.
- Sodium is decreasing in MW-8A, MW-16, MW-18R, and MW-19A. Sodium peaked in MW-9 in 2010 then decreased and stabilized at around 25 mg/L. Sodium has been very gradually increasing in MW-15. Sodium in MW-20A decreased until 2014 then stabilized at about 5 mg/L.
- Arsenic is decreasing in MW-8A, MW-9, and MW-20A. Arsenic is increasing in MW-15.
- Barium has been gradually increasing in MW-1R, MW-15, and MW-19A. Seasonal variations are noted for MW-15 and MW-19A. Barium has been gradually decreasing in MW-8A although concentrations appear to be stabilizing during recent sampling events.
- Iron decreased in MW-1R, MW-8A, and MW-9 until 2013 then stabilized. Iron increased in MW-15 until 2013 then stabilized. Iron has gradually decreased in MW-17.
- Manganese spiked in MW-1R during the Second Semiannual 2017 sampling event. Manganese increased in MW-10R until 2016 then abruptly decreased. Manganese has been gradually increasing in MW-8A and gradually decreasing in MW-9 and MW-19A.

4.6.2 NAM Wells

- Field pH is relatively stable in all four NAM wells.
- Ammonia-Nitrogen concentrations in the NAM wells are generally low-level and stable over time.
- Conductivity is gradually decreasing in NAM-3 and NAM-4.
- TDS is decreasing in all four NAM wells.
- Arsenic has generally decreased in NAM-1, NAM-3, and NAM-4. Arsenic is increasing in NAM-2. Concentrations in NAM-2 are currently above the PDWS of 10 µg/L. Arsenic increased in NAM-1 and NAM-3 during the Second Semiannual 2017 sampling event although concentrations were below the PDWS.
- Iron concentrations in the NAM wells vary from one sampling event to another but the overall trends are relatively stable.
- Manganese concentrations in NAM-1 and NAM-2 have varied over time. Concentrations in NAM-3 and NAM-4 have been relatively stable.

4.7 Comparison of Shallow, Middle, and Deep Wells

All of the groundwater monitoring wells that require sampling by the permit are installed into the surficial aquifer at similar depths.

4.8 Related Parameters

Attachment 8 provides scatter plots for related parameters. Comparisons were made between the Conductivity, TDS, Sodium, and Chloride (Dissolved Solids), between Arsenic, Iron, and Manganese (Redox Sensitive Metals), and between Turbidity and selected metals.

In general, there is good correlation between Conductivity and TDS in both the detection wells and the NAM wells. Sodium and Chloride in the detection and background wells are not as well correlated with Conductivity but do correlate with each other.

There is very little correlation between Turbidity and various metals (including Arsenic, Barium, Iron, and Manganese) in the detection wells and the NAM wells.

In general, there is reasonably good correlation between Iron and Arsenic and between Barium and Manganese (especially at higher concentrations) in the detection wells. There is also reasonably good correlation between Iron and Manganese in the NAM wells. Iron and Arsenic are not as well correlated in the NAM wells as in the detection wells.

4.9 Erratic and Poorly Correlated Data

Sporadic low-level Toluene and Chloromethane were reported in some wells during the report period. These results are sporadic detections with no apparent trends. These parameter detections appear to be due to field or laboratory cross-contamination or matrix interferences as discussed in Section 4.5. The data do not appear to be representative of groundwater quality. Cis-1,3-Dichloropropene was also observed during the report period as a singular exceedance (not confirmed by resample) and appears to be an anomalous data point.

Sporadic concentrations of some of the analyzed metals for the groundwater monitoring wells do not necessarily represent anomalous data but may represent low-level groundwater concentrations.

Groundwater elevations reported for MW-9 during the First and Second 2009 sampling events shown on the historical hydrograph in Attachment 3 appear to be anomalous.

5 SURFACE WATER QUALITY

Appendix 3 of the FDEP permit, the MPIS in Section III, Specific Condition No. 2 requires semiannual sampling of two surface water monitoring sites (Pond 1 and Pond 2) for the parameters listed in Chapter 62-701.510(7)(b) FAC. Attachment 10 provides surface water results compared to Class III (fresh) surface water standards and groundwater standards. Report period surface water chemistry graphs are included in Attachment 11.

Table 5.1 provides an overview of the parameters outside of groundwater and/or Class III (fresh) surface water standards in the surface water stations during the report period.

Table 5-1 Surface Water Parameters Exceeding Standards during the Report Period

Surface Water Station ID	Groundwater Exceedances	Surface Water Exceedances
Pond 1	Fecal Coliform	Lead
	Iron	
Pond 2	Fecal Coliform	Conductivity
	Iron	Dissolved Oxygen
		Turbidity
		Fecal Coliform
		Beryllium
		Cadmium
		Iron

The exceedances of Turbidity, Iron, and Beryllium in Pond 2 occurred in March 2017 during the First Semiannual 2017 sampling event when surface water levels were very low due to dry conditions in the area. The pond was resampled for Iron in April 2017 and results (750 µg/L) were below the Class III (fresh) surface water standard of 1,000 µg/L for Iron. The elevated metals results in Pond 2 at that time were likely related to a large increase in Turbidity during that sampling event due to the low water conditions. Turbidity in Pond 2 is generally less than 100 nephelometric turbidity units (NTUs) but was elevated to 1,000 NTUs during the First Semiannual 2017 sampling event. Turbidity returned to 44.8 NTUs during the Second Semiannual 2017 sampling event, within the normal historical range for Pond 2.

6 CONCLUSIONS

The background and detection groundwater monitoring network at the facility is appropriately positioned to provide ambient water quality conditions and to detect potential groundwater contaminants in the surficial aquifer downgradient of the Phase I and Phase II landfill cells. The NAM wells are positioned for downgradient groundwater compliance.

The monitoring wells are constructed with appropriate well-screen intervals to evaluate seasonal groundwater fluctuations within the surficial aquifer. Based on the site hydrogeology and groundwater quality, sampling of deeper aquifers is not necessary at this time.

Based upon the estimated groundwater flow velocity, a semiannual monitoring frequency is adequate.

The County will continue to monitor groundwater quality - in particular the increasing Arsenic trend in NAM-2. During the previous Technical Report period, ending with the First Semiannual 2015 sampling event, a similar increasing Arsenic trend was noted in NAM-4. Arsenic concentrations in NAM-4 have since decreased to below the groundwater standard. Similar initial Arsenic concentrations were also noted in NAM-1 and NAM-3, which have decreased over time in a manner similar to NAM-4. Continued monitoring will determine if a decrease in Arsenic occurs in NAM-2.

7 RECOMMENDATIONS

The Arsenic concentration in NAM-2 will continue to be monitored for future trends. No changes to the Monitoring Plan Implementation Schedule in Appendix 3 of Permit Modification No. 0130542-028-SO-IM are recommended at this time.

8 REFERENCES

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Sarasota County Solid Waste Operations. February 2018. *Sarasota County Central County Solid Waste Disposal Complex, 2017 Semi-Annual Groundwater Report (July-December 2017), 2017 Semi-annual Surface Water Report (July-December 2017).*

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SCS Engineers. June 28, 2002. *Appendix A, Groundwater Monitoring Plan Evaluation, Central County Solid Waste Disposal Complex, Sarasota County, Florida*.

Attachment 1

Site Map

N

GRAPHIC SCALE

0 250 500 1000

SCALE IN FEET
1"=1000'

LEGEND

⊕	MW-8A	GROUNDWATER MONITORING WELL
▲	NAM-1	NATURAL ATTENUATION MONITORING WELL
●	PW-7	PIEZOMETER WELL
○	STW-7	STAFF GAUGE

UPDATED: JUNE 14, 2018

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX SITE MAP

JONES EDMUNDS

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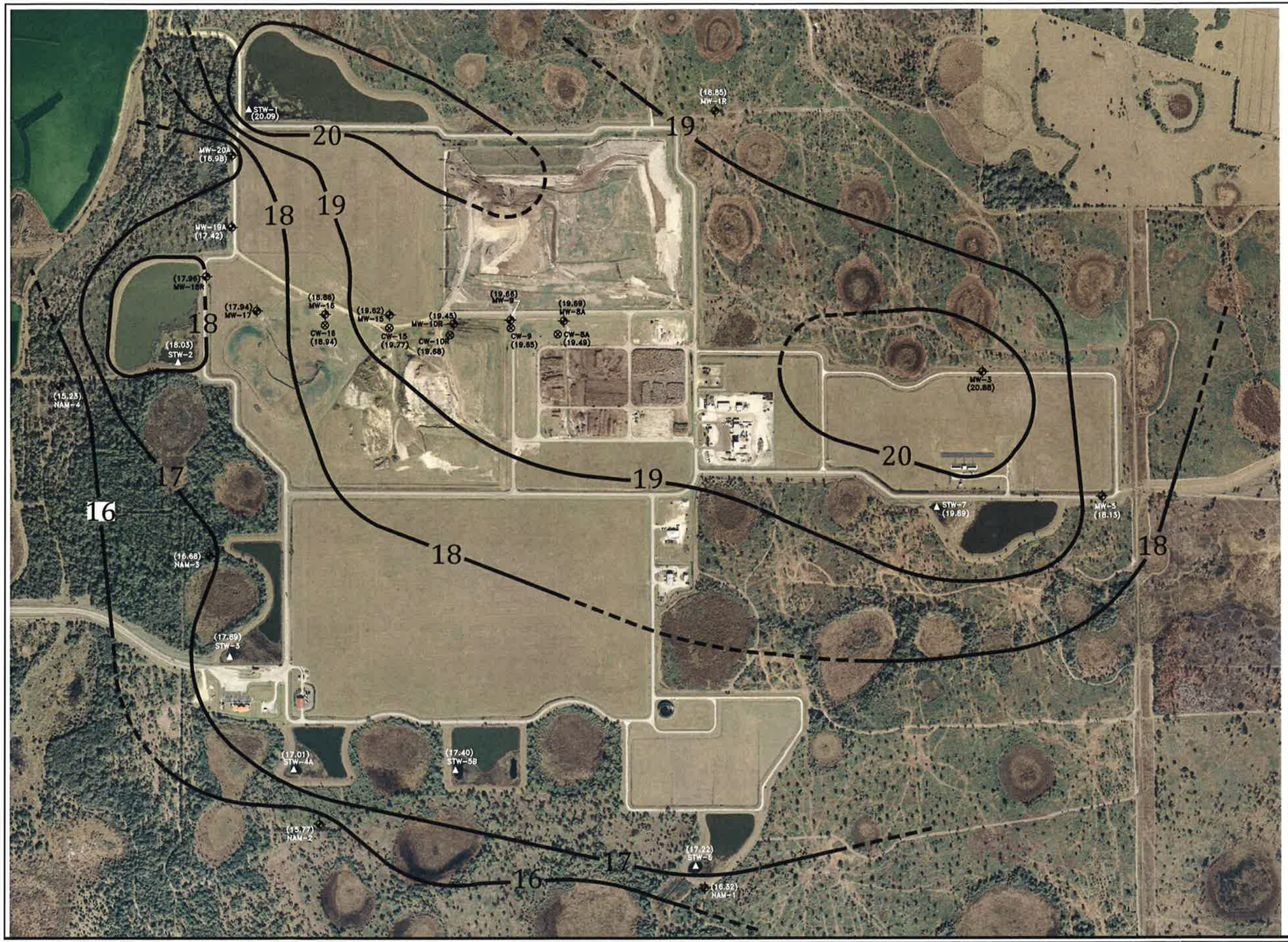
PLOTTED: 6/14/2018 01:46 PM BRIAN THOMAS 19006-052-01

Attachment 2

Groundwater Contour Maps



NORTH

0 400 800 1600 FEET

LEGEND:

- MONITORING WELL WITH GROUNDWATER ELEVATION (FT-NGVD)
- COMPLIANCE WELL WITH GROUDWATER ELEVATION (FT-NGVD)
- PIEZOMETERS WITH GROUNDWATER ELEVATION (FT-NGVD)
- MONITORING POINT WITH SURFACE WATER ELEVATION (FT-NGVD)
- 18 GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)

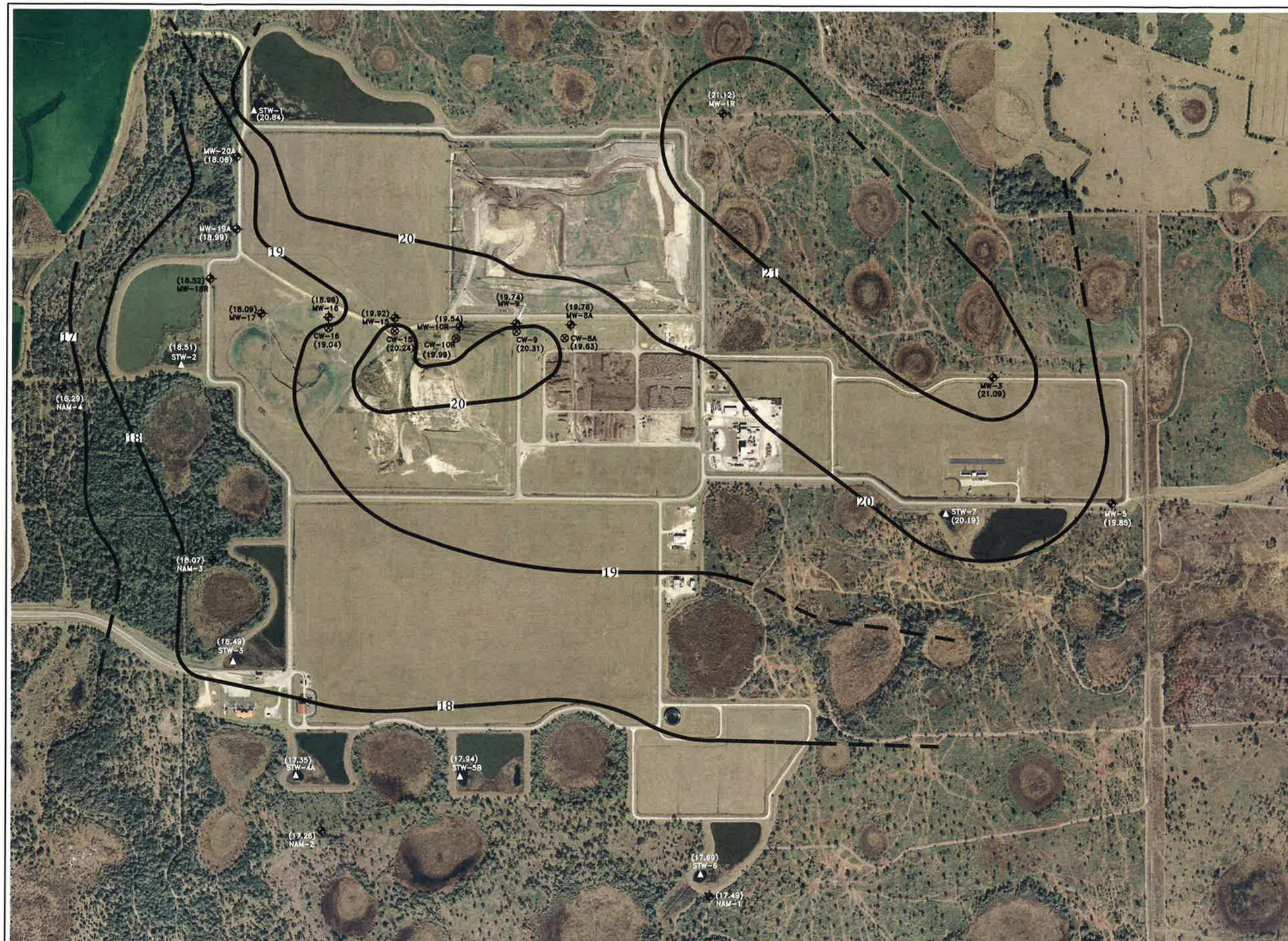
NOTE:

1. GROUNDWATER DATA FROM NOVEMBER 20, 2015
2. GROUNDWATER ELEVATION GIVEN IN PARENTHESES

Bradley J. Barr
PG 1733
12-10-15

FT-NGVD = FEET ABOVE NATIONAL GEODETIC VERTICAL DATUM

ATKINS	SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX	GROUNDWATER CONTOUR MAP NOVEMBER 2015	FIGURE 1



0 400 800 1600 FEET

LEGEND:

- MONITORING WELL WITH GROUNDWATER ELEVATION (FT-NGVD)
- COMPLIANCE WELL WITH GROUDWATER ELEVATION (FT-NGVD)
- PIEZOMETERS WITH GROUNDWATER ELEVATION (FT-NGVD)
- MONITORING POINT WITH SURFACE WATER ELEVATION (FT-NGVD)
- 18 GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)

NOTE:

1. GROUNDWATER DATA FROM APRIL 6, 2016
2. GROUNDWATER ELEVATION GIVEN IN PARENTHESES

Bradley J. Bayne
PG 1733
4-25-16

FT-NGVD = FEET ABOVE NATIONAL GEODETIC VERTICAL DATUM

ATKINS	SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX	**GROUNDWATER CONTOUR MAP APRIL 2016**	FIGURE 1

TROY DAVID HAYS
LICENSE
No. 2879
STATE OF
FLORIDA
PROFESSIONAL GEOLOGIST
1/20/17

-N-

GRAPHIC SCALE

0 250 500 1000

SCALE IN FEET
1"=1000'

LEGEND

MW-8A 19.65	GROUNDWATER MONITORING WELL
NAM-1 16.01	NATURAL ATTENUATION MONITORING WELL
PW-7	PIEZOMETER WELL
STW-7 19.94	STAFF GAUGE
20.00	GROUNDWATER CONTOUR AT 1.00 FOOT INTERVALS
	GROUNDWATER FLOW DIRECTION
17.89 J	ESTIMATED VALUE
17.17*	NOT USED IN CONTOURING

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX GROUNDWATER CONTOUR MAP OCTOBER 31, 2016

JONES EDMUNDS

TROY DAVID HAYS
LICENSE
No. 2679
STATE OF
FLORIDA
PROFESSIONAL GEOLOGIST
5/9/17

-N-

GRAPHIC SCALE

0 250 500 1000

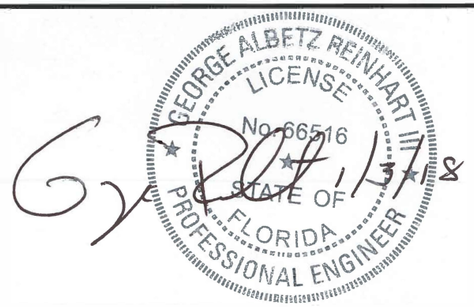
SCALE IN FEET
1"=1000'

LEGEND

MW-8A 17.55	GROUNDWATER MONITORING WELL
NAM-1 14.14	NATURAL ATTENUATION MONITORING WELL
PW-7	PIEZOMETER WELL
STW-7A 17.52	STAFF GAUGE
20.00	GROUNDWATER CONTOUR AT 1.00 FOOT INTERVALS
	GROUNDWATER FLOW DIRECTION
NM	NOT MEASURED
16.57*	NOT USED IN CONTOURING

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX GROUNDWATER CONTOUR MAP MARCH 29, 2017

JONES EDMUNDS



-N-

GRAPHIC SCALE

0 250 500 1000

SCALE IN FEET
1"=1000'

LEGEND

MW-8A 19.51	GROUNDWATER MONITORING WELL
NAM-1 16.59	NATURAL ATTENUATION MONITORING WELL
PW-7	PIEZOMETER WELL
STW-7A 19.92	STAFF GAUGE
20.00	GROUNDWATER CONTOUR AT 1.00 FOOT INTERVALS
	GROUNDWATER FLOW DIRECTION
NM	NOT MEASURED
17.90*	NOT USED IN CONTOURING

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX GROUNDWATER CONTOUR MAP OCTOBER 31, 2017

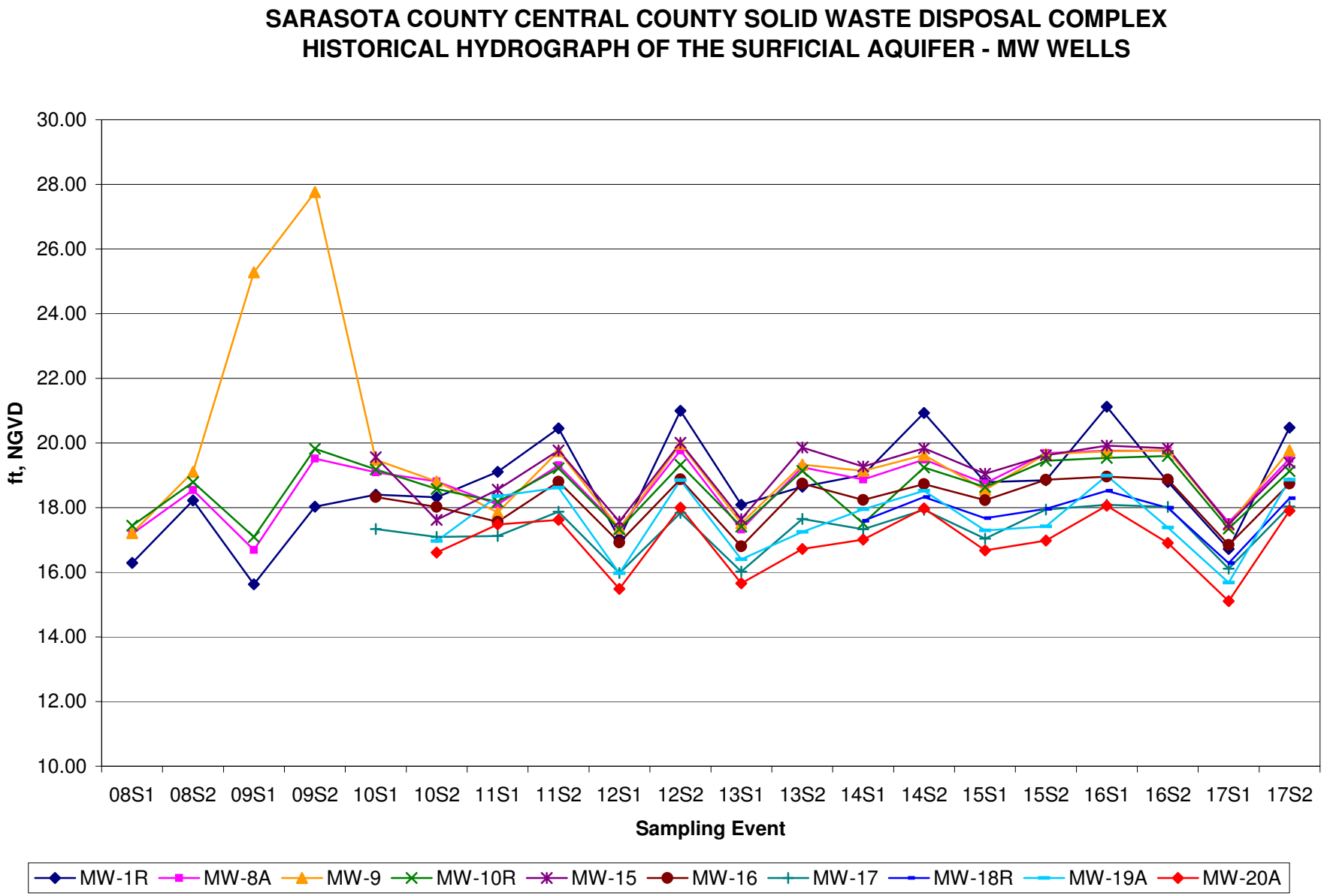
JONES EDMUNDS

SAVED: 12/28/2017 3:38 PM BTHOMAS \\JEACAD\GWM\JONES EDMUNDS\SARASOTA COUNTY\CENTRAL CSWDC\GWM 2017\1752\CENTRAL CSWDC_1752.DWG

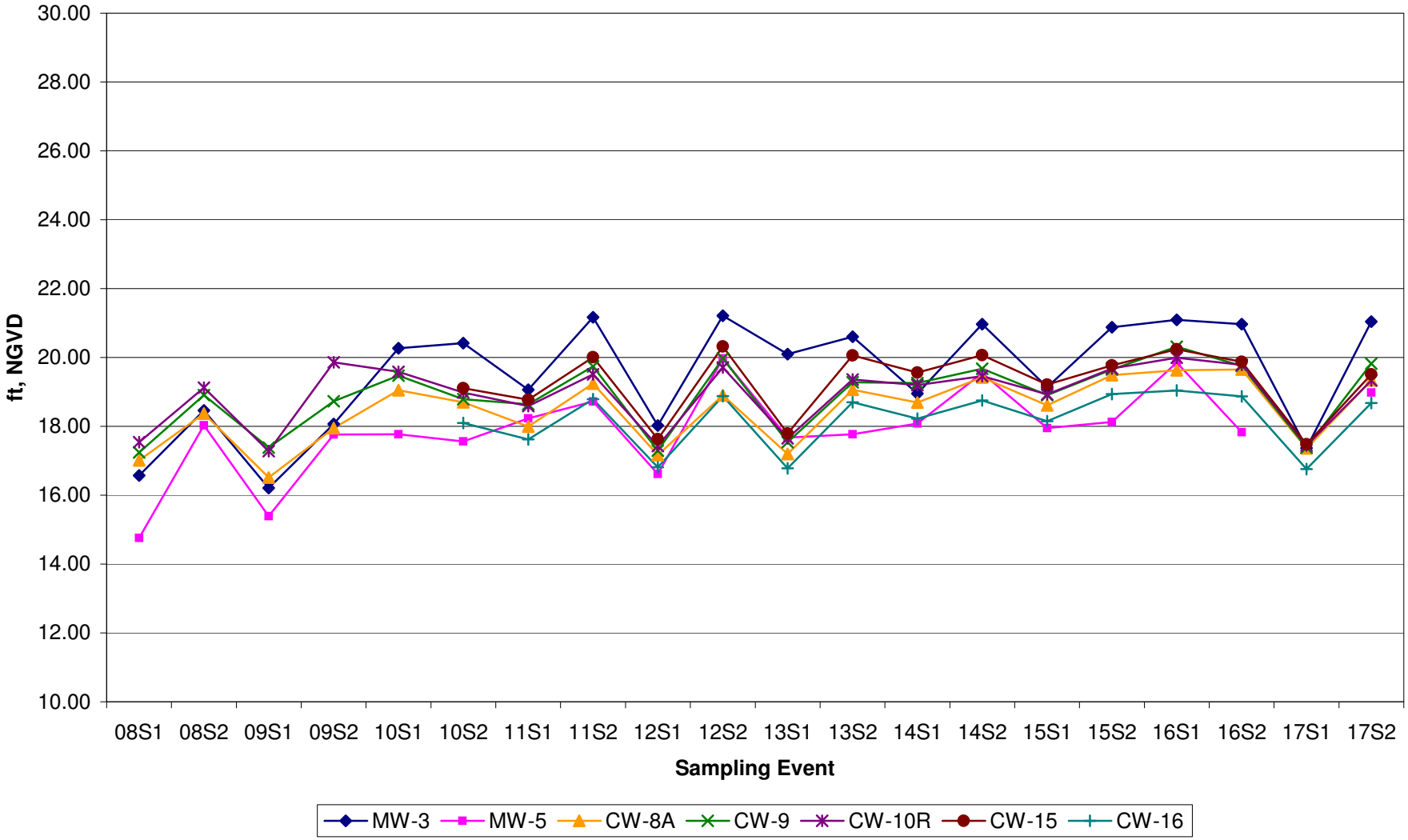
PLOTTED: 12/28/2017 03:38 PM BRIAN THOMAS 19006-052-01

Attachment 3

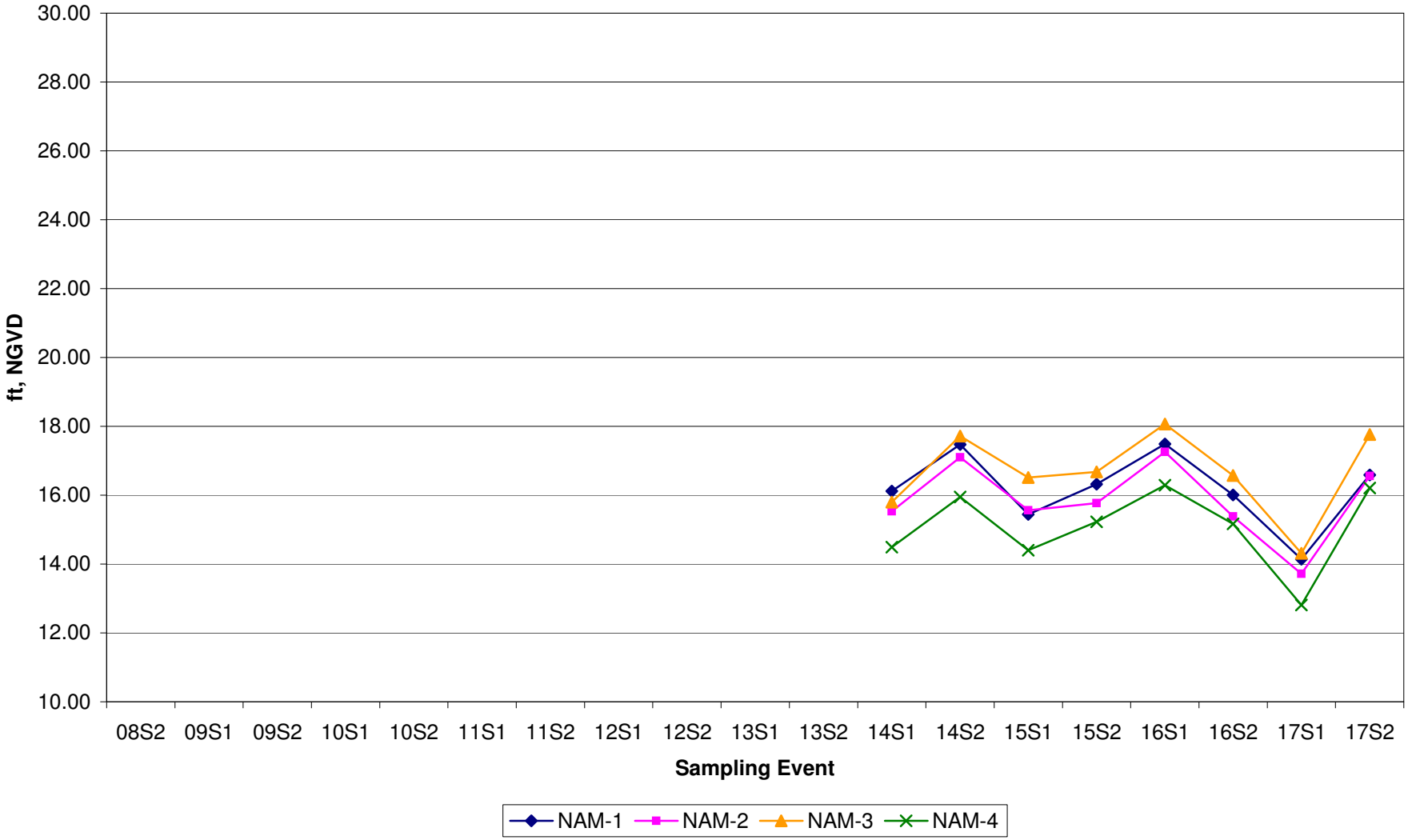
Hydrographs, Groundwater Velocity Calculations, and Well Construction and Total Depth Information

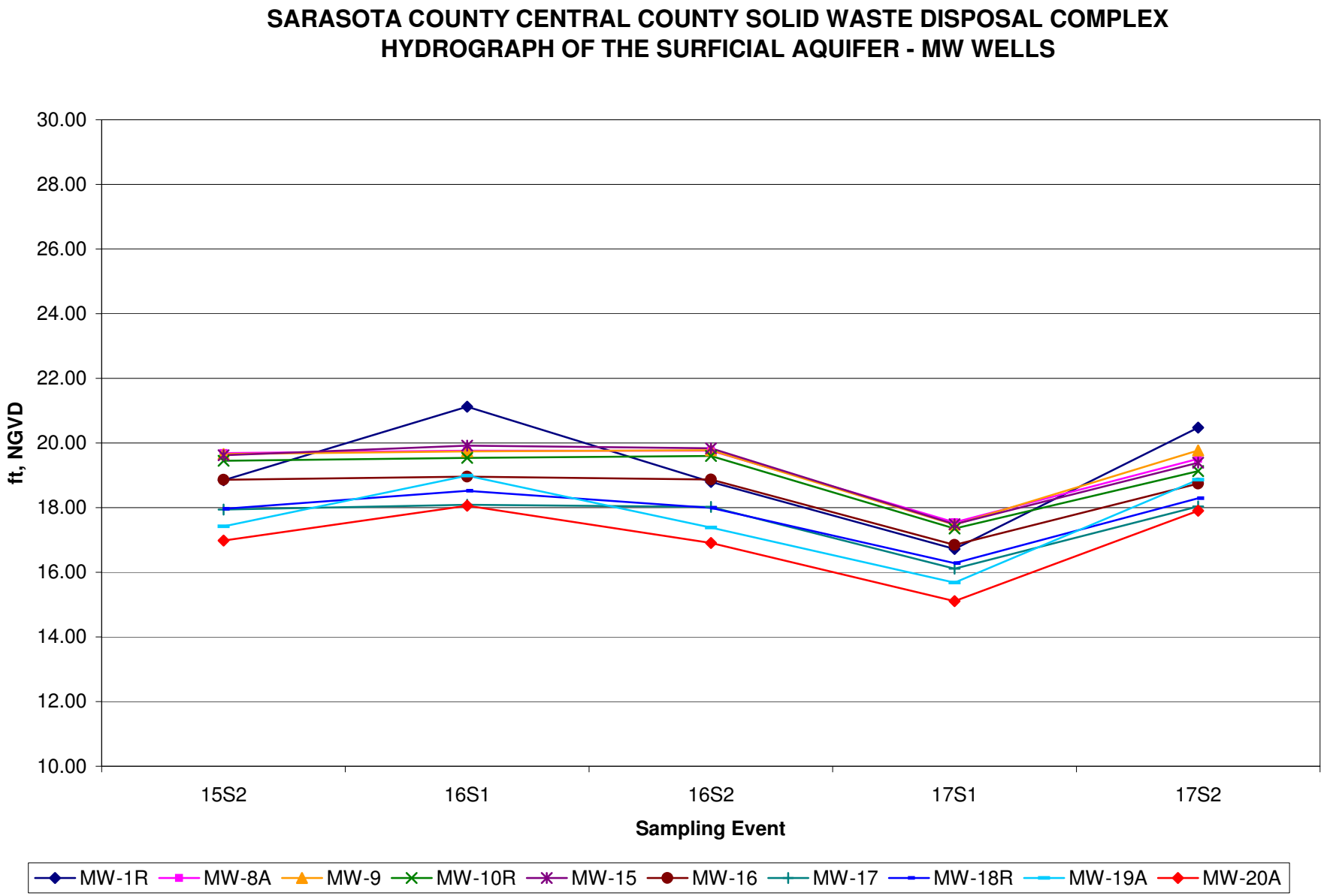

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
HISTORICAL HYDROGRAPH OF THE SURFICIAL AQUIFER - MW WELLS
ft, NGVD
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
08S1
08S2
09S1
09S2
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-1R
MW-8A
MW-9
MW-10R
MW-15
MW-16
MW-17
MW-18R
MW-19A
MW-20A

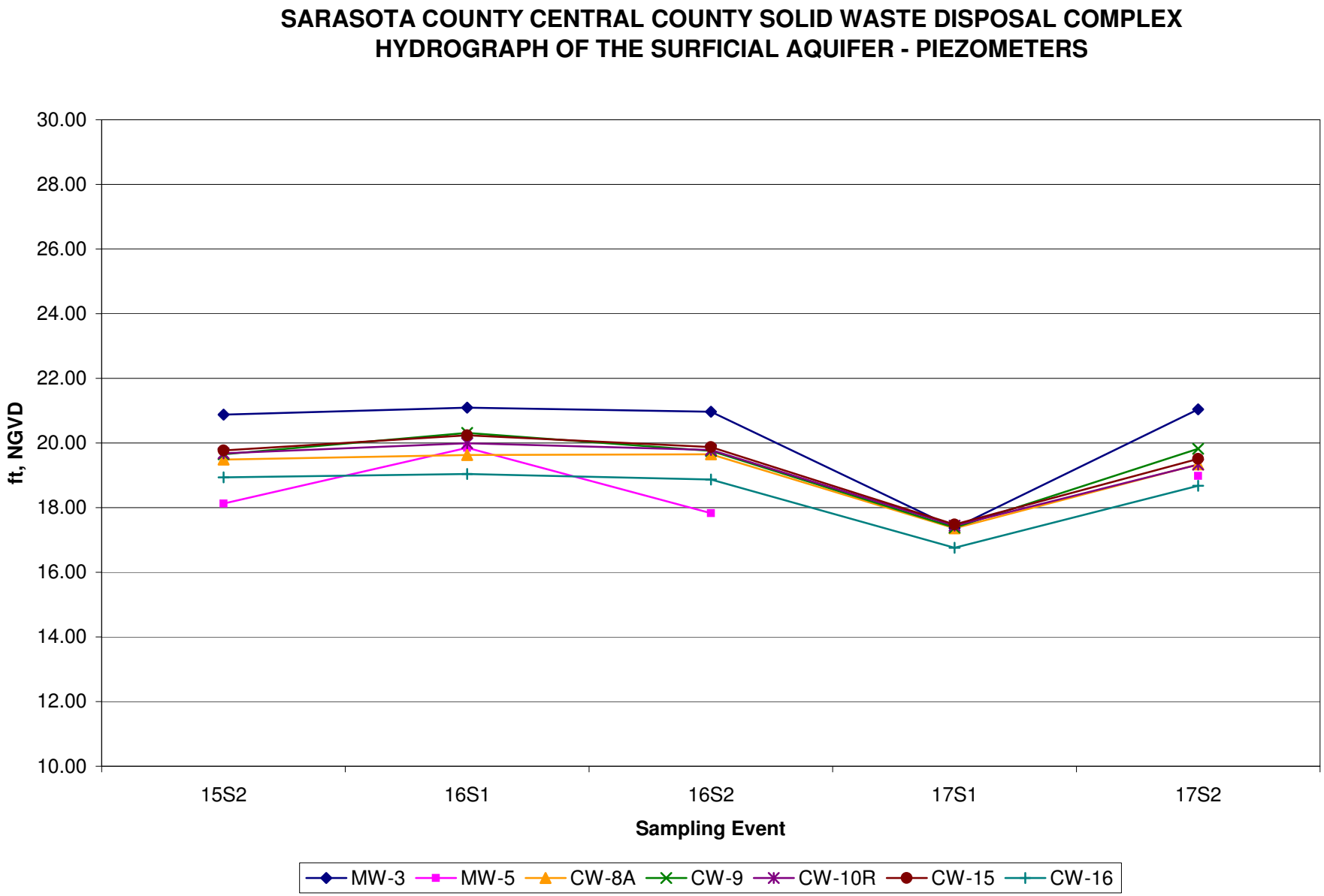
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
HISTORICAL HYDROGRAPH OF THE SURFICIAL AQUIFER - PIEZOMETERS

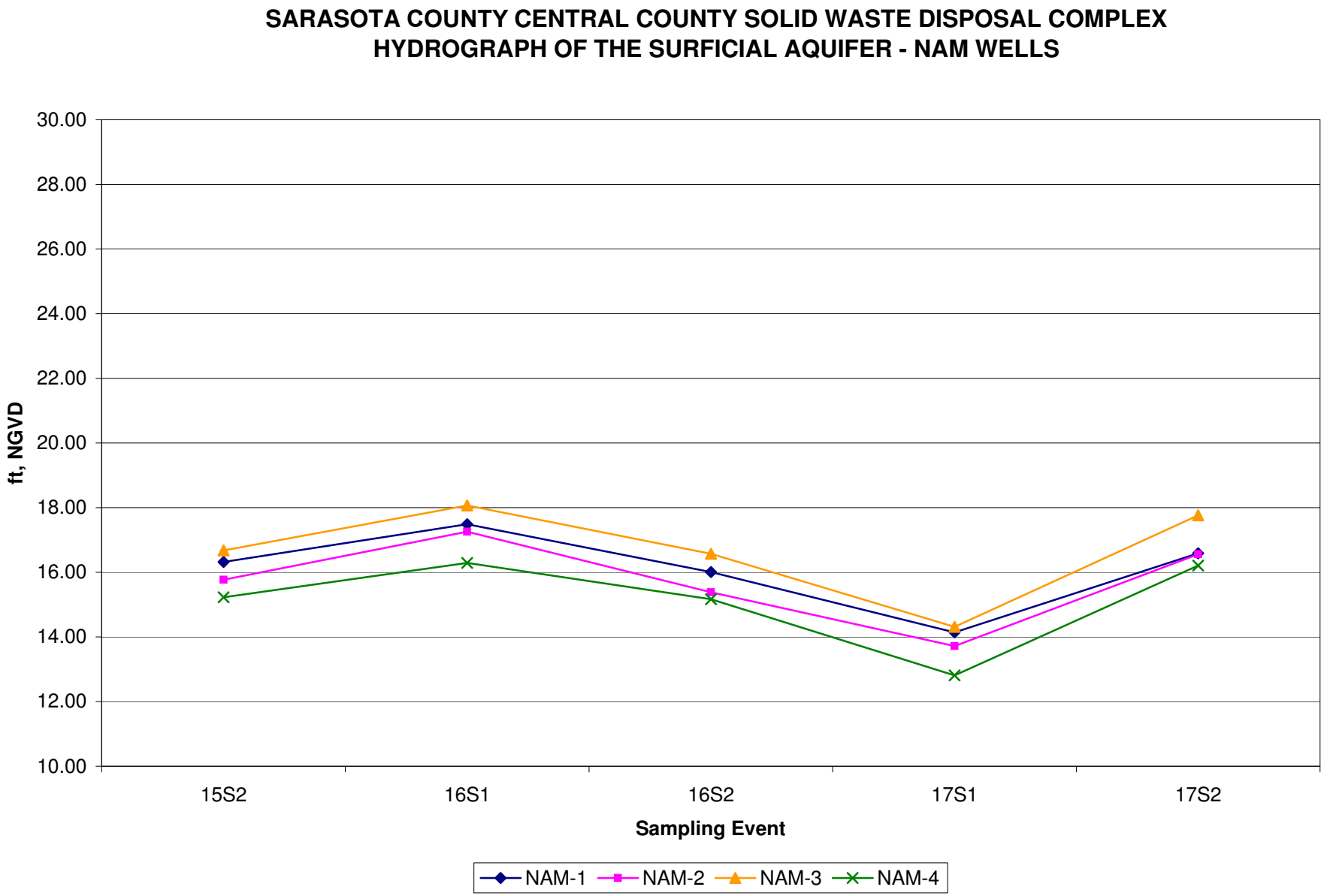


SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
HISTORICAL HYDROGRAPH OF THE SURFICIAL AQUIFER - NAM WELLS




SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
HYDROGRAPH OF THE SURFICIAL AQUIFER - MW WELLS
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
ft, NGVD
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-1R
MW-8A
MW-9
MW-10R
MW-15
MW-16
MW-17
MW-18R
MW-19A
MW-20A


SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
HYDROGRAPH OF THE SURFICIAL AQUIFER - PIEZOMETERS
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
ft, NGVD
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-3
MW-5
CW-8A
CW-9
CW-10R
CW-15
CW-16


SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
HYDROGRAPH OF THE SURFICIAL AQUIFER - NAM WELLS
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
ft, NGVD
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-1
NAM-2
NAM-3
NAM-4

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER VELOCITY CALCULATIONS

Calculated Groundwater Velocity – Surficial Aquifer

Calculated using low Hydraulic Conductivity value of 2.52 ft/day

Sampling Event	Date	Gradient Location	Groundwater Elevation Upgradient Well	Groundwater Elevation Downgradient Well	Δ GWE (ft)	Distance between wells (ft)	Flow Gradient *i (rise/run)*	Hydraulic Conductivity* *K* (ft/day)	Porosity *n (decimal)*	Darcian Velocity (*K/n) i* (ft/day)	Horizontal Groundwater Velocity (ft/yr)
15S2	11/20/2015	MW-3 to NAM-1	20.88	16.32	4.56	5092	0.00090	2.52	0.44	0.005	1.8
16S1	4/6/2016	MW-3 to NAM-1	21.09	17.49	3.60	5092	0.00071	2.52	0.44	0.004	1.5
16S2	10/31/2016	MW-3 to NAM-1	20.97	16.01	4.96	5092	0.00097	2.52	0.44	0.006	2.2
17S1	3/29/2017	MW-3 to NAM-1	17.37	14.14	3.23	5092	0.00063	2.52	0.44	0.004	1.5
17S2	10/31/2017	MW-3 to NAM-1	21.04	16.59	4.45	5092	0.00087	2.52	0.44	0.005	1.8
										Average	1.8

Calculated using high Hydraulic Conductivity value of 20.41 ft/day

Sampling Event	Date	Gradient Location	Groundwater Elevation Upgradient Well	Groundwater Elevation Downgradient Well	Δ GWE (ft)	Distance between wells (ft)	Flow Gradient *i (rise/run)*	Hydraulic Conductivity* *K* (ft/day)	Porosity *n (decimal)*	Darcian Velocity (*K/n) i* (ft/day)	Horizontal Groundwater Velocity (ft/yr)
15S2	11/20/2015	MW-3 to NAM-1	20.88	16.32	4.56	5092	0.00090	20.41	0.44	0.042	15.3
16S1	4/6/2016	MW-3 to NAM-1	21.09	17.49	3.60	5092	0.00071	20.41	0.44	0.033	12.0
16S2	10/31/2016	MW-3 to NAM-1	20.97	16.01	4.96	5092	0.00097	20.41	0.44	0.045	16.4
17S1	3/29/2017	MW-3 to NAM-1	17.37	14.14	3.23	5092	0.00063	20.41	0.44	0.029	10.6
17S2	10/31/2017	MW-3 to NAM-1	21.04	16.59	4.45	5092	0.00087	20.41	0.44	0.040	14.6
										Average	13.8

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER VELOCITY CALCULATIONS

Calculated Groundwater Velocity – Surficial Aquifer

Calculated using low Hydraulic Conductivity value of 2.52 ft/day

Sampling Event	Date	Gradient Location	Groundwater Elevation Upgradient Well	Groundwater Elevation Downgradient Well	Δ GWE (ft)	Distance between wells (ft)	Flow Gradient *i (rise/run)*	Hydraulic Conductivity* *K* (ft/day)	Porosity *n (decimal)*	Darcian Velocity (*K/n) i* (ft/day)	Horizontal Groundwater Velocity (ft/yr)
15S2	11/20/2015	MW-9 to NAM-2	19.66	15.77	3.89	4424	0.00088	2.52	0.44	0.005	1.8
16S1	4/6/2016	MW-9 to NAM-2	19.74	17.26	2.48	4424	0.00056	2.52	0.44	0.003	1.1
16S2	10/31/2016	MW-9 to NAM-2	19.78	15.38	4.40	4424	0.00099	2.52	0.44	0.006	2.2
17S1	3/29/2017	MW-9 to NAM-2	17.47	13.72	3.75	4424	0.00085	2.52	0.44	0.005	1.8
17S2	10/31/2017	MW-9 to NAM-2	19.77	16.56	3.21	4424	0.00073	2.52	0.44	0.004	1.5
										Average	1.7

Calculated using high Hydraulic Conductivity value of 20.41 ft/day

Sampling Event	Date	Gradient Location	Groundwater Elevation Upgradient Well	Groundwater Elevation Downgradient Well	Δ GWE (ft)	Distance between wells (ft)	Flow Gradient *i (rise/run)*	Hydraulic Conductivity* *K* (ft/day)	Porosity *n (decimal)*	Darcian Velocity (*K/n) i* (ft/day)	Horizontal Groundwater Velocity (ft/yr)
15S2	11/20/2015	MW-9 to NAM-2	19.66	15.77	3.89	4424	0.00088	20.41	0.44	0.041	15.0
16S1	4/6/2016	MW-9 to NAM-2	19.74	17.26	2.48	4424	0.00056	20.41	0.44	0.026	9.5
16S2	10/31/2016	MW-9 to NAM-2	19.78	15.38	4.40	4424	0.00099	20.41	0.44	0.046	16.8
17S1	3/29/2017	MW-9 to NAM-2	17.47	13.72	3.75	4424	0.00085	20.41	0.44	0.039	14.2
17S2	10/31/2017	MW-9 to NAM-2	19.77	16.56	3.21	4424	0.00073	20.41	0.44	0.034	12.4
										Average	13.6

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER VELOCITY CALCULATIONS

Calculated Groundwater Velocity – Surficial Aquifer

Calculated using low Hydraulic Conductivity value of 2.52 ft/day

Sampling Event	Date	Gradient Location	Groundwater Elevation Upgradient Well	Groundwater Elevation Downgradient Well	Δ GWE (ft)	Distance between wells (ft)	Flow Gradient *i (rise/run)*	Hydraulic Conductivity* *K* (ft/day)	Porosity *n (decimal)*	Darcian Velocity (*K/n) i* (ft/day)	Horizontal Groundwater Velocity (ft/yr)
15S2	11/20/2015	MW-16 to NAM-4	18.88	15.23	3.65	2143	0.00170	2.52	0.44	0.010	3.7
16S1	4/6/2016	MW-16 to NAM-4	18.96	16.29	2.67	2143	0.00125	2.52	0.44	0.007	2.6
16S2	10/31/2016	MW-16 to NAM-4	18.87	15.17	3.70	2143	0.00173	2.52	0.44	0.010	3.7
17S1	3/29/2017	MW-16 to NAM-4	16.85	12.81	4.04	2143	0.00189	2.52	0.44	0.011	4.0
17S2	10/31/2017	MW-16 to NAM-4	18.74	16.21	2.53	2143	0.00118	2.52	0.44	0.007	2.6
										Average	3.3

Calculated using high Hydraulic Conductivity value of 20.41 ft/day

Sampling Event	Date	Gradient Location	Groundwater Elevation Upgradient Well	Groundwater Elevation Downgradient Well	Δ GWE (ft)	Distance between wells (ft)	Flow Gradient *i (rise/run)*	Hydraulic Conductivity* *K* (ft/day)	Porosity *n (decimal)*	Darcian Velocity (*K/n) i* (ft/day)	Horizontal Groundwater Velocity (ft/yr)
15S2	11/20/2015	MW-16 to NAM-4	18.88	15.23	3.65	2143	0.00170	20.41	0.44	0.079	28.8
16S1	4/6/2016	MW-16 to NAM-4	18.96	16.29	2.67	2143	0.00125	20.41	0.44	0.058	21.2
16S2	10/31/2016	MW-16 to NAM-4	18.87	15.17	3.70	2143	0.00173	20.41	0.44	0.080	29.2
17S1	3/29/2017	MW-16 to NAM-4	16.85	12.81	4.04	2143	0.00189	20.41	0.44	0.088	32.1
17S2	10/31/2017	MW-16 to NAM-4	18.74	16.21	2.53	2143	0.00118	20.41	0.44	0.055	20.1
										Average	26.3

Sarasota County
Central County Solid Waste Disposal Complex
Groundwater Monitoring Well - Total Depth Information

Monitoring Wells

ID	Elevation Top of Casing NGVD 1929	Elevation Ground NGVD 1929	Elevation Concrete Pad NGVD 1929	Inches Measured Stick-Up Height	Feet Measured Stick-Up Height	December 2015 Apparent Total Depth - Measured Feet Below Top of Casing	December 2015 Apparent Total Depth - Measured Feet Below Land Surface	May 2018 Apparent Total Depth - Measured Feet Below Top of Casing	May 2018 Apparent Total Depth - Measured Feet Below Land Surface	Apparent Total Depth Change December 2015 to May 2018	Apparent Original Well Depth From Well Construction Feet Below Land Surface
Source	1	1	1	2	Calculated	2	Calculated	3	Calculated	Calculated	3
Background Well											
MW-1R	24.428	NR	NR	33.90	2.83	15.77	12.94	15.41	12.58	-0.36	12
Detection Wells											
MW-8A	35.40	NR	NR	39.50	3.29	22.81	19.52	22.50	19.21	-0.31	13 (?)
MW-9	32.08	NR	32.28	0.00	0.00	23.20	23.20	22.75	22.75	-0.45	11.5 (?)
MW-10R	39.49	36.33	36.23	36.60	3.05	30.43	27.38	29.90	26.85	-0.53	18.5 (?)
MW-15	44.32	NR	NR	35.40	2.95	31.05	28.10	30.48	27.53	-0.57	27.2
MW-16	43.73	NR	NR	35.80	2.98	30.41	27.43	30.25	27.27	-0.16	27.1
MW-17	46.15	NR	NR	34.75	2.90	33.05	30.15	32.56	29.66	-0.49	29.3
MW-18R	28.33	24.82	NR	42.00	3.50	18.71	15.21	18.65	15.15	-0.06	15
MW-19A	27.52	24.81	NR	27.20	2.27	17.61	15.34	17.50	15.23	-0.11	14.5
MW-20A	27.38	24.57	NR	27.80	2.32	17.48	15.16	17.14	14.82	-0.34	14.5
Natural Attenuation Wells											
NAM-1	19.87	NR	NR	23.60	1.97	15.05	13.08	14.97	13.00	-0.08	12.5
NAM-2	20.02	NR	NR	23.20	1.93	15.22	13.29	15.15	13.22	-0.07	12.5
NAM-3	20.62	NR	NR	23.40	1.95	15.25	13.30	15.17	13.22	-0.08	12.5
NAM-4	22.66	18.20	NR	48.10	4.01	16.96	12.95	16.94	12.93	-0.02	12.6

Source:

1	Specific Purpose Survey - Central County Solid Waste Disposal Complex - Sarasota County Survey-Mapping - Field Date 3/14/2008
2	Atkins - December 2015 Technical Report or Other Information
3	Sarasota County

(?) = Data Unclear or Questionable
NR = Data Not Reported
NA = Data Not Available or Applicable

Attachment 4

Groundwater Parameters Reported At or Outside Groundwater Standards During the Report Period

Background and Detection Wells

ANALYSIS RESULTS COMPARED TO GROUNDWATER STANDARDS, GUIDANCE CONCENTRATIONS OR BACKGROUND CONCENTRATIONS
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		pH (FIELD)	AMMONIA NITROGEN	TOTAL DISSOLVED SOLIDS	ARSENIC	IRON	MANGANESE	CIS-1,3-DICHLORO-PROPENE
STANDARD		6.5-8.5 S.U.**	2.8 mg/L***	1924 mg/L #	10 µg/L*	6300 µg/L #	50 µg/L**	0.4 µg/L***
UNITS		S.U.	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L
Background								
MW-1R	11/02/2015	6.24	-	-	-	-	-	1.7
MW-1R	01/07/2016	-	NM	NM	NM	NM	NM	-
MW-1R	03/30/2016	6.25	-	-	-	-	-	-
MW-1R	10/26/2016	6.46	-	-	-	-	-	-
MW-1R	03/21/2017	-	-	-	-	-	-	-
MW-1R	10/24/2017	6.38	-	-	-	-	97.2	-
Detection								
MW-8A	11/10/2015	6.27	18.6	-	13.5	12200	-	-
MW-8A	03/30/2016	6.17	15.8	-	11.3	12900	-	-
MW-8A	10/27/2016	6.32	15.1	-	10.0 @	9650	-	-
MW-8A	03/28/2017	-	13.4	-	35.4	24900	-	-
MW-8A	10/24/2017	6.33	12.1	-	14	10400	50.1	-
MW-9	11/10/2015	6.46	12.5	-	24.0	27500	-	-
MW-9	03/30/2016	6.32	12.2	-	17.3	29500	-	-
MW-9	10/27/2016	6.50 @	15.8	-	17.9	26400	-	-
MW-9	03/28/2017	-	15.8	-	23.2	33700	-	-
MW-9	10/26/2017	-	11.7	-	-	23800	-	-
MW-10R	11/10/2015	6.33	8.2	-	12.5	51700	-	-
MW-10R	04/05/2016	6.40	7.4	-	10.8	54200	61.2	-
MW-10R	11/02/2016	6.41	7.0	-	-	54200	69.0	-
MW-10R	03/22/2017	-	7.4	-	20.1	58200	-	-
MW-10R	10/27/2017	-	7.3	-	10.7	56000	-	-
MW-15	11/19/2015	-	26.7	2550	69.3	65100	666	-
MW-15	04/05/2016	-	19.2	2420	58.2	61500	491	-
MW-15	11/02/2016	-	28.2	2370	65.0	70800	747	-
MW-15	03/22/2017	-	19.7	-	78.2	59700	487	-
MW-15	10/27/2017	-	27.0	2280	73.6	63700	592	-
MW-16	11/19/2015	6.21	38.7	-	56.5	53600	-	-
MW-16	04/05/2016	6.30	38.0	-	49.0	52000	100	-
MW-16	11/02/2016	6.25	38.3	-	46.2	56800	-	-
MW-16	03/22/2017	6.50 @	39.2	-	58.6	68900	-	-
MW-16	10/27/2017	6.43	32.8	-	50.4	61200	-	-
MW-17	11/19/2015	6.23	35.4	-	75.7	80900	-	-

ANALYSIS RESULTS COMPARED TO GROUNDWATER STANDARDS, GUIDANCE CONCENTRATIONS OR BACKGROUND CONCENTRATIONS
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		pH (FIELD)	AMMONIA NITROGEN	TOTAL DISSOLVED SOLIDS	ARSENIC	IRON	MANGANESE	CIS-1,3-DICHLORO-PROPENE
STANDARD		6.5-8.5 S.U.**	2.8 mg/L***	1924 mg/L #	10 µg/L*	6300 µg/L #	50 µg/L**	0.4 µg/L***
UNITS		S.U.	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L
MW-17	04/05/2016	6.34	32.8	-	55.8	87700	-	-
MW-17	10/27/2016	6.28	36.0	-	56.2	77100	-	-
MW-17	03/22/2017	-	27.8	-	49.1	94200	-	-
MW-17	10/27/2017	6.45	28.7	-	87.6	92600	-	-
MW-18R	11/03/2015	5.99	26.6	-	16.4	18900	-	-
MW-18R	04/04/2016	5.68	24.4	-	10.3	21300	-	-
MW-18R	10/25/2016	6.01	16.4	-	10.4	10300	-	-
MW-18R	03/21/2017	6.23	20.7	-	22.2	43500	-	-
MW-18R	10/26/2017	6.18	6.3	-	-	-	-	-
MW-19A	11/02/2015	-	3.0	-	31	25800	-	-
MW-19A	04/04/2016	6.44	-	-	27.4	25700	-	-
MW-19A	10/27/2016	-	2.9	-	34.1	24600	-	-
MW-19A	03/21/2017	-	-	-	22.0	23200	-	-
MW-19A	10/24/2017	-	-	-	39.6	28500	-	-
MW-20A	11/02/2015	6.37	-	-	10.5	9960	-	-
MW-20A	04/04/2016	6.17	-	-	-	7140	-	-
MW-20A	10/25/2016	6.42	-	-	-	-	-	-
MW-20A	03/21/2017	-	-	-	10.9	-	-	-
MW-20A	10/24/2017	-	-	-	10 @	8230	-	-

LEGEND

*	=Primary Drinking Water Standard
**	=Secondary Drinking Water Standard
***	=Chapter 62-777 Groundwater Cleanup Target Levels (GCTL)
#	=Site-Specific Background Concentration
@	=Analysis Result is at Groundwater Standard, GCTL, or Background Concentrations
-	=Analysis Result is not at or outside Groundwater Standard, GCTL, or Background Concentrations
NS	=Not Sampled

Note:

This table displays analysis results which were reported at or outside applicable groundwater standards.
Analysis results which were reported above the laboratory detection limit (reporting limit), but not at or above applicable groundwater standards are not displayed in this table.

NAM Wells

ANALYSIS RESULTS COMPARED TO GROUNDWATER STANDARDS AND/OR GUIDANCE CONCENTRATIONS

SARASOTA CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		pH (FIELD)	ARSENIC
STANDARD		6.5-8.5 S.U.**	10 µg/L*
UNITS		S.U.	µg/L
Natural Attenuation Wells			
NAM-1	11/03/2015	-	-
NAM-1	04/01/2016	-	-
NAM-1	10/26/2016	-	-
NAM-1	03/20/2017	-	-
NAM-1	10/25/2017	-	-
NAM-1 DUP	10/25/2017	-	-
NAM-2	11/10/2015	-	-
NAM-2	04/01/2016	-	-
NAM-2	10/26/2016	-	-
NAM-2	03/20/2017	-	11.0
NAM-2	10/26/2017	-	10.6
NAM-3	11/03/2015	-	-
NAM-3	04/01/2016	-	-
NAM-3	10/26/2016	-	-
NAM-3	03/20/2017	-	-
NAM-3	10/26/2017	-	-
NAM-4	11/03/2015	6.39	18.6
NAM-4	04/01/2016	6.39	20.8
NAM-4 DUP	04/01/2016	6.39	20.8
NAM-4	10/26/2016	-	16.9
NAM-4	03/20/2017	-	12.0
NAM-4 DUP	03/20/2017	-	13.0
NAM-4	10/26/2017	-	-

LEGEND

*	=Primary Drinking Water Standard
**	=Secondary Drinking Water Standard
***	=Chapter 62-777 Groundwater Cleanup Target Levels (GCTL)
@	=Analysis Result is at Groundwater Standard or GCTL
-	=Analysis Result is not at or outside Groundwater Standard or GCTL
NS	=Not Sampled
NM	=Not Measured

Note:

This table displays analysis results which were reported at or outside Groundwater Standards or GCTL.
Analysis results notated with "@" indicate that the analysis result was reported at the Groundwater Standard or GCTL.
Analysis results which were reported above the laboratory detection limit (reporting limit), but not at or above the Groundwater Standard or GCTL concentration are not displayed in this table.

Attachment 5

Groundwater Parameters Reported At or Above the Laboratory Detection Limit During the Report Period

Background and Detection Wells

PARAMETERS AT OR ABOVE THE LABORATORY DETECTION LIMIT
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		CONDUC-TIVITY (FIELD)	DISSOLVED OXYGEN (FIELD)	pH (FIELD)	TEMPER-ATURE (FIELD)	TURBIDITY (FIELD)	AMMONIA NITROGEN	CHLORIDE	NITRATE NITROGEN	SULFATE	TOTAL DISSOLVED SOLIDS
STANDARD		(1)	(1)	6.5-8.5 S.U.**	(1)	(1)	2.8 mg/L***	643 mg/L #	10 mg/L*	250 mg/L**	1924 mg/L #
UNITS		uS/cm	ppm	S.U.	deg C	NTU	mg/L	mg/L	mg/L	mg/L	mg/L
Background											
MW-1R	11/2/2015	410	0.49	6.24	26.43	1.10	0.93	10.6	<0.025	<2.5	292
MW-1R	1/7/2016	475	0.48	6.53	22.56	1.41	-	-	-	-	-
MW-1R	3/30/2016	433	0.13	6.25	22.59	1.34	0.22	15.7	0.047 I	<2.5	279
MW-1R	10/26/2016	533	0.13	6.46	26.83	3.78	0.63	15.4	<0.01	<2.5	342
MW-1R	3/21/2017	600	0.48	6.88	22.63	12.1	0.087	30.7	<0.025	<2.5	371
MW-1R	10/24/2017	369	0.75	6.38	26.75	2.28	0.17	9.8	0.043 I	<2.5	254
Detection											
MW-8A	11/10/2015	1770	0.40	6.27	27.17	2.47	18.6	23.8	<0.025	<2.5	1020
MW-8A	3/30/2016	1611	0.22	6.17	23.83	1.20	15.8	18.1	<0.025	<2.5	882
MW-8A	10/27/2016	1474	0.08	6.32	27.00	1.36	15.1	13.9	<0.025	<2.5	794
MW-8A	3/28/2017	1382	0.16	6.63	25.57	0.78	13.4	14.8	<0.025	<2.5	762
MW-8A	10/24/2017	1358	0.1	6.33	27.30	2.61	12.1	10.3	<0.025	<2.5	646
MW-9	11/10/2015	1755	0.32	6.46	29.37	0.63	12.5	27.3	<0.025	8.9	986
MW-9	3/30/2016	1757	0.13	6.32	26.09	0.40	12.2	28.8	<0.025	15.1	936
MW-9	10/27/2016	1885	0.12	6.50	29.50	1.09	15.8	32.8	<0.025	37	1030
MW-9	3/28/2017	1933	0.12	6.70	28.15	1.91	15.8	28.6	<0.025	3.4 I	1030
MW-9	10/26/2017	1973	0.19	6.59	29.56	0.33	11.7	26.2	<0.025	75.8	992
MW-10R	11/10/2015	1503	0.21	6.33	28.05	0.89	8.2	81.9	<0.025	<2.5	796
MW-10R	4/5/2016	1567	0.09	6.40	28.93	0.84	7.4	86.5	<0.05	2.8 I	924
MW-10R	11/2/2016	1665	0.04	6.41	29.57	0.61	7.0	77.7	<0.1	<12.5	856
MW-10R	3/22/2017	1502	0.03	6.53	28.13	4.95	7.4	87.7	<0.025	<2.5	814
MW-10R	10/27/2017	1744	0.11	6.52	29.63	7.84	7.3	89.4	<0.025	<2.5	856
MW-15	11/19/2015	3924	0.10	6.52	30.27	8.24	26.7	178	<0.025	<2.5	2550
MW-15	4/5/2016	3792	0.02	6.63	27.70	1.93	19.2	172	<0.025	<25	2420
MW-15	11/2/2016	3718	0.01	6.58	28.42	2.36	28.2	167	<0.1	<25	2370
MW-15	3/22/2017	2786	0.04	6.60	27.45	8.32	19.7	155	<0.025	<2.5	1740
MW-15	10/27/2017	3617	0.23	6.64	28.11	6.50	27.0	142	<0.025	<2.5	2280
MW-16	11/19/2015	2302	0.12	6.21	30.10	1.49	38.7	181	0.058	<2.5	1290
MW-16	4/5/2016	2369	0.03	6.30	28.42	2.14	38.0	184	<0.025	<12.5	1300
MW-16	11/2/2016	2399	0.04	6.25	28.42	1.24	38.3	185	<0.1	<12.5	1290
MW-16	3/22/2017	2379	0.04	6.50	27.50	8.12	39.2	177	<0.025	<2.5	1190
MW-16	10/27/2017	2439	0.29	6.43	27.45	2.5	32.8	150	<0.025	<2.5	1200
MW-17	11/19/2015	1764	0.20	6.23	29.73	1.11	35.4	77.2	0.069	<2.5	898
MW-17	4/5/2016	1783	0.11	6.34	27.50	1.77	32.8	81.6	<0.05	<2.5	938
MW-17	10/27/2016	1788	0.03	6.28	29.12	1.83	36.0	80.2	<0.12	<2.5	1850
MW-17	3/22/2017	1715	0.13	6.55	25.60	23.4	27.8	82.5	0.39	<2.5	910
MW-17	10/27/2017	1871	0.37	6.45	25.17	2.69	28.7	79.3	0.026 I	<2.5	916

PARAMETERS AT OR ABOVE THE LABORATORY DETECTION LIMIT
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		CONDUC-TIVITY (FIELD)	DISSOLVED OXYGEN (FIELD)	pH (FIELD)	TEMPER-ATURE (FIELD)	TURBIDITY (FIELD)	AMMONIA NITROGEN	CHLORIDE	NITRATE NITROGEN	SULFATE	TOTAL DISSOLVED SOLIDS
STANDARD		(1)	(1)	6.5-8.5 S.U.**	(1)	(1)	2.8 mg/L***	643 mg/L #	10 mg/L*	250 mg/L**	1924 mg/L #
UNITS		uS/cm	ppm	S.U.	deg C	NTU	mg/L	mg/L	mg/L	mg/L	mg/L
MW-18R	11/3/2015	679	0.17	5.99	28.90	7.31	26.6	13.8	0.027 I	<2.5	387
MW-18R	4/4/2016	700	0.11	5.68	23.93	6.09	24.4	15.1	<0.025	<2.5	367
MW-18R	10/25/2016	578	0.06	6.01	29.00	6.64	16.4	10.3	<0.025	<2.5	312
MW-18R	3/21/2017	639	0.10	6.23	25.30	18.9	20.7	17.1	0.11	<2.5	360
MW-18R	10/26/2017	374	0.21	6.18	27.76	7.29	6.3	7.4	<0.025	5.3	214
MW-19A	11/2/2015	726	0.15	6.59	28.79	1.12	3.0	10.5	<0.025	2.8 I	367
MW-19A	4/4/2016	779	0.10	6.44	23.93	5.29	2.5	8.4	<0.025	<2.5	390
MW-19A	10/27/2016	842	0.12	6.63	27.91	2.02	2.9	5.5	<0.025	3.1 I	416
MW-19A	3/21/2017	861	0.14	6.91	24.37	1.85	1.6	6.3	<0.025	8.3	416
MW-19A	10/24/2017	928	0.09	6.69	28.48	0.66	2.4	7.6	<0.025	3.8 I	433
MW-20A	11/2/2015	631	0.25	6.37	28.31	0.70	1.9	4.1 I	<0.025	6.2	375
MW-20A	4/4/2016	569	0.10	6.17	23.69	1.76	0.96	5.1	<0.025	6.9	329
MW-20A	10/25/2016	693	0.12	6.42	27.98	0.66	1.7	4.1 I	<0.025	<2.5	365
MW-20A	3/21/2017	888	0.13	6.82	23.34	1.03	1.5	15.7	<0.025	11.1	527
MW-20A	10/24/2017	767	0.13	6.62	28.15	1.57	1.3	4.0 I	<0.025	<2.5	290

LEGEND
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PARAMETERS AT OR ABOVE THE LABORATORY DETECTION LIMIT
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON	LEAD	MANGANESE	NICKEL
STANDARD		10 µg/L*	2000 µg/L*	4 µg/L*	5 µg/L*	100 µg/L*	1000 µg/L**	6300 µg/L #	15 µg/L*	50 µg/L**	100 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Background											
MW-1R	11/2/2015	<5	41.4	<0.5	<0.5	3.0 I	<2.5	3250	<5	12.4	<2.5
MW-1R	1/7/2016	-	-	-	-	-	-	-	-	-	-
MW-1R	3/30/2016	<5	37.6	<0.5	<0.5	<2.5	<2.5	2650	<5	11.4	<2.5
MW-1R	10/26/2016	8.4 I	49.8	<0.5	<0.5	2.9 I	<2.5	3840	<5	14.5	<2.5
MW-1R	3/21/2017	<5.0	38.6	<0.5	<0.5	5 I	<2.5	4460	<5	10.6	<2.5
MW-1R	10/24/2017	<5	33.9	<0.5	<0.5	<2.5	<2.5	1100	<5	97.2	<2.5
Detection											
MW-8A	11/10/2015	13.5	60.9	<0.5	<0.5	<2.5	<2.5	12200	<5	49.6	<2.5
MW-8A	3/30/2016	11.3	49.2	<0.5	<0.5	<2.5	<2.5	12900	9.8 I	43.0	<2.5
MW-8A	10/27/2016	10.0	50.7	<0.5	2.5	<2.5	<2.5	9650	<5	46.3	2.5 I
MW-8A	3/28/2017	35.4	42.1	<0.5	1.8	<2.5	3.7 I	24900	<5	28.2	<2.5
MW-8A	10/24/2017	14	49.6	<0.5	<0.5	<2.5	<2.5	10400	<5	50.1	<2.5
MW-9	11/10/2015	24.0	112	<0.5	<0.5	<2.5	<2.5	27500	<5	33.8	<2.5
MW-9	3/30/2016	17.3	104	<0.5	<0.5	<2.5	<2.5	29500	5.1 I	35.6	<2.5
MW-9	10/27/2016	17.9	111	<0.5	0.54 I	<2.5	<2.5	26400	<5	35.8	4.0 I
MW-9	3/28/2017	23.2	104	<0.5	2.4	<2.5	4.7 I	33700	<5	26.0	<2.5
MW-9	10/26/2017	9.9 I	111	<0.5	<0.5	<2.5	<2.5	23800	<5	39.5	<2.5
MW-10R	11/10/2015	12.5	72.0	<0.5	<0.5	<2.5	<2.5	51700	<5	47.3	<2.5
MW-10R	4/5/2016	10.8	73.6	<0.5	0.69 I	5.2	5.0 I	54200	8.1 I	61.2	3.2 I
MW-10R	11/2/2016	8.2 I	83.5	<0.5	1.4	2.6 I	6.8	54200	<5	69.0	<2.5
MW-10R	3/22/2017	20.1	84.3	<0.5	1.5	3.1 I	9.5	58200	<5	21.2	<2.5
MW-10R	10/27/2017	10.7	79	<0.5	<2.5	<2.5	<2.5	56000	<5	46.5	3.2 I
MW-15	11/19/2015	69.3	388	<0.5	2.0	3.1 I	<2.5	65100	<5	666	4.2 I
MW-15	4/5/2016	58.2	268	<0.5	0.79 I	<2.5	<2.5	61500	<5	491	3.5 I
MW-15	11/2/2016	65.0	397	<0.5	2.2	2.7 I	9.7	70800	<25	747	3.5 I
MW-15	3/22/2017	78.2	262	0.55 I	2.0	<2.5	<2.5	59700	<5	487	2.5 I
MW-15	10/27/2017	73.6	369	<0.5	<2.5	<2.5	<2.5	63700	<5	592	8.0
MW-16	11/19/2015	56.5	92.4	<0.5	1.7	4.9 I	<2.5	53600	<5	12.7	<2.5
MW-16	4/5/2016	49.0	89.7	<0.5	0.76 I	6.3	<2.5	52000	5.8 I	100	2.9 I
MW-16	11/2/2016	46.2	89.4	<0.5	1.6	4.0 I	7.5	56800	<5	25.0	<2.5
MW-16	3/22/2017	58.6	98.1	<0.84	<5	<5	<5	68900	<5	13.1	<5.0
MW-16	10/27/2017	50.4	91.3	<0.5	<2.5	2.9 I	<2.5	61200	<5	15.8	4.3 I
MW-17	11/19/2015	75.7	97.4	<0.5	3.0	6.8	<2.5	80900	<5	9.9	<2.5
MW-17	4/5/2016	55.8	96.5	<0.5	2.2	4.1 I	<2.5	87700	<5	9.9	5.0 I
MW-17	10/27/2016	56.2	90.2	<0.5	2.6	4.5 I	<2.5	77100	<5	13.2	7.8
MW-17	3/22/2017	49.1	80.2	<0.84	<5	13.9	<5	94200	<5	9.2 I	7.5 I
MW-17	10/27/2017	87.6	94.1	<0.5	<2.5	<2.5	<2.5	92600	<5	13.8	5.0

PARAMETERS AT OR ABOVE THE LABORATORY DETECTION LIMIT
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JULY 2015 THROUGH DECEMBER 2017

PARAMETER		ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON	LEAD	MANGANESE	NICKEL
STANDARD		10 µg/L*	2000 µg/L*	4 µg/L*	5 µg/L*	100 µg/L*	1000 µg/L**	6300 µg/L #	15 µg/L*	50 µg/L**	100 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-18R	11/3/2015	16.4	23.8	<0.5	<0.5	4.7 I	<2.5	18900	<0.5	8.2	<2.5
MW-18R	4/4/2016	10.3	20.9	<0.5	<0.5	3.8 I	<2.5	21300	9.9 I	6.8	<2.5
MW-18R	10/25/2016	10.4	20.3	<0.5	2.6	<2.5	<2.5	10300	<5	7.7	<2.5
MW-18R	3/21/2017	22.2	42.7	<0.5	0.66 I	6.6	<2.5	43500	<5	<2.5	<2.5
MW-18R	10/26/2017	9.7 I	14.9	<0.5	<0.5	<2.5	<2.5	5880	<5	6.0	<2.5
MW-19A	11/2/2015	31	34.9	<0.5	<0.5	<2.5	<2.5	25800	<5	21.9	<2.5
MW-19A	4/4/2016	27.4	34.0	<0.5	<0.5	<2.5	<2.5	25700	<5	24.9	<2.5
MW-19A	10/27/2016	34.1	58.6	<0.5	<2.5	2.8 I	<12.5	24600	<5	23.0	<2.5
MW-19A	3/21/2017	22.0	32.0	<0.5	<0.5	<2.5	<2.5	23200	<5	26.6	<2.5
MW-19A	10/24/2017	39.6	70	<0.5	<0.5	<2.5	<2.5	28500	<5	26.9	<2.5
MW-20A	11/2/2015	10.5	38.2	<0.5	<0.5	<2.5	<2.5	9960	<5	16.8	<2.5
MW-20A	4/4/2016	<5	36.5	<0.5	<0.5	<2.5	<2.5	7140	<5	11.7	<2.5
MW-20A	10/25/2016	5.7 I	40.5	<0.5	2.9	<2.5	<2.5	3570	<5	16.1	<2.5
MW-20A	3/21/2017	10.9	55.0	<0.5	<0.5	<2.5	<2.5	4810	<5	20.7	<2.5
MW-20A	10/24/2017	10	49.6	<0.5	<0.5	<2.5	<2.5	8230	<5	17.5	<2.5

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SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		SELENIUM	SODIUM	VANADIUM	ZINC	CHLORO-METHANE (METHYL CHLORIDE)	CIS-1,3-DICHLORO-PROPENE	TOLUENE	TOTAL VOCS
STANDARD		50 µg/L*	456 mg/L #	49 µg/L***	5000 µg/L**	2.7 µg/L***	0.4 µg/L***	40 µg/L**	(1)
UNITS		µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Background									
MW-1R	11/2/2015	<7.5	8.7	<5	<10	<0.62	1.7	<0.5	1.7
MW-1R	1/7/2016	-	-	-	-	-	<0.25	-	-
MW-1R	3/30/2016	<7.5	14.4	<5	<10	<0.62	<0.25	1.20	1.2
MW-1R	10/26/2016	<7.5	16.7	<5	<10	<0.62	<0.25	<0.5	-
MW-1R	3/21/2017	<7.5	28.9	7.5 I	<10	<0.62	<0.25	<0.5	-
MW-1R	10/24/2017	<7.5	10.2	<5	<10	<0.11	<0.13	<0.26	-
Detection									
MW-8A	11/10/2015	<7.5	42.8	<5	<10	<0.62	<0.25	<0.5	-
MW-8A	3/30/2016	<7.5	40.2	<5	<10	<0.62	<0.25	1.60	1.6
MW-8A	10/27/2016	<7.5	34.3	<5	<10	<0.62	<0.25	<0.5	-
MW-8A	3/28/2017	<7.5	32.6	<5.0	<10	<0.62	<0.25	<0.5	-
MW-8A	10/24/2017	<7.5	29.8	<5	<10	<0.11	<0.13	<0.26	-
MW-9	11/10/2015	<7.5	26.4	<5	<10	<0.62	<0.25	0.55 I	0.55
MW-9	3/30/2016	11.8 I	25.4	<5	<10	<0.62	<0.25	0.95 I	0.95
MW-9	10/27/2016	<7.5	26.6	<5	14.1 I	<0.62	<0.25	<0.5	-
MW-9	3/28/2017	<7.5	27.2	<5.0	<10	<0.62	<0.25	<0.5	-
MW-9	10/26/2017	<7.5	22.6	<5	<10	<0.62	<0.25	<0.50	-
MW-10R	11/10/2015	<7.5	82.6	<5	<10	<0.62	<0.25	<0.5	-
MW-10R	4/5/2016	<7.5	81.5	5.2 I	16.7 I	<0.11	<0.13	0.37 I	0.37
MW-10R	11/2/2016	9.1 I	84.3	<5	<10	<0.62	<0.25	<0.5	-
MW-10R	3/22/2017	<7.5	79.5	<5.0	<10	<0.62	<0.25	<0.5	-
MW-10R	10/27/2017	<7.5	86.1	<5	<10	<0.11	<0.13	<0.26	-
MW-15	11/19/2015	<7.5	82.5	<5	<10	<0.62	<0.25	<0.5	-
MW-15	4/5/2016	<7.5	77.1	<5	<10	0.13 I	<0.13	0.51 I	0.64
MW-15	11/2/2016	8.6 I	83.9	5.6 I	<10	<0.62	<0.25	<0.5	-
MW-15	3/22/2017	<7.5	91.7	<5.0	<10	<0.62	<0.25	<0.5	-
MW-15	10/27/2017	9.5 I	71.8	7.1 I	<10	0.21 I	<0.13	<0.26	0.21
MW-16	11/19/2015	<7.5	212	8.6 I	<10	<0.62	<0.25	<0.5	-
MW-16	4/5/2016	<7.5	200	7.8 I	<10	<0.11	<0.13	0.98 I	0.98
MW-16	11/2/2016	12.2 I	211	8.2 I	<10	<0.62	<0.25	<0.5	-
MW-16	3/22/2017	<6.0	171	<5.0	<5	<0.62	<0.25	<0.5	-
MW-16	10/27/2017	9.2 I	190	10.3	<10	<0.11	<0.13	<0.26	-
MW-17	11/19/2015	<7.5	60.4	<5	<10	<0.62	<0.25	<0.5	-
MW-17	4/5/2016	23.6	63.2	<5	<10	<0.11	<0.13	0.94 I	0.94
MW-17	10/27/2016	<7.5	59.3	<5	10.7 I	<0.62	<0.25	<0.5	-
MW-17	3/22/2017	6.1 I	52.9	<5.0	<5	<0.62	<0.25	<0.5	-
MW-17	10/27/2017	<7.5	62.4	8.8 I	<10	<0.11	<0.13	0.29 I	0.29

PARAMETERS AT OR ABOVE THE LABORATORY DETECTION LIMIT
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JULY 2015 THROUGH DECEMBER 2017

PARAMETER		SELENIUM	SODIUM	VANADIUM	ZINC	CHLORO-METHANE (METHYL CHLORIDE)	CIS-1,3-DICHLORO-PROPENE	TOLUENE	TOTAL VOCS
STANDARD		50 µg/L*	456 mg/L #	49 µg/L***	5000 µg/L**	2.7 µg/L***	0.4 µg/L***	40 µg/L**	(1)
UNITS		µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-18R	11/3/2015	<7.5	15.6	8.3 I	<10	<0.62	<0.25	<0.5	-
MW-18R	4/4/2016	<7.5	14.4	8.1 I	<10	<0.11	<0.13	0.79 I	0.79
MW-18R	10/25/2016	<7.5	8.9	<5	<10	<0.62	<0.25	<0.5	-
MW-18R	3/21/2017	<7.5	16.5	18.1	<10	<0.62	<0.25	<0.5	-
MW-18R	10/26/2017	<7.5	5.7	6.0 I	<10	<0.62	<0.25	<0.50	-
MW-19A	11/2/2015	<7.5	6.0	<5	<10	<0.62	<0.25	<0.5	-
MW-19A	4/4/2016	<7.5	7.1	<5	<10	<0.11	<0.13	1.20	1.2
MW-19A	10/27/2016	<7.5	6.6	<5	<10	<0.62	<0.25	<0.5	-
MW-19A	3/21/2017	<7.5	4.4	<5.0	<10	<0.62	<0.25	<0.5	-
MW-19A	10/24/2017	<7.5	6.2	<5	<10	<0.11	<0.13	<0.26	-
MW-20A	11/2/2015	<7.5	4.8	<5	<10	<0.62	<0.25	<0.5	-
MW-20A	4/4/2016	<7.5	4.0	<5	<10	<0.11	<0.13	0.86 I	0.86
MW-20A	10/25/2016	<7.5	4.9	<5	<10	<0.62	<0.25	<0.5	-
MW-20A	3/21/2017	<7.5	12.1	<5.0	<10	<0.62	<0.25	<0.5	-
MW-20A	10/24/2017	<7.5	4.4	9.1 I	<10	<0.11	<0.13	<0.26	-

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NAM Wells

PARAMETERS AT OR ABOVE THE LABORATORY DETECTION LIMIT
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		CONDUC-TIVITY (FIELD)	DISSOLVED OXYGEN (FIELD)	pH (FIELD)	TEMPER-ATURE (FIELD)	TURBIDITY (FIELD)	AMMONIA NITROGEN	TOTAL DISSOLVED SOLIDS	ARSENIC	IRON	MANGANESE
STANDARD		(1)	(1)	6.5-8.5 S.U.**	(1)	(1)	2.8 mg/L***	1924 mg/L #	10 µg/L*	6300 µg/L #	50 µg/L**
UNITS		uS/cm	ppm	S.U.	deg C	NTU	mg/L	mg/L	µg/L	µg/L	µg/L
Natural Attenuation Wells											
NAM-1	11/3/2015	1011	0.14	6.81	26.63	3.37	0.28	600	8.5 I	3830	5.4
NAM-1	4/1/2016	989	0.12	6.89	23.32	8.77	0.22	570	4.0	3560	3.7 I
NAM-1	10/26/2016	904	0.23	6.70	25.34	2.74	0.17	529	3.2	2810	2.7 I
NAM-1	3/20/2017	933	0.55	7.27	21.29	0.67	0.087	541	<5.4	877	<5
NAM-1	10/25/2017	826	0.09	6.87	25.68	1.47	0.052	477	2.7	1960	<2.5
NAM-1 DUP	10/25/2017	826	0.09	6.87	25.68	1.47	0.052	472	3.1	2170	<2.5
NAM-2	11/10/2015	776	0.21	6.65	26.10	0.72	0.29	479	8.9	2760	3.4 I
NAM-2	4/1/2016	778	0.22	6.69	22.95	0.50	0.24	456	7.7	2770	3.1 I
NAM-2	10/26/2016	781	0.35	6.85	26.00	3.48	0.38	467	6.8	2570	4.7 I
NAM-2	3/20/2017	778	1.17	7.12	22.17	1.63	0.19	441	11.0	3130	<5
NAM-2	10/26/2017	808	0.12	7.03	25.87	0.54	0.18	449	10.6	2740	2.8 I
NAM-3	11/3/2015	618	0.17	6.59	25.14	0.85	0.43	405	6.7	4910	8.0
NAM-3	4/1/2016	616	0.13	6.75	22.27	0.76	0.38	356	5.4	6170	7.7
NAM-3	10/26/2016	578	0.46	6.72	24.58	2.81	0.45	348	3.6	5190	8.5
NAM-3	3/20/2017	585	1.44	7.08	20.68	1.86	0.4	353	<5.4	5970	7.4 I
NAM-3	10/26/2017	595	0.08	6.99	24.65	2.32	0.24	311	4.6	6030	7.9
NAM-4	11/3/2015	749	0.21	6.39	26.31	3.12	0.11	461	18.6	1960	4.1 I
NAM-4	4/1/2016	743	0.24	6.39	22.56	1.59	0.099	426	20.8	4340	4.1 I
NAM-4 DUP	4/1/2016	743	0.24	6.39	22.56	1.59	0.10	437	20.8	4780	4.6 I
NAM-4	10/26/2016	773	0.84	6.57	26.62	12.9	0.11	458	16.9	4590	4.6 I
NAM-4	3/20/2017	606	0.71	6.72	22.58	3.60	0.11	369	12.0	2930	5.4 I
NAM-4 DUP	3/20/2017	606	0.71	6.72	22.58	3.60	0.11	376	13.0	3050	5.4 I
NAM-4	10/26/2017	572	0.14	6.59	25.85	0.43	0.097	326	8.8	3410	3.8 I

LEGEND
* = Primary Drinking Water Standard
** = Secondary Drinking Water Standard
*** = Chapter 62-777 Groundwater Cleanup Target Levels (GCTL)
# = Site-Specific Background Concentration

PARAMETERS AT OR ABOVE THE LABORATORY DETECTION LIMIT
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER	
STANDARD UNITS	
Natural Attenution Wells	
NAM-1	11/3/2015
NAM-1	4/1/2016
NAM-1	10/26/2016
NAM-1	3/20/2017
NAM-1	10/25/2017
NAM-1 DUP	10/25/2017
NAM-2	11/10/2015
NAM-2	4/1/2016
NAM-2	10/26/2016
NAM-2	3/20/2017
NAM-2	10/26/2017
NAM-3	11/3/2015
NAM-3	4/1/2016
NAM-3	10/26/2016
NAM-3	3/20/2017
NAM-3	10/26/2017
NAM-4	11/3/2015
NAM-4	4/1/2016
NAM-4 DUP	4/1/2016
NAM-4	10/26/2016
NAM-4	3/20/2017
NAM-4 DUP	3/20/2017
NAM-4	10/26/2017

LEGEND
* = Primary Drinking Water Standard
** = Secondary Drinking Water Standard
*** = Chapter 62-777 Groundwater Cleanup Target Levels (GCTL)
# = Site-Specific Background Concentration

Attachment 6

Groundwater All Data Table for the Report Period

Background and Detection Wells

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		CONDUC-TIVITY (FIELD)	DISSOLVED OXYGEN (FIELD)	pH (FIELD)	TEMPER-ATURE (FIELD)	TURBIDITY (FIELD)	AMMONIA NITROGEN	CHLORIDE	NITRATE NITROGEN	SULFATE	TOTAL DISSOLVED SOLIDS
STANDARD		(1)	(1)	6.5-8.5 S.U.**	(1)	(1)	2.8 mg/L***	643 mg/L #	10 mg/L*	250 mg/L**	1924 mg/L #
UNITS		uS/cm	ppm	S.U.	deg C	NTU	mg/L	mg/L	mg/L	mg/L	mg/L
Background											
MW-1R	11/2/2015	410	0.49	6.24	26.43	1.10	0.93	10.6	<0.025	<2.5	292
MW-1R	1/7/2016	475	0.48	6.53	22.56	1.41	-	-	-	-	-
MW-1R	3/30/2016	433	0.13	6.25	22.59	1.34	0.22	15.7	0.047 I	<2.5	279
MW-1R	10/26/2016	533	0.13	6.46	26.83	3.78	0.63	15.4	<0.01	<2.5	342
MW-1R	3/21/2017	600	0.48	6.88	22.63	12.1	0.087	30.7	<0.025	<2.5	371
MW-1R	10/24/2017	369	0.75	6.38	26.75	2.28	0.17	9.8	0.043 I	<2.5	254
Detection											
MW-8A	11/10/2015	1770	0.40	6.27	27.17	2.47	18.6	23.8	<0.025	<2.5	1020
MW-8A	3/30/2016	1611	0.22	6.17	23.83	1.20	15.8	18.1	<0.025	<2.5	882
MW-8A	10/27/2016	1474	0.08	6.32	27.00	1.36	15.1	13.9	<0.025	<2.5	794
MW-8A	3/28/2017	1382	0.16	6.63	25.57	0.78	13.4	14.8	<0.025	<2.5	762
MW-8A	10/24/2017	1358	0.1	6.33	27.30	2.61	12.1	10.3	<0.025	<2.5	646
MW-9	11/10/2015	1755	0.32	6.46	29.37	0.63	12.5	27.3	<0.025	8.9	986
MW-9	3/30/2016	1757	0.13	6.32	26.09	0.40	12.2	28.8	<0.025	15.1	936
MW-9	10/27/2016	1885	0.12	6.50	29.50	1.09	15.8	32.8	<0.025	37	1030
MW-9	3/28/2017	1933	0.12	6.70	28.15	1.91	15.8	28.6	<0.025	3.4 I	1030
MW-9	10/26/2017	1973	0.19	6.59	29.56	0.33	11.7	26.2	<0.025	75.8	992
MW-10R	11/10/2015	1503	0.21	6.33	28.05	0.89	8.2	81.9	<0.025	<2.5	796
MW-10R	4/5/2016	1567	0.09	6.40	28.93	0.84	7.4	86.5	<0.05	2.8 I	924
MW-10R	11/2/2016	1665	0.04	6.41	29.57	0.61	7.0	77.7	<0.1	<12.5	856
MW-10R	3/22/2017	1502	0.03	6.53	28.13	4.95	7.4	87.7	<0.025	<2.5	814
MW-10R	10/27/2017	1744	0.11	6.52	29.63	7.84	7.3	89.4	<0.025	<2.5	856
MW-15	11/19/2015	3924	0.10	6.52	30.27	8.24	26.7	178	<0.025	<2.5	2550
MW-15	4/5/2016	3792	0.02	6.63	27.70	1.93	19.2	172	<0.025	<25	2420
MW-15	11/2/2016	3718	0.01	6.58	28.42	2.36	28.2	167	<0.1	<25	2370
MW-15	3/22/2017	2786	0.04	6.60	27.45	8.32	19.7	155	<0.025	<2.5	1740
MW-15	10/27/2017	3617	0.23	6.64	28.11	6.50	27.0	142	<0.025	<2.5	2280
MW-16	11/19/2015	2302	0.12	6.21	30.10	1.49	38.7	181	0.058	<2.5	1290
MW-16	4/5/2016	2369	0.03	6.30	28.42	2.14	38.0	184	<0.025	<12.5	1300
MW-16	11/2/2016	2399	0.04	6.25	28.42	1.24	38.3	185	<0.1	<12.5	1290
MW-16	3/22/2017	2379	0.04	6.50	27.50	8.12	39.2	177	<0.025	<2.5	1190
MW-16	10/27/2017	2439	0.29	6.43	27.45	2.5	32.8	150	<0.025	<2.5	1200
MW-17	11/19/2015	1764	0.20	6.23	29.73	1.11	35.4	77.2	0.069	<2.5	898
MW-17	4/5/2016	1783	0.11	6.34	27.50	1.77	32.8	81.6	<0.05	<2.5	938
MW-17	10/27/2016	1788	0.03	6.28	29.12	1.83	36.0	80.2	<0.12	<2.5	1850
MW-17	3/22/2017	1715	0.13	6.55	25.60	23.4	27.8	82.5	0.39	<2.5	910
MW-17	10/27/2017	1871	0.37	6.45	25.17	2.69	28.7	79.3	0.026 I	<2.5	916

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		CONDUC-TIVITY (FIELD)	DISSOLVED OXYGEN (FIELD)	pH (FIELD)	TEMPER-ATURE (FIELD)	TURBIDITY (FIELD)	AMMONIA NITROGEN	CHLORIDE	NITRATE NITROGEN	SULFATE	TOTAL DISSOLVED SOLIDS
STANDARD		(1)	(1)	6.5-8.5 S.U.**	(1)	(1)	2.8 mg/L***	643 mg/L #	10 mg/L*	250 mg/L**	1924 mg/L #
UNITS		uS/cm	ppm	S.U.	deg C	NTU	mg/L	mg/L	mg/L	mg/L	mg/L
MW-18R	11/3/2015	679	0.17	5.99	28.90	7.31	26.6	13.8	0.027 I	<2.5	387
MW-18R	4/4/2016	700	0.11	5.68	23.93	6.09	24.4	15.1	<0.025	<2.5	367
MW-18R	10/25/2016	578	0.06	6.01	29.00	6.64	16.4	10.3	<0.025	<2.5	312
MW-18R	3/21/2017	639	0.10	6.23	25.30	18.9	20.7	17.1	0.11	<2.5	360
MW-18R	10/26/2017	374	0.21	6.18	27.76	7.29	6.3	7.4	<0.025	5.3	214
MW-19A	11/2/2015	726	0.15	6.59	28.79	1.12	3.0	10.5	<0.025	2.8 I	367
MW-19A	4/4/2016	779	0.10	6.44	23.93	5.29	2.5	8.4	<0.025	<2.5	390
MW-19A	10/27/2016	842	0.12	6.63	27.91	2.02	2.9	5.5	<0.025	3.1 I	416
MW-19A	3/21/2017	861	0.14	6.91	24.37	1.85	1.6	6.3	<0.025	8.3	416
MW-19A	10/24/2017	928	0.09	6.69	28.48	0.66	2.4	7.6	<0.025	3.8 I	433
MW-20A	11/2/2015	631	0.25	6.37	28.31	0.70	1.9	4.1 I	<0.025	6.2	375
MW-20A	4/4/2016	569	0.10	6.17	23.69	1.76	0.96	5.1	<0.025	6.9	329
MW-20A	10/25/2016	693	0.12	6.42	27.98	0.66	1.7	4.1 I	<0.025	<2.5	365
MW-20A	3/21/2017	888	0.13	6.82	23.34	1.03	1.5	15.7	<0.025	11.1	527
MW-20A	10/24/2017	767	0.13	6.62	28.15	1.57	1.3	4.0 I	<0.025	<2.5	290

LEGEND
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ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD
STANDARD		6 µg/L*	10 µg/L*	2000 µg/L*	4 µg/L*	5 µg/L*	100 µg/L*	140µg/L***	1000 µg/L**	6300 µg/L #	15 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Background											
MW-1R	11/2/2015	<0.5	<5	41.4	<0.5	<0.5	3.0 I	<5	<2.5	3250	<5
MW-1R	1/7/2016	-	-	-	-	-	-	-	-	-	-
MW-1R	3/30/2016	<0.5	<5	37.6	<0.5	<0.5	<2.5	<5	<2.5	2650	<5
MW-1R	10/26/2016	<0.5	8.4 I	49.8	<0.5	<0.5	2.9 I	<5	<2.5	3840	<5
MW-1R	3/21/2017	<0.5	<5.0	38.6	<0.5	<0.5	5 I	<5	<2.5	4460	<5
MW-1R	10/24/2017	<0.5	<5	33.9	<0.5	<0.5	<2.5	<5	<2.5	1100	<5
Detection											
MW-8A	11/10/2015	<0.5	13.5	60.9	<0.5	<0.5	<2.5	<5	<2.5	12200	<5
MW-8A	3/30/2016	<0.5	11.3	49.2	<0.5	<0.5	<2.5	<5	<2.5	12900	9.8 I
MW-8A	10/27/2016	<0.5	10.0	50.7	<0.5	2.5	<2.5	<5	<2.5	9650	<5
MW-8A	3/28/2017	<0.5	35.4	42.1	<0.5	1.8	<2.5	<5	3.7 I	24900	<5
MW-8A	10/24/2017	<0.5	14.0	49.6	<0.5	<0.5	<2.5	<5	<2.5	10400	<5
MW-9	11/10/2015	<0.5	24.0	112	<0.5	<0.5	<2.5	<5	<2.5	27500	<5
MW-9	3/30/2016	<0.5	17.3	104	<0.5	<0.5	<2.5	<5	<2.5	29500	5.1 I
MW-9	10/27/2016	<0.5	17.9	111	<0.5	0.54 I	<2.5	<5	<2.5	26400	<5
MW-9	3/28/2017	<0.5	23.2	104	<0.5	2.4	<2.5	<5	4.7 I	33700	<5
MW-9	10/26/2017	<0.5	9.9 I	111	<0.5	<0.5	<2.5	<5	<2.5	23800	<5
MW-10R	11/10/2015	<0.5	12.5	72.0	<0.5	<0.5	<2.5	<5	<2.5	51700	<5
MW-10R	4/5/2016	<0.5	10.8	73.6	<0.5	0.69 I	5.2	<5	5.0 I	54200	8.1 I
MW-10R	11/2/2016	<0.5	8.2 I	83.5	<0.5	1.4	2.6 I	<5	6.8	54200	<5
MW-10R	3/22/2017	<2.5	20.1	84.3	<0.5	1.5	3.1 I	<5	9.5	58200	<5
MW-10R	10/27/2017	<0.5	10.7	79	<0.5	<2.5	<2.5	<5	<2.5	56000	<5
MW-15	11/19/2015	<0.5	69.3	388	<0.5	2.0	3.1 I	<5	<2.5	65100	<5
MW-15	4/5/2016	<0.5	58.2	268	<0.5	0.79 I	<2.5	<5	<2.5	61500	<5
MW-15	11/2/2016	<0.5	65.0	397	<0.5	2.2	2.7 I	<5	9.7	70800	<25
MW-15	3/22/2017	<5	78.2	262	0.55 I	2.0	<2.5	<5	<2.5	59700	<5
MW-15	10/27/2017	<0.5	73.6	369	<0.5	<2.5	<2.5	<5	<2.5	63700	<5
MW-16	11/19/2015	<0.5	56.5	92.4	<0.5	1.7	4.9 I	<5	<2.5	53600	<5
MW-16	4/5/2016	<0.5	49.0	89.7	<0.5	0.76 I	6.3	<5	<2.5	52000	5.8 I
MW-16	11/2/2016	<0.5	46.2	89.4	<0.5	1.6	4.0 I	<5	7.5	56800	<5
MW-16	3/22/2017	<2.5	58.6	98.1	<0.84	<5	<5	<5	<5	68900	<5
MW-16	10/27/2017	<0.5	50.4	91.3	<0.5	<2.5	2.9 I	<5	<2.5	61200	<5
MW-17	11/19/2015	<0.5	75.7	97.4	<0.5	3.0	6.8	<5	<2.5	80900	<5
MW-17	4/5/2016	<0.5	55.8	96.5	<0.5	2.2	4.1 I	<5	<2.5	87700	<5
MW-17	10/27/2016	<0.5	56.2	90.2	<0.5	2.6	4.5 I	<5	<2.5	77100	<5
MW-17	3/22/2017	<2.5	49.1	80.2	<0.84	<5	13.9	<5	<5	94200	<5
MW-17	10/27/2017	<0.5	87.6	94.1	<0.5	<2.5	<2.5	<5	<2.5	92600	<5

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD
STANDARD		6 µg/L*	10 µg/L*	2000 µg/L*	4 µg/L*	5 µg/L*	100 µg/L*	140µg/L***	1000 µg/L**	6300 µg/L #	15 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-18R	11/3/2015	<0.5	16.4	23.8	<0.5	<0.5	4.7 I	<5	<2.5	18900	<0.5
MW-18R	4/4/2016	<0.5	10.3	20.9	<0.5	<0.5	3.8 I	<5	<2.5	21300	9.9 I
MW-18R	10/25/2016	<0.5	10.4	20.3	<0.5	2.6	<2.5	<5	<2.5	10300	<5
MW-18R	3/21/2017	<0.5	22.2	42.7	<0.5	0.66 I	6.6	<5	<2.5	43500	<5
MW-18R	10/26/2017	<0.5	9.7 I	14.9	<0.5	<0.5	<2.5	<5	<2.5	5880	<5
MW-19A	11/2/2015	<0.5	31.0	34.9	<0.5	<0.5	<2.5	<5	<2.5	25800	<5
MW-19A	4/4/2016	<0.5	27.4	34.0	<0.5	<0.5	<2.5	<5	<2.5	25700	<5
MW-19A	10/27/2016	<0.5	34.1	58.6	<0.5	<2.5	2.8 I	<5	<12.5	24600	<5
MW-19A	3/21/2017	<0.5	22.0	32.0	<0.5	<0.5	<2.5	<5	<2.5	23200	<5
MW-19A	10/24/2017	<0.5	39.6	70	<0.5	<0.5	<2.5	<5	<2.5	28500	<5
MW-20A	11/2/2015	<0.5	10.5	38.2	<0.5	<0.5	<2.5	<5	<2.5	9960	<5
MW-20A	4/4/2016	<0.5	<5	36.5	<0.5	<0.5	<2.5	<5	<2.5	7140	<5
MW-20A	10/25/2016	<0.5	5.7 I	40.5	<0.5	2.9	<2.5	<5	<2.5	3570	<5
MW-20A	3/21/2017	<0.5	10.9	55.0	<0.5	<0.5	<2.5	<5	<2.5	4810	<5
MW-20A	10/24/2017	<0.5	10.0	49.6	<0.5	<0.5	<2.5	<5	<2.5	8230	<5

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ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		MANGANESE	MERCURY	NICKEL	SELENIUM	SILVER	SODIUM	THALLIUM	VANADIUM	ZINC	1,1,1,2-TETRA-CHLORO-ETHANE
STANDARD		50 µg/L**	2 µg/L*	100 µg/L*	50 µg/L*	100 µg/L**	456 mg/L #	2 µg/L*	49 µg/L***	5000 µg/L**	1.3 µg/L***
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
Background											
MW-1R	11/2/2015	12.4	<0.1	<2.5	<7.5	<2.5	8.7	<0.5	<5	<10	<0.5
MW-1R	1/7/2016	-	-	-	-	-	-	-	-	-	-
MW-1R	3/30/2016	11.4	<0.1	<2.5	<7.5	<2.5	14.4	<0.5	<5	<10	<0.5
MW-1R	10/26/2016	14.5	<0.1	<2.5	<7.5	<2.5	16.7	<0.5	<5	<10	<0.5
MW-1R	3/21/2017	10.6	<0.25	<2.5	<7.5	<2.5	28.9	<0.5	7.5 I	<10	<0.5
MW-1R	10/24/2017	97.2	<0.1	<2.5	<7.5	<2.5	10.2	<0.5	<5	<10	<0.33
Detection											
MW-8A	11/10/2015	49.6	<0.1	<2.5	<7.5	<2.5	42.8	<0.5	<5	<10	<0.5
MW-8A	3/30/2016	43.0	<0.1	<2.5	<7.5	<2.5	40.2	<0.5	<5	<10	<0.5
MW-8A	10/27/2016	46.3	<0.1	2.5 I	<7.5	<2.5	34.3	<0.5	<5	<10	<0.5
MW-8A	3/28/2017	28.2	<0.1	<2.5	<7.5	<2.5	32.6	<0.5	<5.0	<10	<0.5
MW-8A	10/24/2017	50.1	<0.1	<2.5	<7.5	<2.5	29.8	<0.5	<5	<10	<0.33
MW-9	11/10/2015	33.8	<0.1	<2.5	<7.5	<2.5	26.4	<0.5	<5	<10	<0.5
MW-9	3/30/2016	35.6	<0.1	<2.5	11.8 I	<12.5	25.4	<0.5	<5	<10	<0.5
MW-9	10/27/2016	35.8	<0.1	4.0 I	<7.5	<2.5	26.6	<0.5	<5	14.1 I	<0.5
MW-9	3/28/2017	26.0	<0.1	<2.5	<7.5	<2.5	27.2	<0.5	<5.0	<10	<0.5
MW-9	10/26/2017	39.5	<0.1	<2.5	<7.5	<2.5	22.6	<0.5	<5	<10	<0.5
MW-10R	11/10/2015	47.3	<0.1	<2.5	<7.5	<2.5	82.6	<0.5	<5	<10	<0.5
MW-10R	4/5/2016	61.2	<0.1	3.2 I	<7.5	<2.5	81.5	<0.5	5.2 I	16.7 I	<0.33
MW-10R	11/2/2016	69.0	<0.1	<2.5	9.1 I	<2.5	84.3	<0.5	<5	<10	<0.5
MW-10R	3/22/2017	21.2	<0.25	<2.5	<7.5	<25	79.5	<2.5	<5.0	<10	<0.5
MW-10R	10/27/2017	46.5	<0.1	3.2 I	<7.5	<12.5	86.1	<0.5	<5	<10	<0.33
MW-15	11/19/2015	666	<0.1	4.2 I	<7.5	<2.5	82.5	<0.5	<5	<10	<0.5
MW-15	4/5/2016	491	<0.1	3.5 I	<7.5	<2.5	77.1	<0.5	<5	<10	<0.33
MW-15	11/2/2016	747	<0.1	3.5 I	8.6 I	<2.5	83.9	<0.5	5.6 I	<10	<0.5
MW-15	3/22/2017	487	<0.25	2.5 I	<7.5	<25	91.7	<5.0	<5.0	<10	<0.5
MW-15	10/27/2017	592	<0.1	8.0	9.5 I	<12.5	71.8	<0.5	7.1 I	<10	<0.33
MW-16	11/19/2015	12.7	<0.1	<2.5	<7.5	<2.5	212	<0.5	8.6 I	<10	<0.5
MW-16	4/5/2016	100	<0.1	2.9 I	<7.5	<2.5	200	<0.5	7.8 I	<10	<0.33
MW-16	11/2/2016	25.0	<0.1	<2.5	12.2 I	<2.5	211	<0.5	8.2 I	<10	<0.5
MW-16	3/22/2017	13.1	<0.25	<5.0	<6.0	<1.4	171	<2.5	<5.0	<5	<0.5
MW-16	10/27/2017	15.8	<0.1	4.3 I	9.2 I	<12.5	190	<0.5	10.3	<10	<0.33
MW-17	11/19/2015	9.9	<0.1	<2.5	<7.5	<2.5	60.4	<0.5	<5	<10	<0.5
MW-17	4/5/2016	9.9	<0.1	5.0 I	23.6	<2.5	63.2	<0.5	<5	<10	<0.33
MW-17	10/27/2016	13.2	<0.1	7.8	<7.5	<2.5	59.3	<0.5	<5	10.7 I	<0.5
MW-17	3/22/2017	9.2 I	<0.25	7.5 I	6.1 I	<1.4	52.9	<2.5	<5.0	<5	<0.5
MW-17	10/27/2017	13.8	<0.1	5.0	<7.5	<12.5	62.4	<0.5	8.8 I	<10	<0.33

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
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PARAMETER		MANGANESE	MERCURY	NICKEL	SELENIUM	SILVER	SODIUM	THALLIUM	VANADIUM	ZINC	1,1,1,2-TETRA-CHLORO-ETHANE
STANDARD		50 µg/L**	2 µg/L*	100 µg/L*	50 µg/L*	100 µg/L**	456 mg/L #	2 µg/L*	49 µg/L***	5000 µg/L**	1.3 µg/L***
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
MW-18R	11/3/2015	8.2	<0.1	<2.5	<7.5	<2.5	15.6	<0.5	8.3 I	<10	<0.5
MW-18R	4/4/2016	6.8	<0.1	<2.5	<7.5	<2.5	14.4	<0.5	8.1 I	<10	<0.33
MW-18R	10/25/2016	7.7	<0.1	<2.5	<7.5	<2.5	8.9	<0.5	<5	<10	<0.5
MW-18R	3/21/2017	<2.5	<0.25	<2.5	<7.5	<12.5	16.5	<0.5	18.1	<10	<0.5
MW-18R	10/26/2017	6.0	<0.1	<2.5	<7.5	<2.5	5.7	<0.5	6.0 I	<10	<0.50
MW-19A	11/2/2015	21.9	<0.1	<2.5	<7.5	<2.5	6.0	<0.5	<5	<10	<0.5
MW-19A	4/4/2016	24.9	<0.1	<2.5	<7.5	<5	7.1	<0.5	<5	<10	<0.33
MW-19A	10/27/2016	23.0	<0.1	<2.5	<7.5	<2.5	6.6	<0.5	<5	<10	<0.5
MW-19A	3/21/2017	26.6	<0.25	<2.5	<7.5	<2.5	4.4	<0.5	<5.0	<10	<0.5
MW-19A	10/24/2017	26.9	<0.1	<2.5	<7.5	<2.5	6.2	<0.5	<5	<10	<0.33
MW-20A	11/2/2015	16.8	<0.1	<2.5	<7.5	<2.5	4.8	<0.5	<5	<10	<0.5
MW-20A	4/4/2016	11.7	<0.1	<2.5	<7.5	<2.5	4.0	<0.5	<5	<10	<0.33
MW-20A	10/25/2016	16.1	<0.1	<2.5	<7.5	<2.5	4.9	<0.5	<5	<10	<0.5
MW-20A	3/21/2017	20.7	<0.25	<2.5	<7.5	<2.5	12.1	<0.5	<5.0	<10	<0.5
MW-20A	10/24/2017	17.5	<0.1	<2.5	<7.5	<2.5	4.4	<0.5	9.1 I	<10	<0.33

LEGEND
* = Primary Drinking Water Standard
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*** = Chapter 62-777 Groundwater Cleanup Target Levels (GCTL)
# = Site-Specific Background Concentration

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		1,1,1-TRICHLORO-ETHANE	1,1,2,2-TETRA-CHLORO-ETHANE	1,1,2-TRICHLORO-ETHANE	1,1-DICHLORO-ETHANE	1,1-DICHLORO-ETHENE	1,2,3-TRICHLORO-PROPANE	1,2-DIBROMO-3-CHLORO-PROPANE	1,2-DIBROMO-ETHANE (EDB)	1,2-DICHLORO-BENZENE	1,2-DICHLORO-ETHANE
STANDARD		200 µg/L*	0.2 µg/L***	5 µg/L*	70 µg/L***	7 µg/L*	0.02 µg/L***	0.2 µg/L*	0.02 µg/L*	600 µg/L*	3 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Background											
MW-1R	11/2/2015	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0050	<0.0063	<0.5	<0.5
MW-1R	1/7/2016	-	-	-	-	-	-	-	-	-	-
MW-1R	3/30/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0051	<0.0079	<0.5	<0.5
MW-1R	10/26/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0048	<0.0073	<0.5	<0.5
MW-1R	3/21/2017	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0063	<0.0074	<0.5	<0.5
MW-1R	10/24/2017	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0062	<0.0072	<0.3	<0.24
Detection											
MW-8A	11/10/2015	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0049	<0.0062	<0.5	<0.5
MW-8A	3/30/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0051	<0.0078	<0.5	<0.5
MW-8A	10/27/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0051	<0.0077	<0.5	<0.5
MW-8A	3/28/2017	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0062	<0.0073	<0.5	<0.5
MW-8A	10/24/2017	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0061	<0.0072	<0.3	<0.24
MW-9	11/10/2015	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0050	<0.0064	<0.5	<0.5
MW-9	3/30/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0051	<0.0077	<0.5	<0.5
MW-9	10/27/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0052	<0.0079	<0.5	<0.5
MW-9	3/28/2017	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0063	<0.0074	<0.5	<0.5
MW-9	10/26/2017	<0.50	<0.12	<0.50	<0.50	<0.50	<0.59	<0.0061	<0.0071	<0.50	<0.50
MW-10R	11/10/2015	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0050	<0.0063	<0.5	<0.5
MW-10R	4/5/2016	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0049	<0.0076	<0.3	<0.24
MW-10R	11/2/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.005	<0.0076	<0.5	<0.5
MW-10R	3/22/2017	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0062	<0.0073	<0.5	<0.5
MW-10R	10/27/2017	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0061	<0.0071	<0.3	<0.24
MW-15	11/19/2015	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0050	<0.0063	<0.5	<0.5
MW-15	4/5/2016	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0049	<0.0075	<0.3	<0.24
MW-15	11/2/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0051	<0.0078	<0.5	<0.5
MW-15	3/22/2017	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0062	<0.0073	<0.5	<0.5
MW-15	10/27/2017	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0061	<0.0071	<0.3	<0.24
MW-16	11/19/2015	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0051	<0.0064	<0.5	<0.5
MW-16	4/5/2016	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0049	<0.0075	<0.3	<0.24
MW-16	11/2/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0051	<0.0078	<0.5	<0.5
MW-16	3/22/2017	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0061	<0.0071	<0.5	<0.5
MW-16	10/27/2017	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.006	<0.0071	<0.3	<0.24
MW-17	11/19/2015	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0054	<0.0068	<0.5	<0.5
MW-17	4/5/2016	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0049	<0.0075	<0.3	<0.24
MW-17	10/27/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0052	<0.0080	<0.5	<0.5
MW-17	3/22/2017	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0062	<0.0072	<0.5	<0.5
MW-17	10/27/2017	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0062	<0.0072	<0.3	<0.24

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		1,1,1-TRICHLORO-ETHANE	1,1,2,2-TETRA-CHLORO-ETHANE	1,1,2-TRICHLORO-ETHANE	1,1-DICHLORO-ETHANE	1,1-DICHLORO-ETHENE	1,2,3-TRICHLORO-PROPANE	1,2-DIBROMO-3-CHLORO-PROPANE	1,2-DIBROMO-ETHANE (EDB)	1,2-DICHLORO-BENZENE	1,2-DICHLORO-ETHANE
STANDARD		200 µg/L*	0.2 µg/L***	5 µg/L*	70 µg/L***	7 µg/L*	0.02 µg/L***	0.2 µg/L*	0.02 µg/L*	600 µg/L*	3 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-18R	11/3/2015	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0050	<0.0064	<0.5	<0.5
MW-18R	4/4/2016	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0050	<0.0077	<0.3	<0.24
MW-18R	10/25/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0047	<0.0072	<0.5	<0.5
MW-18R	3/21/2017	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0064	<0.0075	<0.5	<0.5
MW-18R	10/26/2017	<0.50	<0.12	<0.50	<0.50	<0.50	<0.59	<0.0061	<0.0071	<0.5	<0.5
MW-19A	11/2/2015	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0051	<0.0064	<0.5	<0.5
MW-19A	4/4/2016	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0050	<0.0077	<0.3	<0.24
MW-19A	10/27/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0051	<0.0078	<0.5	<0.5
MW-19A	3/21/2017	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0063	<0.0074	<0.5	<0.5
MW-19A	10/24/2017	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0062	<0.0072	<0.3	<0.24
MW-20A	11/2/2015	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0050	<0.0063	<0.5	<0.5
MW-20A	4/4/2016	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0049	<0.0075	<0.3	<0.24
MW-20A	10/25/2016	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0047	<0.0072	<0.5	<0.5
MW-20A	3/21/2017	<0.5	<0.12	<0.5	<0.5	<0.5	<0.59	<0.0065	<0.0076	<0.5	<0.5
MW-20A	10/24/2017	<0.48	<0.4	<0.29	<0.32	<0.56	<0.41	<0.0061	<0.0071	<0.3	<0.24

LEGEND
* = Primary Drinking Water Standard
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# = Site-Specific Background Concentration

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		1,2-DICHLORO-PROPANE	1,4-DICHLORO-BENZENE	2-HEXANONE	4-METHYL-2-PENTANONE	ACETONE	ACRYLONI-TRILE	BENZENE	BROMO-CHLORO-METHANE	BROMO-DICHLORO-METHANE	BROMOFORM
STANDARD		5 µg/L*	75 µg/L*	280 µg/L***	350 µg/L**	6300 µg/L***	0.06µg/L***	1 µg/L*	91 µg/L***	0.6 µg/L***	4.4 µg/L***
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Background											
MW-1R	11/2/2015	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-1R	1/7/2016	-	-	-	-	-	-	-	-	-	-
MW-1R	3/30/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-1R	10/26/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-1R	3/21/2017	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-1R	10/24/2017	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
Detection											
MW-8A	11/10/2015	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-8A	3/30/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-8A	10/27/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-8A	3/28/2017	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-8A	10/24/2017	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
MW-9	11/10/2015	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-9	3/30/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-9	10/27/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-9	3/28/2017	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-9	10/26/2017	<0.5	<0.50	<5.0	<5.0	<10	<5.0	<0.10	<0.50	<0.27	<0.50
MW-10R	11/10/2015	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-10R	4/5/2016	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
MW-10R	11/2/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-10R	3/22/2017	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-10R	10/27/2017	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
MW-15	11/19/2015	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-15	4/5/2016	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
MW-15	11/2/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-15	3/22/2017	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-15	10/27/2017	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
MW-16	11/19/2015	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-16	4/5/2016	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
MW-16	11/2/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-16	3/22/2017	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-16	10/27/2017	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
MW-17	11/19/2015	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-17	4/5/2016	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
MW-17	10/27/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-17	3/22/2017	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-17	10/27/2017	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		1,2-DICHLORO-PROPANE	1,4-DICHLORO-BENZENE	2-HEXANONE	4-METHYL-2-PENTANONE	ACETONE	ACRYLONI-TRILE	BENZENE	BROMO-CHLORO-METHANE	BROMO-DICHLORO-METHANE	BROMOFORM
STANDARD		5 µg/L*	75 µg/L*	280 µg/L***	350 µg/L**	6300 µg/L***	0.06µg/L***	1 µg/L*	91 µg/L***	0.6 µg/L***	4.4 µg/L***
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-18R	11/3/2015	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-18R	4/4/2016	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
MW-18R	10/25/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-18R	3/21/2017	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-18R	10/26/2017	<0.50	<0.50	<5.0	<5.0	<10	<5.0	<0.10	<0.50	<0.27	<0.50
MW-19A	11/2/2015	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-19A	4/4/2016	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
MW-19A	10/27/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-19A	3/21/2017	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-19A	10/24/2017	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
MW-20A	11/2/2015	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-20A	4/4/2016	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26
MW-20A	10/25/2016	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-20A	3/21/2017	<0.5	<0.5	<5	<5	<10	<5	<0.1	<0.5	<0.27	<0.5
MW-20A	10/24/2017	<0.27	<0.33	<0.46	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26

LEGEND
* = Primary Drinking Water Standard
** = Secondary Drinking Water Standard
*** = Chapter 62-777 Groundwater Cleanup Target Levels (GCTL)
# = Site-Specific Background Concentration

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		BROMO-METHANE (METHYL BROMIDE)	CARBON DISULFIDE	CARBON TETRA-CHLORIDE	CHLORO-BENZENE	CHLORO-ETHANE	CHLORO-FORM	CHLORO-METHANE (METHYL CHLORIDE)	CIS-1,2-DICHLORO-ETHENE	CIS-1,3-DICHLORO-PROPENE	DIBROMO-CHLORO-METHANE
STANDARD		9.8 µg/L***	700 µg/L***	3 µg/L*	100 µg/L*	12 µg/L***	70 µg/L***	2.7 µg/L***	70 µg/L*	0.4 µg/L***	0.4 µg/L***
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Background											
MW-1R	11/2/2015	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	1.7	<0.26
MW-1R	1/7/2016	-	-	-	-	-	-	-	-	<0.25	-
MW-1R	3/30/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-1R	10/26/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-1R	3/21/2017	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-1R	10/24/2017	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21
Detection											
MW-8A	11/10/2015	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-8A	3/30/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-8A	10/27/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-8A	3/28/2017	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-8A	10/24/2017	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21
MW-9	11/10/2015	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-9	3/30/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-9	10/27/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-9	3/28/2017	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-9	10/26/2017	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.62	<0.50	<0.25	<0.26
MW-10R	11/10/2015	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-10R	4/5/2016	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21
MW-10R	11/2/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-10R	3/22/2017	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-10R	10/27/2017	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21
MW-15	11/19/2015	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-15	4/5/2016	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	0.13 I	<0.19	<0.13	<0.21
MW-15	11/2/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-15	3/22/2017	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-15	10/27/2017	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	0.21 I	<0.19	<0.13	<0.21
MW-16	11/19/2015	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-16	4/5/2016	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21
MW-16	11/2/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-16	3/22/2017	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-16	10/27/2017	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21
MW-17	11/19/2015	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-17	4/5/2016	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21
MW-17	10/27/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-17	3/22/2017	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-17	10/27/2017	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		BROMO-METHANE (METHYL BROMIDE)	CARBON DISULFIDE	CARBON TETRA-CHLORIDE	CHLORO-BENZENE	CHLORO-ETHANE	CHLORO-FORM	CHLORO-METHANE (METHYL CHLORIDE)	CIS-1,2-DICHLORO-ETHENE	CIS-1,3-DICHLORO-PROPENE	DIBROMO-CHLORO-METHANE
STANDARD		9.8 µg/L***	700 µg/L***	3 µg/L*	100 µg/L*	12 µg/L***	70 µg/L***	2.7 µg/L***	70 µg/L*	0.4 µg/L***	0.4 µg/L***
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-18R	11/3/2015	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-18R	4/4/2016	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21
MW-18R	10/25/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-18R	3/21/2017	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-18R	10/26/2017	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.62	<0.50	<0.25	<0.26
MW-19A	11/2/2015	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-19A	4/4/2016	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21
MW-19A	10/27/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-19A	3/21/2017	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-19A	10/24/2017	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21
MW-20A	11/2/2015	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-20A	4/4/2016	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21
MW-20A	10/25/2016	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-20A	3/21/2017	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26
MW-20A	10/24/2017	<0.29	<1.2	<0.25	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21

LEGEND
* = Primary Drinking Water Standard
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# = Site-Specific Background Concentration

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		DICHLORO-METHANE	ETHYL-BENZENE	METHYL ETHYL KETONE	METHYL-IODIDE	STYRENE	TETRA-CHLORO-ETHENE	TOLUENE	TRANS-1,2-DICHLORO-ETHENE	TRANS-1,3-DICHLORO-PROPENE	TRICHLORO-ETHENE
STANDARD		5 µg/L*	30 µg/L**	4200 µg/L***	(1)	100 µg/L*	3 µg/L*	40 µg/L**	100 µg/L*	0.4 µg/L***	3 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Background											
MW-1R	11/2/2015	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-1R	1/7/2016	-	-	-	-	-	-	-	-	-	-
MW-1R	3/30/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	1.20	<0.5	<0.25	<0.5
MW-1R	10/26/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-1R	3/21/2017	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-1R	10/24/2017	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	<0.26	<0.49	<0.26	<0.47
Detection											
MW-8A	11/10/2015	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-8A	3/30/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	1.60	<0.5	<0.25	<0.5
MW-8A	10/27/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-8A	3/28/2017	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-8A	10/24/2017	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	<0.26	<0.49	<0.26	<0.47
MW-9	11/10/2015	<2.5	<0.5	<5	<0.5	<0.5	<0.5	0.55 I	<0.5	<0.25	<0.5
MW-9	3/30/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	0.95 I	<0.5	<0.25	<0.5
MW-9	10/27/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-9	3/28/2017	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-9	10/26/2017	<2.5	<0.5	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.25	<0.50
MW-10R	11/10/2015	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-10R	4/5/2016	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	0.37 I	<0.49	<0.26	<0.47
MW-10R	11/2/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-10R	3/22/2017	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-10R	10/27/2017	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	<0.26	<0.49	<0.26	<0.47
MW-15	11/19/2015	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-15	4/5/2016	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	0.51 I	<0.49	<0.26	<0.47
MW-15	11/2/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-15	3/22/2017	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-15	10/27/2017	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	<0.26	<0.49	<0.26	<0.47
MW-16	11/19/2015	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-16	4/5/2016	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	0.98 I	<0.49	<0.26	<0.47
MW-16	11/2/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-16	3/22/2017	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-16	10/27/2017	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	<0.26	<0.49	<0.26	<0.47
MW-17	11/19/2015	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-17	4/5/2016	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	0.94 I	<0.49	<0.26	<0.47
MW-17	10/27/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-17	3/22/2017	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-17	10/27/2017	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	0.29 I	<0.49	<0.26	<0.47

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		DICHLORO-METHANE	ETHYL-BENZENE	METHYL ETHYL KETONE	METHYL-IODIDE	STYRENE	TETRA-CHLORO-ETHENE	TOLUENE	TRANS-1,2-DICHLORO-ETHENE	TRANS-1,3-DICHLORO-PROPENE	TRICHLORO-ETHENE
STANDARD		5 µg/L*	30 µg/L**	4200 µg/L***	(1)	100 µg/L*	3 µg/L*	40 µg/L**	100 µg/L*	0.4 µg/L***	3 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-18R	11/3/2015	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-18R	4/4/2016	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	0.79 I	<0.49	<0.26	<0.47
MW-18R	10/25/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-18R	3/21/2017	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-18R	10/26/2017	<2.5	<0.5	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.25	<0.50
MW-19A	11/2/2015	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-19A	4/4/2016	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	1.20	<0.49	<0.26	<0.47
MW-19A	10/27/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-19A	3/21/2017	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-19A	10/24/2017	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	<0.26	<0.49	<0.26	<0.47
MW-20A	11/2/2015	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-20A	4/4/2016	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	0.86 I	<0.49	<0.26	<0.47
MW-20A	10/25/2016	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-20A	3/21/2017	<2.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5
MW-20A	10/24/2017	<0.97	<0.3	<0.96	<0.32	<0.26	<0.46	<0.26	<0.49	<0.26	<0.47

LEGEND
* = Primary Drinking Water Standard
** = Secondary Drinking Water Standard
*** = Chapter 62-777 Groundwater Cleanup Target Levels (GCTL)
# = Site-Specific Background Concentration

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		TRICHLORO-FLUORO-METHANE	VINYL ACETATE	VINYL CHLORIDE	XYLENES	(E)-1,4-DICHLORO-2-BUTENE	DIBROMO-METHANE
STANDARD		2100 µg/L***	88 µg/L***	1 µg/L*	20 µg/L**	(1)	70 µg/L***
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Background							
MW-1R	11/2/2015	<0.5	<1	<0.5	<0.5	<5	<0.5
MW-1R	1/7/2016	-	-	-	-	-	-
MW-1R	3/30/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-1R	10/26/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-1R	3/21/2017	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-1R	10/24/2017	<0.2	<0.35	<0.62	<1	<1	<0.21
Detection							
MW-8A	11/10/2015	<0.5	<1	<0.5	<0.5	<5	<0.5
MW-8A	3/30/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-8A	10/27/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-8A	3/28/2017	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-8A	10/24/2017	<0.2	<0.35	<0.62	<1	<1	<0.21
MW-9	11/10/2015	<0.5	<1	<0.5	<0.5	<5	<0.5
MW-9	3/30/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-9	10/27/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-9	3/28/2017	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-9	10/26/2017	<0.5	<1.0	<0.50	<1.5	<5	<0.50
MW-10R	11/10/2015	<0.5	<1	<0.5	<0.5	<5	<0.5
MW-10R	4/5/2016	<0.2	<0.35	<0.62	<0.66	<1	<0.21
MW-10R	11/2/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-10R	3/22/2017	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-10R	10/27/2017	<0.2	<0.35	<0.62	<1	<1	<0.21
MW-15	11/19/2015	<0.5	<1	<0.5	<0.5	<5	<0.5
MW-15	4/5/2016	<0.2	<0.35	<0.62	<0.66	<1	<0.21
MW-15	11/2/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-15	3/22/2017	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-15	10/27/2017	<0.2	<0.35	<0.62	<1	<1	<0.21
MW-16	11/19/2015	<0.5	<1	<0.5	<0.5	<5	<0.5
MW-16	4/5/2016	<0.2	<0.35	<0.62	<0.66	<1	<0.21
MW-16	11/2/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-16	3/22/2017	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-16	10/27/2017	<0.2	<0.35	<0.62	<1	<1	<0.21
MW-17	11/19/2015	<0.5	<1	<0.5	<0.5	<5	<0.5
MW-17	4/5/2016	<0.2	<0.35	<0.62	<0.66	<1	<0.21
MW-17	10/27/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-17	3/22/2017	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-17	10/27/2017	<0.2	<0.35	<0.62	<1	<1	<0.21

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		TRICHLORO-FLUORO-METHANE	VINYL ACETATE	VINYL CHLORIDE	XYLENES	(E)-1,4-DICHLORO-2-BUTENE	DIBROMO-METHANE
STANDARD		2100 µg/L***	88 µg/L***	1 µg/L*	20 µg/L**	(1)	70 µg/L***
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-18R	11/3/2015	<0.5	<1	<0.5	<0.5	<5	<0.5
MW-18R	4/4/2016	<0.2	<0.35	<0.62	<0.66	<1	<0.21
MW-18R	10/25/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-18R	3/21/2017	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-18R	10/26/2017	<0.5	<1.0	<0.50	<1.5	<5	<0.50
MW-19A	11/2/2015	<0.5	<1	<0.5	<0.5	<5	<0.5
MW-19A	4/4/2016	<0.2	<0.35	<0.62	<0.66	<1	<0.21
MW-19A	10/27/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-19A	3/21/2017	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-19A	10/24/2017	<0.2	<0.35	<0.62	<1	<1	<0.21
MW-20A	11/2/2015	<0.5	<1	<0.5	<0.5	<5	<0.5
MW-20A	4/4/2016	<0.2	<0.35	<0.62	<0.66	<1	<0.21
MW-20A	10/25/2016	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-20A	3/21/2017	<0.5	<1	<0.5	<1.5	<5	<0.5
MW-20A	10/24/2017	<0.2	<0.35	<0.62	<1	<1	<0.21

LEGEND
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# = Site-Specific Background Concentration

NAM Wells

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		CONDUC-TIVITY (FIELD)	DISSOLVED OXYGEN (FIELD)	pH (FIELD)	TEMPER-ATURE (FIELD)	TURBIDITY (FIELD)	AMMONIA NITROGEN	TOTAL DISSOLVED SOLIDS	ARSENIC	IRON	MANGANESE
STANDARD		(1)	(1)	6.5-8.5 S.U.**	(1)	(1)	2.8 mg/L***	1924 mg/L #	10 µg/L*	6300 µg/L #	50 µg/L**
UNITS		uS/cm	ppm	S.U.	deg C	NTU	mg/L	mg/L	µg/L	µg/L	µg/L
Natural Attenuation Wells											
NAM-1	11/3/2015	1011	0.14	6.81	26.63	3.37	0.28	600	8.5 I	3830	5.4
NAM-1	4/1/2016	989	0.12	6.89	23.32	8.77	0.22	570	4.0	3560	3.7 I
NAM-1	10/26/2016	904	0.23	6.70	25.34	2.74	0.17	529	3.2	2810	2.7 I
NAM-1	3/20/2017	933	0.55	7.27	21.29	0.67	0.087	541	<5.4	877	<5
NAM-1	10/25/2017	826	0.09	6.87	25.68	1.47	0.052	477	2.7	1960	<2.5
NAM-1 DUP	10/25/2017	826	0.09	6.87	25.68	1.47	0.052	472	3.1	2170	<2.5
NAM-2	11/10/2015	776	0.21	6.65	26.10	0.72	0.29	479	8.9	2760	3.4 I
NAM-2	4/1/2016	778	0.22	6.69	22.95	0.50	0.24	456	7.7	2770	3.1 I
NAM-2	10/26/2016	781	0.35	6.85	26.00	3.48	0.38	467	6.8	2570	4.7 I
NAM-2	3/20/2017	778	1.17	7.12	22.17	1.63	0.19	441	11.0	3130	<5
NAM-2	10/26/2017	808	0.12	7.03	25.87	0.54	0.18	449	10.6	2740	2.8 I
NAM-3	11/3/2015	618	0.17	6.59	25.14	0.85	0.43	405	6.7	4910	8.0
NAM-3	4/1/2016	616	0.13	6.75	22.27	0.76	0.38	356	5.4	6170	7.7
NAM-3	10/26/2016	578	0.46	6.72	24.58	2.81	0.45	348	3.6	5190	8.5
NAM-3	3/20/2017	585	1.44	7.08	20.68	1.86	0.4	353	<5.4	5970	7.4 I
NAM-3	10/26/2017	595	0.08	6.99	24.65	2.32	0.24	311	4.6	6030	7.9
NAM-4	11/3/2015	749	0.21	6.39	26.31	3.12	0.11	461	18.6	1960	4.1 I
NAM-4	4/1/2016	743	0.24	6.39	22.56	1.59	0.099	426	20.8	4340	4.1 I
NAM-4 DUP	4/1/2016	743	0.24	6.39	22.56	1.59	0.10	437	20.8	4780	4.6 I
NAM-4	10/26/2016	773	0.84	6.57	26.62	12.9	0.11	458	16.9	4590	4.6 I
NAM-4	3/20/2017	606	0.71	6.72	22.58	3.60	0.11	369	12.0	2930	5.4 I
NAM-4 DUP	3/20/2017	606	0.71	6.72	22.58	3.60	0.11	376	13.0	3050	5.4 I
NAM-4	10/26/2017	572	0.14	6.59	25.85	0.43	0.097	326	8.8	3410	3.8 I

LEGEND
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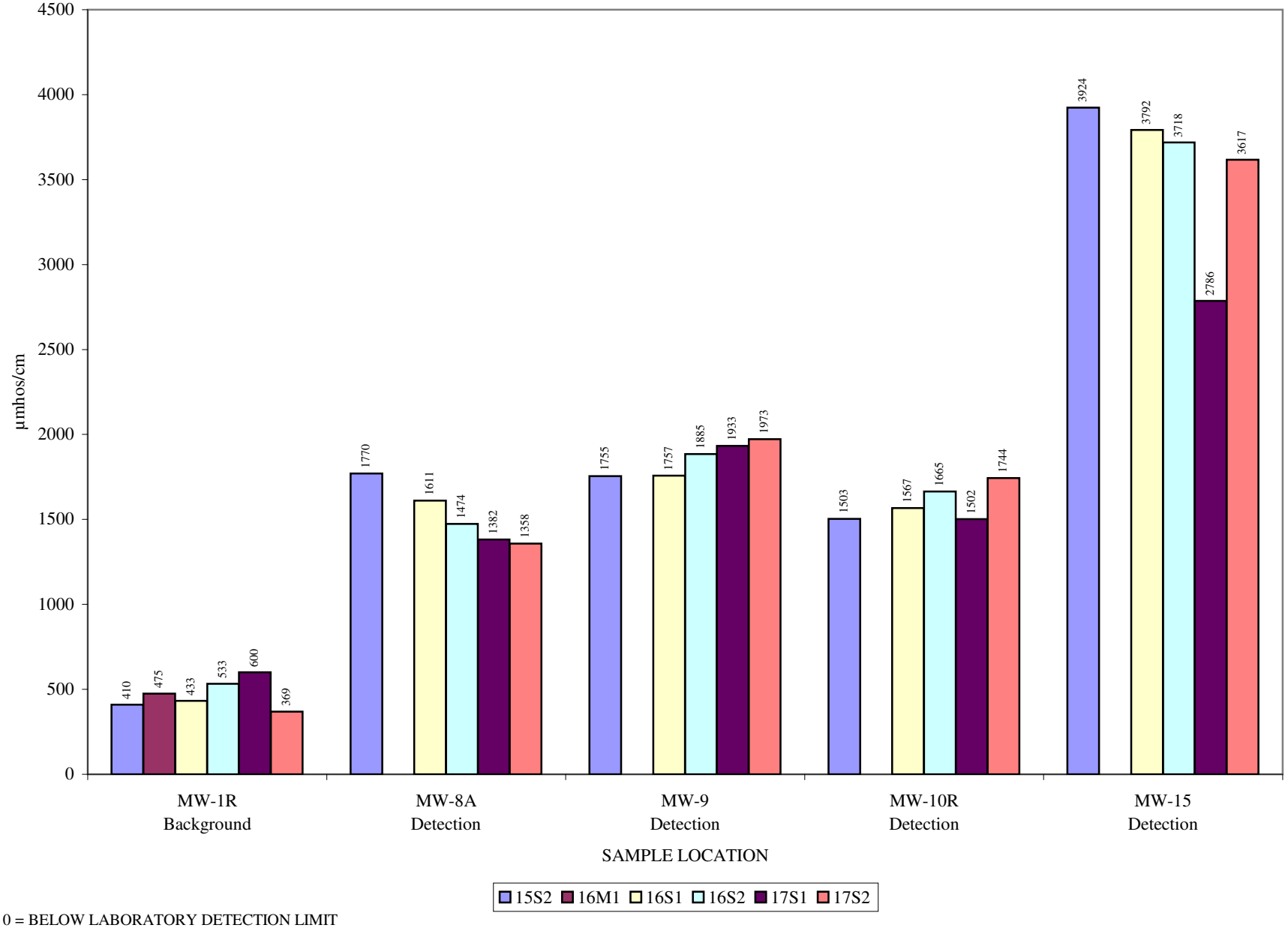
Attachment 7

Groundwater Chemistry Graphs for the Report Period

Background and Detection Wells

CONDUCTIVITY (FIELD)

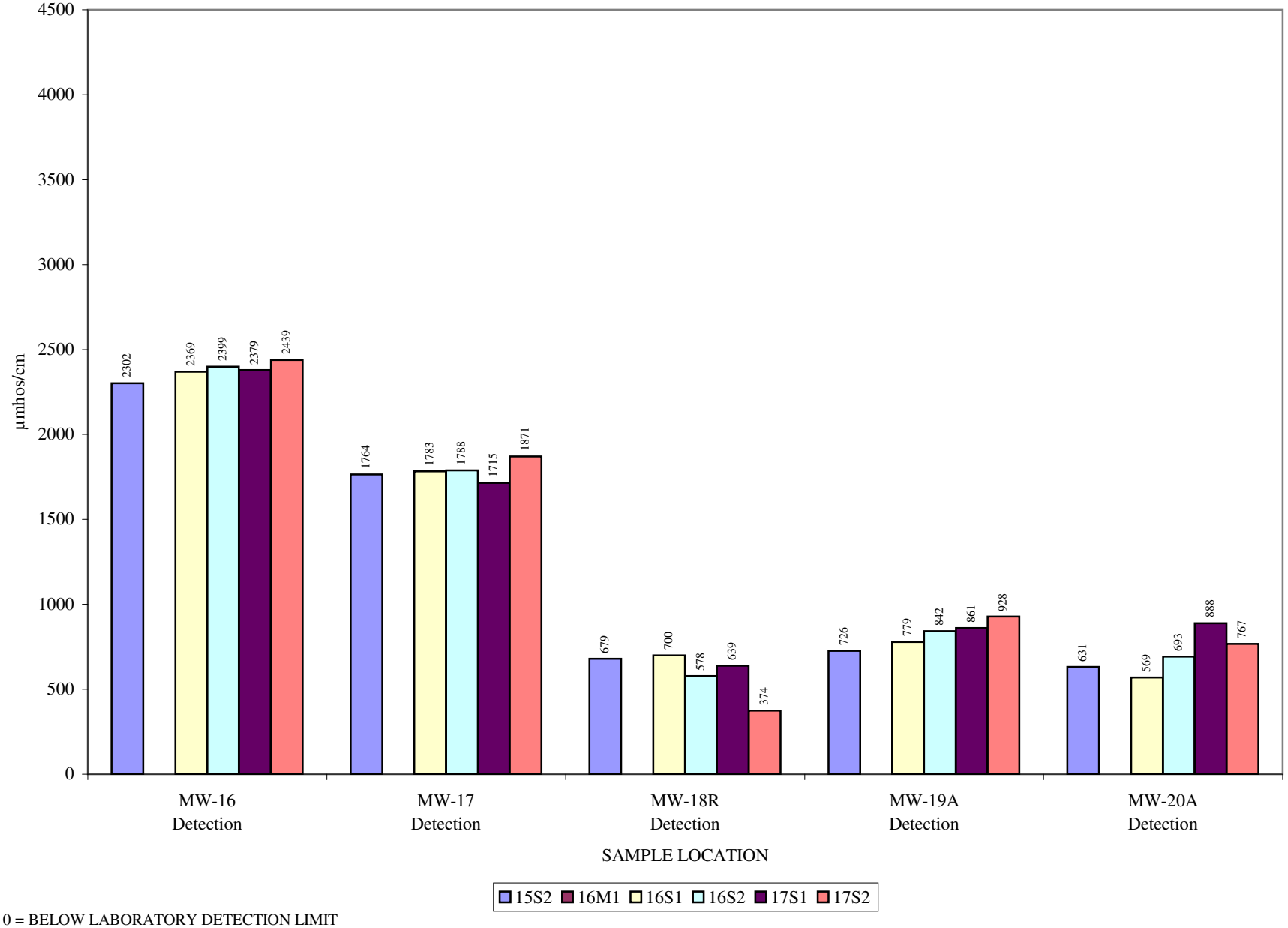
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CONDUCTIVITY (FIELD)

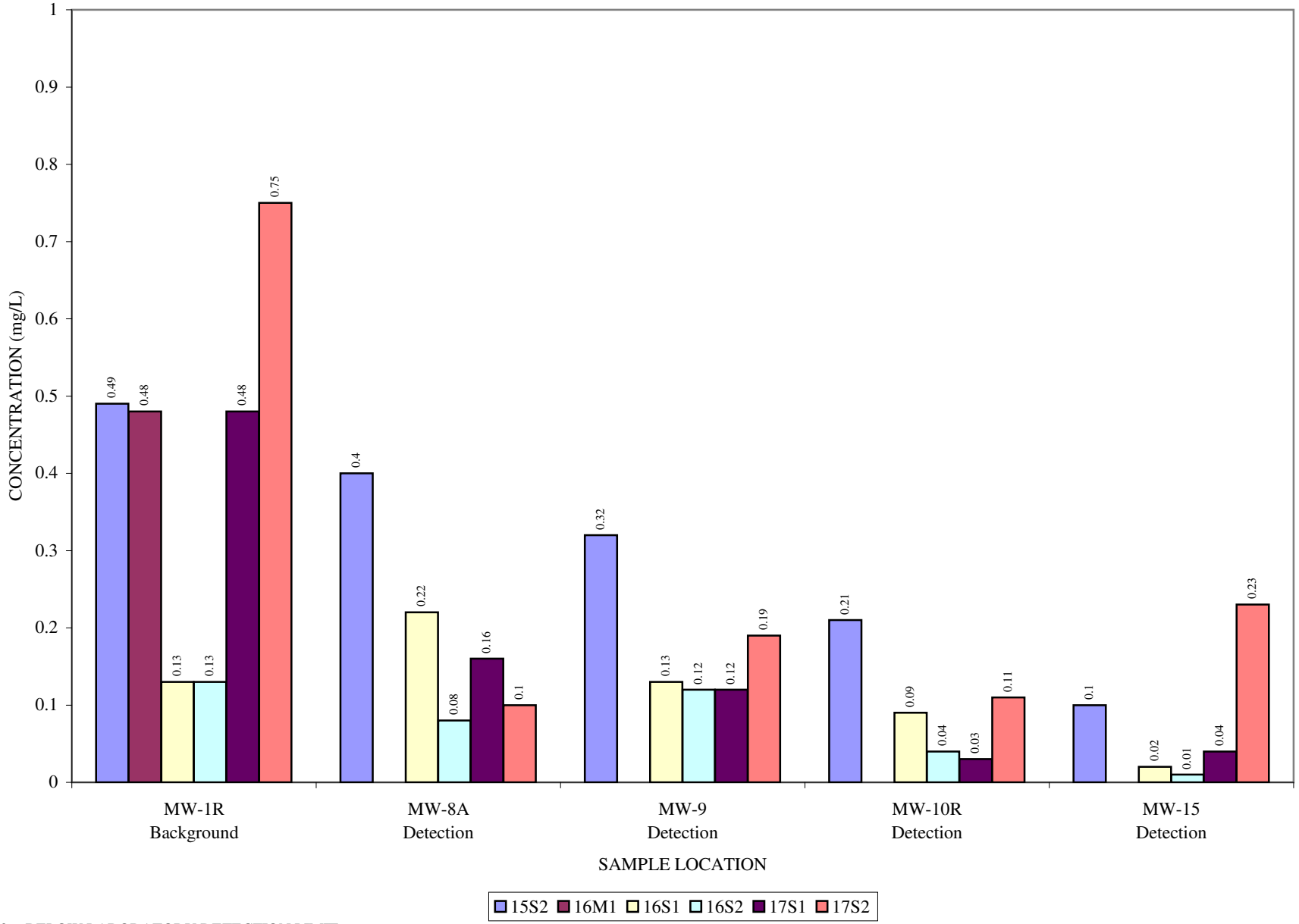
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

DISSOLVED OXYGEN (FIELD)

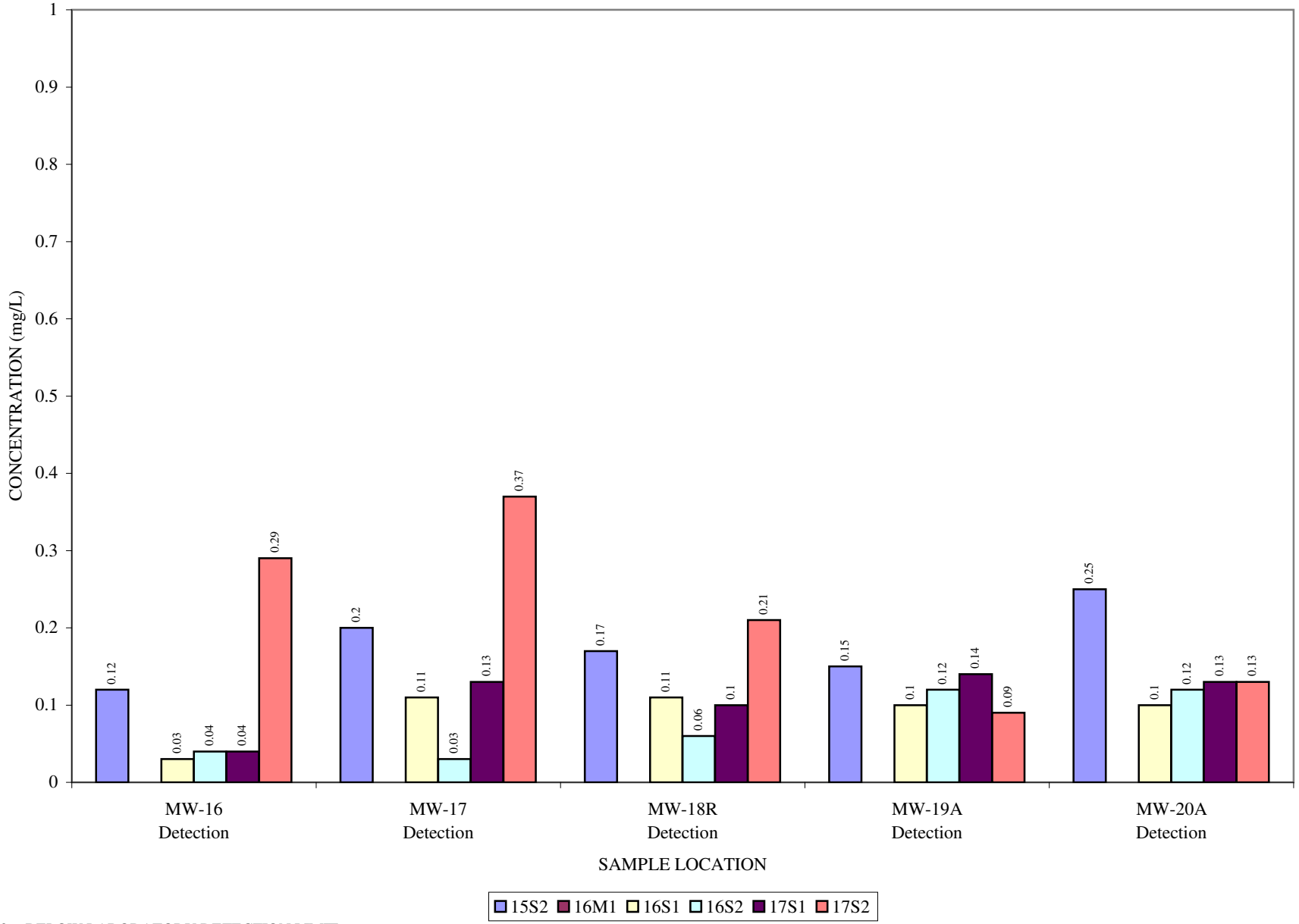
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

DISSOLVED OXYGEN (FIELD)

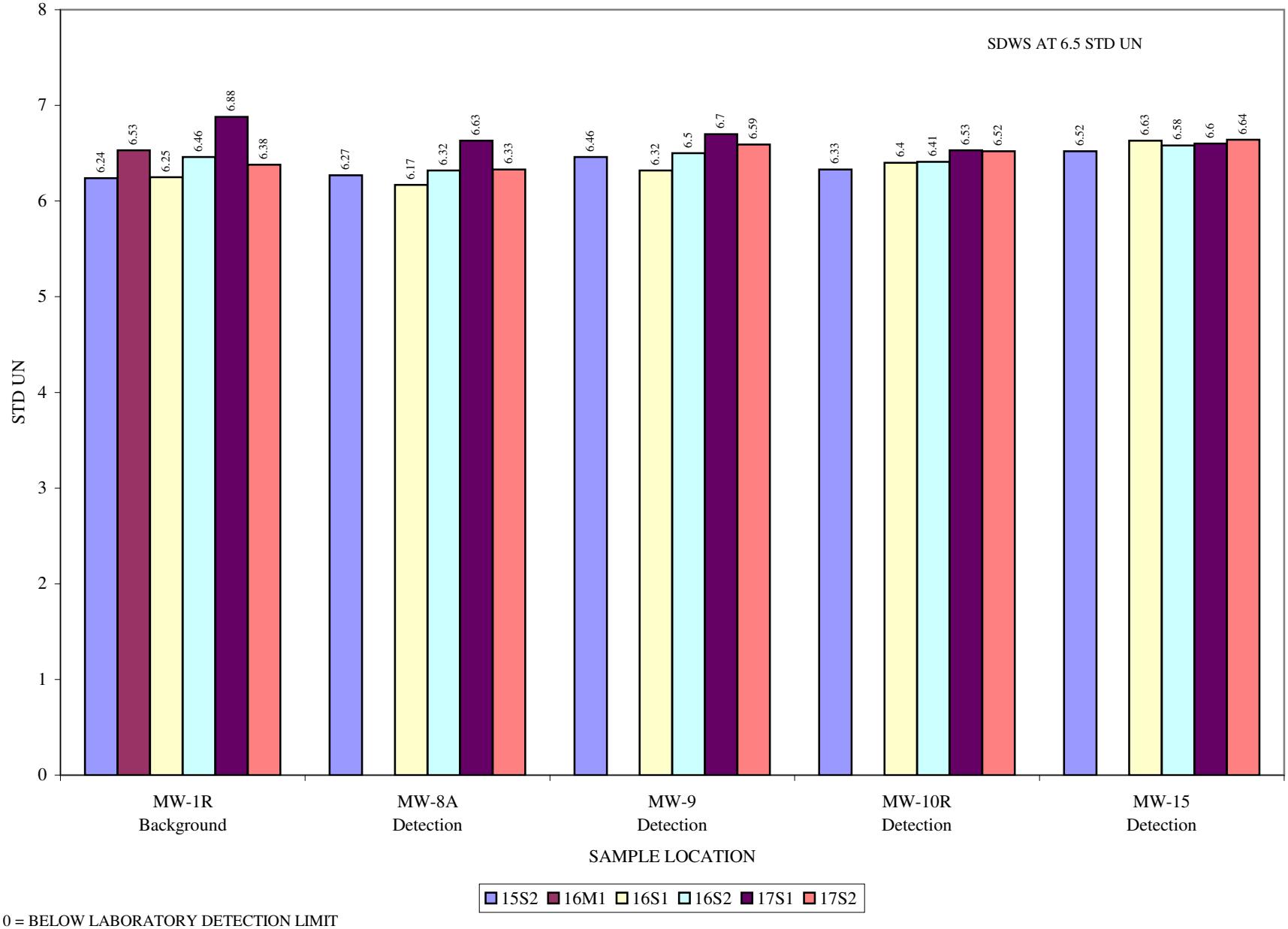
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

pH (FIELD)

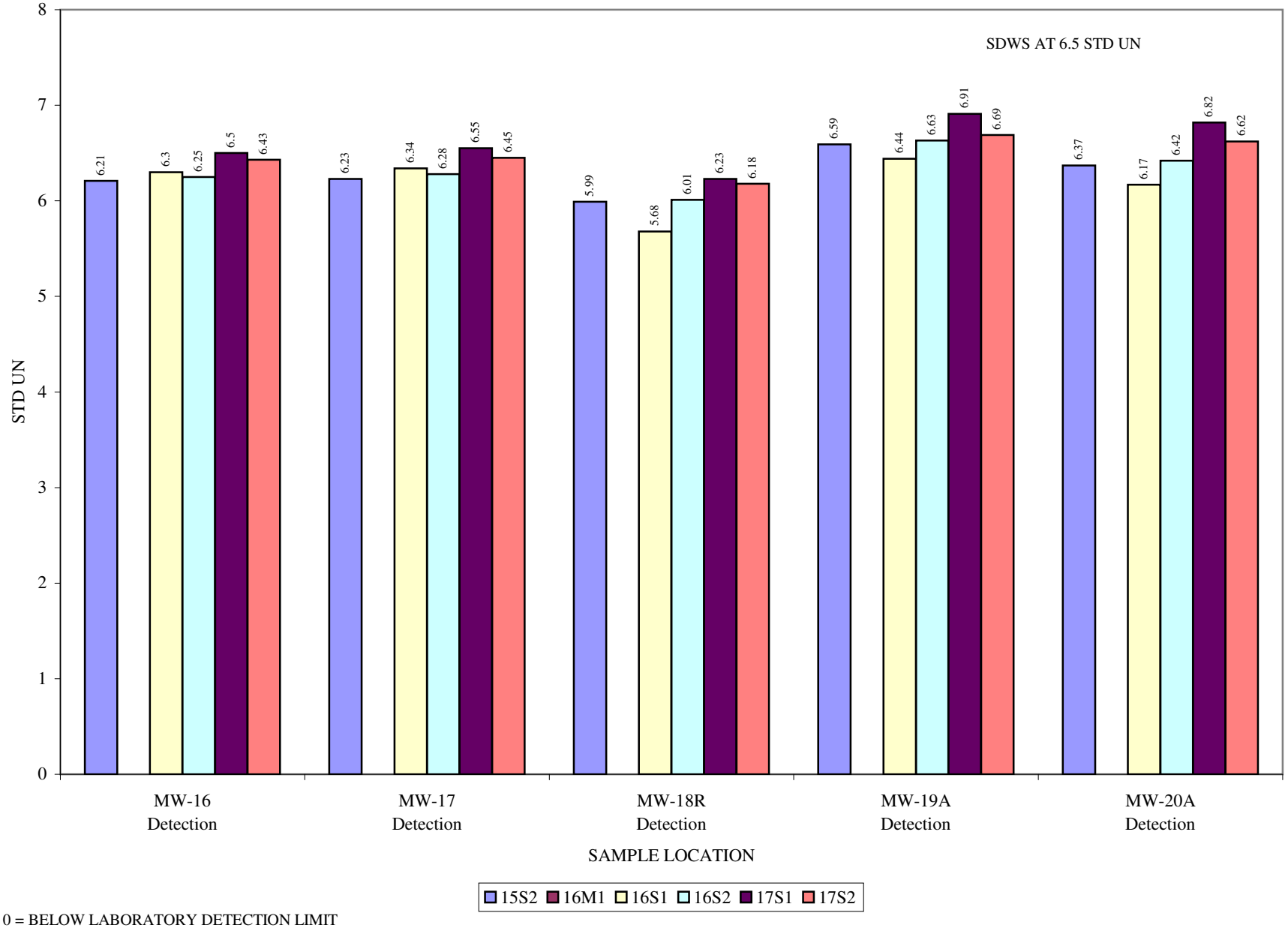
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

pH (FIELD)

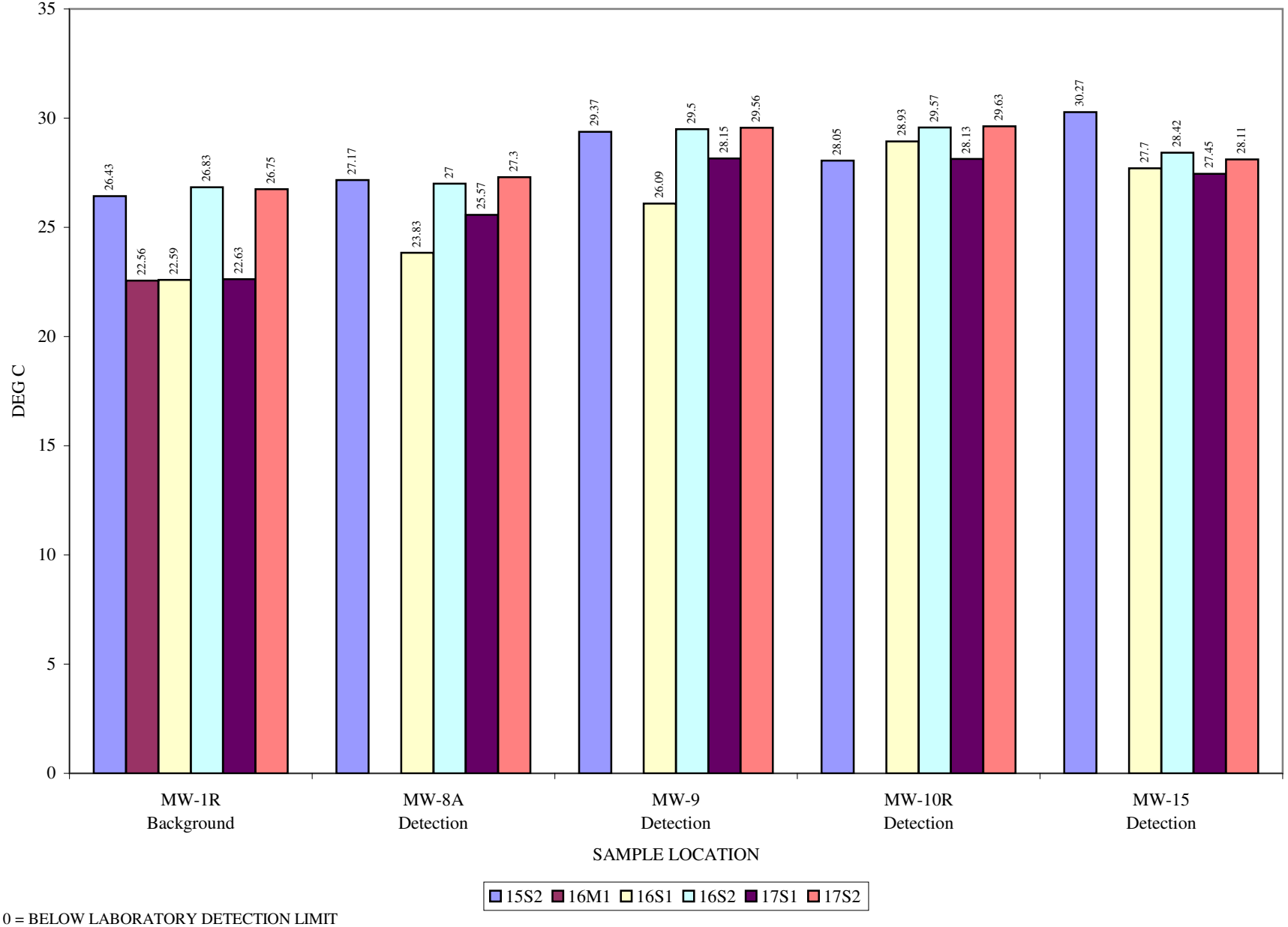
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TEMPERATURE (FIELD)

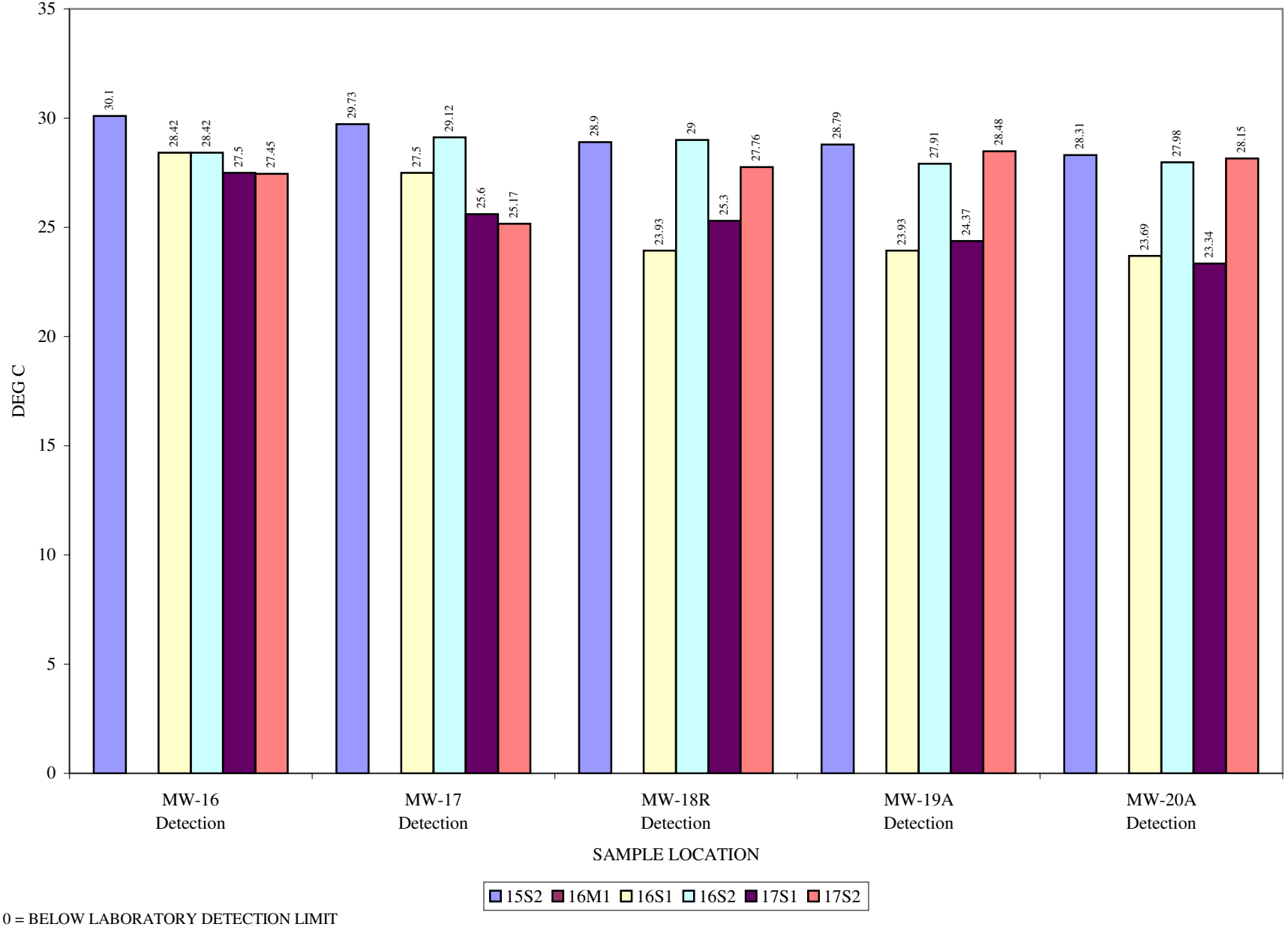
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TEMPERATURE (FIELD)

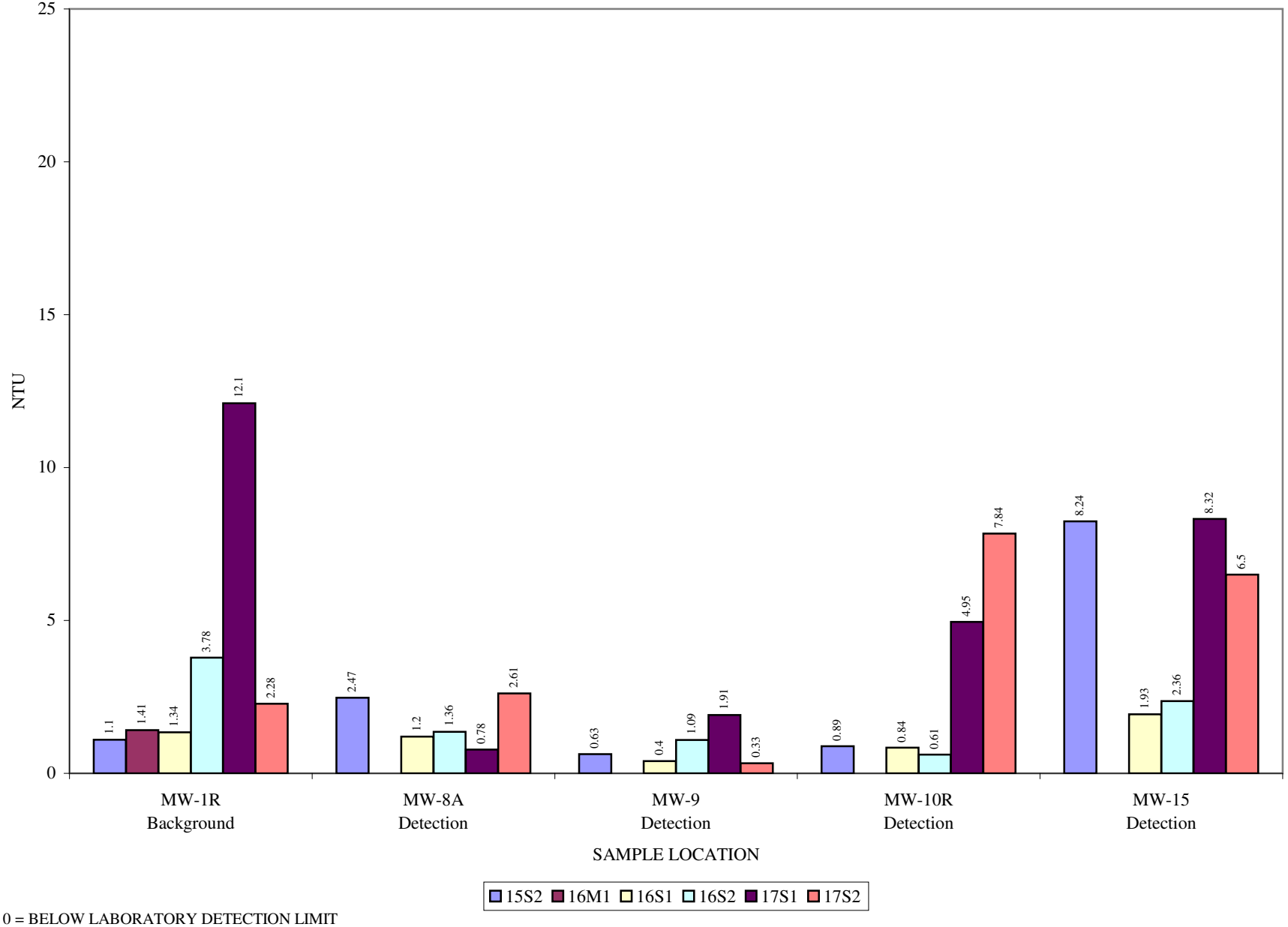
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TURBIDITY (FIELD)

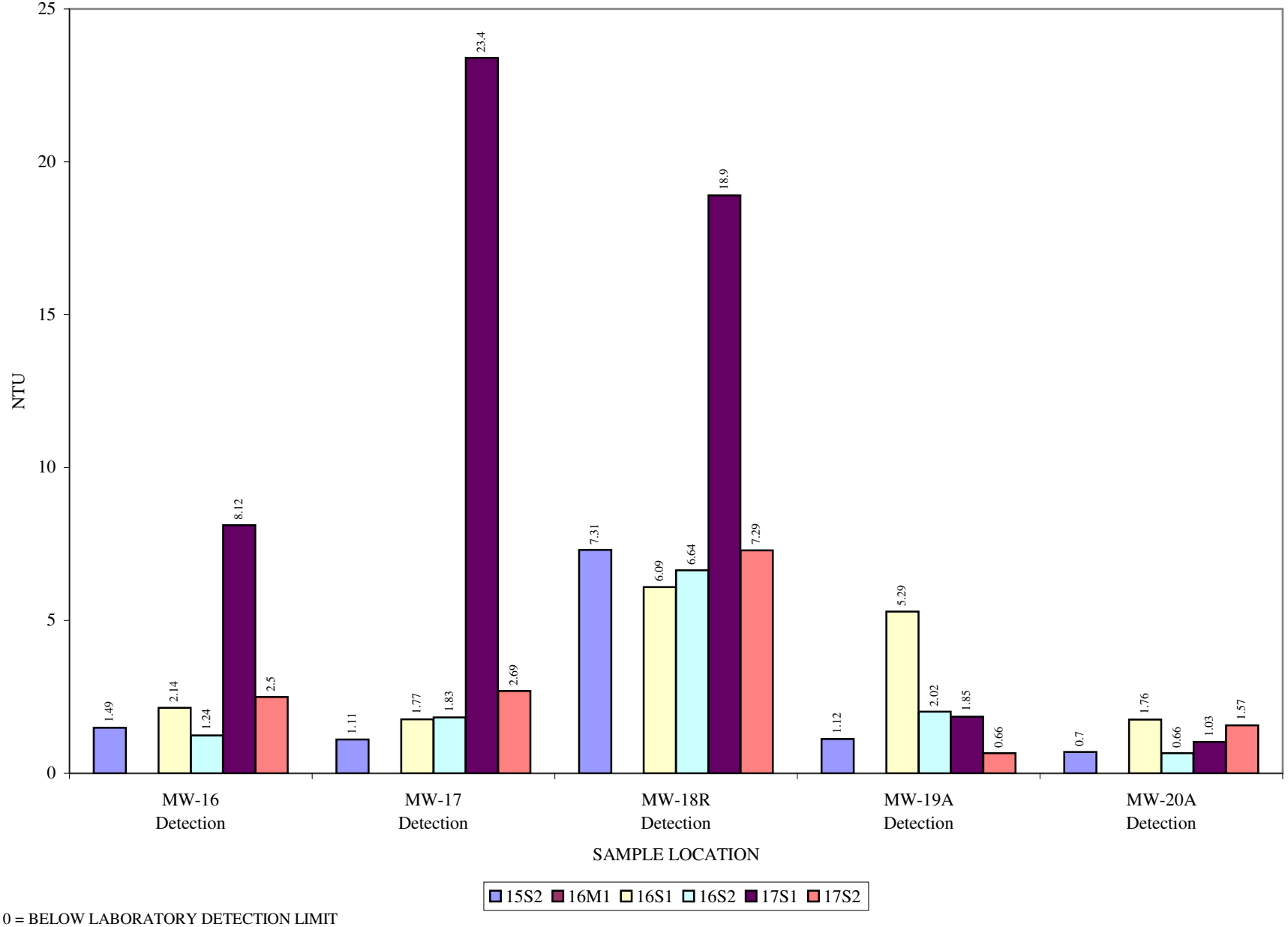
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TURBIDITY (FIELD)

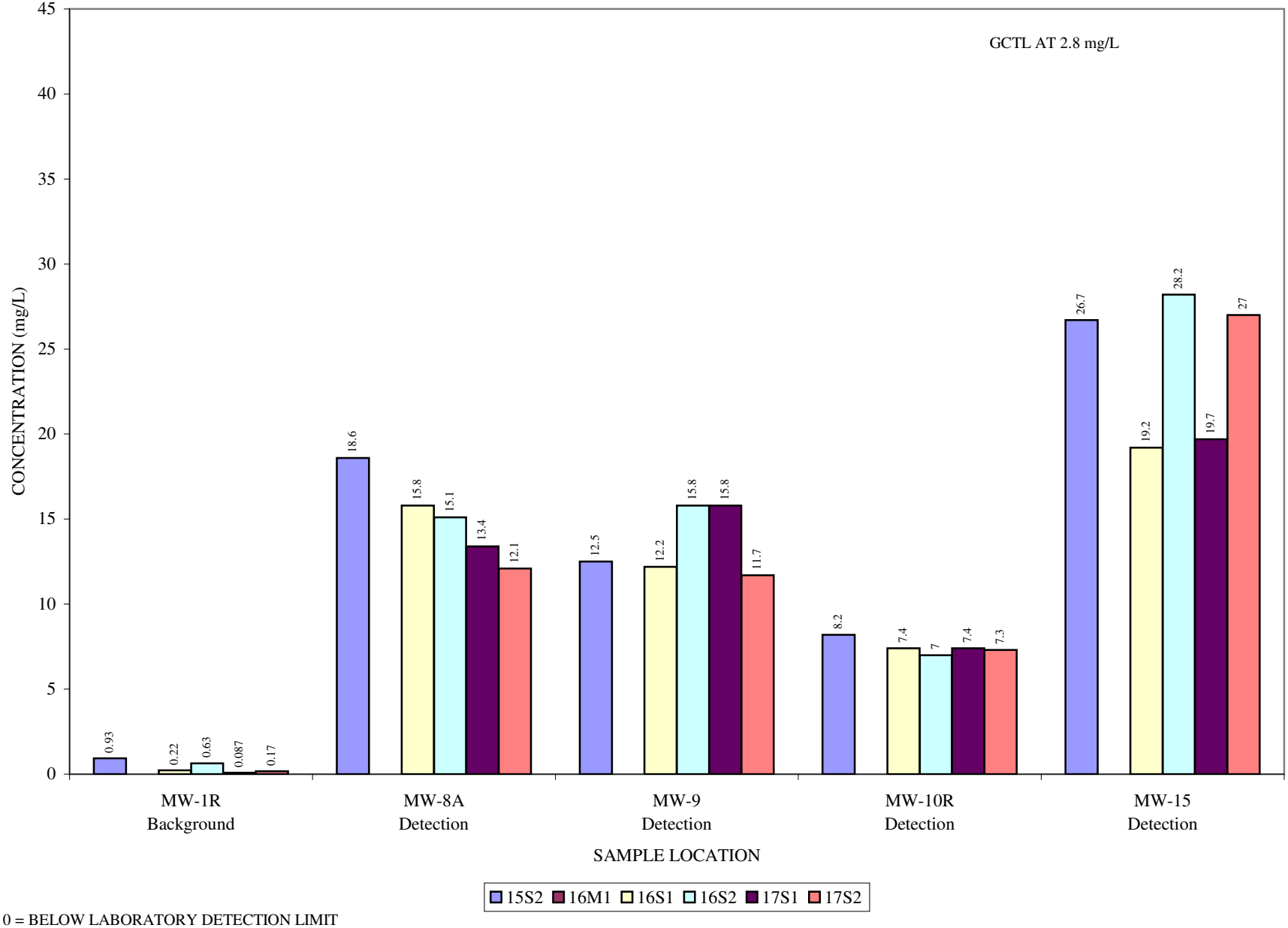
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

AMMONIA NITROGEN

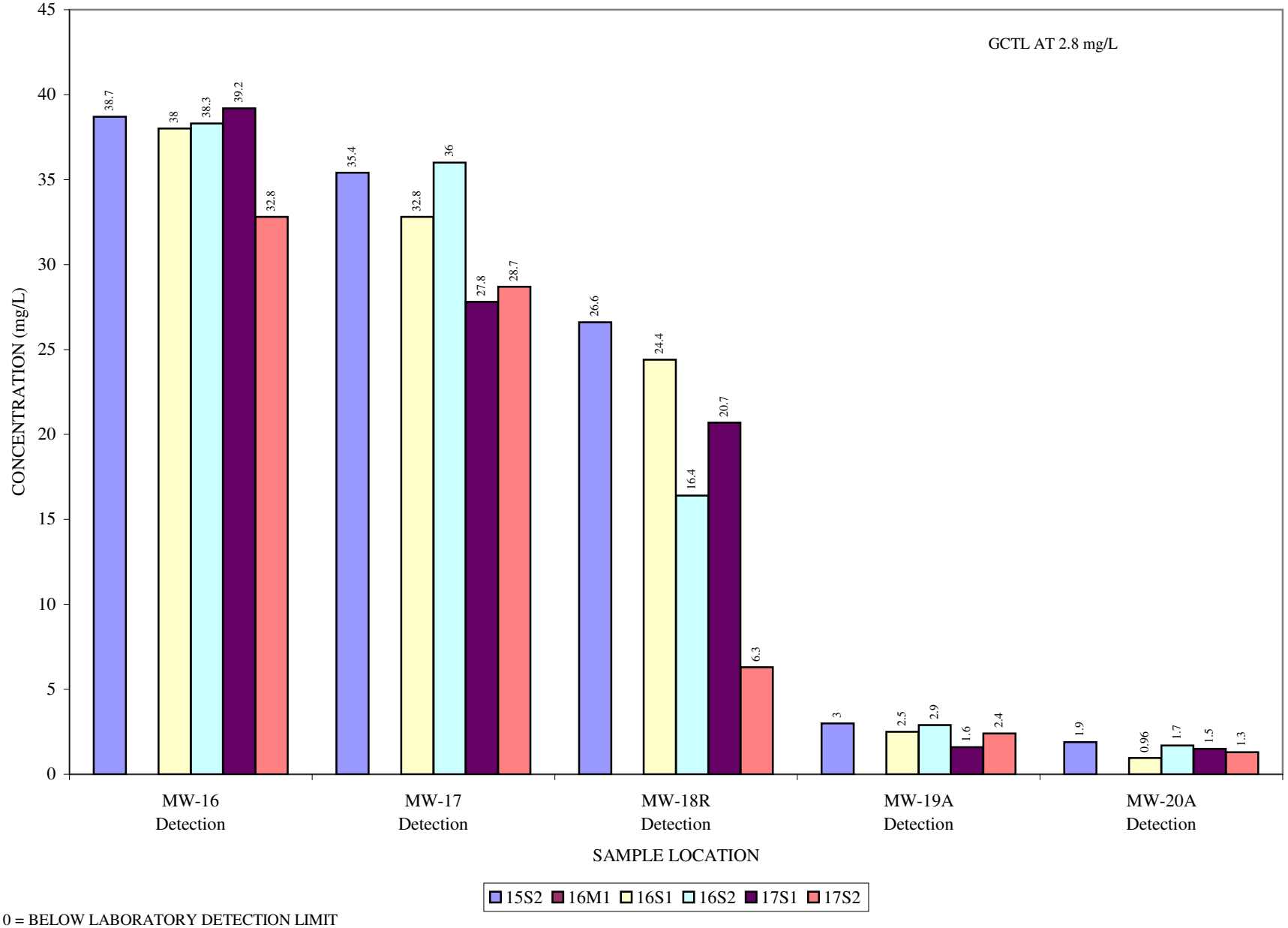
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

AMMONIA NITROGEN

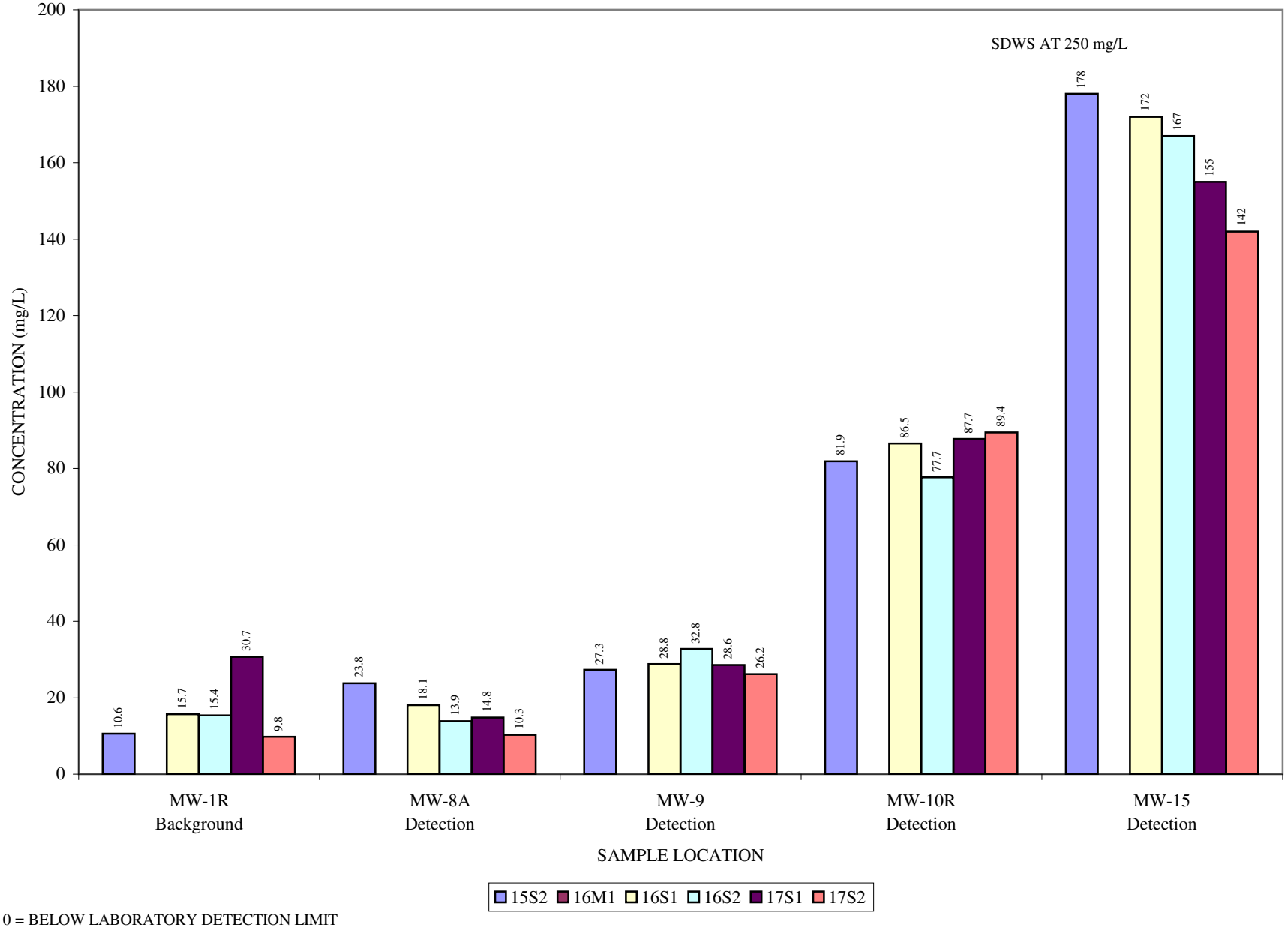
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CHLORIDE

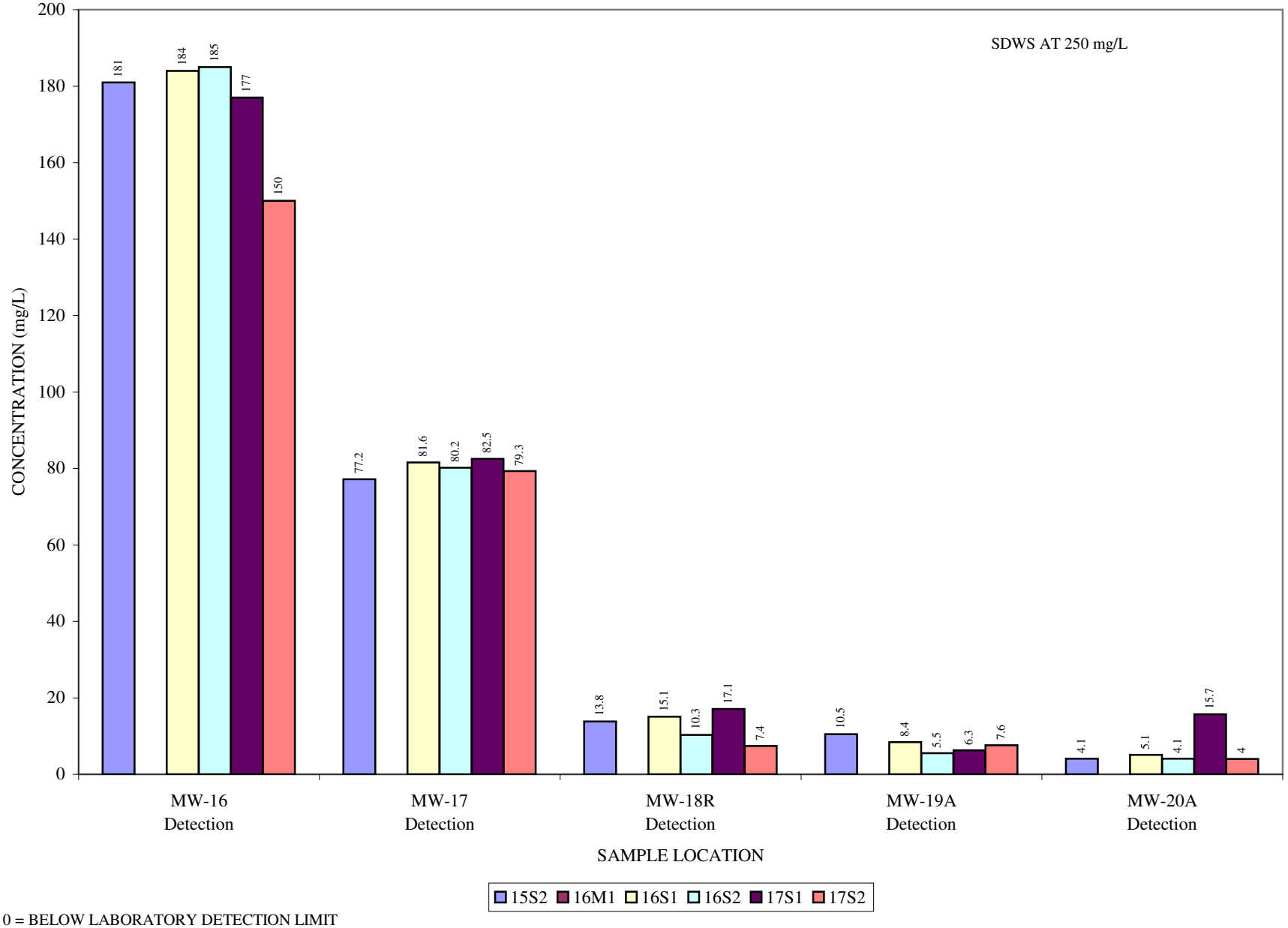
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CHLORIDE

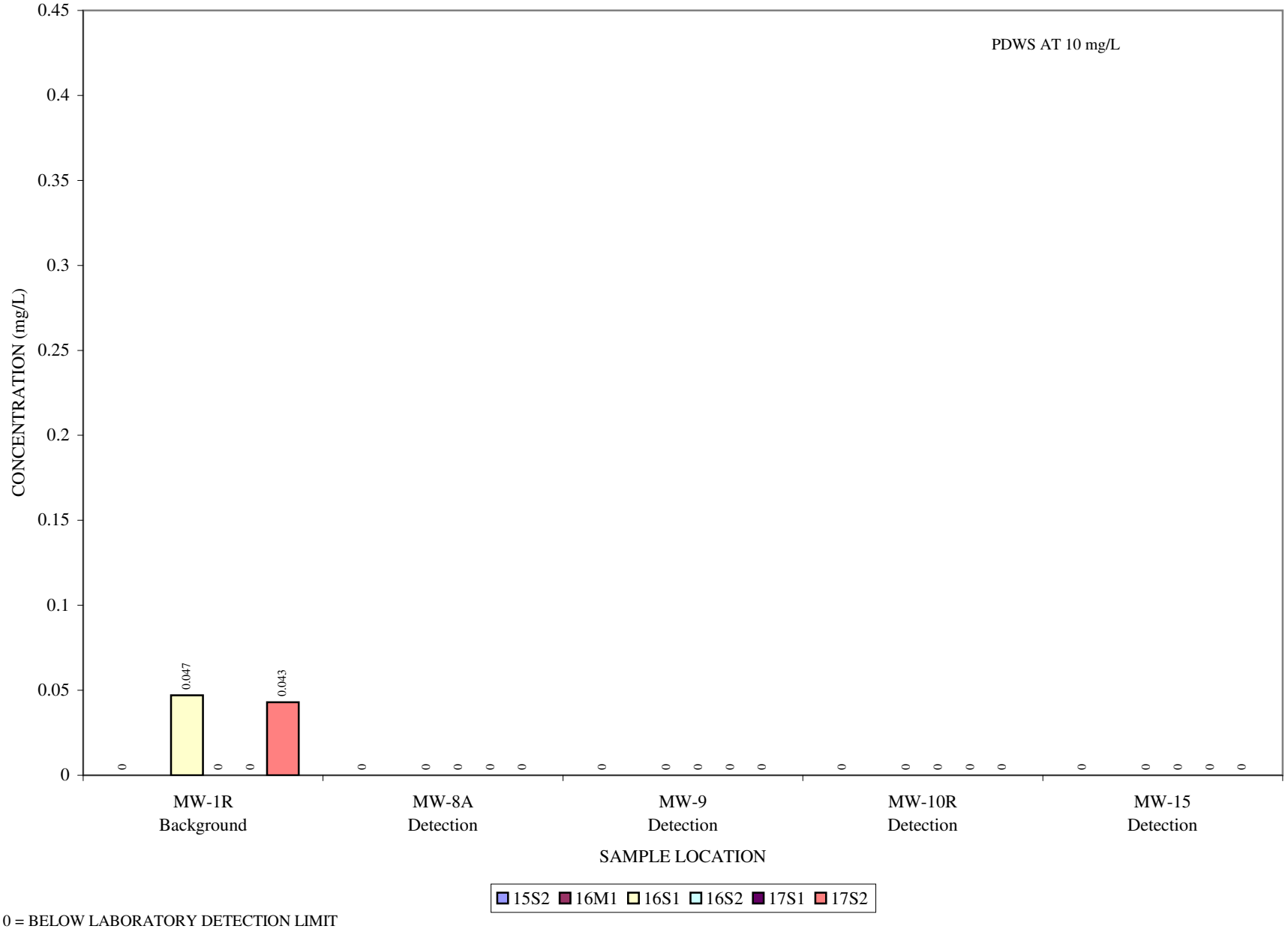
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

NITRATE NITROGEN

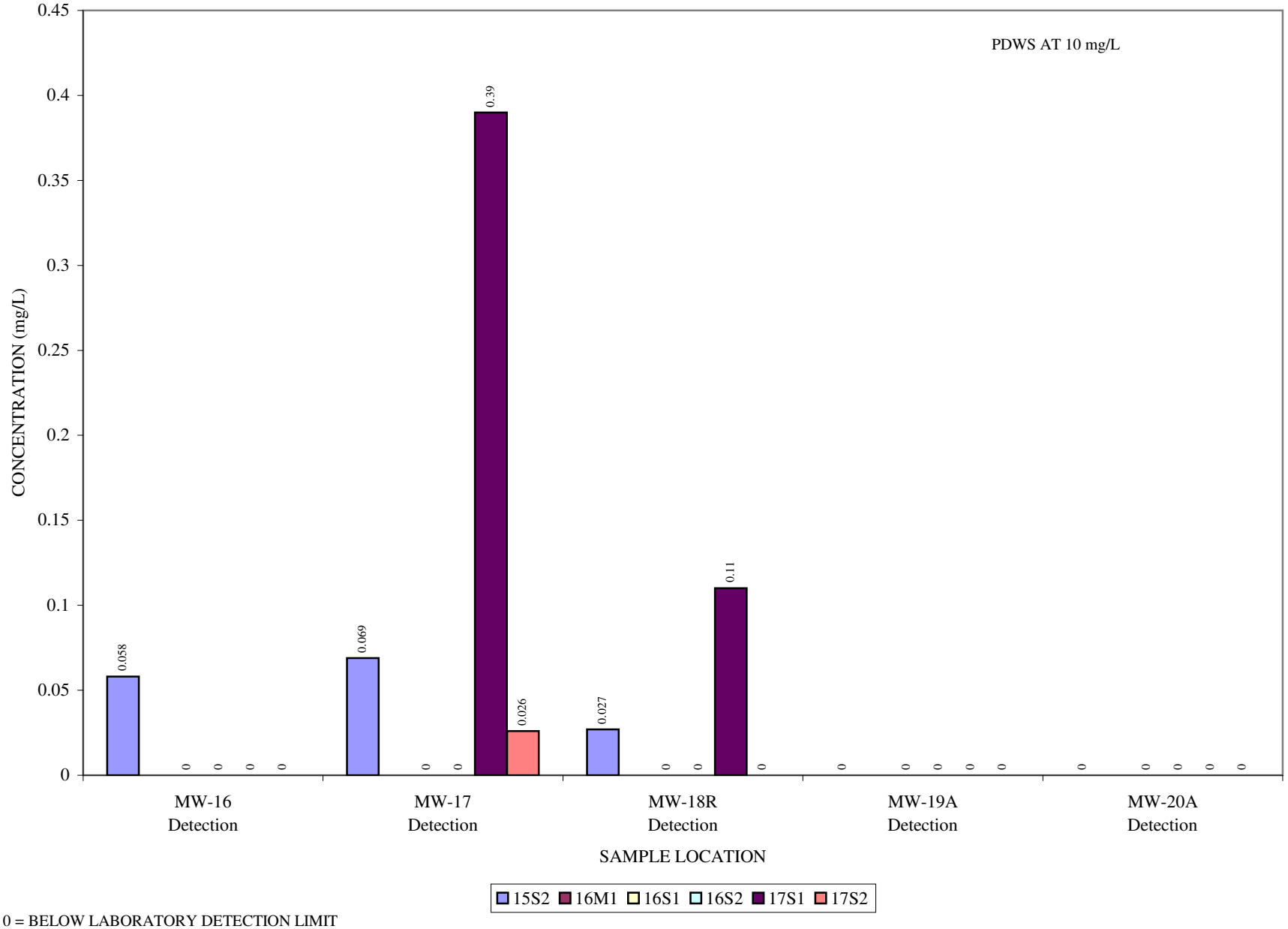
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

NITRATE NITROGEN

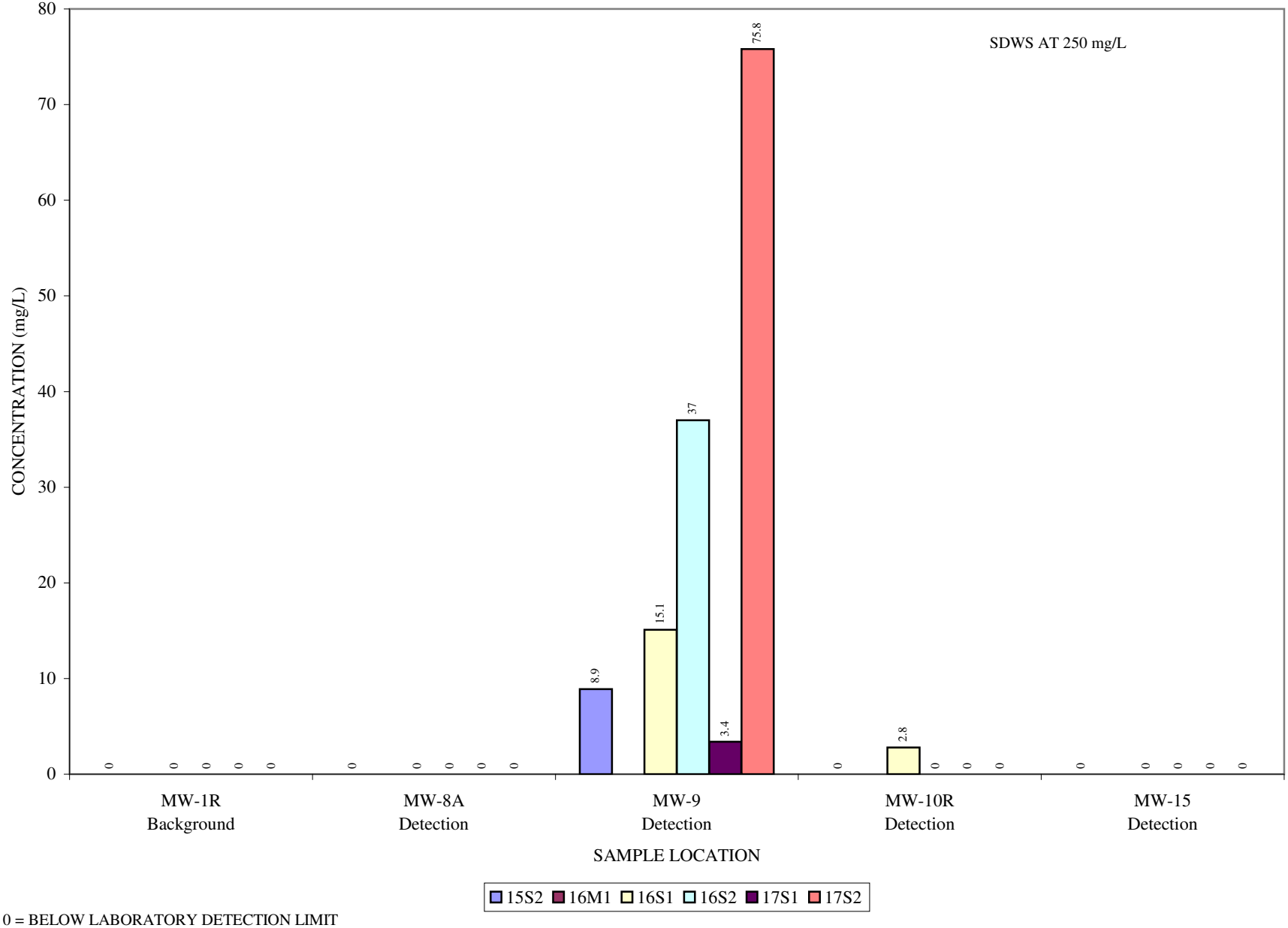
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

SULFATE

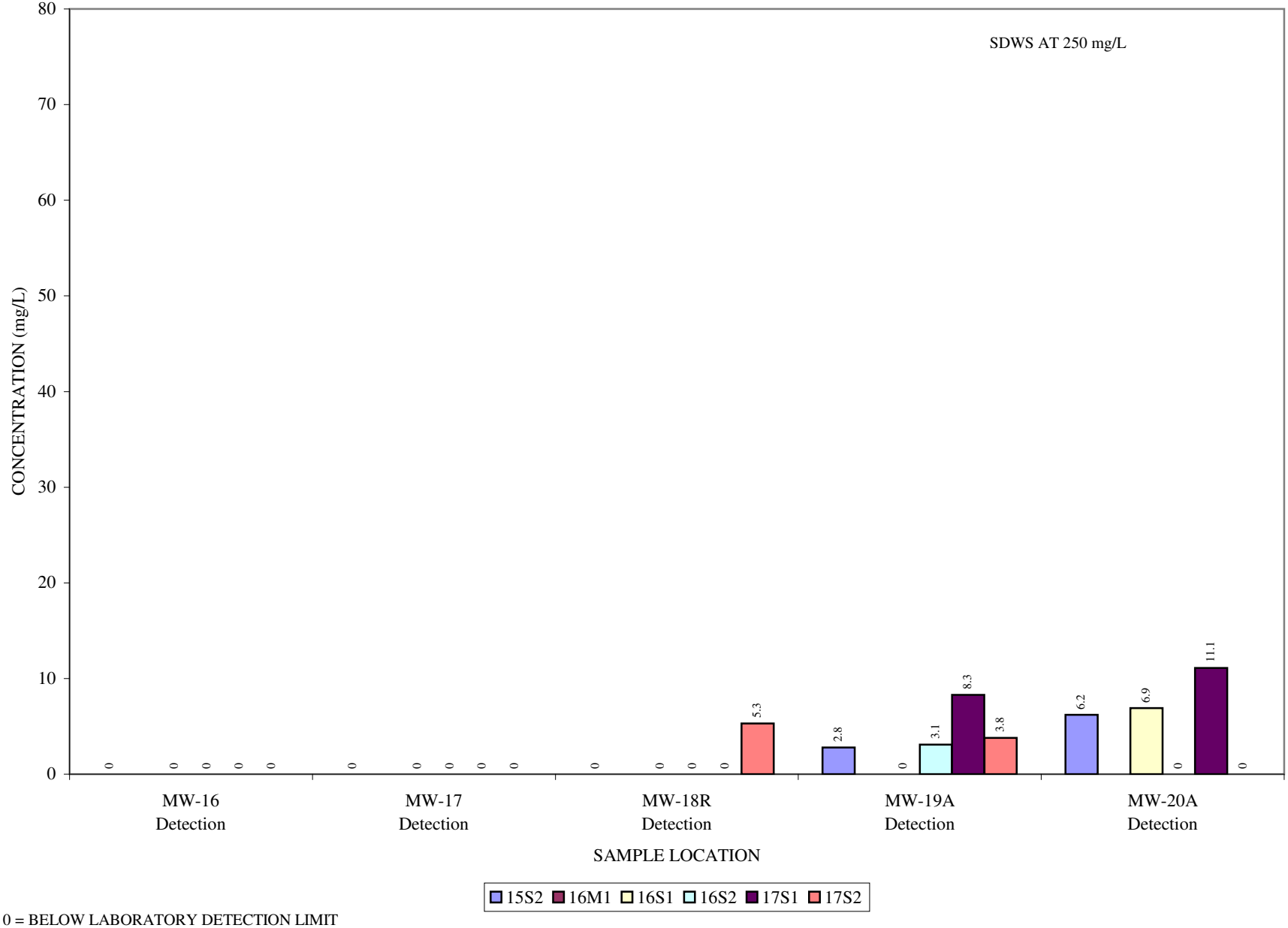
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

SULFATE

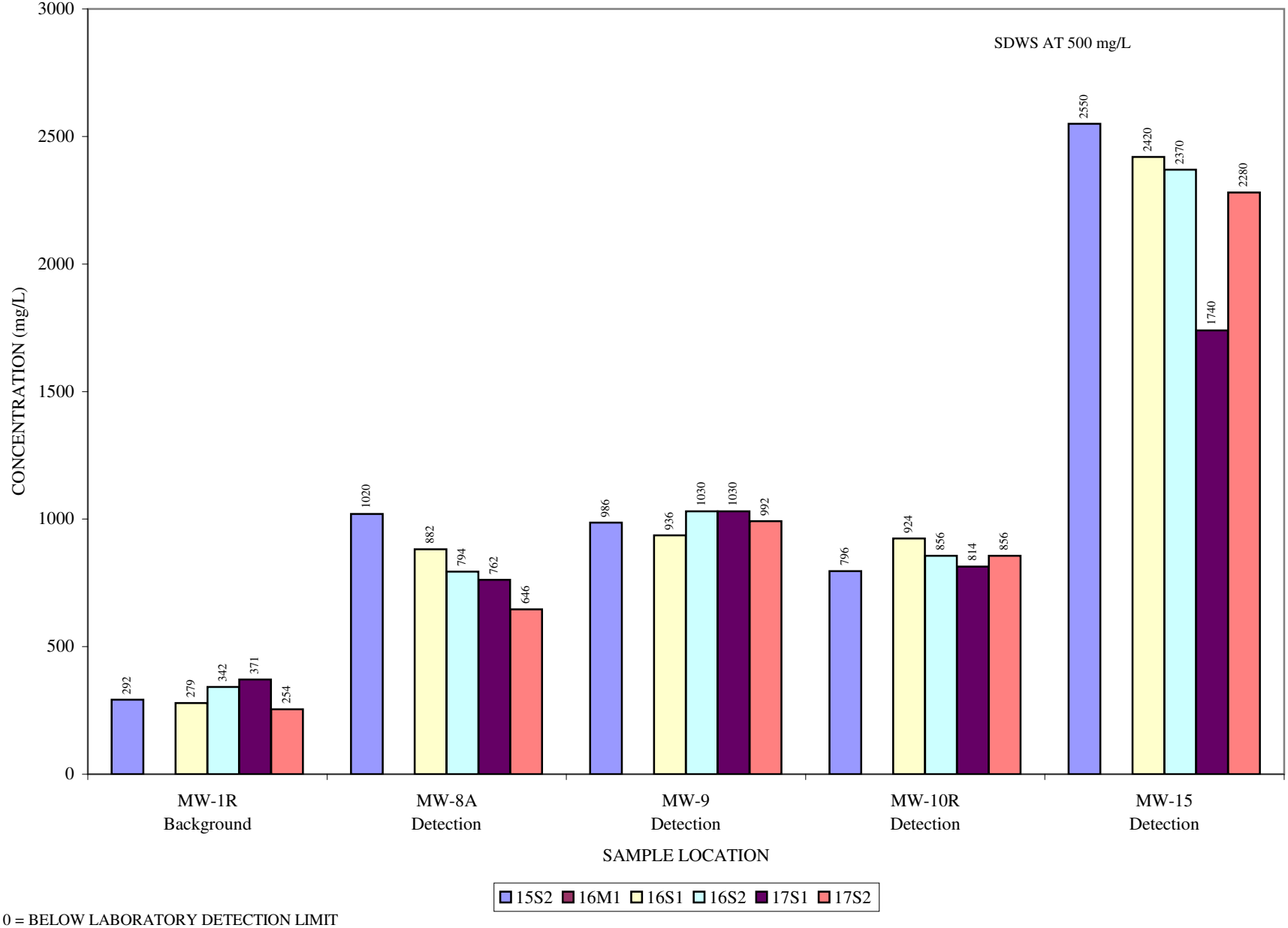
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TOTAL DISSOLVED SOLIDS

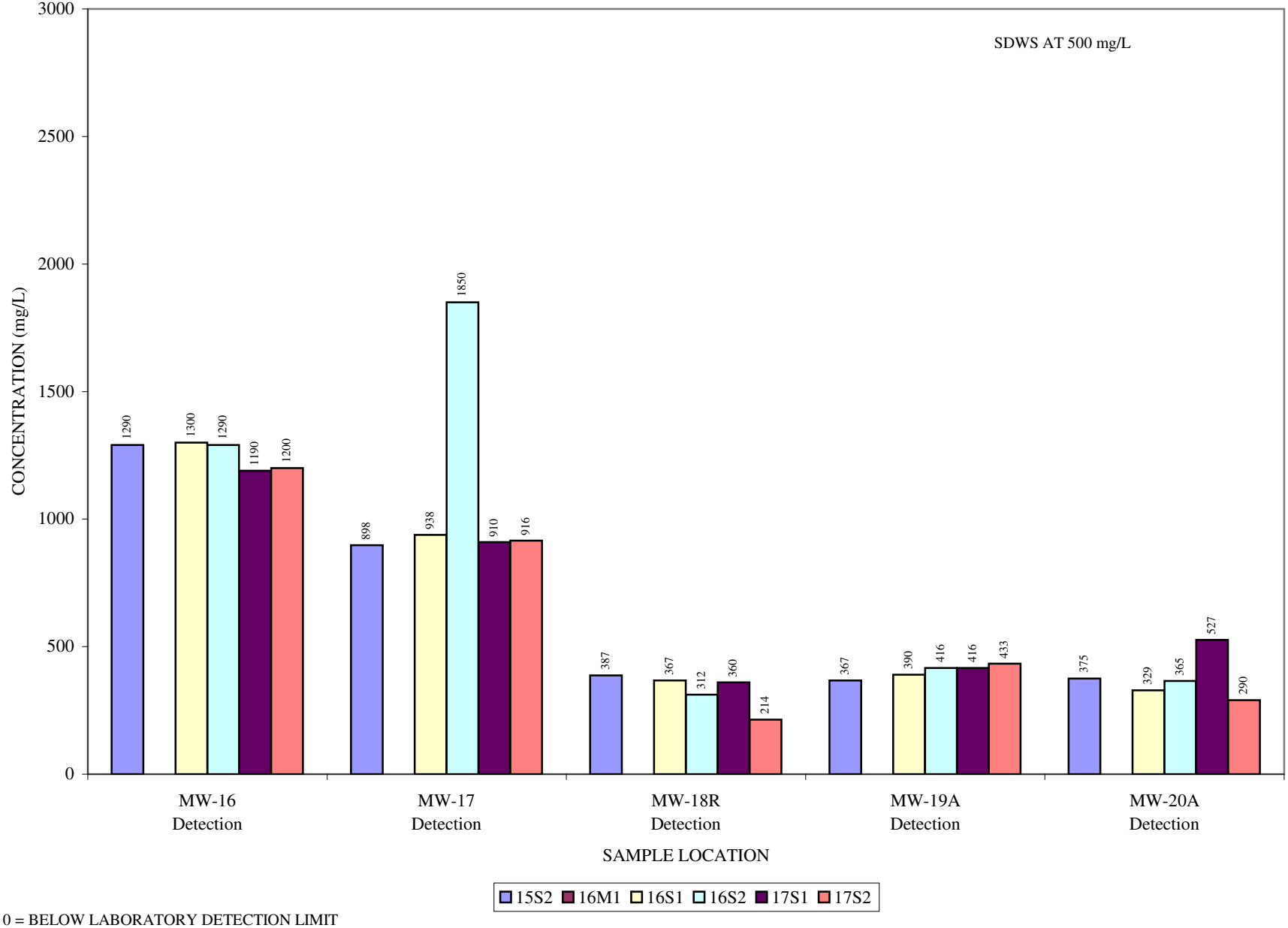
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TOTAL DISSOLVED SOLIDS

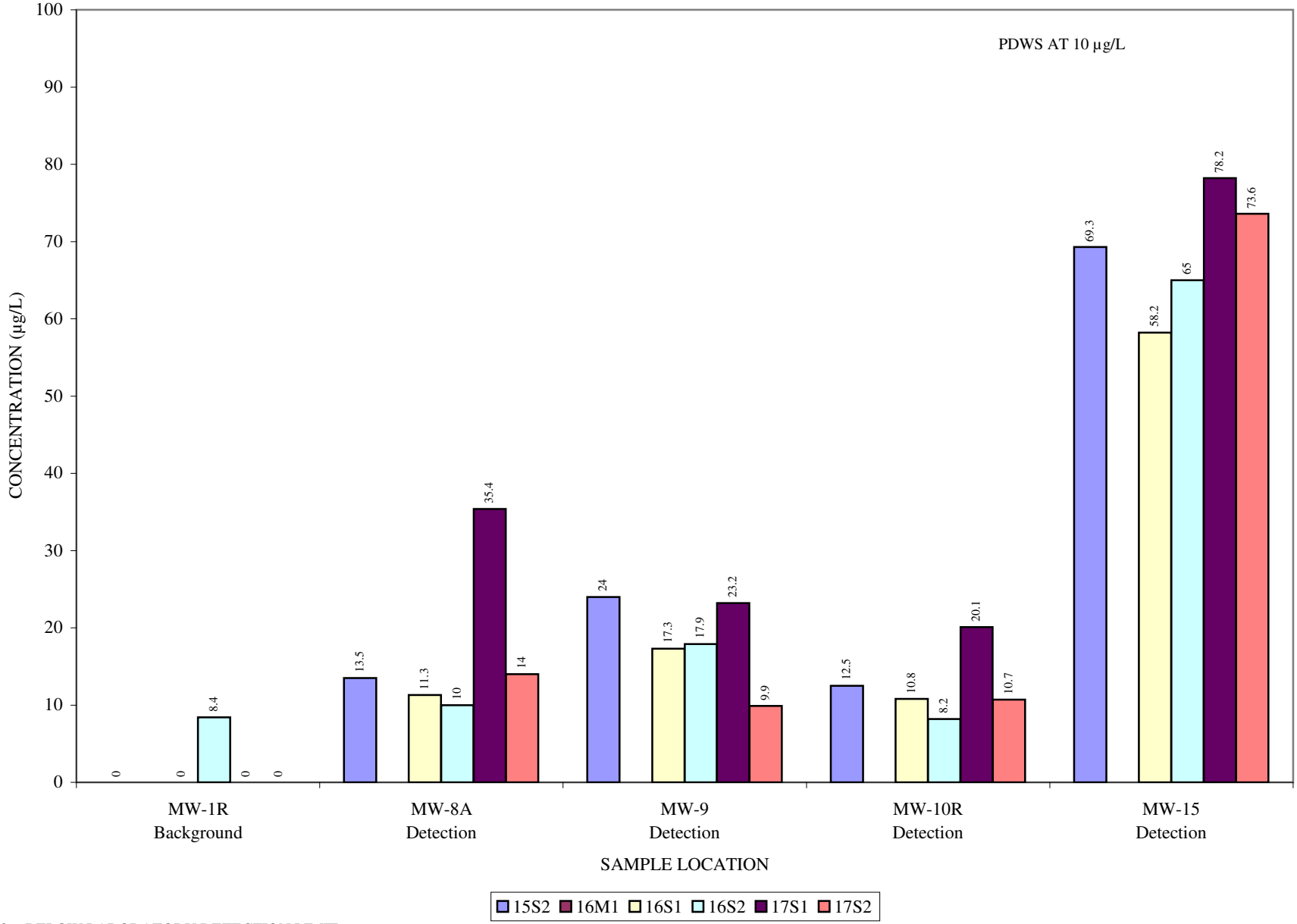
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

ARSENIC

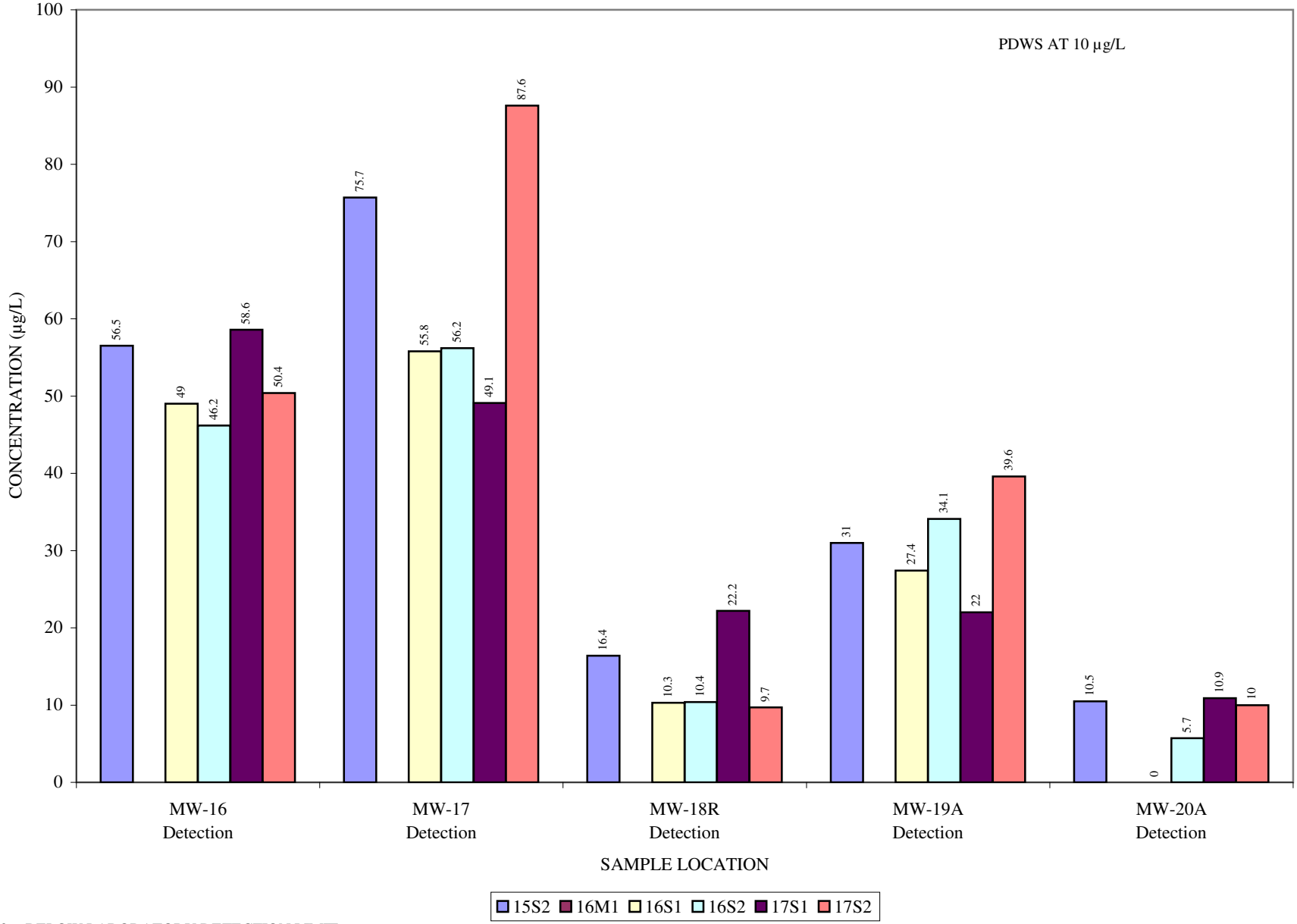
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

ARSENIC

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



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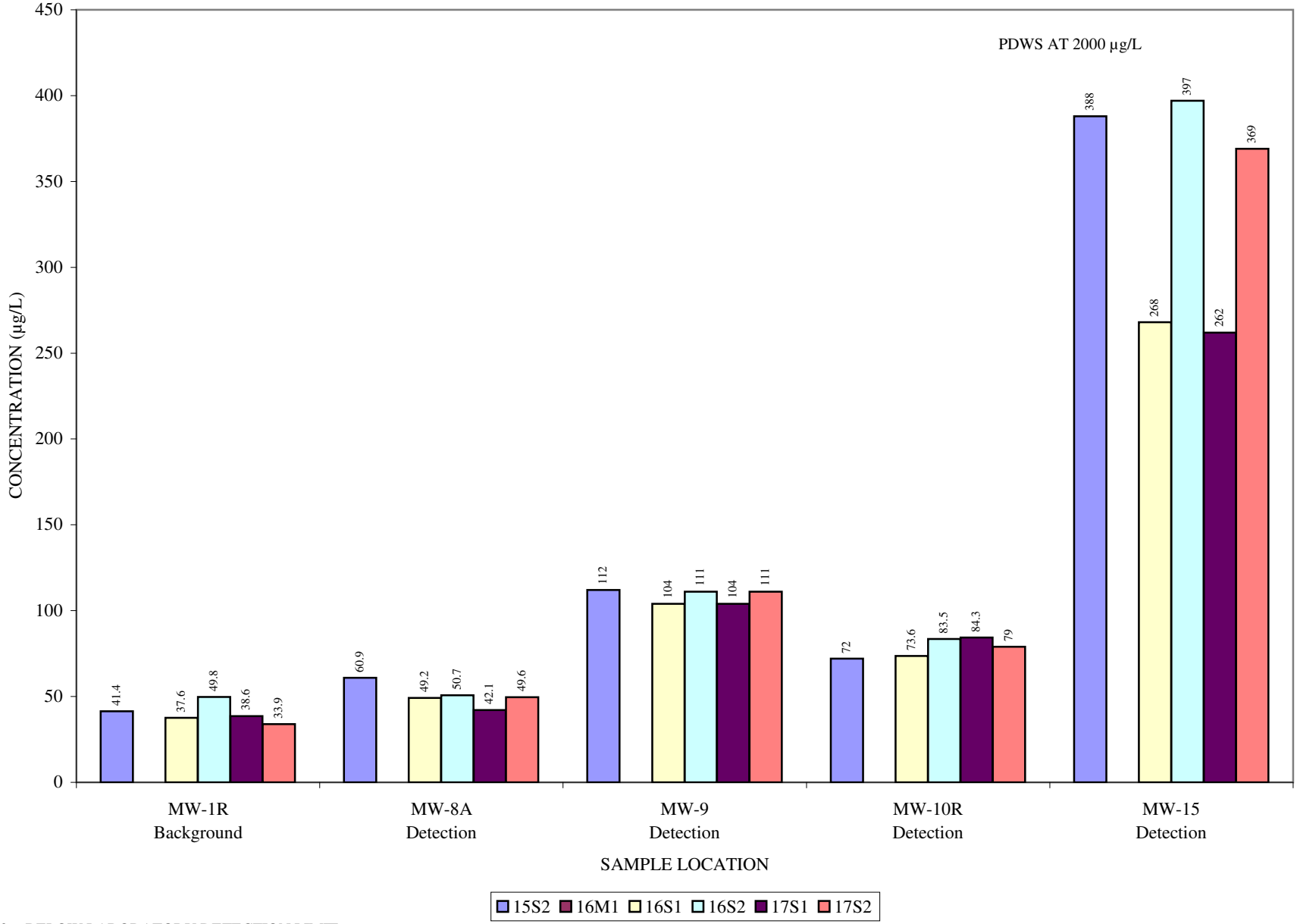
BARIUM

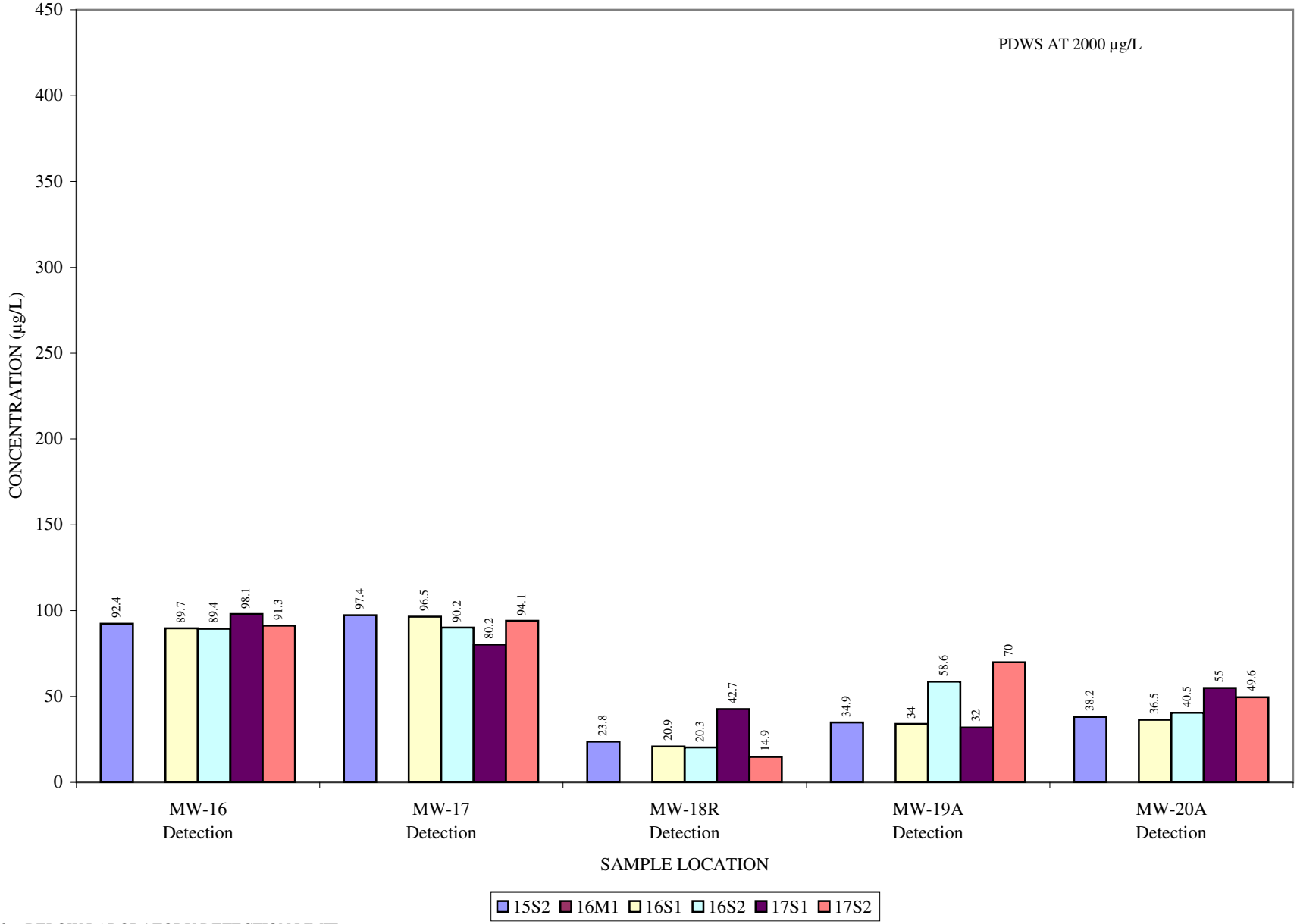
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

BARIUM

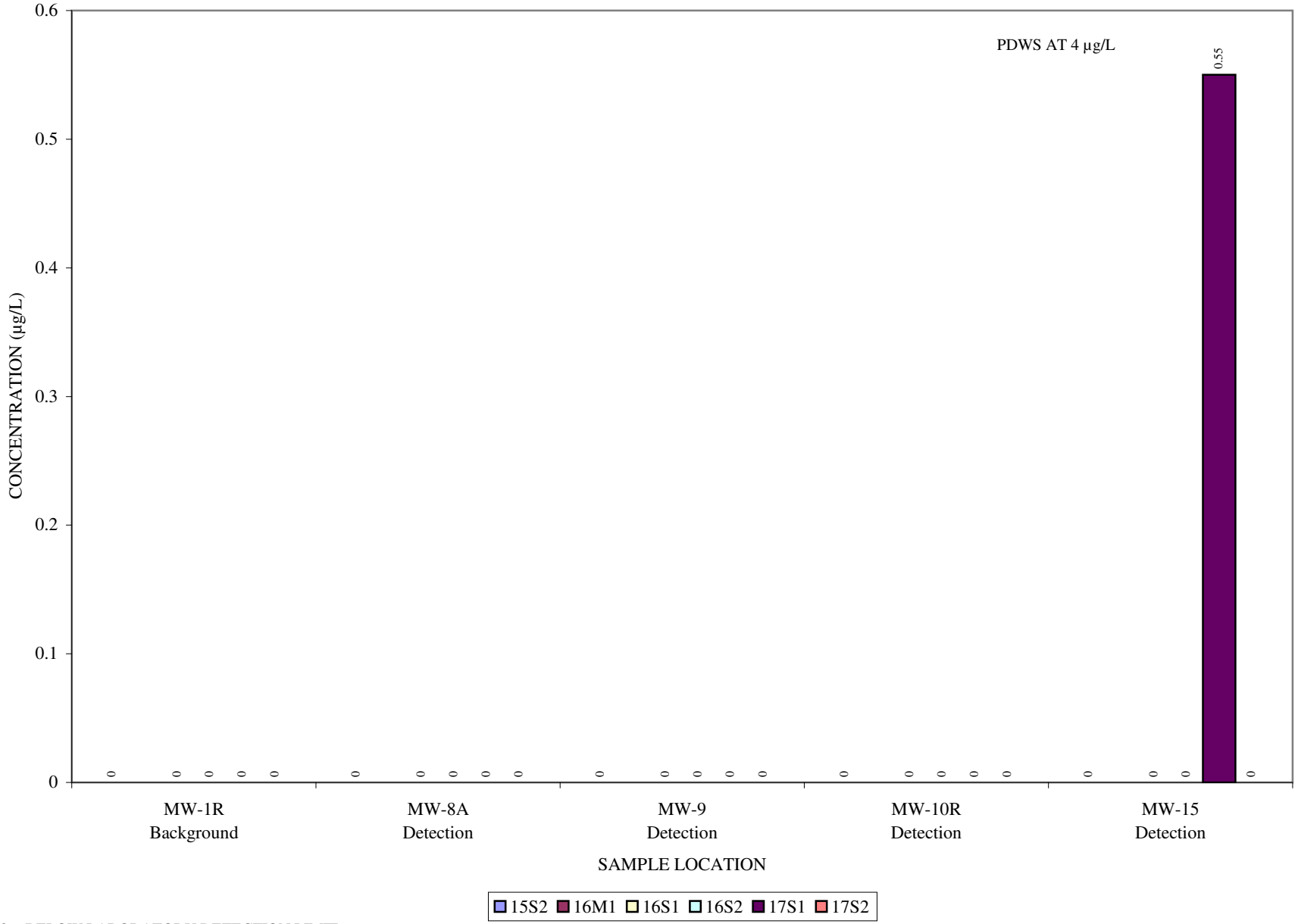
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

BERYLLIUM

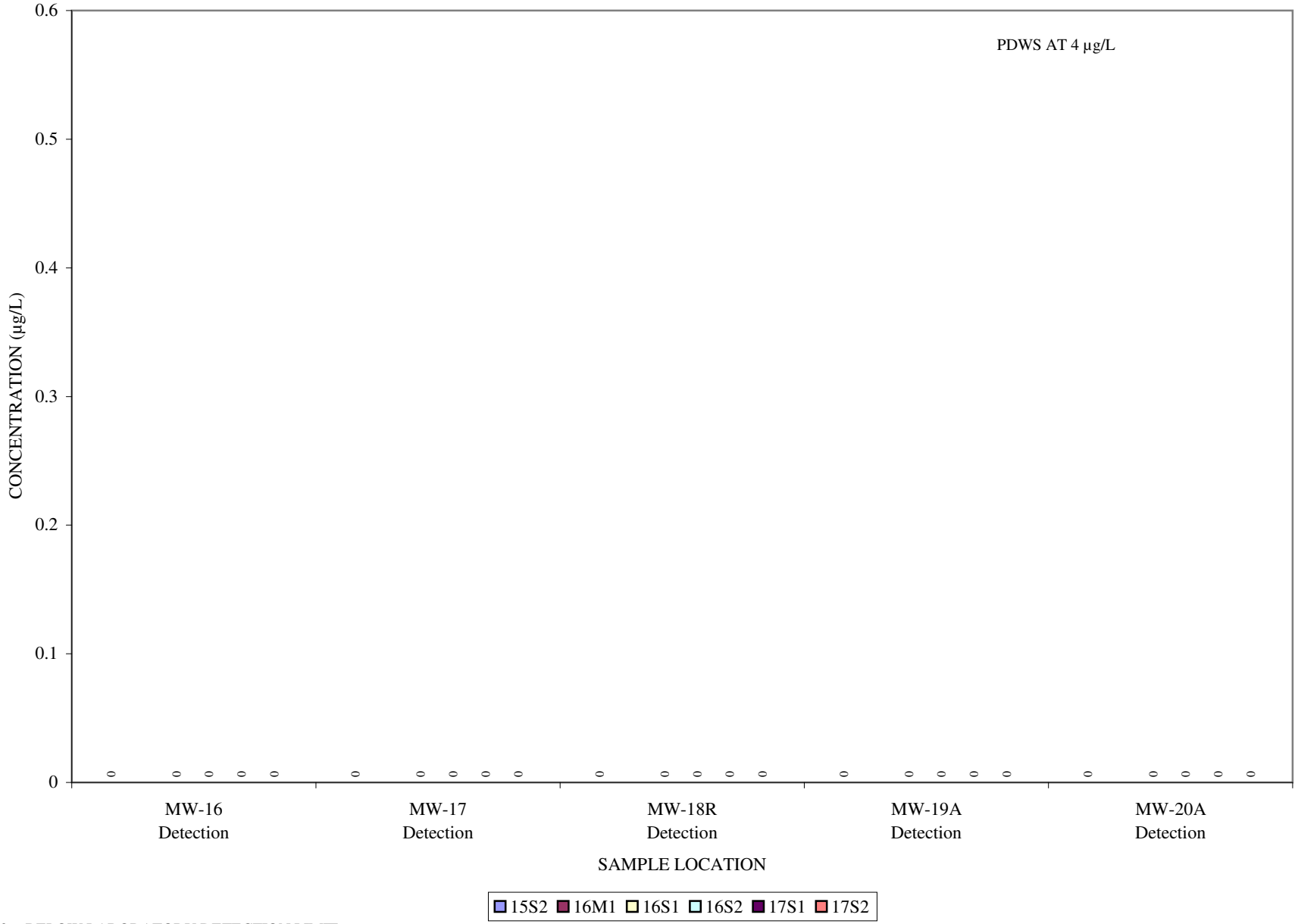
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

BERYLLIUM

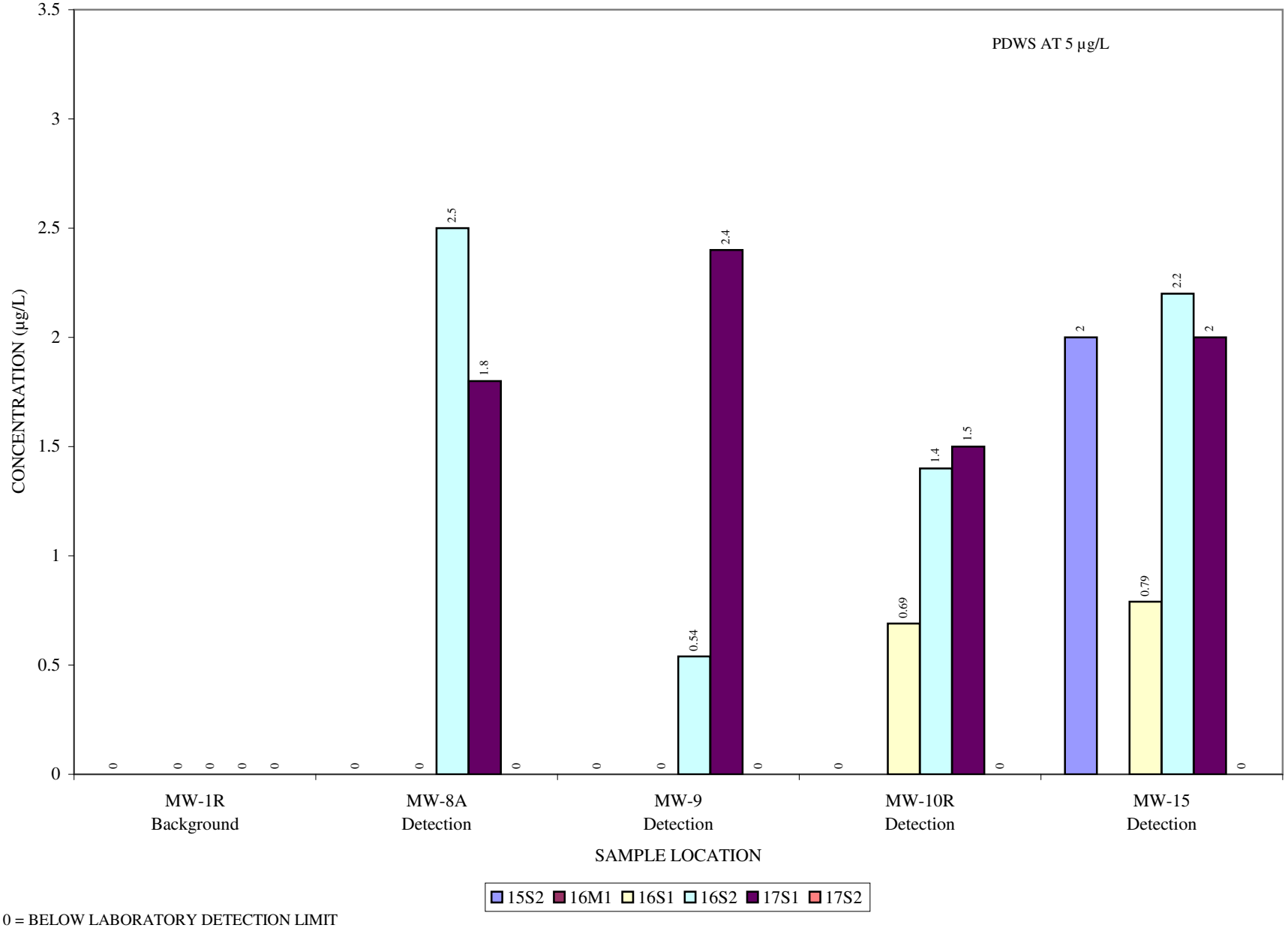
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CADMIUM

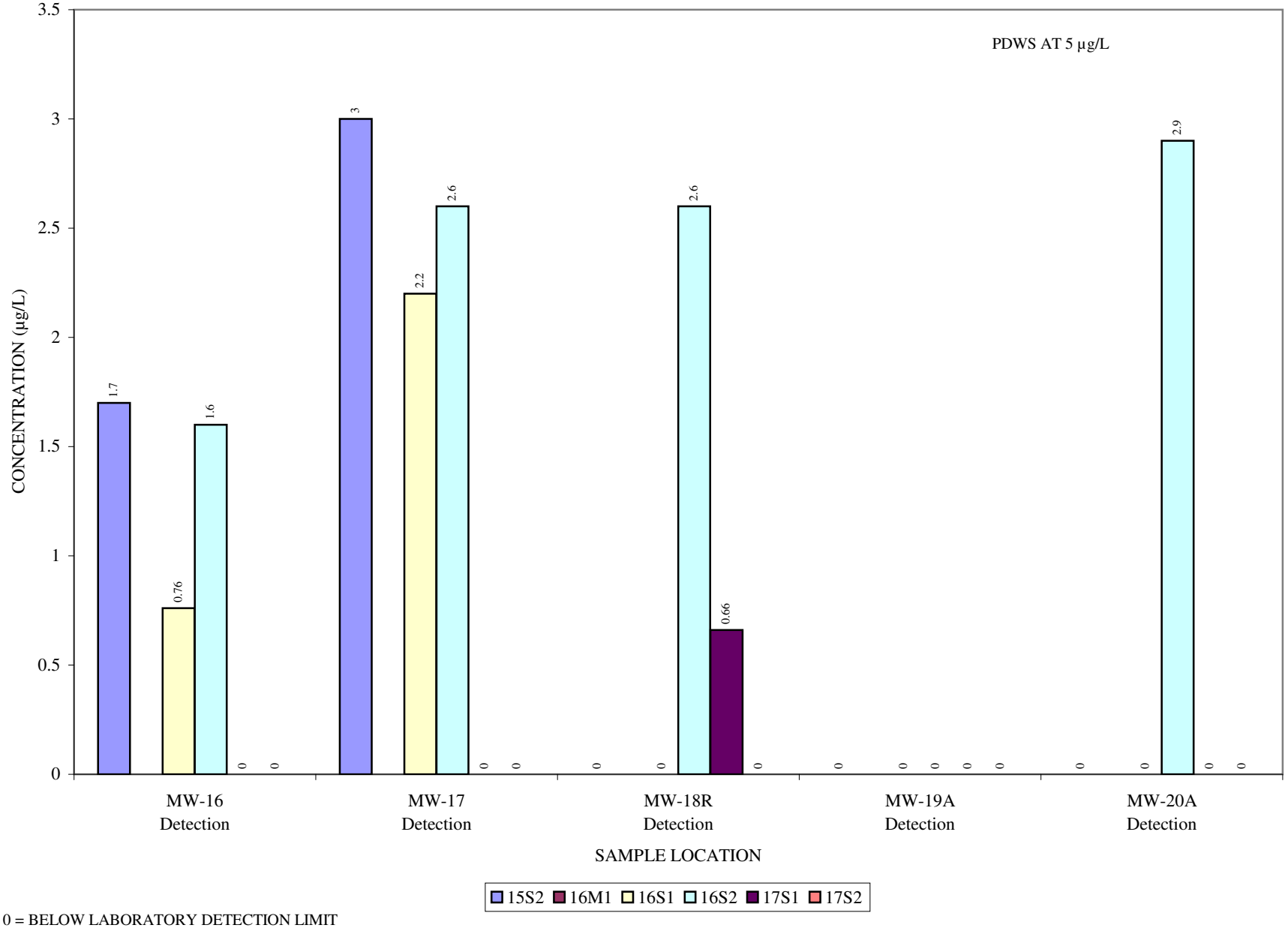
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CADMIUM

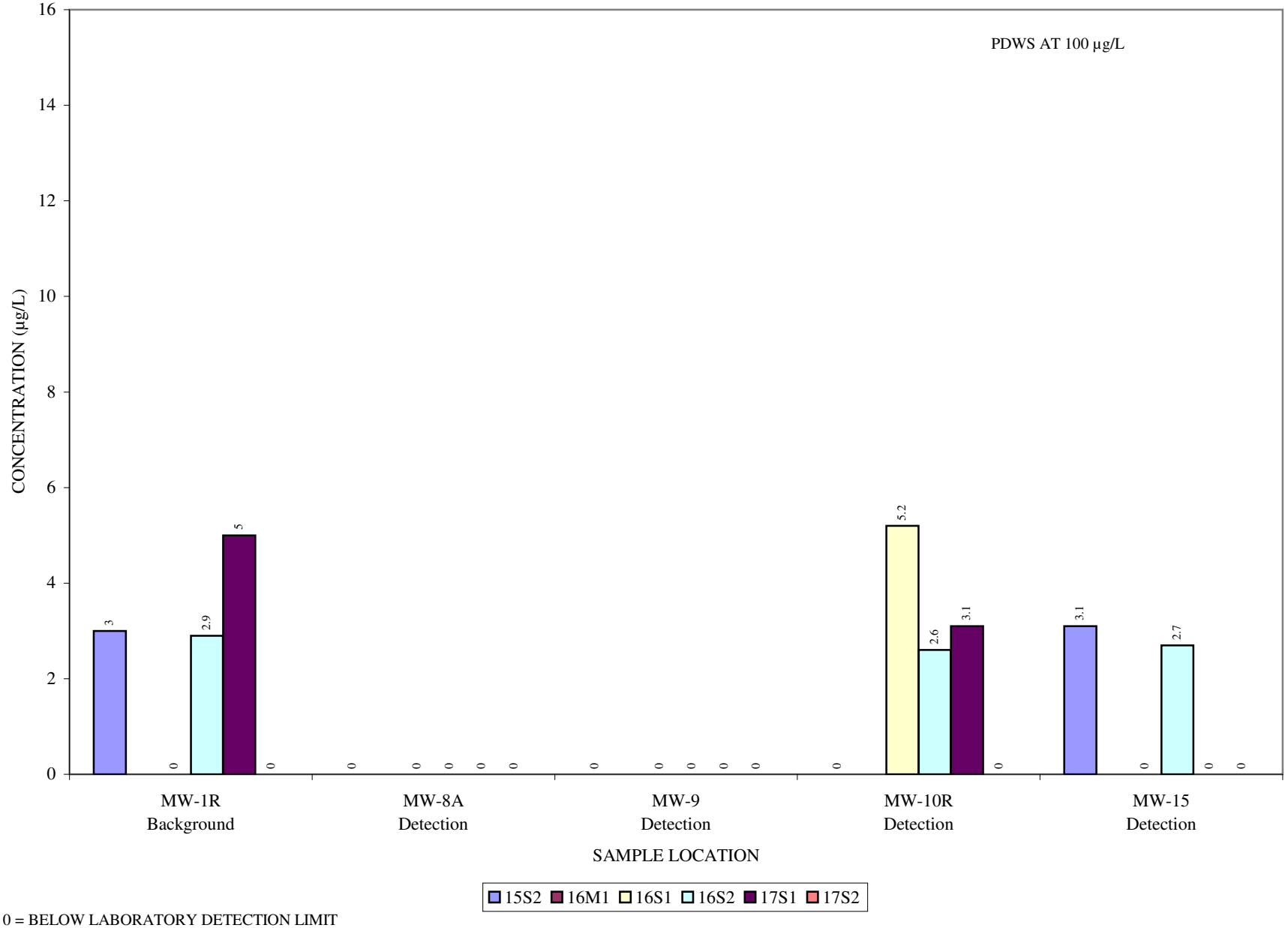
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CHROMIUM

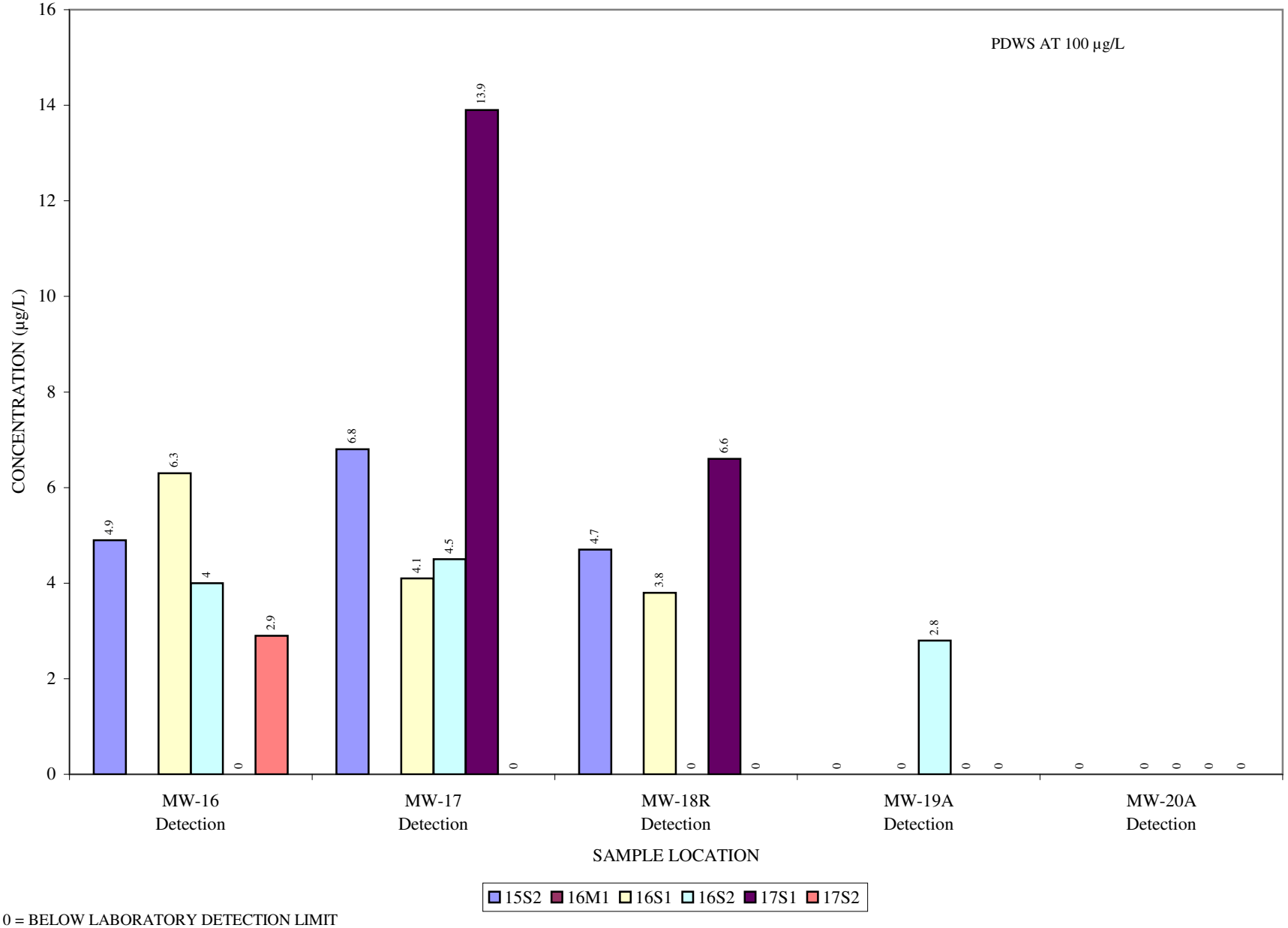
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CHROMIUM

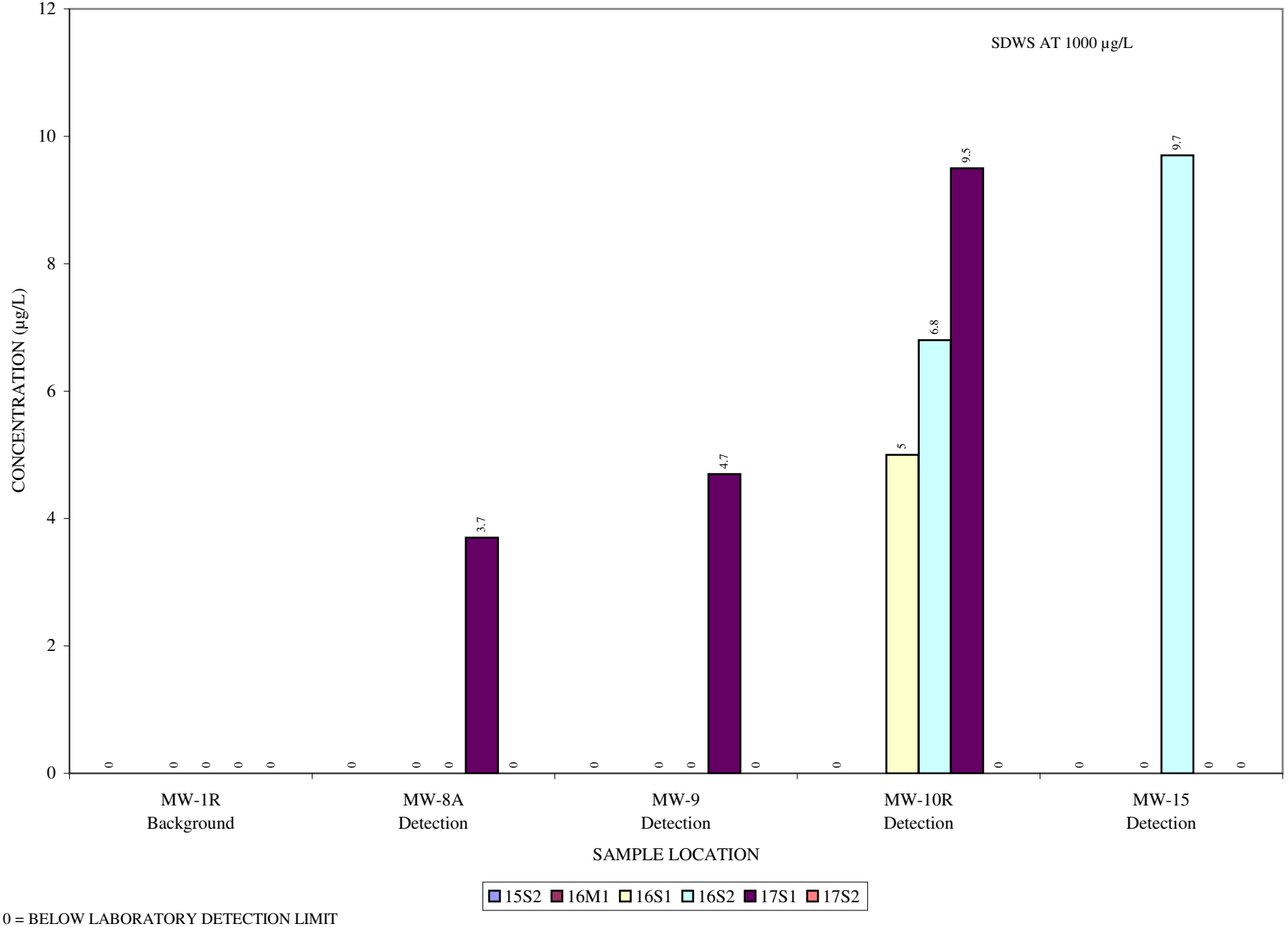
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

COPPER

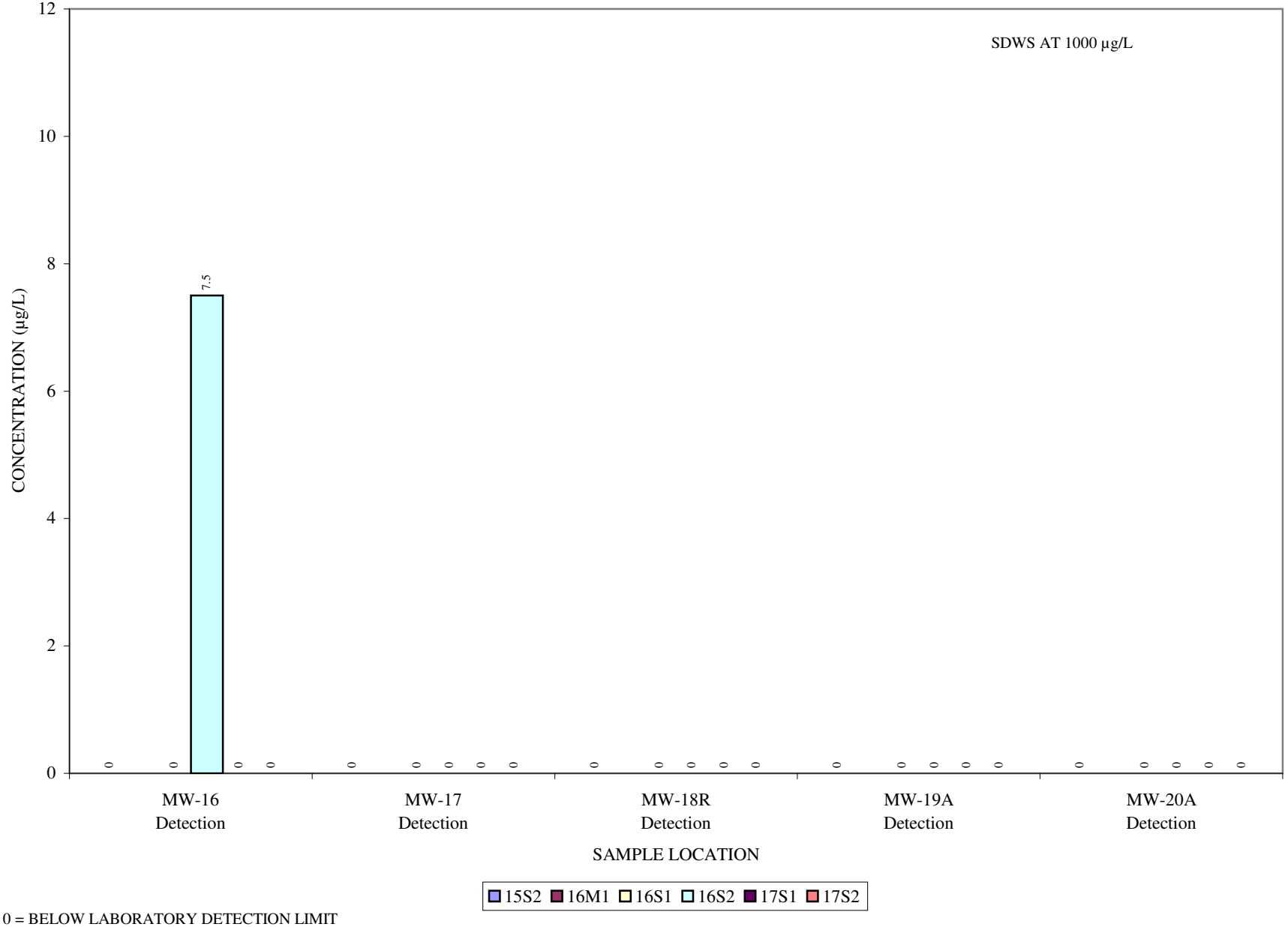
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

COPPER

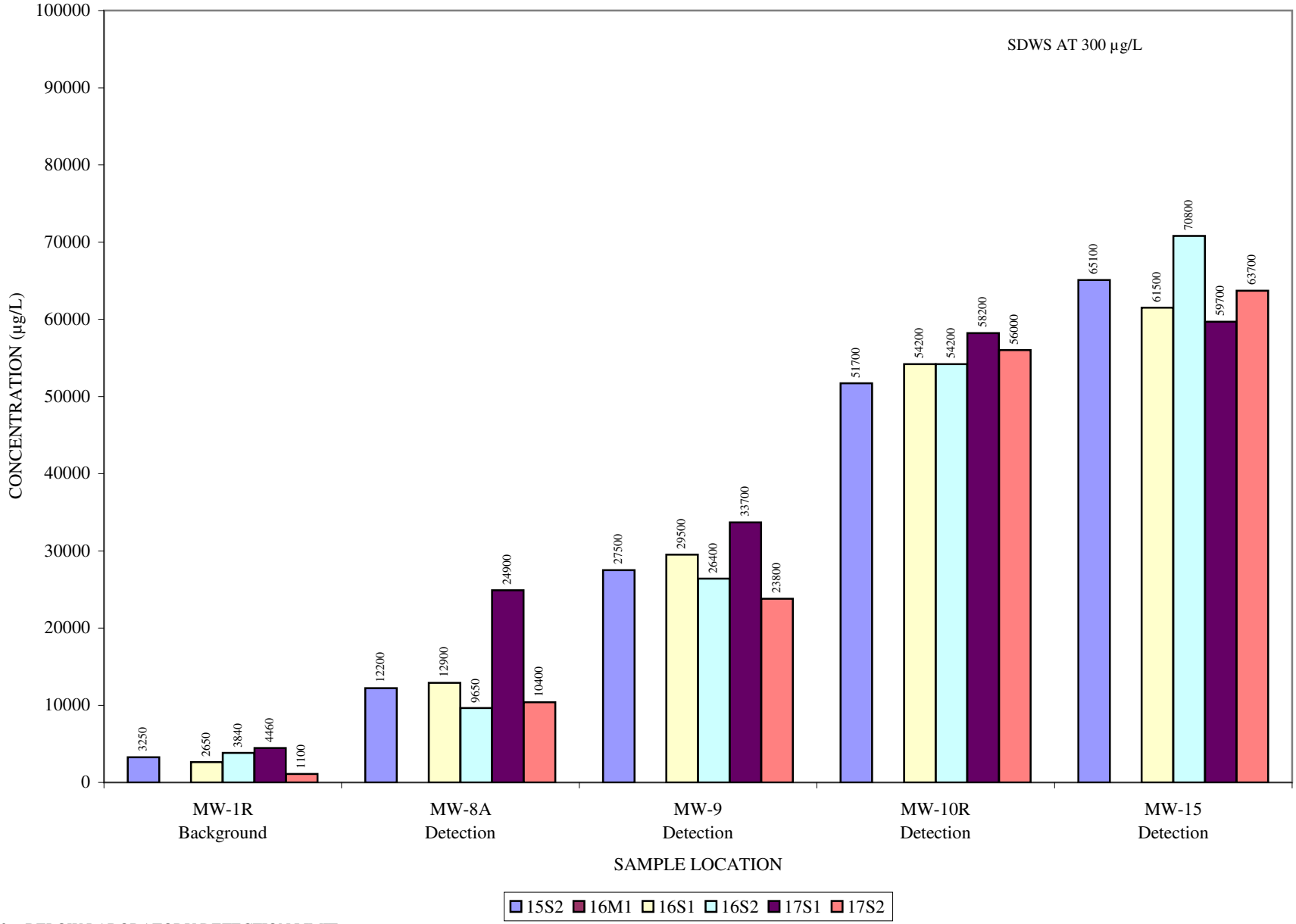
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

IRON

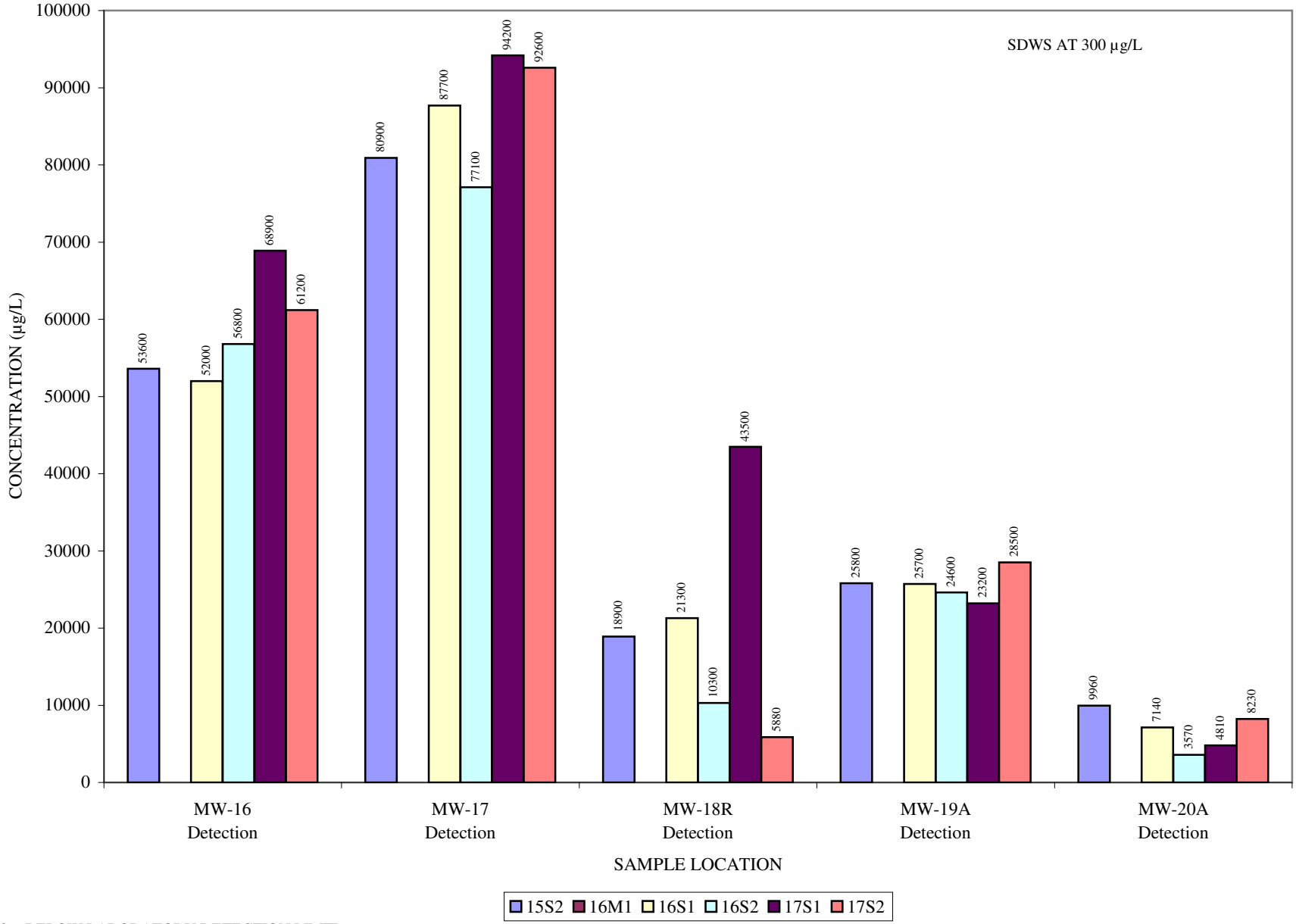
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

IRON

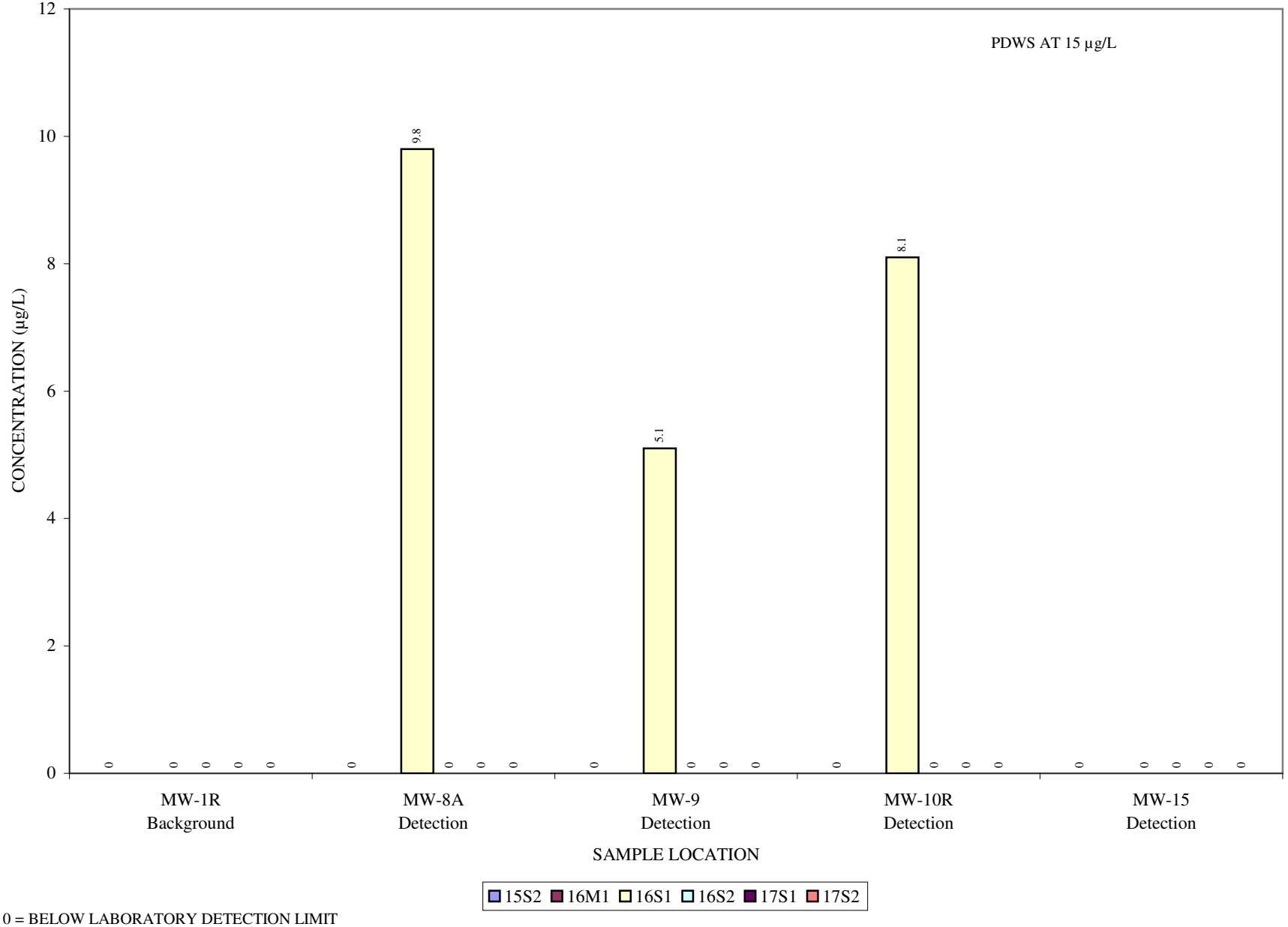
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

LEAD

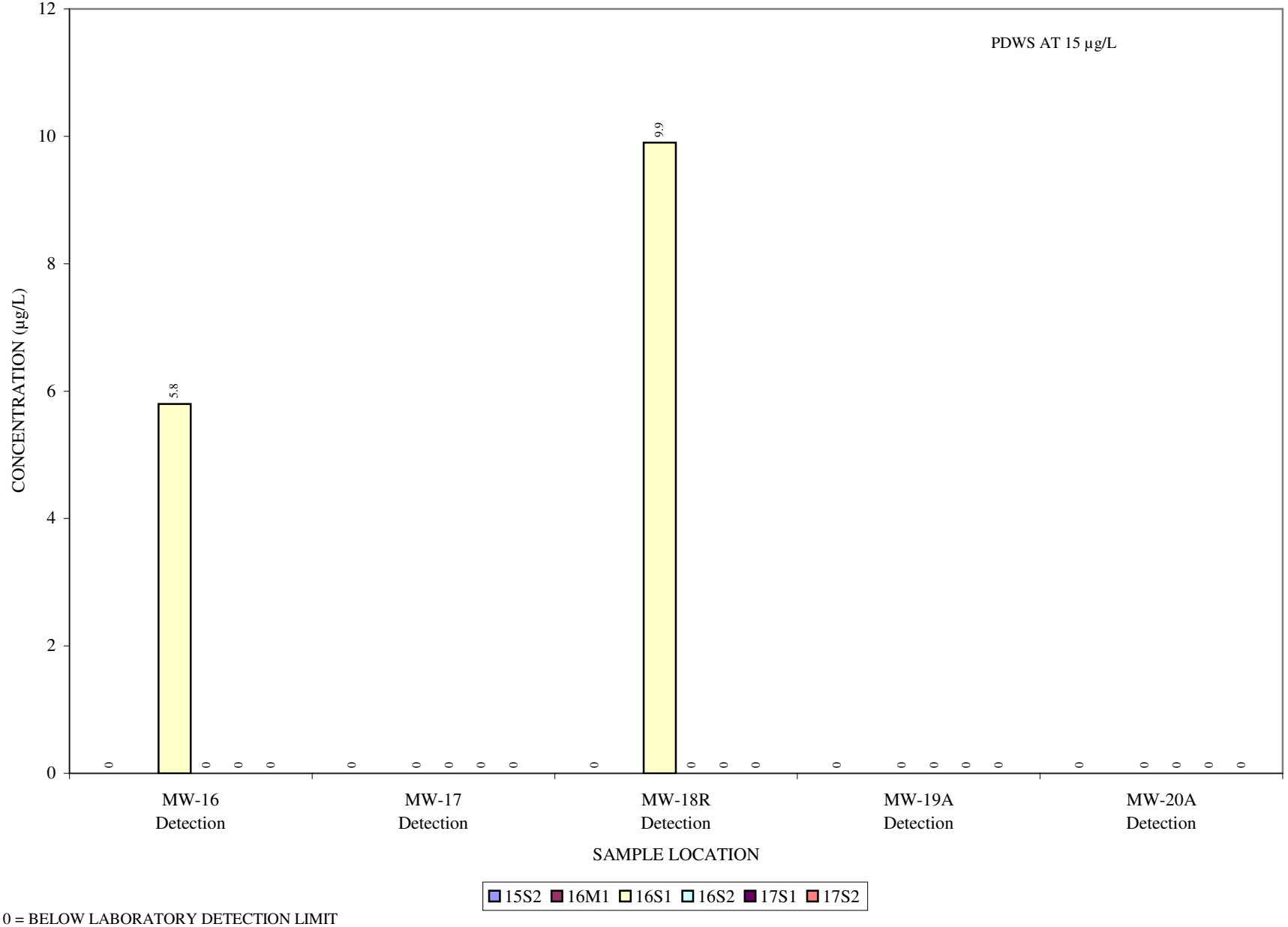
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

LEAD

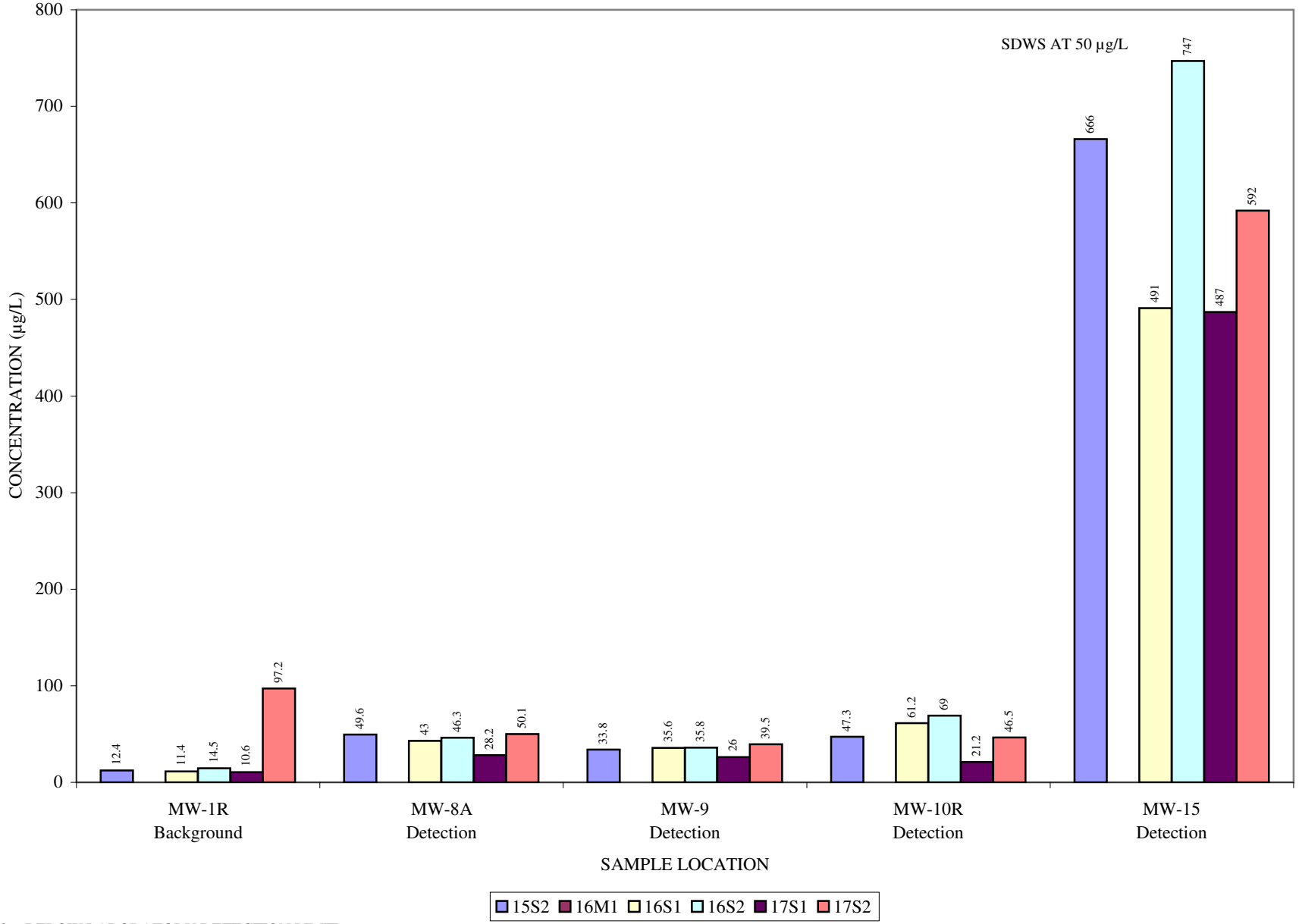
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

MANGANESE

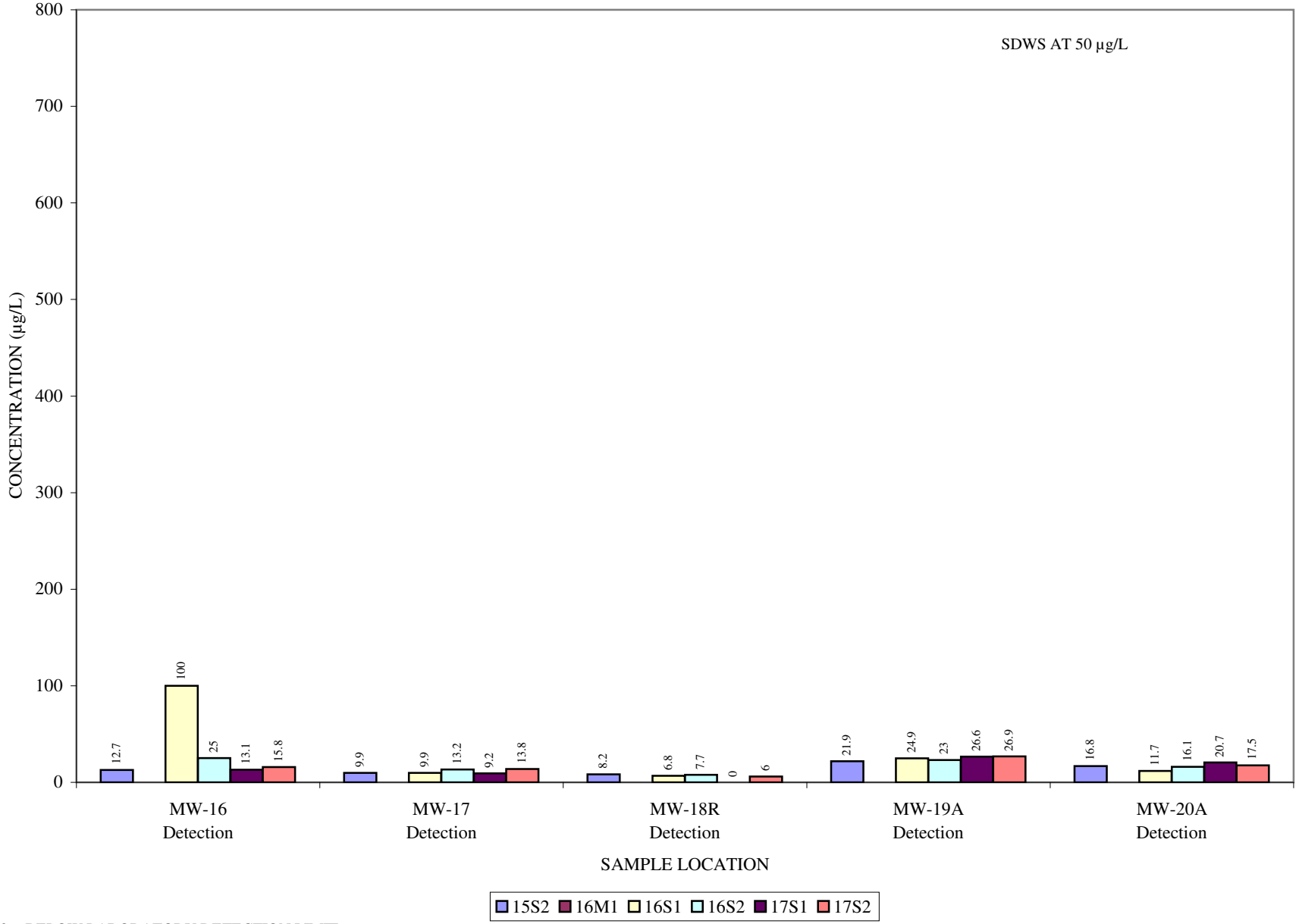
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

MANGANESE

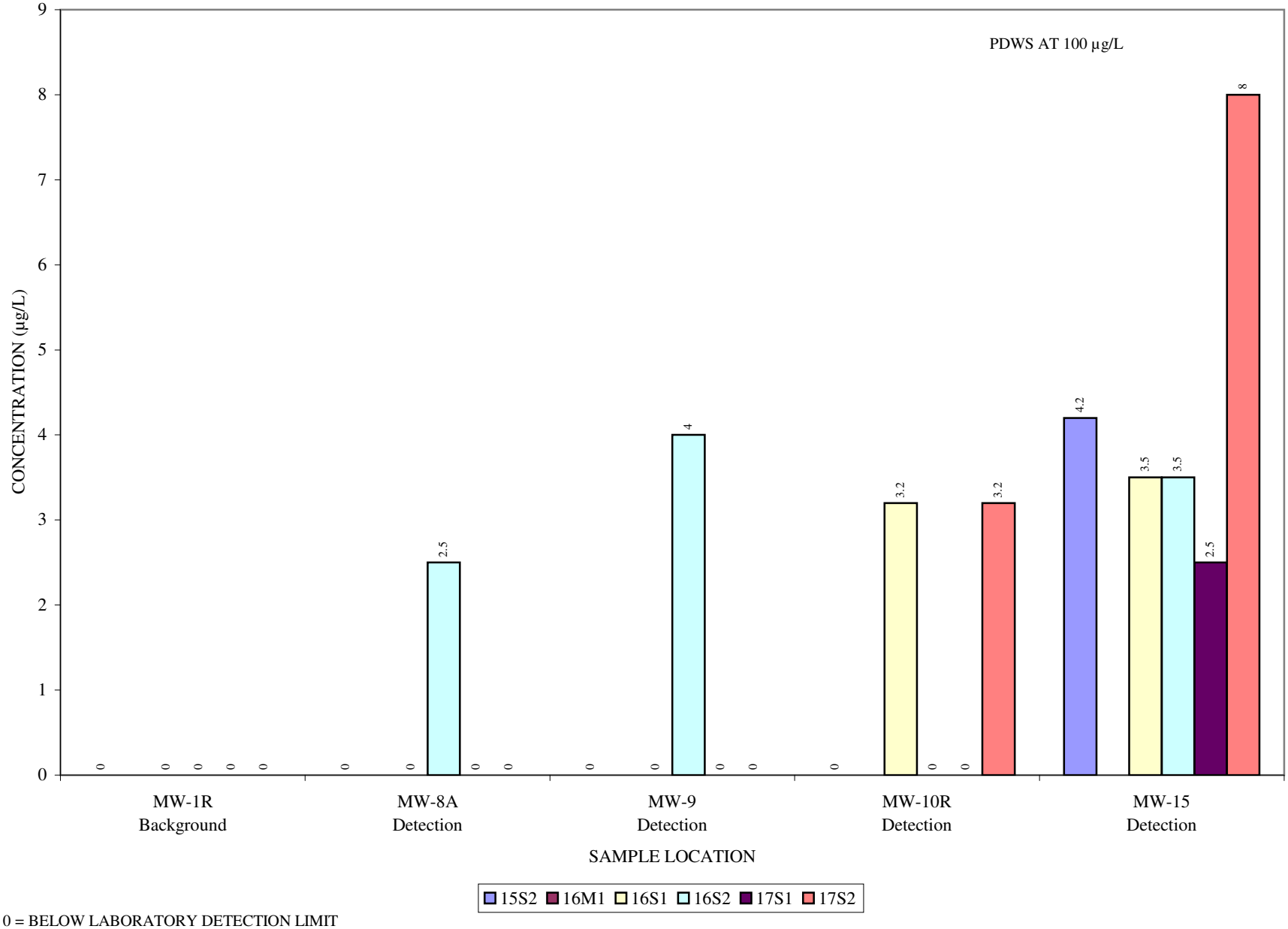
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

NICKEL

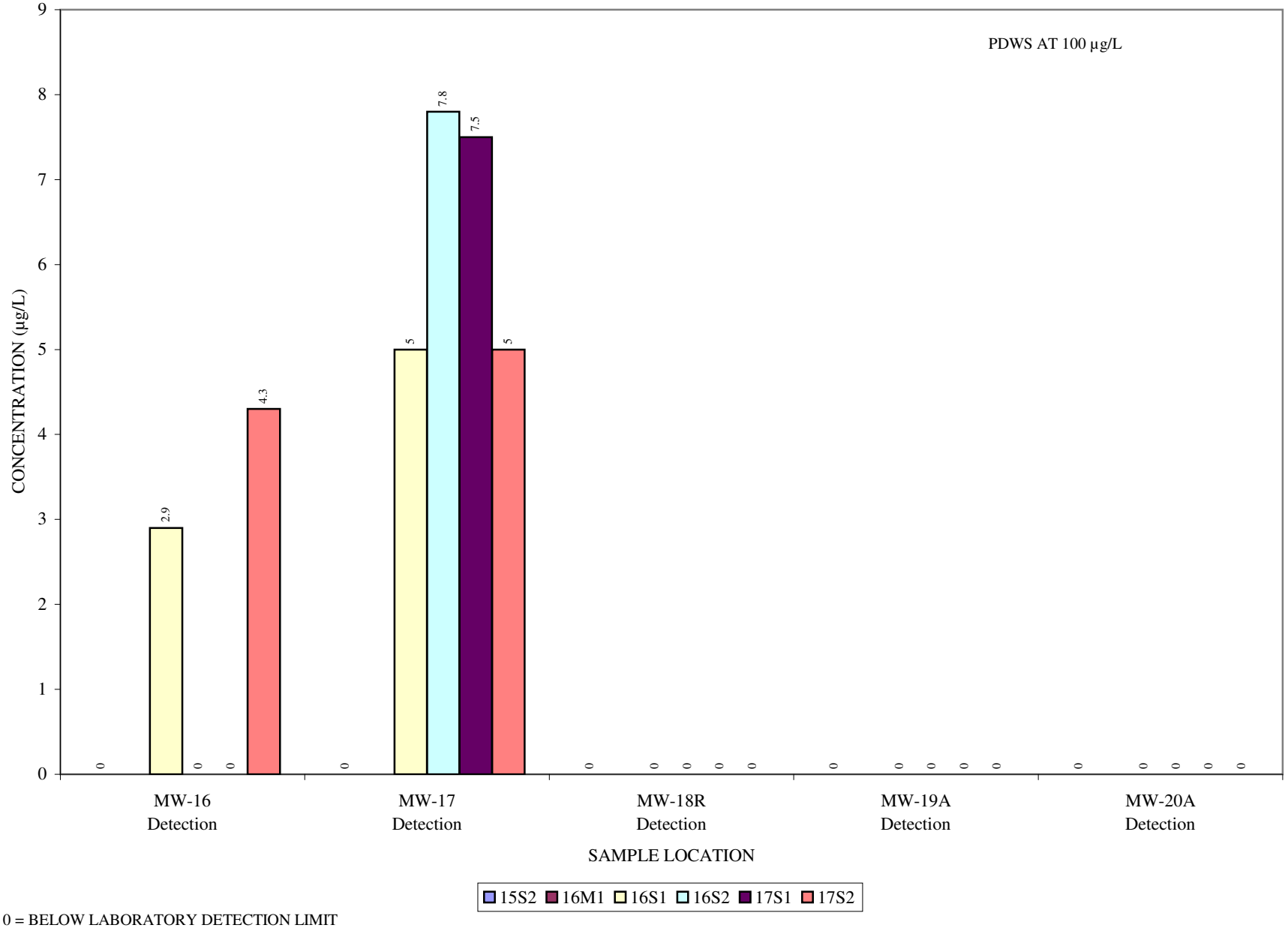
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

NICKEL

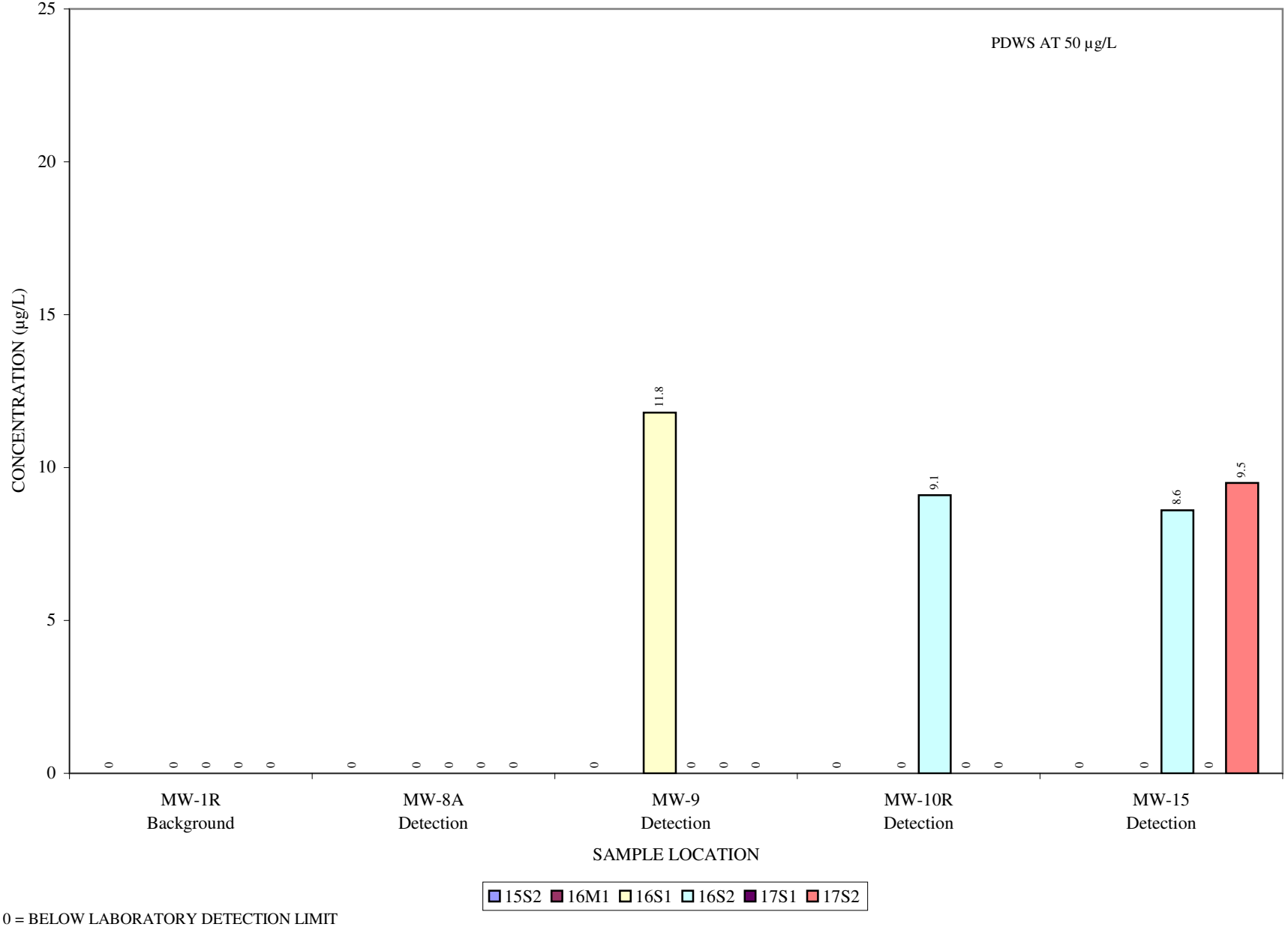
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

SELENIUM

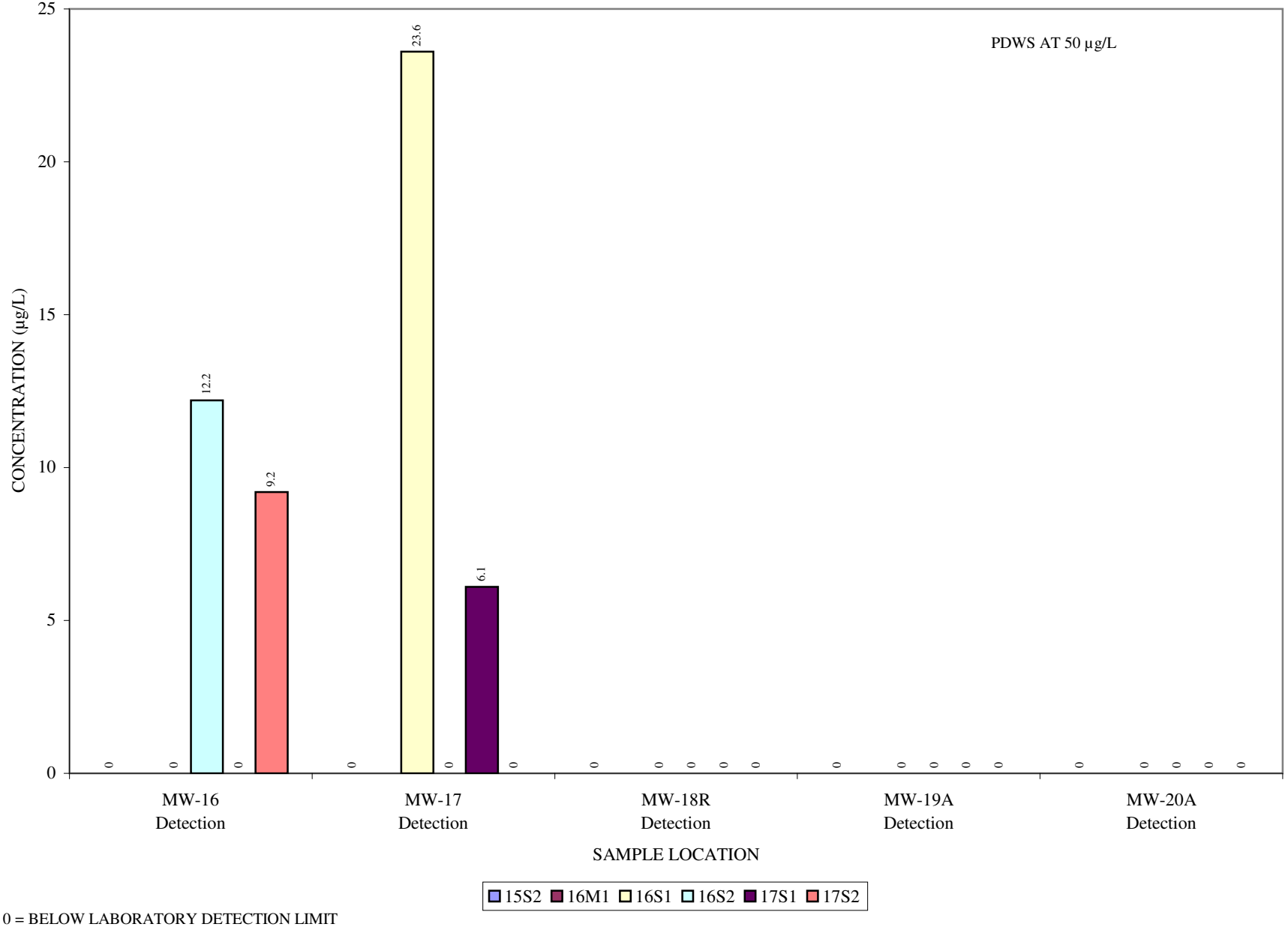
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

SELENIUM

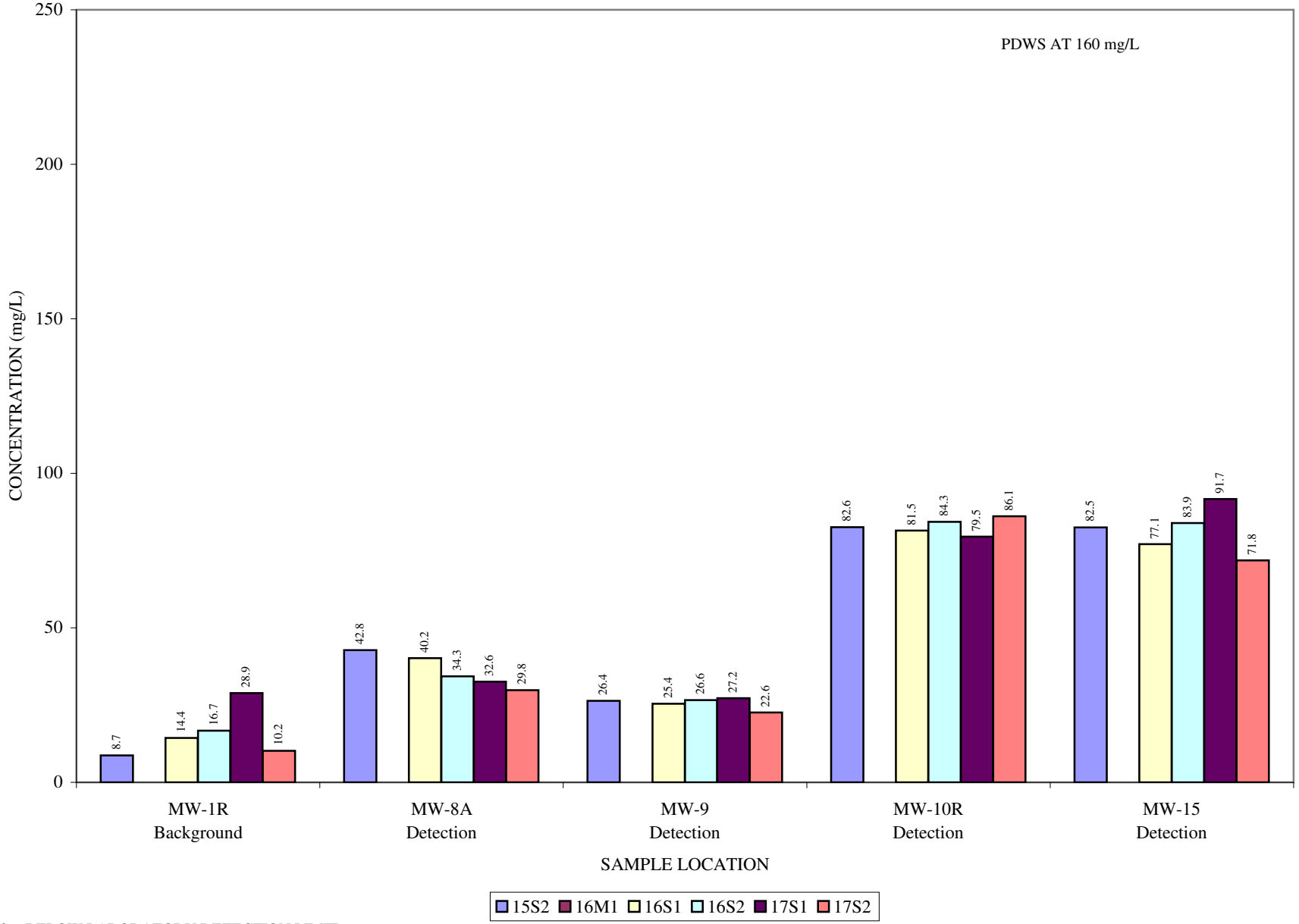
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

SODIUM

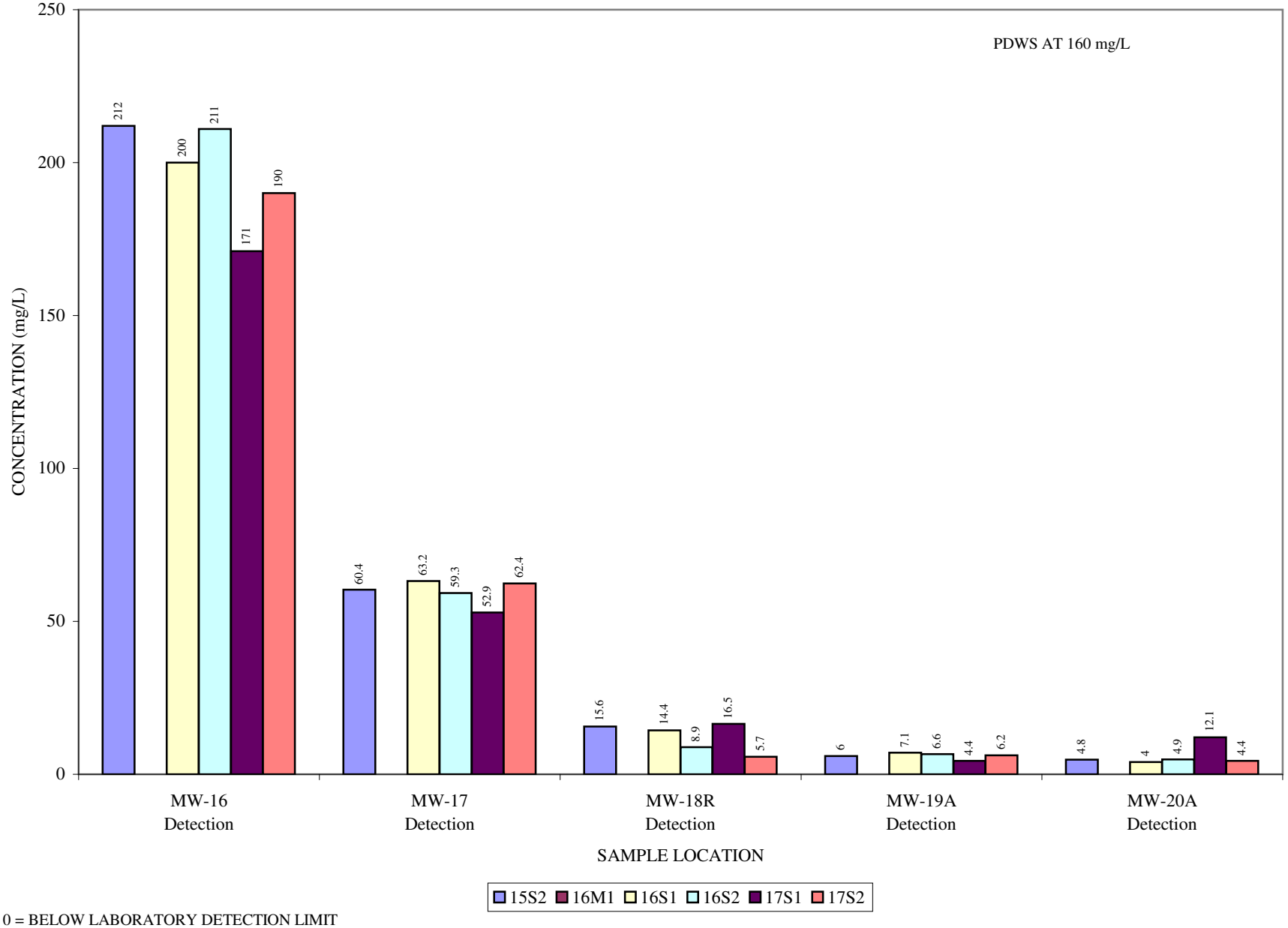
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

SODIUM

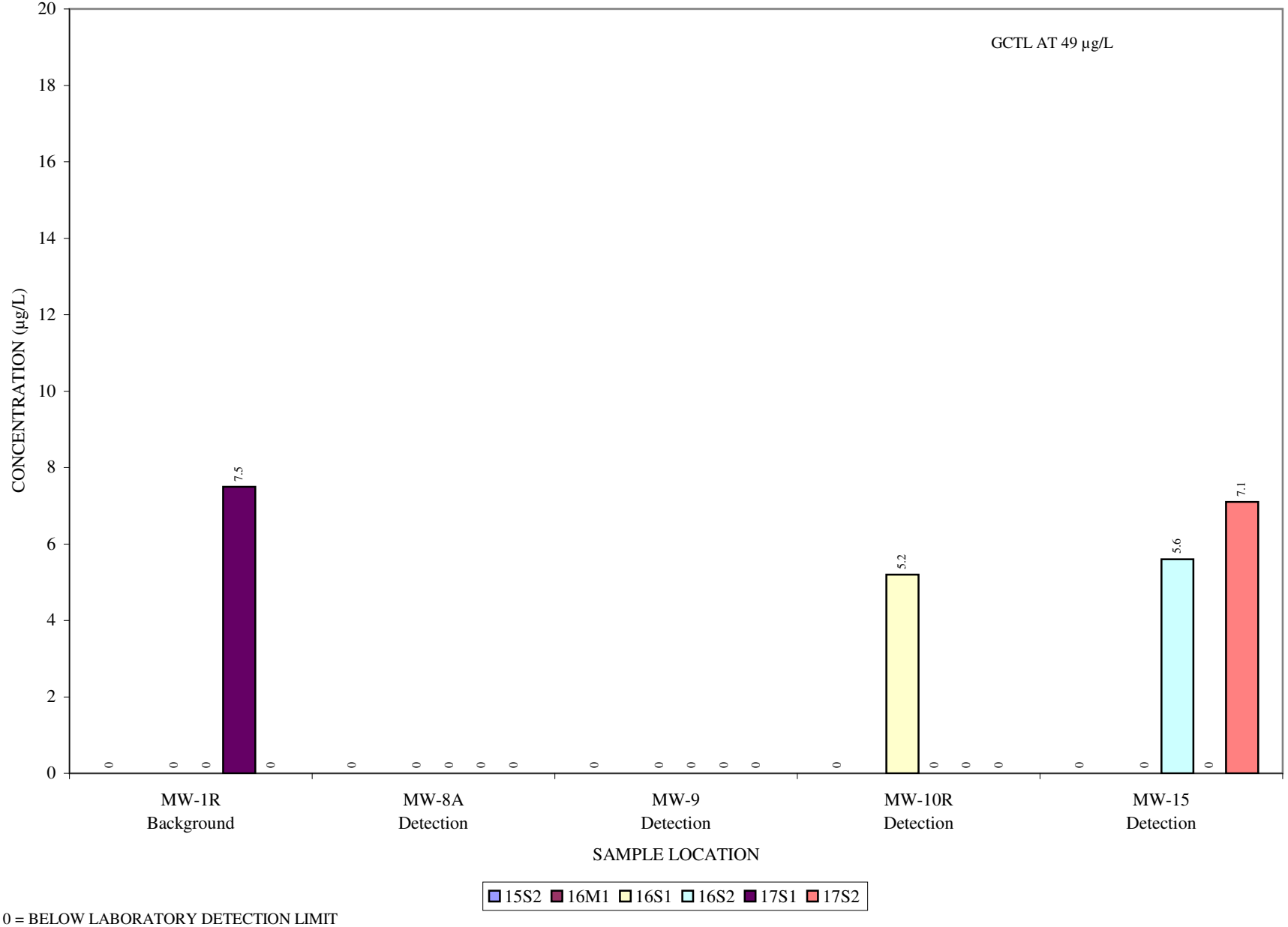
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

VANADIUM

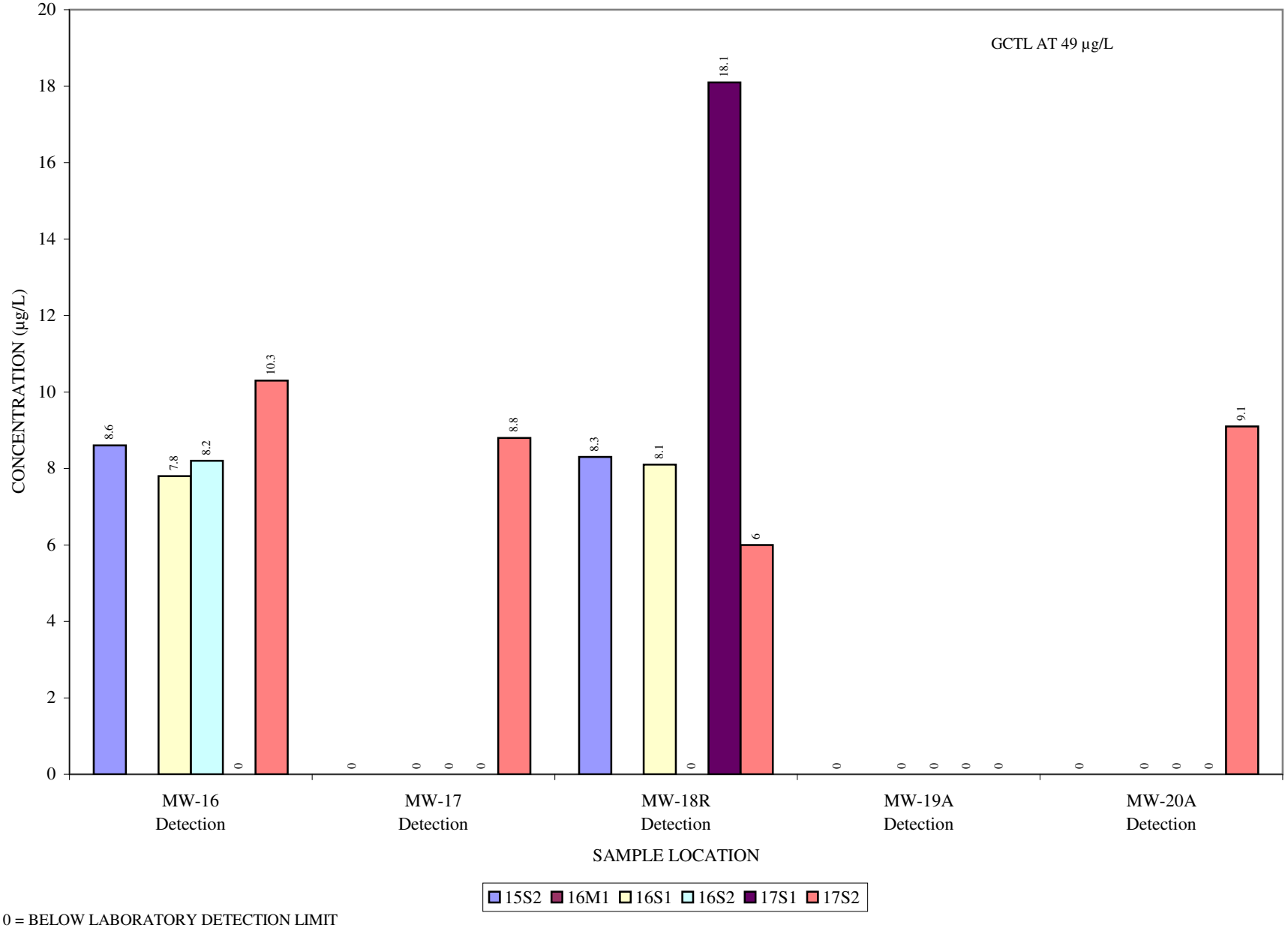
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

VANADIUM

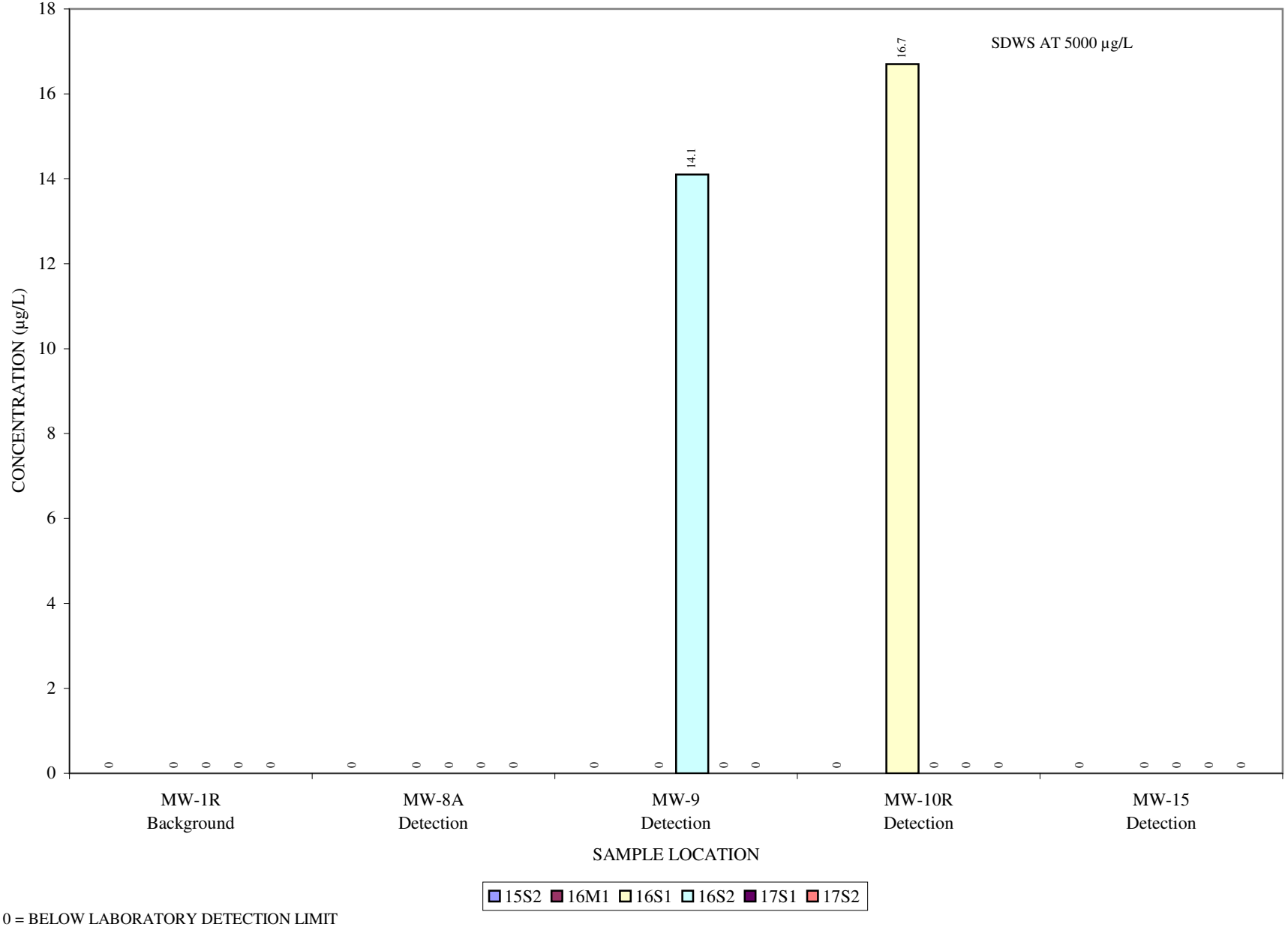
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

ZINC

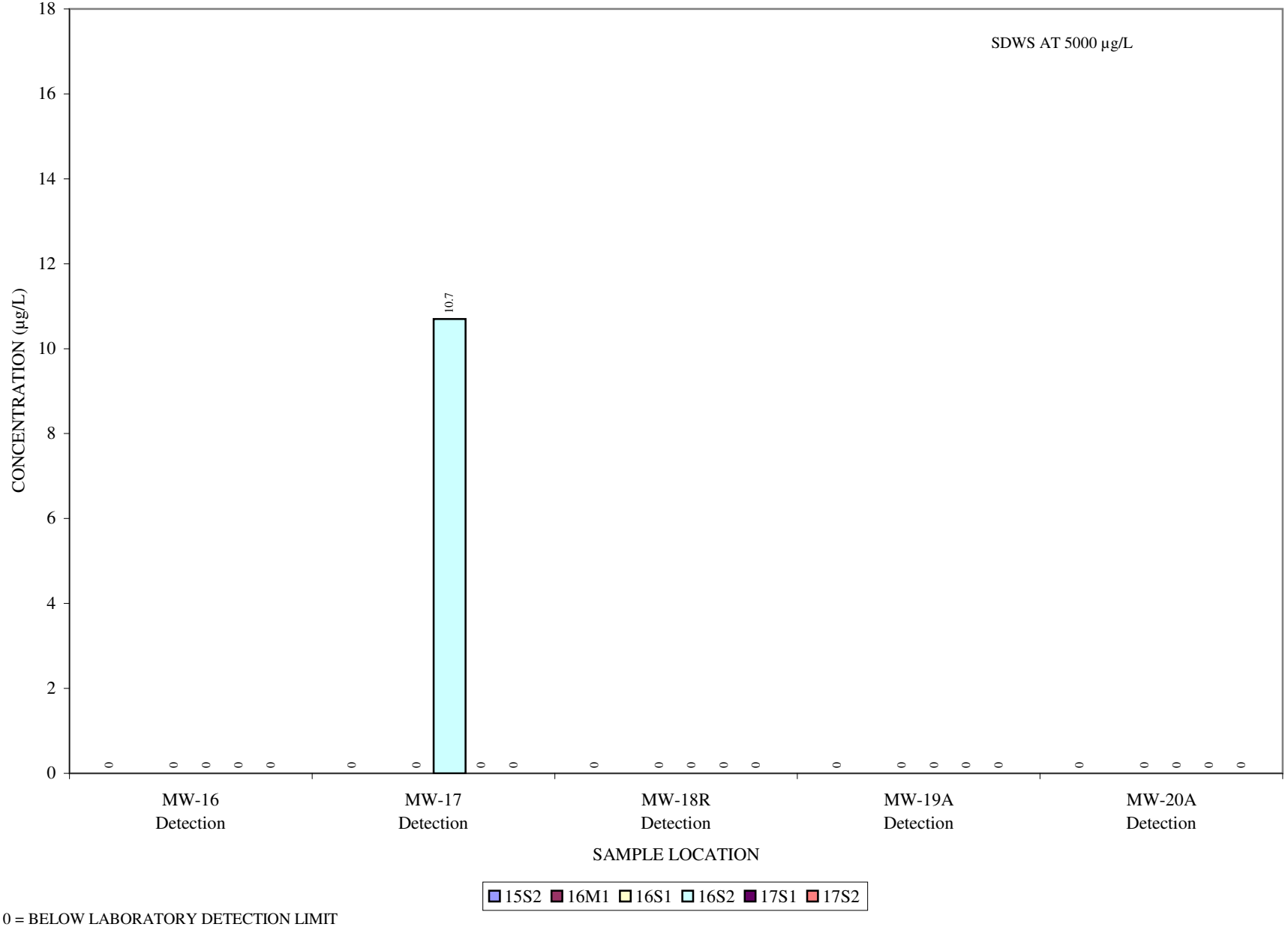
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

ZINC

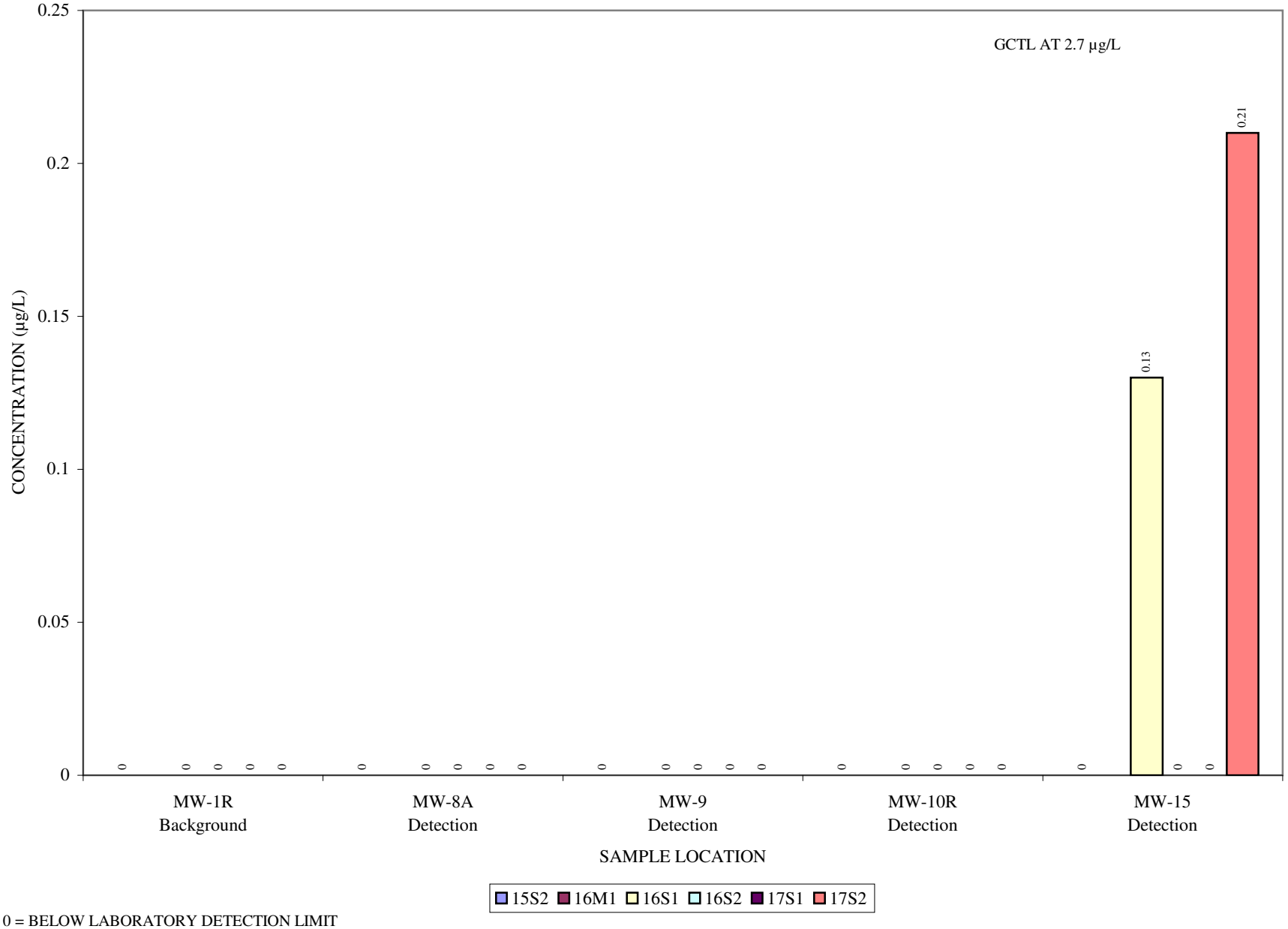
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CHLOROMETHANE (METHYL CHLORIDE)

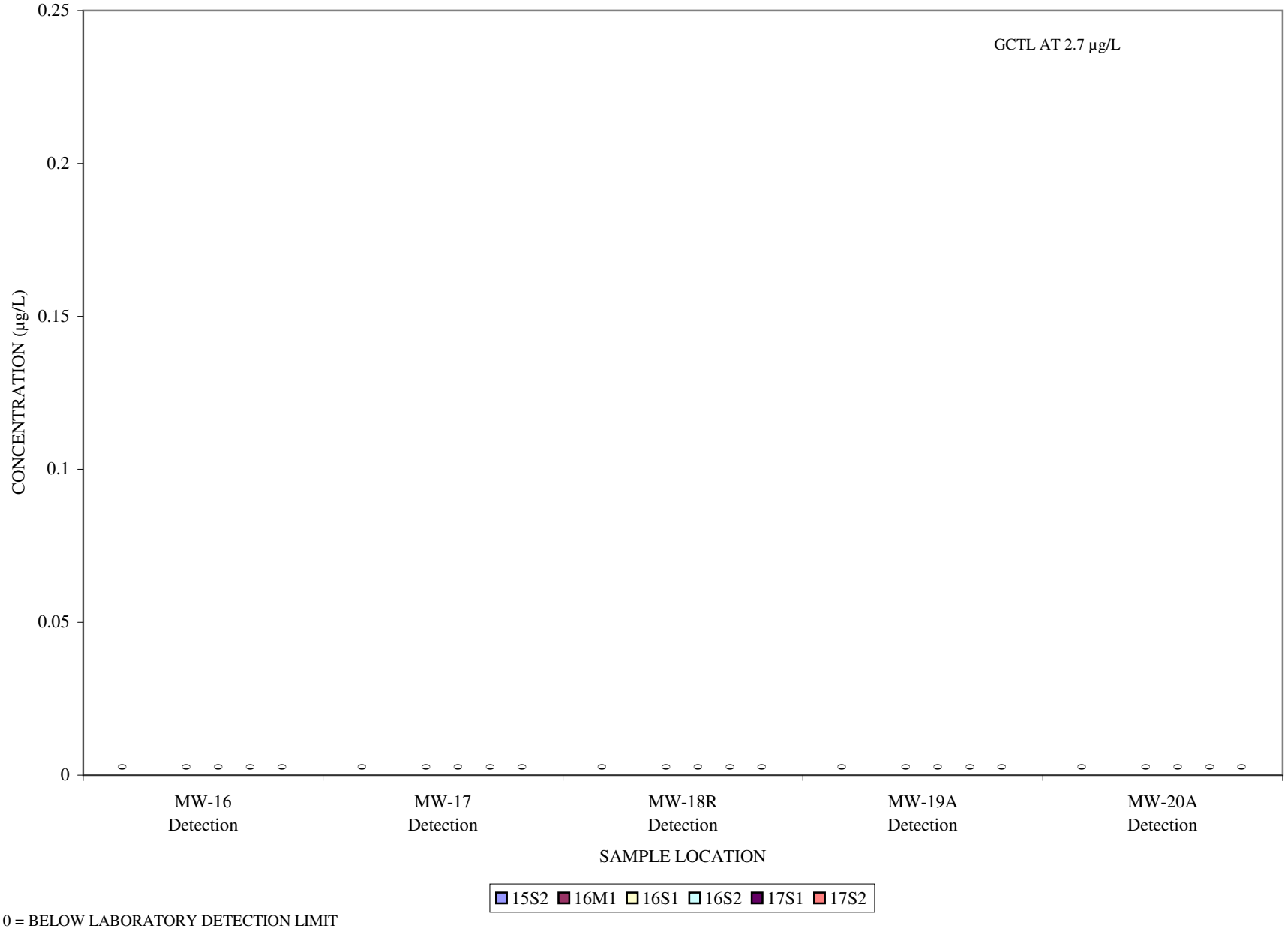
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CHLOROMETHANE (METHYL CHLORIDE)

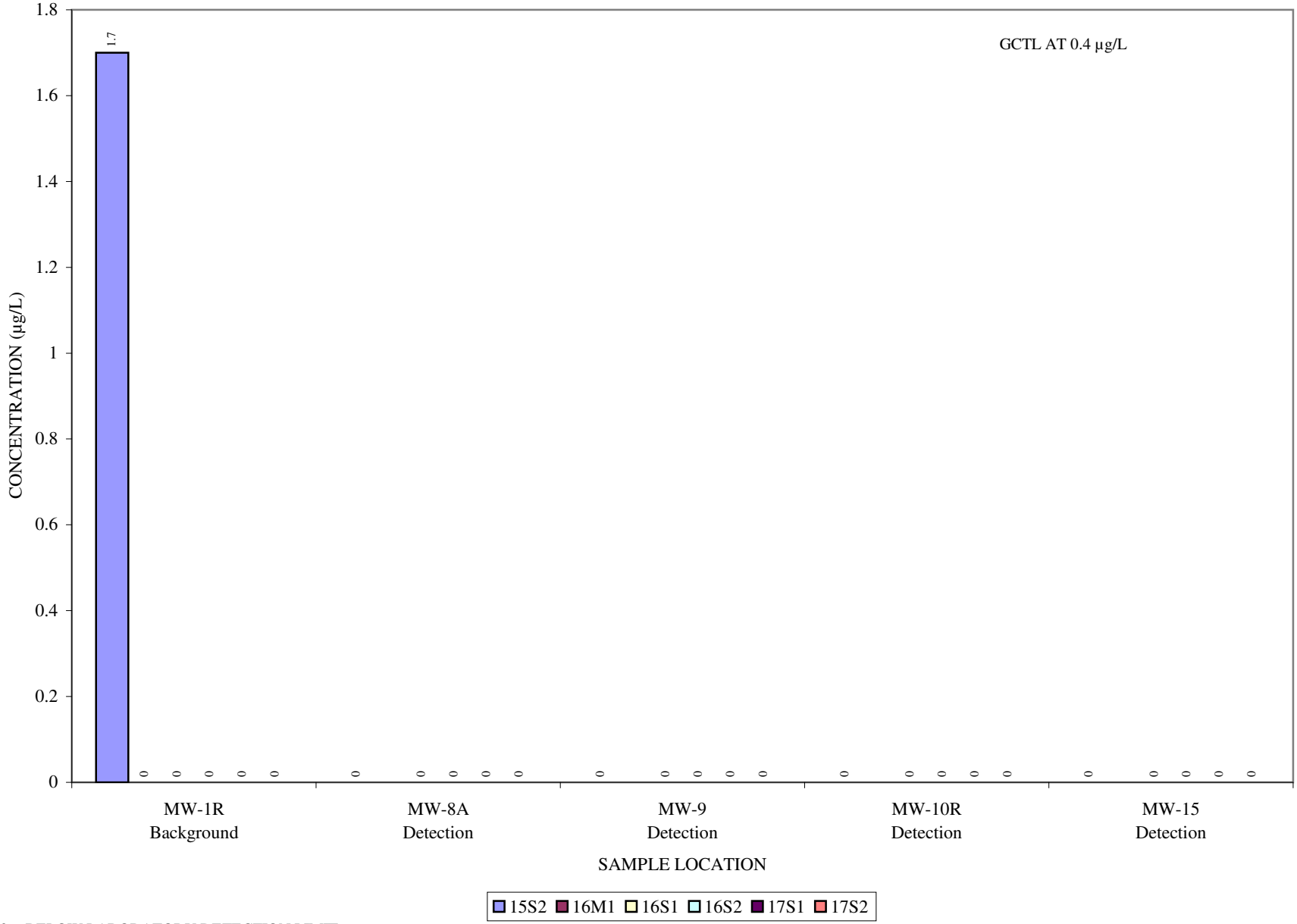
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CIS-1,3-DICHLOROPROPENE

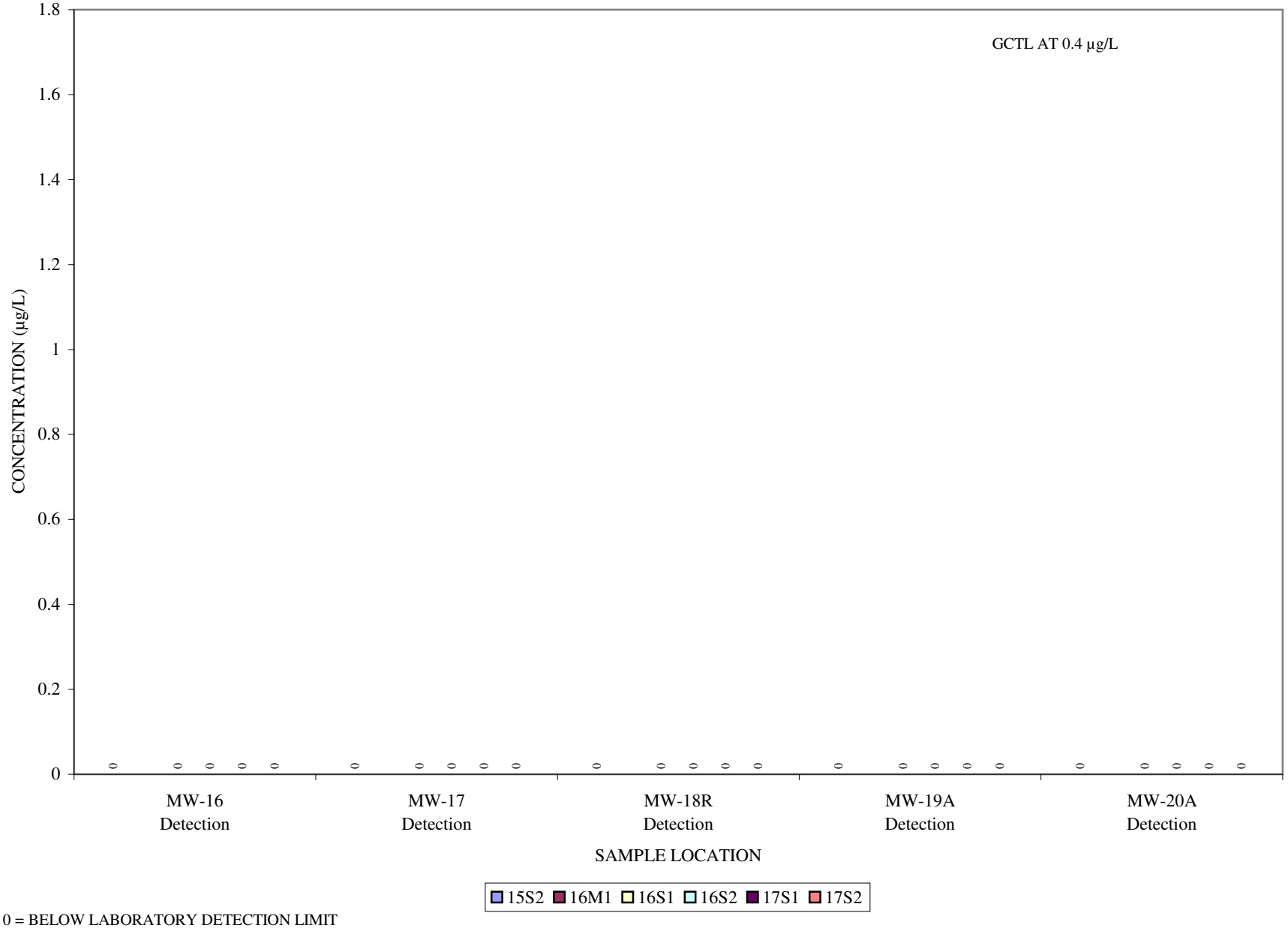
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CIS-1,3-DICHLOROPROPENE

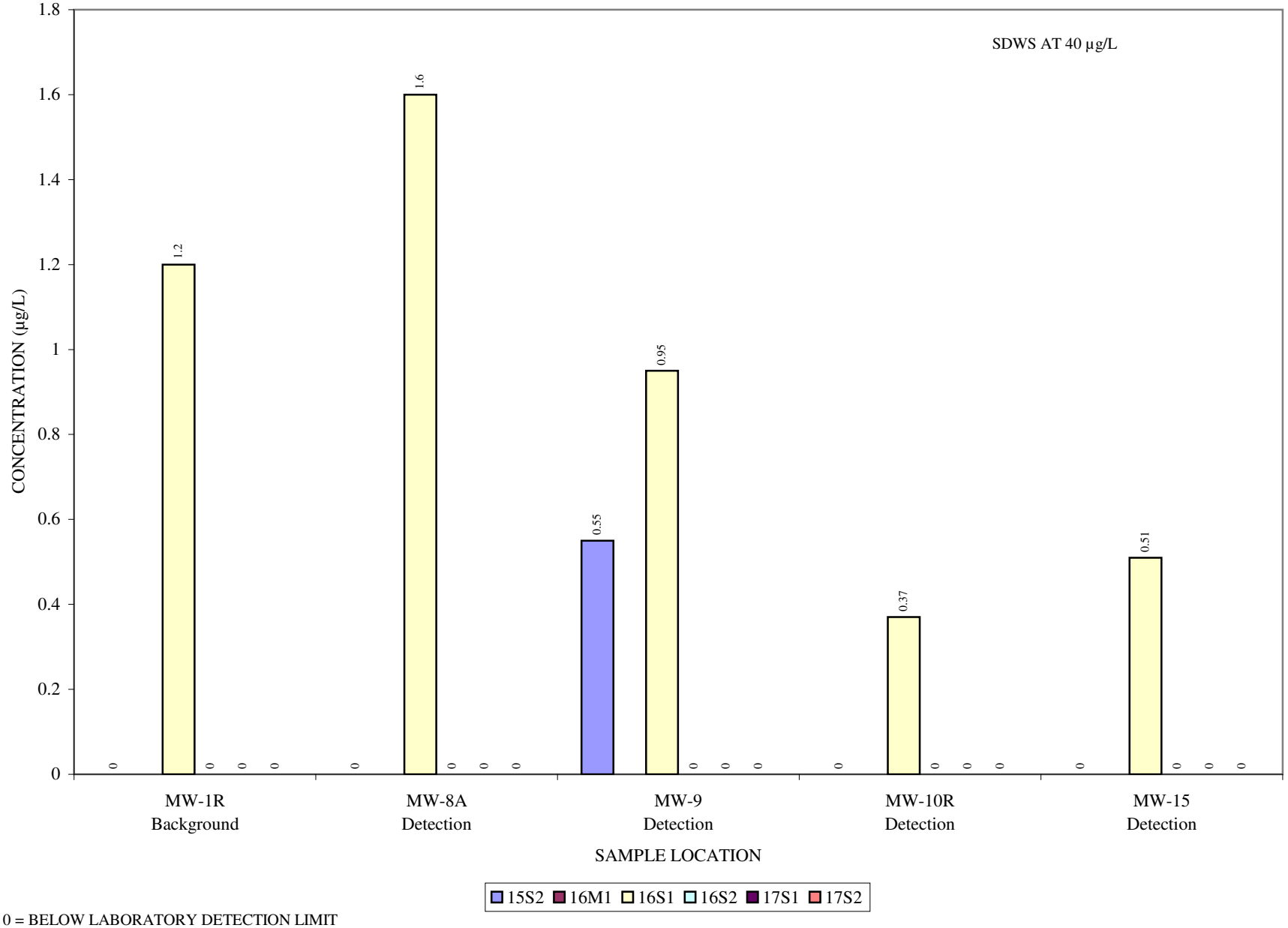
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TOLUENE

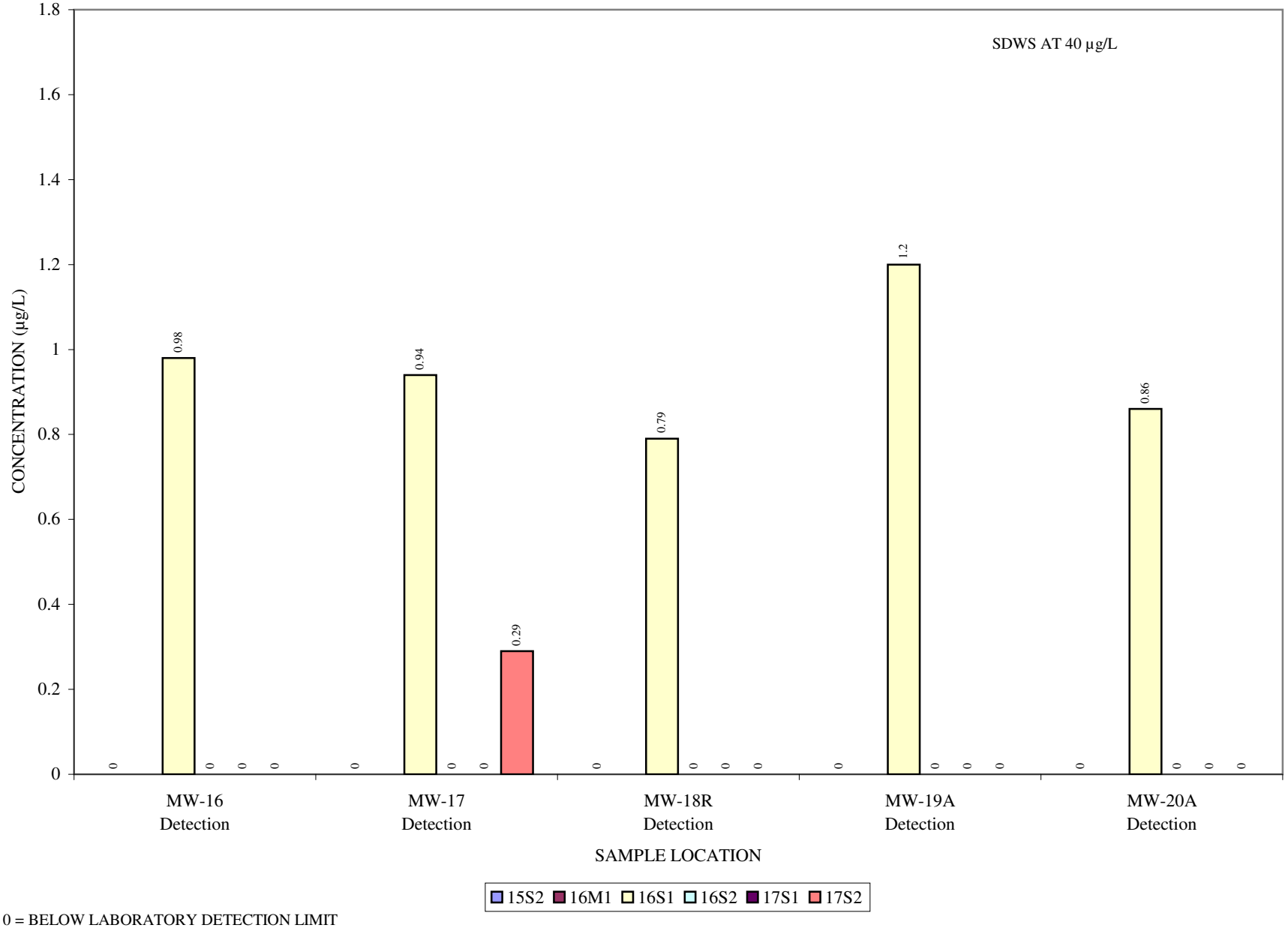
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TOLUENE

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH

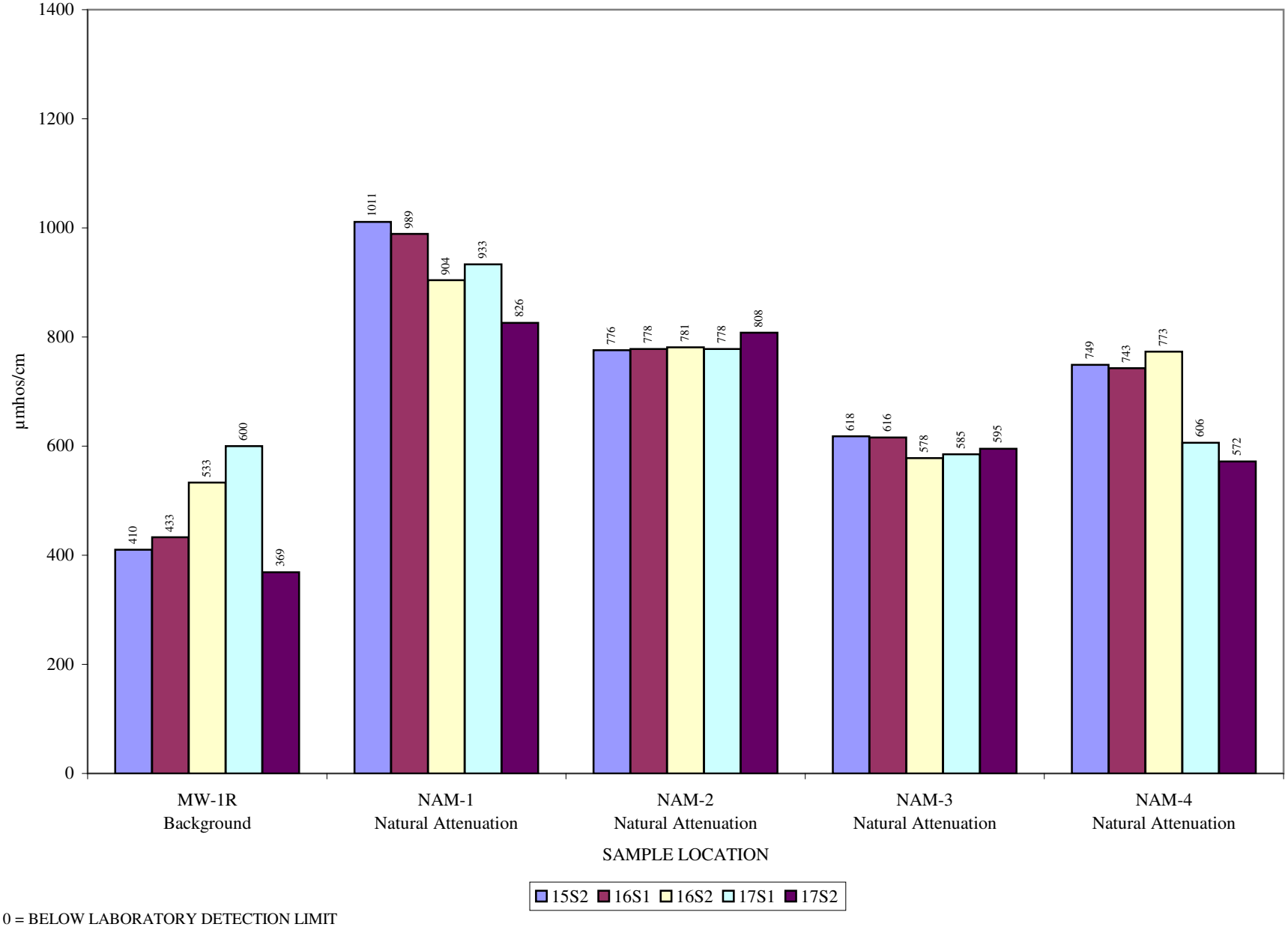


0 = BELOW LABORATORY DETECTION LIMIT

NAM Wells

CONDUCTIVITY (FIELD)

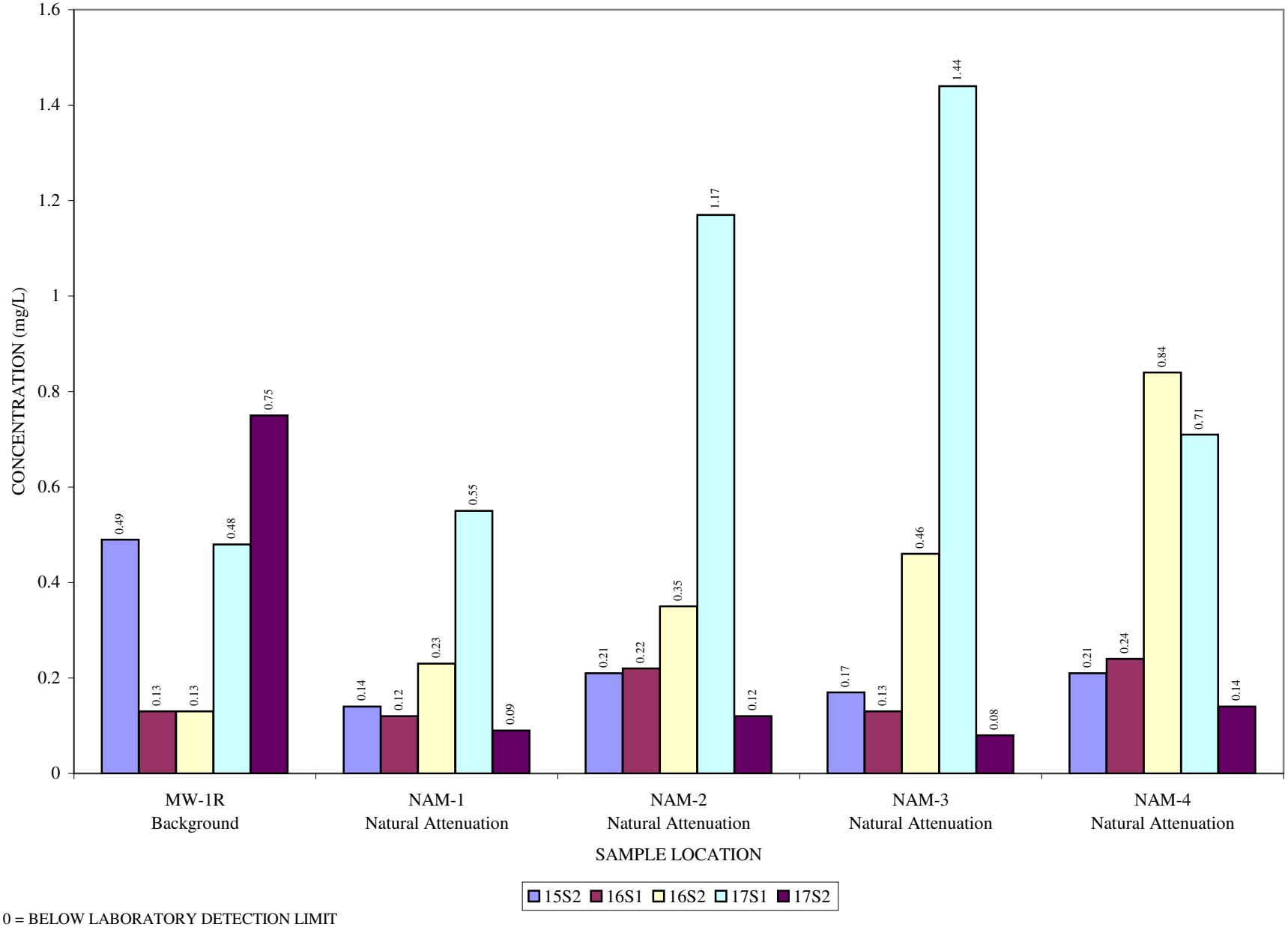
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

DISSOLVED OXYGEN (FIELD)

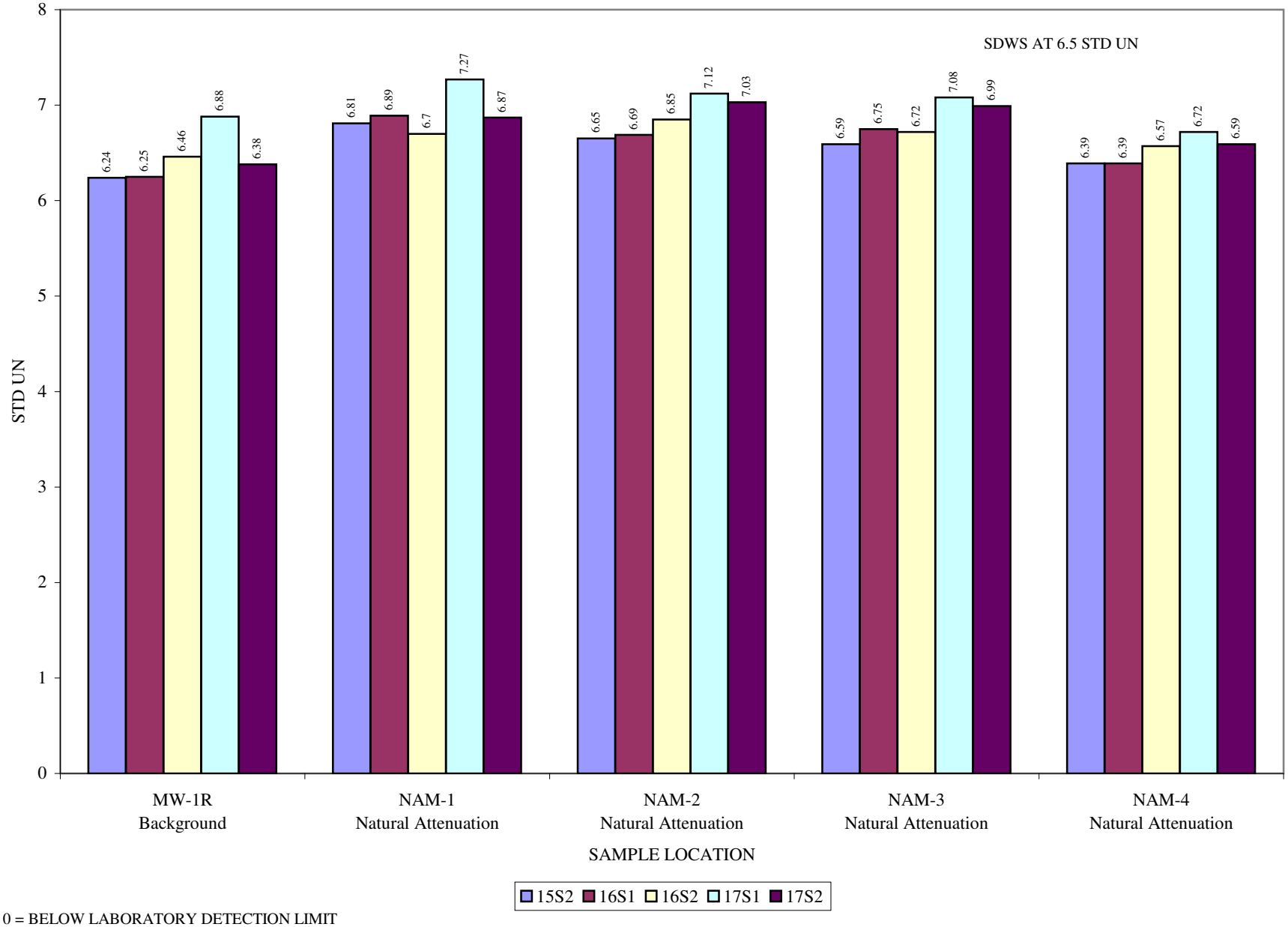
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

pH (FIELD)

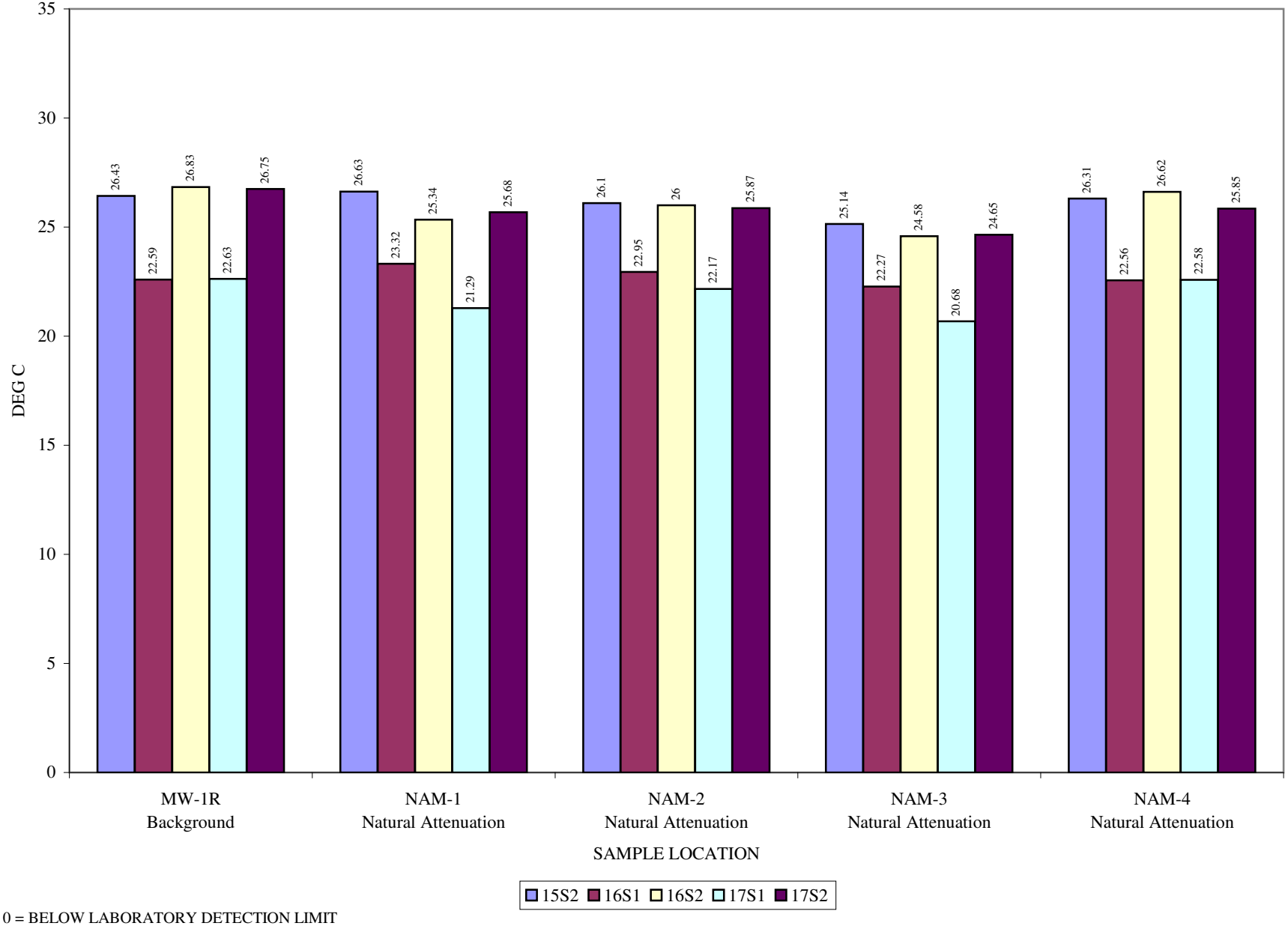
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TEMPERATURE (FIELD)

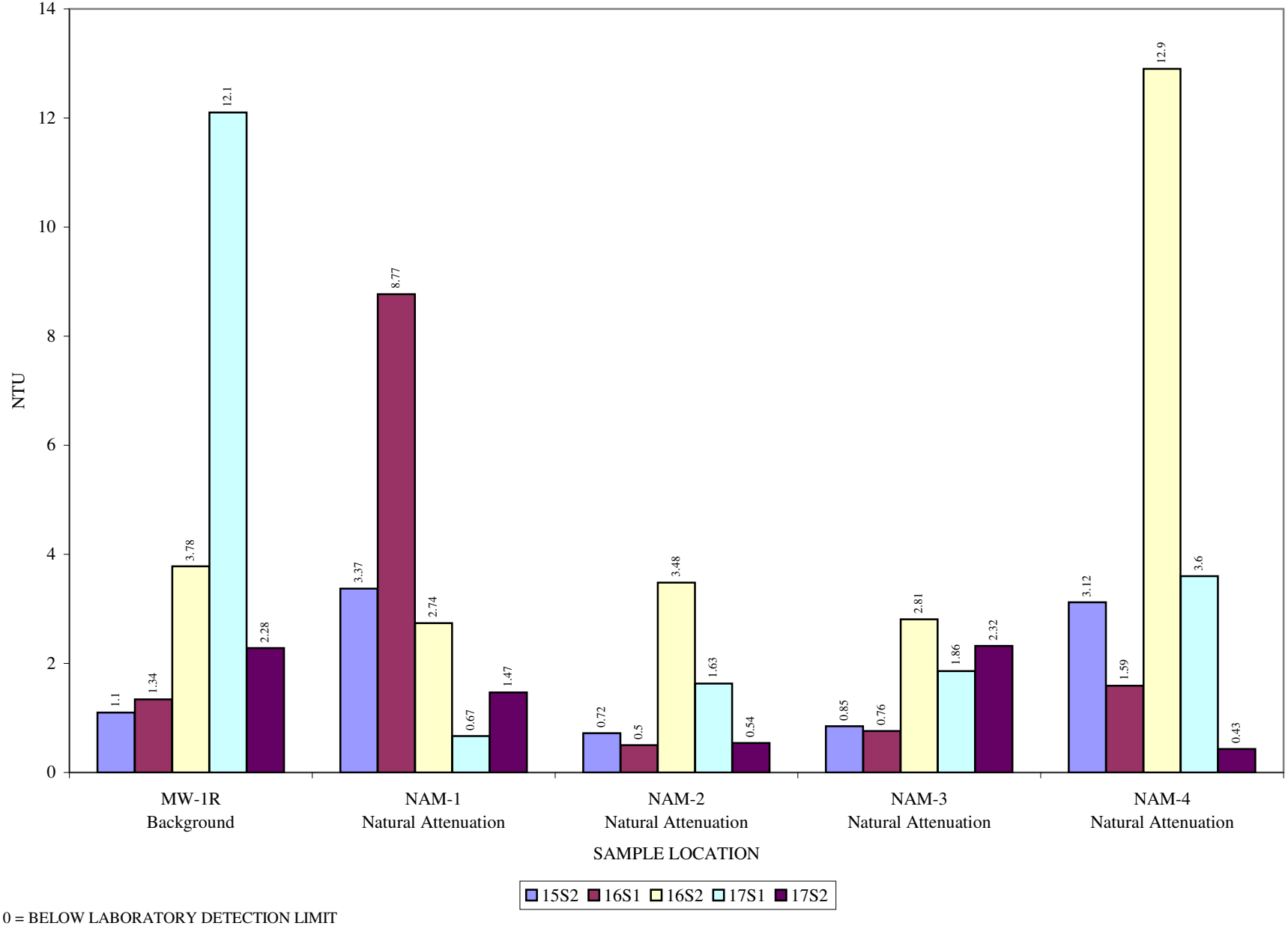
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TURBIDITY (FIELD)

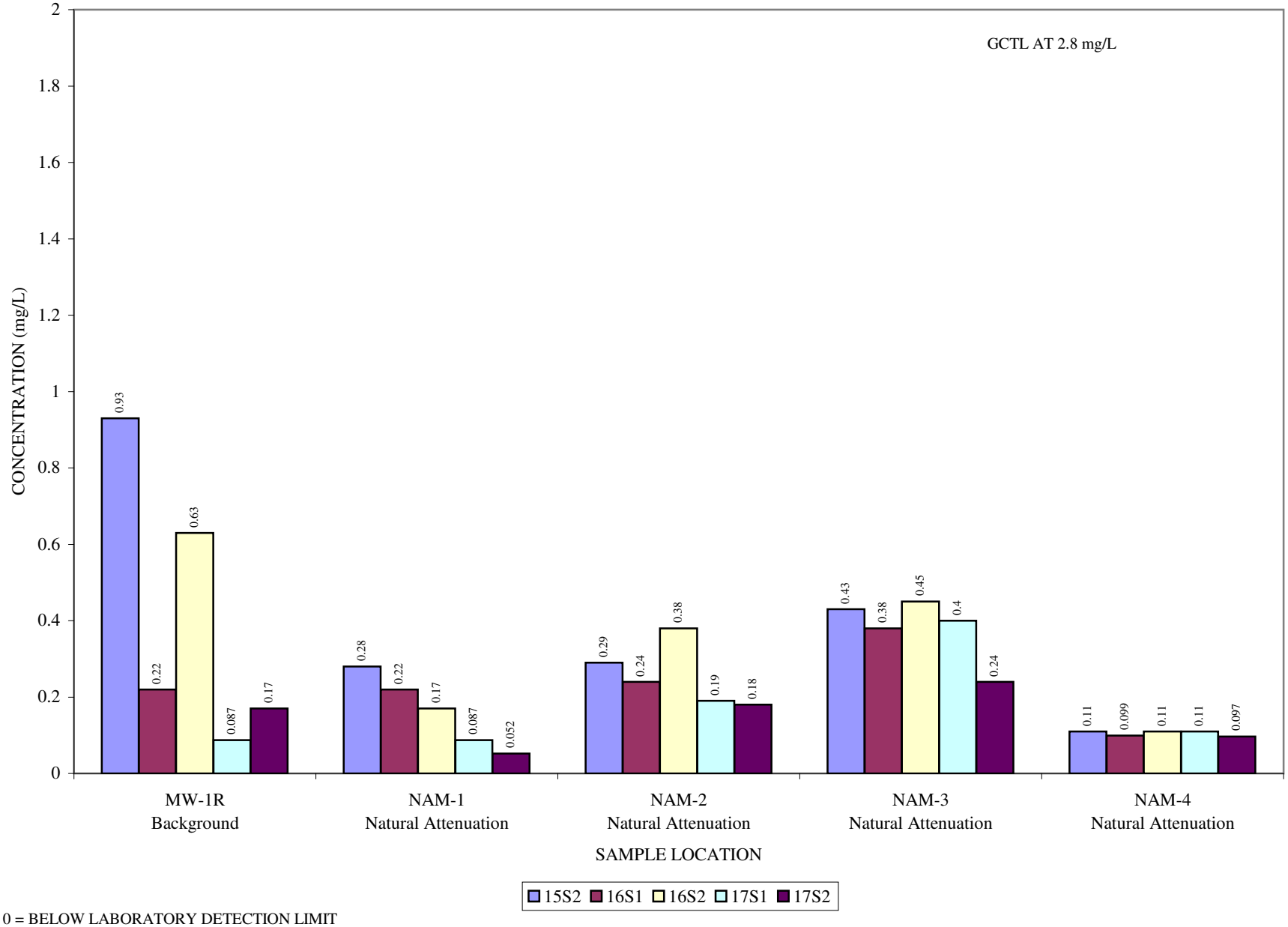
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

AMMONIA NITROGEN

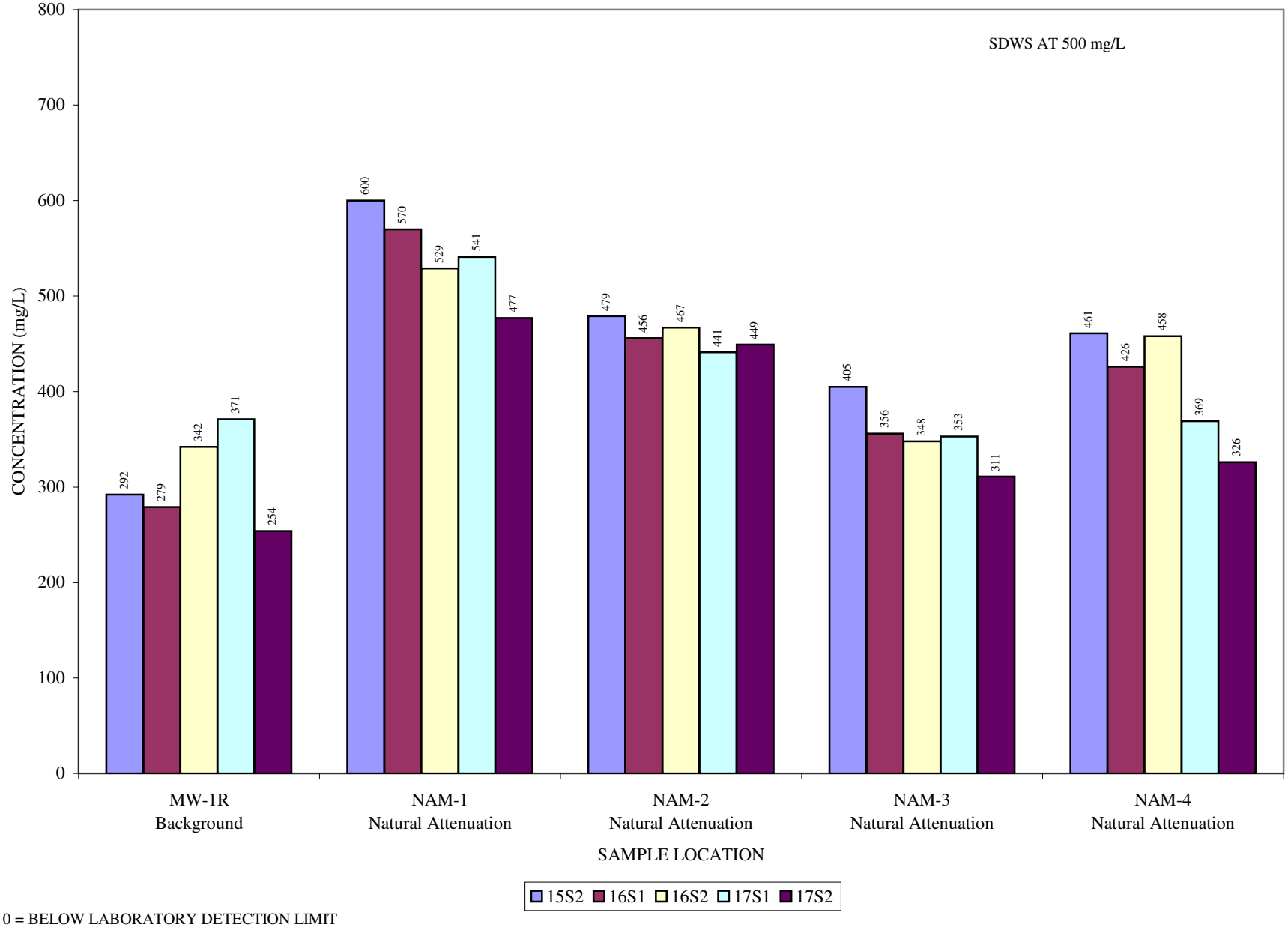
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TOTAL DISSOLVED SOLIDS

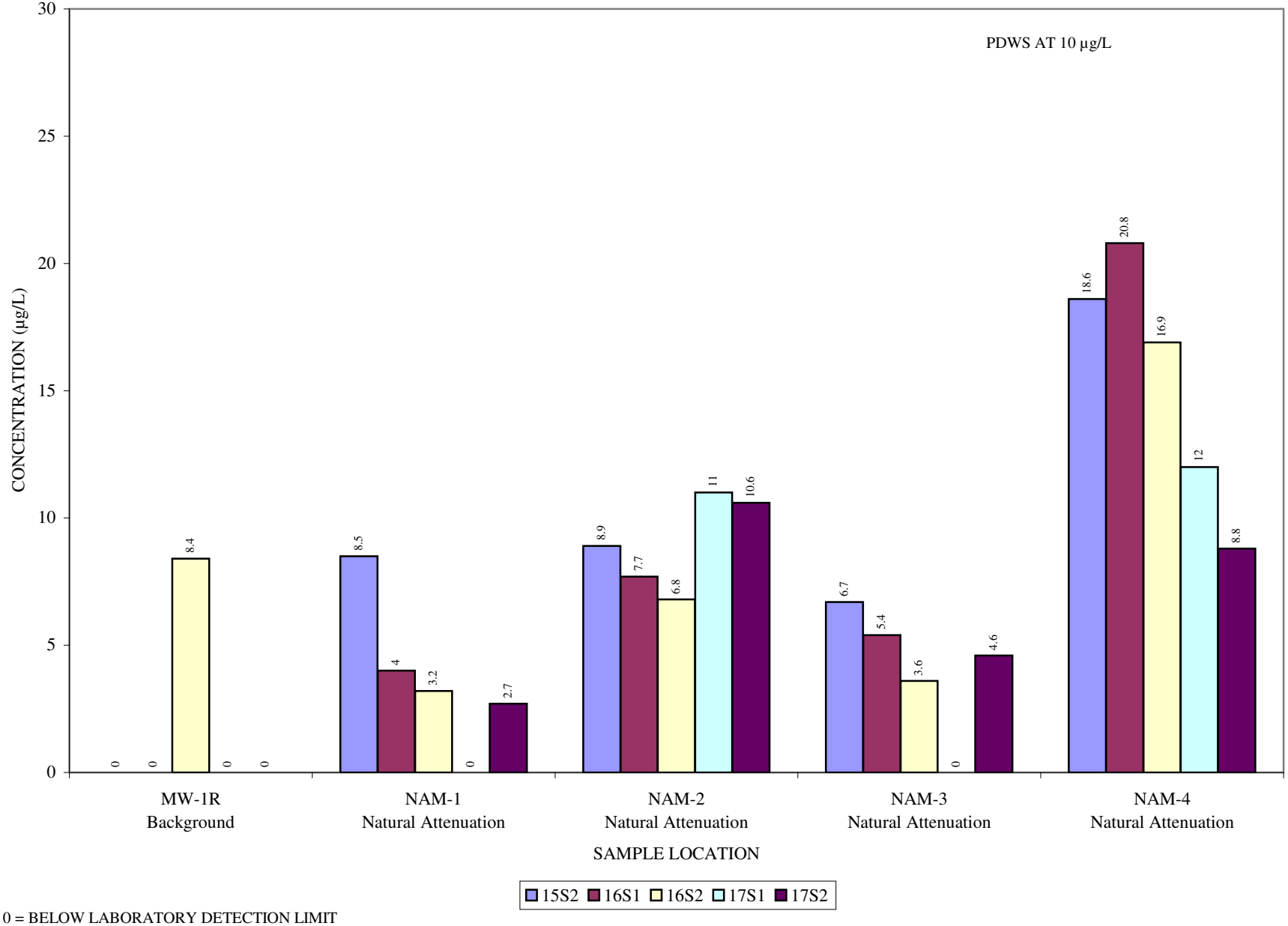
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

ARSENIC

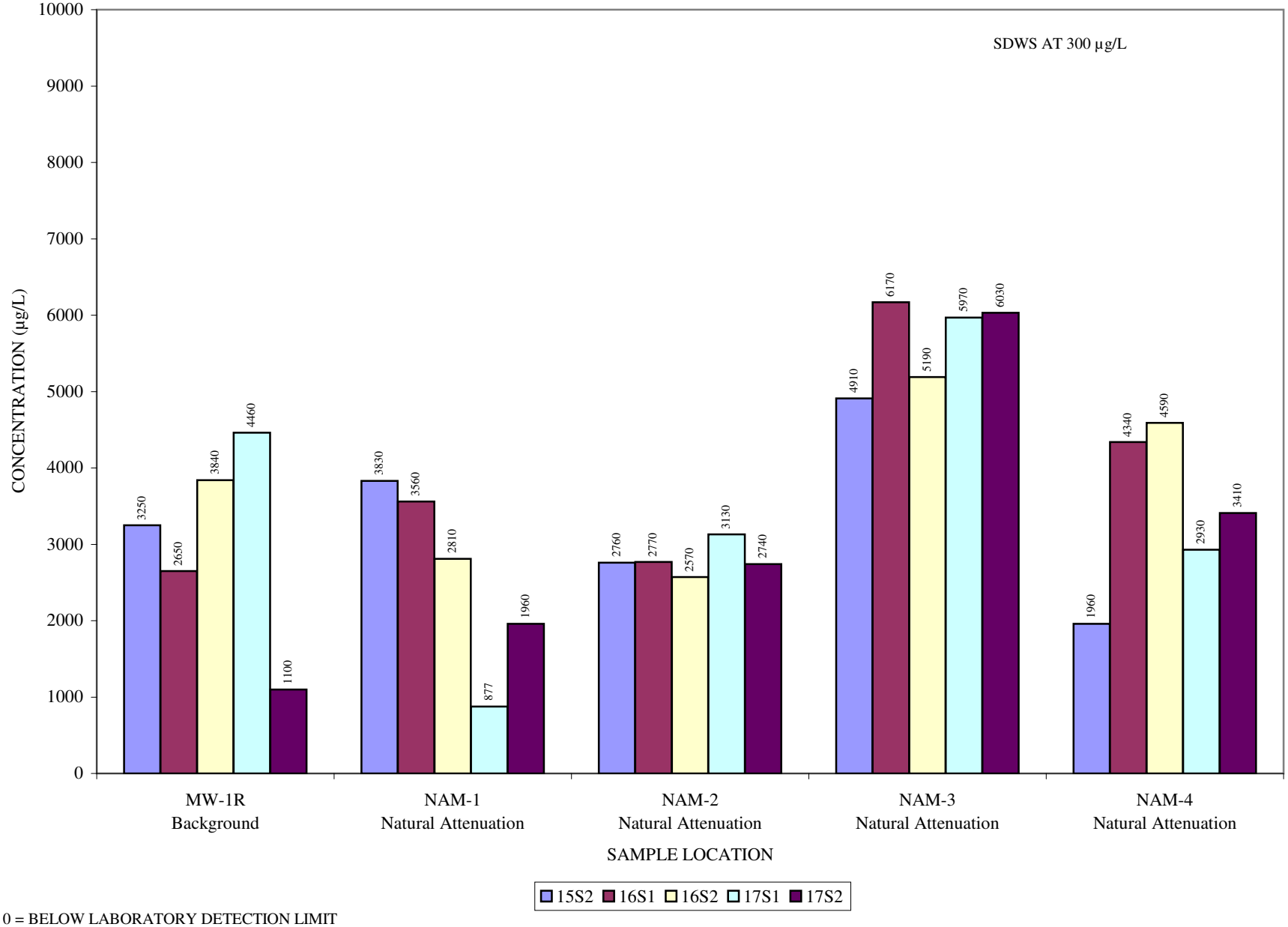
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

IRON

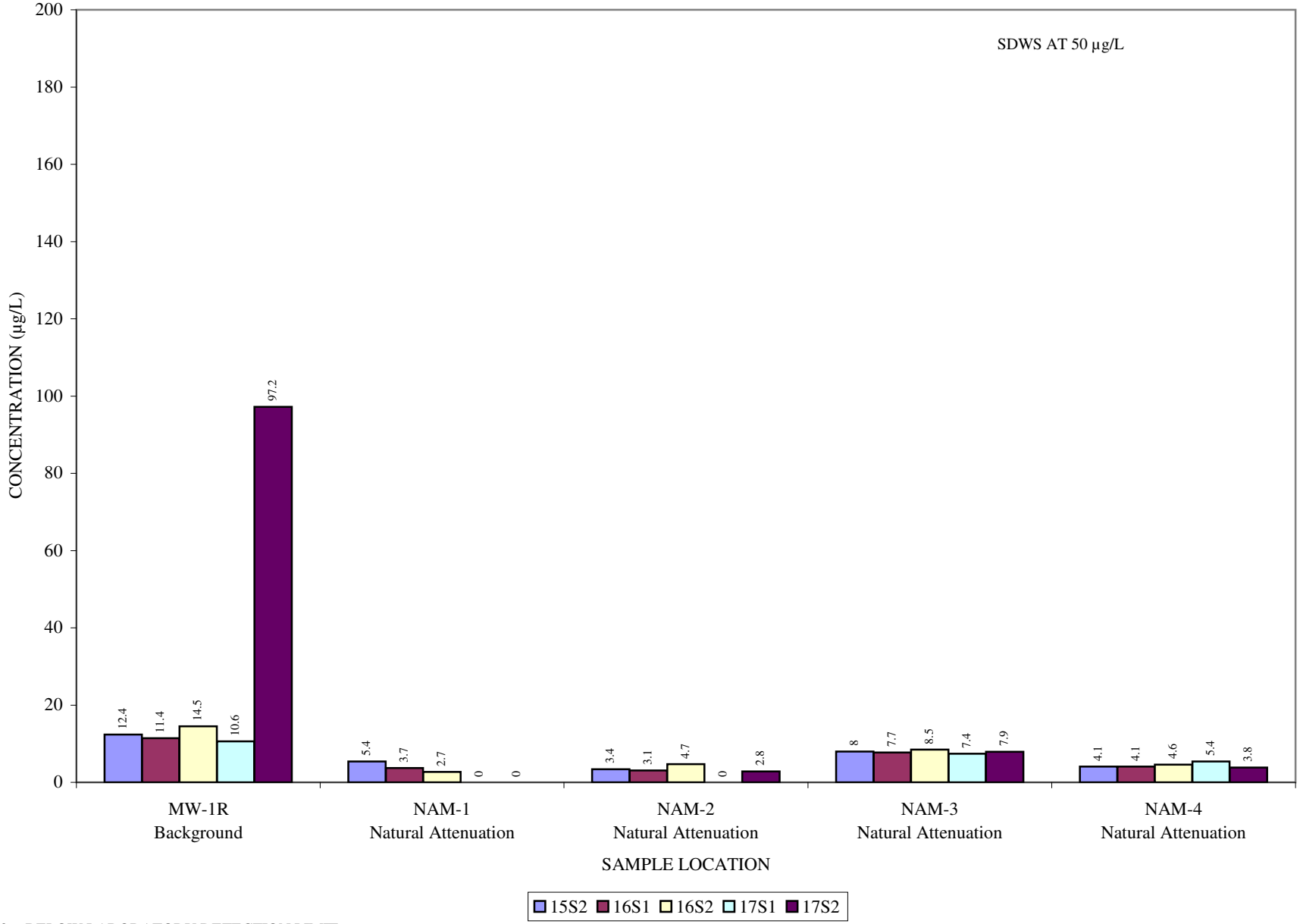
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

MANGANESE

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER CHEMISTRY GRAPH



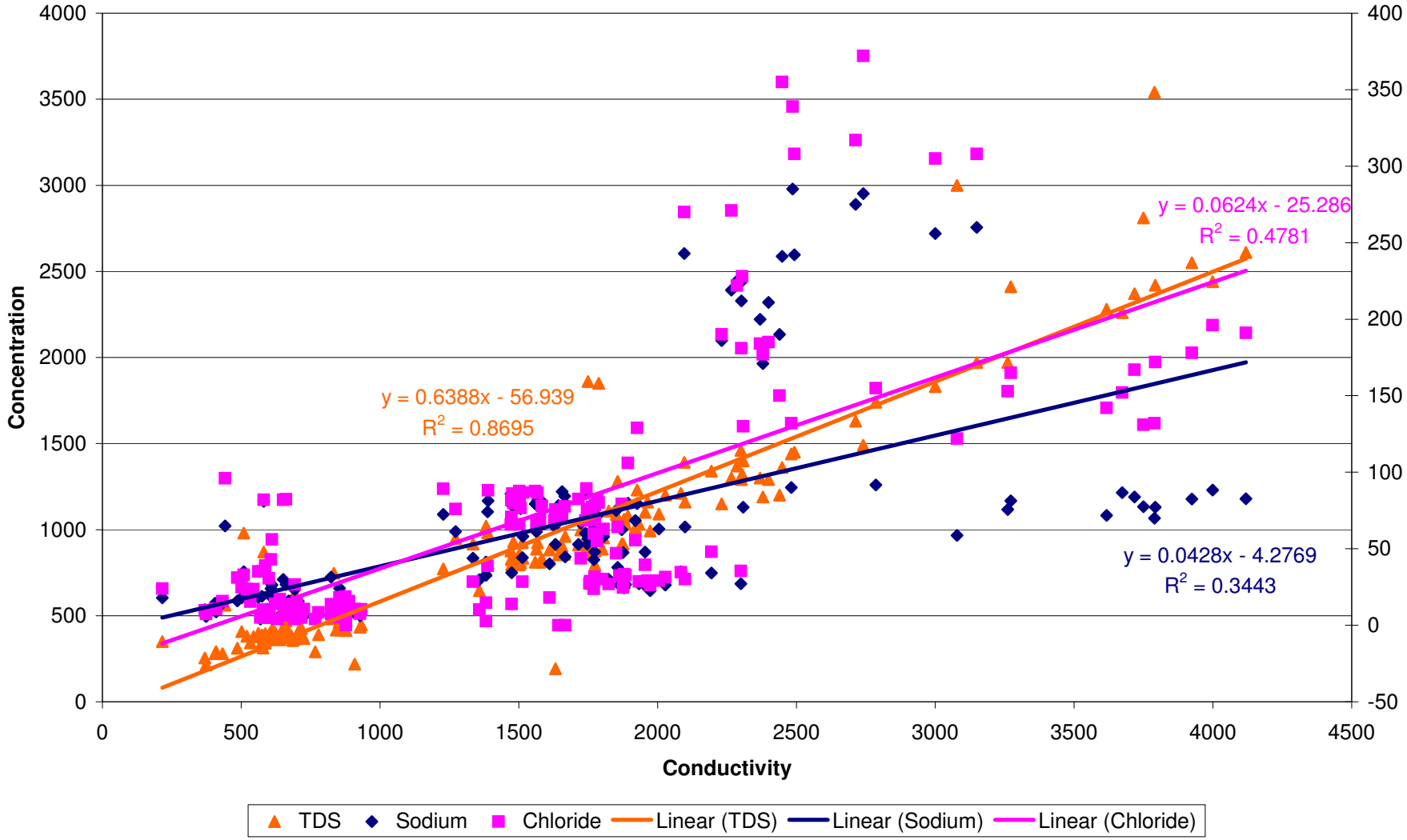
0 = BELOW LABORATORY DETECTION LIMIT

Attachment 8

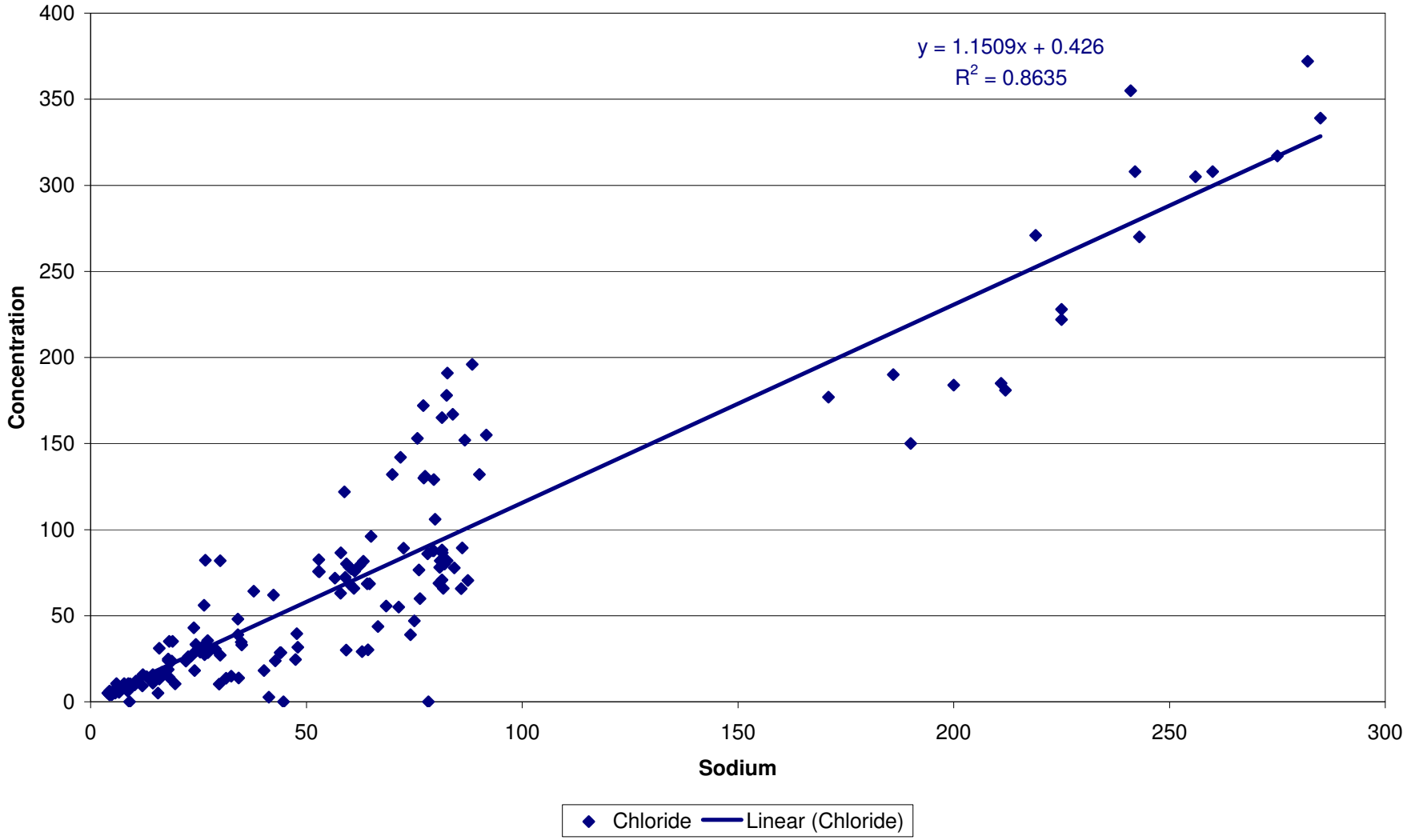
Scatter Plots for Related Parameters

Background and Detection Wells

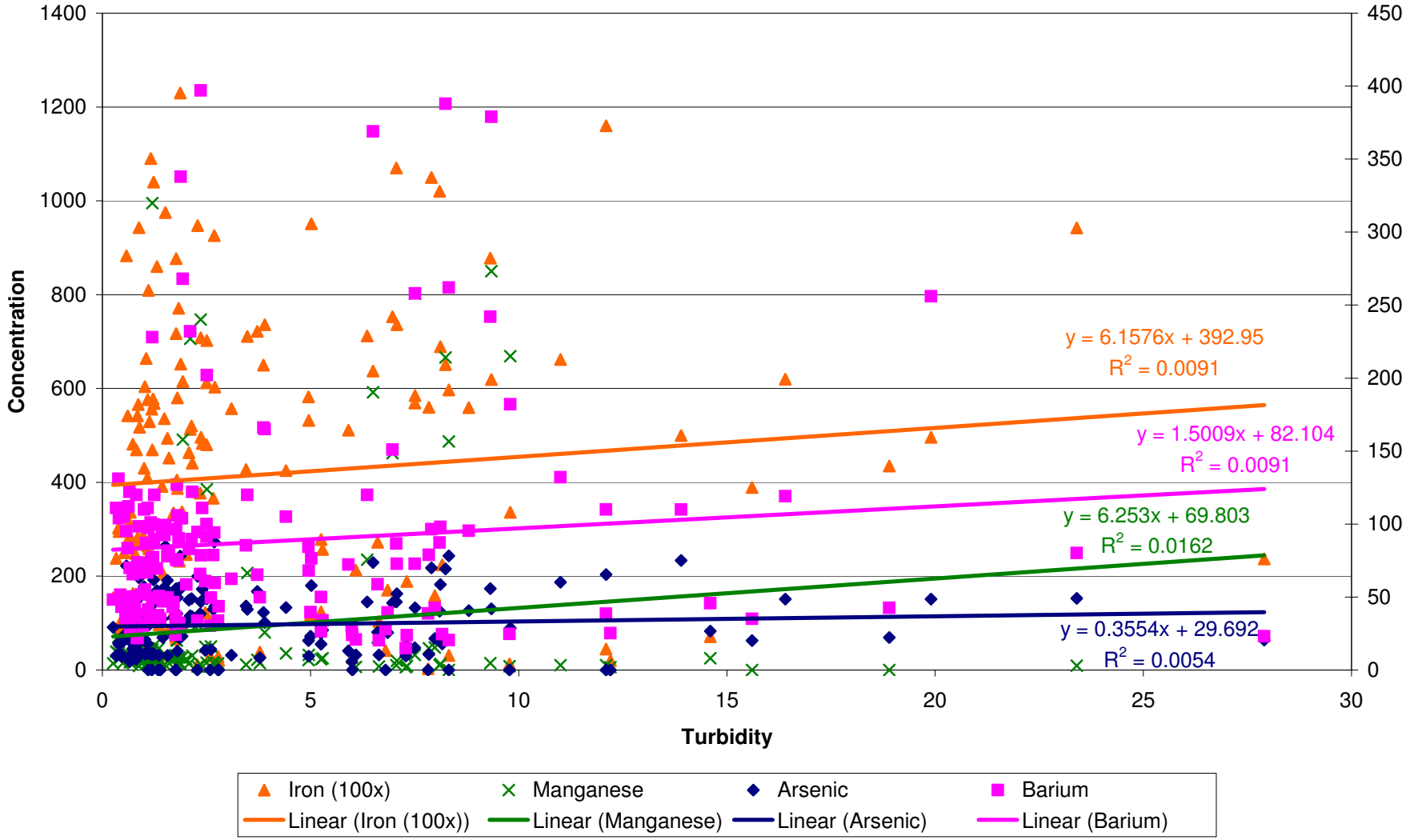
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
RELATED PARAMETERS - DISSOLVED SOLIDS SERIES



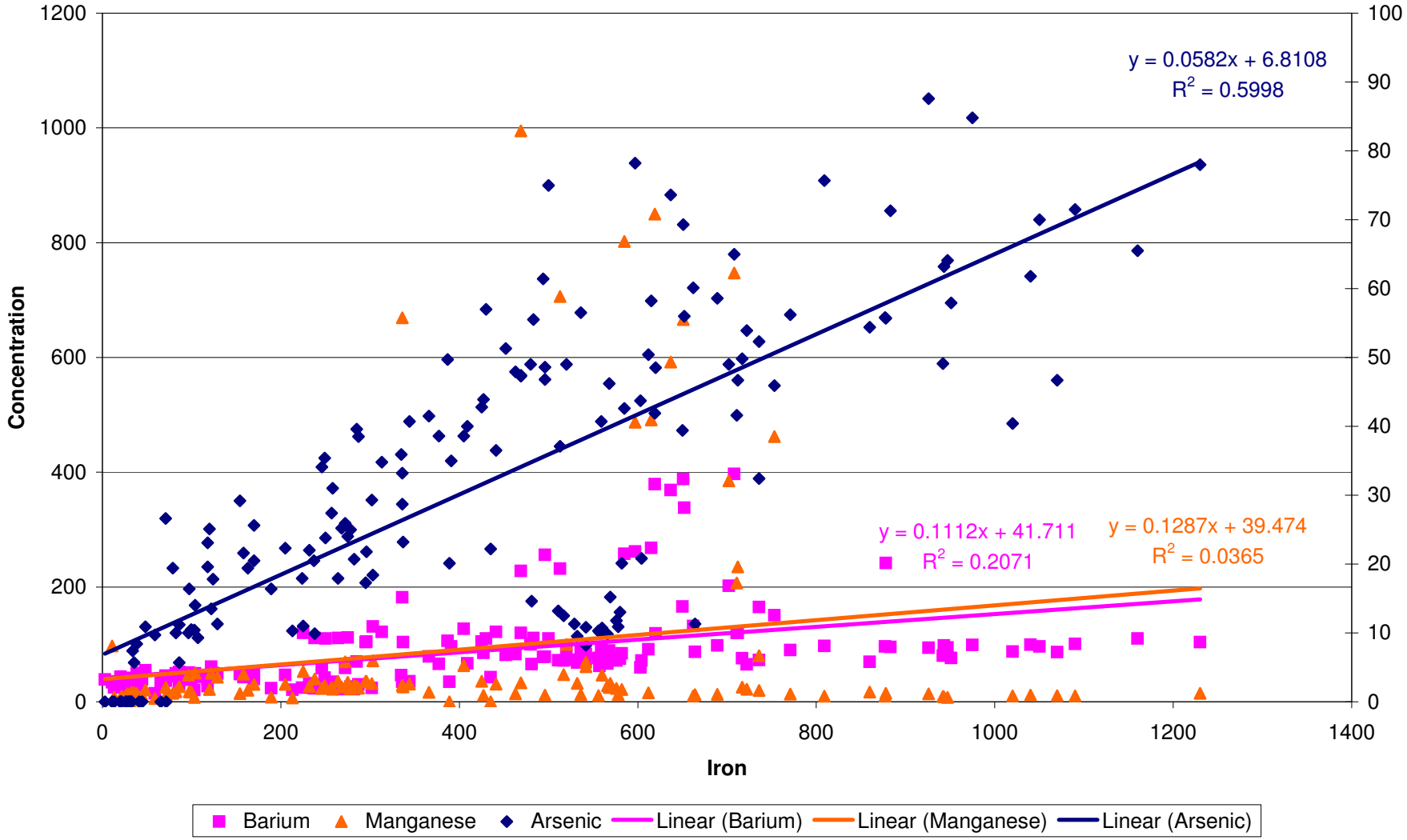
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
RELATED PARAMETERS - SODIUM AND CHLORIDE



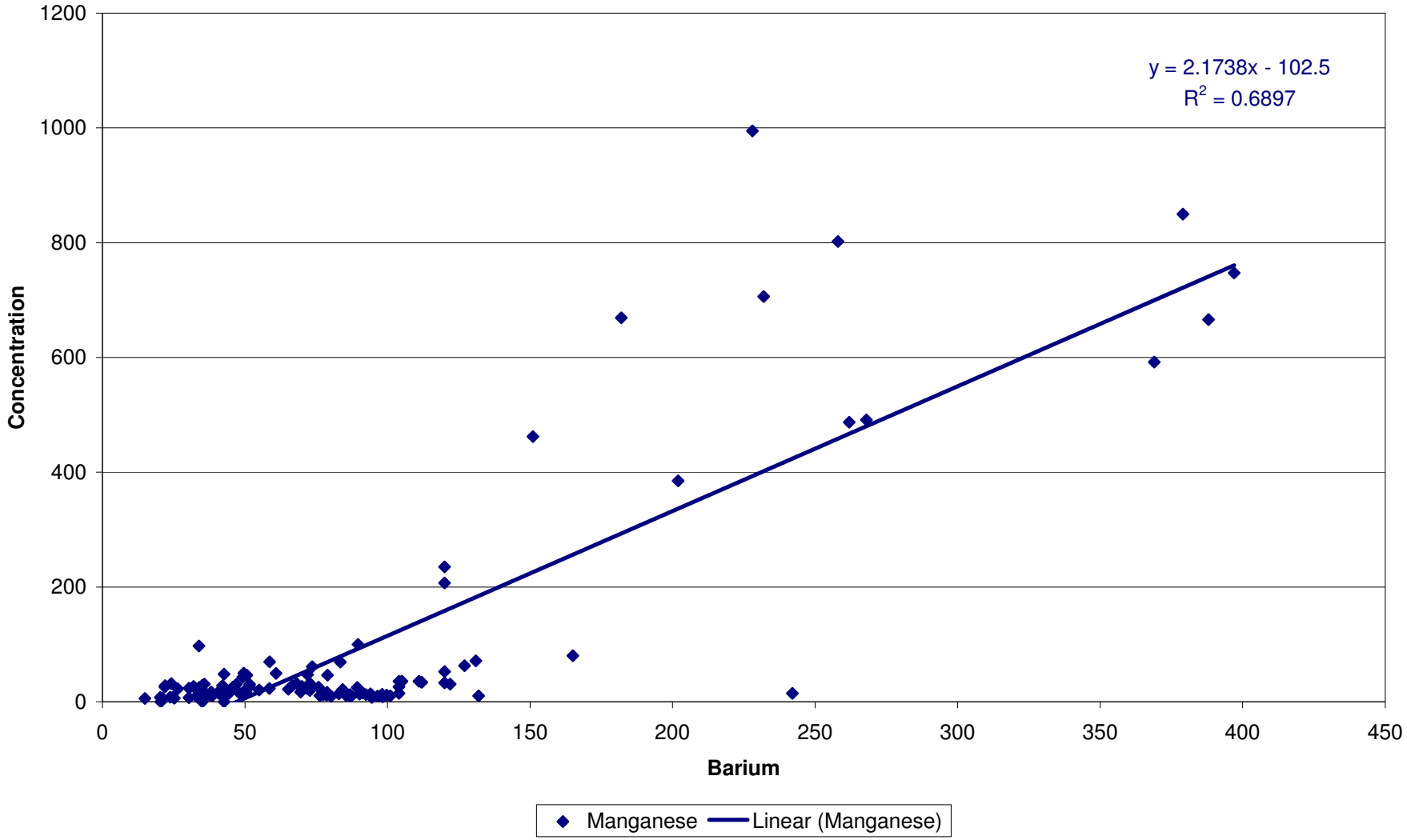
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
RELATED PARAMETERS - TURBIDITY AND METALS SERIES



SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
RELATED PARAMETERS - REDOX SENSITIVE METALS SERIES

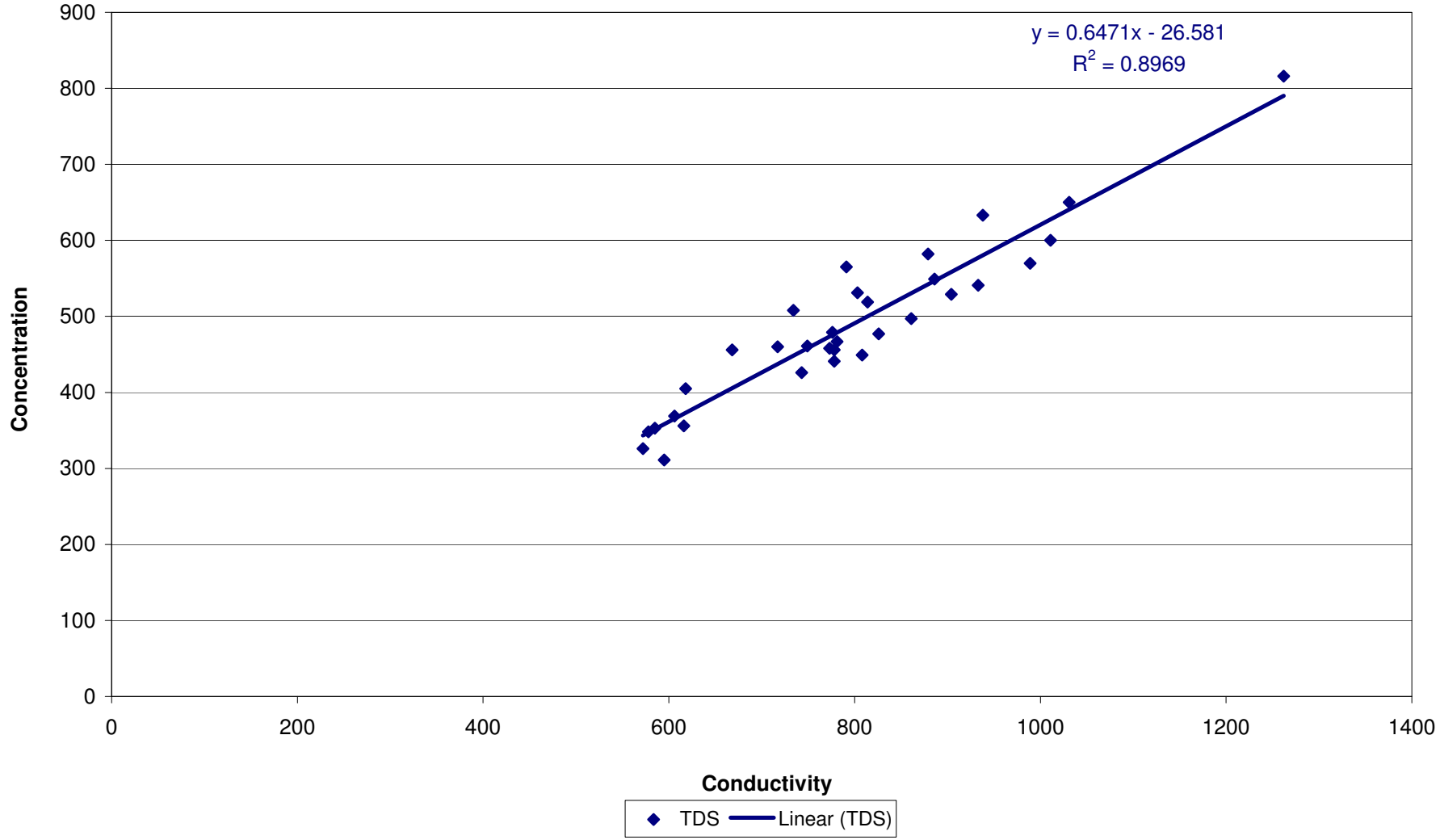


SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
RELATED PARAMETERS - BARIUM AND MANGANESE

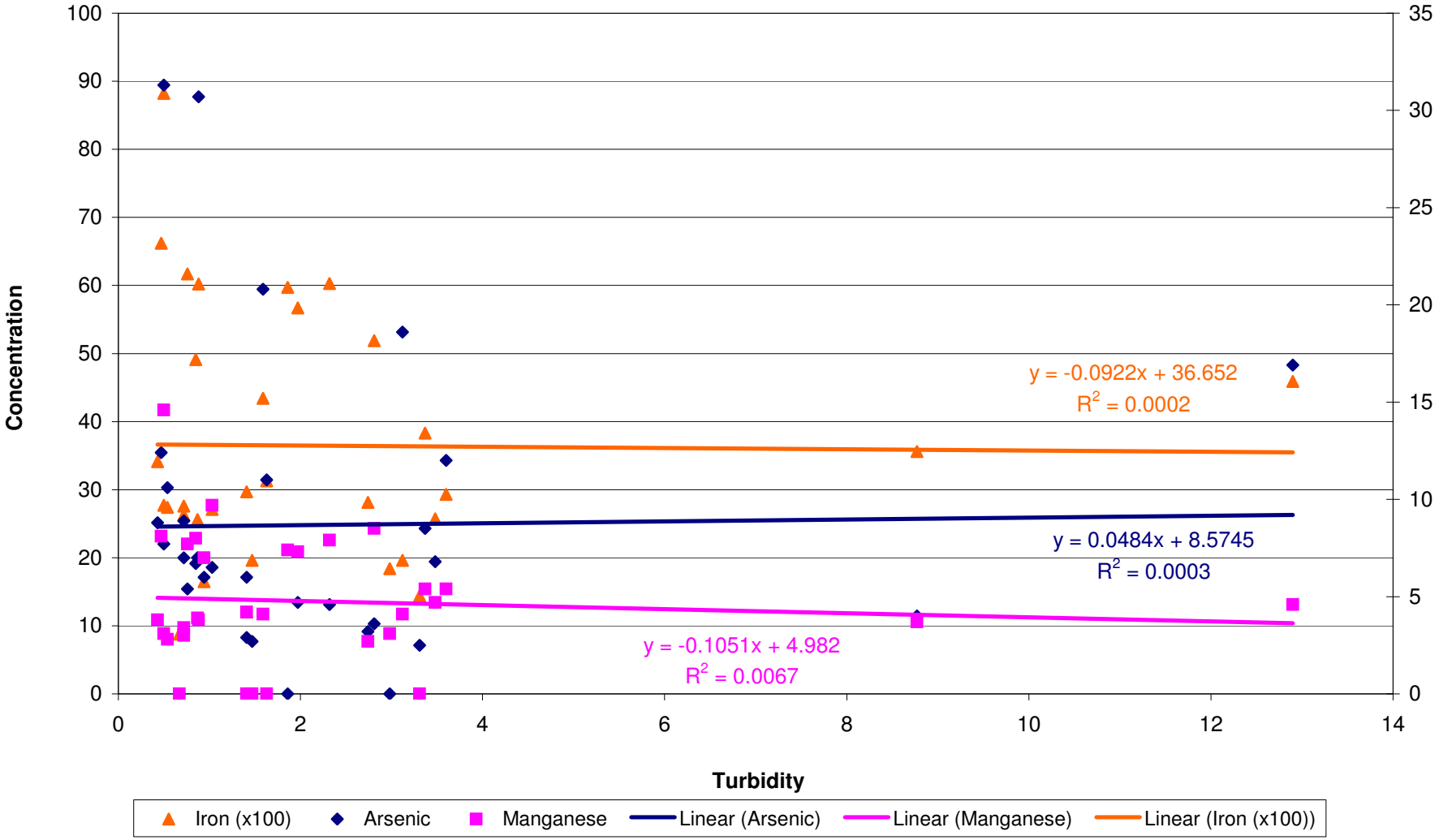


NAM Wells

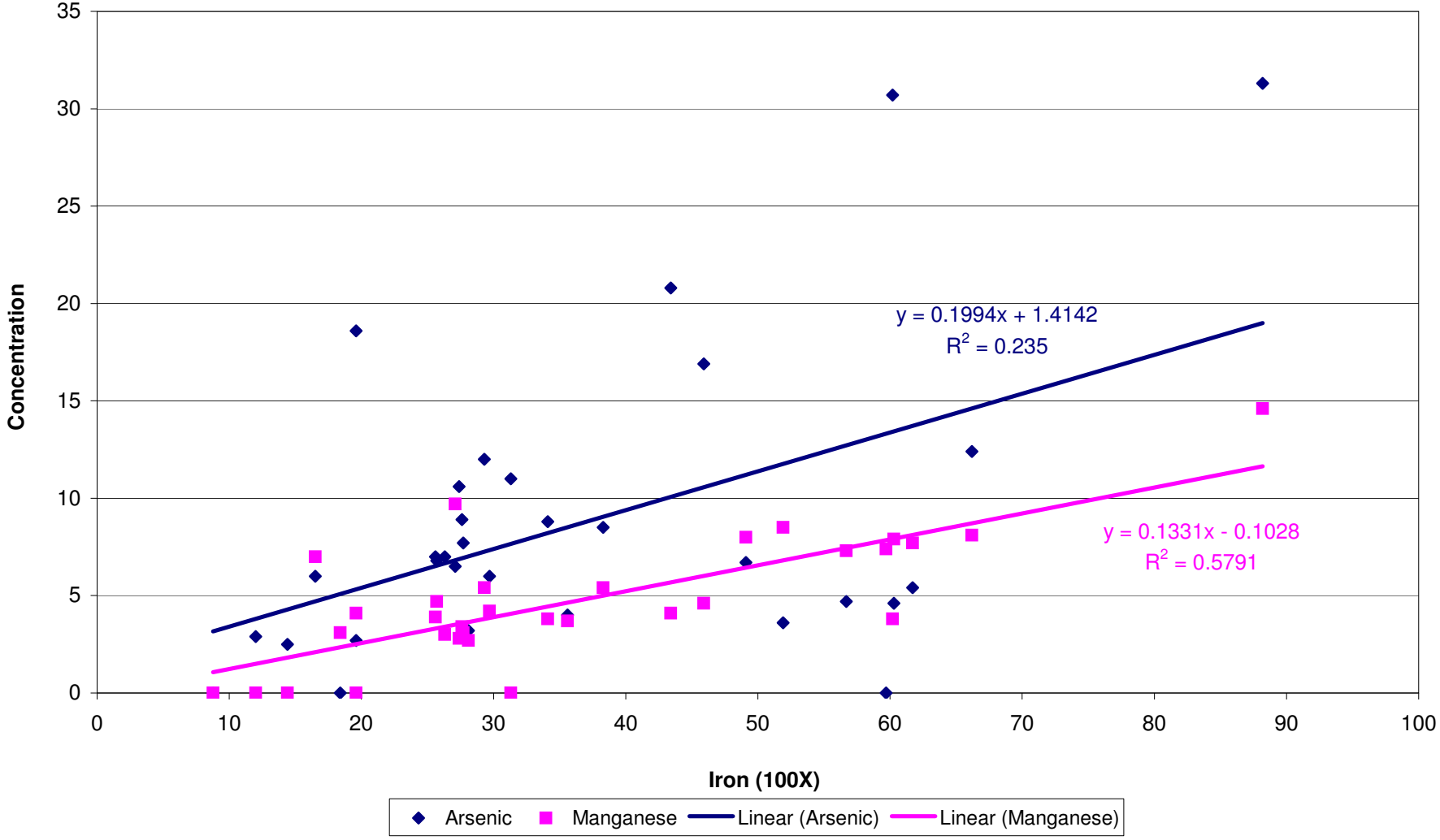
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
RELATED PARAMETERS - DISSOLVED SOLIDS SERIES



SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
RELATED PARAMETERS - TURBIDITY AND METALS SERIES



SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
RELATED PARAMETERS - REDOX SENSITIVE METALS SERIES



Attachment 9

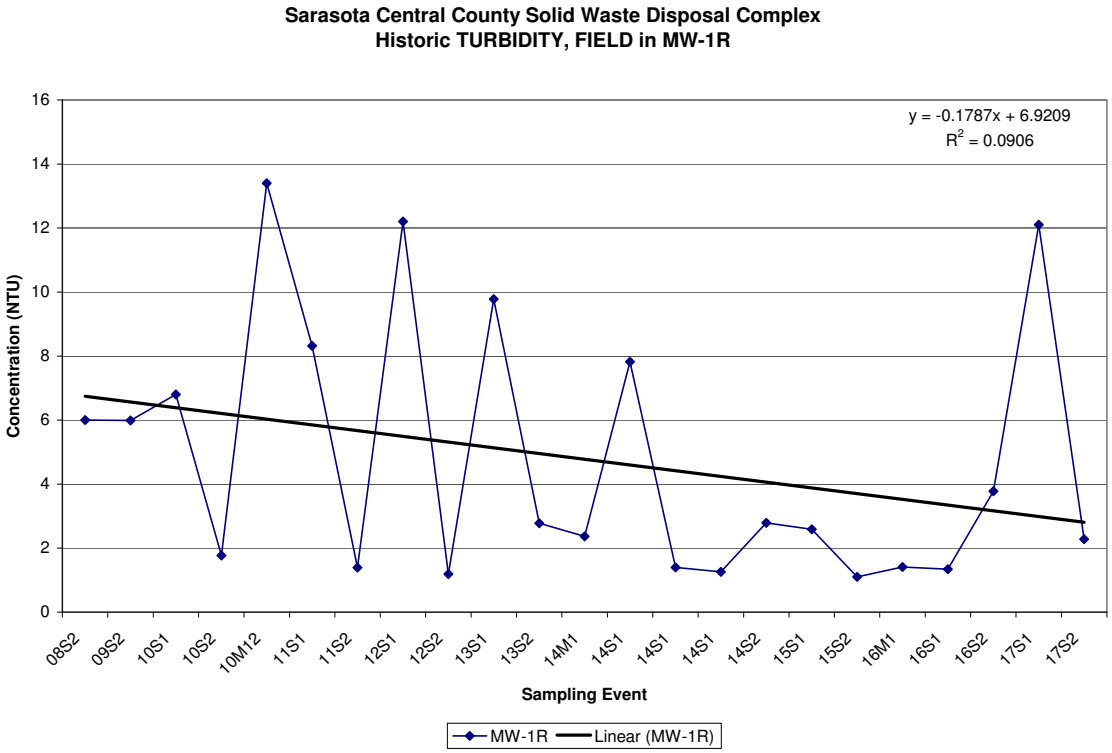
Historical Groundwater Trend Graphs

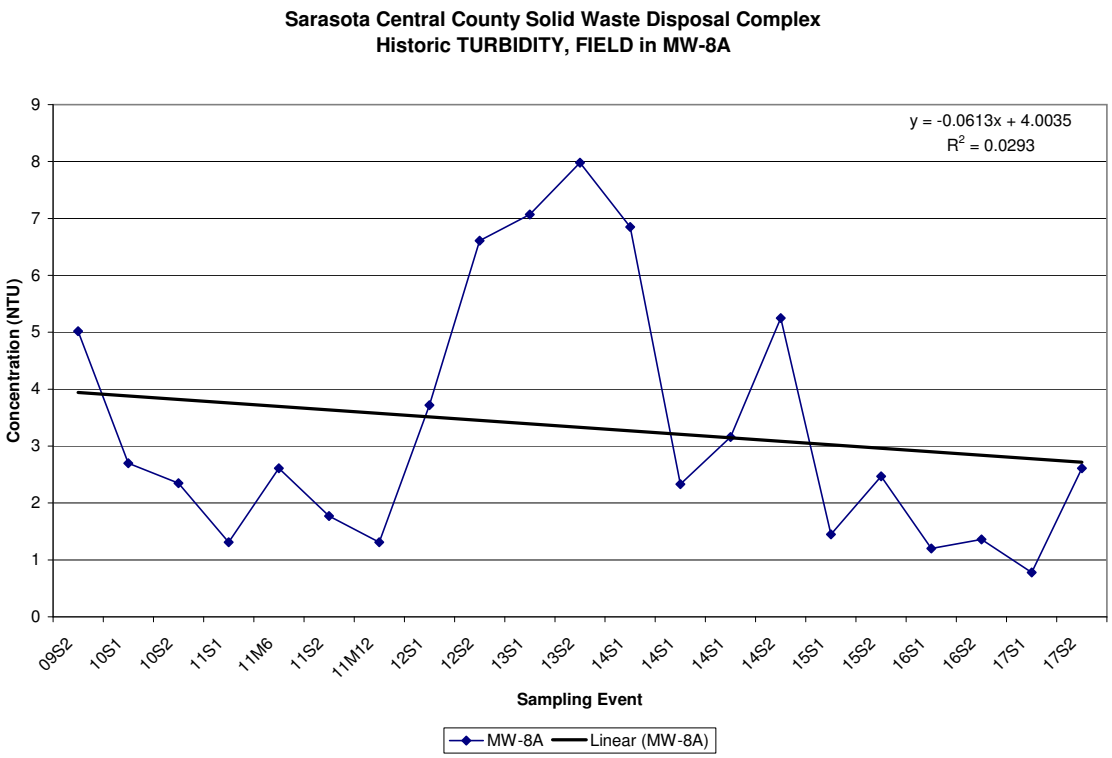
Background and Detection Wells

Sarasota County

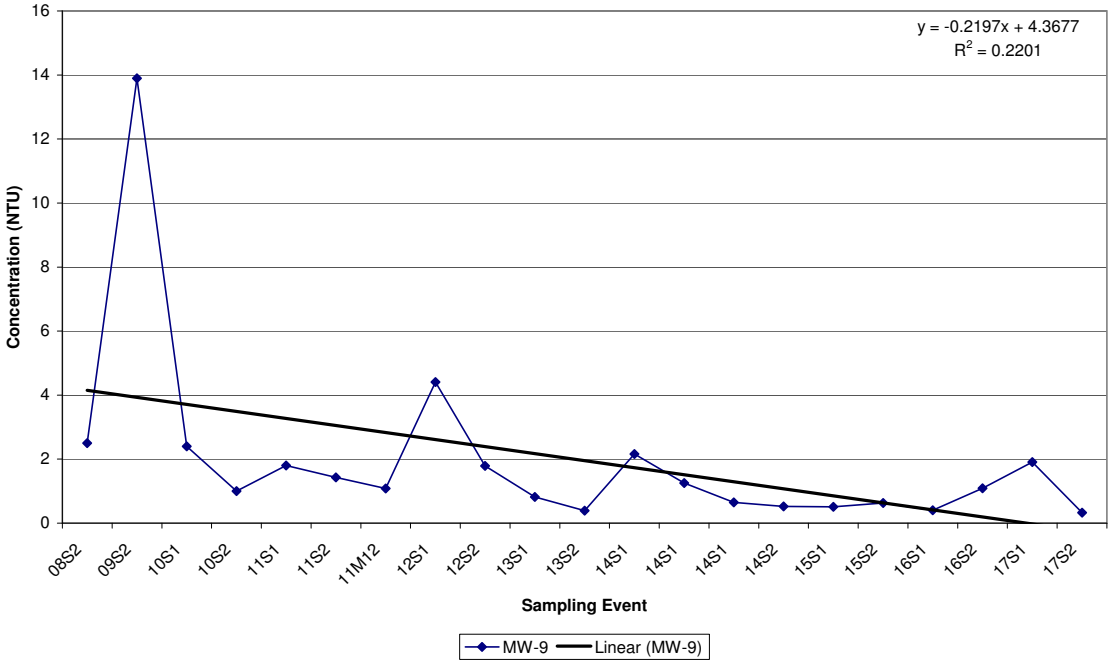
Central County Solid Waste Disposal Complex

Historical Turbidity Data

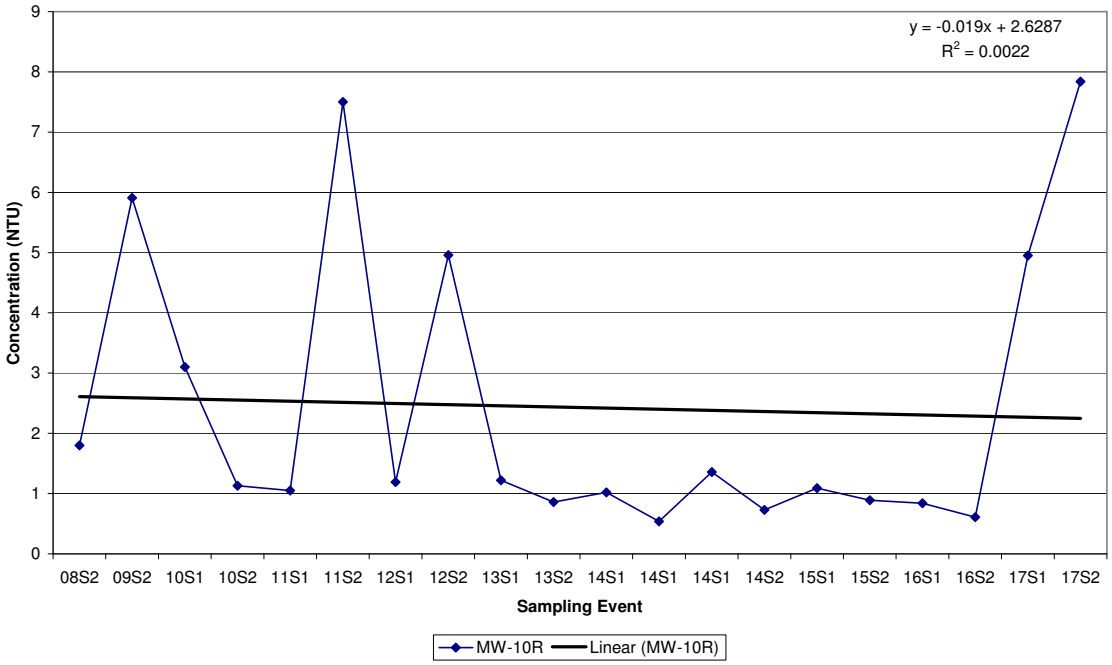

Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in MW-1R
y = -0.1787x + 6.9209
R2 = 0.0906
Concentration (NTU)
0
2
4
6
8
10
12
14
16
08S2
09S2
10S1
10S2
10M12
11S1
11S2
12S1
12S2
13S1
13S2
14M1
14S1
14S1
14S1
14S2
15S1
15S2
16M1
16S1
16S2
17S1
17S2
Sampling Event
MW-1R
Linear (MW-1R)

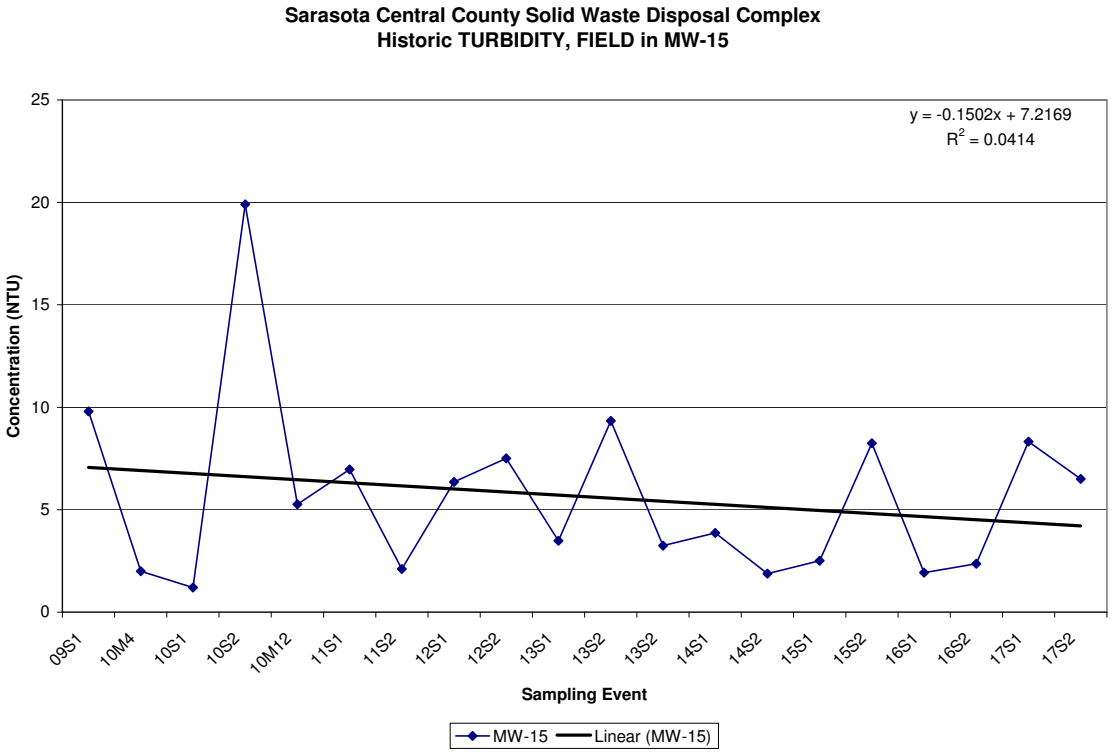

Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in MW-8A
y = -0.0613x + 4.0035
R2 = 0.0293
Concentration (NTU)
0
1
2
3
4
5
6
7
8
9
09S2
10S1
10S2
11S1
11M6
11S2
11M12
12S1
12S2
13S1
13S2
14S1
14S1
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-8A
Linear (MW-8A)

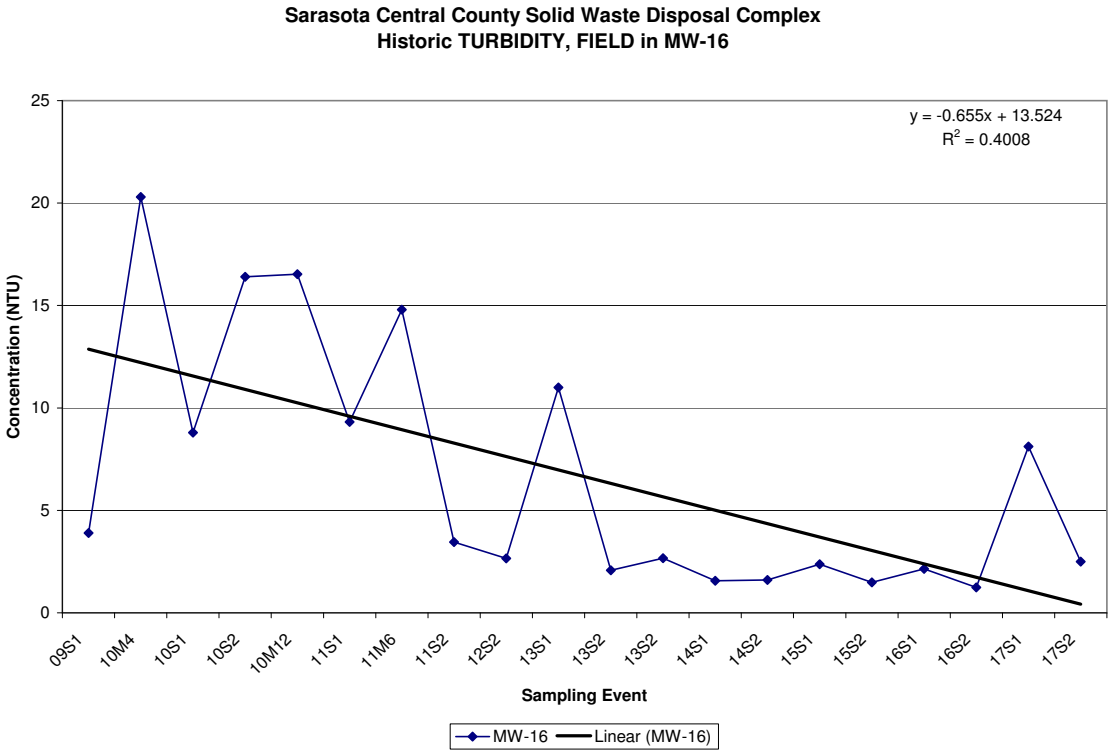
Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in MW-9

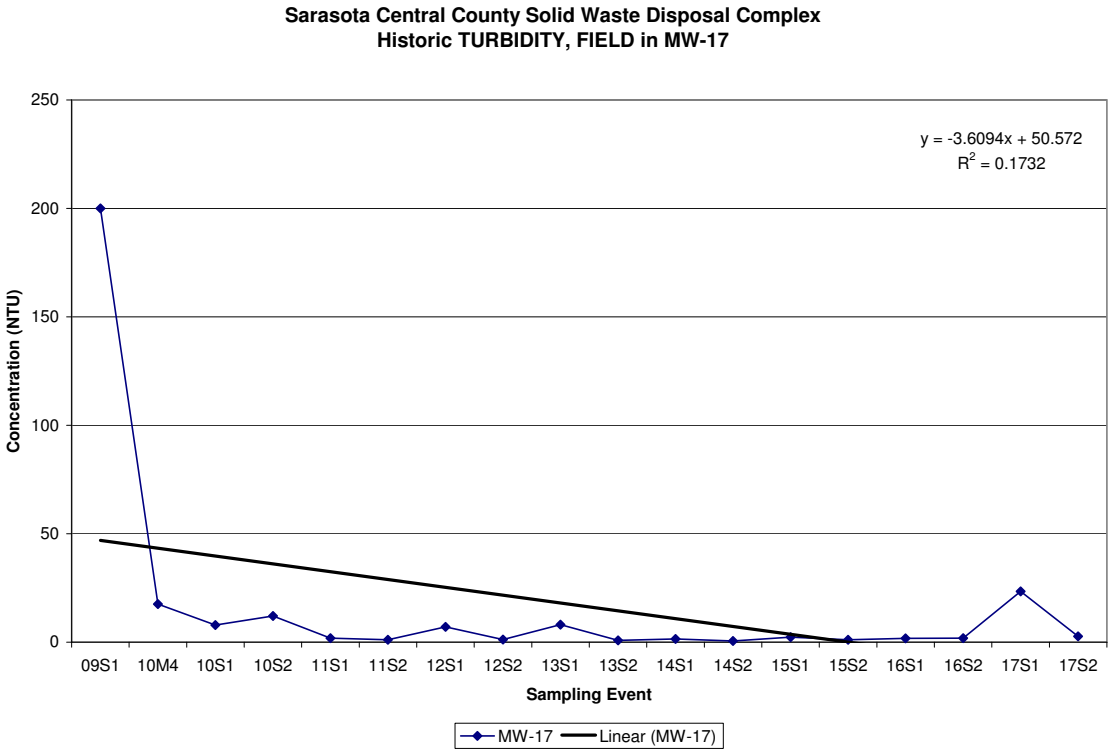


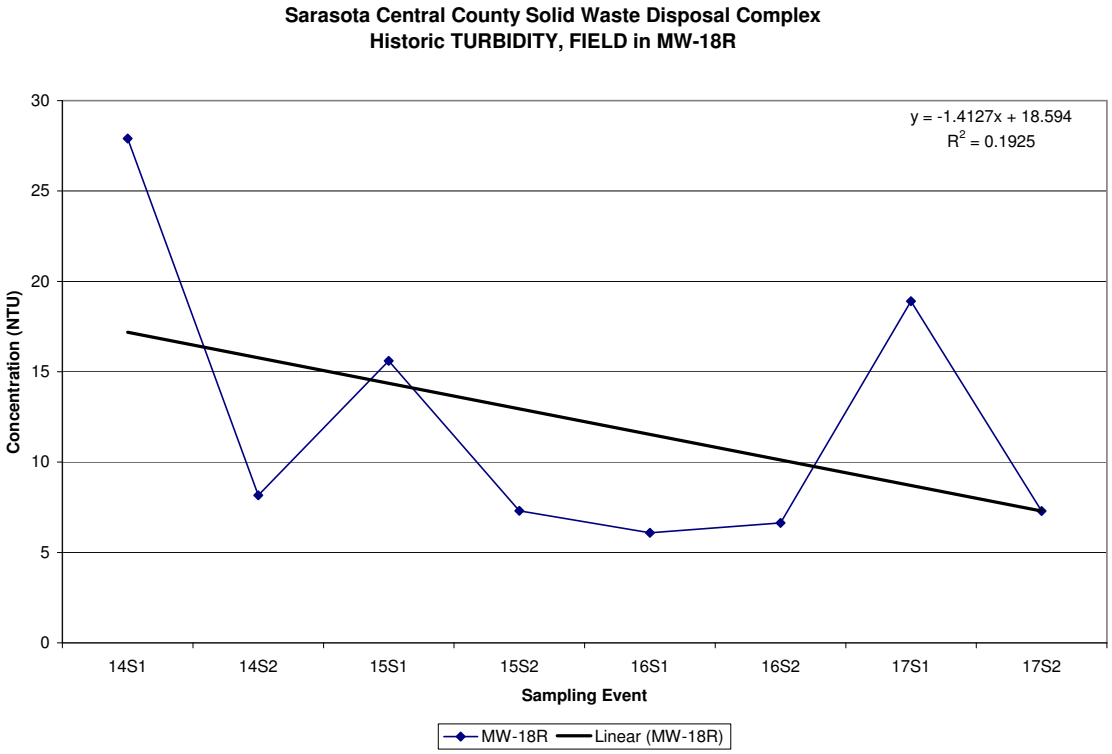
Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in MW-10R

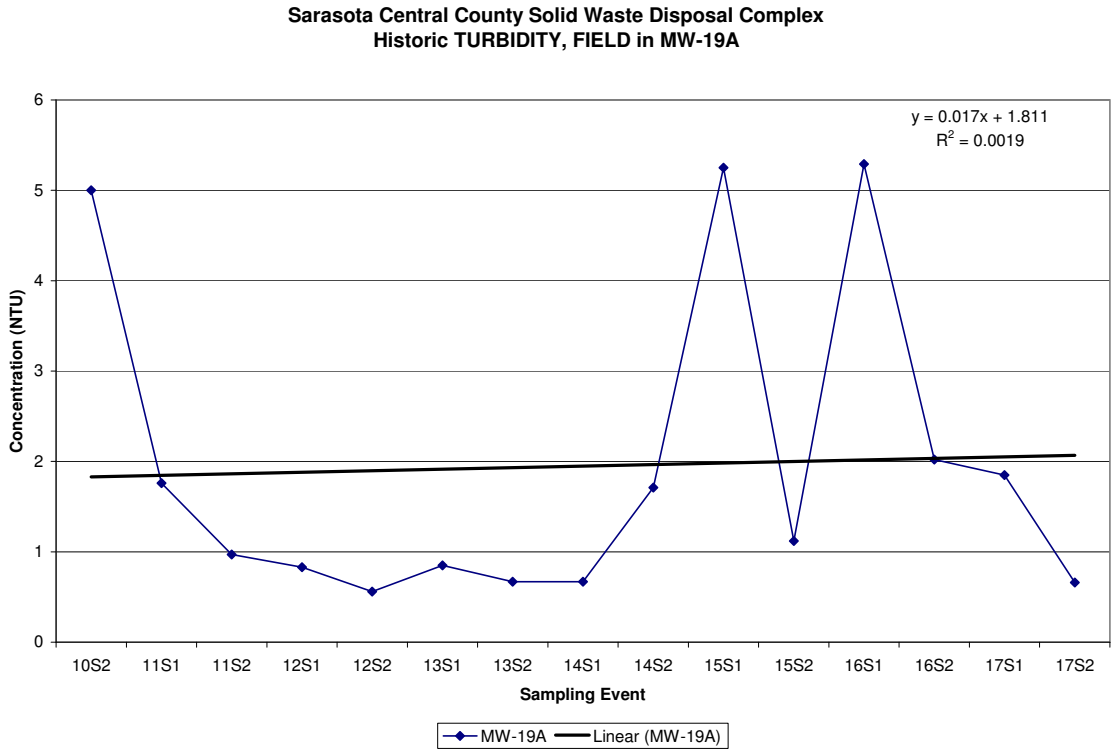


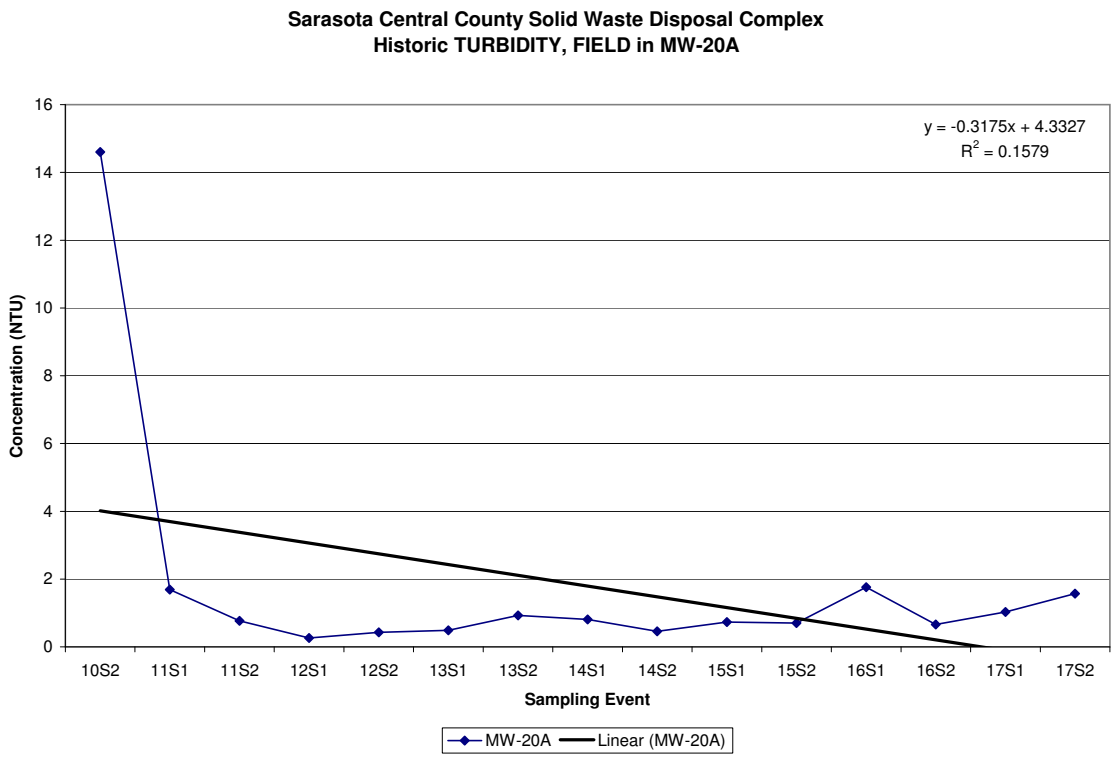

Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in MW-15
y = -0.1502x + 7.2169
R2 = 0.0414
Concentration (NTU)
25
20
15
10
5
0
09S1
10M4
10S1
10S2
10M12
11S1
11S2
12S1
12S2
13S1
13S2
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-15
Linear (MW-15)


Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in MW-16
y = -0.655x + 13.524
R2 = 0.4008
Concentration (NTU)
25
20
15
10
5
0
09S1
10M4
10S1
10S2
10M12
11S1
11M6
11S2
12S2
13S1
13S2
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-16
Linear (MW-16)


Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in MW-17
y = -3.6094x + 50.572
R2 = 0.1732
Concentration (NTU)
250
200
150
100
50
0
09S1
10M4
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-17
Linear (MW-17)


Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in MW-18R
y = -1.4127x + 18.594
R2 = 0.1925
Concentration (NTU)
30
25
20
15
10
5
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-18R
Linear (MW-18R)

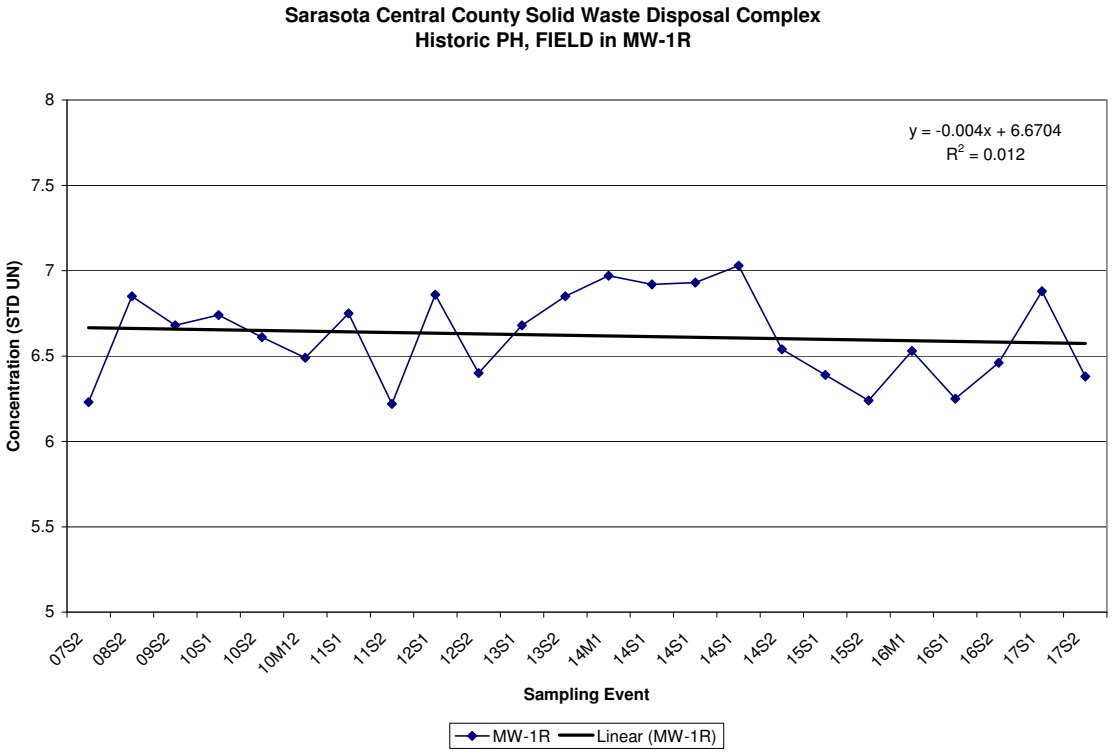

Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in MW-19A
y = 0.017x + 1.811
R2 = 0.0019
Concentration (NTU)
0
1
2
3
4
5
6
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-19A
Linear (MW-19A)

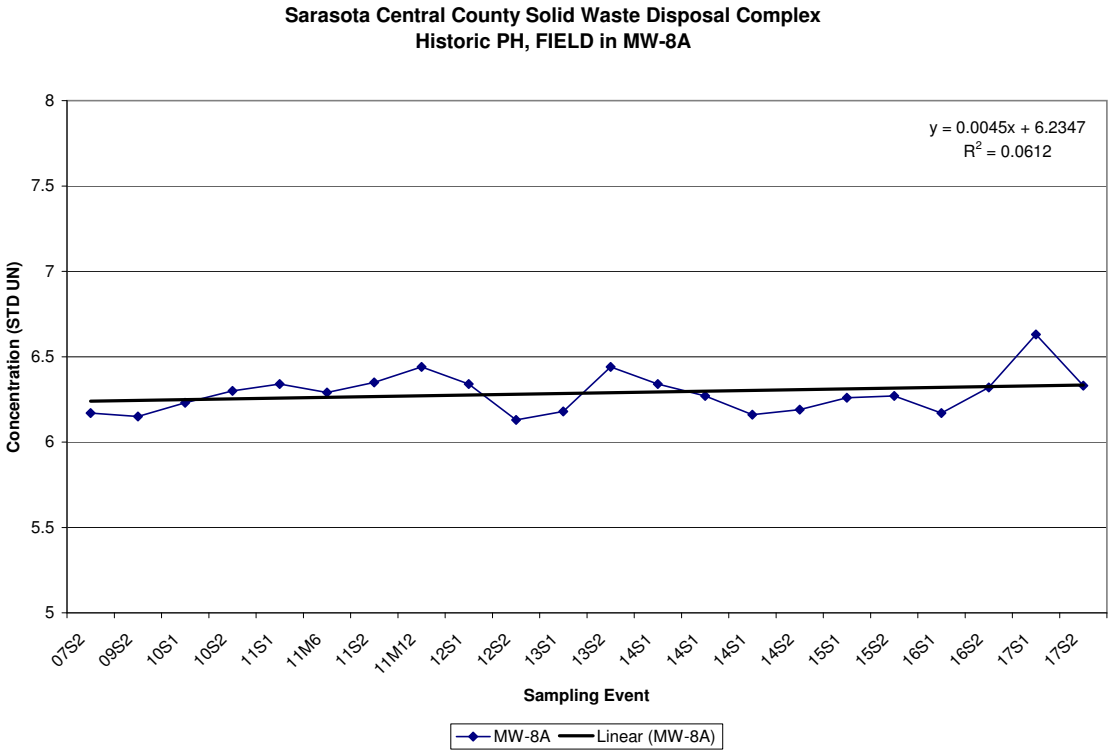

Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in MW-20A
y = -0.3175x + 4.3327
R2 = 0.1579
Concentration (NTU)
0
2
4
6
8
10
12
14
16
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-20A
Linear (MW-20A)

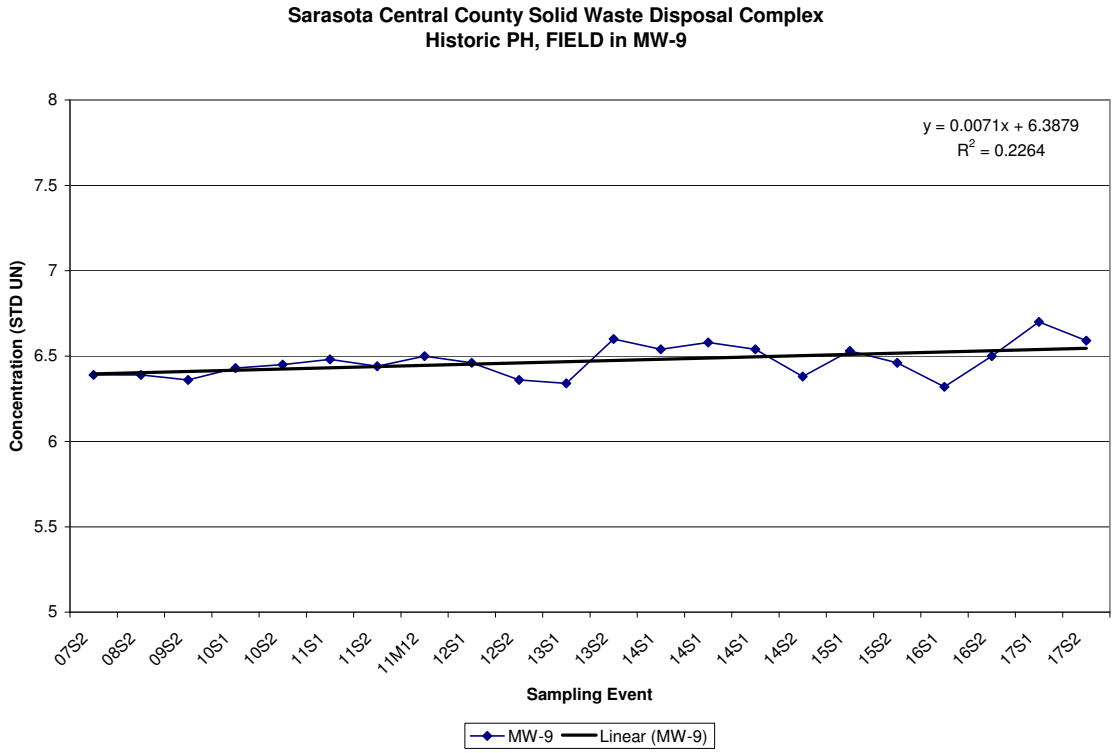
Sarasota County

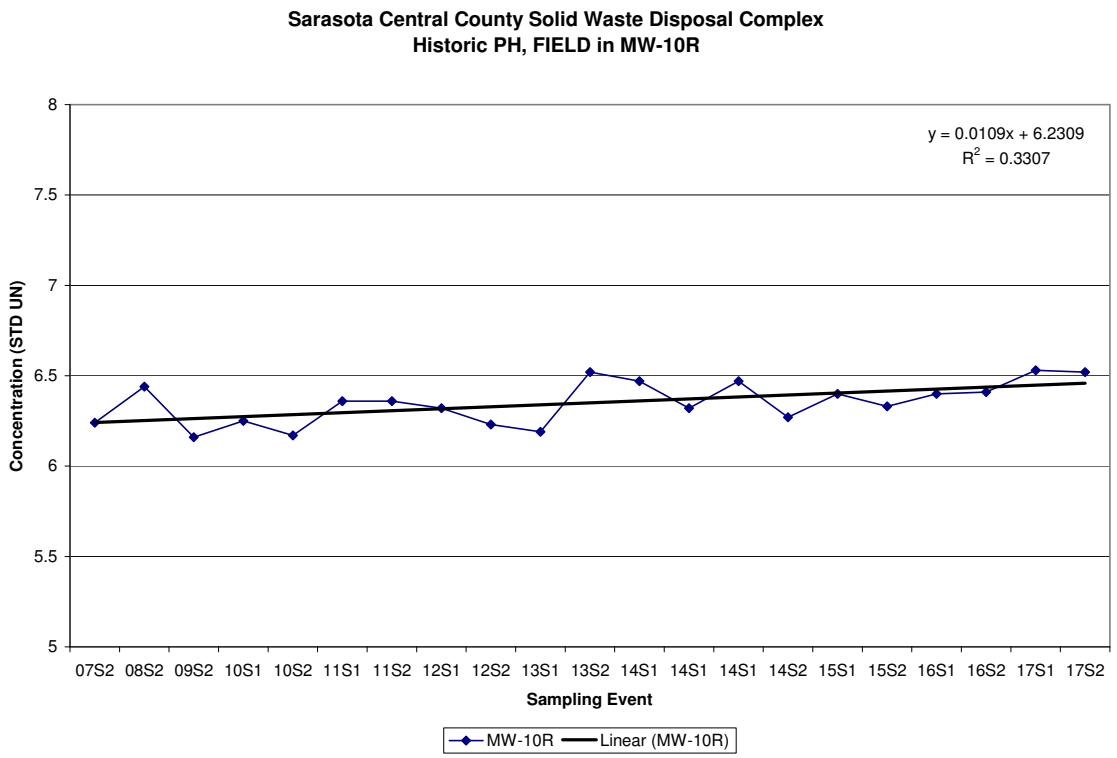
Central County Solid Waste Disposal Complex

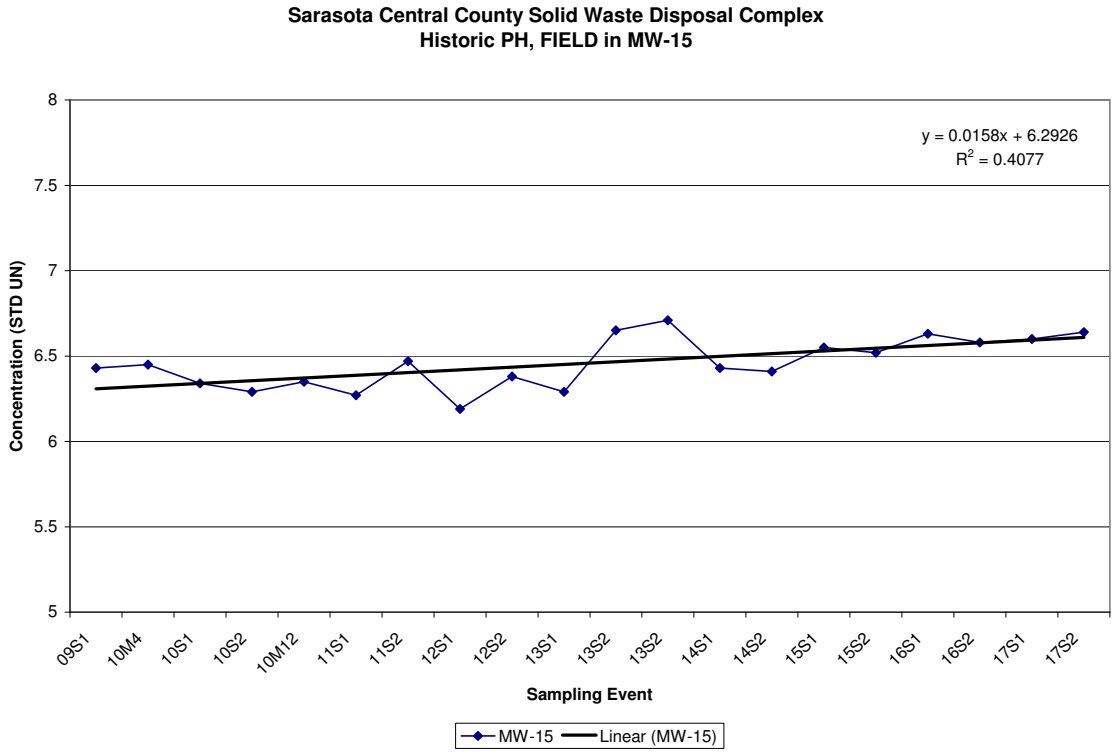
Historical pH Data

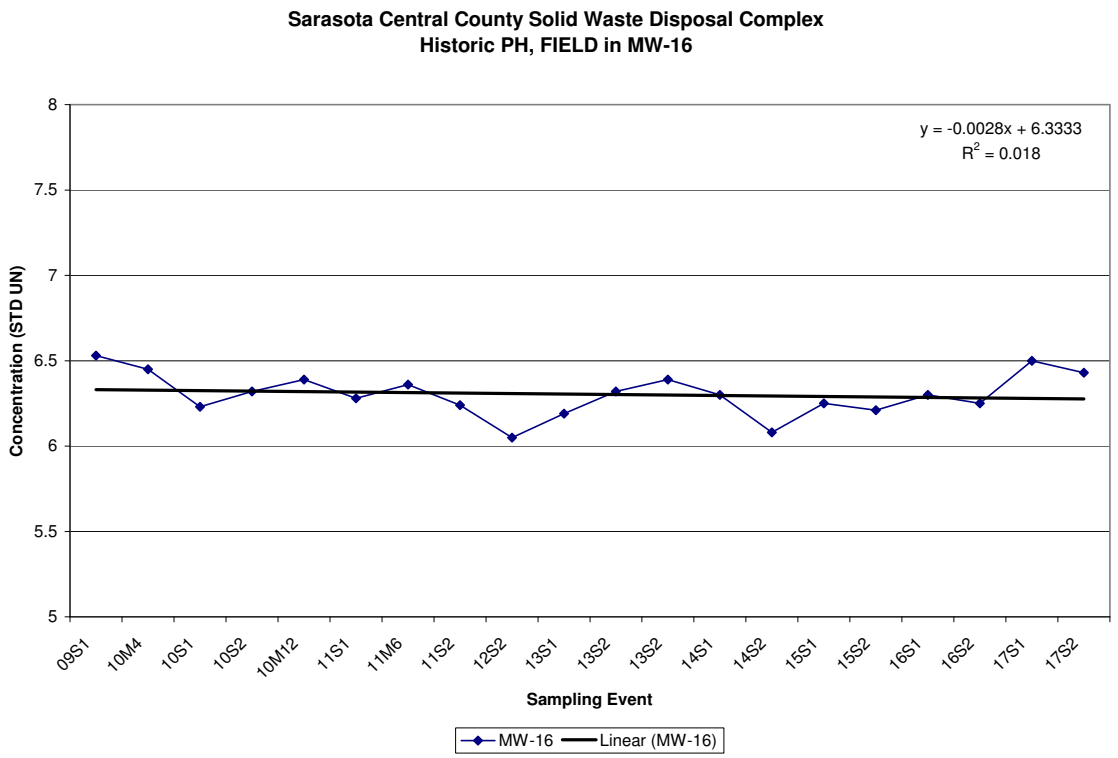

Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in MW-1R
y = -0.004x + 6.6704
R2 = 0.012
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
07S2
08S2
09S2
10S1
10S2
10M12
11S1
11S2
12S1
12S2
13S1
13S2
14M1
14S1
14S1
14S1
14S2
15S1
15S2
16M1
16S1
16S2
17S1
17S2
Sampling Event
MW-1R
Linear (MW-1R)

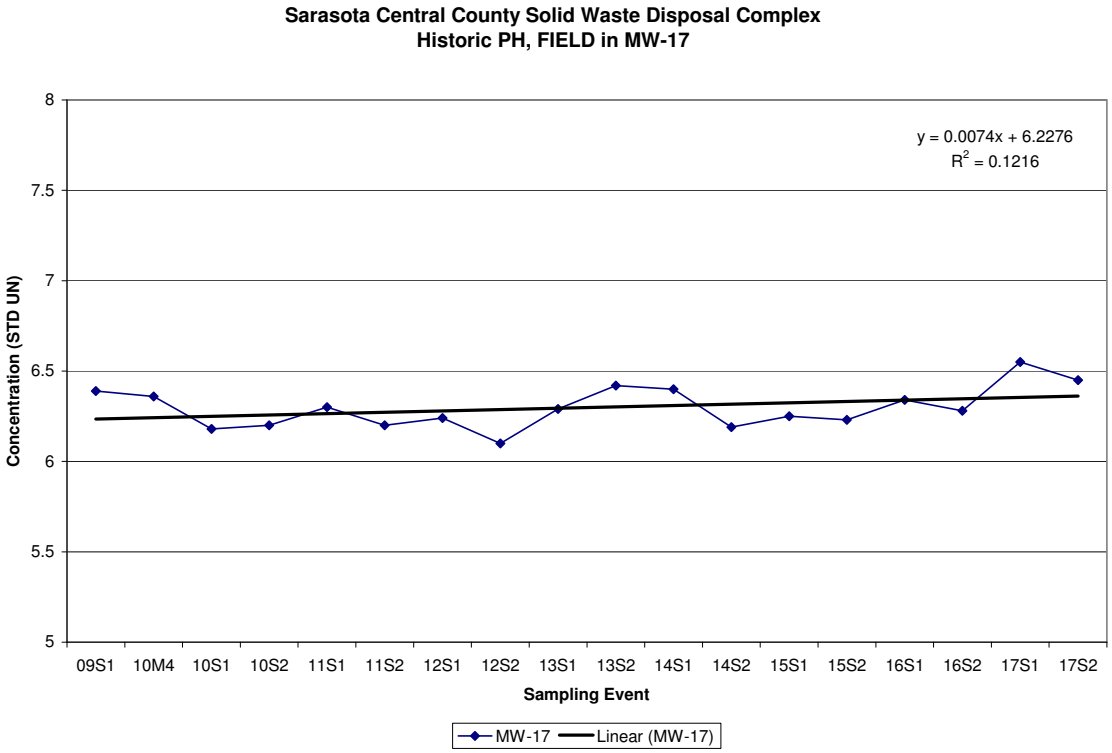

Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in MW-8A
y = 0.0045x + 6.2347
R2 = 0.0612
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
07S2
09S2
10S1
10S2
11S1
11M6
11S2
11M12
12S1
12S2
13S1
13S2
14S1
14S1
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-8A
Linear (MW-8A)

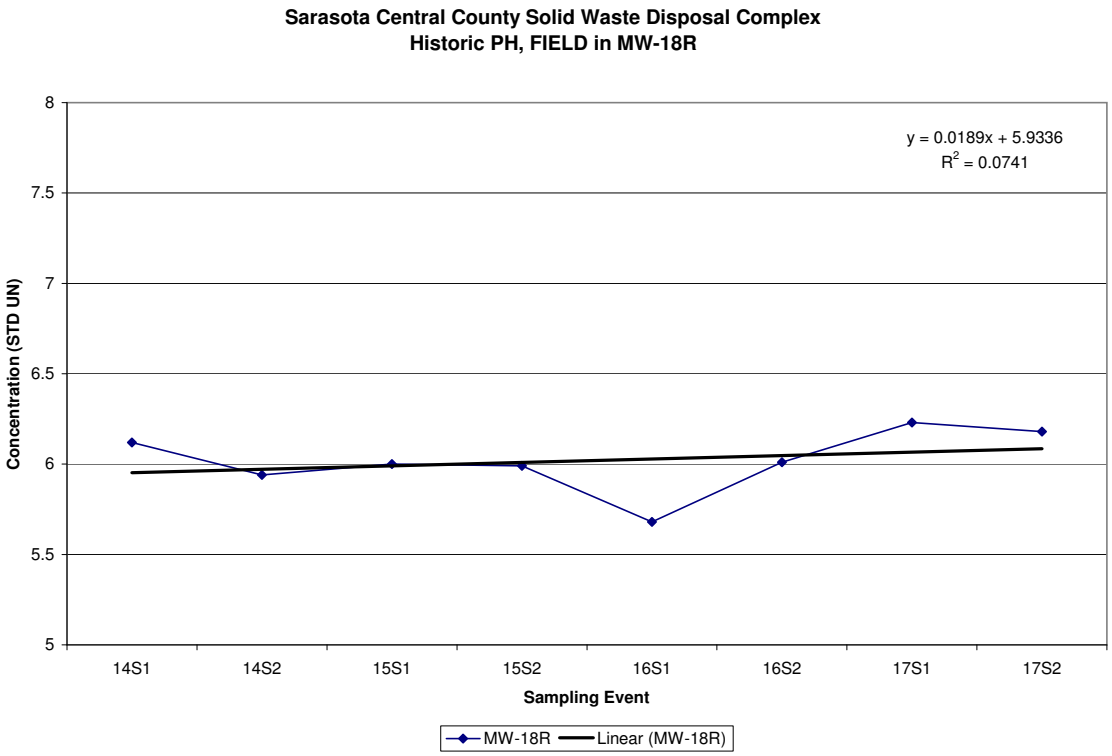

Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in MW-9
y = 0.0071x + 6.3879
R2 = 0.2264
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
07S2
08S2
09S2
10S1
10S2
11S1
11S2
11M12
12S1
12S2
13S1
13S2
14S1
14S1
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-9
Linear (MW-9)

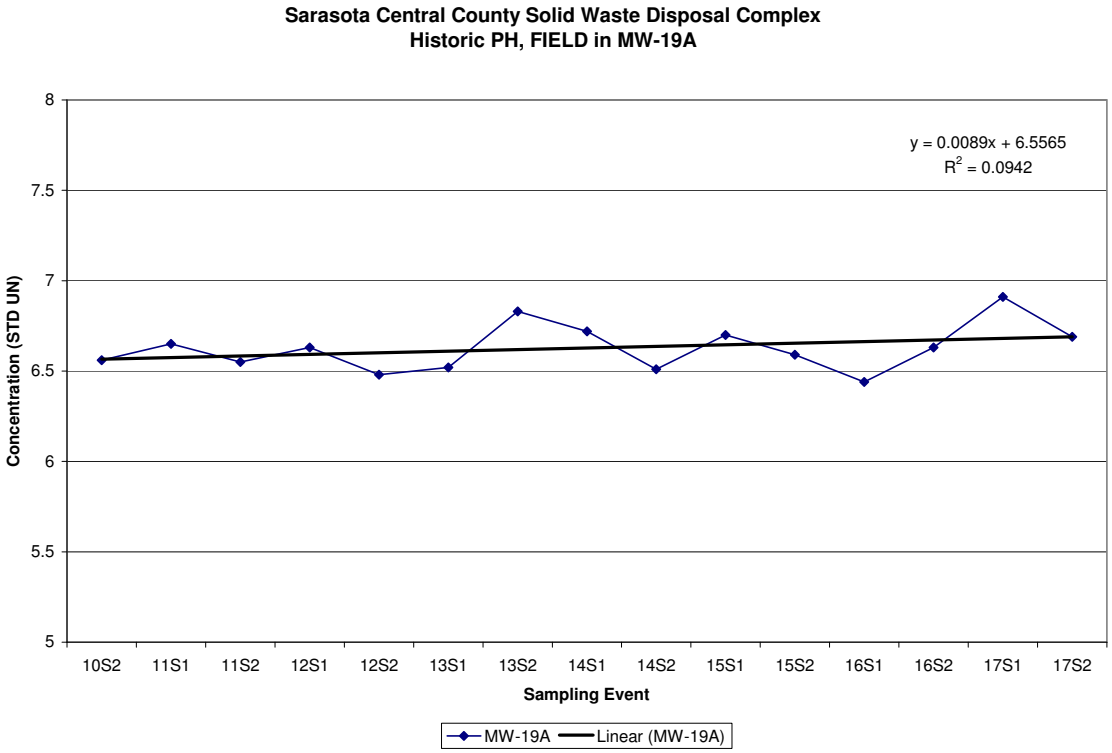

Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in MW-10R
y = 0.0109x + 6.2309
R2 = 0.3307
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
07S2
08S2
09S2
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S1
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-10R
Linear (MW-10R)

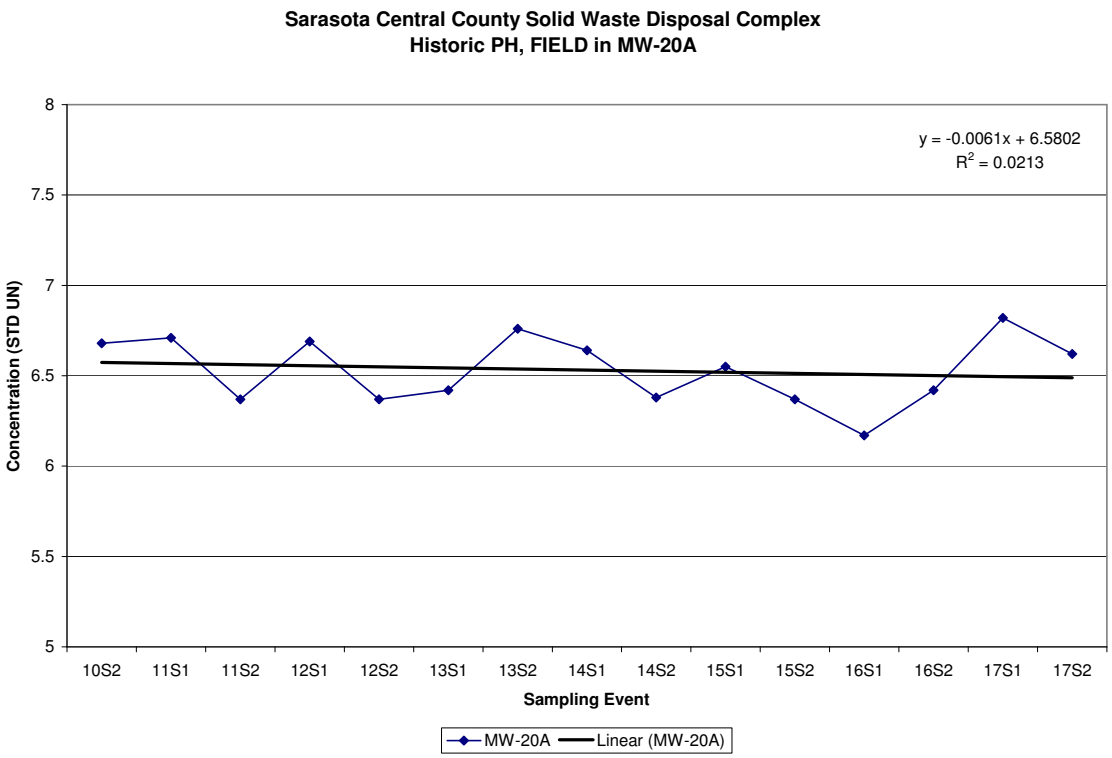

Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in MW-15
y = 0.0158x + 6.2926
R2 = 0.4077
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
09S1
10M4
10S1
10S2
10M12
11S1
11S2
12S1
12S2
13S1
13S2
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-15
Linear (MW-15)


Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in MW-16
y = -0.0028x + 6.3333
R2 = 0.018
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
09S1
10M4
10S1
10S2
10M12
11S1
11M6
11S2
12S2
13S1
13S2
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-16
Linear (MW-16)


Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in MW-17
y = 0.0074x + 6.2276
R2 = 0.1216
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
09S1
10M4
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-17
Linear (MW-17)


Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in MW-18R
y = 0.0189x + 5.9336
R2 = 0.0741
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-18R
Linear (MW-18R)


Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in MW-19A
y = 0.0089x + 6.5565
R2 = 0.0942
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-19A
Linear (MW-19A)

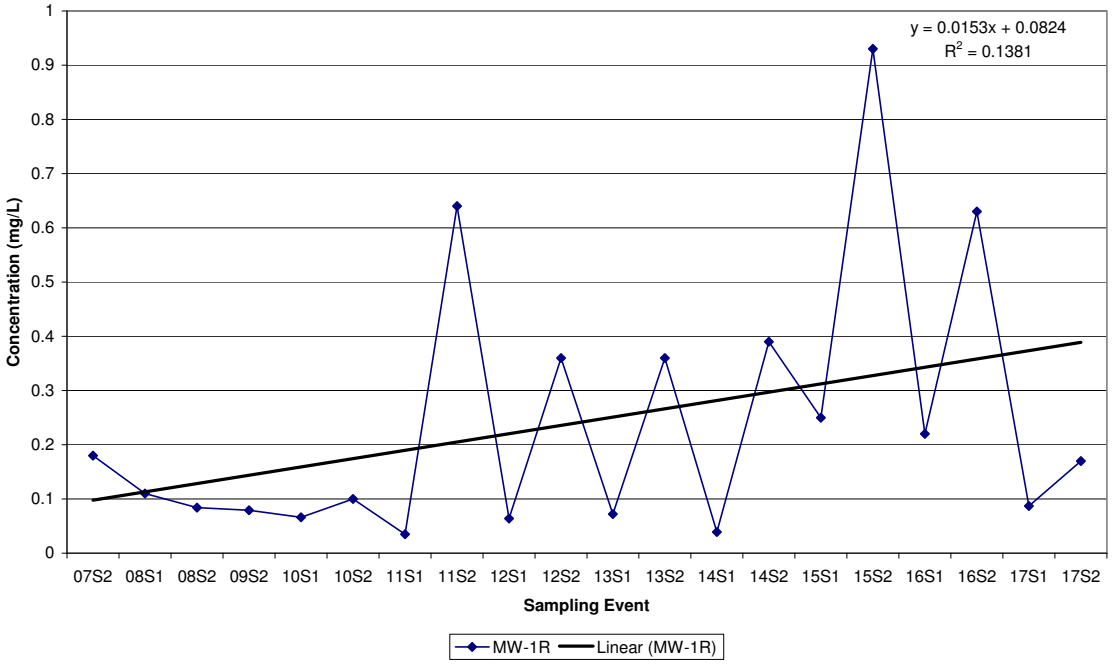

Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in MW-20A
y = -0.0061x + 6.5802
R2 = 0.0213
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-20A
Linear (MW-20A)

Sarasota County

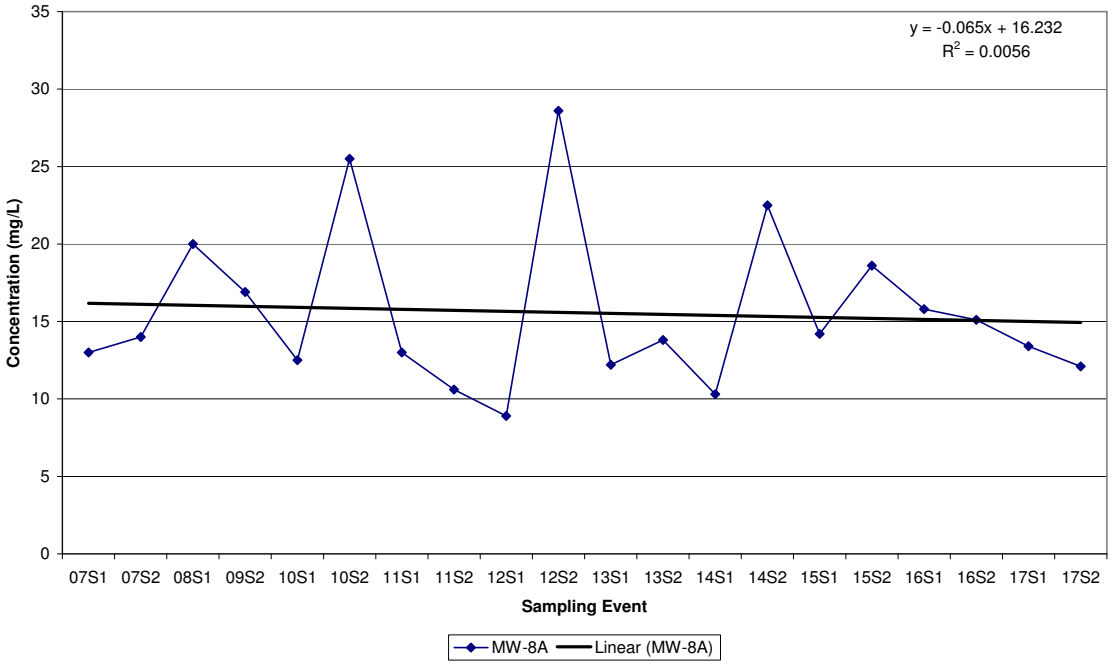
Central County Solid Waste Disposal Complex

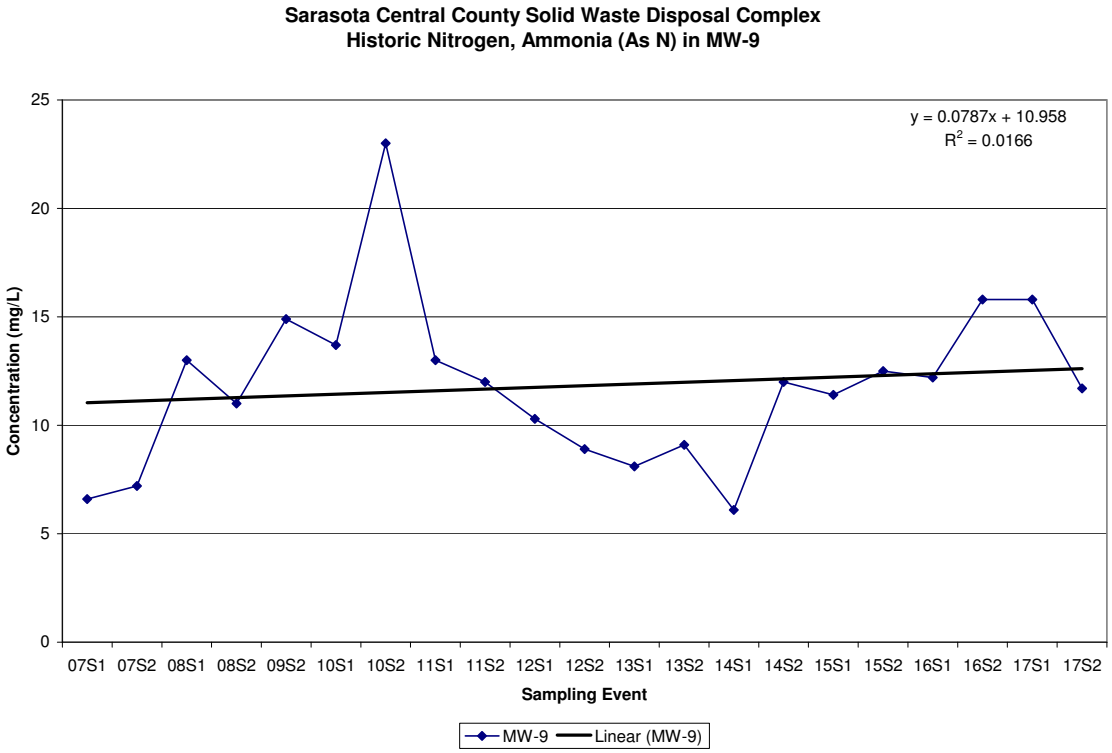
Historical Ammonia-Nitrogen Data

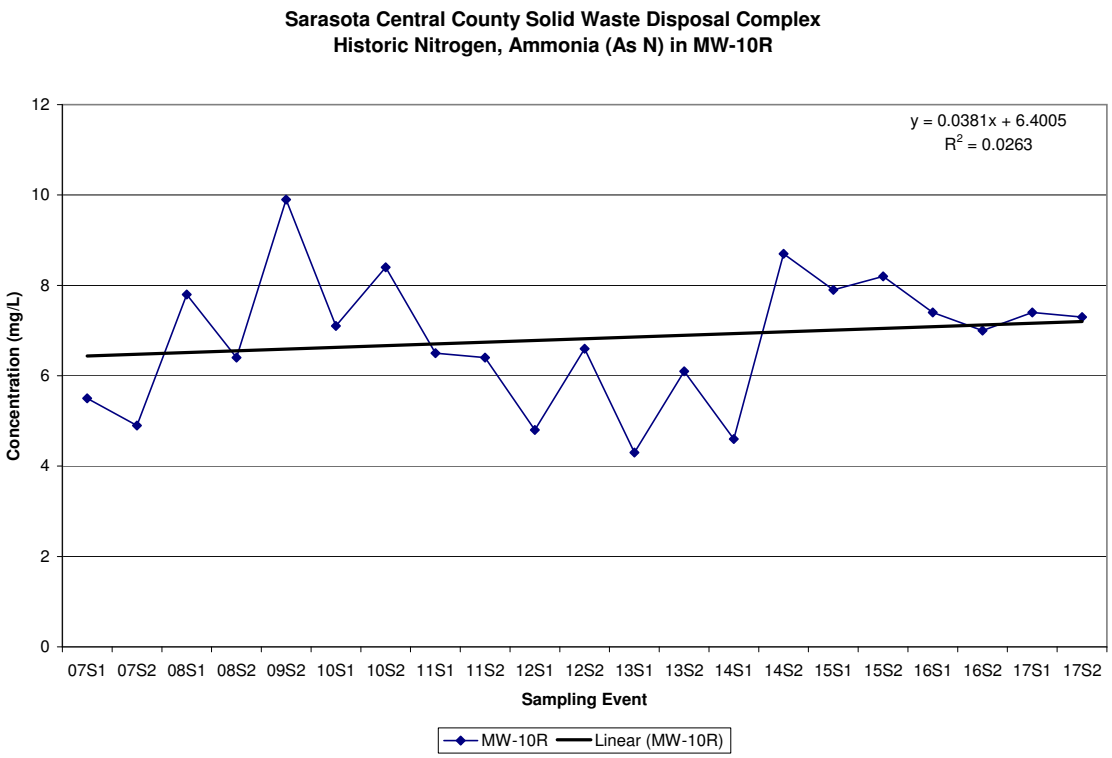
Sarasota Central County Solid Waste Disposal Complex
Historic AMMONIA (NH3) TOTAL AS N in MW-1R

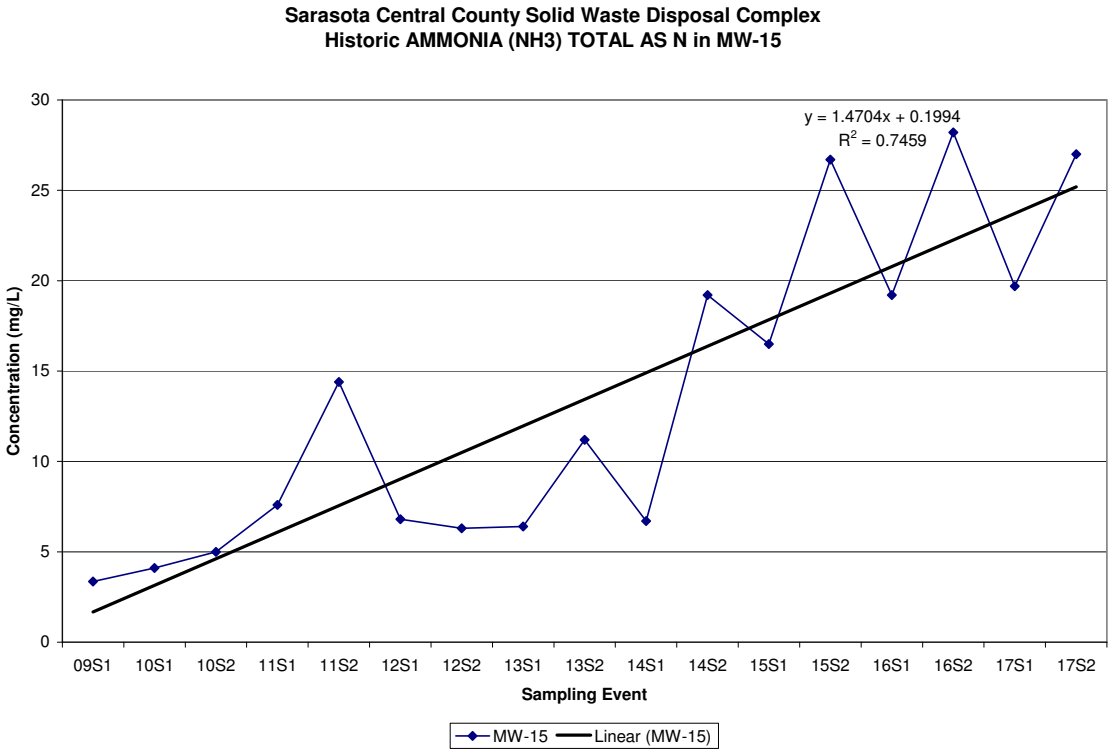


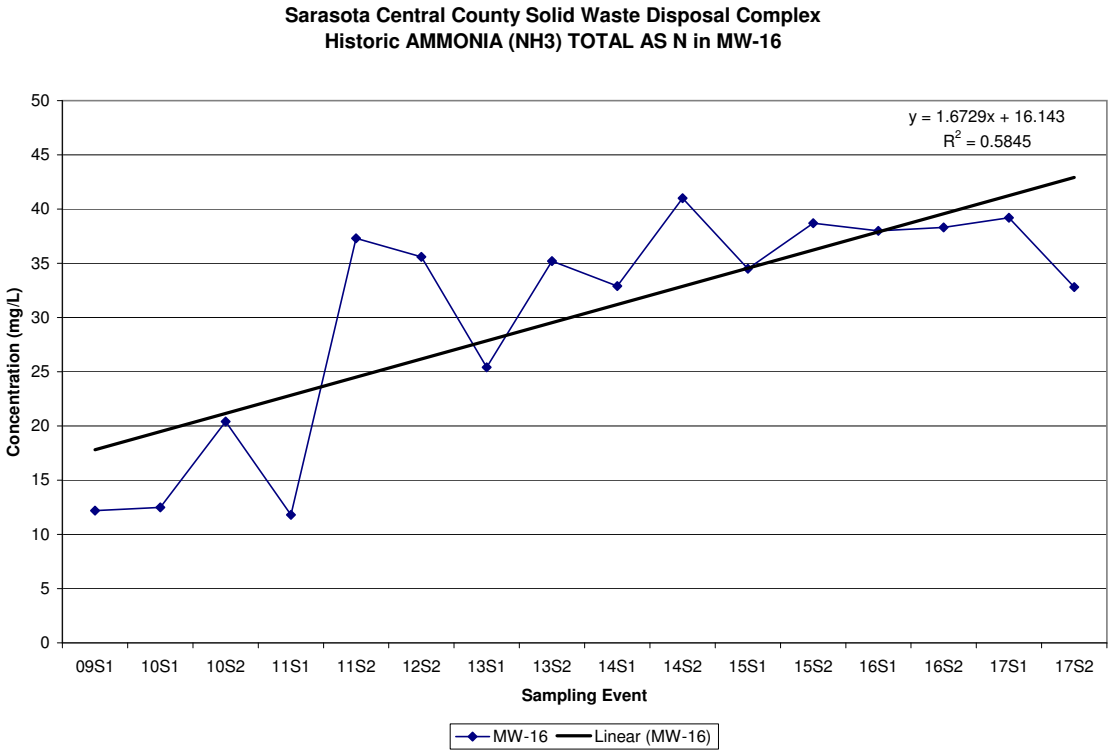
Sarasota Central County Solid Waste Disposal Complex
Historic Nitrogen, Ammonia (As N) in MW-8A

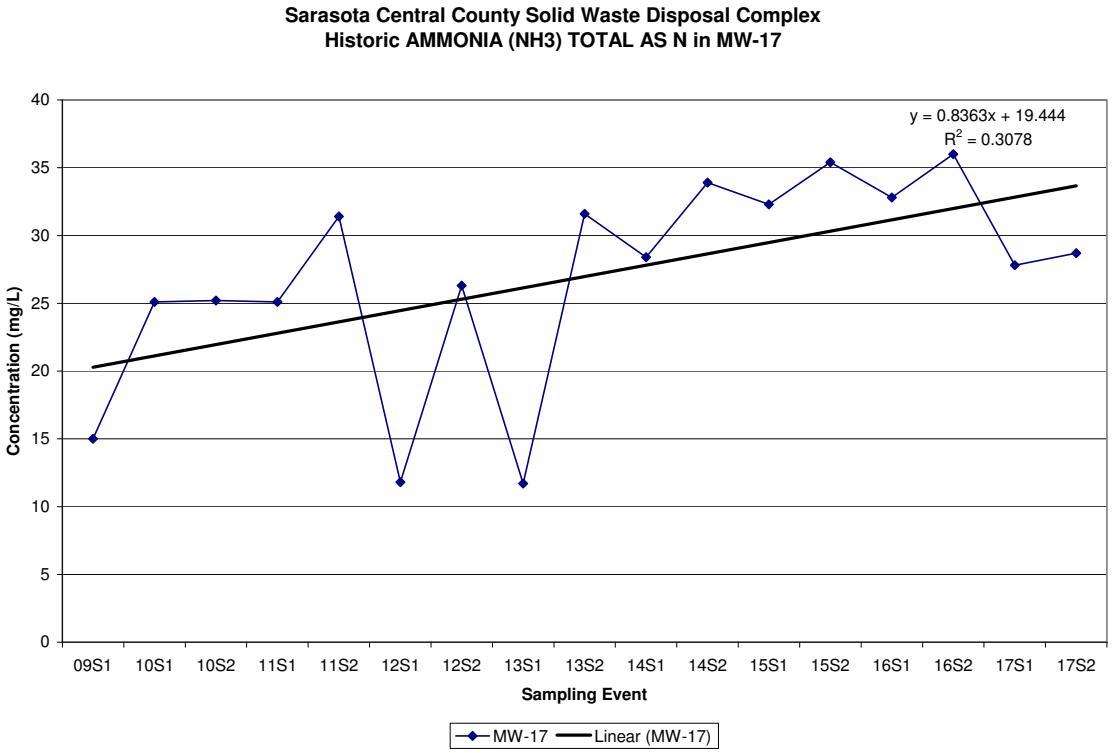


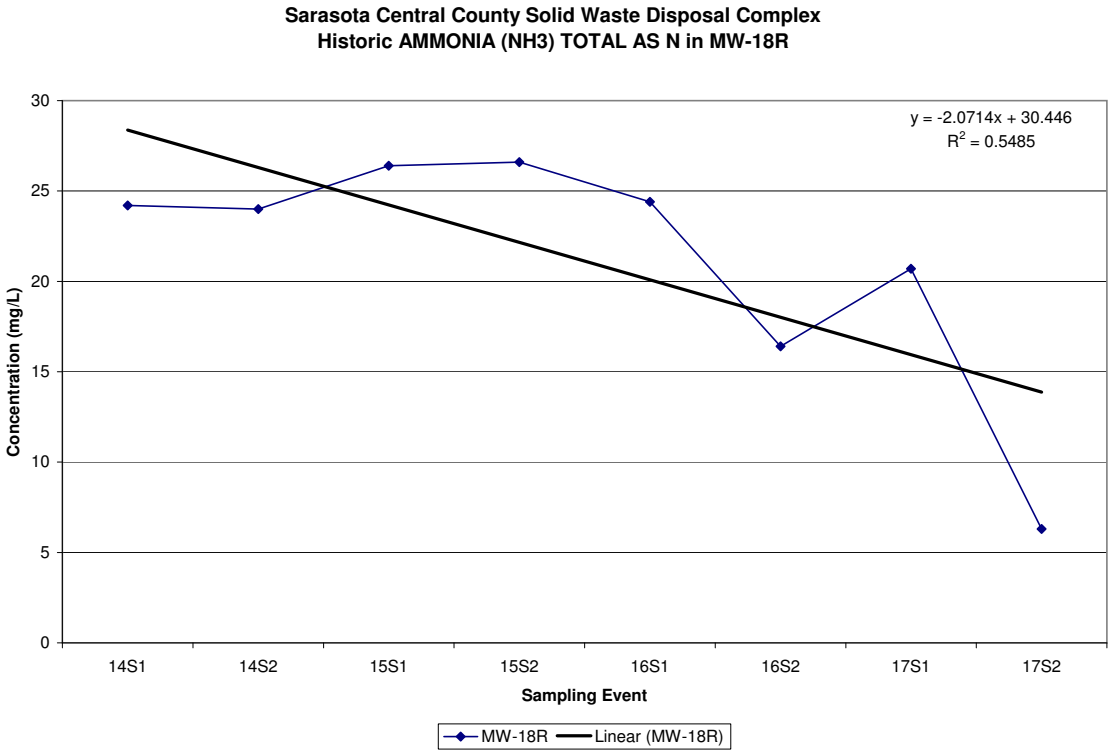

Sarasota Central County Solid Waste Disposal Complex
Historic Nitrogen, Ammonia (As N) in MW-9
y = 0.0787x + 10.958
R2 = 0.0166
Concentration (mg/L)
25
20
15
10
5
0
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-9
Linear (MW-9)

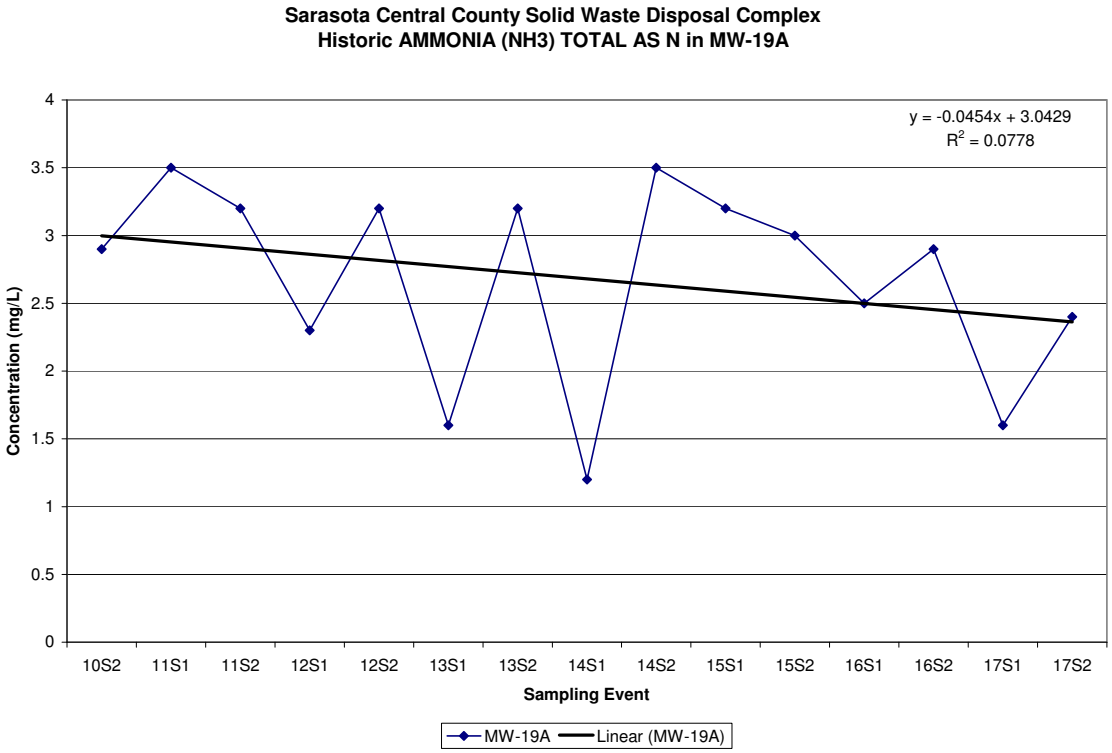

Sarasota Central County Solid Waste Disposal Complex
Historic Nitrogen, Ammonia (As N) in MW-10R
y = 0.0381x + 6.4005
R2 = 0.0263
Concentration (mg/L)
12
10
8
6
4
2
0
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-10R
Linear (MW-10R)

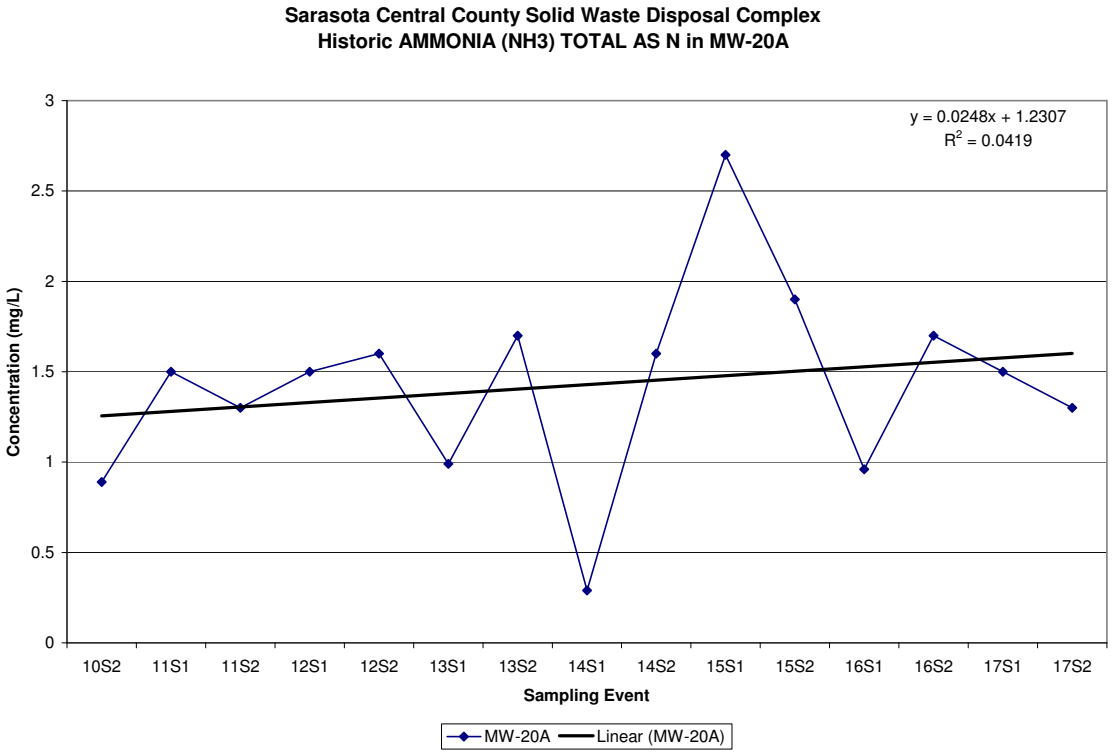

Sarasota Central County Solid Waste Disposal Complex
Historic AMMONIA (NH3) TOTAL AS N in MW-15
y = 1.4704x + 0.1994
R2 = 0.7459
Concentration (mg/L)
0
5
10
15
20
25
30
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-15
Linear (MW-15)


Sarasota Central County Solid Waste Disposal Complex
Historic AMMONIA (NH3) TOTAL AS N in MW-16
y = 1.6729x + 16.143
R2 = 0.5845
Concentration (mg/L)
0
5
10
15
20
25
30
35
40
45
50
09S1
10S1
10S2
11S1
11S2
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-16
Linear (MW-16)


Sarasota Central County Solid Waste Disposal Complex
Historic AMMONIA (NH3) TOTAL AS N in MW-17
y = 0.8363x + 19.444
R2 = 0.3078
Concentration (mg/L)
40
35
30
25
20
15
10
5
0
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-17
Linear (MW-17)


Sarasota Central County Solid Waste Disposal Complex
Historic AMMONIA (NH3) TOTAL AS N in MW-18R
y = -2.0714x + 30.446
R2 = 0.5485
Concentration (mg/L)
30
25
20
15
10
5
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-18R
Linear (MW-18R)

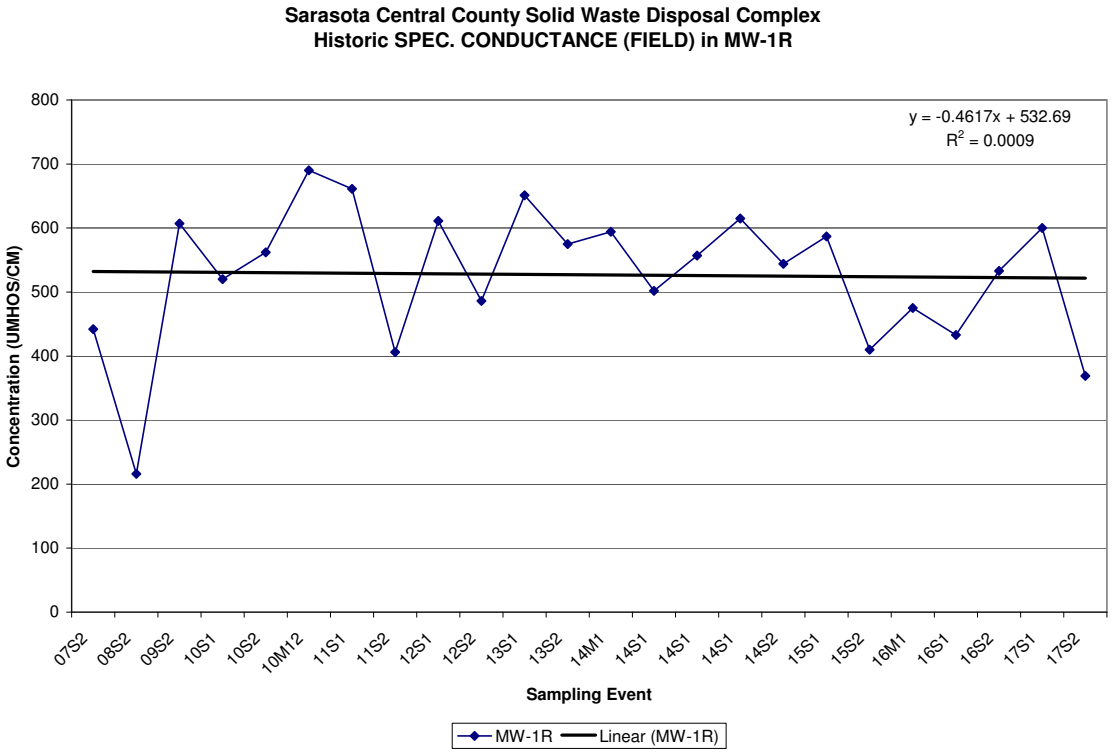

Sarasota Central County Solid Waste Disposal Complex
Historic AMMONIA (NH3) TOTAL AS N in MW-19A
y = -0.0454x + 3.0429
R2 = 0.0778
Concentration (mg/L)
4
3.5
3
2.5
2
1.5
1
0.5
0
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-19A
Linear (MW-19A)

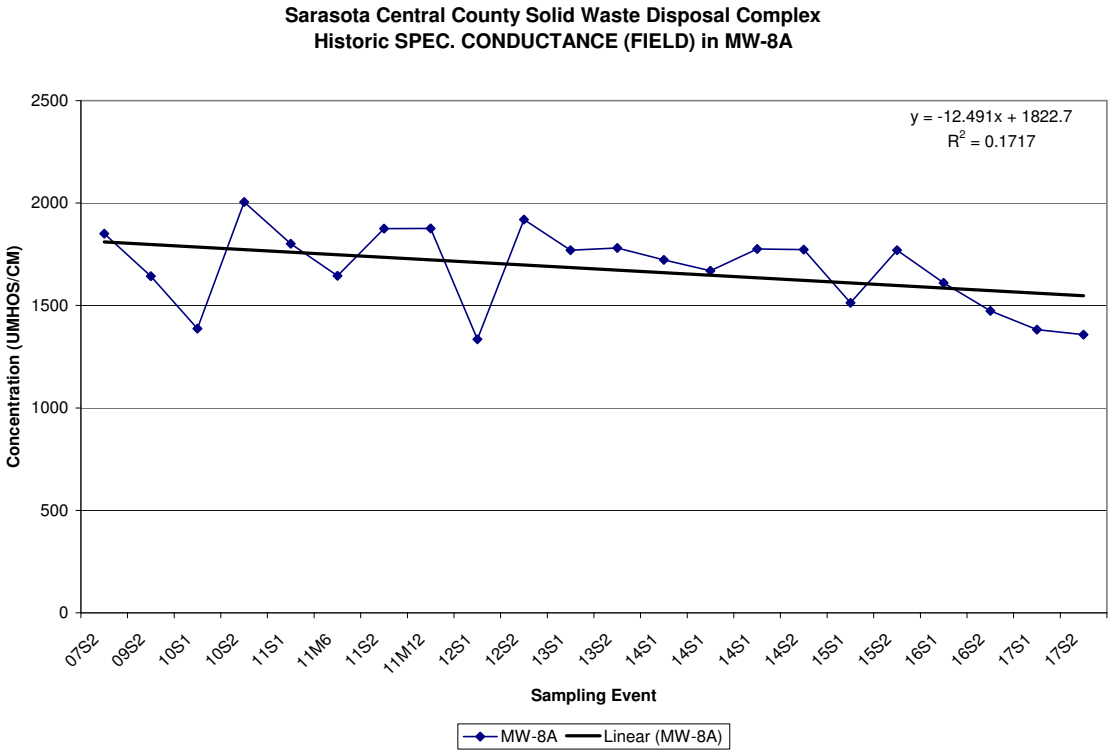

Sarasota Central County Solid Waste Disposal Complex
Historic AMMONIA (NH3) TOTAL AS N in MW-20A
y = 0.0248x + 1.2307
R2 = 0.0419
Concentration (mg/L)
3
2.5
2
1.5
1
0.5
0
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-20A
Linear (MW-20A)

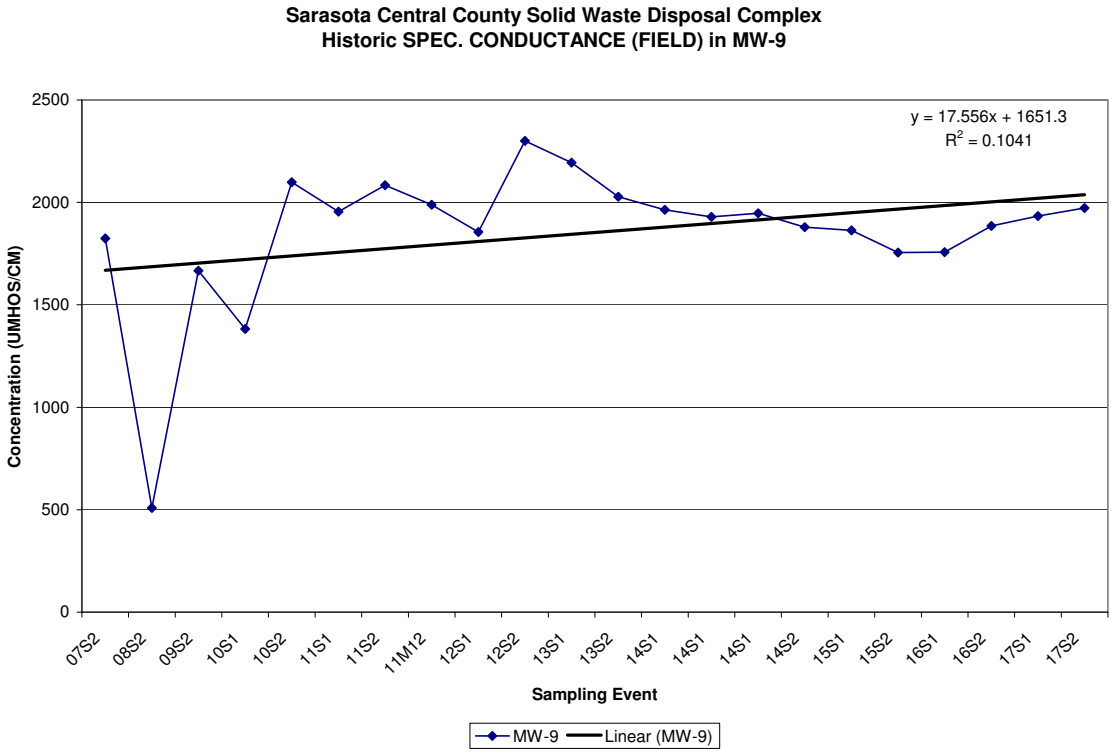
Sarasota County

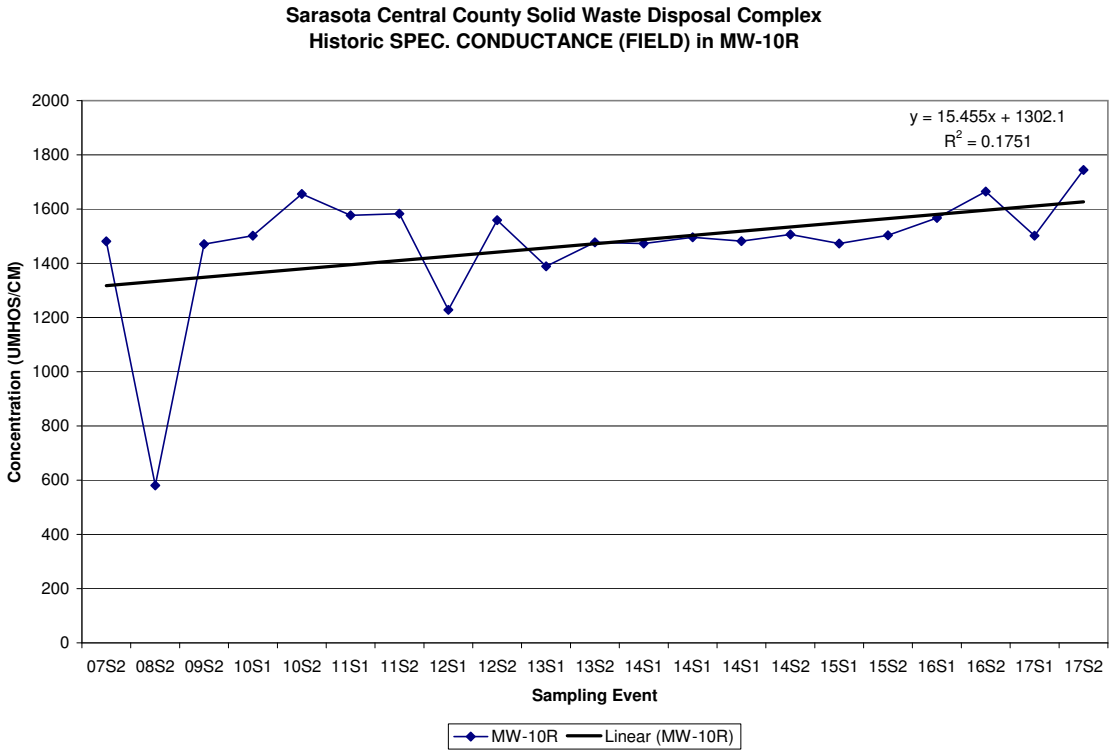
Central County Solid Waste Disposal Complex

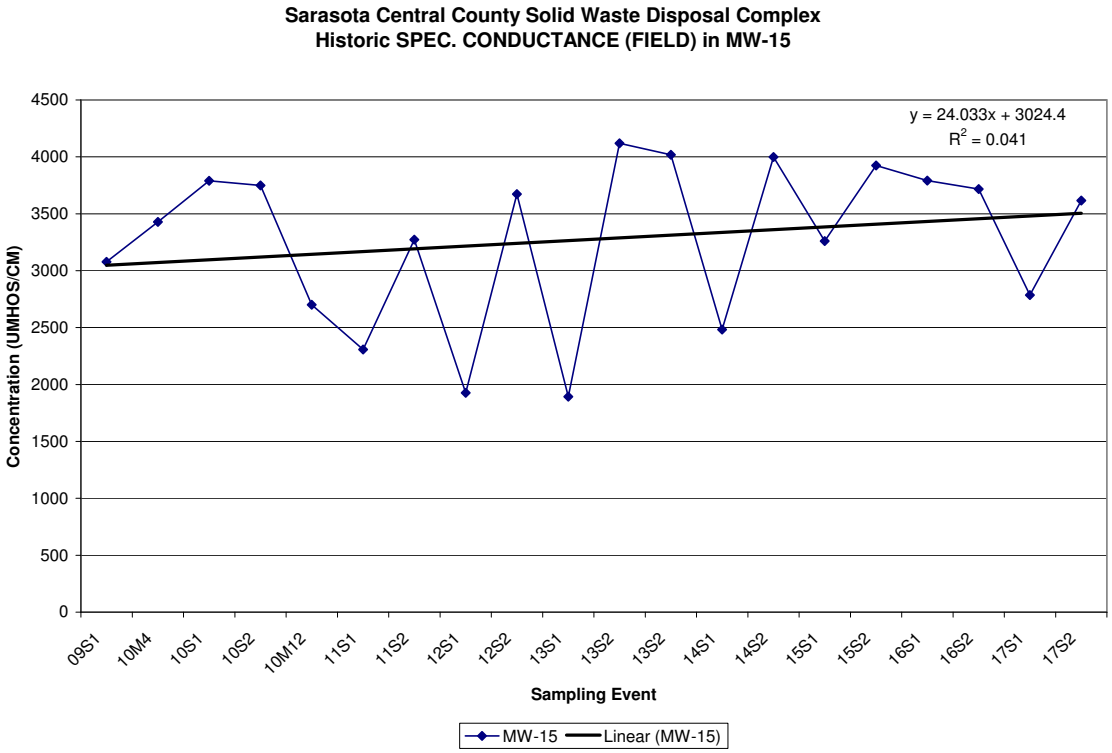
Historical Conductivity Data

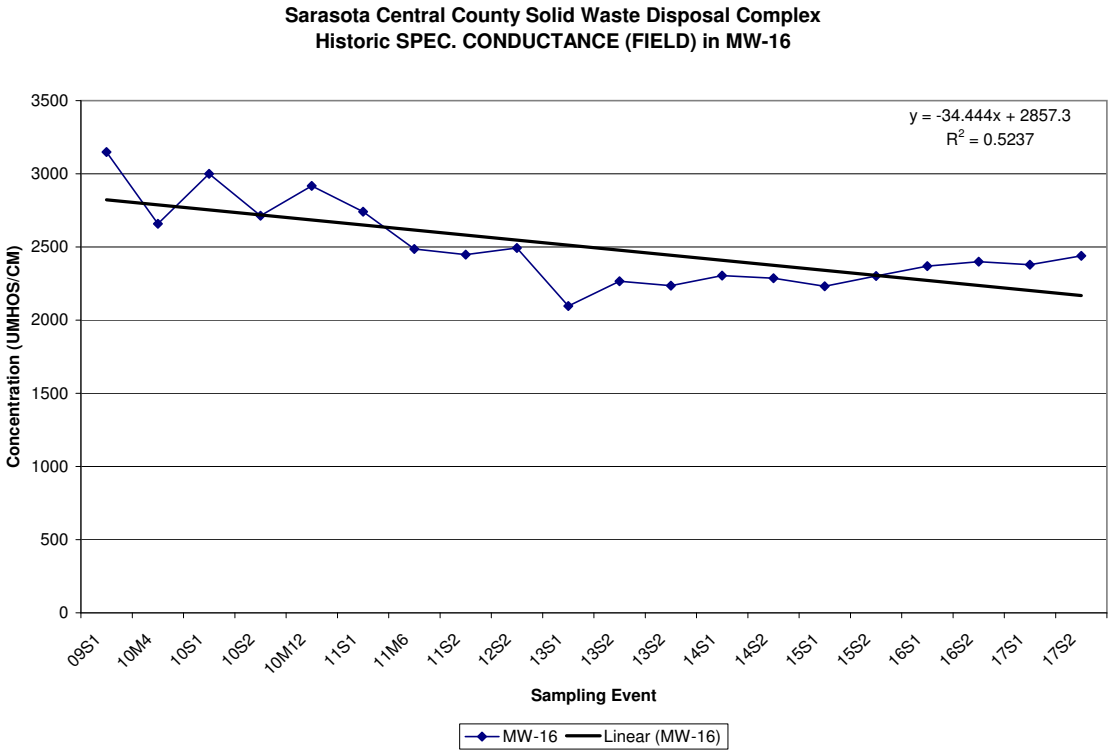

Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in MW-1R
y = -0.4617x + 532.69
R2 = 0.0009
Concentration (UMHOS/CM)
800
700
600
500
400
300
200
100
0
07S2
08S2
09S2
10S1
10S2
10M12
11S1
11S2
12S1
12S2
13S1
13S2
14M1
14S1
14S1
14S1
14S2
15S1
15S2
16M1
16S1
16S2
17S1
17S2
Sampling Event
MW-1R
Linear (MW-1R)

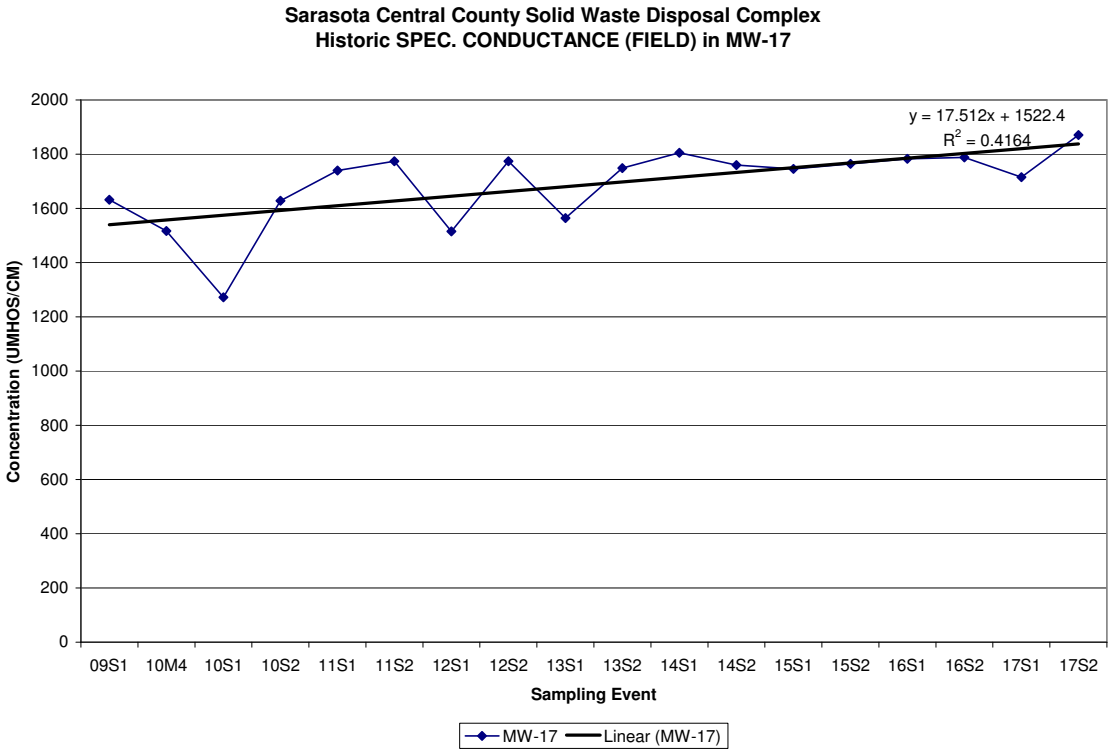

Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in MW-8A
y = -12.491x + 1822.7
R2 = 0.1717
Concentration (UMHOS/CM)
2500
2000
1500
1000
500
0
07S2
09S2
10S1
10S2
11S1
11M6
11S2
11M12
12S1
12S2
13S1
13S2
14S1
14S1
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-8A
Linear (MW-8A)

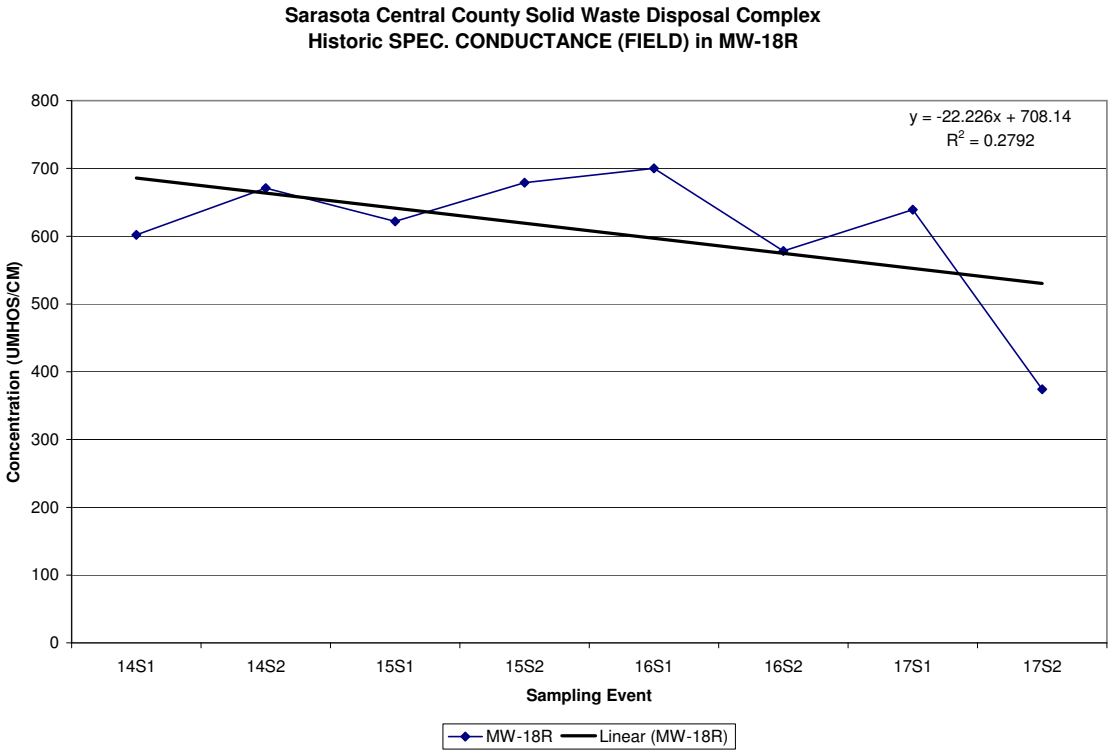

Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in MW-9
y = 17.556x + 1651.3
R2 = 0.1041
Concentration (UMHOS/CM)
2500
2000
1500
1000
500
0
07S2
08S2
09S2
10S1
10S2
11S1
11S2
11M12
12S1
12S2
13S1
13S2
14S1
14S1
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-9
Linear (MW-9)

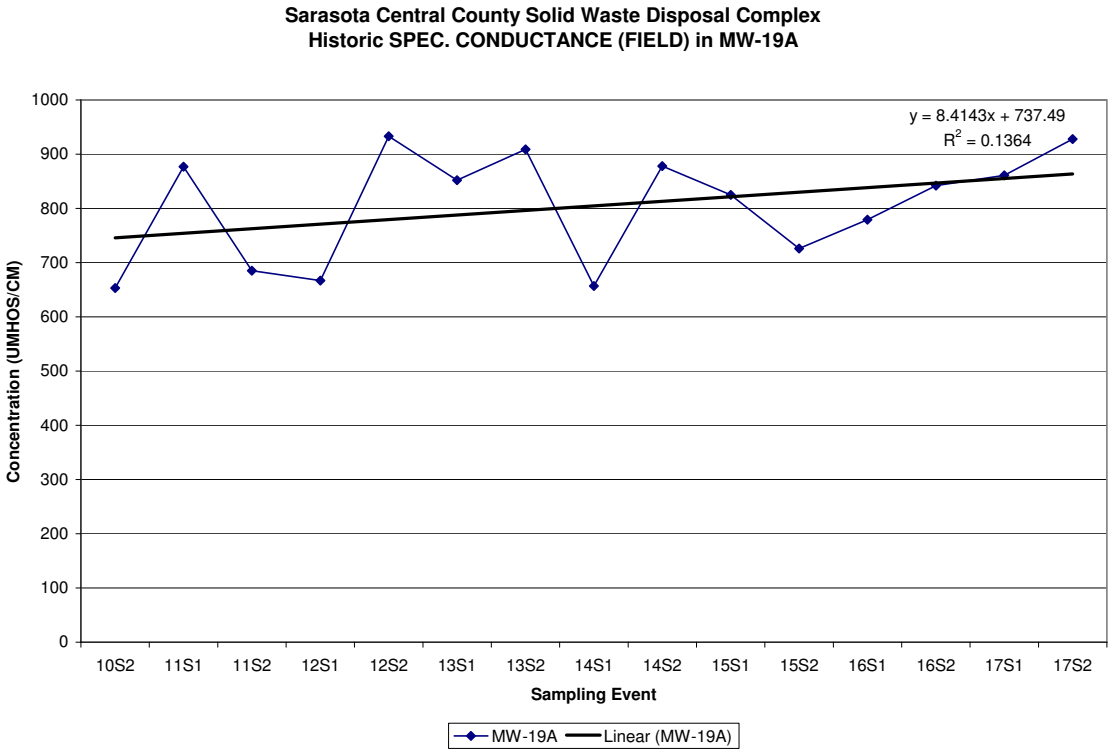

Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in MW-10R
y = 15.455x + 1302.1
R2 = 0.1751
Concentration (UMHOS/CM)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
07S2
08S2
09S2
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S1
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-10R
Linear (MW-10R)

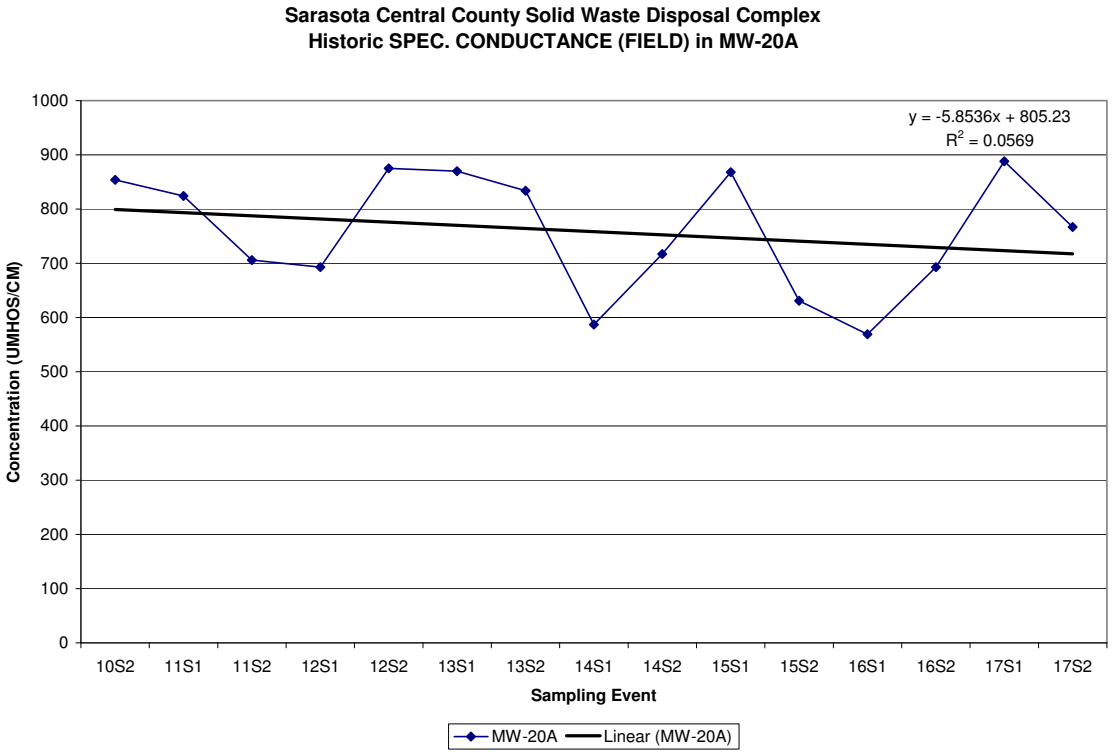

Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in MW-15
y = 24.033x + 3024.4
R2 = 0.041
Concentration (UMHOS/CM)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
09S1
10M4
10S1
10S2
10M12
11S1
11S2
12S1
12S2
13S1
13S2
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-15
Linear (MW-15)


Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in MW-16
y = -34.444x + 2857.3
R2 = 0.5237
Concentration (UMHOS/CM)
3500
3000
2500
2000
1500
1000
500
0
09S1
10M4
10S1
10S2
10M12
11S1
11M6
11S2
12S2
13S1
13S2
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-16
Linear (MW-16)


Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in MW-17
y = 17.512x + 1522.4
R2 = 0.4164
Concentration (UMHOS/CM)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
09S1
10M4
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-17
Linear (MW-17)


Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in MW-18R
y = -22.226x + 708.14
R2 = 0.2792
Concentration (UMHOS/CM)
800
700
600
500
400
300
200
100
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-18R
Linear (MW-18R)

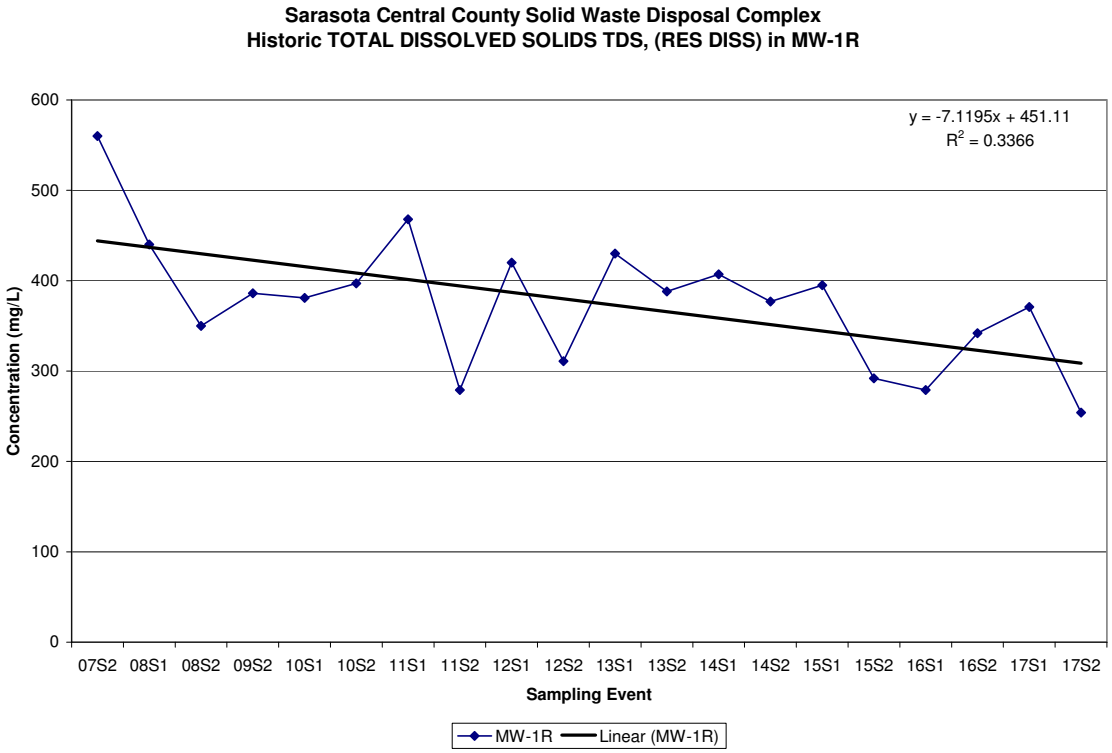

Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in MW-19A
y = 8.4143x + 737.49
R2 = 0.1364
Concentration (UMHOS/CM)
1000
900
800
700
600
500
400
300
200
100
0
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-19A
Linear (MW-19A)

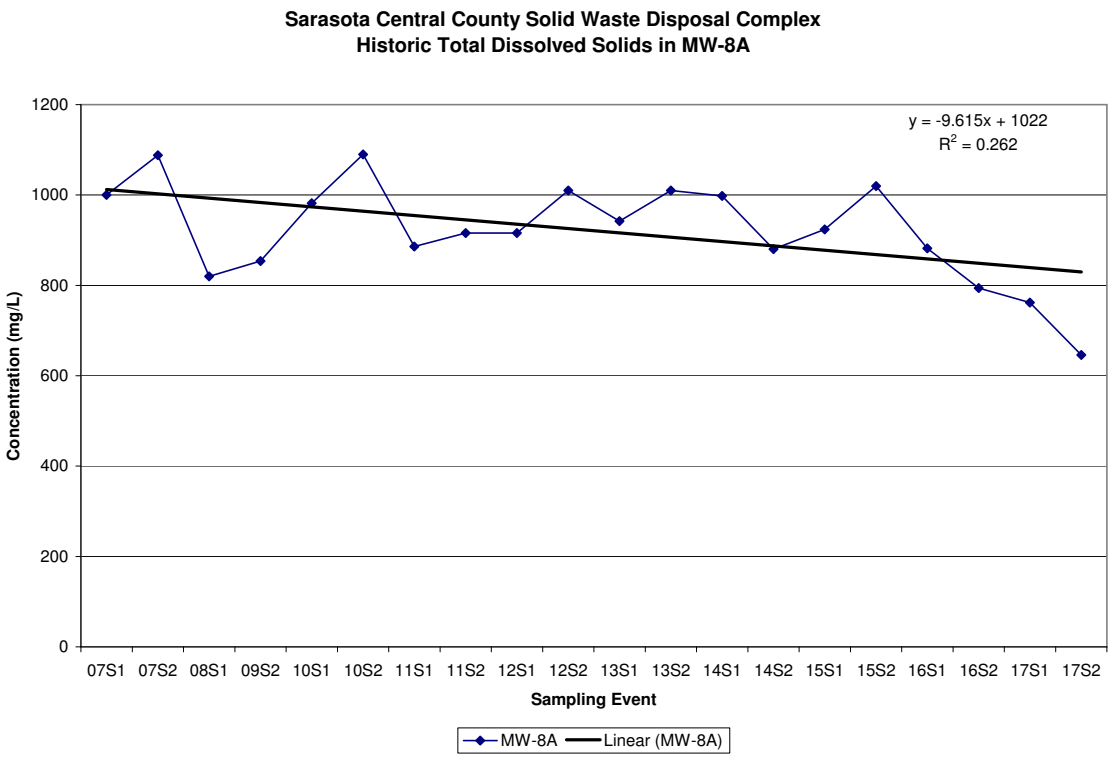

Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in MW-20A
y = -5.8536x + 805.23
R2 = 0.0569
Concentration (UMHOS/CM)
1000
900
800
700
600
500
400
300
200
100
0
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-20A
Linear (MW-20A)

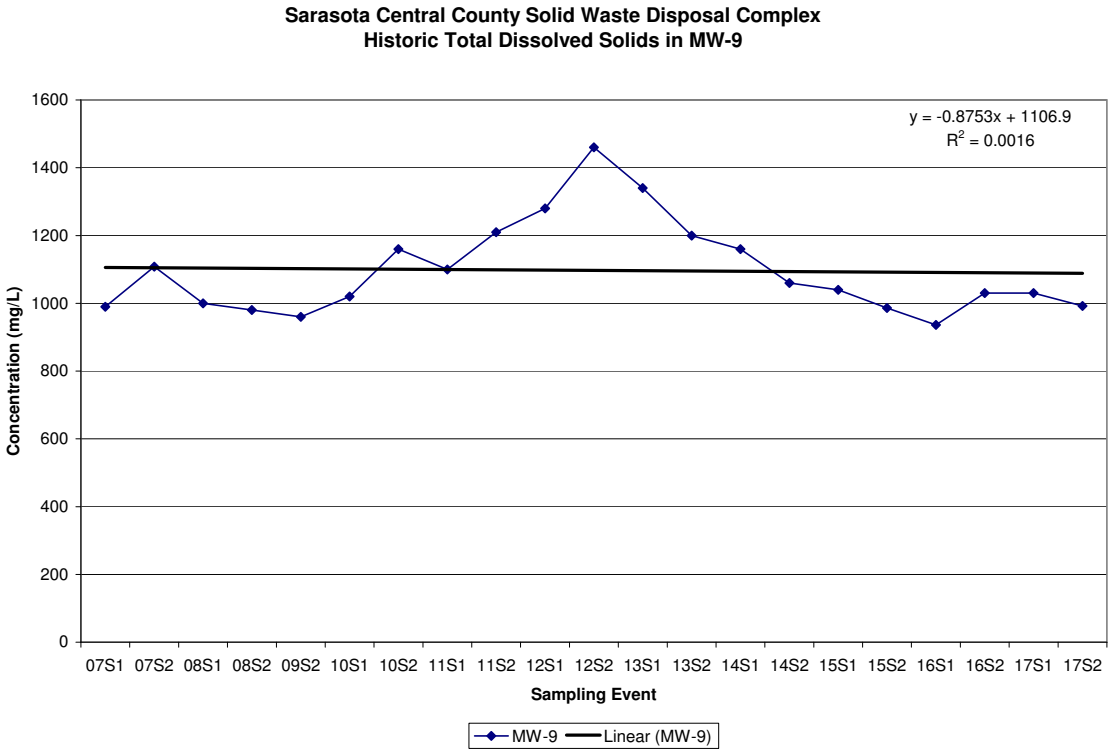
Sarasota County

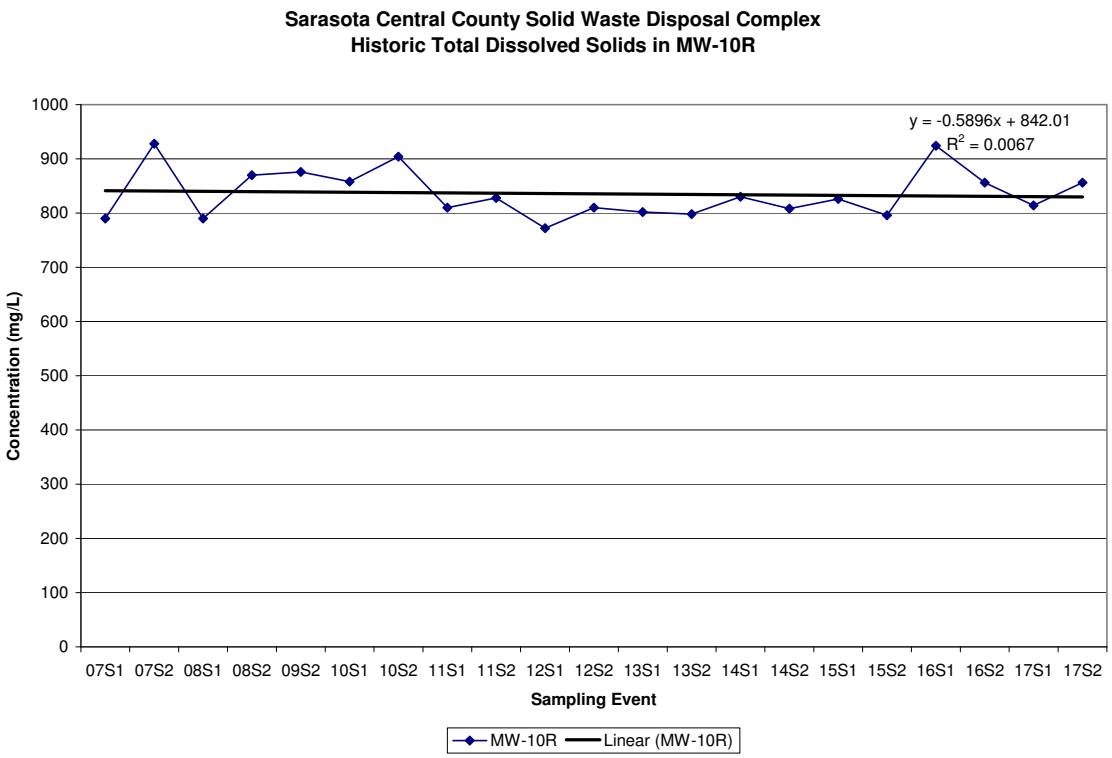
Central County Solid Waste Disposal Complex

Historical Total Dissolved Solids Data

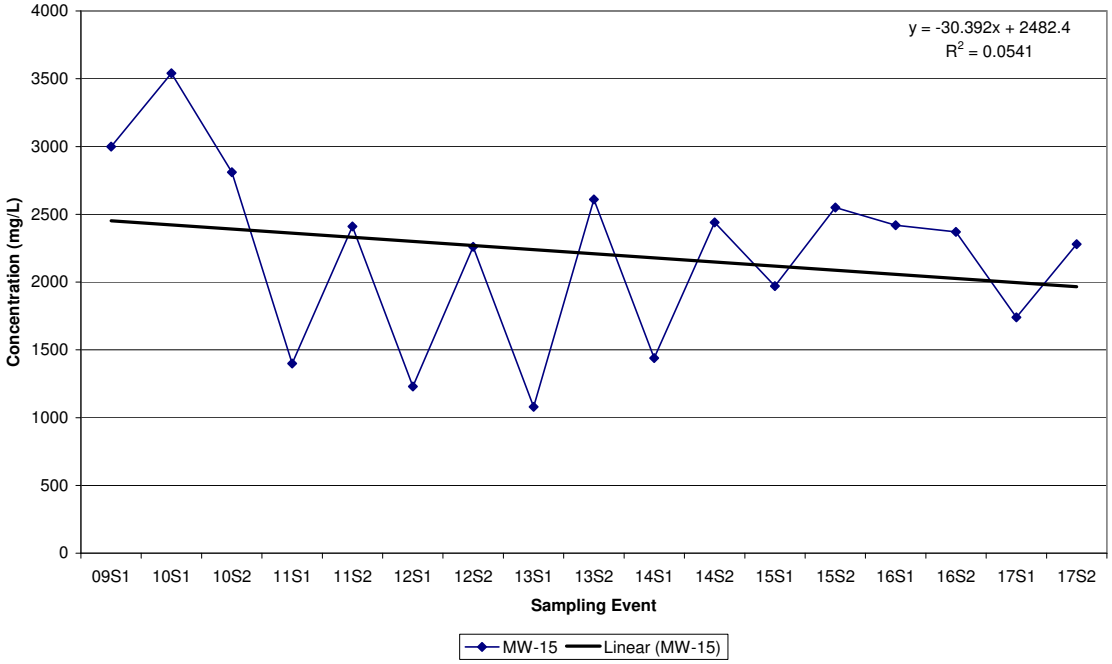

Sarasota Central County Solid Waste Disposal Complex
Historic TOTAL DISSOLVED SOLIDS TDS, (RES DISS) in MW-1R
y = -7.1195x + 451.11
R2 = 0.3366
Concentration (mg/L)
600
500
400
300
200
100
0
07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-1R
Linear (MW-1R)


Sarasota Central County Solid Waste Disposal Complex
Historic Total Dissolved Solids in MW-8A
y = -9.615x + 1022
R2 = 0.262
Concentration (mg/L)
1200
1000
800
600
400
200
0
07S1 07S2 08S1 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-8A
Linear (MW-8A)

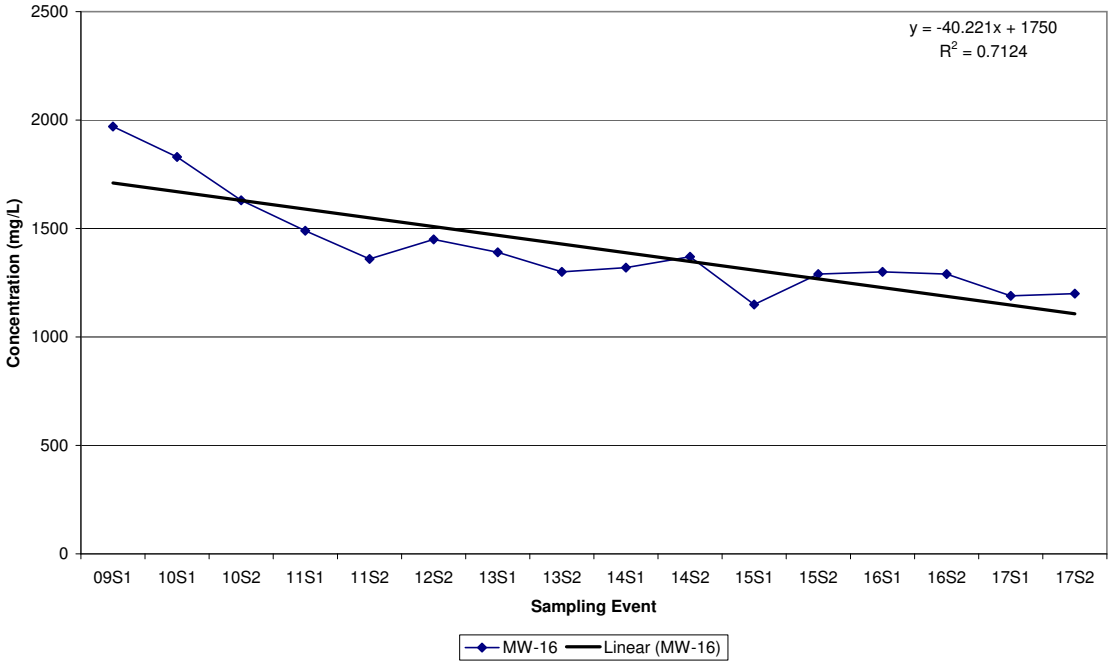

Sarasota Central County Solid Waste Disposal Complex
Historic Total Dissolved Solids in MW-9
y = -0.8753x + 1106.9
R2 = 0.0016
Concentration (mg/L)
1600
1400
1200
1000
800
600
400
200
0
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-9
Linear (MW-9)


Sarasota Central County Solid Waste Disposal Complex
Historic Total Dissolved Solids in MW-10R
y = -0.5896x + 842.01
R2 = 0.0067
Concentration (mg/L)
1000
900
800
700
600
500
400
300
200
100
0
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-10R
Linear (MW-10R)

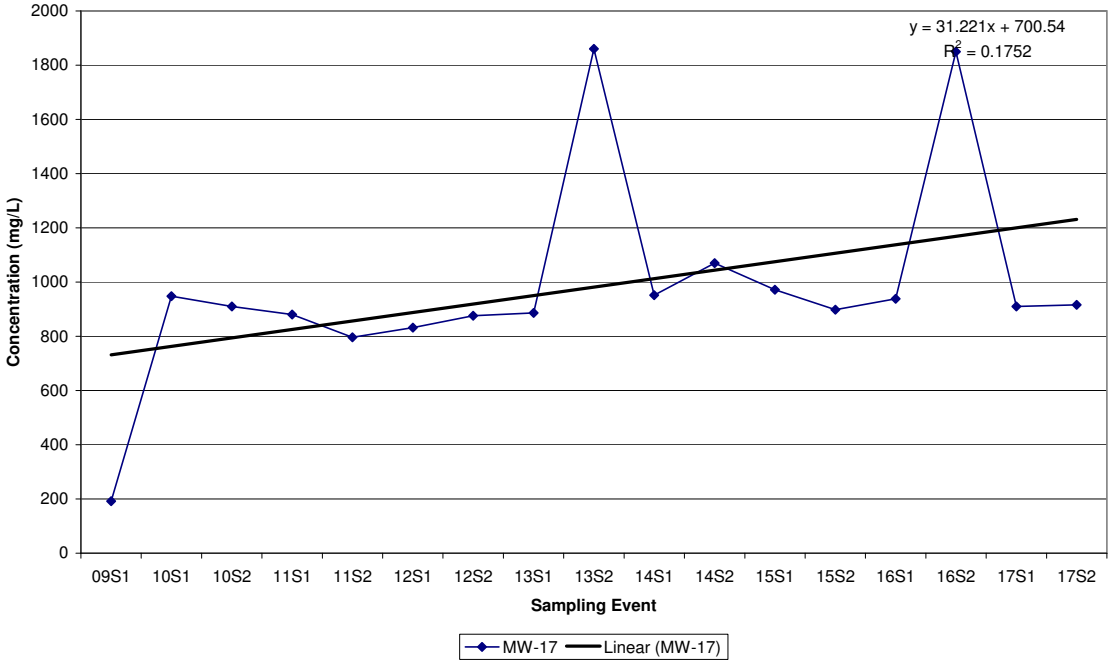
Sarasota Central County Solid Waste Disposal Complex
Historic TOTAL DISSOLVED SOLIDS TDS, (RES DISS) in MW-15



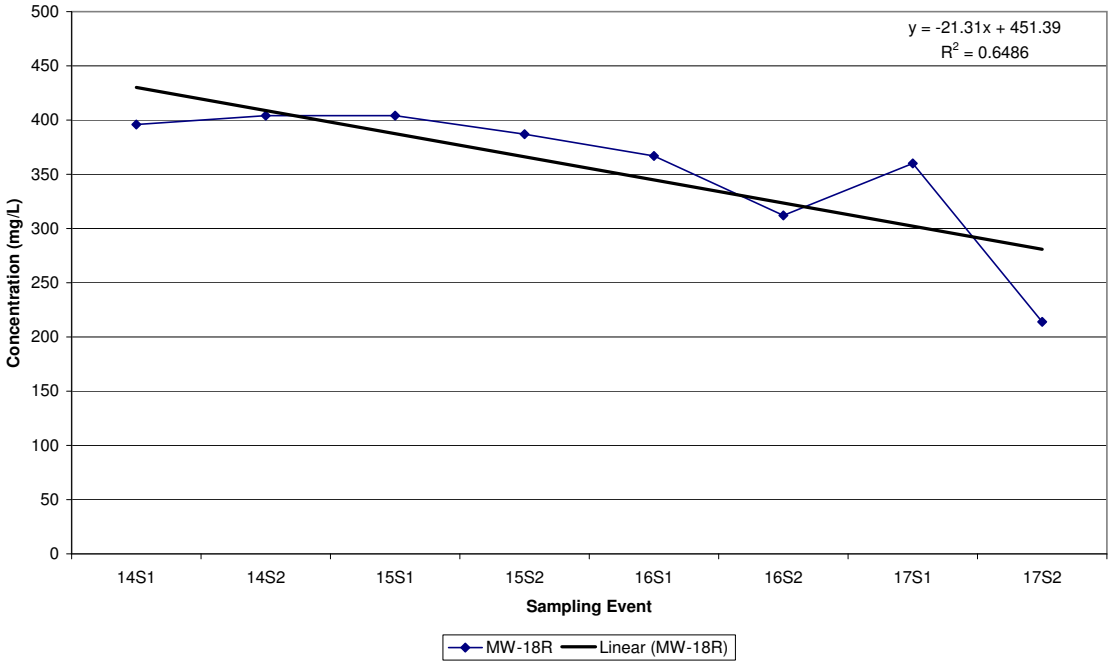
Sarasota Central County Solid Waste Disposal Complex
Historic TOTAL DISSOLVED SOLIDS TDS, (RES DISS) in MW-16



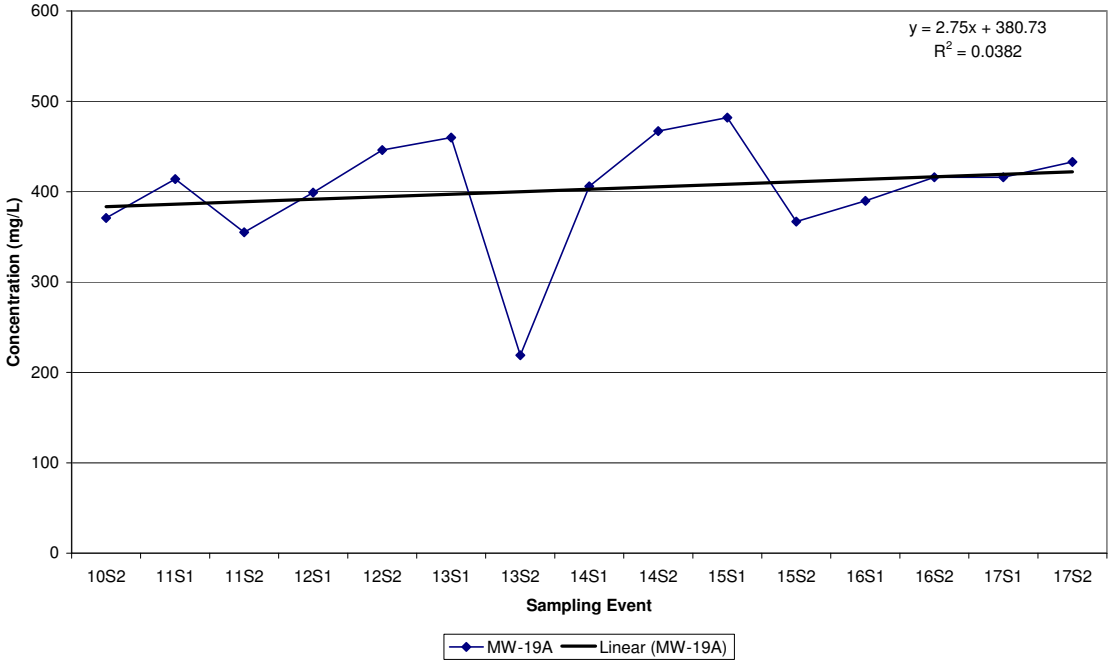
Sarasota Central County Solid Waste Disposal Complex
Historic TOTAL DISSOLVED SOLIDS TDS, (RES DISS) in MW-17



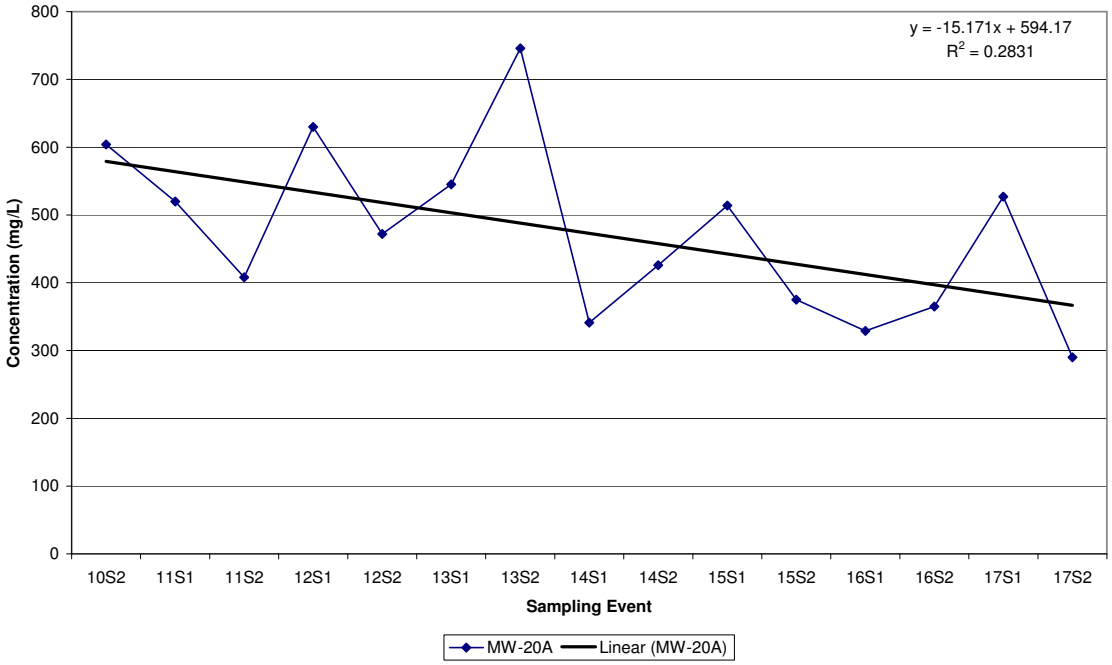
Sarasota Central County Solid Waste Disposal Complex
Historic TOTAL DISSOLVED SOLIDS TDS, (RES DISS) in MW-18R



Sarasota Central County Solid Waste Disposal Complex
Historic TOTAL DISSOLVED SOLIDS TDS, (RES DISS) in MW-19A



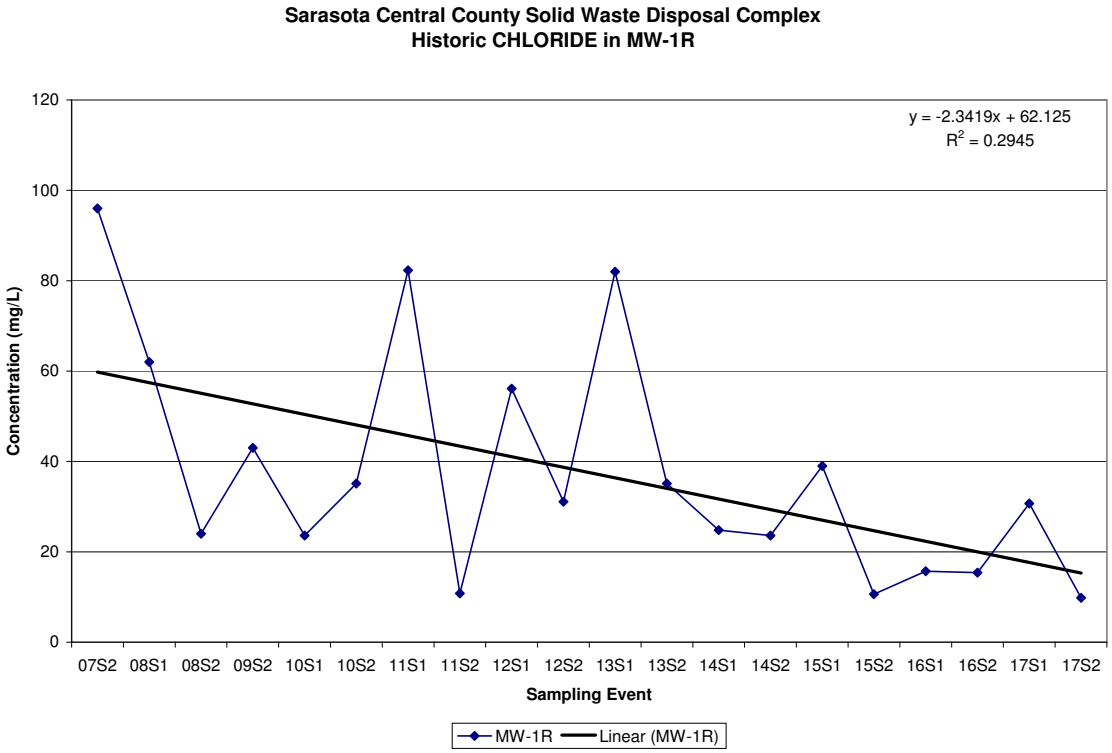
Sarasota Central County Solid Waste Disposal Complex
Historic TOTAL DISSOLVED SOLIDS TDS, (RES DISS) in MW-20A

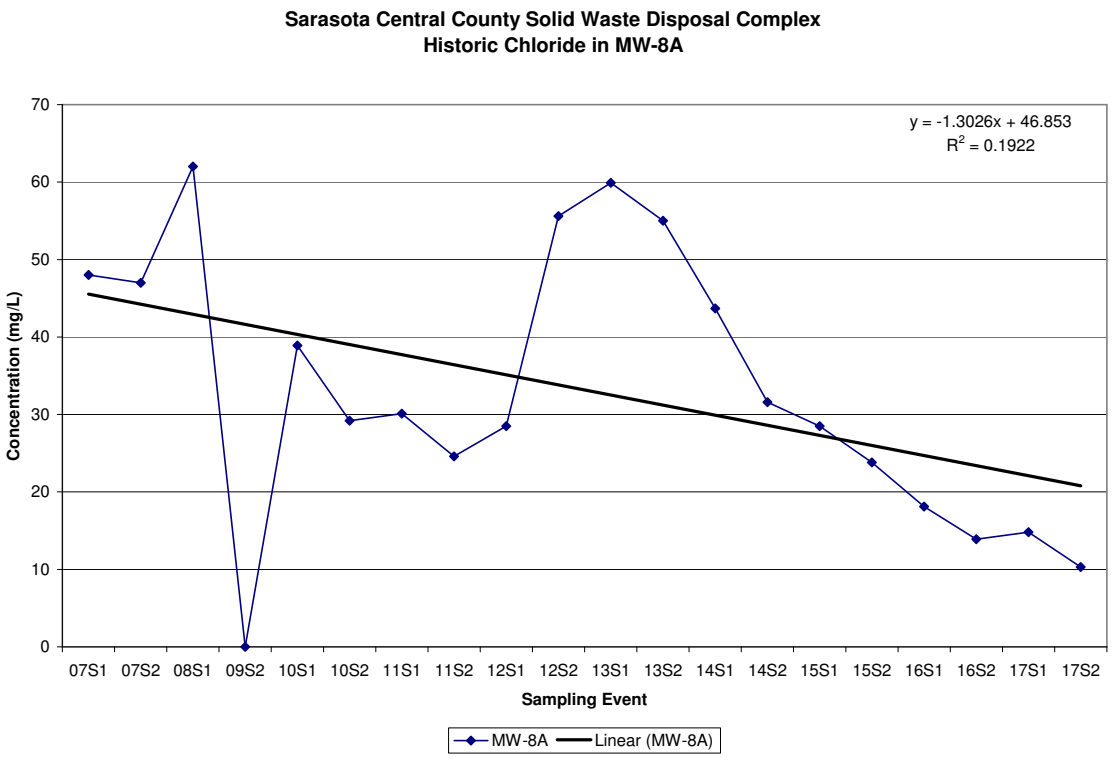


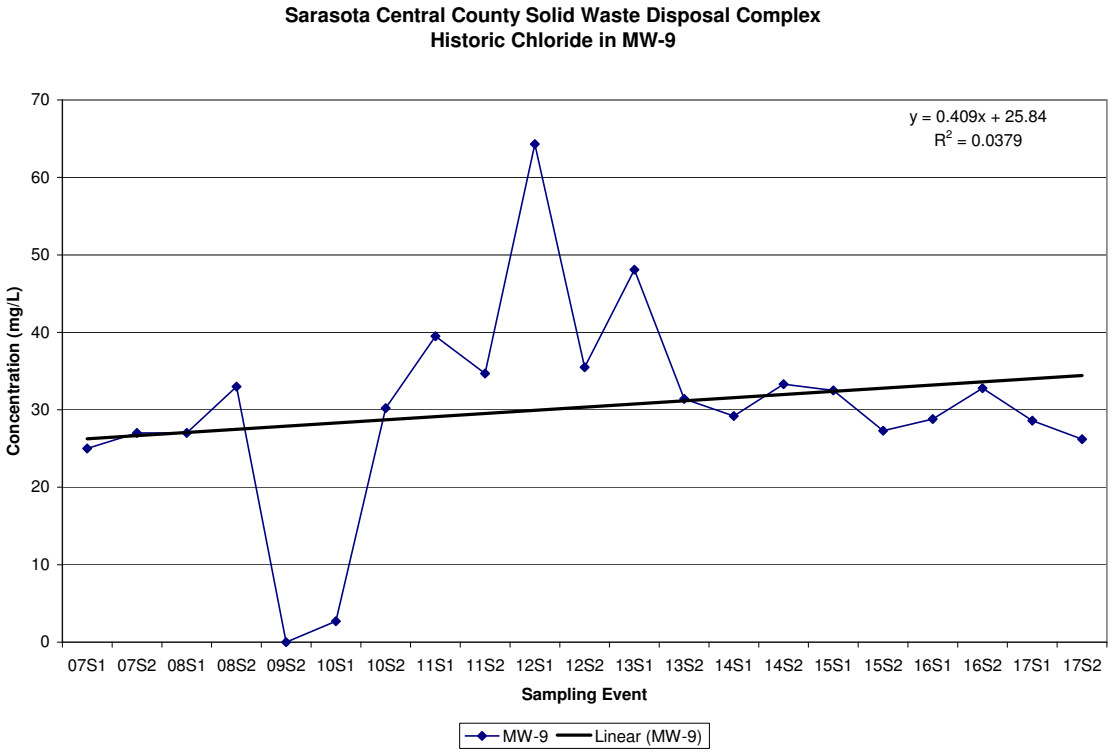
Sarasota County

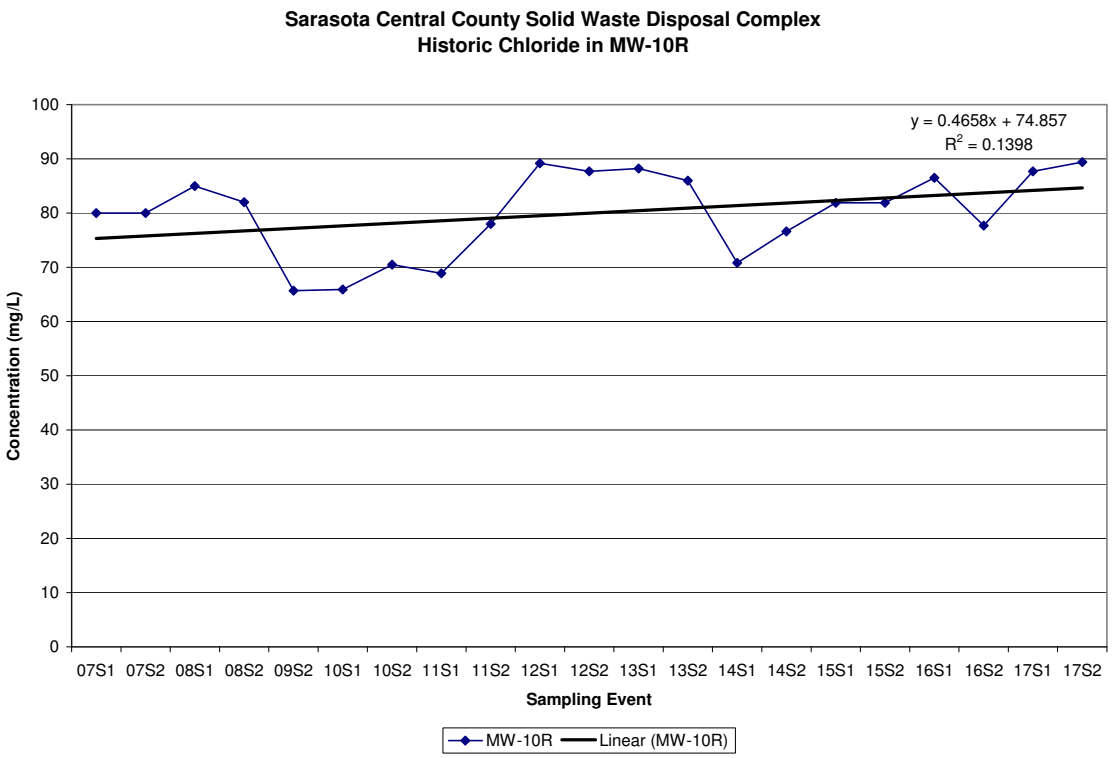
Central County Solid Waste Disposal Complex

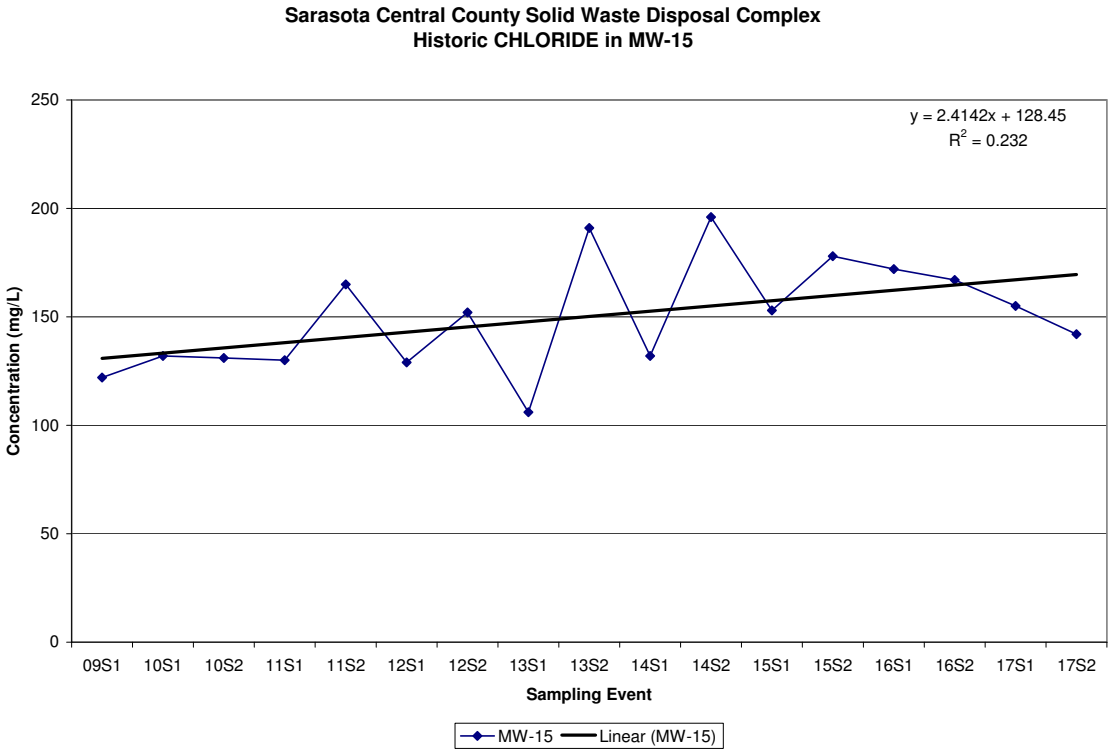
Historical Chloride Data

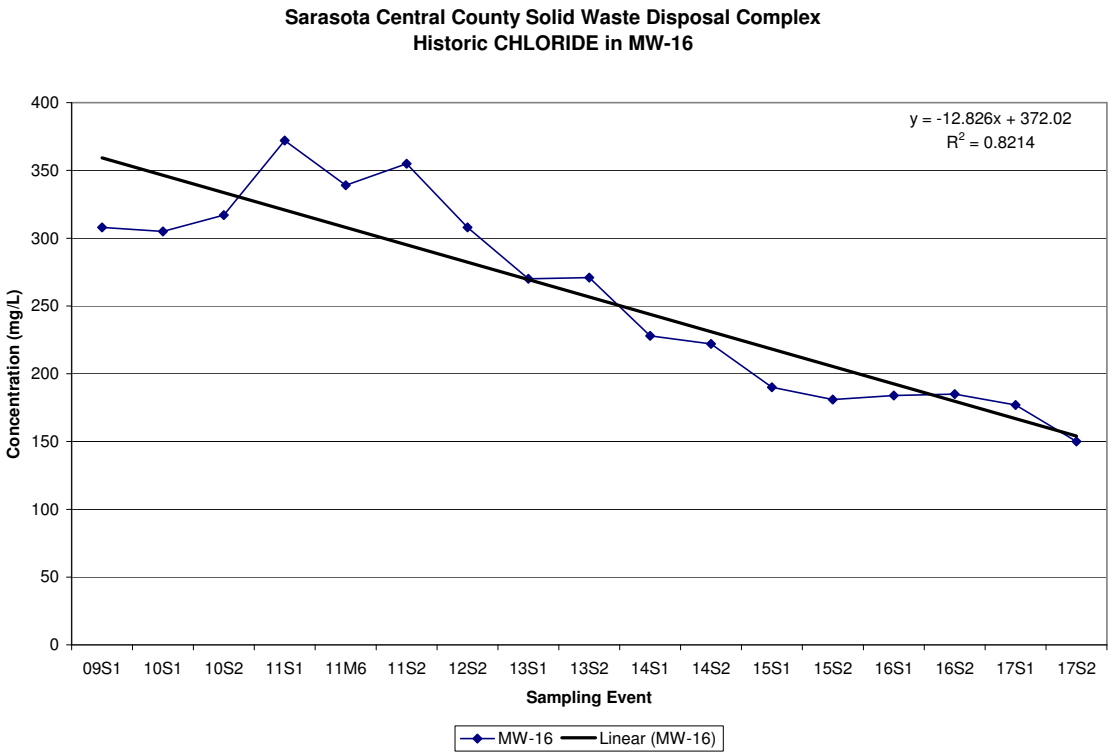

Sarasota Central County Solid Waste Disposal Complex
Historic CHLORIDE in MW-1R
y = -2.3419x + 62.125
R2 = 0.2945
Concentration (mg/L)
120
100
80
60
40
20
0
07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-1R
Linear (MW-1R)

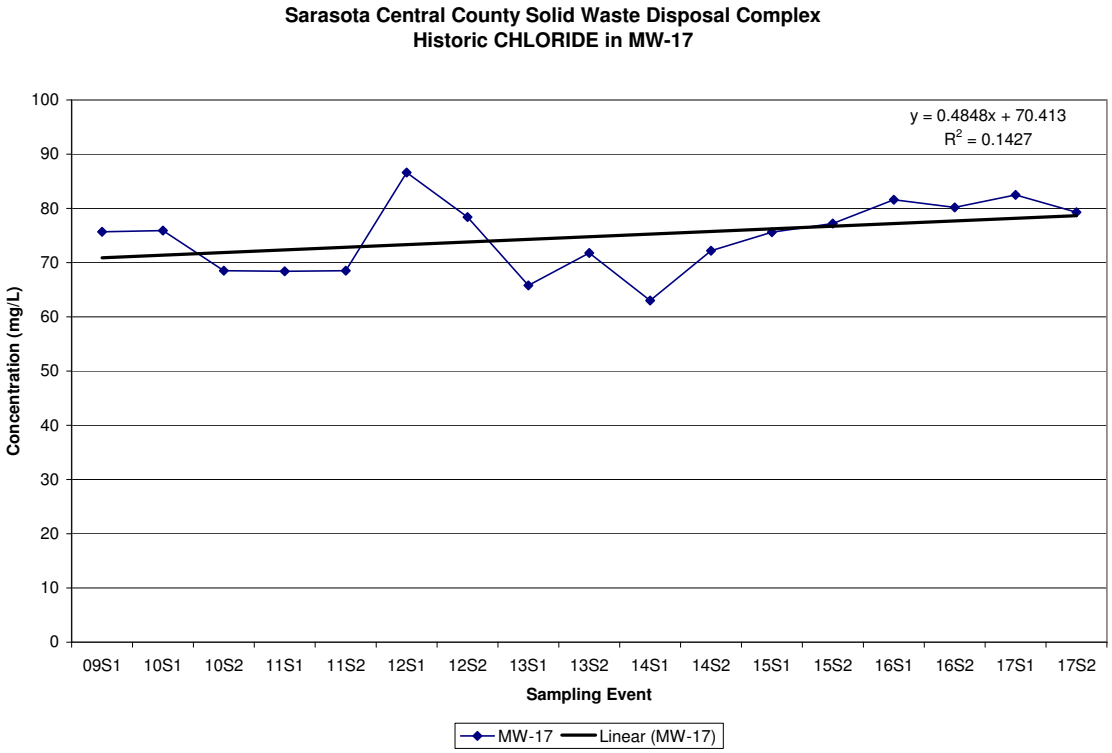

Sarasota Central County Solid Waste Disposal Complex
Historic Chloride in MW-8A
y = -1.3026x + 46.853
R2 = 0.1922
Concentration (mg/L)
70
60
50
40
30
20
10
0
07S1 07S2 08S1 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-8A
Linear (MW-8A)

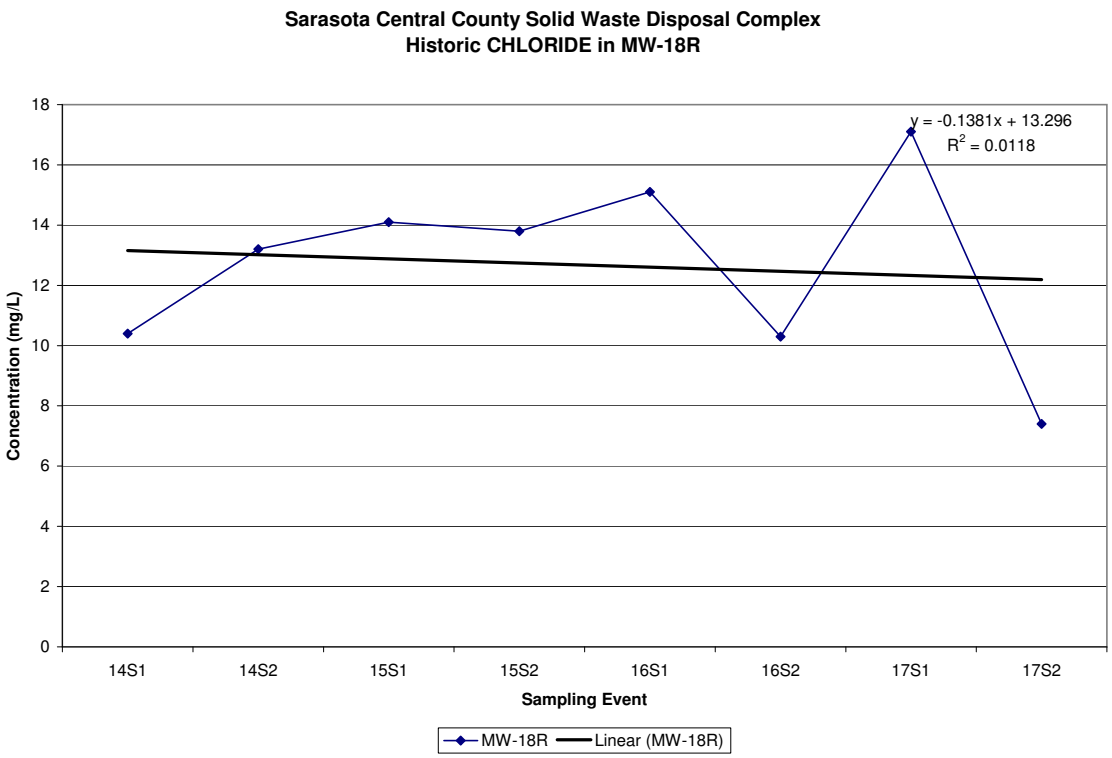

Sarasota Central County Solid Waste Disposal Complex
Historic Chloride in MW-9
y = 0.409x + 25.84
R2 = 0.0379
Concentration (mg/L)
0
10
20
30
40
50
60
70
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-9
Linear (MW-9)

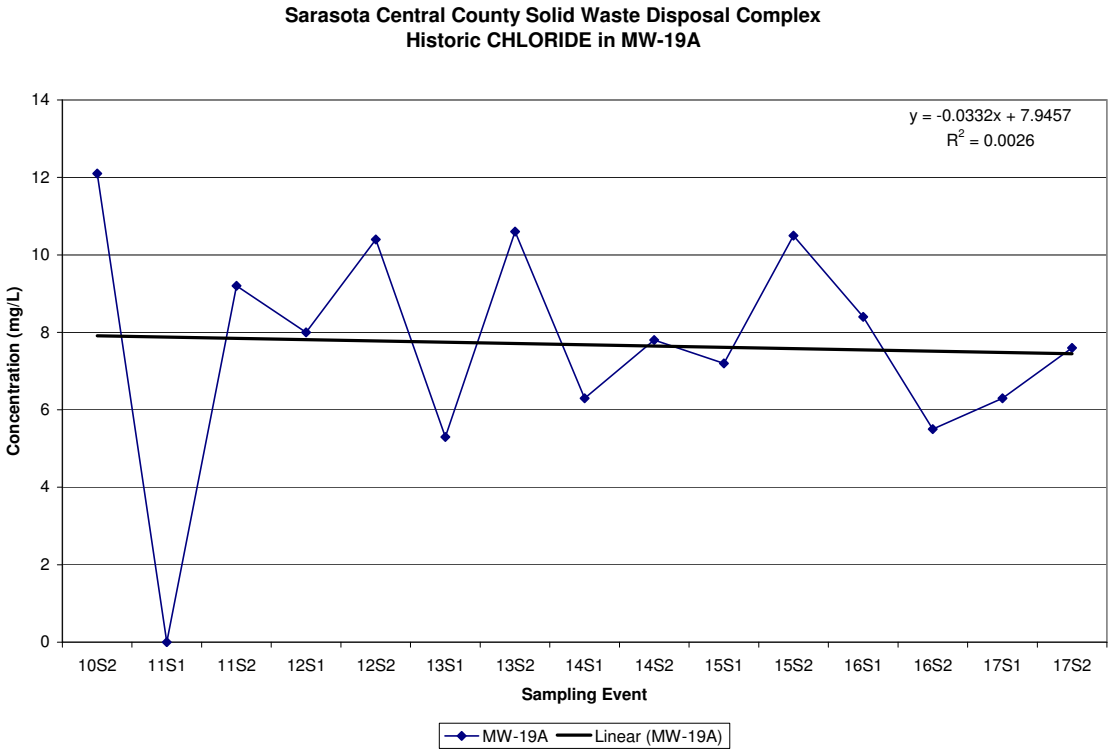

Sarasota Central County Solid Waste Disposal Complex
Historic Chloride in MW-10R
y = 0.4658x + 74.857
R2 = 0.1398
Concentration (mg/L)
0
10
20
30
40
50
60
70
80
90
100
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-10R
Linear (MW-10R)

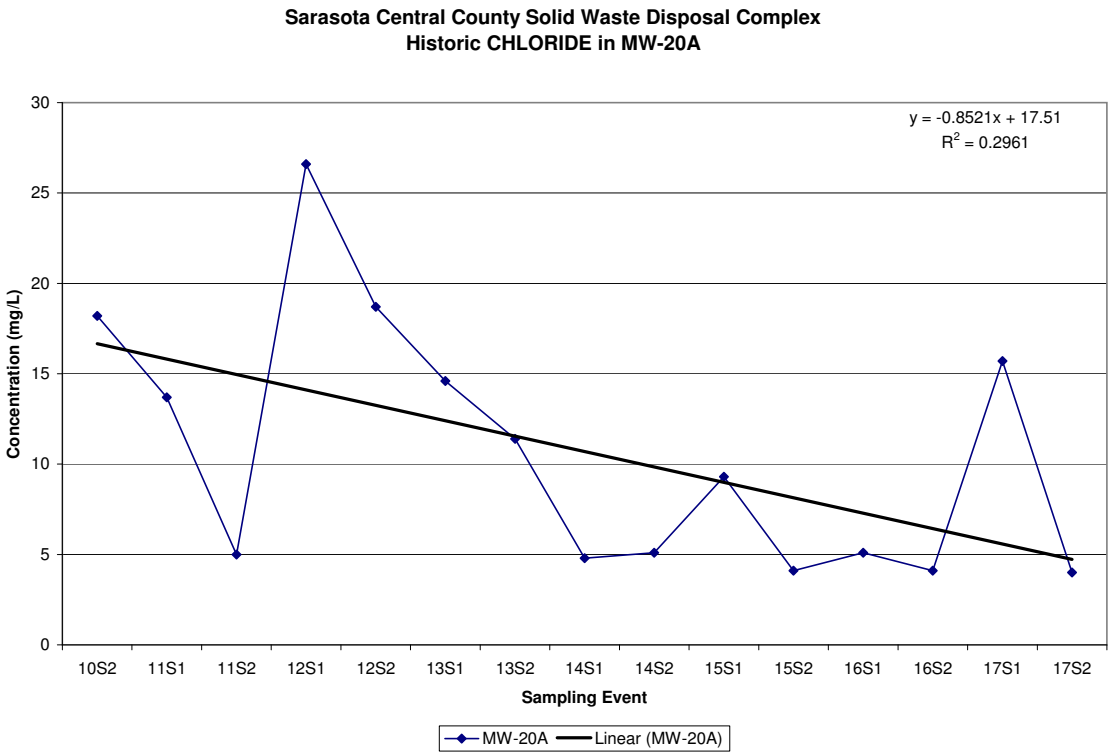

Sarasota Central County Solid Waste Disposal Complex
Historic CHLORIDE in MW-15
y = 2.4142x + 128.45
R2 = 0.232
Concentration (mg/L)
250
200
150
100
50
0
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-15
Linear (MW-15)


Sarasota Central County Solid Waste Disposal Complex
Historic CHLORIDE in MW-16
y = -12.826x + 372.02
R2 = 0.8214
Concentration (mg/L)
400
350
300
250
200
150
100
50
0
09S1
10S1
10S2
11S1
11M6
11S2
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-16
Linear (MW-16)


Sarasota Central County Solid Waste Disposal Complex
Historic CHLORIDE in MW-17
y = 0.4848x + 70.413
R2 = 0.1427
Concentration (mg/L)
100
90
80
70
60
50
40
30
20
10
0
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-17
Linear (MW-17)


Sarasota Central County Solid Waste Disposal Complex
Historic CHLORIDE in MW-18R
y = -0.1381x + 13.296
R2 = 0.0118
Concentration (mg/L)
18
16
14
12
10
8
6
4
2
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-18R
Linear (MW-18R)

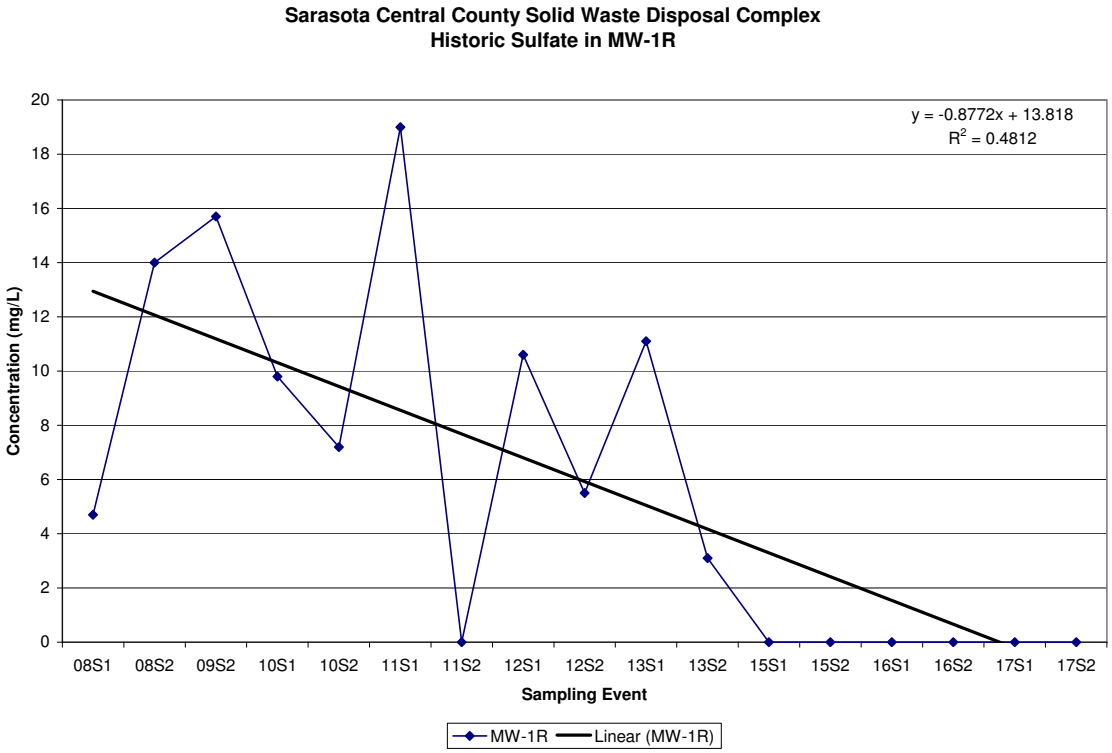

Sarasota Central County Solid Waste Disposal Complex
Historic CHLORIDE in MW-19A
y = -0.0332x + 7.9457
R2 = 0.0026
Concentration (mg/L)
0
2
4
6
8
10
12
14
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-19A
Linear (MW-19A)

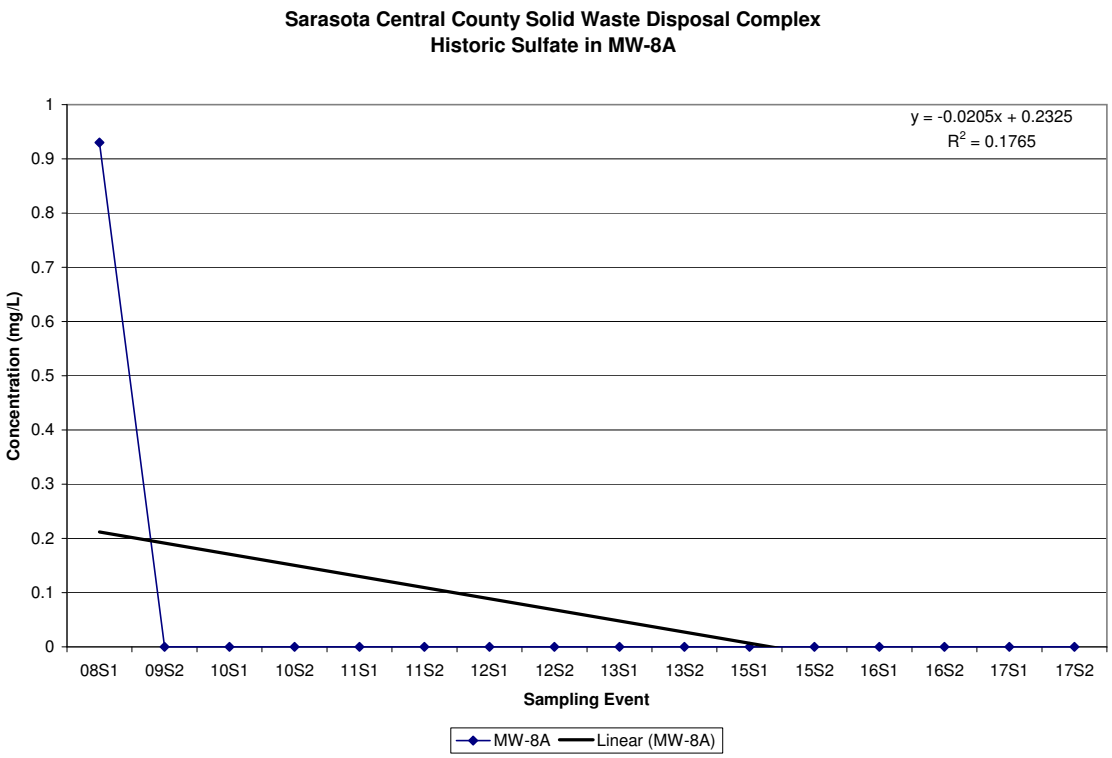

Sarasota Central County Solid Waste Disposal Complex
Historic CHLORIDE in MW-20A
y = -0.8521x + 17.51
R2 = 0.2961
Concentration (mg/L)
0
5
10
15
20
25
30
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-20A
Linear (MW-20A)

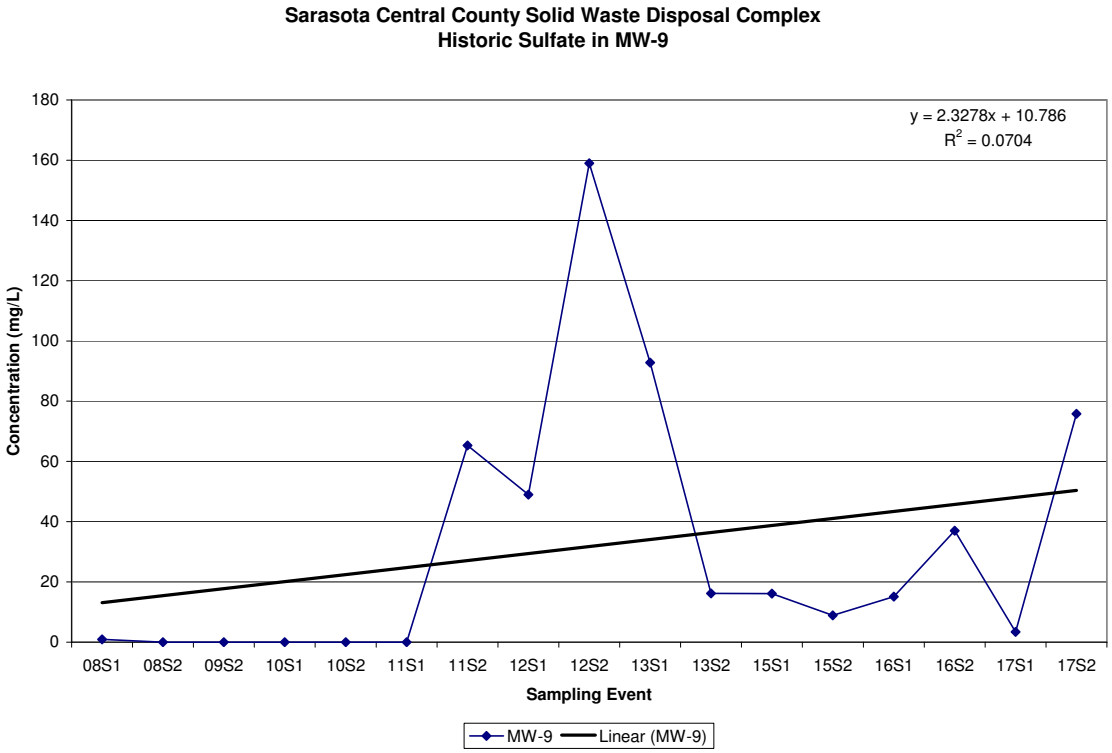
Sarasota County

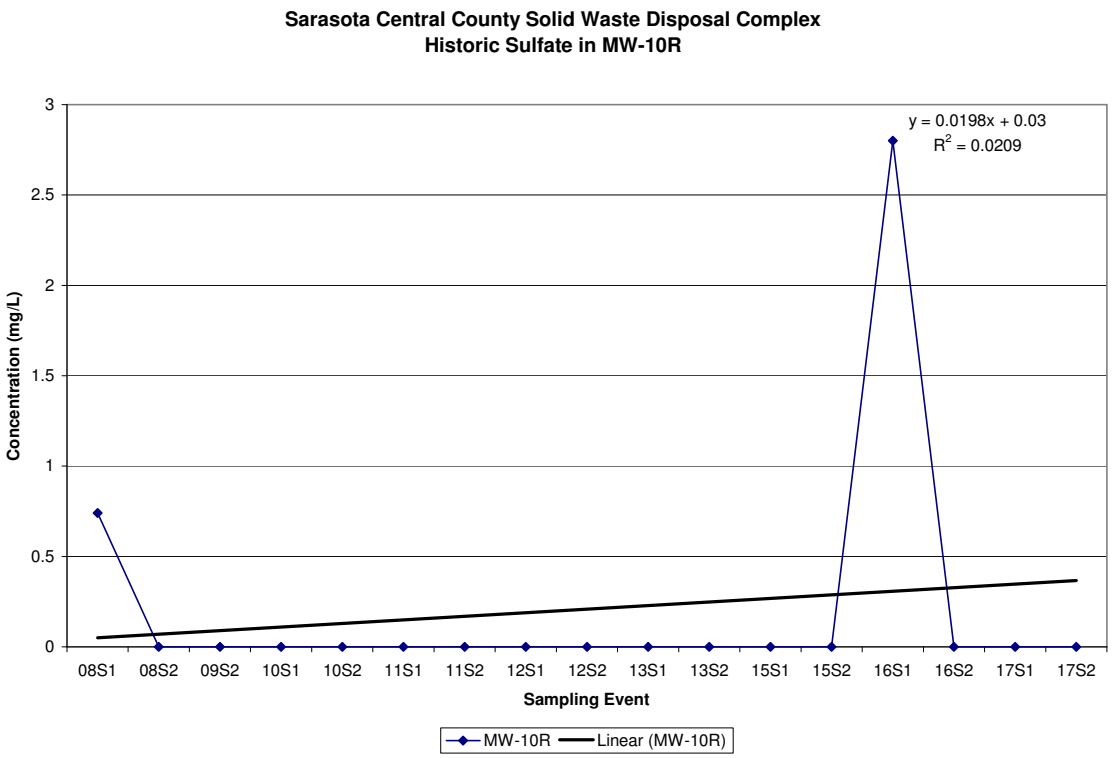
Central County Solid Waste Disposal Complex

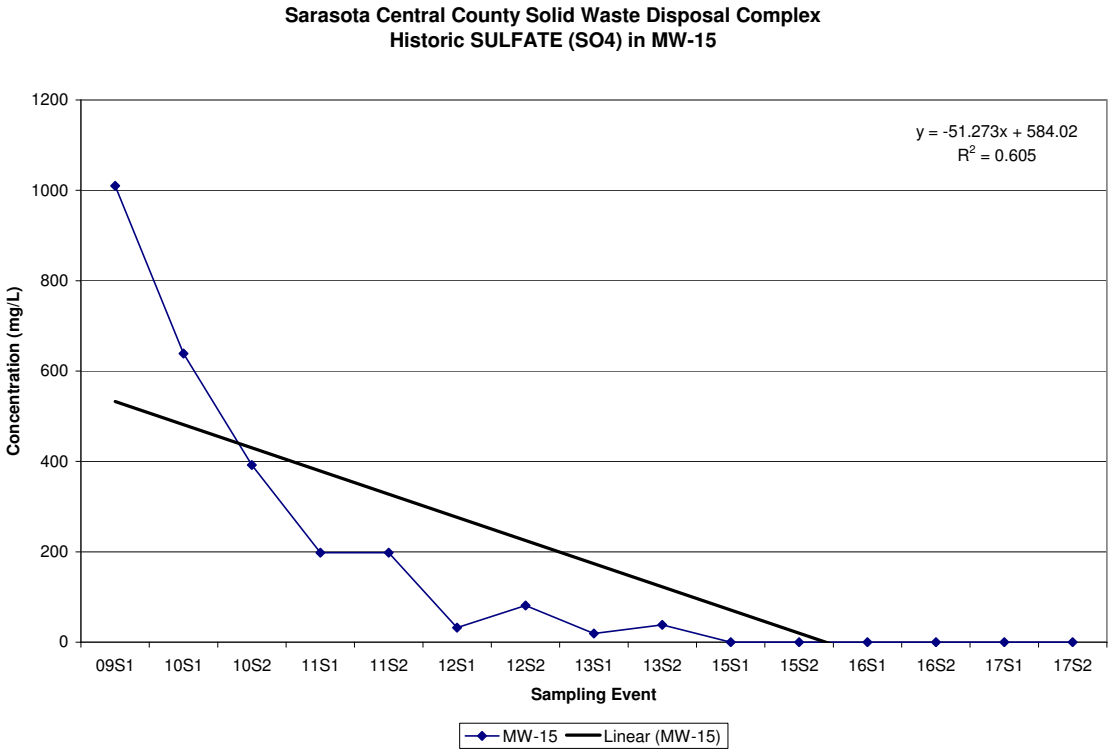
Historical Sulfate Data

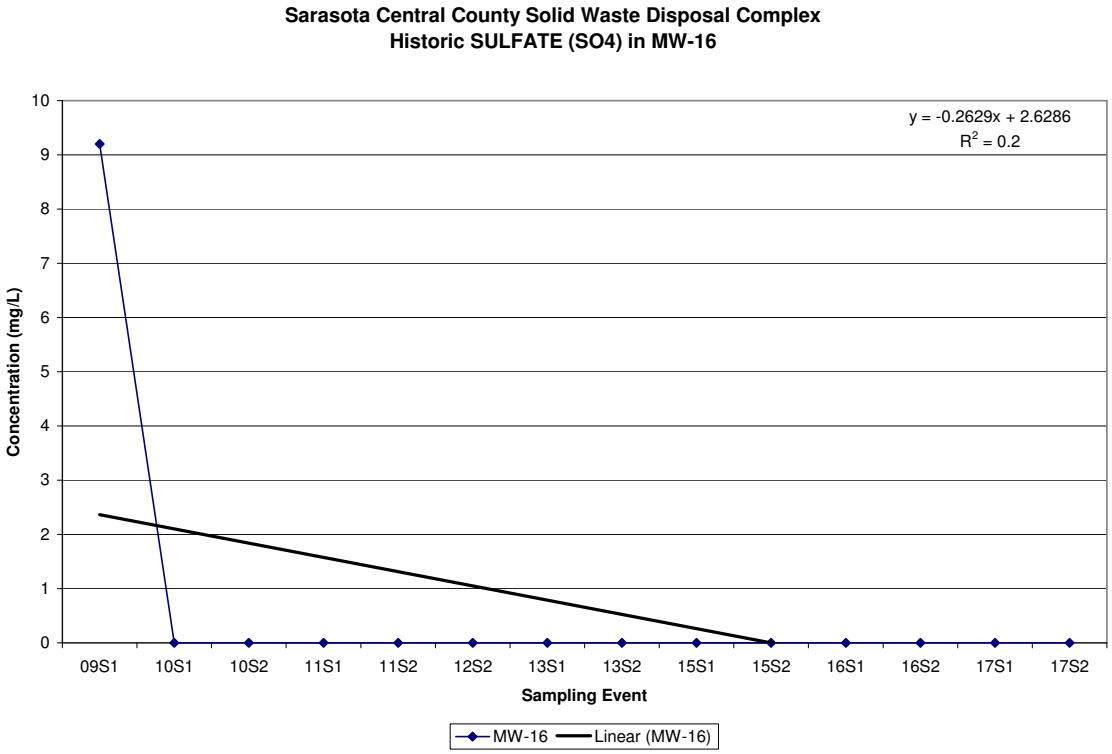

Sarasota Central County Solid Waste Disposal Complex
Historic Sulfate in MW-1R
y = -0.8772x + 13.818
R2 = 0.4812
Concentration (mg/L)
20
18
16
14
12
10
8
6
4
2
0
08S1
08S2
09S2
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-1R
Linear (MW-1R)

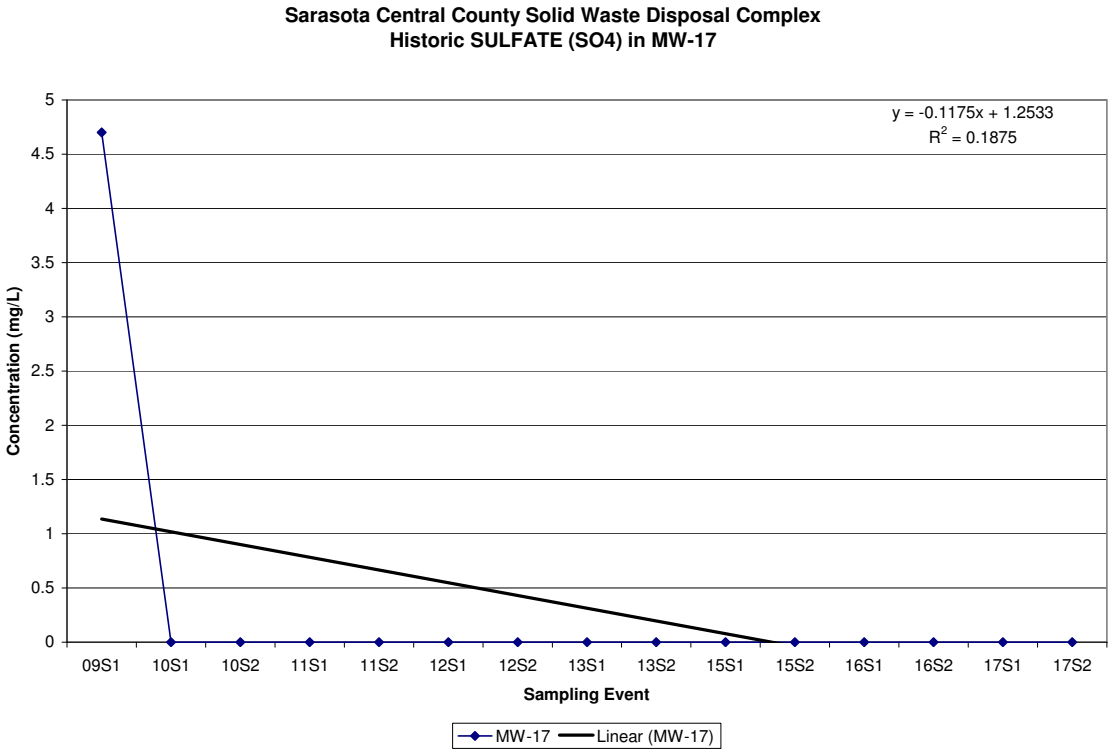

Sarasota Central County Solid Waste Disposal Complex
Historic Sulfate in MW-8A
y = -0.0205x + 0.2325
R2 = 0.1765
Concentration (mg/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
08S1
09S2
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-8A
Linear (MW-8A)

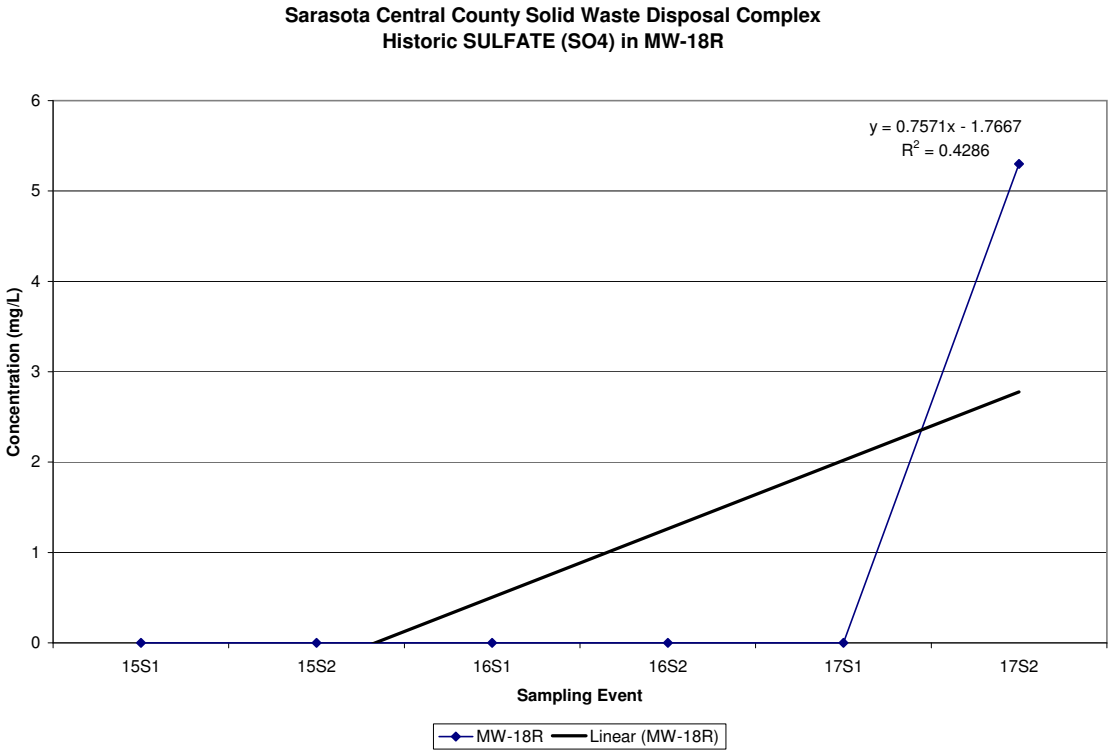

Sarasota Central County Solid Waste Disposal Complex
Historic Sulfate in MW-9
y = 2.3278x + 10.786
R2 = 0.0704
Concentration (mg/L)
180
160
140
120
100
80
60
40
20
0
08S1
08S2
09S2
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-9
Linear (MW-9)

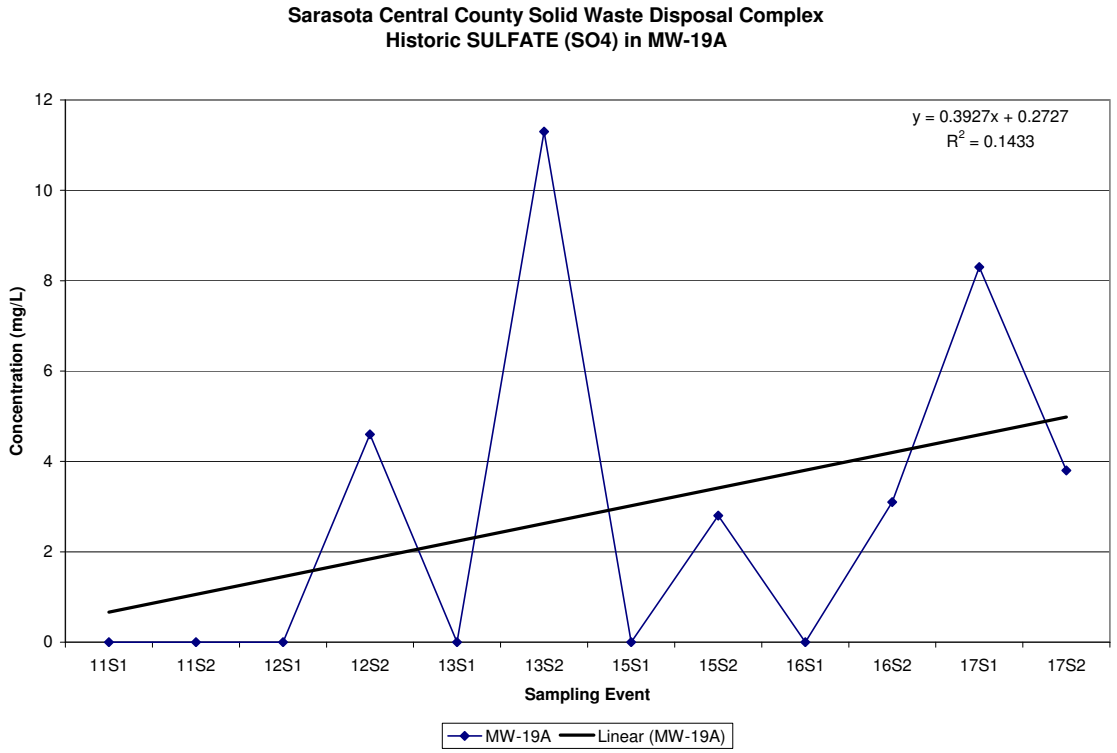

Sarasota Central County Solid Waste Disposal Complex
Historic Sulfate in MW-10R
y = 0.0198x + 0.03
R2 = 0.0209
Concentration (mg/L)
3
2.5
2
1.5
1
0.5
0
08S1
08S2
09S2
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-10R
Linear (MW-10R)

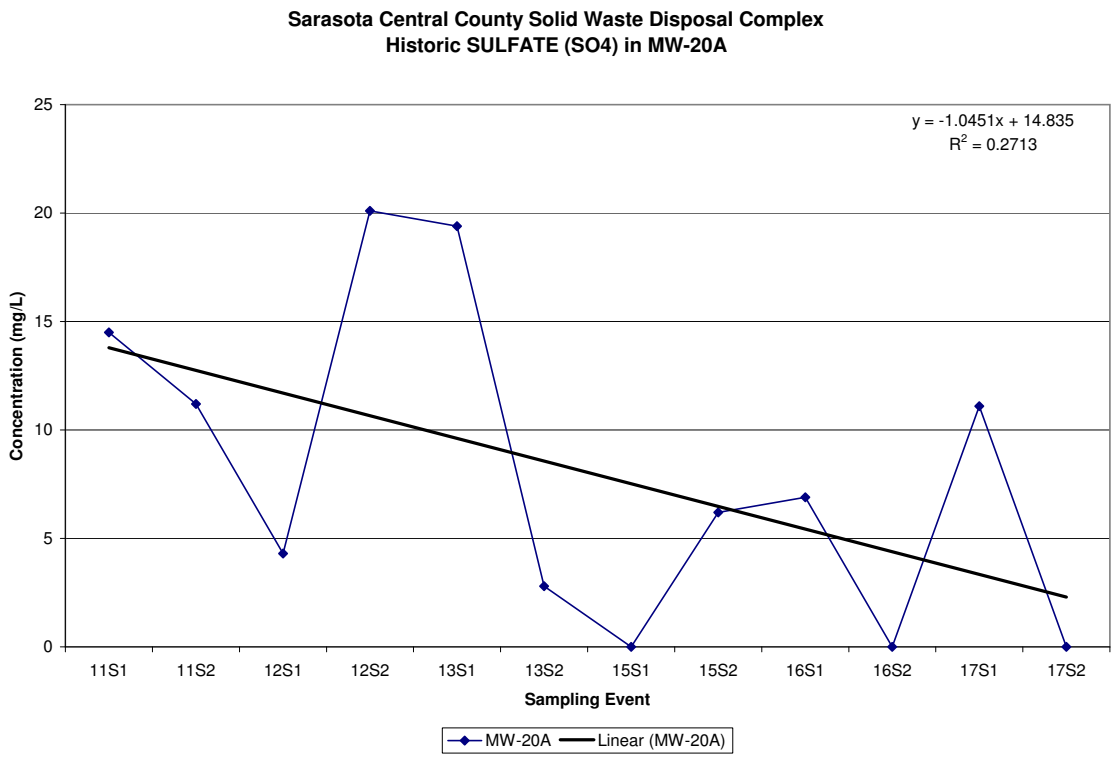

Sarasota Central County Solid Waste Disposal Complex
Historic SULFATE (SO4) in MW-15
y = -51.273x + 584.02
R2 = 0.605
Concentration (mg/L)
1200
1000
800
600
400
200
0
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-15
Linear (MW-15)


Sarasota Central County Solid Waste Disposal Complex
Historic SULFATE (SO4) in MW-16
y = -0.2629x + 2.6286
R2 = 0.2
Concentration (mg/L)
10
9
8
7
6
5
4
3
2
1
0
09S1
10S1
10S2
11S1
11S2
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-16
Linear (MW-16)


Sarasota Central County Solid Waste Disposal Complex
Historic SULFATE (SO4) in MW-17
y = -0.1175x + 1.2533
R2 = 0.1875
Concentration (mg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-17
Linear (MW-17)


Sarasota Central County Solid Waste Disposal Complex
Historic SULFATE (SO4) in MW-18R
y = 0.7571x - 1.7667
R2 = 0.4286
Concentration (mg/L)
6
5
4
3
2
1
0
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-18R
Linear (MW-18R)

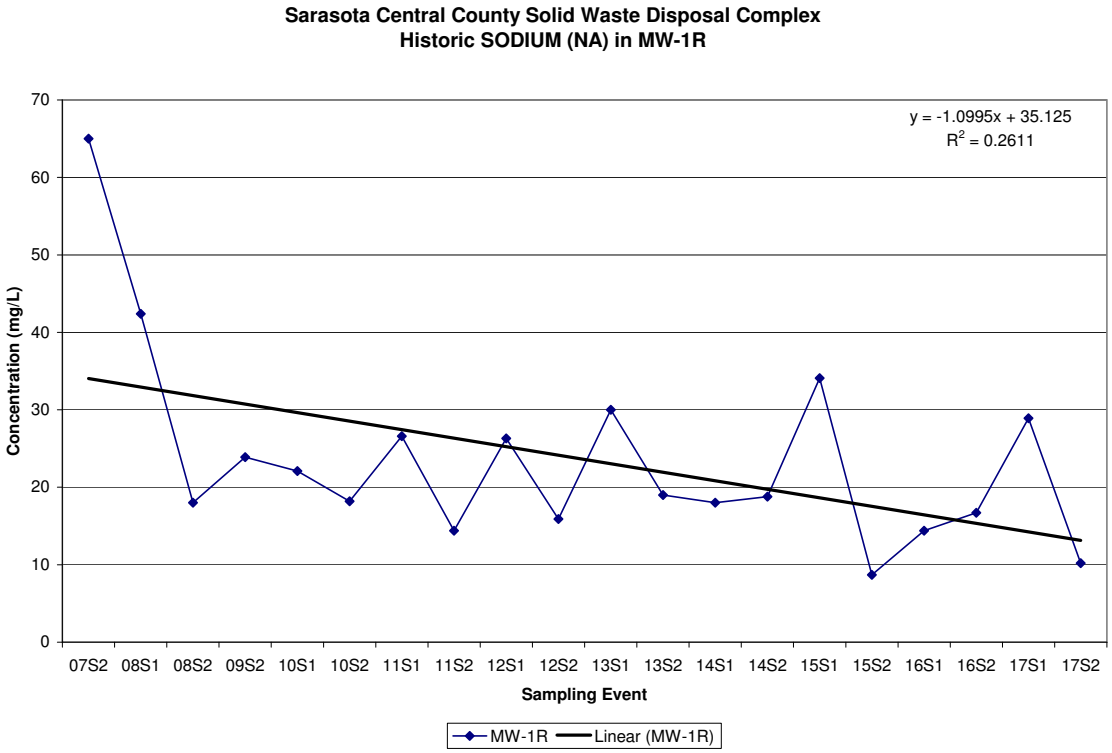

Sarasota Central County Solid Waste Disposal Complex
Historic SULFATE (SO4) in MW-19A
y = 0.3927x + 0.2727
R2 = 0.1433
Concentration (mg/L)
0
2
4
6
8
10
12
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-19A
Linear (MW-19A)

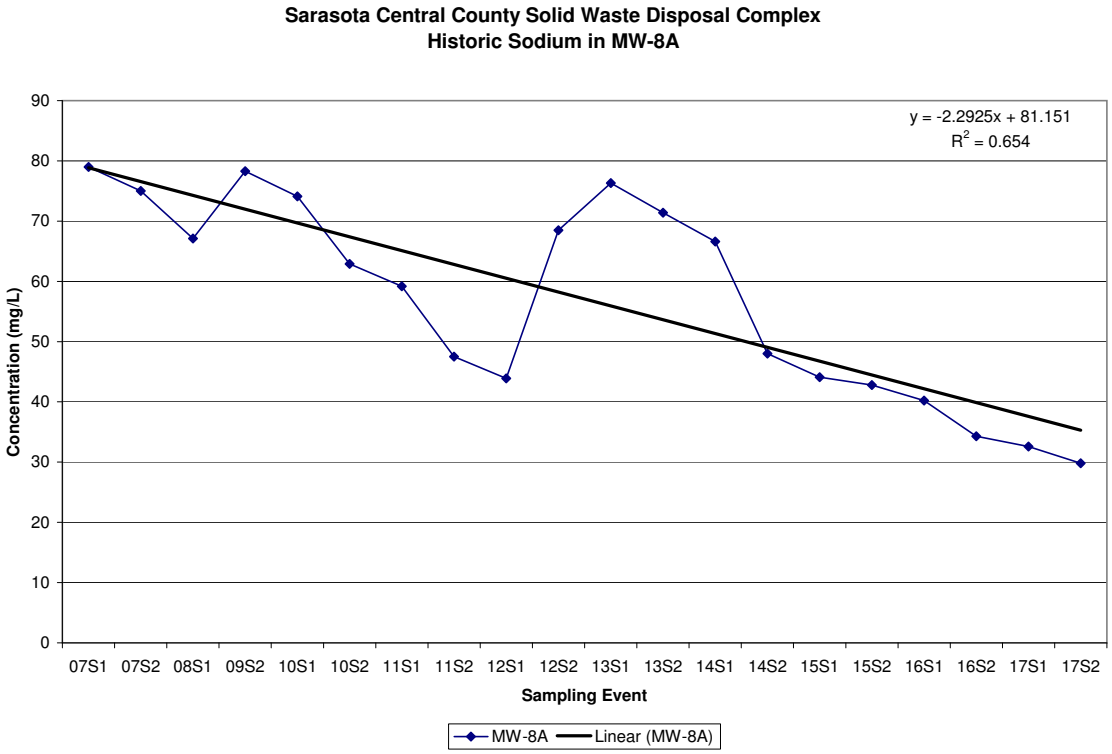

Sarasota Central County Solid Waste Disposal Complex
Historic SULFATE (SO4) in MW-20A
y = -1.0451x + 14.835
R2 = 0.2713
Concentration (mg/L)
0
5
10
15
20
25
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-20A
Linear (MW-20A)

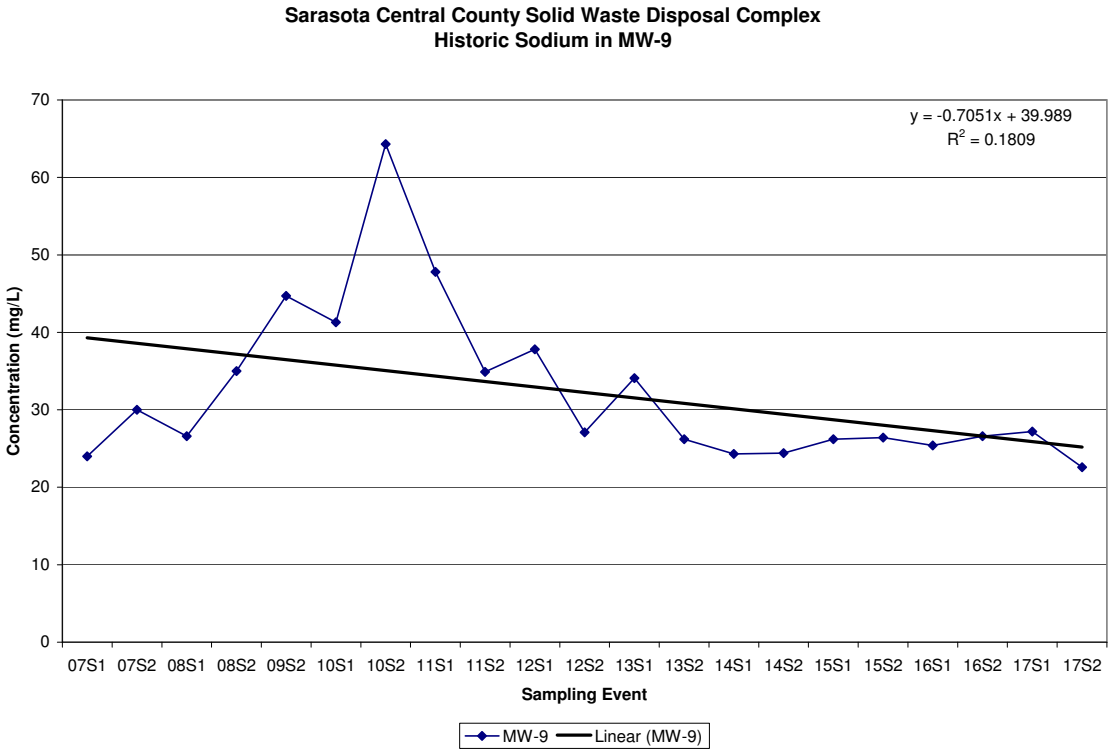
Sarasota County

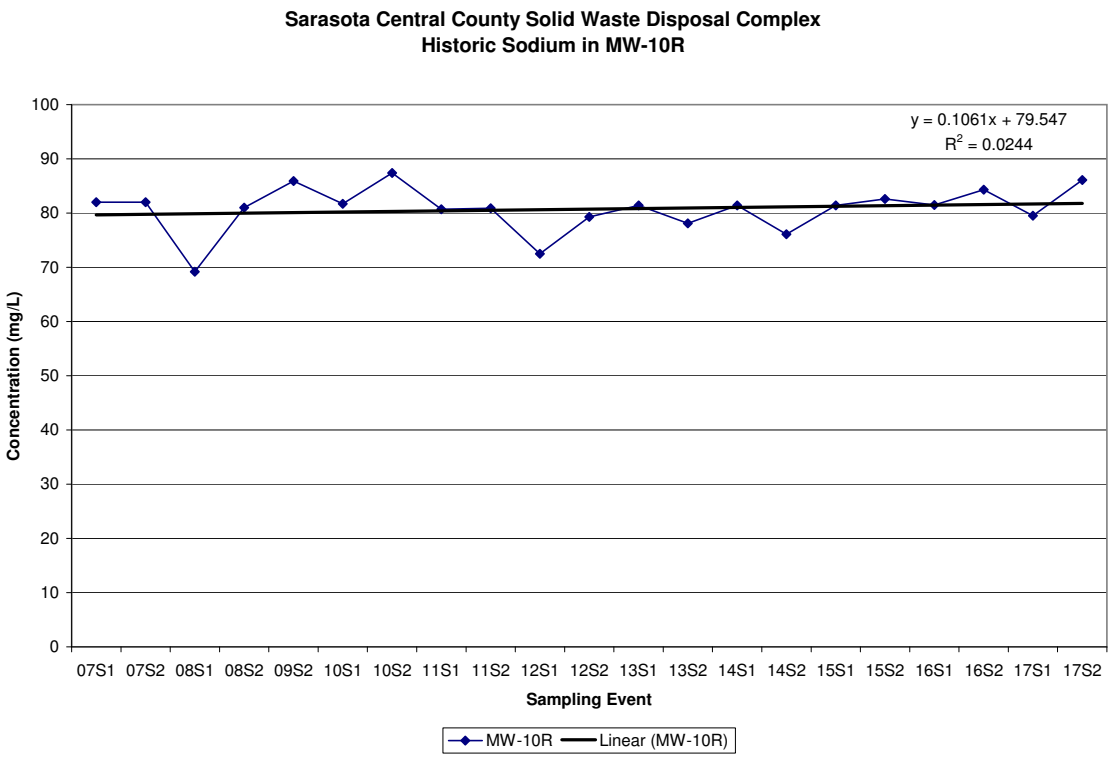
Central County Solid Waste Disposal Complex

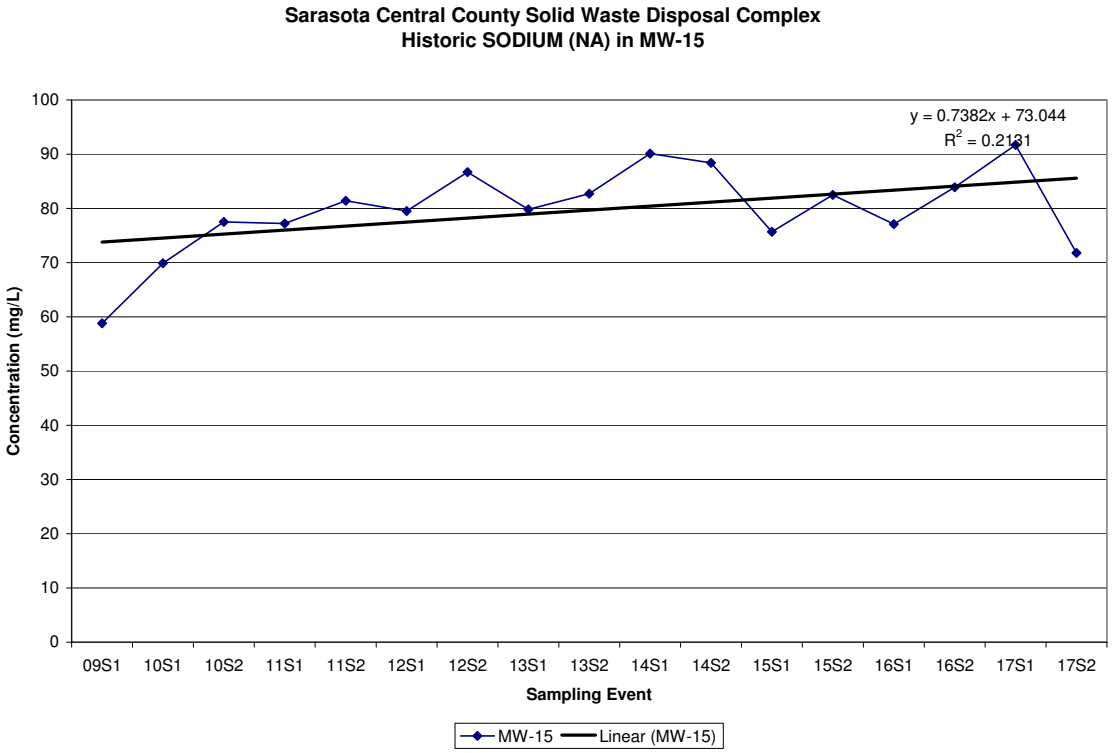
Historical Sodium Data

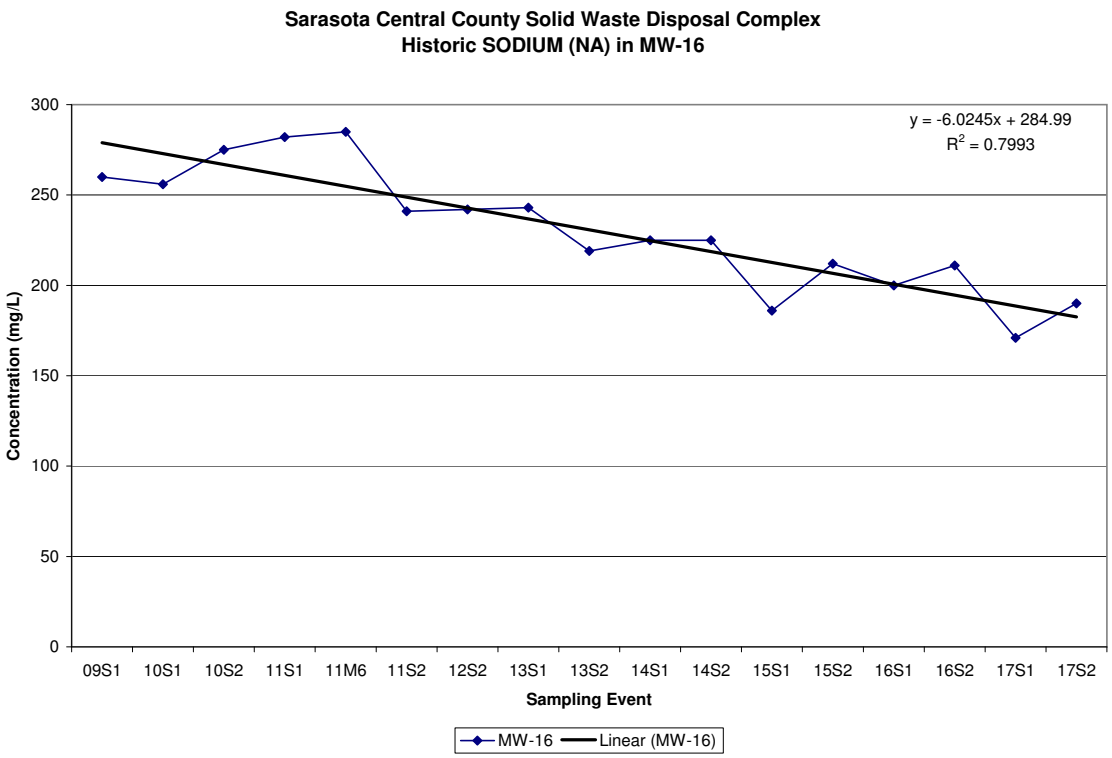

Sarasota Central County Solid Waste Disposal Complex
Historic SODIUM (NA) in MW-1R
y = -1.0995x + 35.125
R2 = 0.2611
Concentration (mg/L)
0
10
20
30
40
50
60
70
07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-1R
Linear (MW-1R)

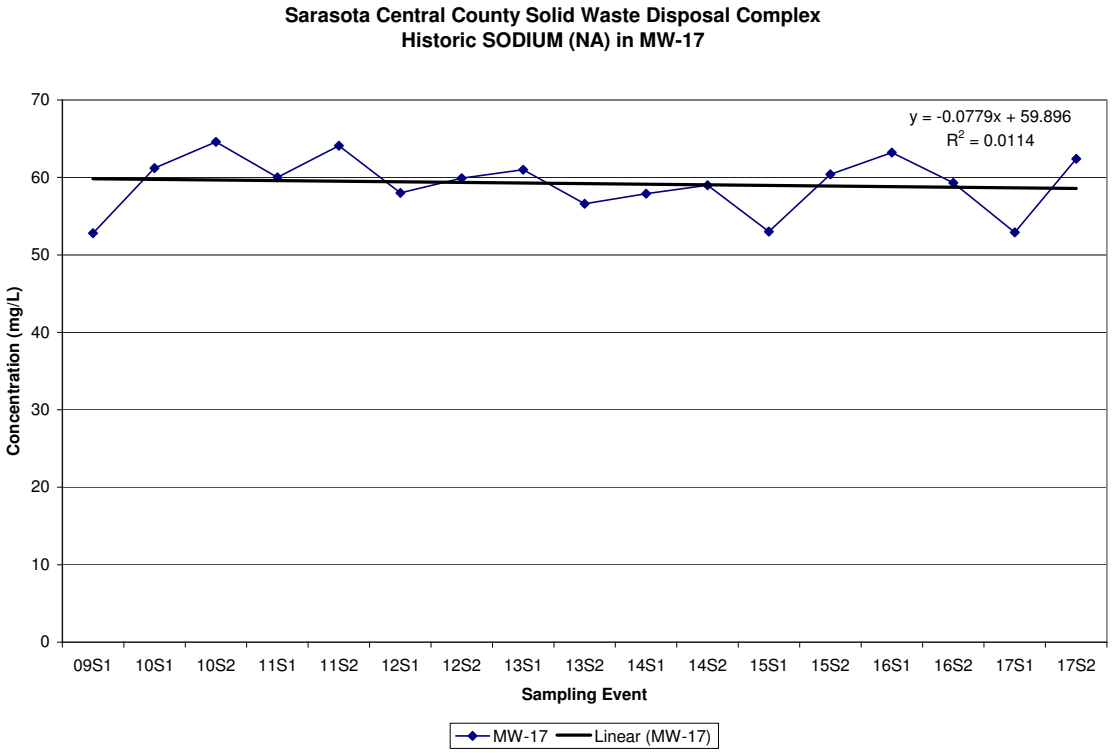

Sarasota Central County Solid Waste Disposal Complex
Historic Sodium in MW-8A
y = -2.2925x + 81.151
R2 = 0.654
Concentration (mg/L)
0
10
20
30
40
50
60
70
80
90
07S1 07S2 08S1 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-8A
Linear (MW-8A)

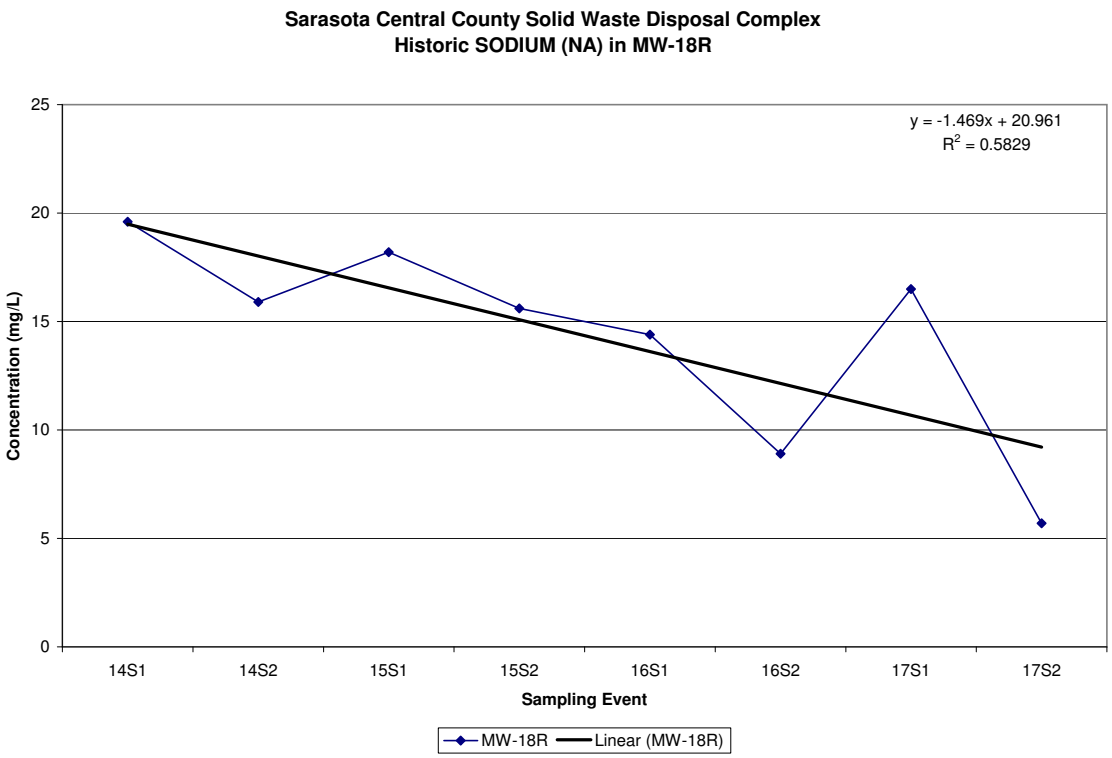

Sarasota Central County Solid Waste Disposal Complex
Historic Sodium in MW-9
y = -0.7051x + 39.989
R2 = 0.1809
Concentration (mg/L)
0
10
20
30
40
50
60
70
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-9
Linear (MW-9)

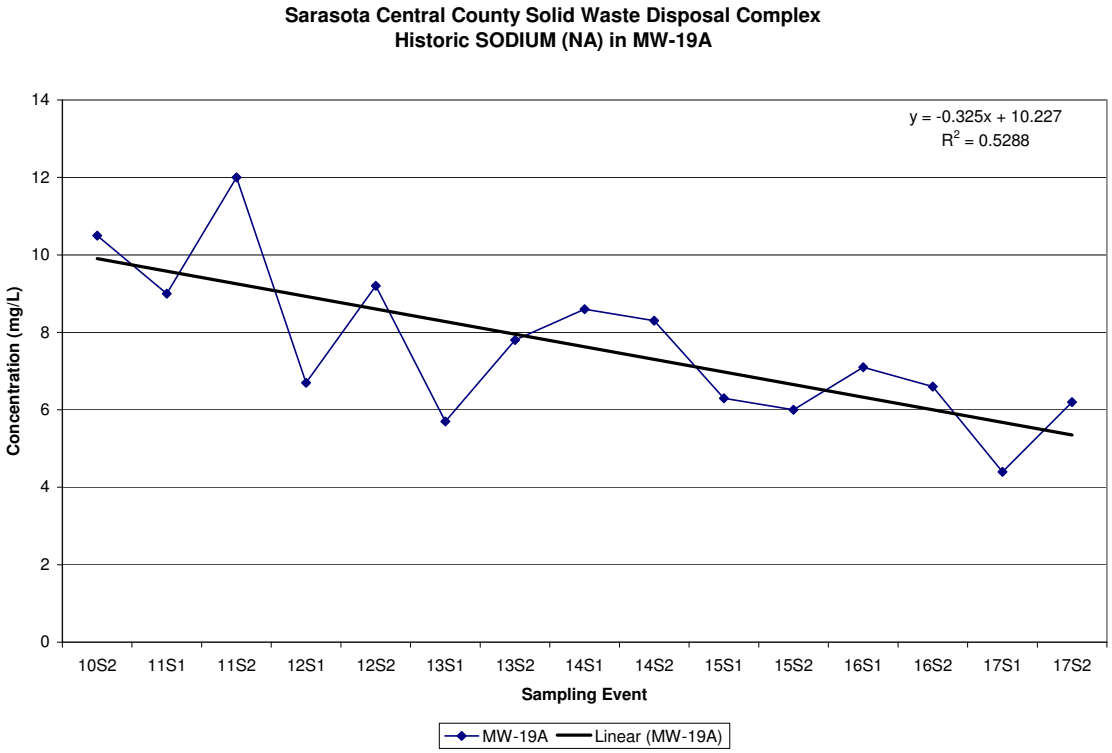

Sarasota Central County Solid Waste Disposal Complex
Historic Sodium in MW-10R
y = 0.1061x + 79.547
R2 = 0.0244
Concentration (mg/L)
0
10
20
30
40
50
60
70
80
90
100
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-10R
Linear (MW-10R)

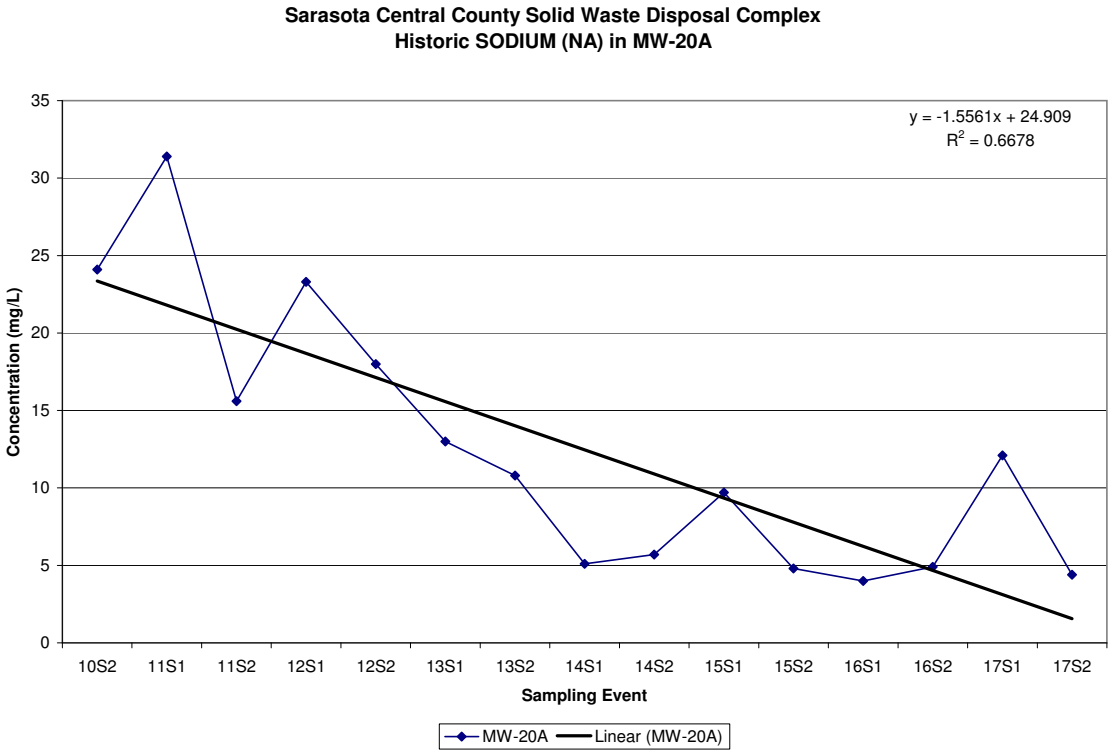

Sarasota Central County Solid Waste Disposal Complex
Historic SODIUM (NA) in MW-15
y = 0.7382x + 73.044
R2 = 0.2131
Concentration (mg/L)
100
90
80
70
60
50
40
30
20
10
0
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-15
Linear (MW-15)


Sarasota Central County Solid Waste Disposal Complex
Historic SODIUM (NA) in MW-16
y = -6.0245x + 284.99
R2 = 0.7993
Concentration (mg/L)
300
250
200
150
100
50
0
09S1
10S1
10S2
11S1
11M6
11S2
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-16
Linear (MW-16)


Sarasota Central County Solid Waste Disposal Complex
Historic SODIUM (NA) in MW-17
y = -0.0779x + 59.896
R2 = 0.0114
Concentration (mg/L)
70
60
50
40
30
20
10
0
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-17
Linear (MW-17)


Sarasota Central County Solid Waste Disposal Complex
Historic SODIUM (NA) in MW-18R
y = -1.469x + 20.961
R2 = 0.5829
Concentration (mg/L)
25
20
15
10
5
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-18R
Linear (MW-18R)

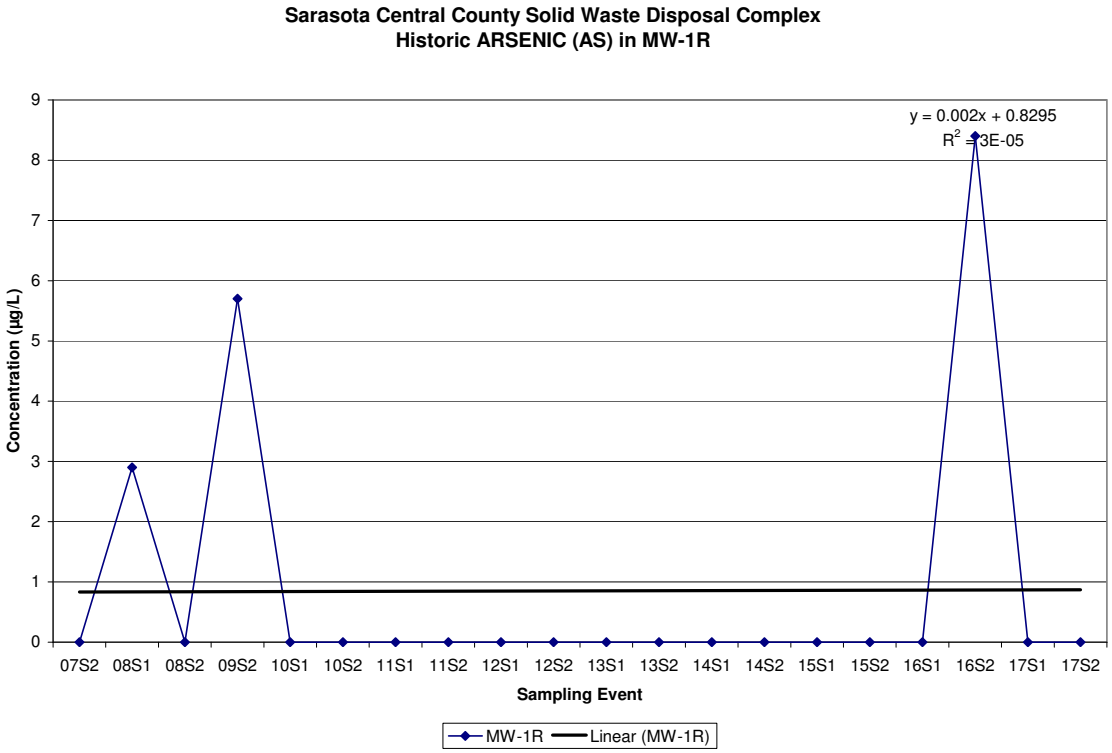

Sarasota Central County Solid Waste Disposal Complex
Historic SODIUM (NA) in MW-19A
y = -0.325x + 10.227
R2 = 0.5288
Concentration (mg/L)
0
2
4
6
8
10
12
14
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-19A
Linear (MW-19A)

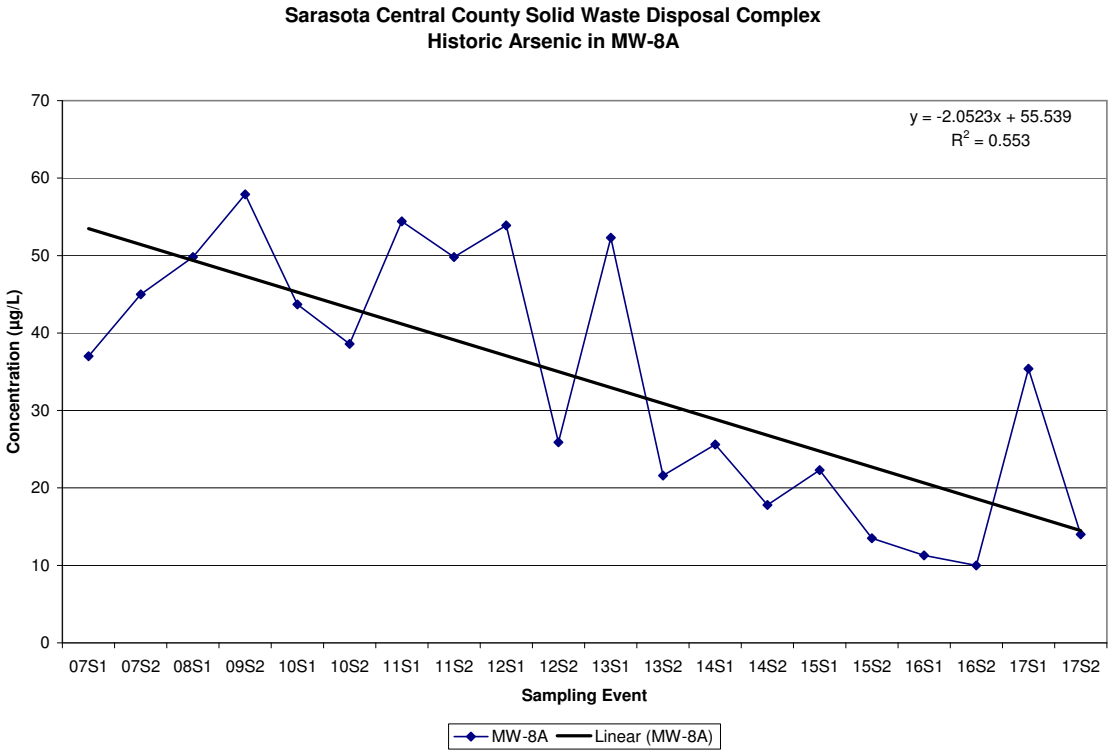

Sarasota Central County Solid Waste Disposal Complex
Historic SODIUM (NA) in MW-20A
y = -1.5561x + 24.909
R2 = 0.6678
Concentration (mg/L)
0
5
10
15
20
25
30
35
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-20A
Linear (MW-20A)

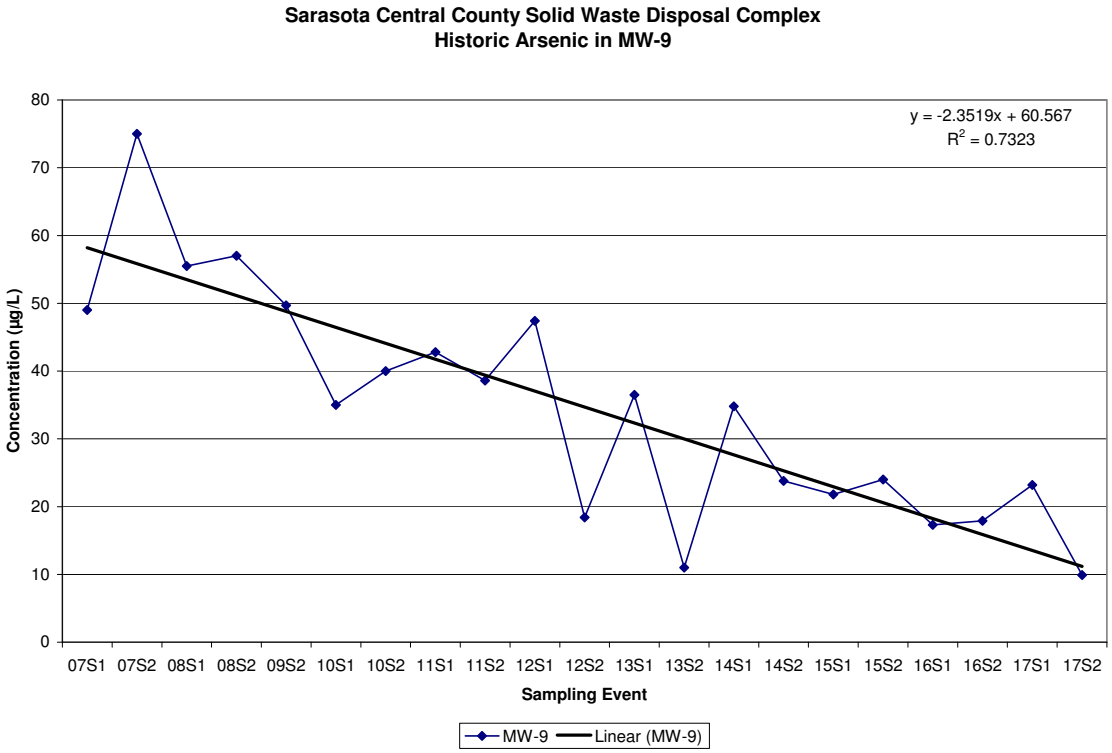
Sarasota County

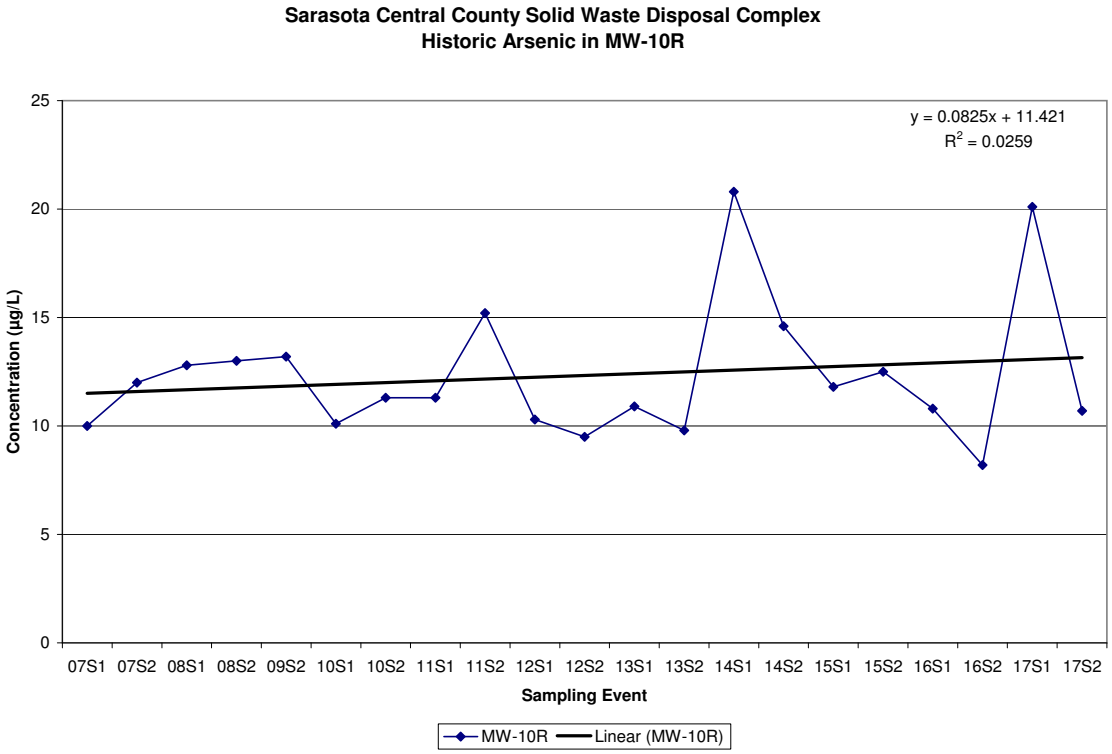
Central County Solid Waste Disposal Complex

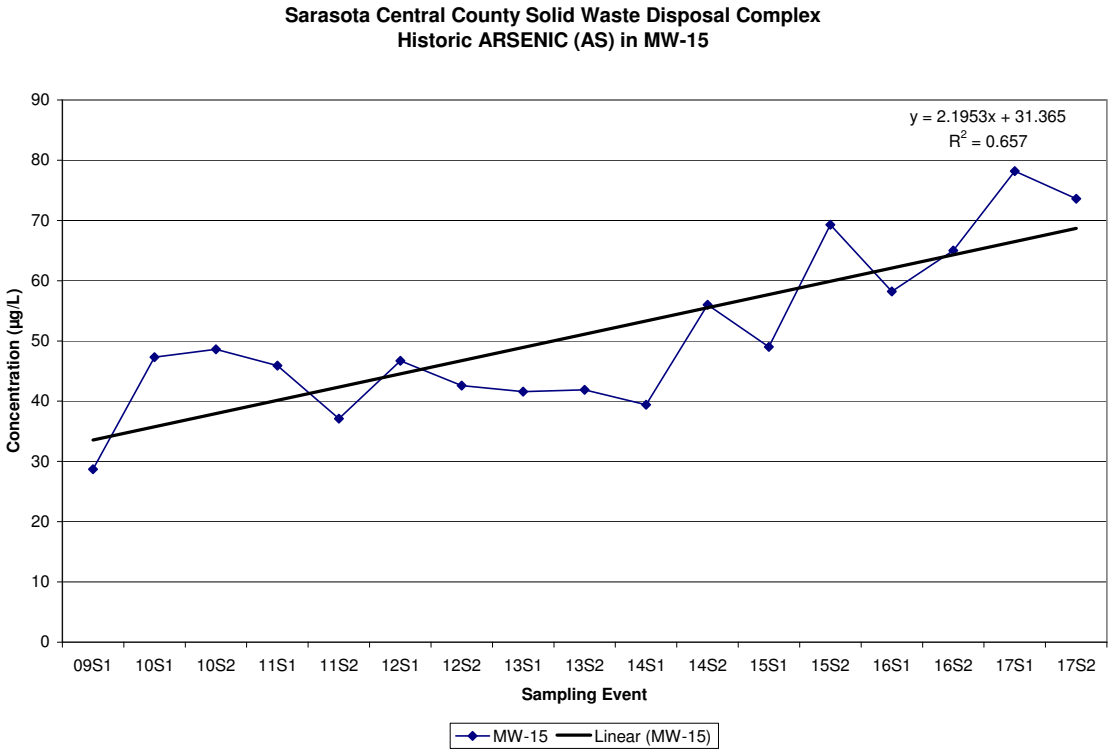
Historical Arsenic Data

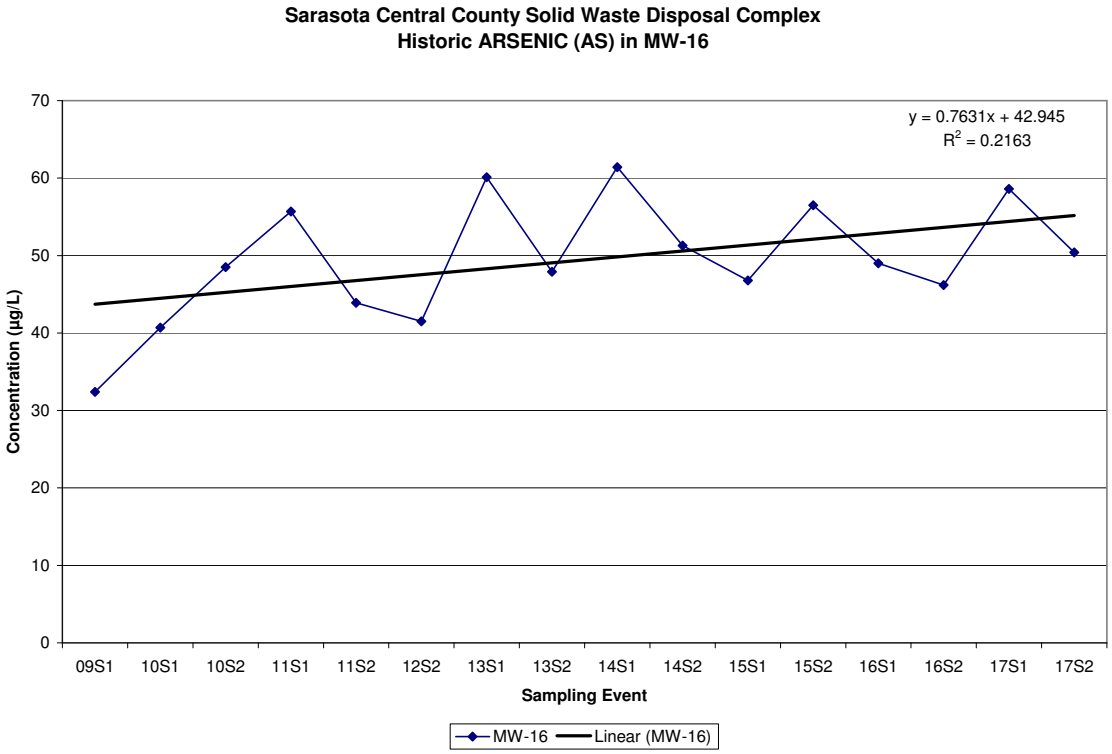

Sarasota Central County Solid Waste Disposal Complex
Historic ARSENIC (AS) in MW-1R
y = 0.002x + 0.8295
R2 = 3E-05
Concentration (µg/L)
0
1
2
3
4
5
6
7
8
9
07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-1R
Linear (MW-1R)

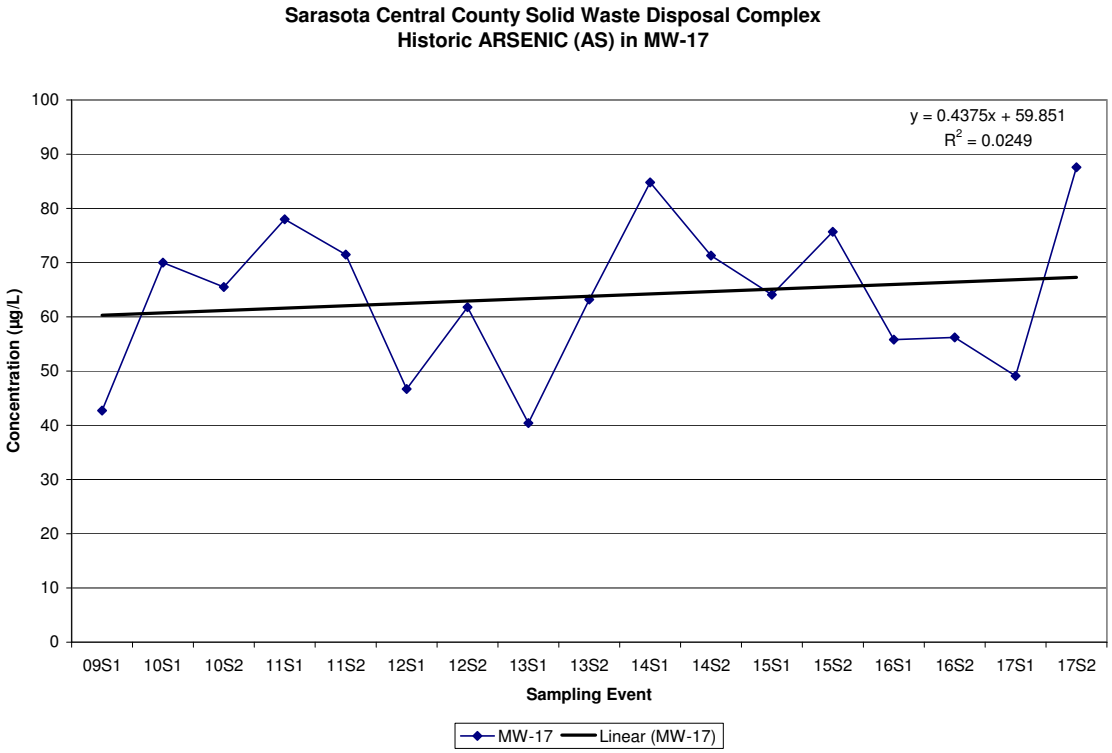

Sarasota Central County Solid Waste Disposal Complex
Historic Arsenic in MW-8A
y = -2.0523x + 55.539
R2 = 0.553
Concentration (µg/L)
0
10
20
30
40
50
60
70
07S1 07S2 08S1 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-8A
Linear (MW-8A)

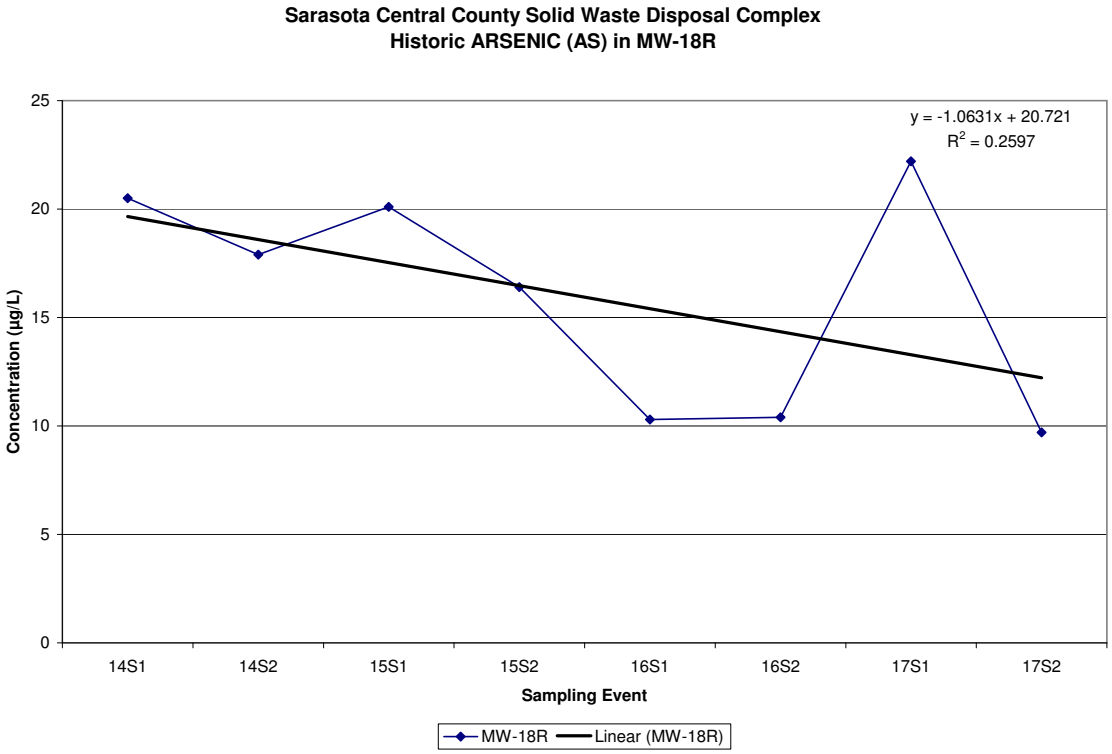

Sarasota Central County Solid Waste Disposal Complex
Historic Arsenic in MW-9
y = -2.3519x + 60.567
R2 = 0.7323
Concentration (µg/L)
0
10
20
30
40
50
60
70
80
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-9
Linear (MW-9)

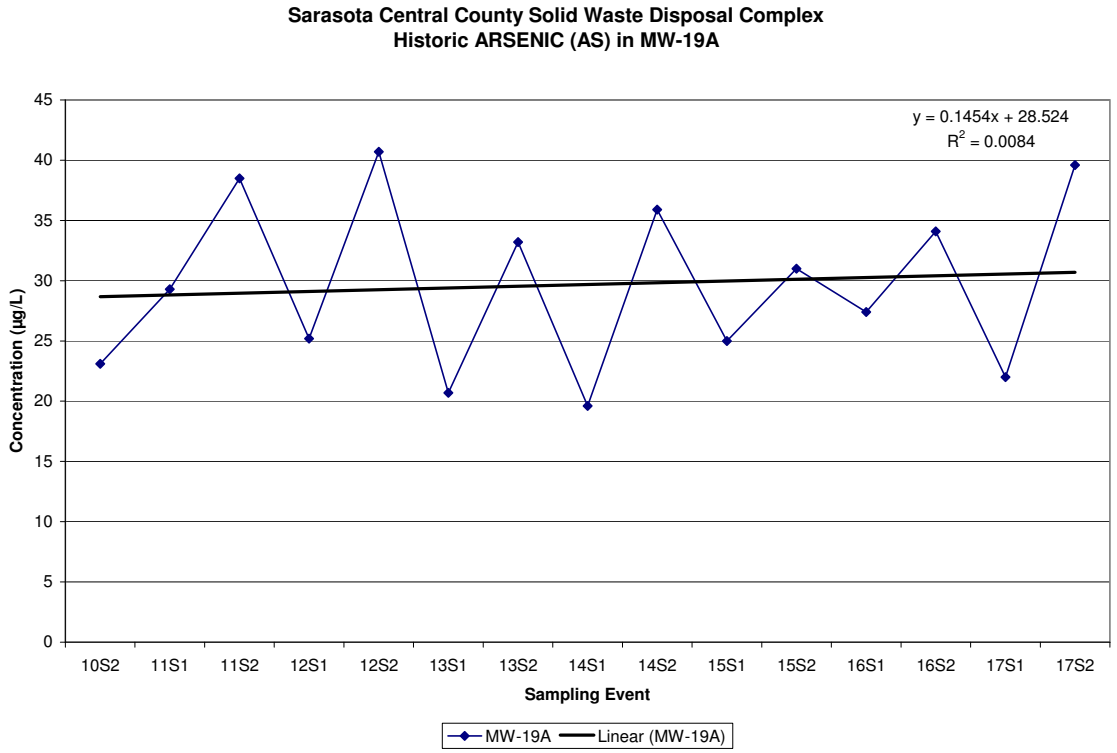

Sarasota Central County Solid Waste Disposal Complex
Historic Arsenic in MW-10R
y = 0.0825x + 11.421
R2 = 0.0259
Concentration (µg/L)
0
5
10
15
20
25
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-10R
Linear (MW-10R)

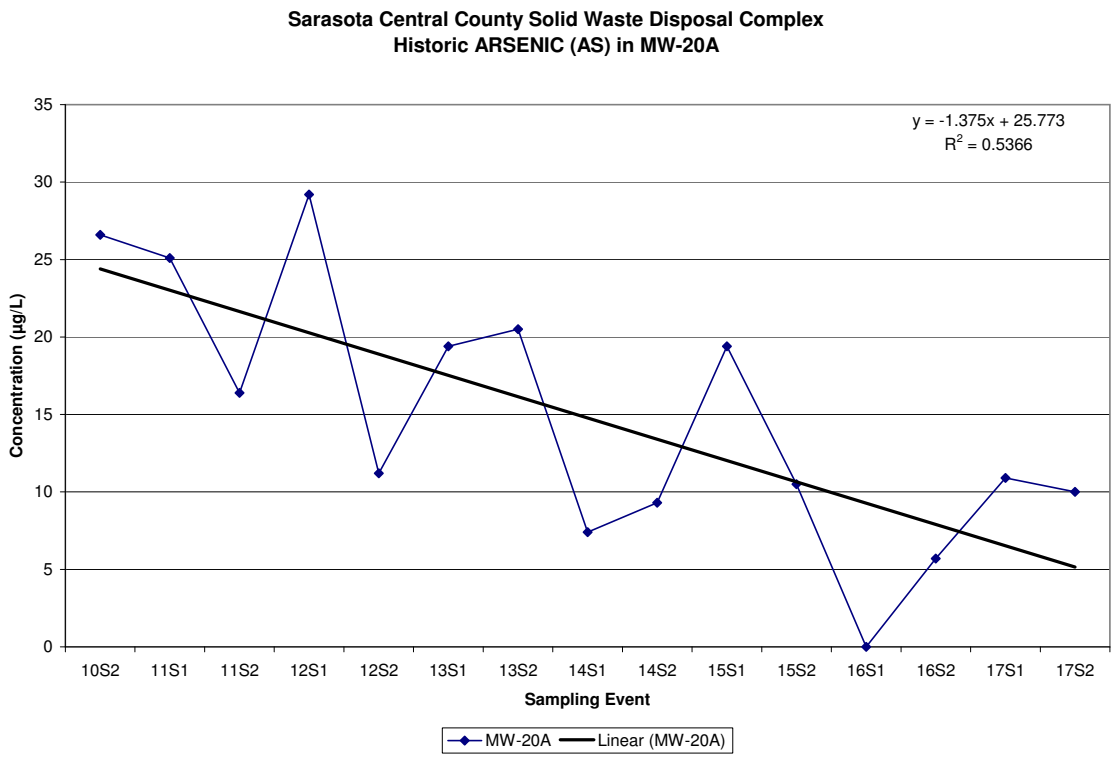

Sarasota Central County Solid Waste Disposal Complex
Historic ARSENIC (AS) in MW-15
y = 2.1953x + 31.365
R2 = 0.657
Concentration (µg/L)
0
10
20
30
40
50
60
70
80
90
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-15
Linear (MW-15)


Sarasota Central County Solid Waste Disposal Complex
Historic ARSENIC (AS) in MW-16
y = 0.7631x + 42.945
R2 = 0.2163
Concentration (µg/L)
0
10
20
30
40
50
60
70
09S1
10S1
10S2
11S1
11S2
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-16
Linear (MW-16)


Sarasota Central County Solid Waste Disposal Complex
Historic ARSENIC (AS) in MW-17
y = 0.4375x + 59.851
R2 = 0.0249
Concentration (µg/L)
100
90
80
70
60
50
40
30
20
10
0
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-17
Linear (MW-17)


Sarasota Central County Solid Waste Disposal Complex
Historic ARSENIC (AS) in MW-18R
y = -1.0631x + 20.721
R2 = 0.2597
Concentration (µg/L)
25
20
15
10
5
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-18R
Linear (MW-18R)

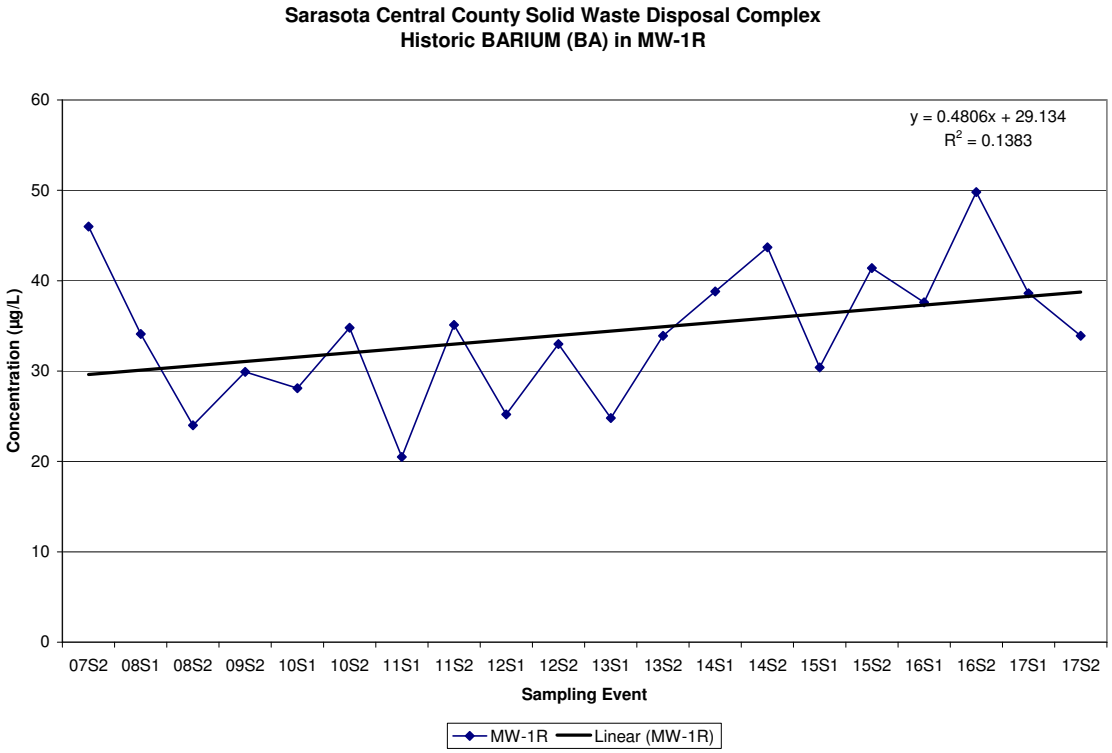

Sarasota Central County Solid Waste Disposal Complex
Historic ARSENIC (AS) in MW-19A
y = 0.1454x + 28.524
R2 = 0.0084
Concentration (µg/L)
45
40
35
30
25
20
15
10
5
0
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-19A
Linear (MW-19A)

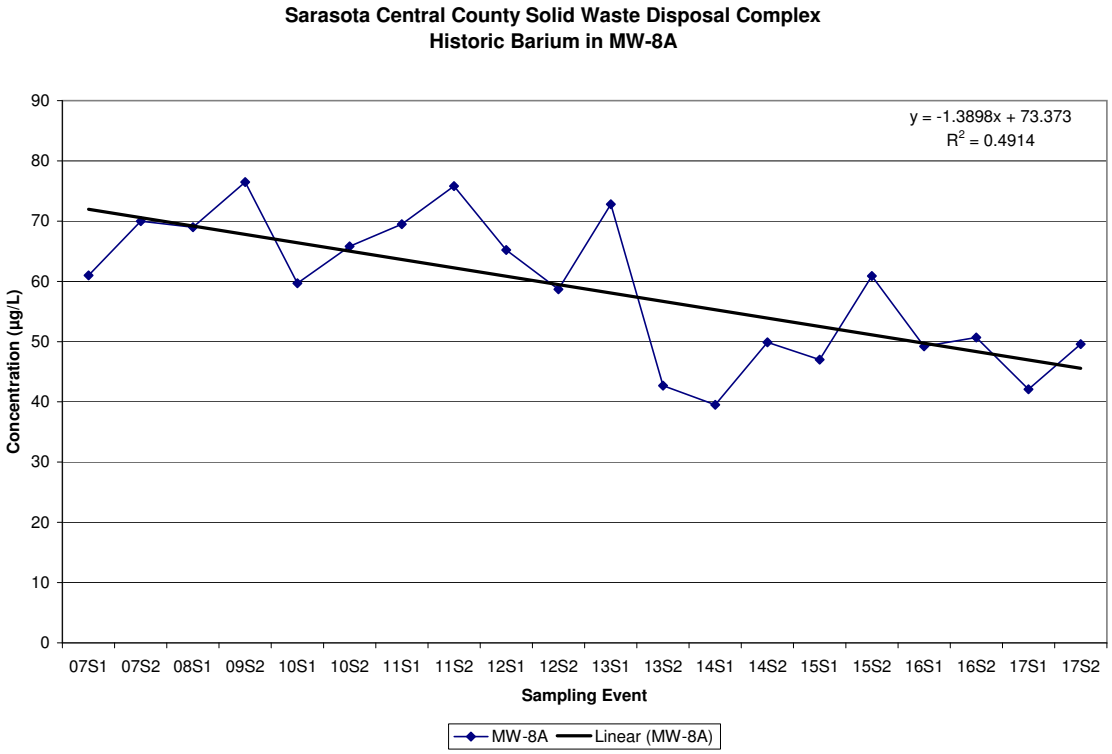

Sarasota Central County Solid Waste Disposal Complex
Historic ARSENIC (AS) in MW-20A
y = -1.375x + 25.773
R2 = 0.5366
Concentration (µg/L)
35
30
25
20
15
10
5
0
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-20A
Linear (MW-20A)

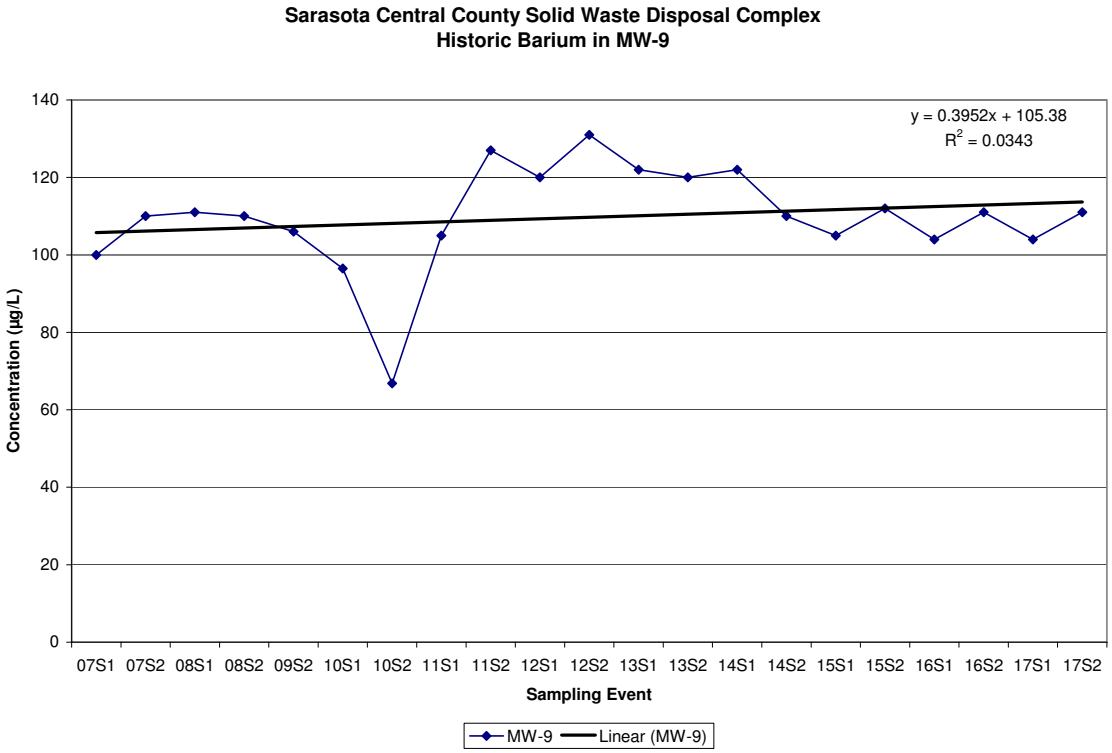
Sarasota County

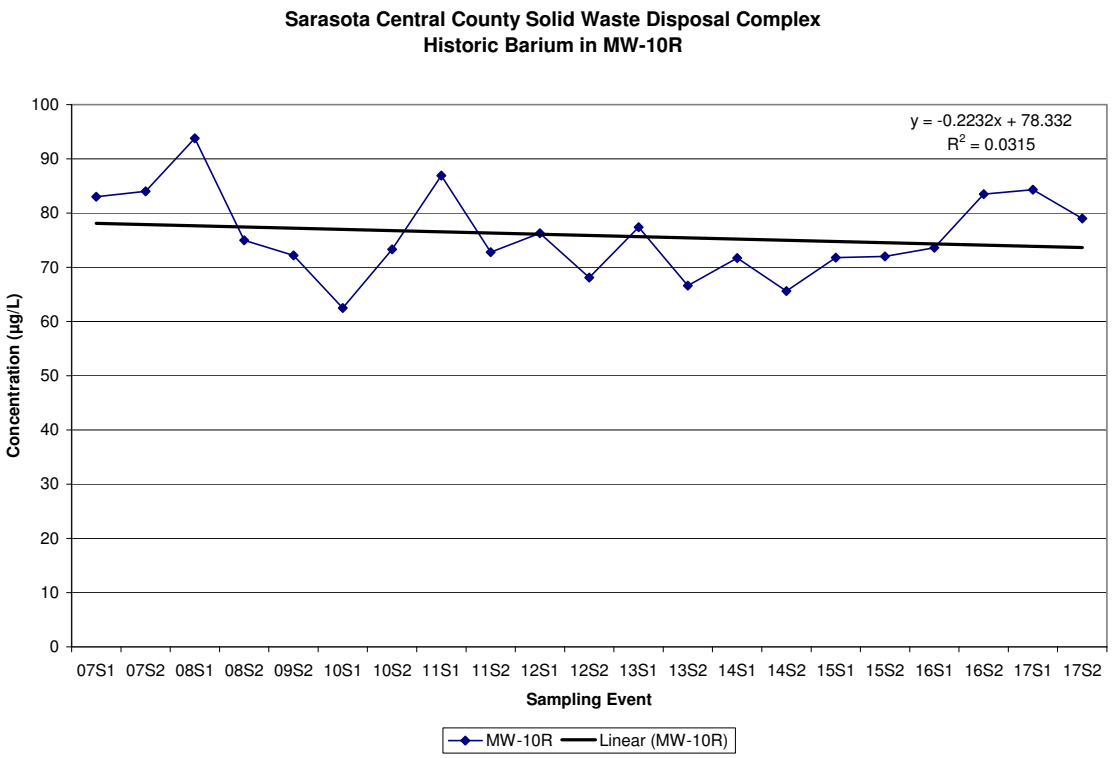
Central County Solid Waste Disposal Complex

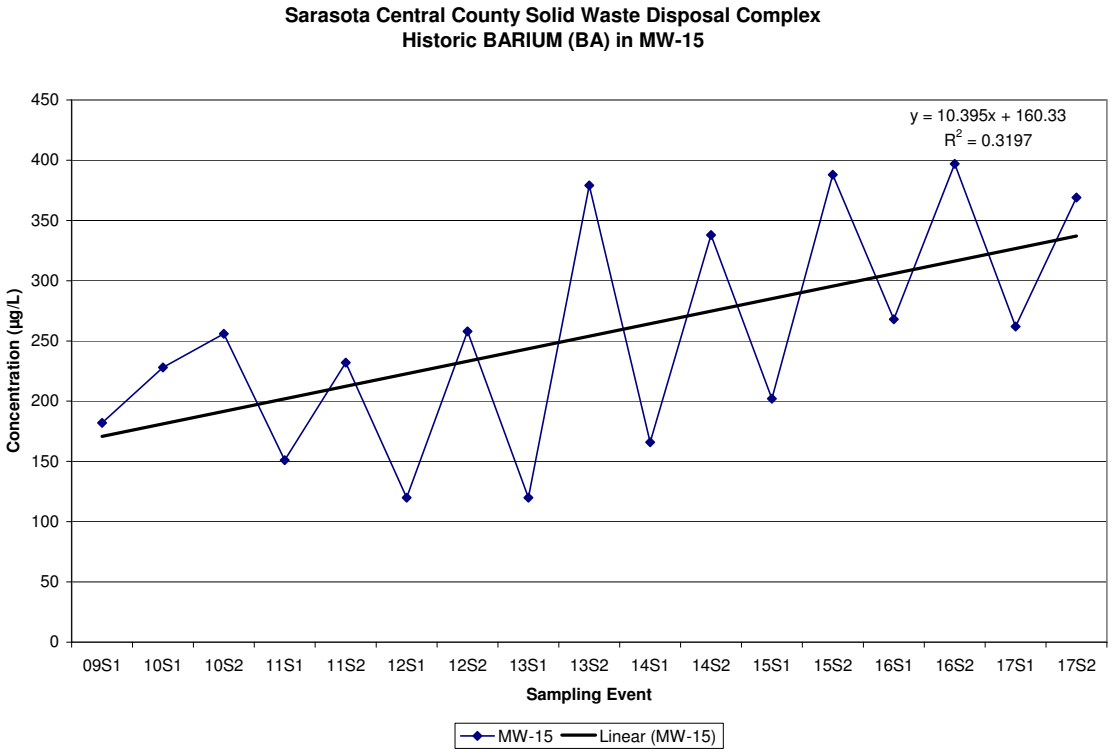
Historical Barium Data

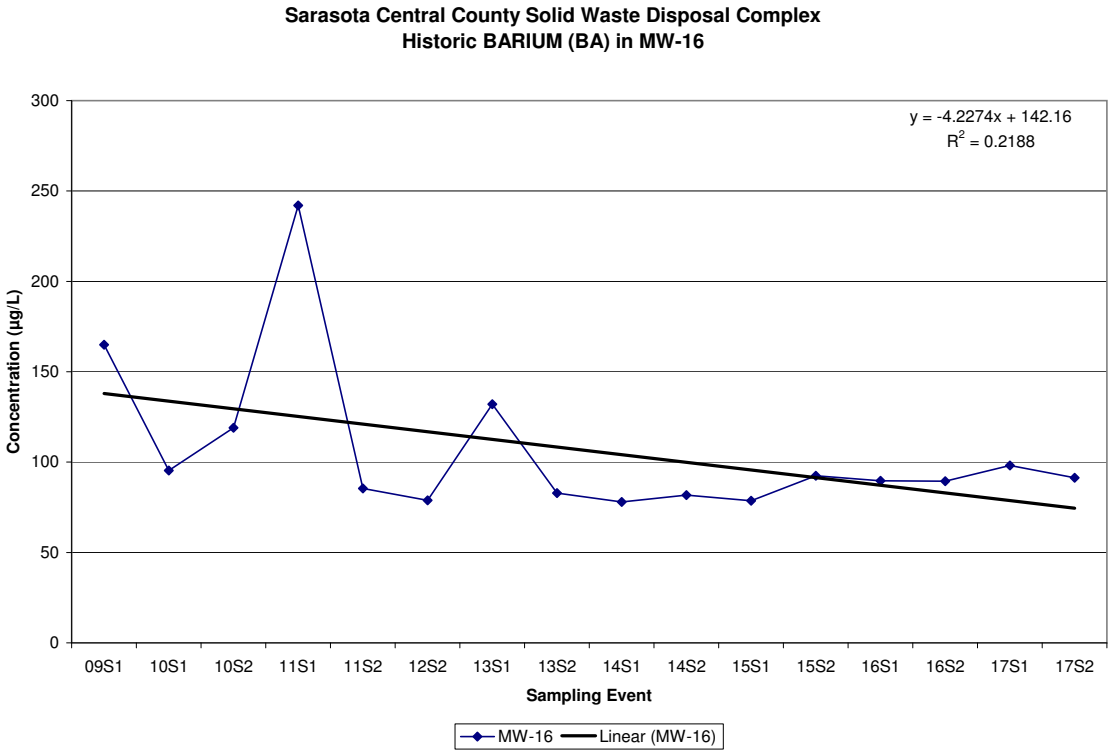

Sarasota Central County Solid Waste Disposal Complex
Historic BARIUM (BA) in MW-1R
y = 0.4806x + 29.134
R2 = 0.1383
Concentration (µg/L)
0
10
20
30
40
50
60
07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-1R
Linear (MW-1R)

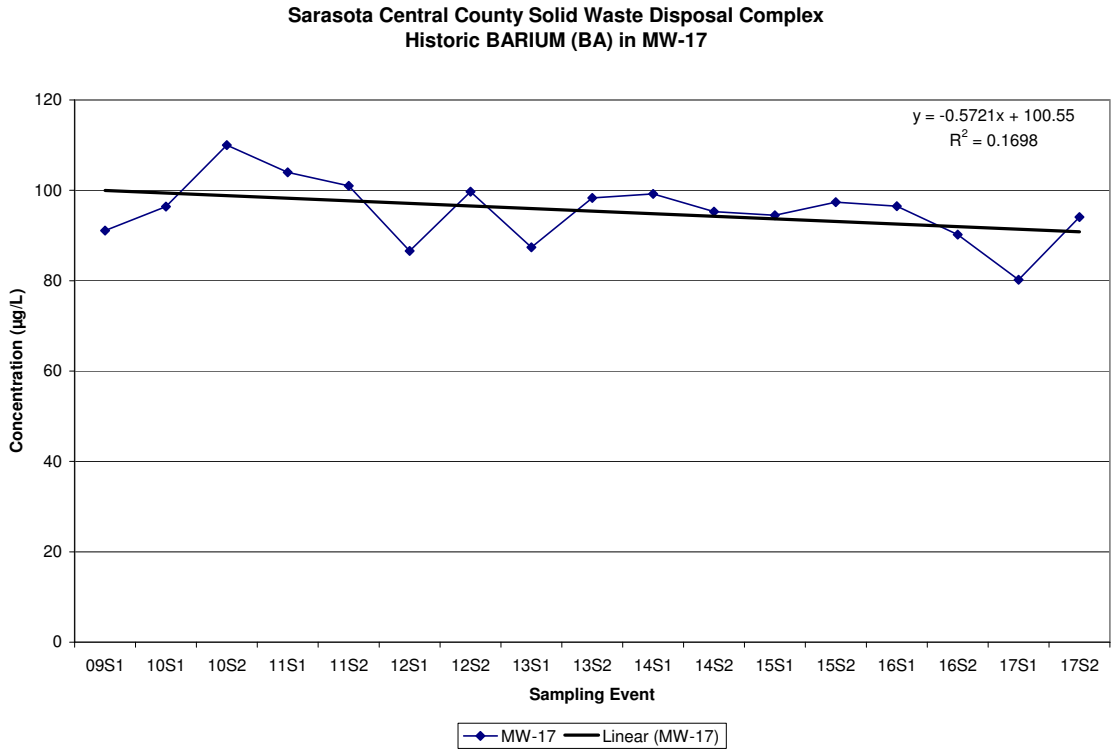

Sarasota Central County Solid Waste Disposal Complex
Historic Barium in MW-8A
y = -1.3898x + 73.373
R2 = 0.4914
Concentration (µg/L)
0
10
20
30
40
50
60
70
80
90
07S1 07S2 08S1 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-8A
Linear (MW-8A)

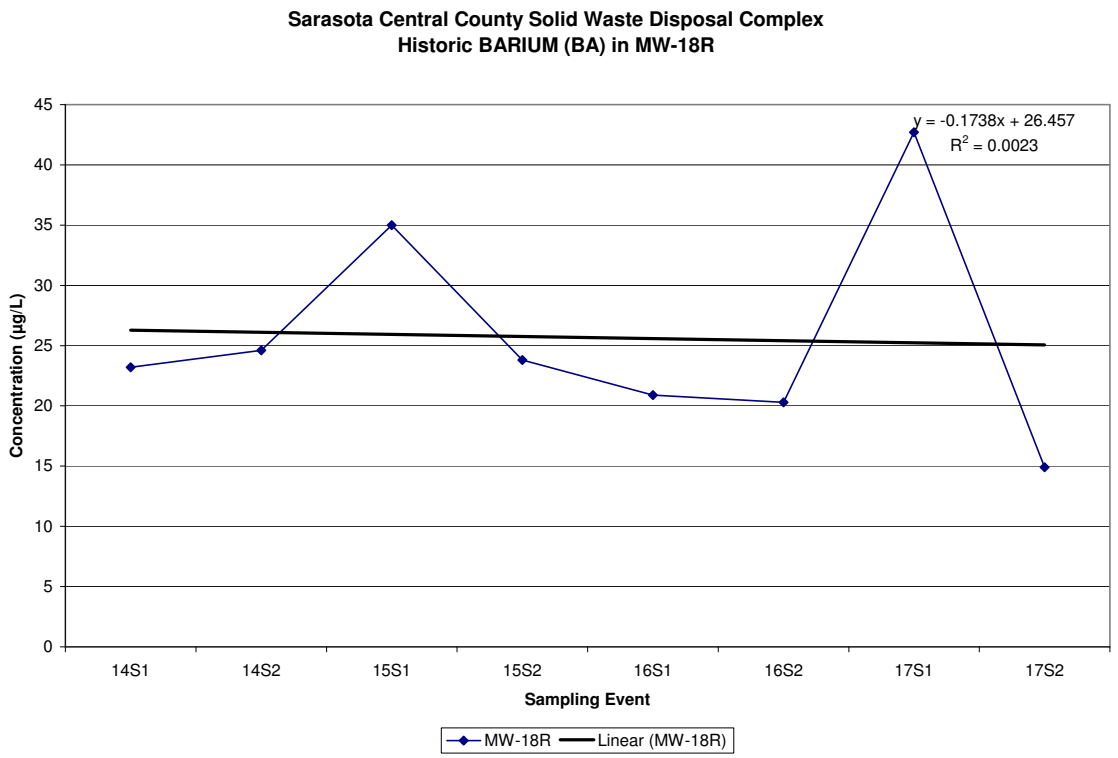

Sarasota Central County Solid Waste Disposal Complex
Historic Barium in MW-9
y = 0.3952x + 105.38
R2 = 0.0343
Concentration (µg/L)
0
20
40
60
80
100
120
140
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-9
Linear (MW-9)

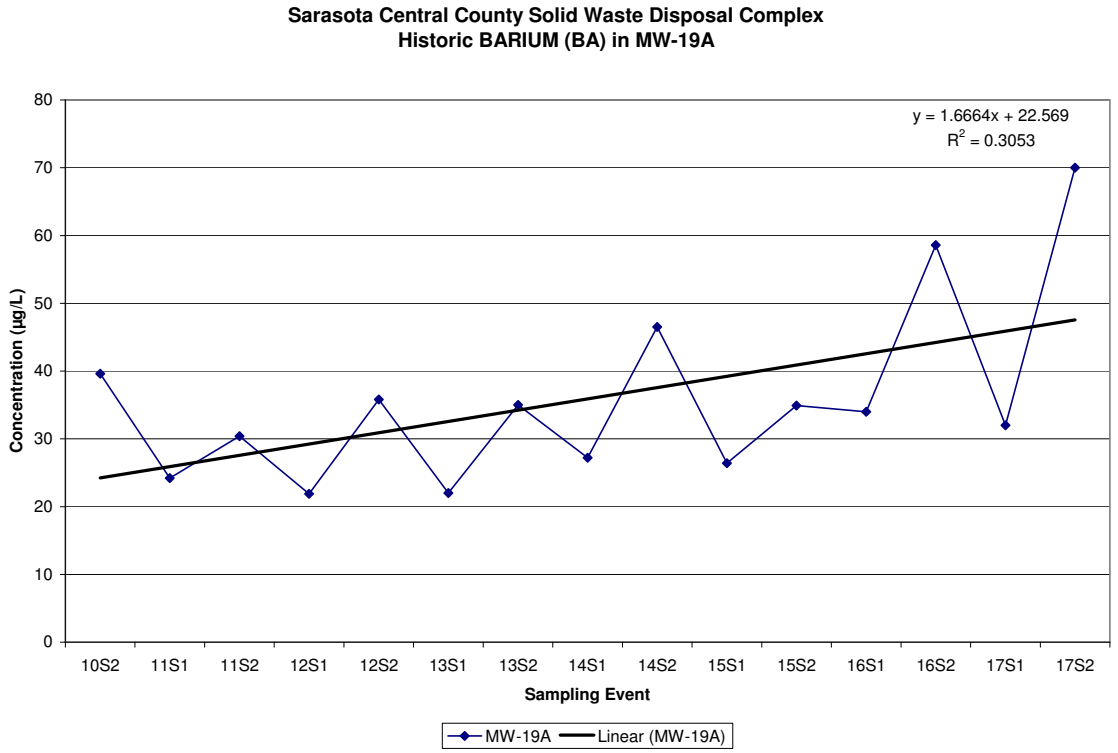

Sarasota Central County Solid Waste Disposal Complex
Historic Barium in MW-10R
y = -0.2232x + 78.332
R2 = 0.0315
Concentration (µg/L)
0
10
20
30
40
50
60
70
80
90
100
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-10R
Linear (MW-10R)

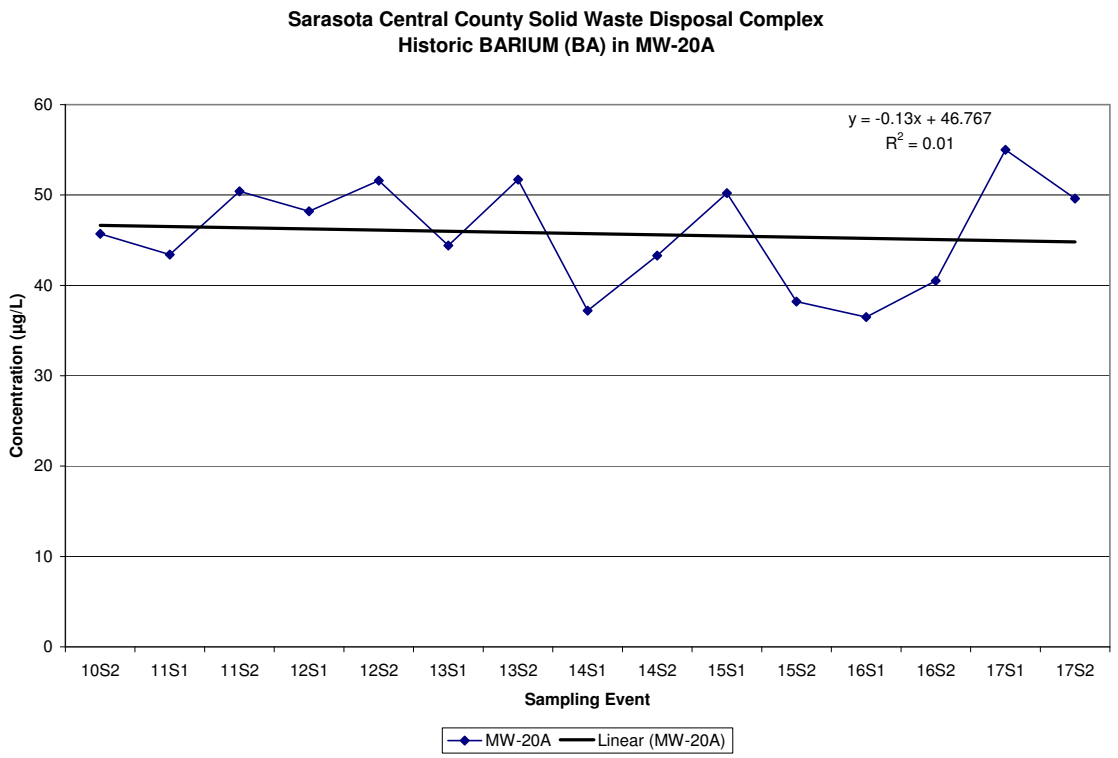

Sarasota Central County Solid Waste Disposal Complex
Historic BARIUM (BA) in MW-15
y = 10.395x + 160.33
R2 = 0.3197
Concentration (µg/L)
450
400
350
300
250
200
150
100
50
0
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-15
Linear (MW-15)


Sarasota Central County Solid Waste Disposal Complex
Historic BARIUM (BA) in MW-16
y = -4.2274x + 142.16
R2 = 0.2188
Concentration (µg/L)
300
250
200
150
100
50
0
09S1
10S1
10S2
11S1
11S2
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-16
Linear (MW-16)


Sarasota Central County Solid Waste Disposal Complex
Historic BARIUM (BA) in MW-17
y = -0.5721x + 100.55
R2 = 0.1698
Concentration (µg/L)
120
100
80
60
40
20
0
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-17
Linear (MW-17)


Sarasota Central County Solid Waste Disposal Complex
Historic BARIUM (BA) in MW-18R
y = -0.1738x + 26.457
R2 = 0.0023
Concentration (µg/L)
45
40
35
30
25
20
15
10
5
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-18R
Linear (MW-18R)

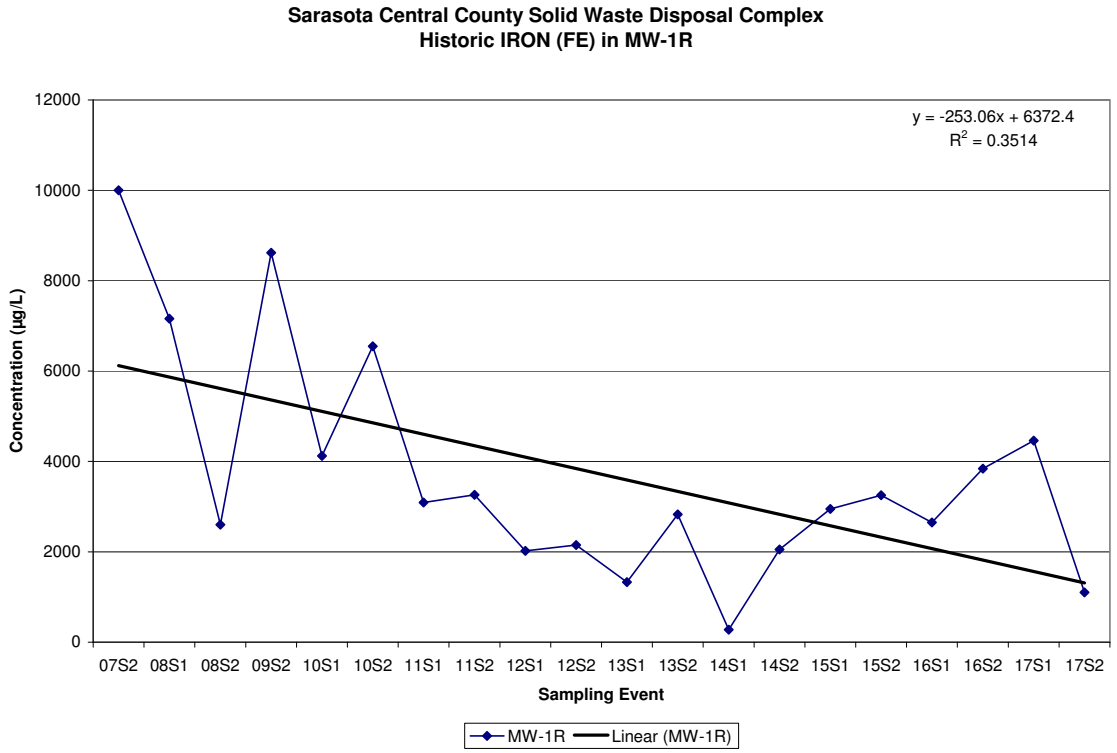

Sarasota Central County Solid Waste Disposal Complex
Historic BARIUM (BA) in MW-19A
y = 1.6664x + 22.569
R2 = 0.3053
Concentration (µg/L)
0
10
20
30
40
50
60
70
80
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-19A
Linear (MW-19A)

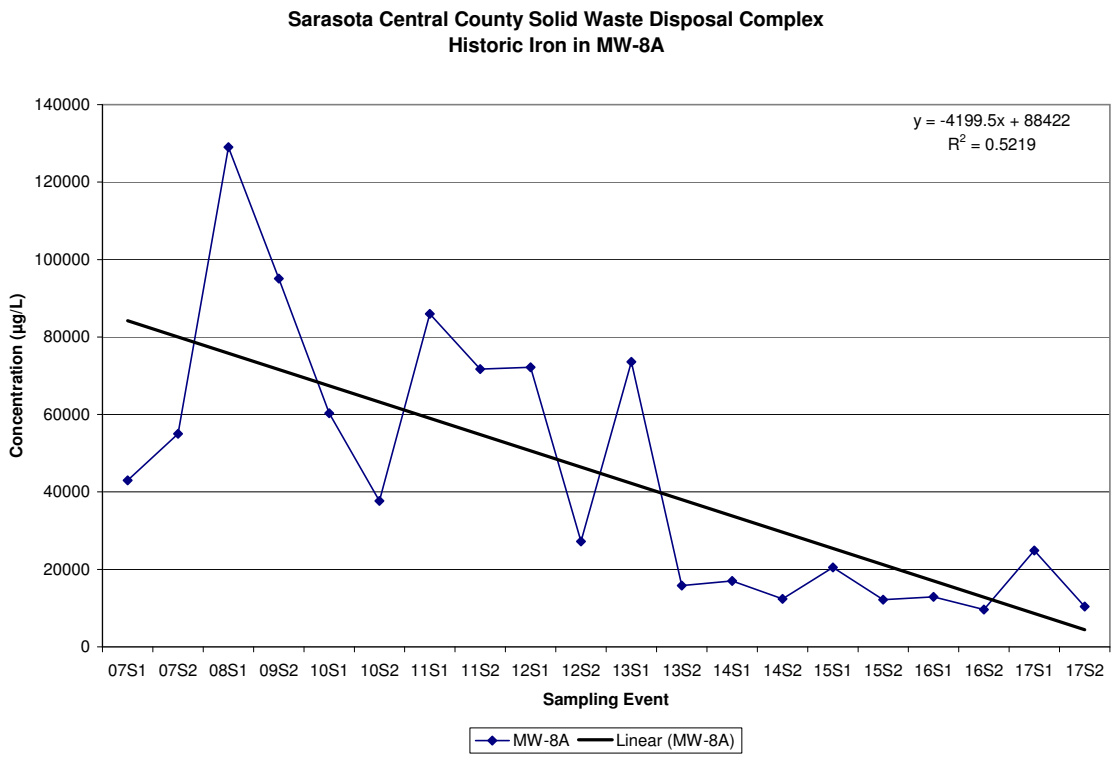

Sarasota Central County Solid Waste Disposal Complex
Historic BARIUM (BA) in MW-20A
y = -0.13x + 46.767
R2 = 0.01
Concentration (µg/L)
0
10
20
30
40
50
60
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-20A
Linear (MW-20A)

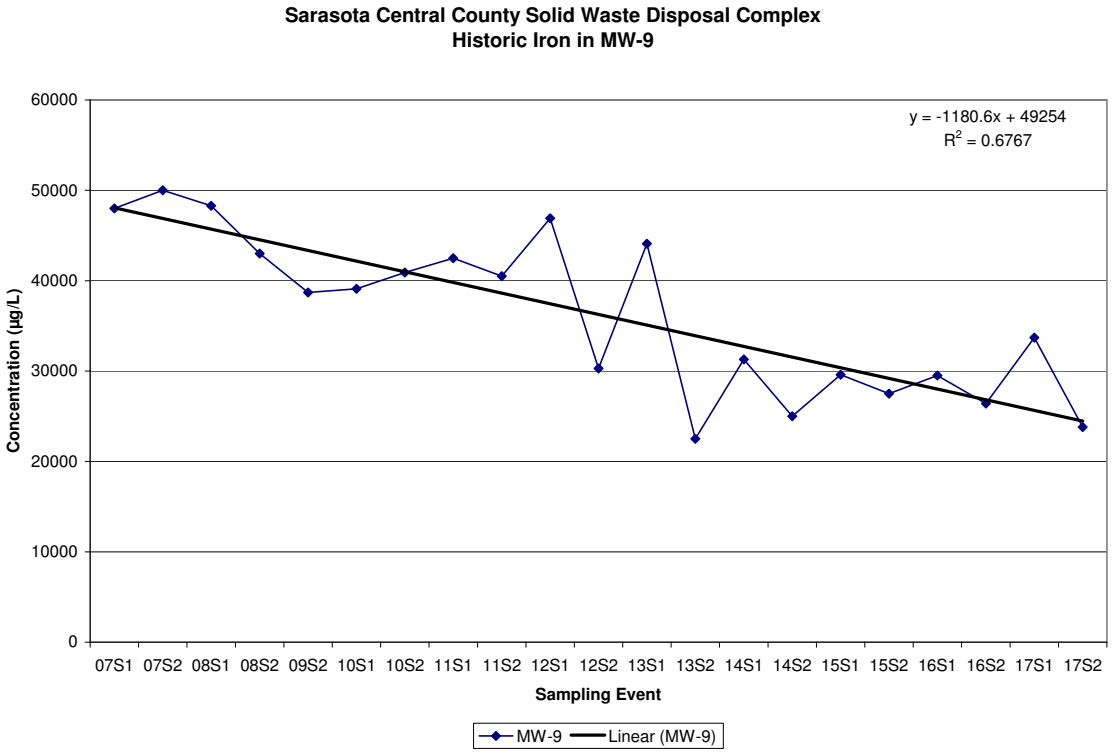
Sarasota County

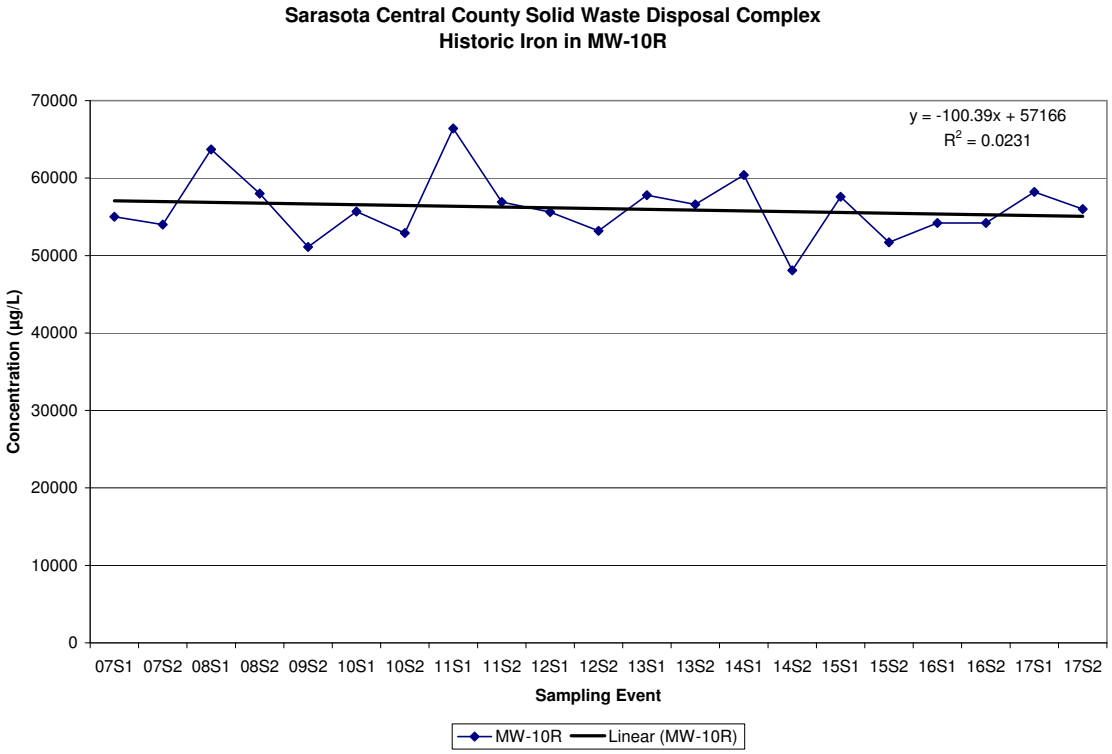
Central County Solid Waste Disposal Complex

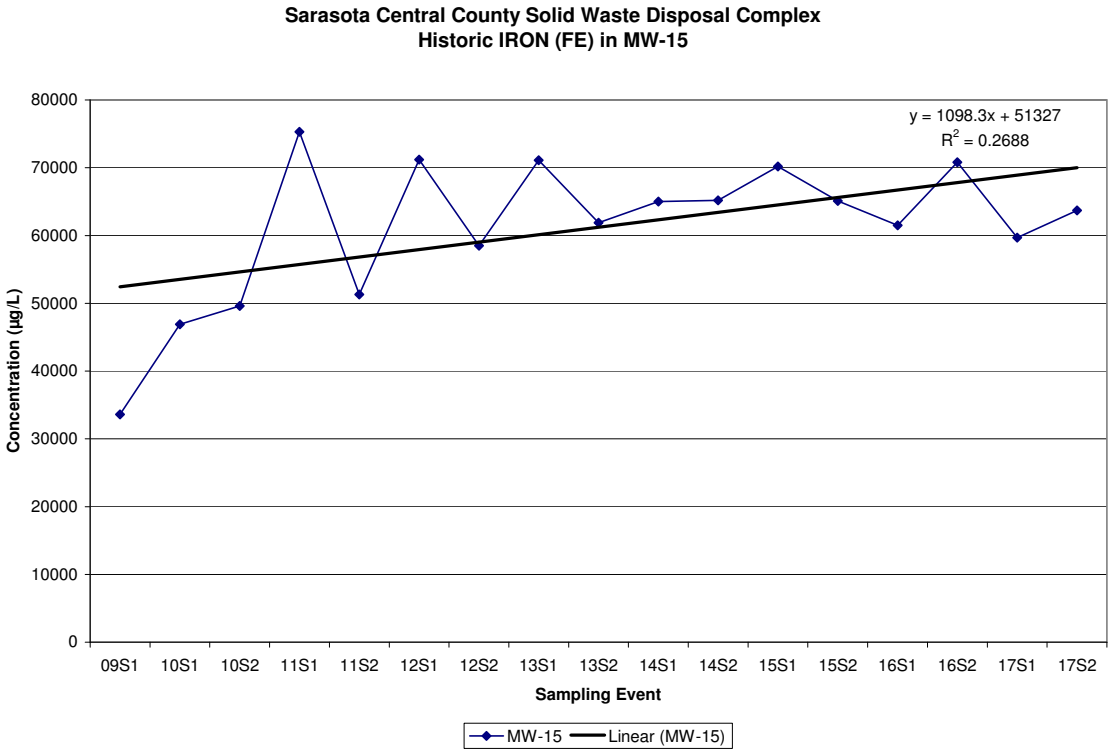
Historical Iron Data

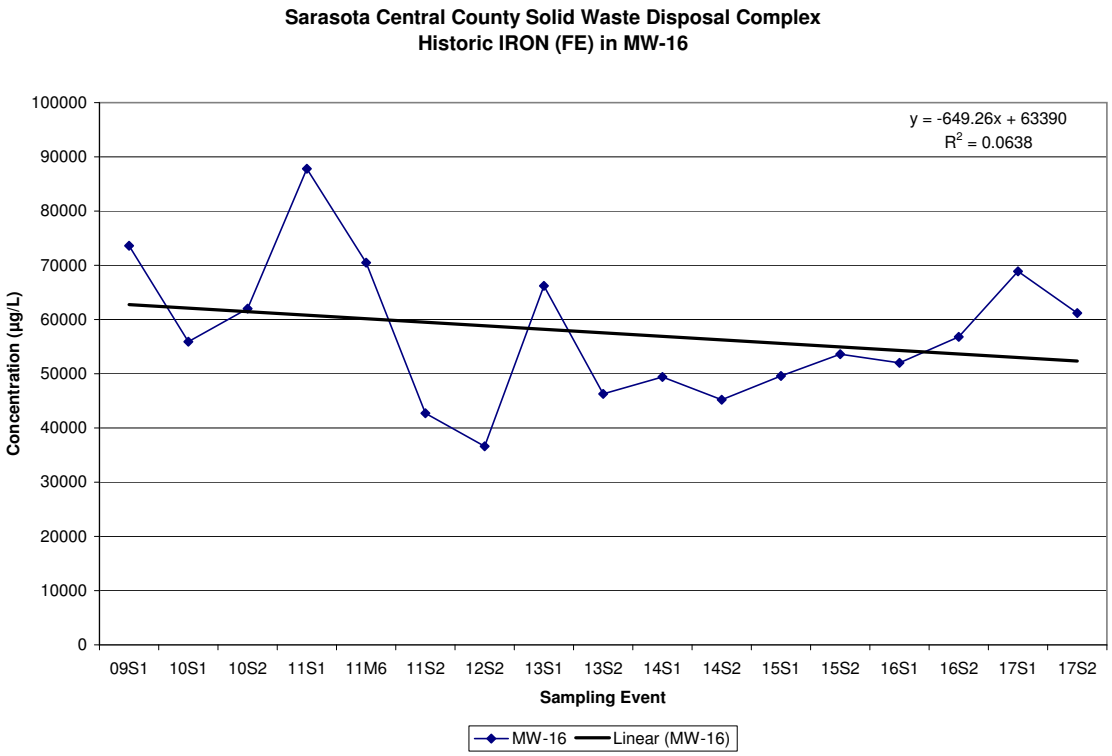

Sarasota Central County Solid Waste Disposal Complex
Historic IRON (FE) in MW-1R
y = -253.06x + 6372.4
R2 = 0.3514
Concentration (µg/L)
12000
10000
8000
6000
4000
2000
0
07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-1R
Linear (MW-1R)

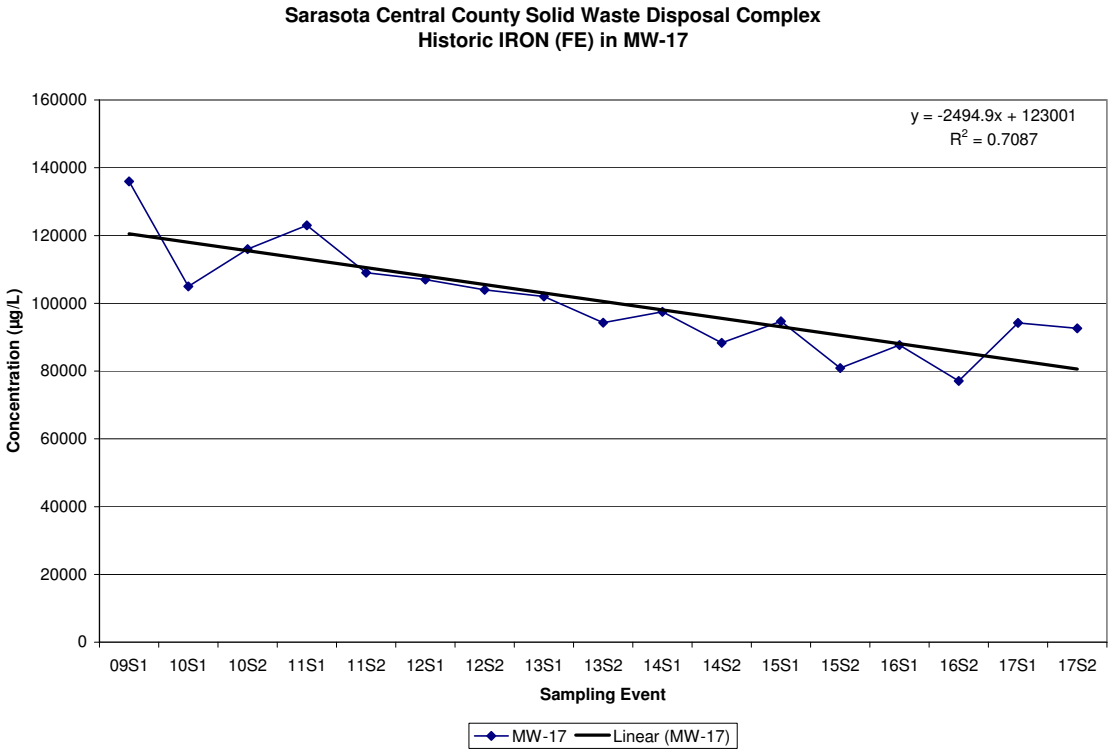

Sarasota Central County Solid Waste Disposal Complex
Historic Iron in MW-8A
y = -4199.5x + 88422
R2 = 0.5219
Concentration (µg/L)
140000
120000
100000
80000
60000
40000
20000
0
07S1 07S2 08S1 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-8A
Linear (MW-8A)

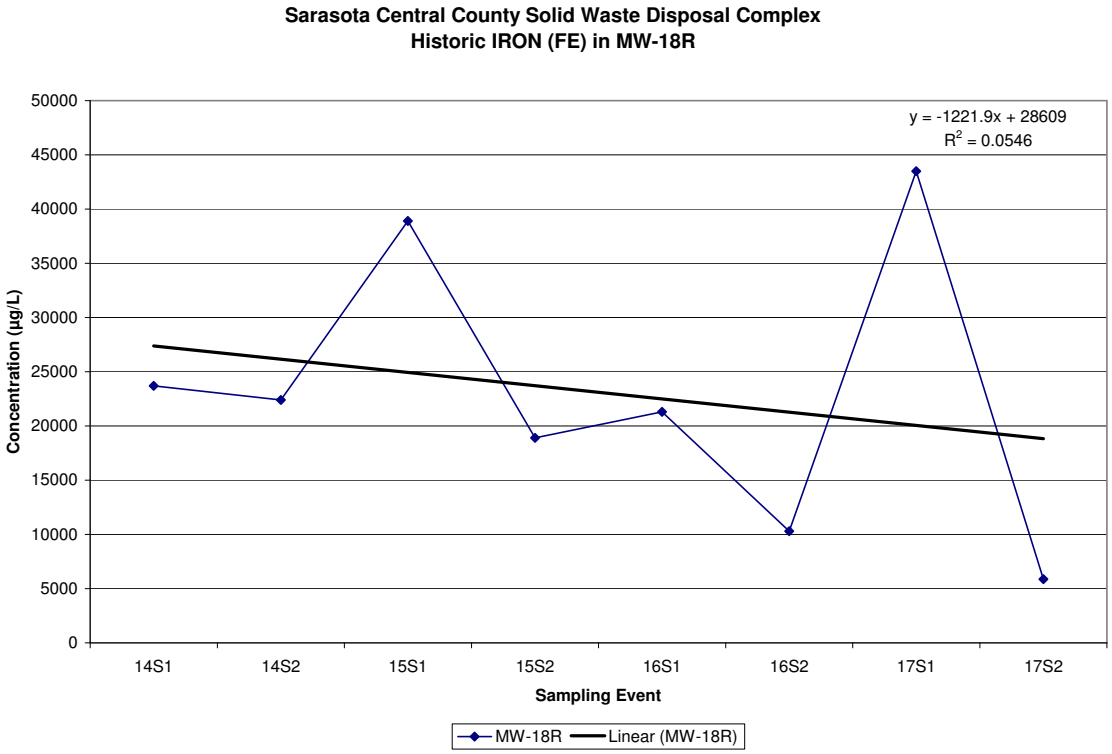

Sarasota Central County Solid Waste Disposal Complex
Historic Iron in MW-9
y = -1180.6x + 49254
R2 = 0.6767
Concentration (µg/L)
60000
50000
40000
30000
20000
10000
0
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-9
Linear (MW-9)

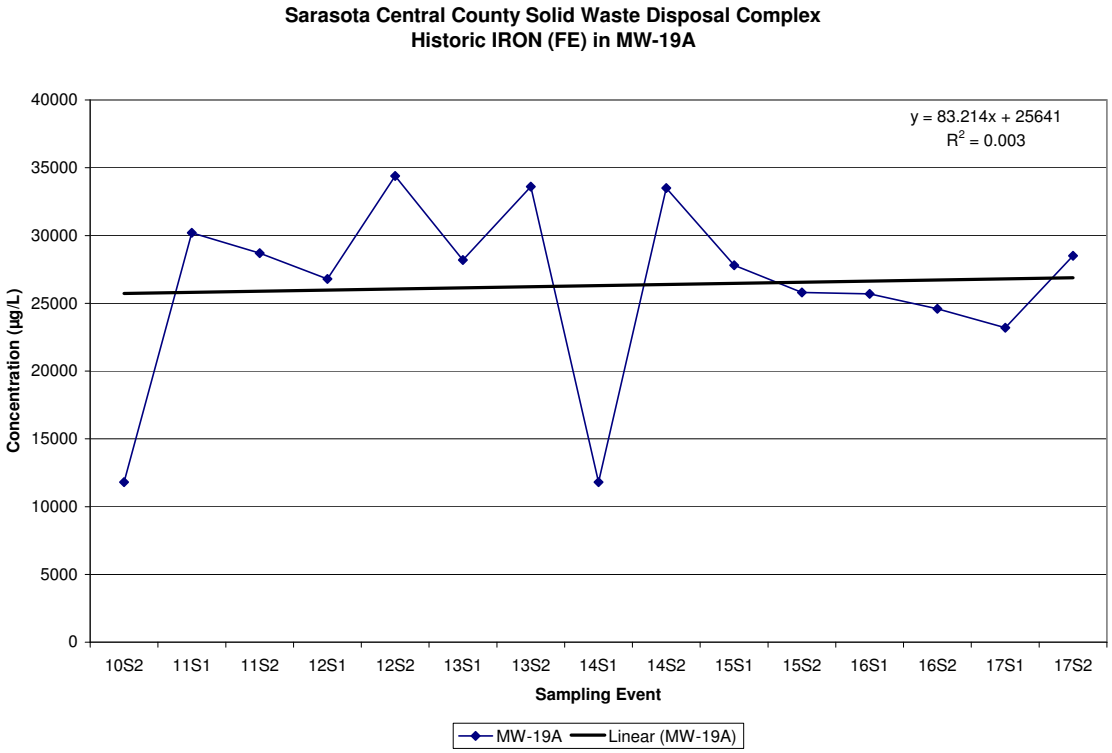

Sarasota Central County Solid Waste Disposal Complex
Historic Iron in MW-10R
y = -100.39x + 57166
R2 = 0.0231
Concentration (µg/L)
70000
60000
50000
40000
30000
20000
10000
0
07S1 07S2 08S1 08S2 09S2 10S1 10S2 11S1 11S2 12S1 12S2 13S1 13S2 14S1 14S2 15S1 15S2 16S1 16S2 17S1 17S2
Sampling Event
MW-10R
Linear (MW-10R)

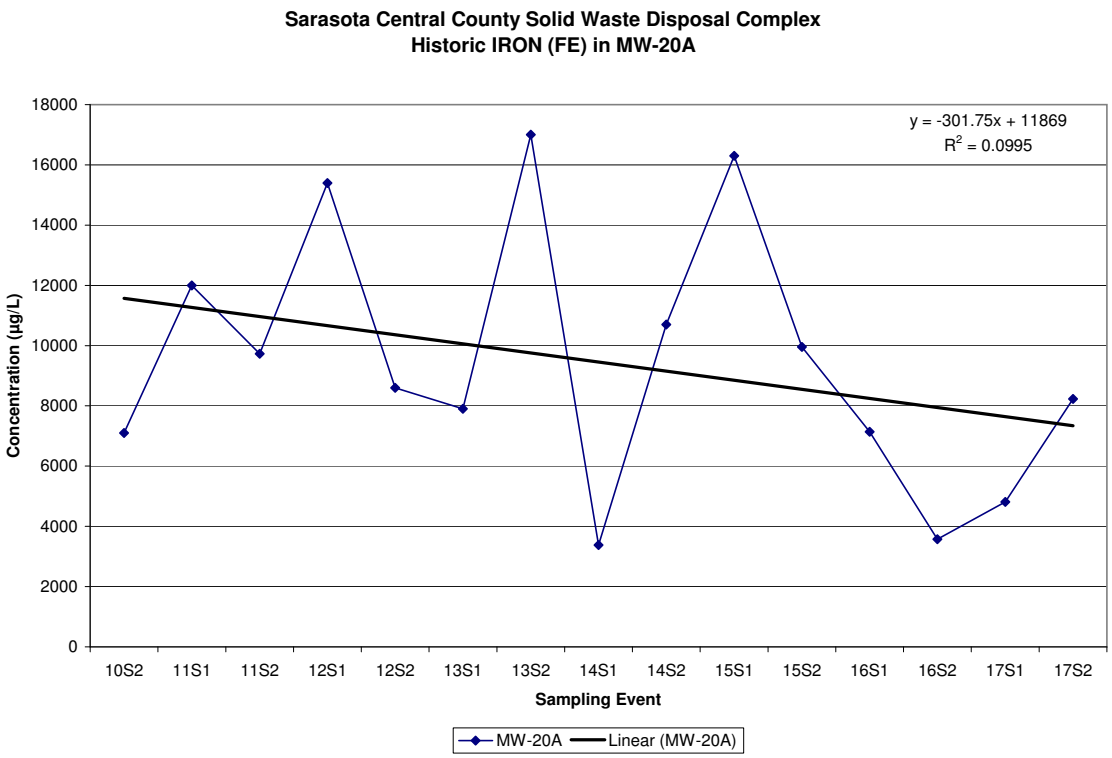

Sarasota Central County Solid Waste Disposal Complex
Historic IRON (FE) in MW-15
y = 1098.3x + 51327
R2 = 0.2688
Concentration (µg/L)
80000
70000
60000
50000
40000
30000
20000
10000
0
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-15
Linear (MW-15)


Sarasota Central County Solid Waste Disposal Complex
Historic IRON (FE) in MW-16
y = -649.26x + 63390
R2 = 0.0638
Concentration (µg/L)
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
09S1
10S1
10S2
11S1
11M6
11S2
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-16
Linear (MW-16)


Sarasota Central County Solid Waste Disposal Complex
Historic IRON (FE) in MW-17
y = -2494.9x + 123001
R2 = 0.7087
Concentration (µg/L)
160000
140000
120000
100000
80000
60000
40000
20000
0
09S1
10S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-17
Linear (MW-17)


Sarasota Central County Solid Waste Disposal Complex
Historic IRON (FE) in MW-18R
y = -1221.9x + 28609
R2 = 0.0546
Concentration (µg/L)
50000
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-18R
Linear (MW-18R)

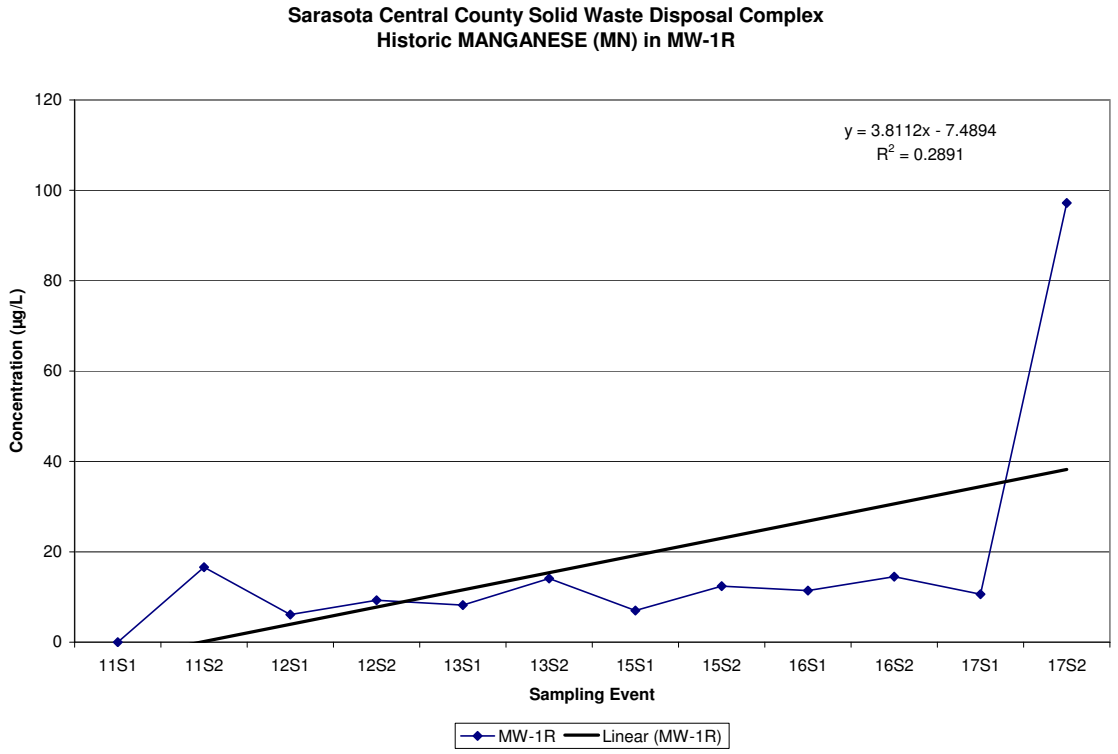

Sarasota Central County Solid Waste Disposal Complex
Historic IRON (FE) in MW-19A
y = 83.214x + 25641
R2 = 0.003
Concentration (µg/L)
40000
35000
30000
25000
20000
15000
10000
5000
0
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-19A
Linear (MW-19A)

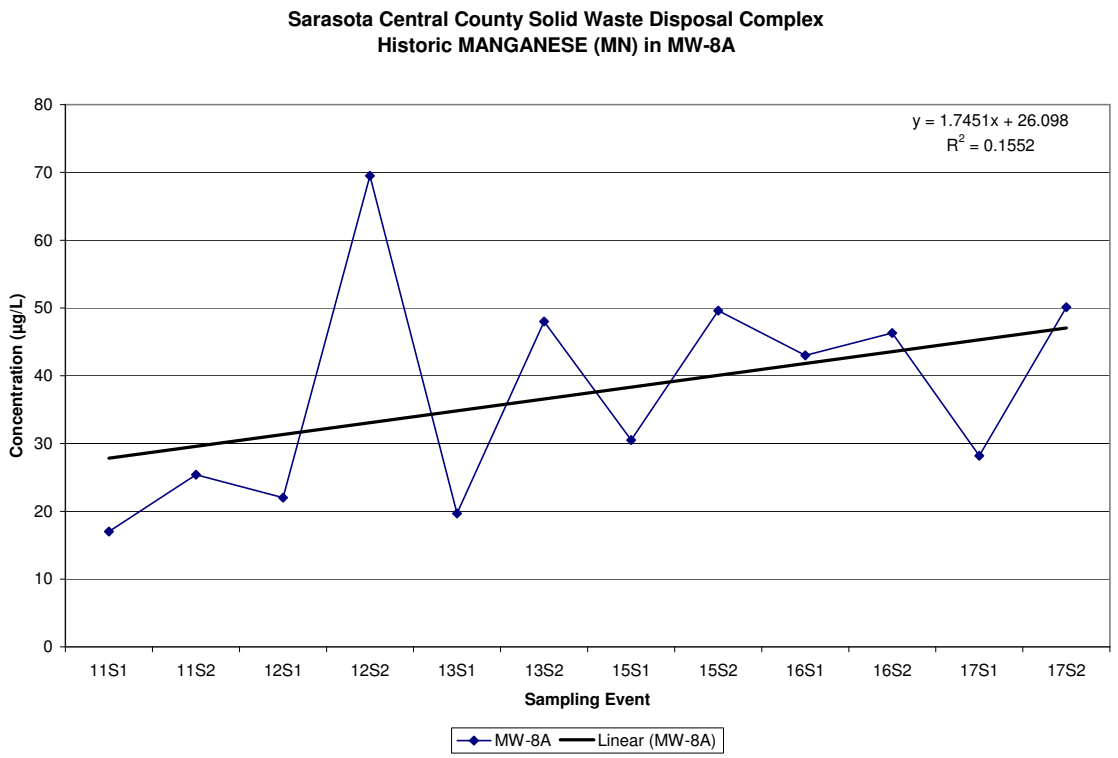

Sarasota Central County Solid Waste Disposal Complex
Historic IRON (FE) in MW-20A
y = -301.75x + 11869
R2 = 0.0995
Concentration (µg/L)
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
10S2
11S1
11S2
12S1
12S2
13S1
13S2
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-20A
Linear (MW-20A)

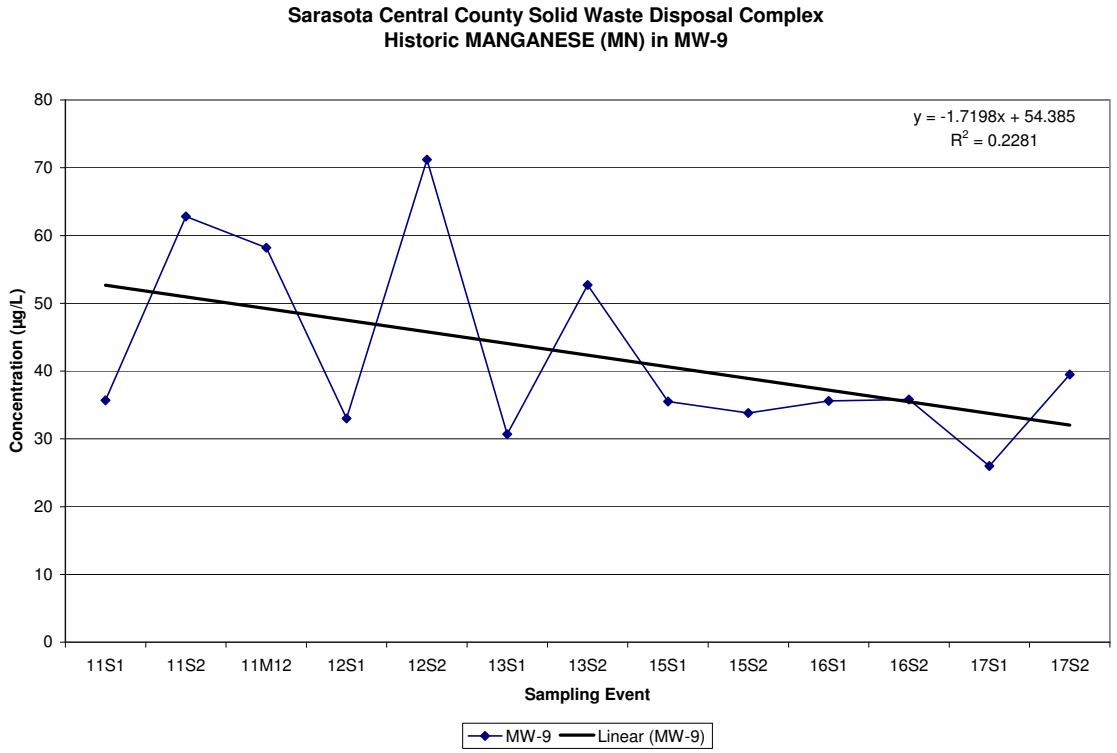
Sarasota County

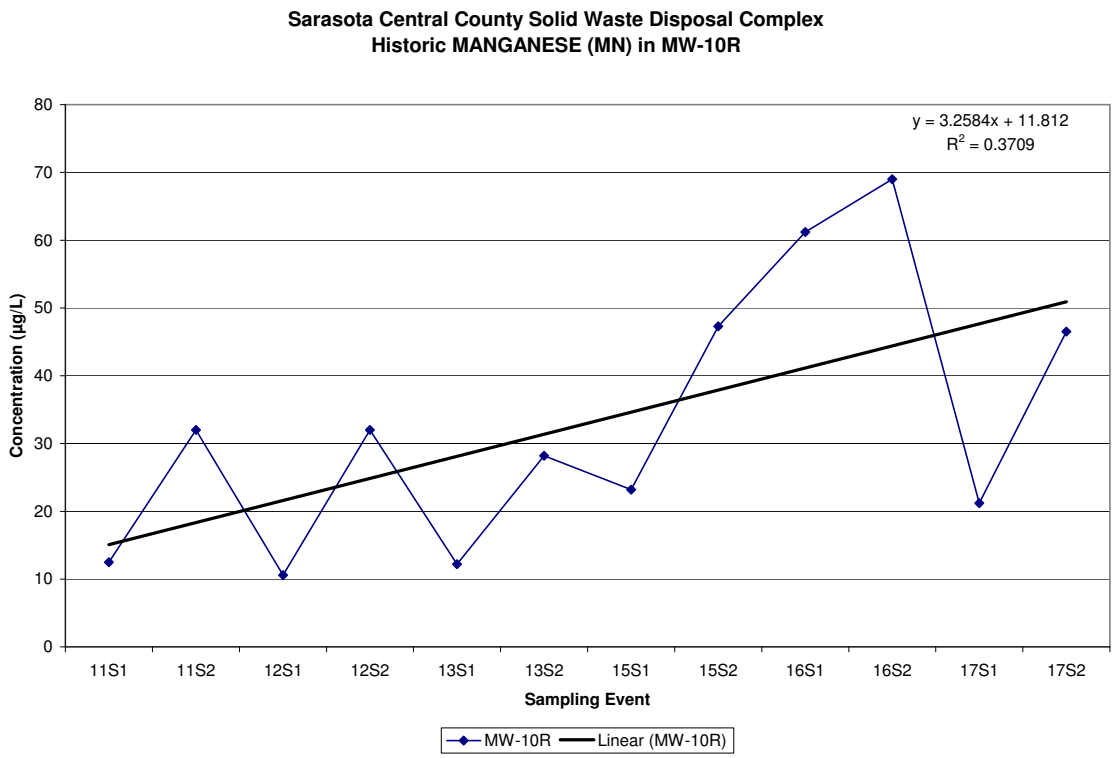
Central County Solid Waste Disposal Complex

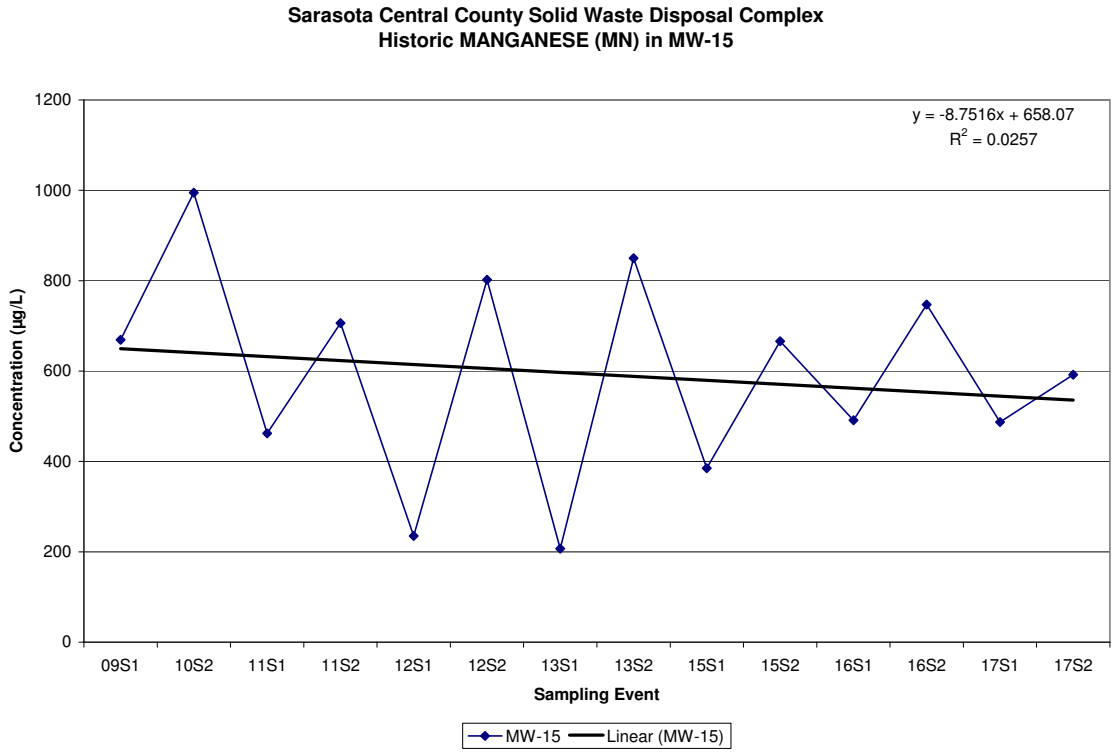
Historical Manganese Data

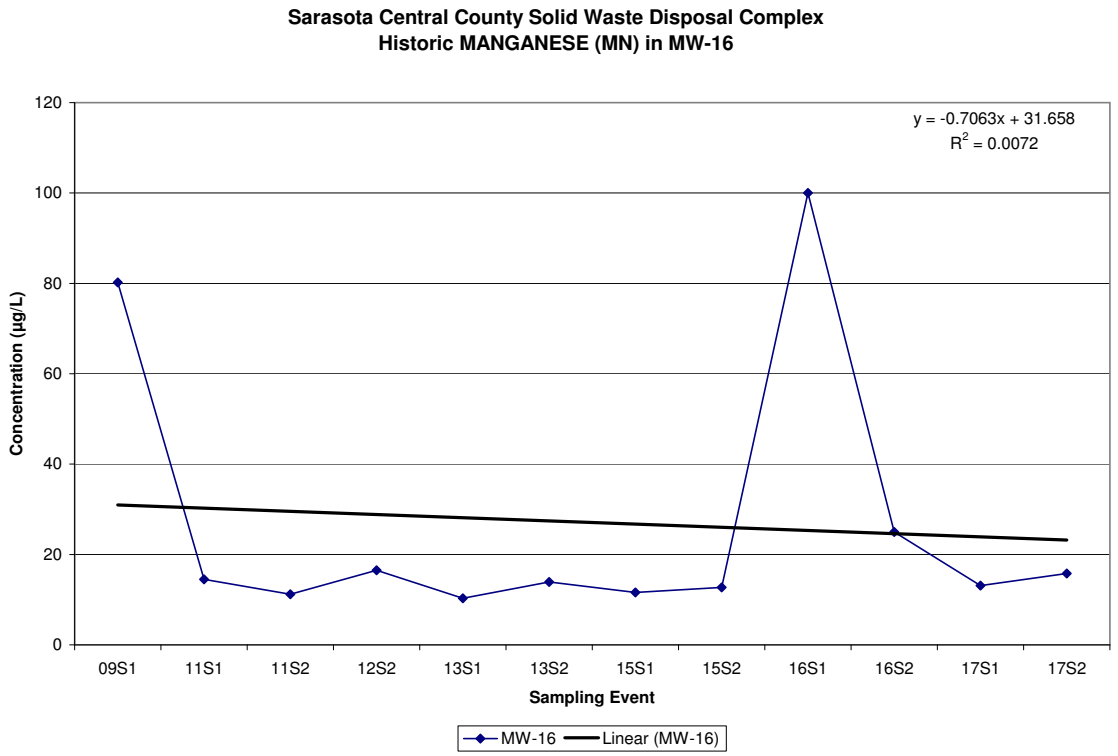

Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in MW-1R
y = 3.8112x - 7.4894
R2 = 0.2891
Concentration (µg/L)
120
100
80
60
40
20
0
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-1R
Linear (MW-1R)

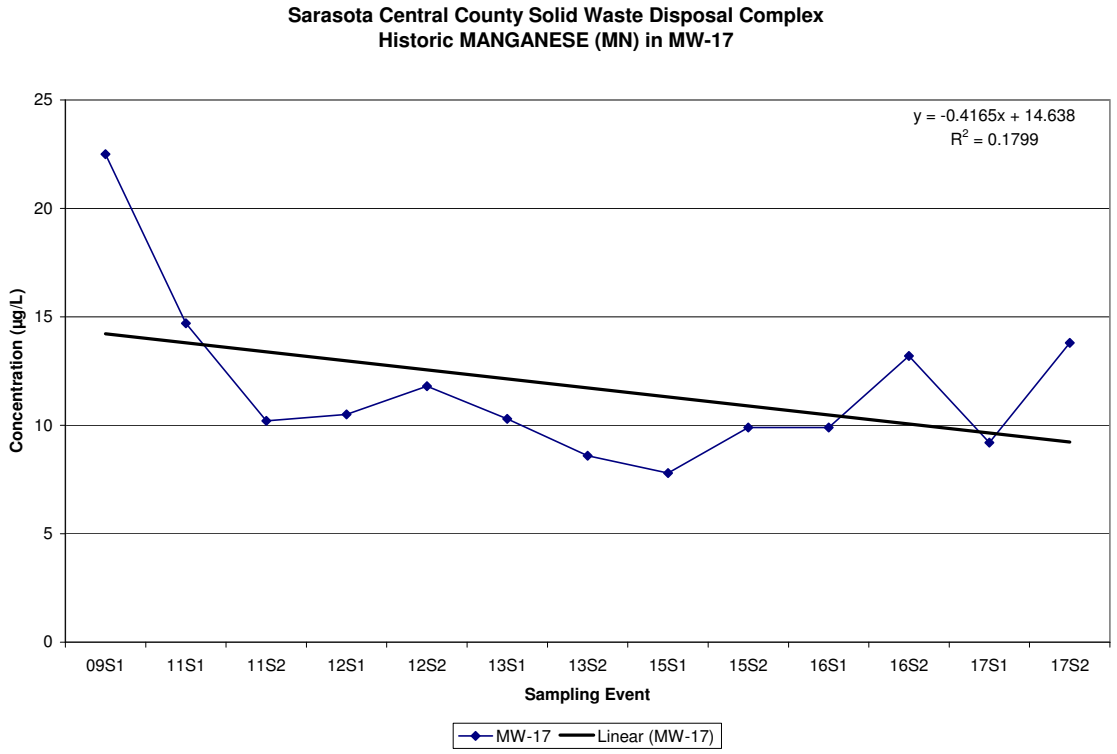

Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in MW-8A
y = 1.7451x + 26.098
R2 = 0.1552
Concentration (µg/L)
80
70
60
50
40
30
20
10
0
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-8A
Linear (MW-8A)

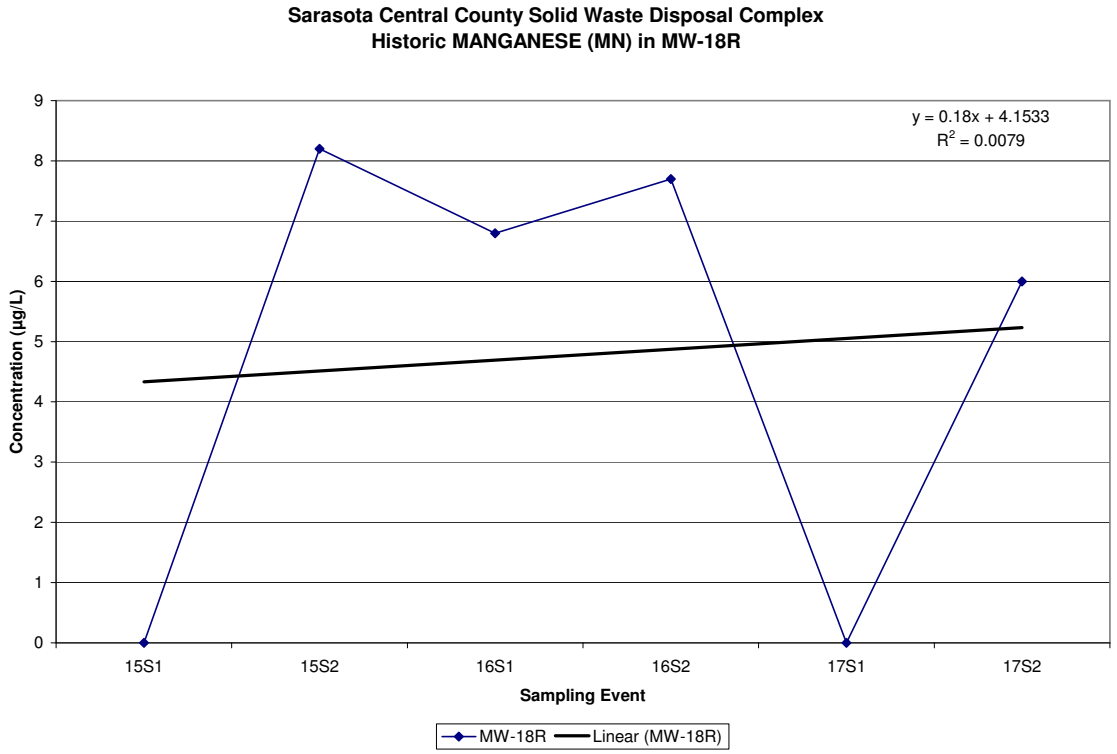

Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in MW-9
y = -1.7198x + 54.385
R2 = 0.2281
Concentration (µg/L)
0
10
20
30
40
50
60
70
80
11S1
11S2
11M12
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-9
Linear (MW-9)

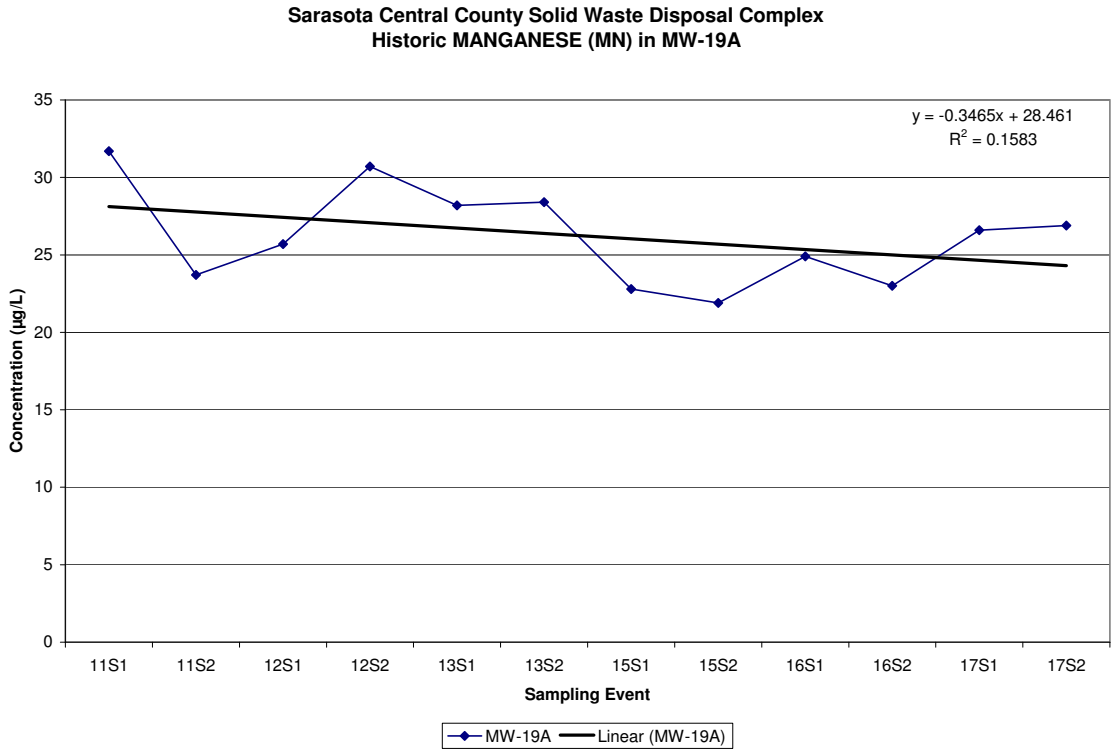

Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in MW-10R
y = 3.2584x + 11.812
R2 = 0.3709
Concentration (µg/L)
0
10
20
30
40
50
60
70
80
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-10R
Linear (MW-10R)

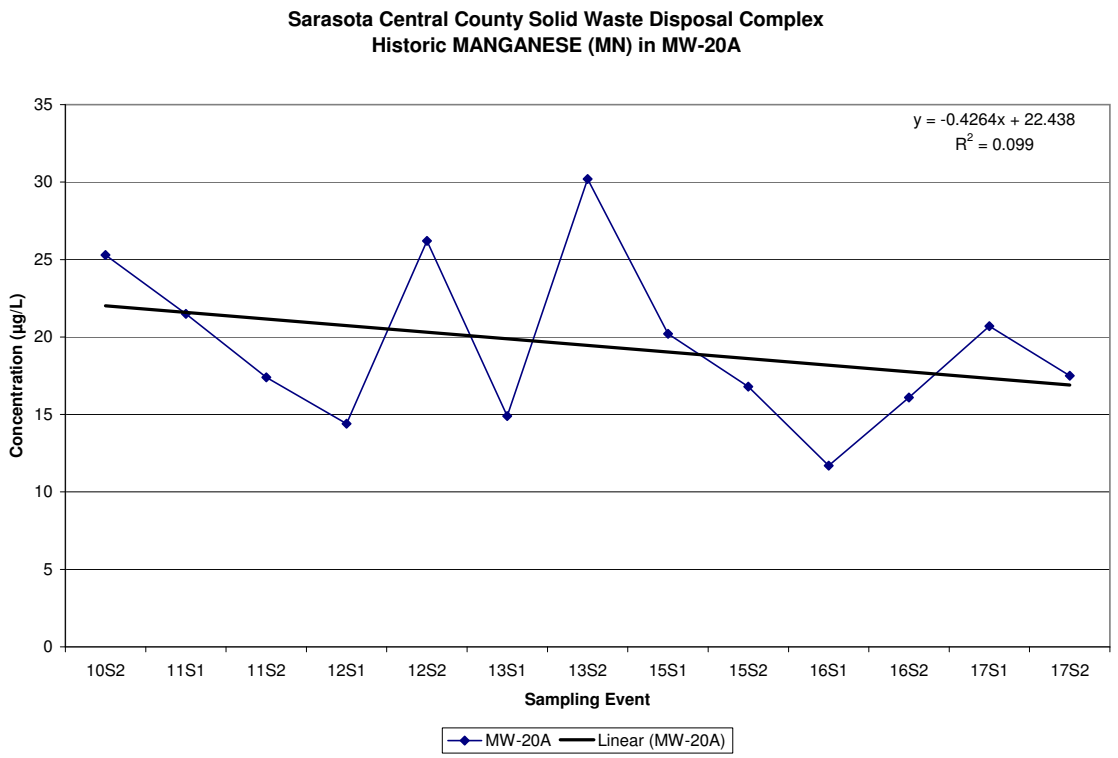

Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in MW-15
y = -8.7516x + 658.07
R2 = 0.0257
Concentration (µg/L)
1200
1000
800
600
400
200
0
09S1
10S2
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-15
Linear (MW-15)


Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in MW-16
y = -0.7063x + 31.658
R2 = 0.0072
Concentration (µg/L)
120
100
80
60
40
20
0
09S1
11S1
11S2
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-16
Linear (MW-16)


Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in MW-17
y = -0.4165x + 14.638
R2 = 0.1799
Concentration (µg/L)
25
20
15
10
5
0
09S1
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-17
Linear (MW-17)


Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in MW-18R
y = 0.18x + 4.1533
R2 = 0.0079
Concentration (µg/L)
9
8
7
6
5
4
3
2
1
0
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-18R
Linear (MW-18R)


Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in MW-19A
y = -0.3465x + 28.461
R2 = 0.1583
Concentration (µg/L)
35
30
25
20
15
10
5
0
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-19A
Linear (MW-19A)

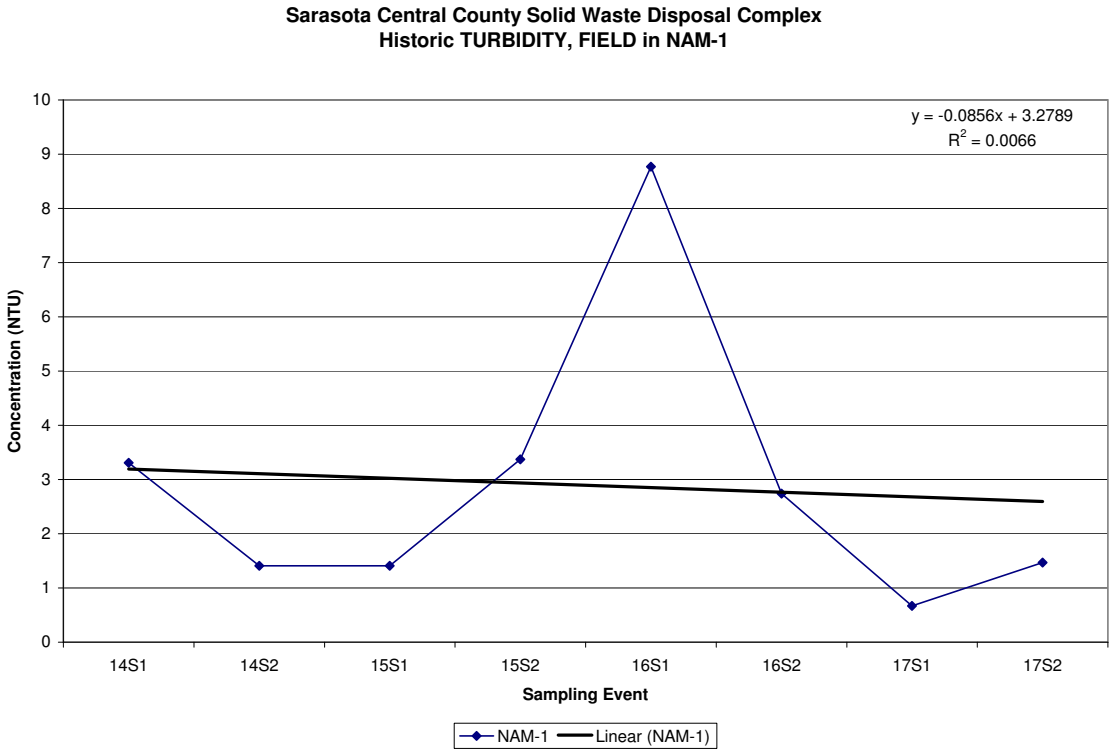

Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in MW-20A
y = -0.4264x + 22.438
R2 = 0.099
Concentration (µg/L)
35
30
25
20
15
10
5
0
10S2
11S1
11S2
12S1
12S2
13S1
13S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
MW-20A
Linear (MW-20A)

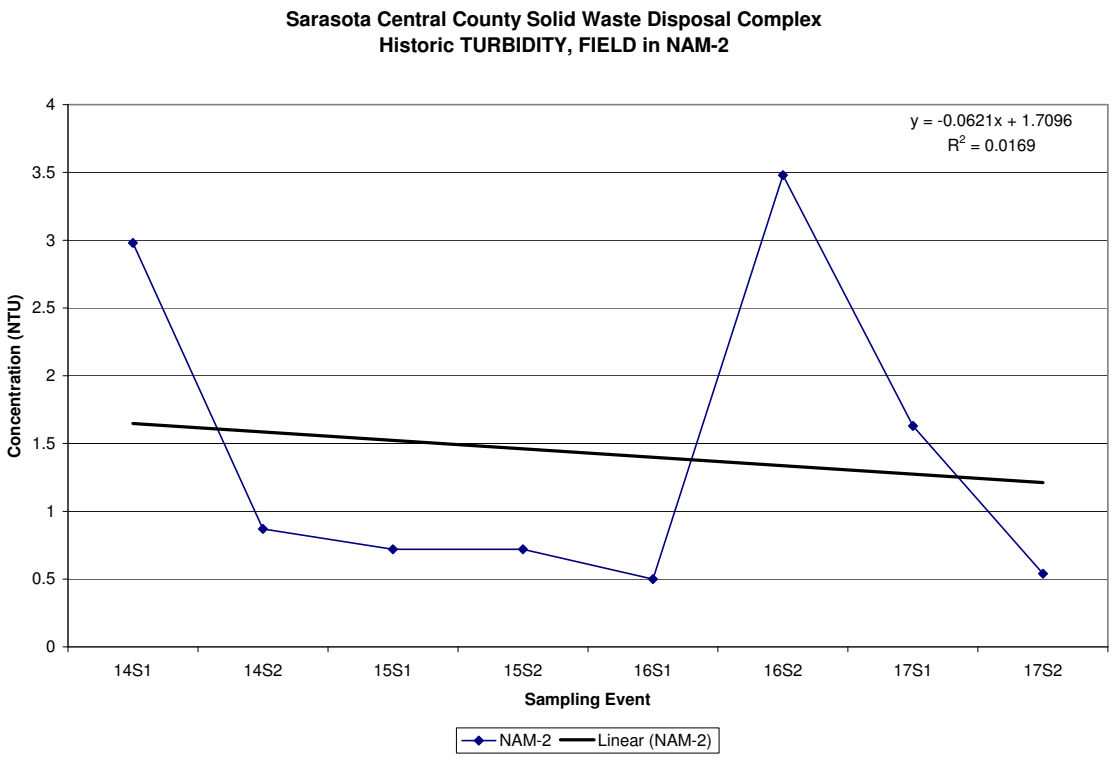
NAM Wells

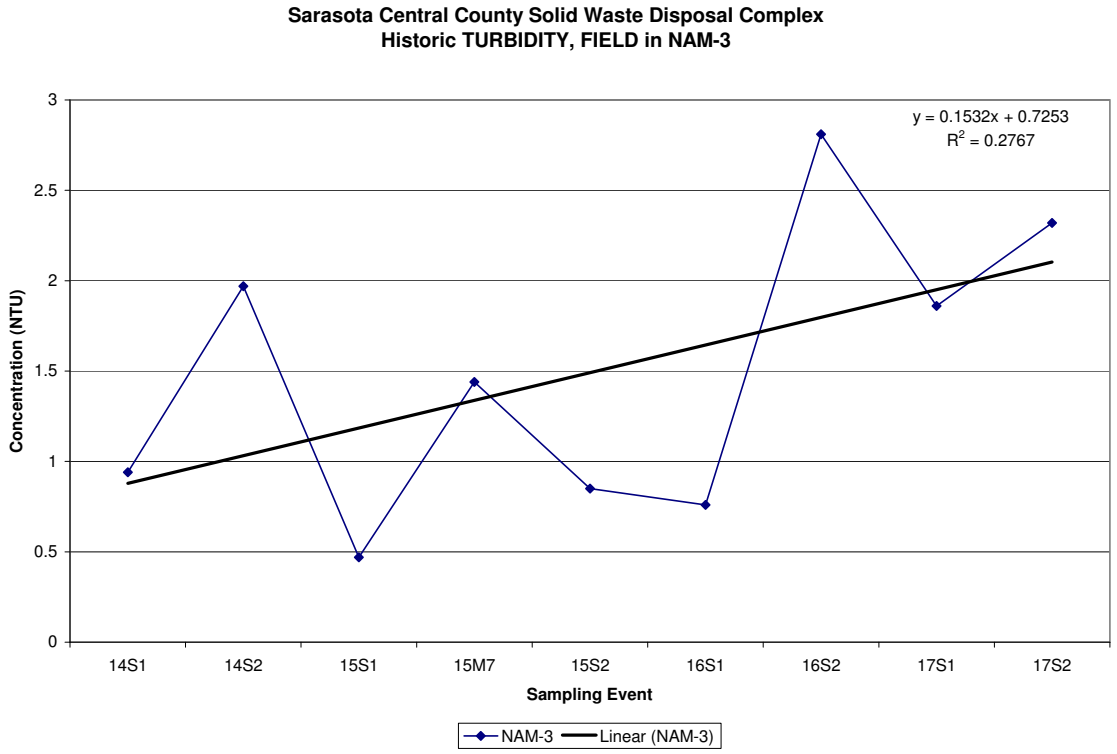
Sarasota County

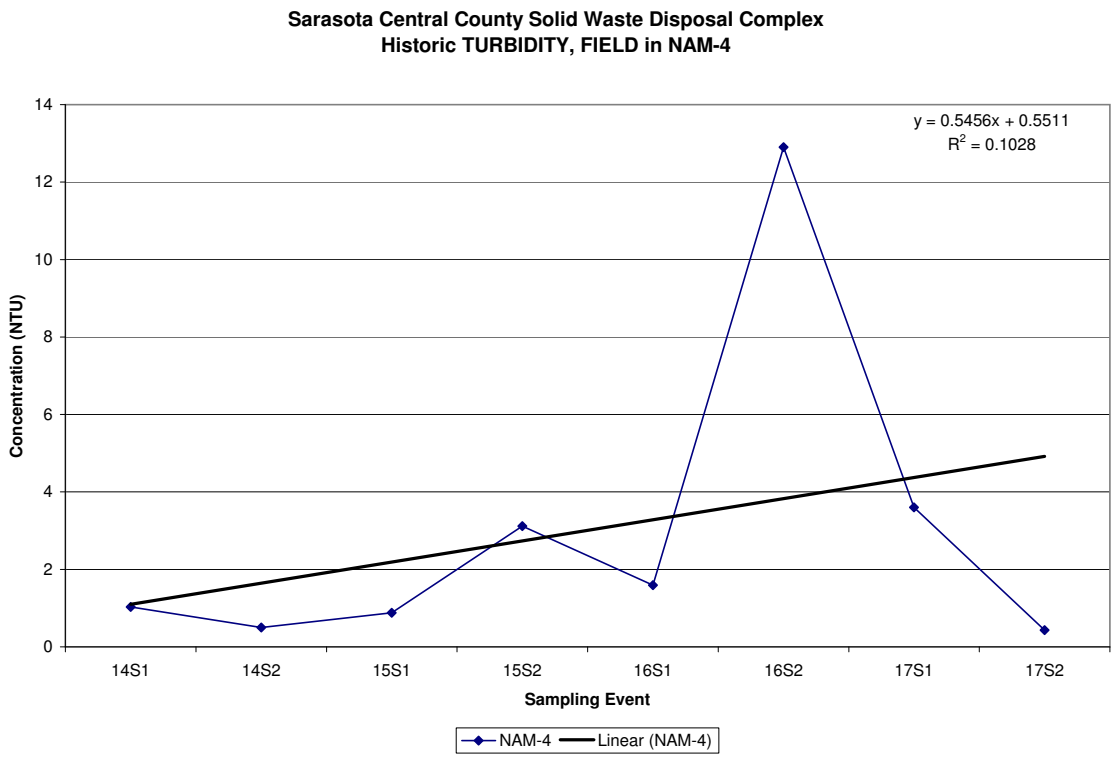
Central County Solid Waste Disposal Complex

Historical Turbidity Data


Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in NAM-1
y = -0.0856x + 3.2789
R2 = 0.0066
Concentration (NTU)
0
1
2
3
4
5
6
7
8
9
10
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-1
Linear (NAM-1)


Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in NAM-2
y = -0.0621x + 1.7096
R2 = 0.0169
Concentration (NTU)
0
0.5
1
1.5
2
2.5
3
3.5
4
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-2
Linear (NAM-2)

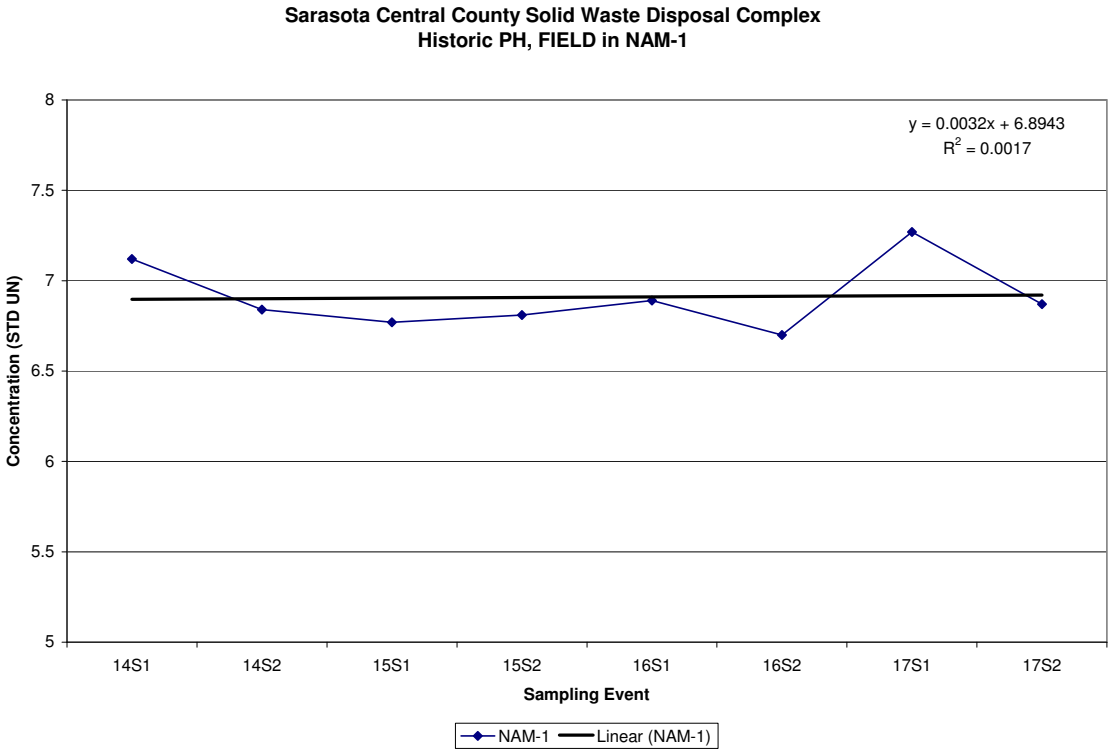

Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in NAM-3
y = 0.1532x + 0.7253
R2 = 0.2767
Concentration (NTU)
3
2.5
2
1.5
1
0.5
0
14S1
14S2
15S1
15M7
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-3
Linear (NAM-3)

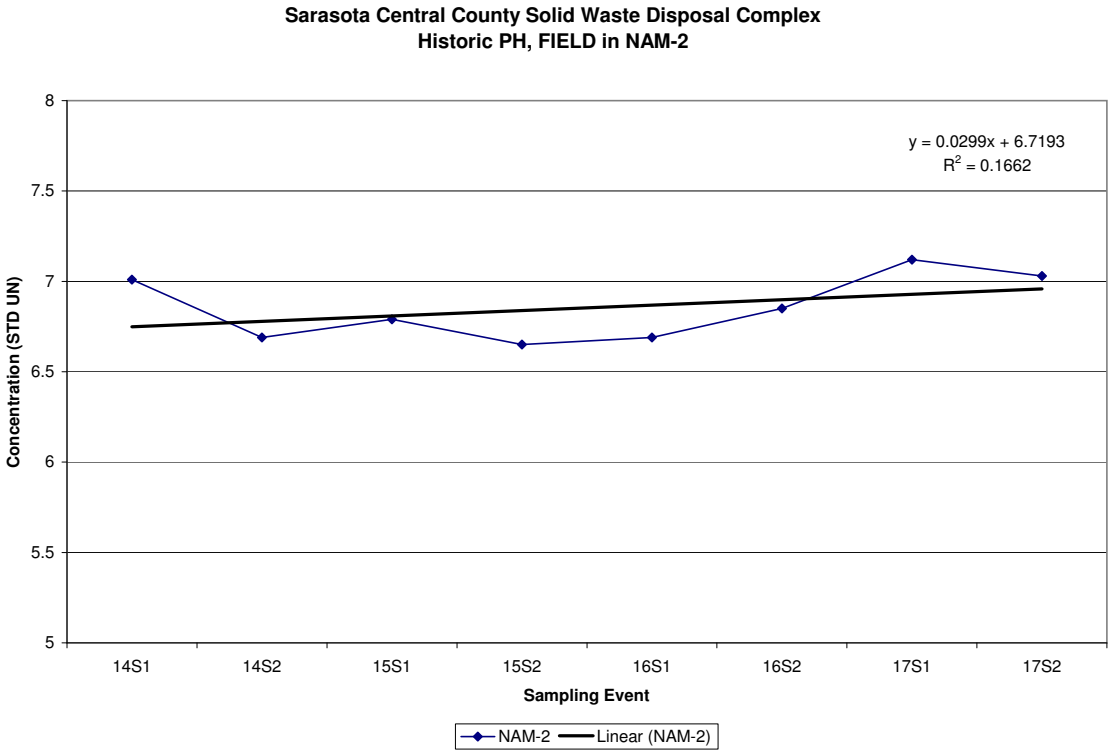

Sarasota Central County Solid Waste Disposal Complex
Historic TURBIDITY, FIELD in NAM-4
y = 0.5456x + 0.5511
R2 = 0.1028
Concentration (NTU)
14
12
10
8
6
4
2
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-4
Linear (NAM-4)

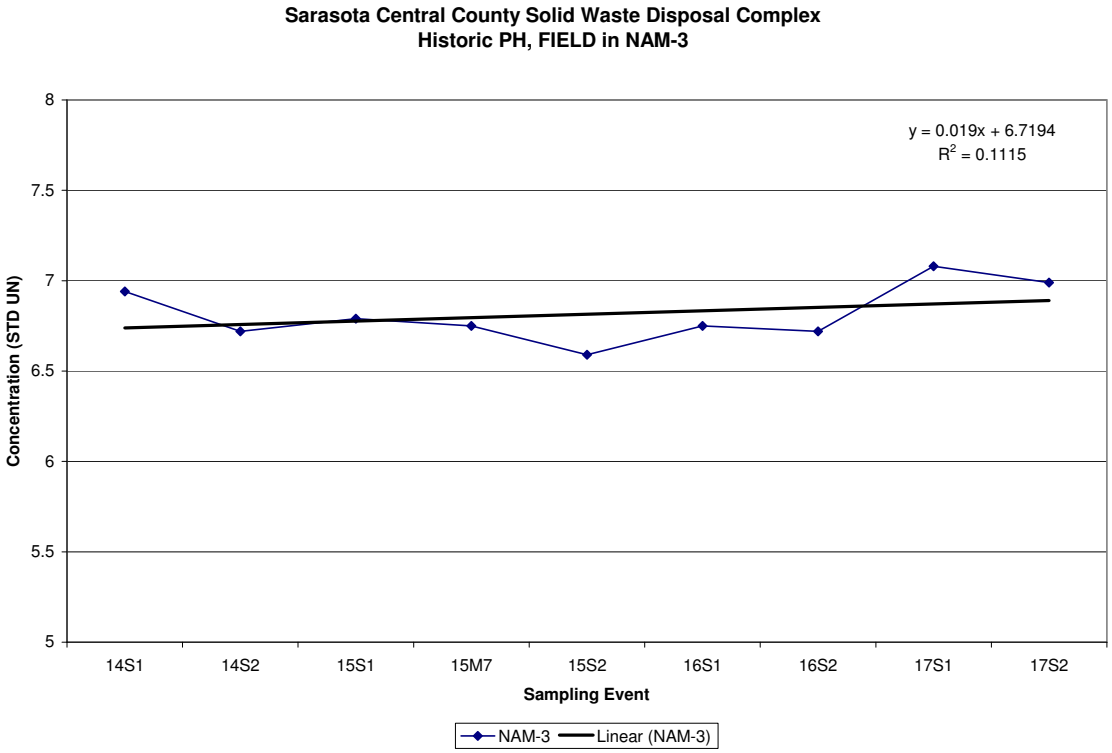
Sarasota County

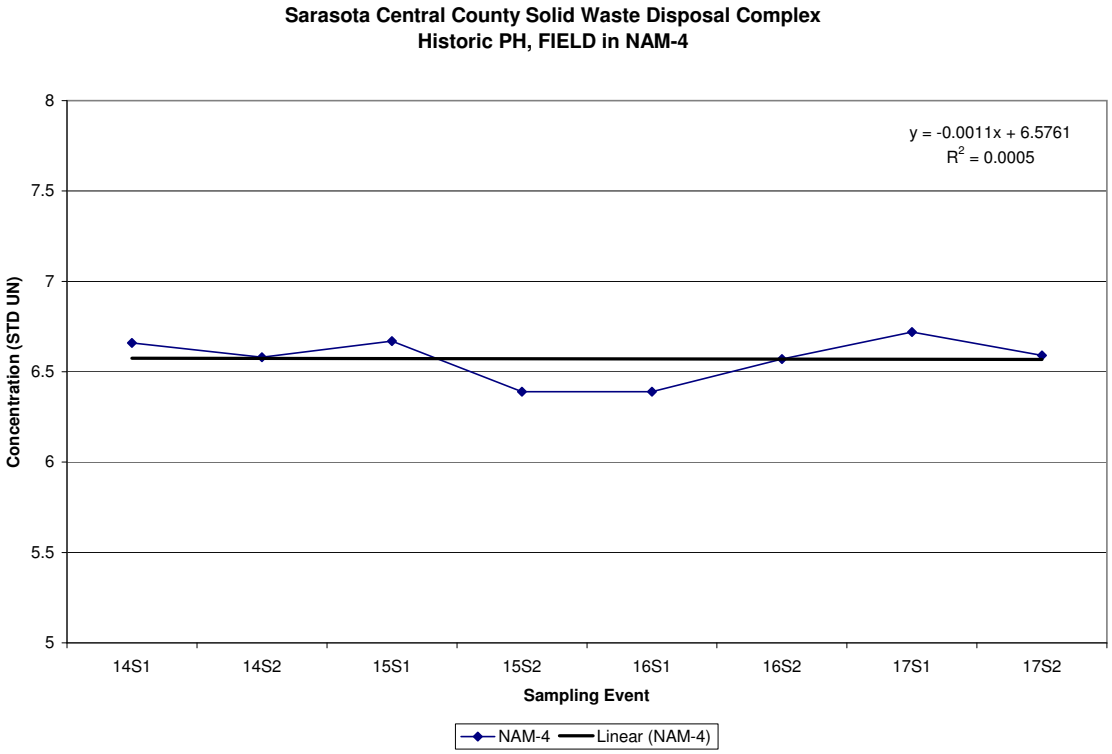
Central County Solid Waste Disposal Complex

Historical pH Data


Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in NAM-1
y = 0.0032x + 6.8943
R2 = 0.0017
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-1
Linear (NAM-1)


Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in NAM-2
y = 0.0299x + 6.7193
R2 = 0.1662
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-2
Linear (NAM-2)

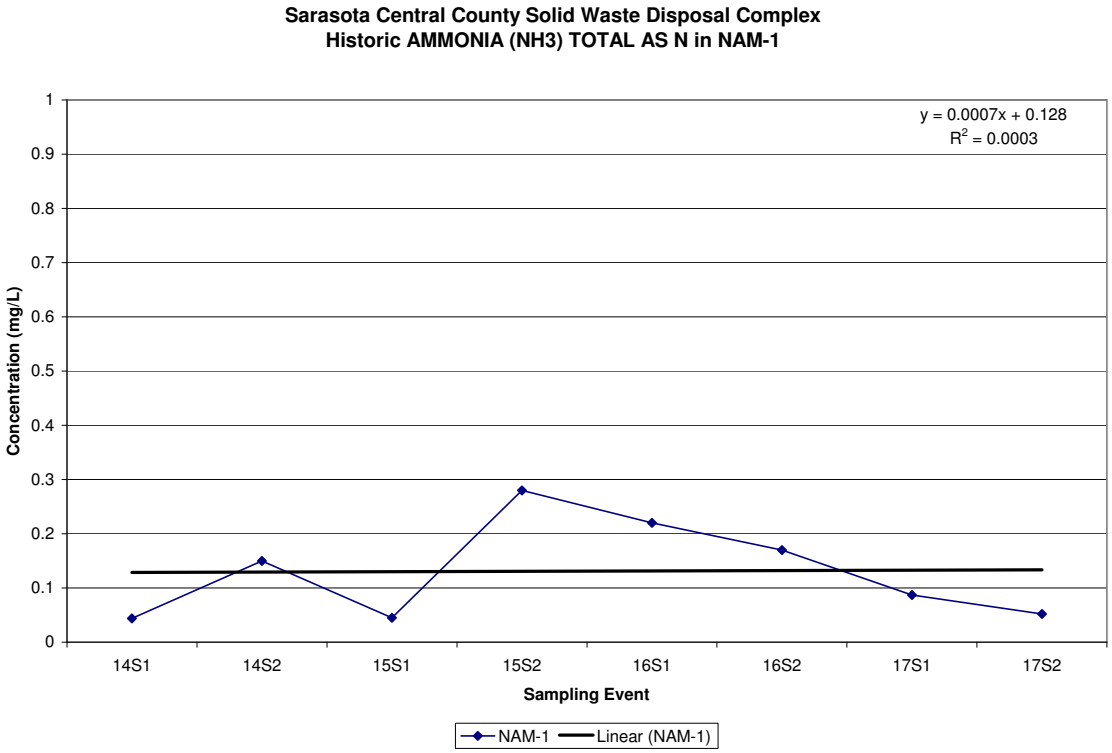

Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in NAM-3
y = 0.019x + 6.7194
R2 = 0.1115
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
14S1
14S2
15S1
15M7
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-3
Linear (NAM-3)

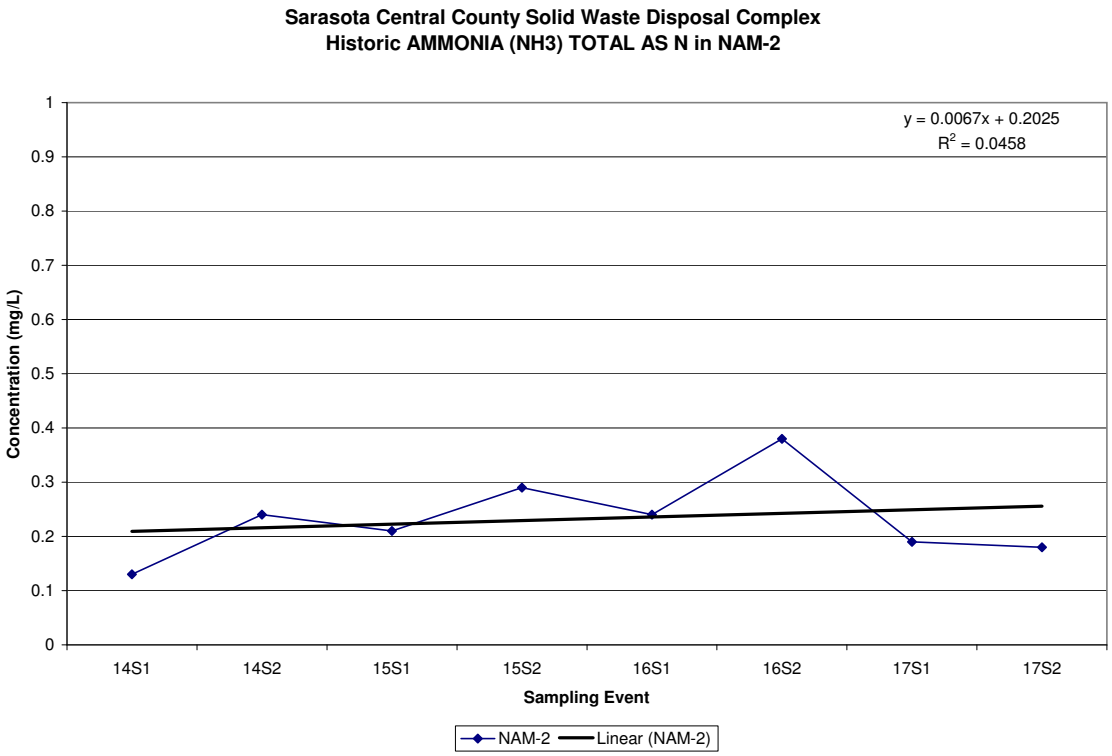

Sarasota Central County Solid Waste Disposal Complex
Historic PH, FIELD in NAM-4
y = -0.0011x + 6.5761
R2 = 0.0005
Concentration (STD UN)
8
7.5
7
6.5
6
5.5
5
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-4
Linear (NAM-4)

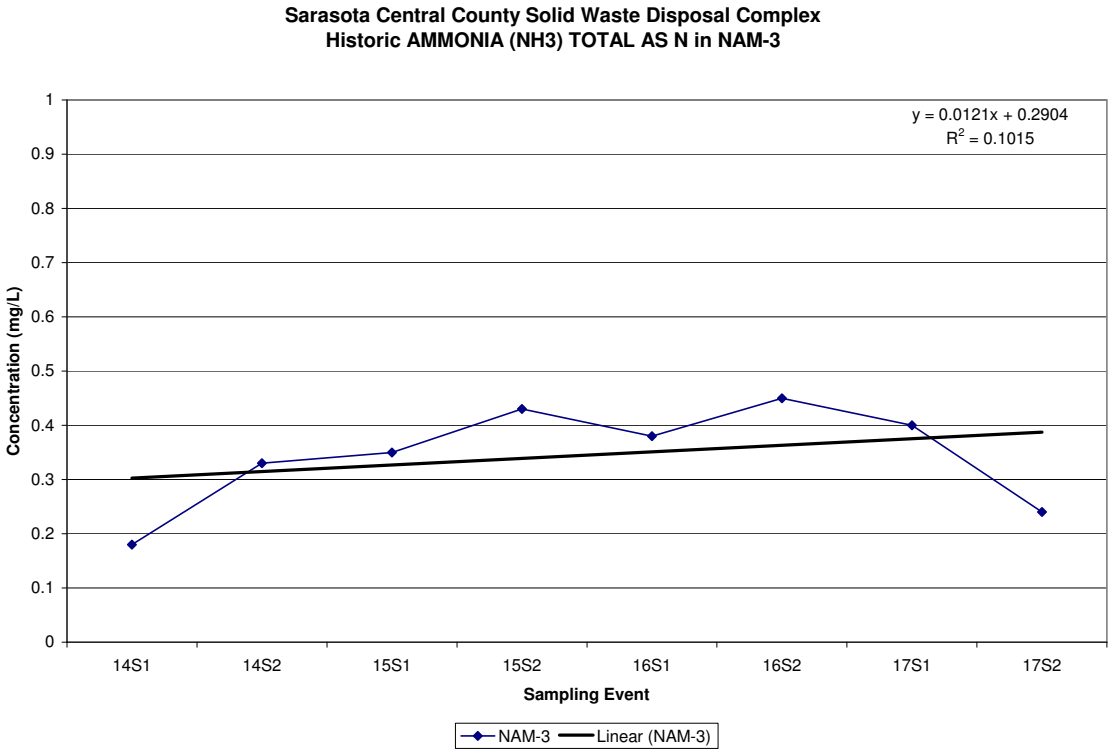
Sarasota County

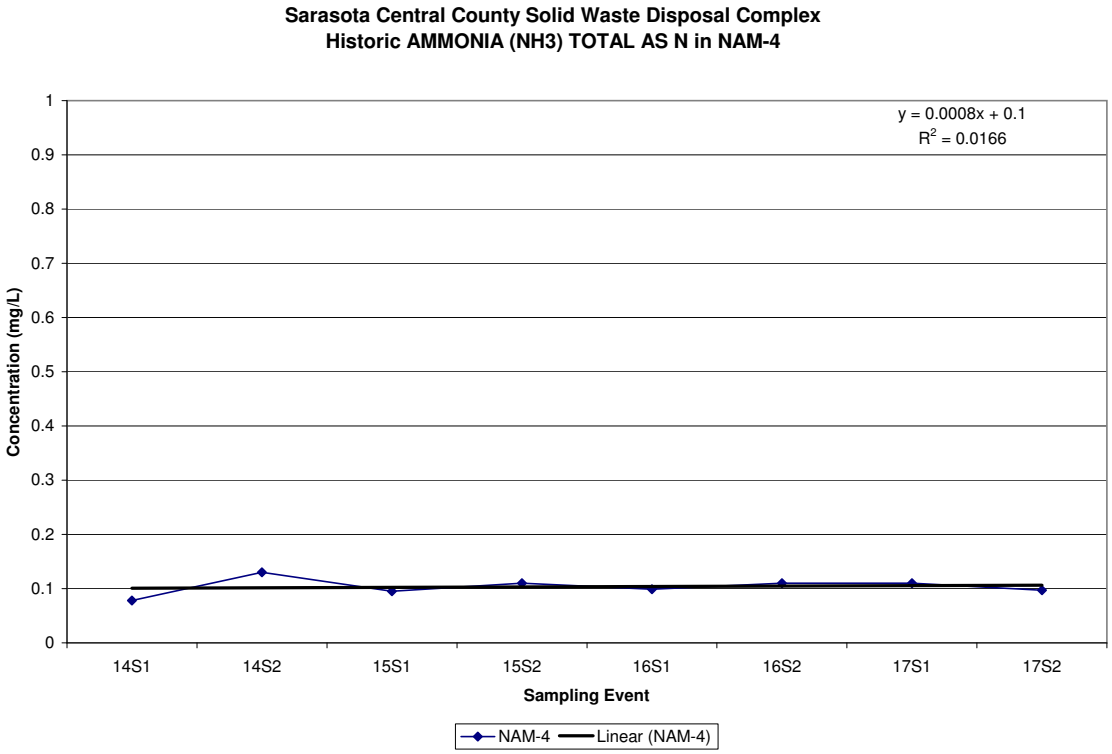
Central County Solid Waste Disposal Complex

Historical Ammonia-Nitrogen Data


Sarasota Central County Solid Waste Disposal Complex
Historic AMMONIA (NH3) TOTAL AS N in NAM-1
y = 0.0007x + 0.128
R2 = 0.0003
Concentration (mg/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-1
Linear (NAM-1)


Sarasota Central County Solid Waste Disposal Complex
Historic AMMONIA (NH3) TOTAL AS N in NAM-2
y = 0.0067x + 0.2025
R2 = 0.0458
Concentration (mg/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-2
Linear (NAM-2)

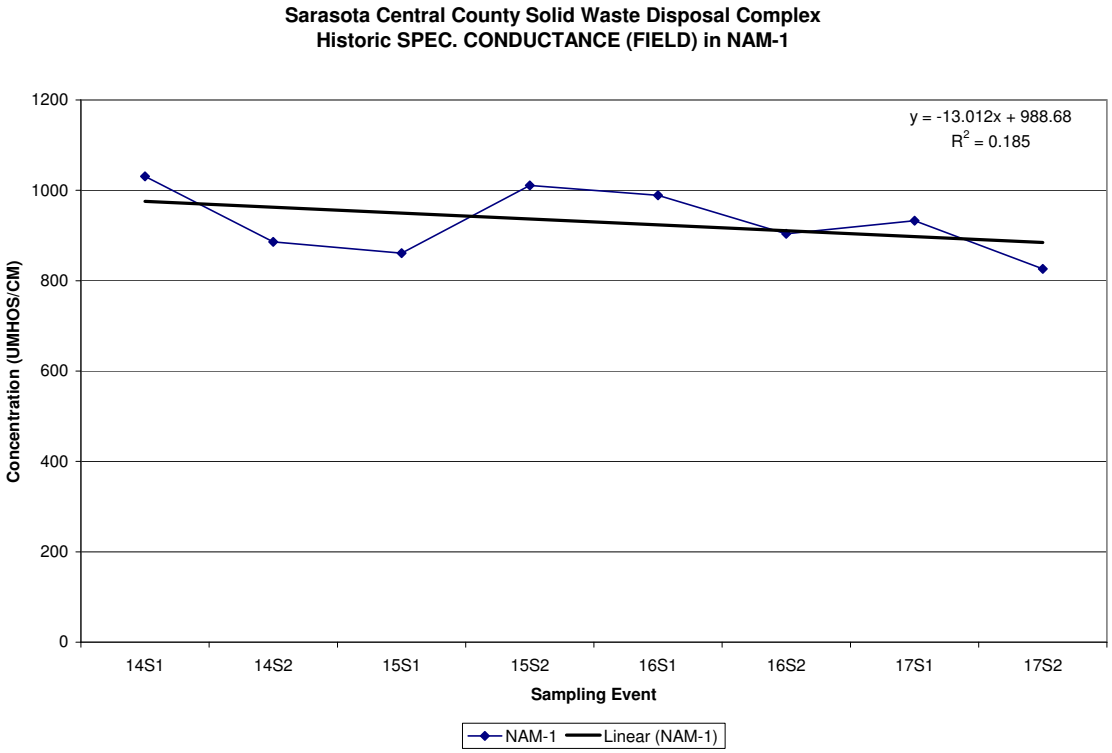

Sarasota Central County Solid Waste Disposal Complex
Historic AMMONIA (NH3) TOTAL AS N in NAM-3
y = 0.0121x + 0.2904
R2 = 0.1015
Concentration (mg/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-3
Linear (NAM-3)

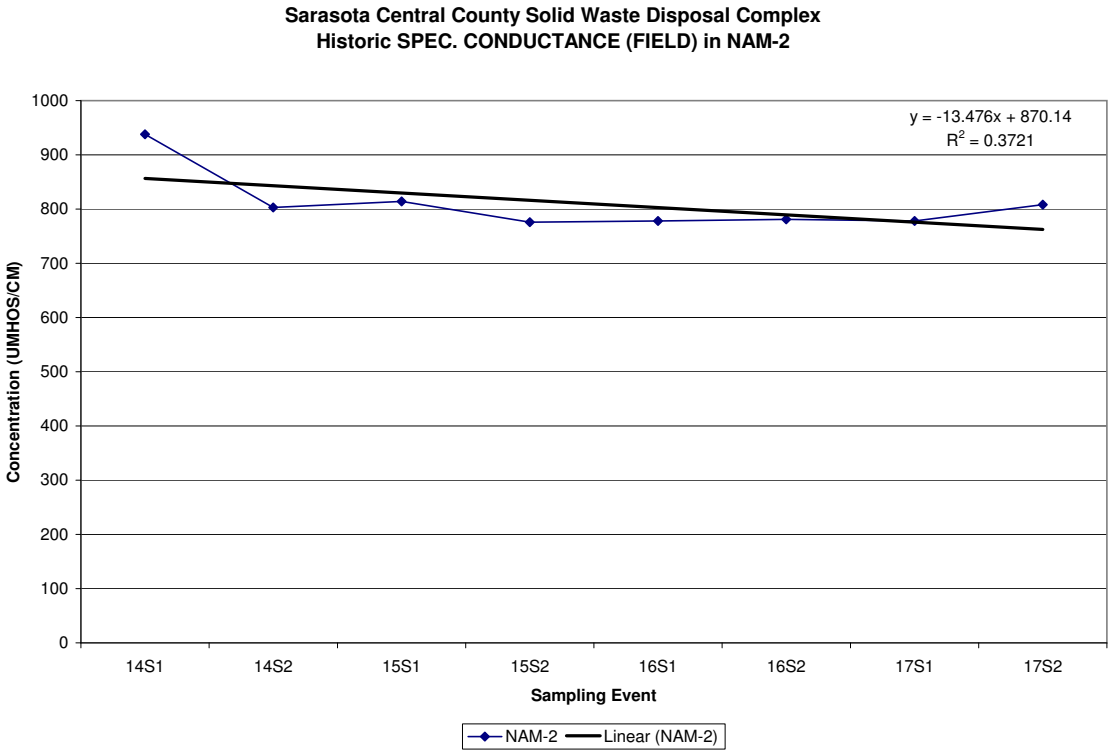

Sarasota Central County Solid Waste Disposal Complex
Historic AMMONIA (NH3) TOTAL AS N in NAM-4
y = 0.0008x + 0.1
R2 = 0.0166
Concentration (mg/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-4
Linear (NAM-4)

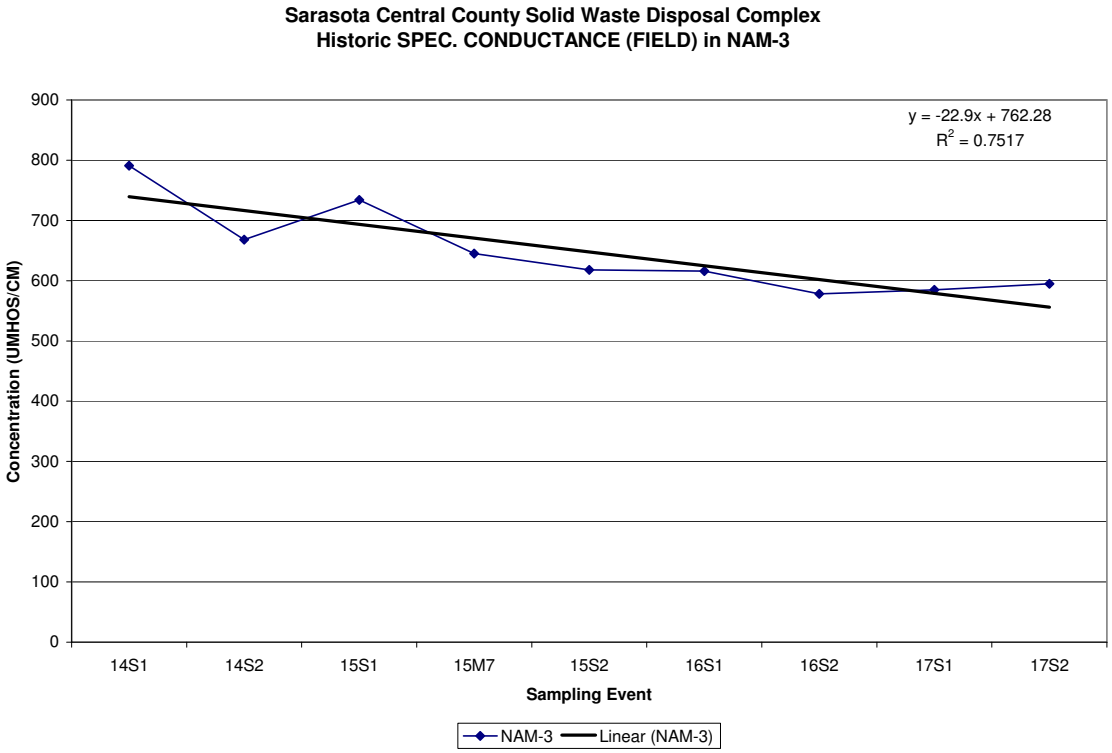
Sarasota County

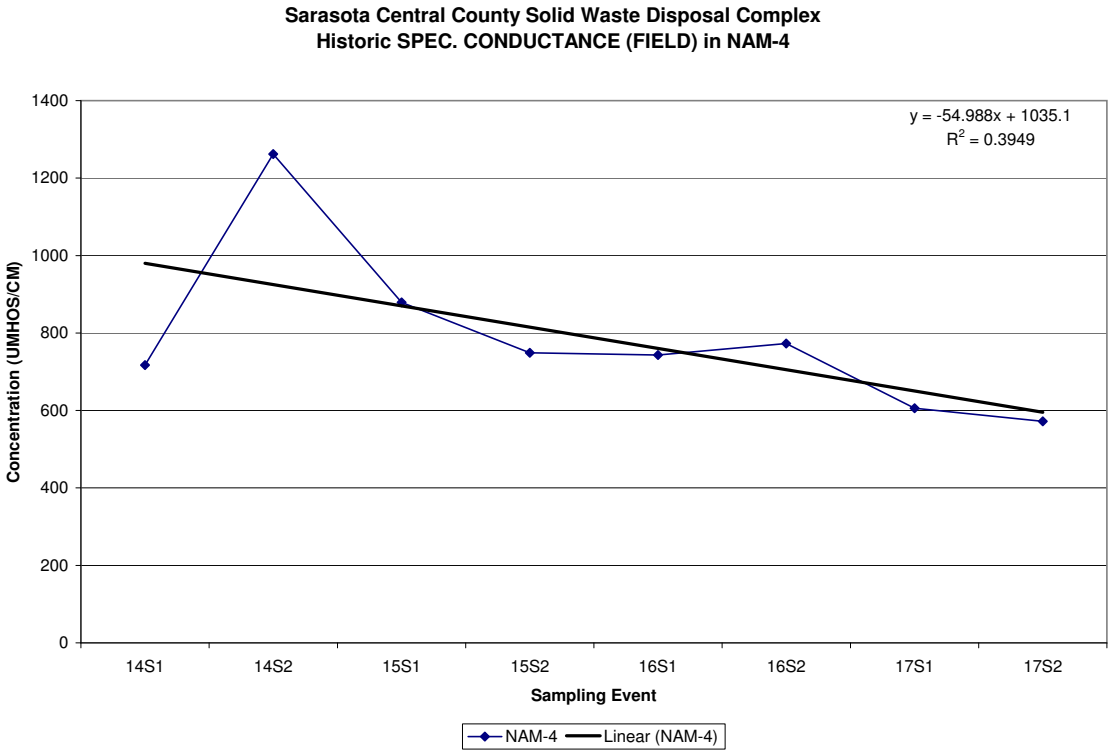
Central County Solid Waste Disposal Complex

Historical Conductivity Data


Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in NAM-1
y = -13.012x + 988.68
R2 = 0.185
Concentration (UMHOS/CM)
1200
1000
800
600
400
200
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-1
Linear (NAM-1)


Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in NAM-2
y = -13.476x + 870.14
R2 = 0.3721
Concentration (UMHOS/CM)
1000
900
800
700
600
500
400
300
200
100
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-2
Linear (NAM-2)

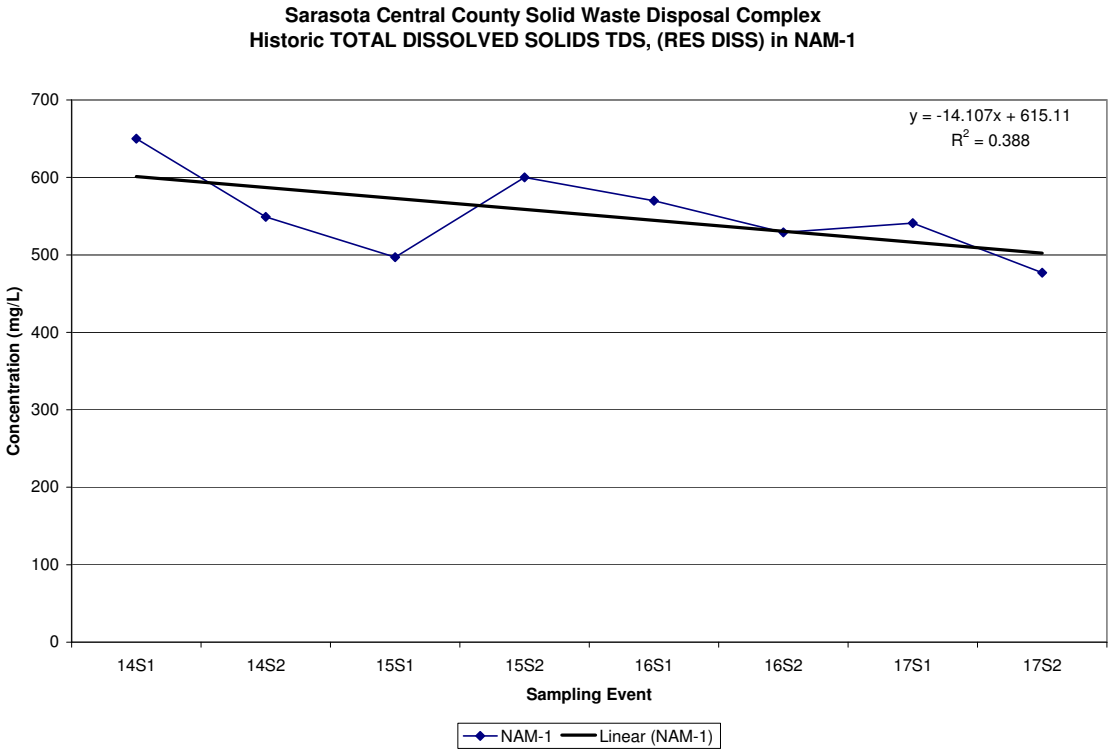

Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in NAM-3
y = -22.9x + 762.28
R2 = 0.7517
Concentration (UMHOS/CM)
900
800
700
600
500
400
300
200
100
0
14S1
14S2
15S1
15M7
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-3
Linear (NAM-3)

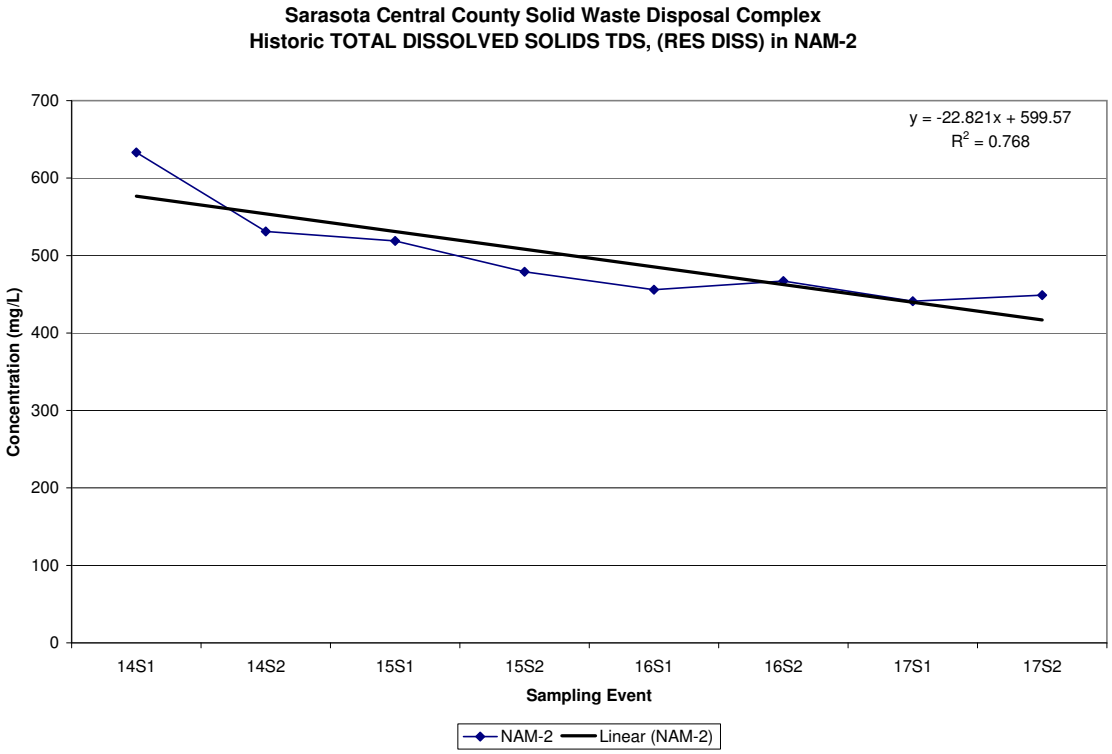

Sarasota Central County Solid Waste Disposal Complex
Historic SPEC. CONDUCTANCE (FIELD) in NAM-4
y = -54.988x + 1035.1
R2 = 0.3949
Concentration (UMHOS/CM)
1400
1200
1000
800
600
400
200
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-4
Linear (NAM-4)

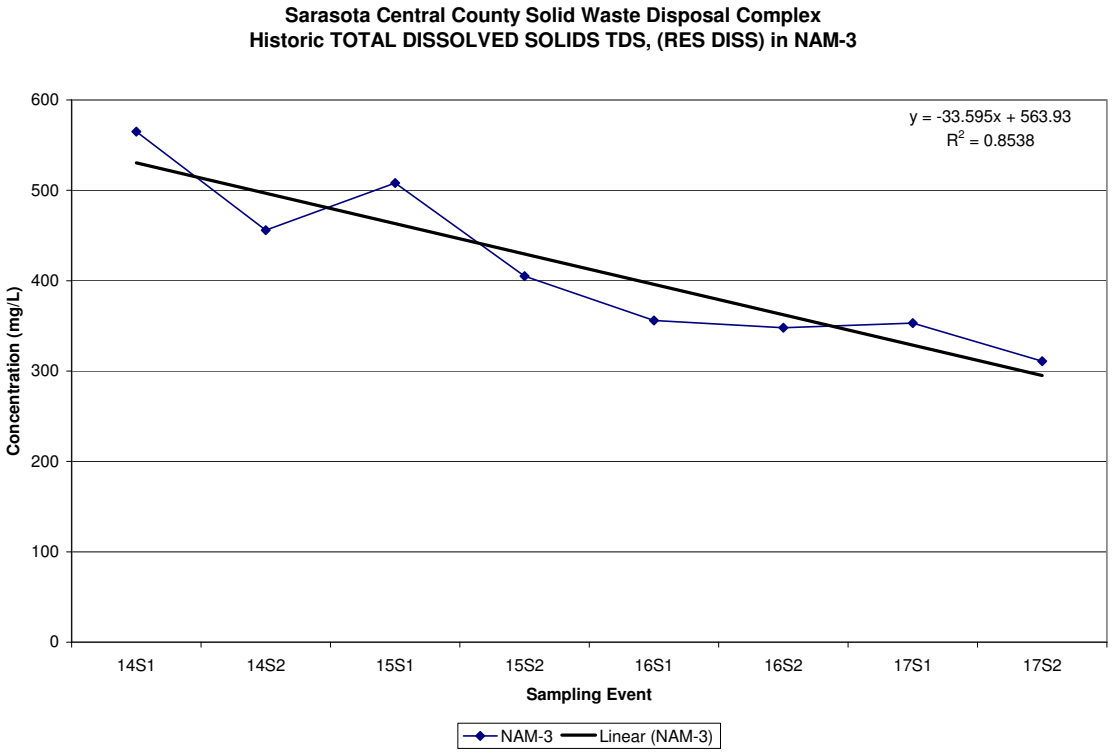
Sarasota County

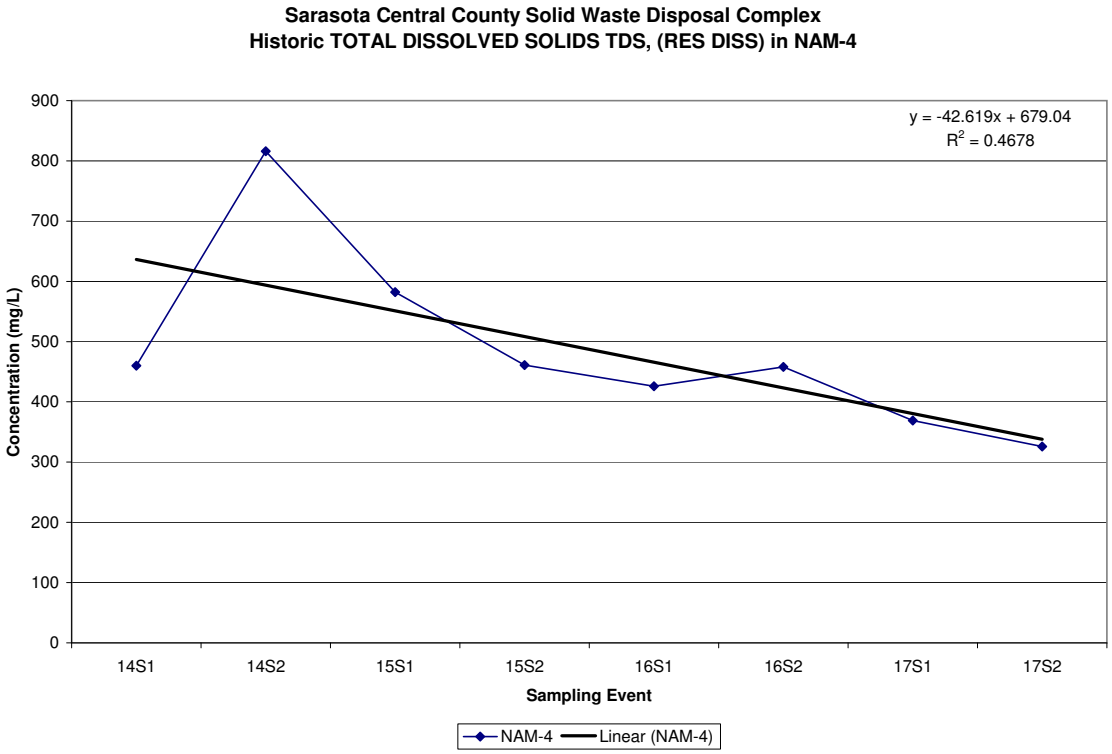
Central County Solid Waste Disposal Complex

Historical Total Dissolved Solids Data


Sarasota Central County Solid Waste Disposal Complex
Historic TOTAL DISSOLVED SOLIDS TDS, (RES DISS) in NAM-1
y = -14.107x + 615.11
R2 = 0.388
Concentration (mg/L)
700
600
500
400
300
200
100
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-1
Linear (NAM-1)


Sarasota Central County Solid Waste Disposal Complex
Historic TOTAL DISSOLVED SOLIDS TDS, (RES DISS) in NAM-2
y = -22.821x + 599.57
R2 = 0.768
Concentration (mg/L)
700
600
500
400
300
200
100
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-2
Linear (NAM-2)

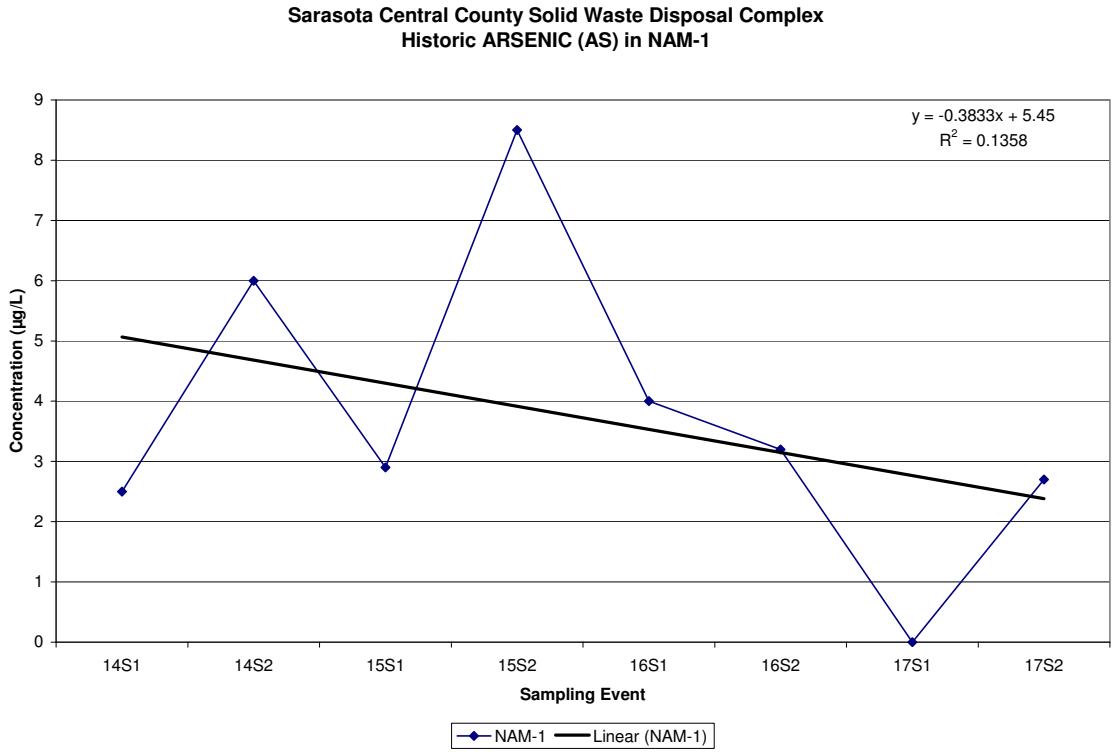

Sarasota Central County Solid Waste Disposal Complex
Historic TOTAL DISSOLVED SOLIDS TDS, (RES DISS) in NAM-3
y = -33.595x + 563.93
R2 = 0.8538
Concentration (mg/L)
600
500
400
300
200
100
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-3
Linear (NAM-3)

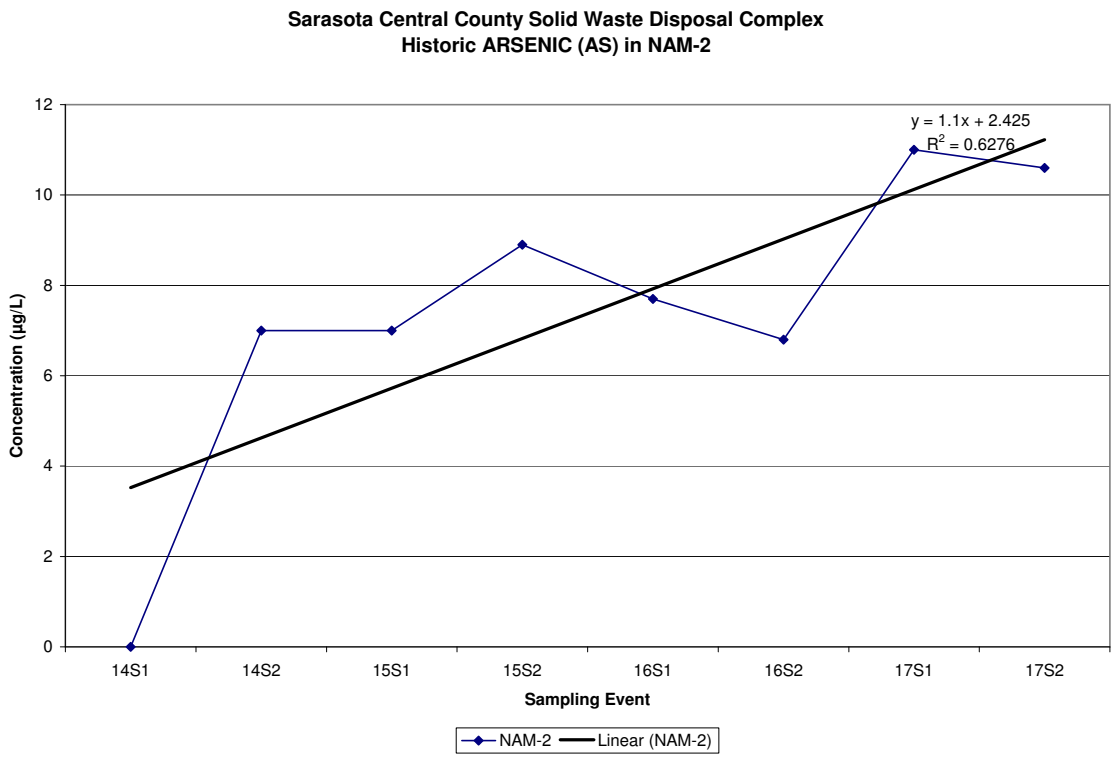

Sarasota Central County Solid Waste Disposal Complex
Historic TOTAL DISSOLVED SOLIDS TDS, (RES DISS) in NAM-4
y = -42.619x + 679.04
R2 = 0.4678
Concentration (mg/L)
900
800
700
600
500
400
300
200
100
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-4
Linear (NAM-4)

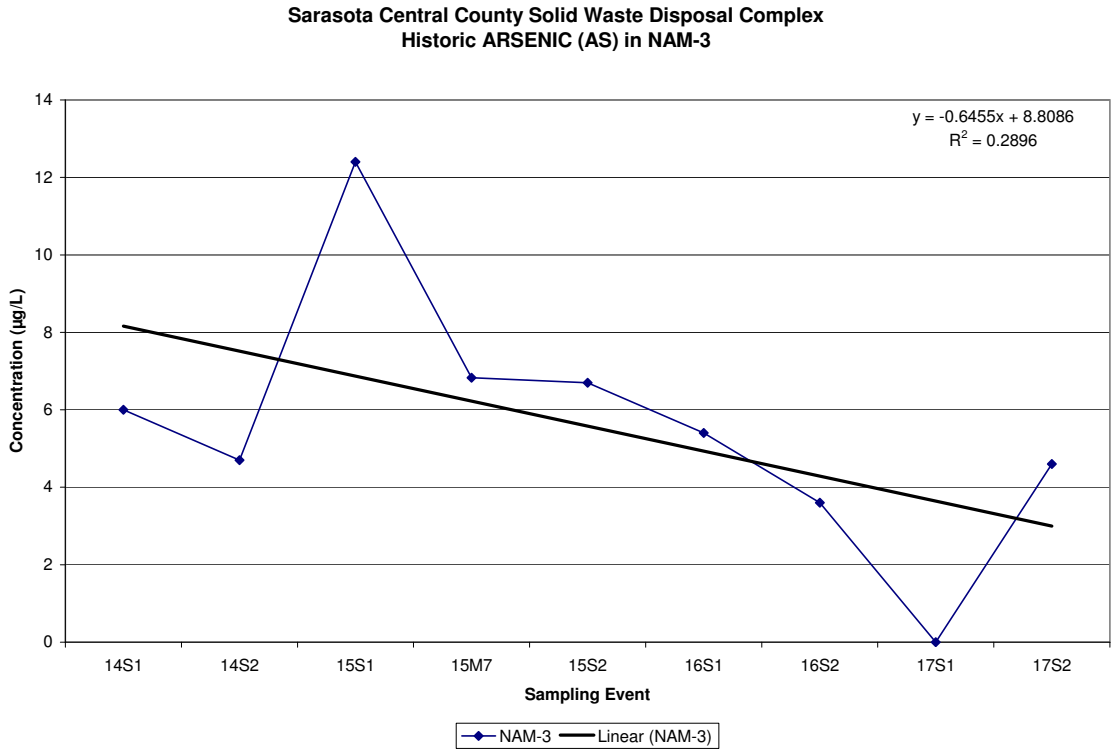
Sarasota County

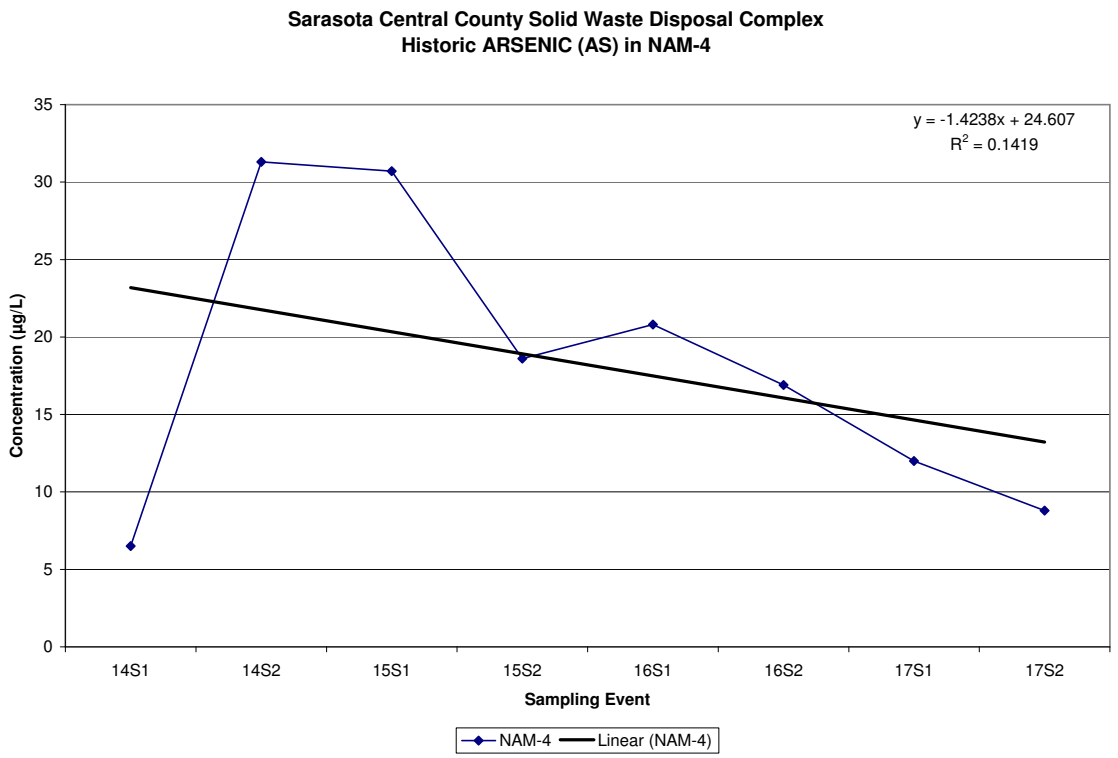
Central County Solid Waste Disposal Complex

Historical Arsenic Data


Sarasota Central County Solid Waste Disposal Complex
Historic ARSENIC (AS) in NAM-1
y = -0.3833x + 5.45
R2 = 0.1358
Concentration (µg/L)
0
1
2
3
4
5
6
7
8
9
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-1
Linear (NAM-1)


Sarasota Central County Solid Waste Disposal Complex
Historic ARSENIC (AS) in NAM-2
y = 1.1x + 2.425
R2 = 0.6276
Concentration (µg/L)
0
2
4
6
8
10
12
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-2
Linear (NAM-2)

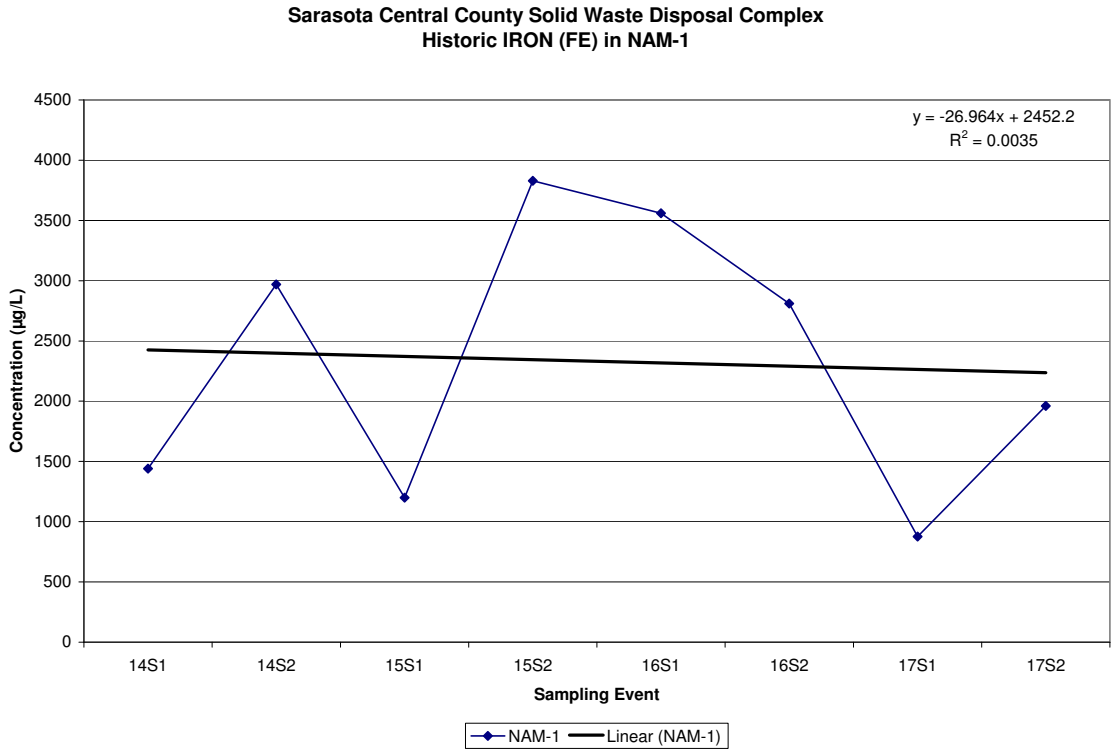

Sarasota Central County Solid Waste Disposal Complex
Historic ARSENIC (AS) in NAM-3
y = -0.6455x + 8.8086
R2 = 0.2896
Concentration (µg/L)
14
12
10
8
6
4
2
0
14S1
14S2
15S1
15M7
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-3
Linear (NAM-3)

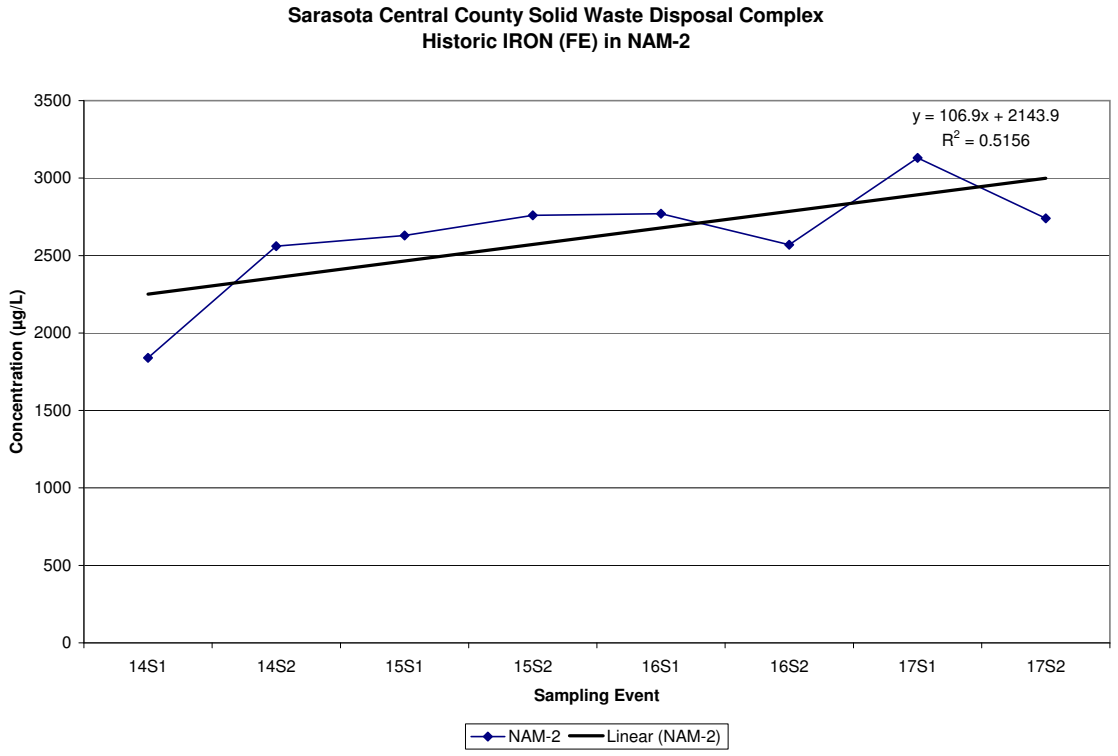

Sarasota Central County Solid Waste Disposal Complex
Historic ARSENIC (AS) in NAM-4
y = -1.4238x + 24.607
R2 = 0.1419
Concentration (µg/L)
35
30
25
20
15
10
5
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-4
Linear (NAM-4)

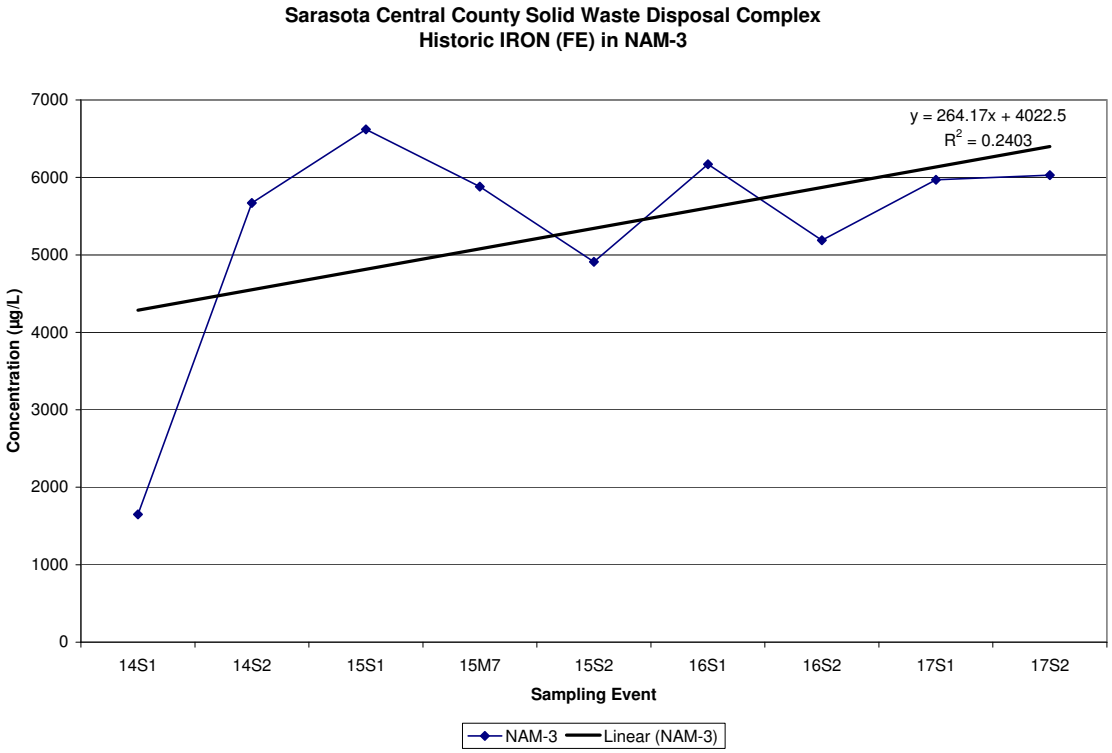
Sarasota County

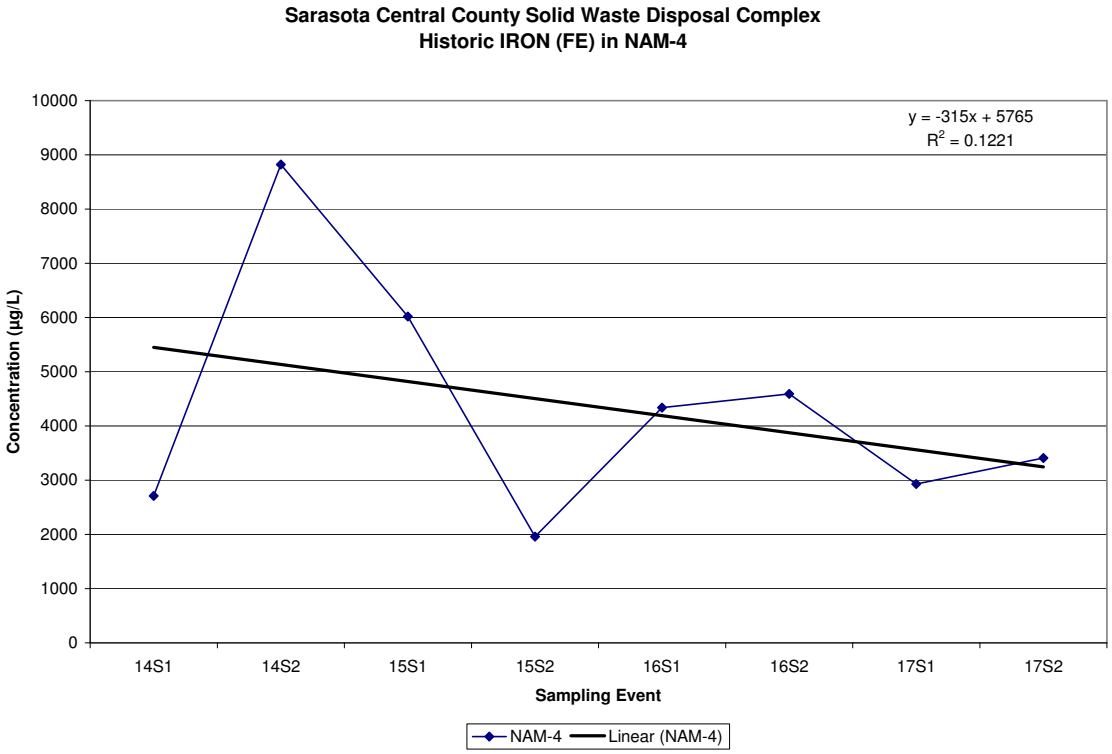
Central County Solid Waste Disposal Complex

Historical Iron Data


Sarasota Central County Solid Waste Disposal Complex
Historic IRON (FE) in NAM-1
y = -26.964x + 2452.2
R2 = 0.0035
Concentration (µg/L)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-1
Linear (NAM-1)


Sarasota Central County Solid Waste Disposal Complex
Historic IRON (FE) in NAM-2
y = 106.9x + 2143.9
R2 = 0.5156
Concentration (µg/L)
3500
3000
2500
2000
1500
1000
500
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-2
Linear (NAM-2)

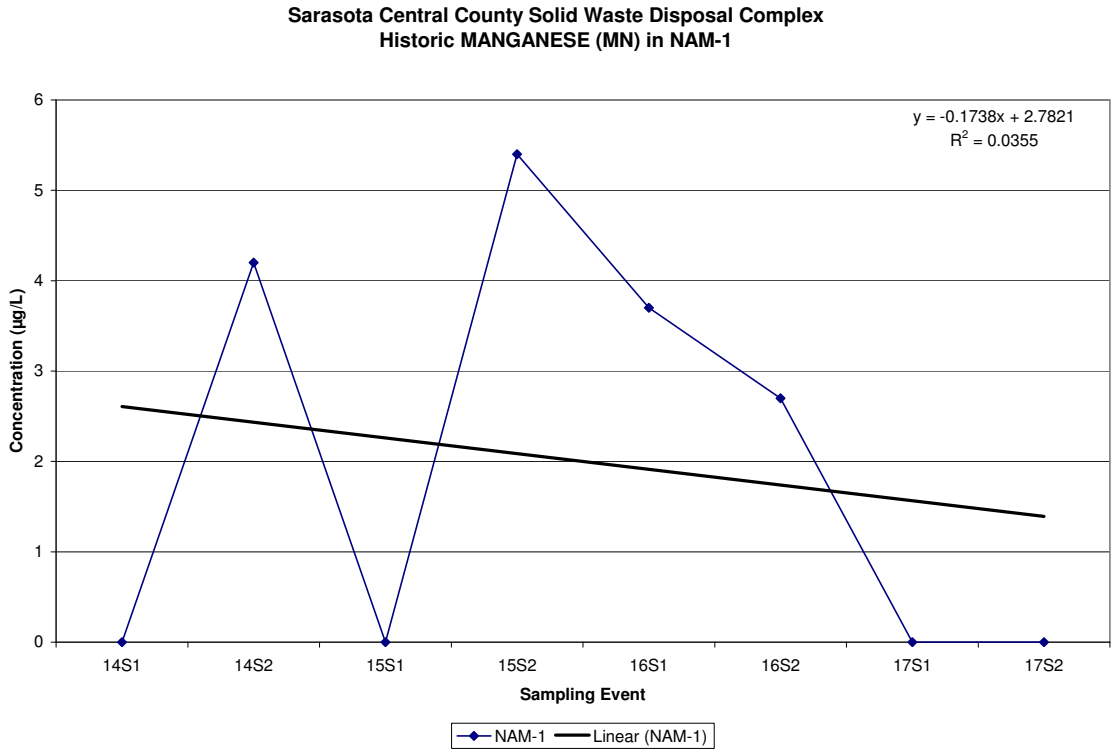

Sarasota Central County Solid Waste Disposal Complex
Historic IRON (FE) in NAM-3
y = 264.17x + 4022.5
R2 = 0.2403
Concentration (µg/L)
7000
6000
5000
4000
3000
2000
1000
0
14S1
14S2
15S1
15M7
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-3
Linear (NAM-3)

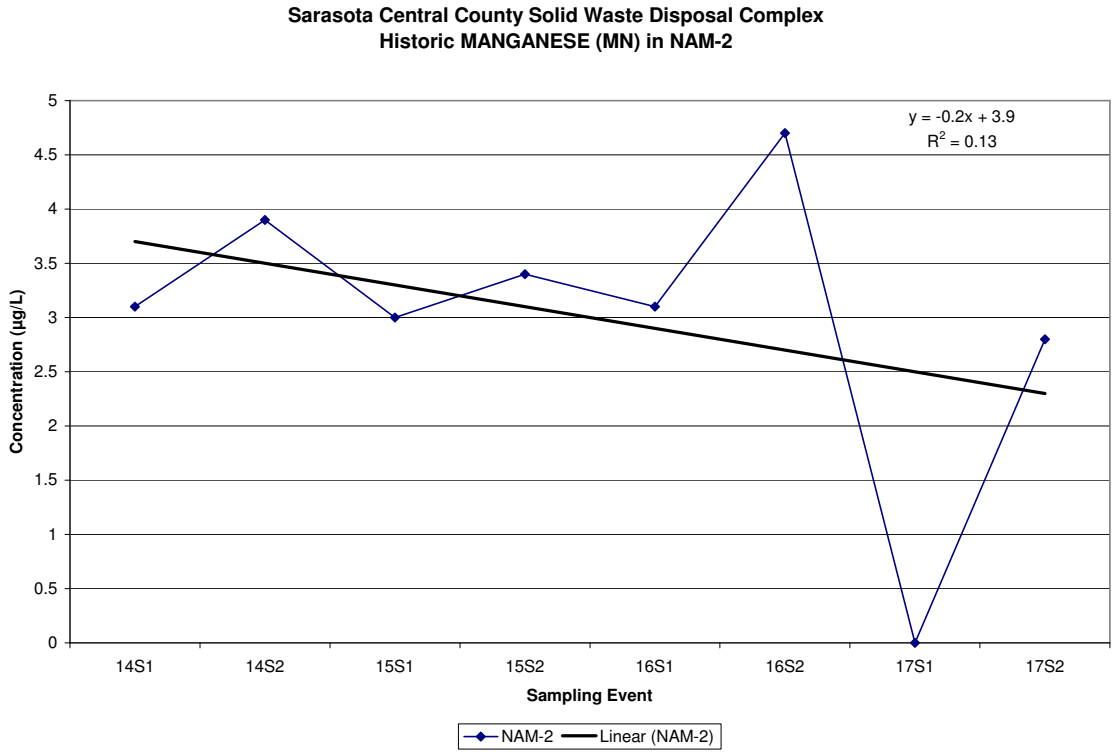

Sarasota Central County Solid Waste Disposal Complex
Historic IRON (FE) in NAM-4
y = -315x + 5765
R2 = 0.1221
Concentration (µg/L)
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-4
Linear (NAM-4)

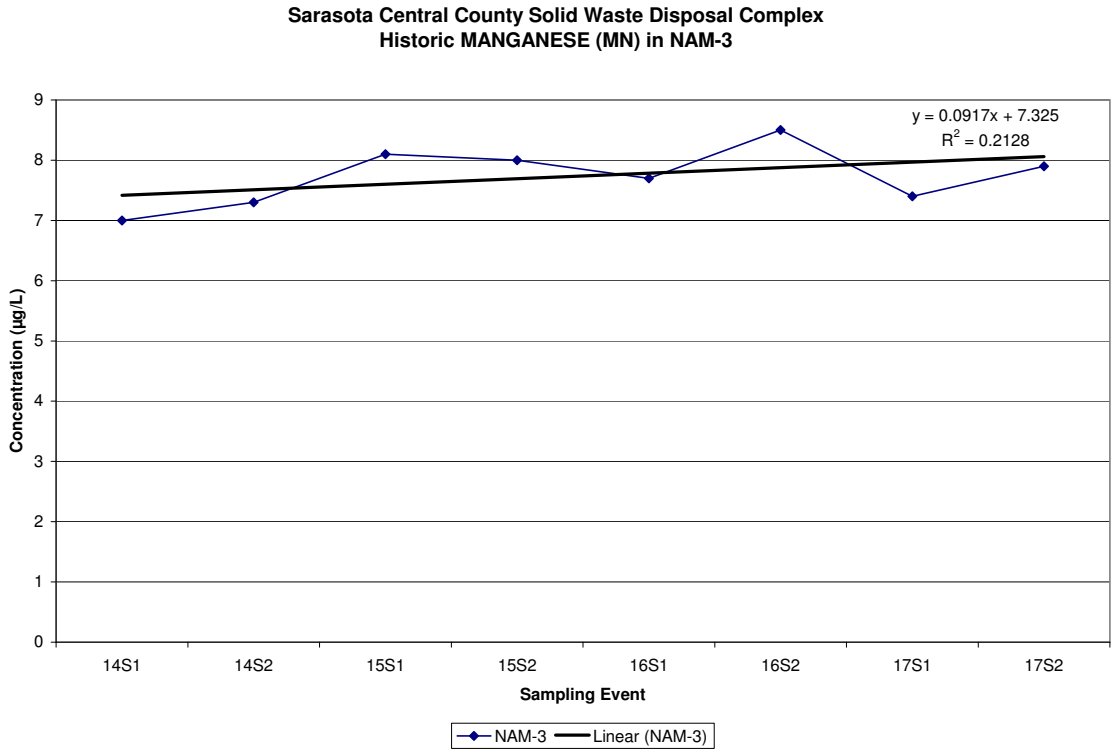
Sarasota County

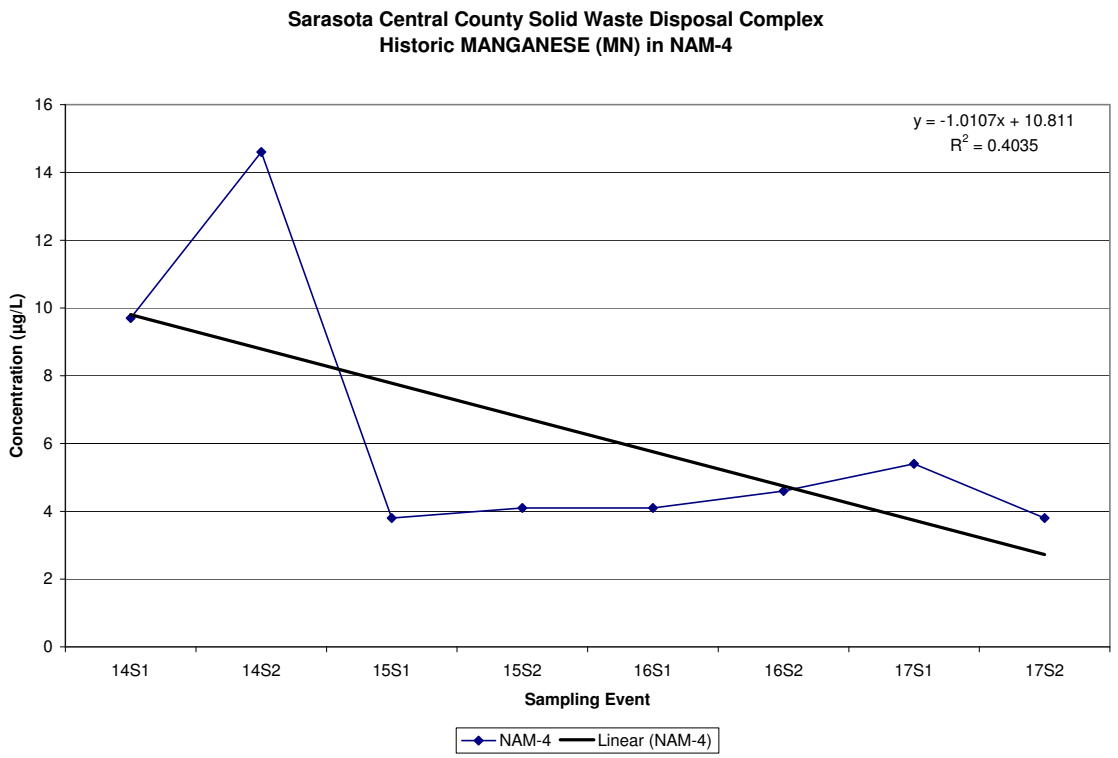
Central County Solid Waste Disposal Complex

Historical Manganese Data


Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in NAM-1
y = -0.1738x + 2.7821
R2 = 0.0355
Concentration (µg/L)
0
1
2
3
4
5
6
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-1
Linear (NAM-1)


Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in NAM-2
y = -0.2x + 3.9
R2 = 0.13
Concentration (µg/L)
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-2
Linear (NAM-2)


Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in NAM-3
y = 0.0917x + 7.325
R2 = 0.2128
Concentration (µg/L)
0
1
2
3
4
5
6
7
8
9
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-3
Linear (NAM-3)


Sarasota Central County Solid Waste Disposal Complex
Historic MANGANESE (MN) in NAM-4
y = -1.0107x + 10.811
R2 = 0.4035
Concentration (µg/L)
0
2
4
6
8
10
12
14
16
14S1
14S2
15S1
15S2
16S1
16S2
17S1
17S2
Sampling Event
NAM-4
Linear (NAM-4)

Attachment 10

Surface Water Results Compared to Class III (Fresh) Surface Water Standards and Groundwater Standards

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		CONDUC-TIVITY (FIELD)	DISSOLVED OXYGEN (FIELD)	pH (FIELD)	TEMPER-ATURE (FIELD)	TURBIDITY (FIELD)	AMMONIA NITROGEN	UN-IONIZED AMMONIA	BIOCHEMICAL OXYGEN DEMAND	CHEMICAL OXYGEN DEMAND	CHLORO-PHYLL A
CLASS III (FRESH) SURFACE WATER STANDARD		<50 % increase or <1275 max	>5.0 mg/L	6.0-8.5 S.U.**	(1)	<29 NTU above natural background	2.39 mg/L (calc)	0.02 mg/L	NA	NA	NA
GROUNDWATER STANDARD		(1)	(1)	6.5-8.5 S.U.**	(1)	(1)	2.8 mg/L***	(1)	(1)	(1)	(1)
UNITS		umhos/cm	ppm	S.U.	deg C	NTU	mg/L	mg/L	mg/L	mg/L	mg/m3
POND 1	11/9/2015	427	5.01	7.21	27.00	11.1	<0.02	<0.02	3.0	69.8	37
POND 1	4/6/2016	409	7.48	7.33	23.40	40.0	<0.02	<0.02	3.4	64	39.0
POND 1	10/31/2016	367	6.17	7.20	23.03	21.5	<0.02	<0.02	3.2	54.2	56.2
POND 1	3/23/2017	442	7.22	7.73	22.68	25.7	<0.02	<0.02	2.8	41.2	50.4
POND 1	10/30/2017	286	6.90	7.85	19.48	13.8	<0.02	<0.02	<4	54	35.3
POND 1 DUP	10/30/2017	286	6.90	7.85	19.48	13.8	0.029 I	0.00093	<4	58	13.1
POND 2	11/9/2015	370	3.58	7.22	27.10	17.2	0.16	0.0021	3.4	75.6	50
POND 2	4/6/2016	259	3.96	6.63	23.29	37.4	0.5	0.0013	4.8	63.7	59.3
POND 2	10/31/2016	409	3.84	6.69	23.11	46.2	0.35	0.0010	<2	62.2	50.7
POND 2	3/23/2017	457	4.10	7.77	22.21	1000	0.23	0.0074	6.9	51.8	76.9
POND 2	4/28/2017	472	4.05	7.63	26.95	1000	-	-	-	-	-
POND 2	10/30/2017	288	5.75	NM	19.12	44.8	0.029 I	<0.01	<4	51.3	16.8

LEGEND
‡ = < value with detection limit greater than MCL
and not listed in FDEP alternate PQL document
BOLD = Outside Groundwater Std
BOXED = Outside Surface Water Std
(1) = No Applicable Groundwater Std
NA = No Applicable Surface Water Std

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		FECAL COLIFORM	NITRATE NITROGEN	TOTAL PHOS-PHORUS as P	TOTAL DISSOLVED SOLIDS	TOTAL HARDNESS	TOTAL KJELDAHL NITROGEN	TOTAL NITROGEN	TOTAL ORGANIC CARBON	TOTAL SUSPENDED SOLIDS	ANTIMONY
CLASS III (FRESH) SURFACE WATER STANDARD		800 (daily max)	NA	NA	NA	NA	NA	NA	NA	NA	4300 µg/L
GROUNDWATER STANDARD		1 col/100ml*	10 mg/L*	(1)	500 mg/L**	(1)	(1)	(1)	(1)	(1)	6 µg/L*
UNITS		col/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L
POND 1	11/9/2015	**600 B**	<0.025	0.34	266	160	1.8	1.8	18.5	12.0	0.65 I
POND 1	4/6/2016	**610 B**	<0.025	0.26	171	165	1.5	1.5	13.7	27.0	0.71 I
POND 1	10/31/2016	**130 B**	<0.01	0.22	243	151	1.8	1.8	14.7	26	0.58 I
POND 1	3/23/2017	**530**	<0.025	0.22	277	187	2.1	2.1	16.2	24	1.1
POND 1	10/30/2017	**630 B**	0.096	0.11	129	136	1.3	1.4	9.9	34.5	0.6 I
POND 1 DUP	10/30/2017	**600**	0.23	0.51	171	112	1.3	1.6	10.7	25.5	<0.5
POND 2	11/9/2015	**930 B**	<0.025	1.1	239	141	2.3	2.3	17.1	15.5	<0.5
POND 2	4/6/2016	**2900**	0.17	1.20	191	84.3	2.4	2.6	14.9	19.5	0.53 I
POND 2	10/31/2016	**120 B**	0.26	1.4	309	129	2.4	2.7	18.7	22	0.59 I
POND 2	3/23/2017	**50 B**	0.38	1.7	316	143	3.2	3.6	19.5	66	1.1
POND 2	4/28/2017	**-**	-	-	-	-	-	-	-	-	-
POND 2	10/30/2017	**2000**	0.29	0.47	140	110	1.2	1.5	10.4	33.5	<0.5

LEGEND
‡ = < value with detection limit greater than MCL
and not listed in FDEP alternate PQL document
BOLD = Outside Groundwater Std
BOXED = Outside Surface Water Std
(1) = No Applicable Groundwater Std
NA = No Applicable Surface Water Std

ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD	MERCURY
CLASS III (FRESH) SURFACE WATER STANDARD		50 µg/L	NA	0.13 µg/L	CALC	CALC	NA	CALC	1000 µg/L	CALC	0.012 µg/L
GROUNDWATER STANDARD		10 µg/L*	2000 µg/L*	4 µg/L*	5 µg/L*	100 µg/L*	140µg/L***	1000 µg/L**	300 µg/L**	15 µg/L*	2 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
POND 1	11/9/2015	9.4 I	26.4	<0.05	0.32	<2.5	<0.5	<0.93	210	6.3	0.00217
POND 1	4/6/2016	<5	22.8	0.061 I	<0.05	2.5 I	<5	1.3	**575**	1.1	0.0076
POND 1	10/31/2016	6.0 I	21.4	<0.05	<0.05	<2.5	<5	<0.93	**340**	<0.5	0.003
POND 1	3/23/2017	<5.0	24.4	<0.05	<0.05	<2.5	<5	1.1	**419**	0.53 I	0.00221
POND 1	10/30/2017	<5	31.7	<0.05	<0.05	<2.5	<5	<0.93	**501**	<0.5	0.00227
POND 1 DUP	10/30/2017	7.4 I	18.7	0.083 I	<0.05	<2.5	<5	1.7	**542**	0.61 I	0.00466
POND 2	11/9/2015	5.8 I	20.2	<0.05	0.37	<2.5	<5	<0.93	226	3.9	0.00205
POND 2	4/6/2016	<5	14.5	0.091 I	<0.05	3.5 I	<5	1.4	**670**	1.4	0.0049
POND 2	10/31/2016	7.6 I	17.2	0.077 I	<0.05	3.0 I	<5	1.8	**598**	1.2	0.00785
POND 2	3/23/2017	7.8 I	22.1	0.14	0.069 I	6.8	<5	3.4	**1140**	2.1	0.00874
POND 2	4/28/2017	-	-	-	-	-	-	-	**750**	-	-
POND 2	10/30/2017	<5	17.3	0.11	<0.05	<2.5	<5	1.5	**433**	0.5 I	0.00473

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ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC	1,1,1,2-TETRA-CHLORO-ETHANE	1,1,1-TRICHLORO-ETHANE	1,1,2,2-TETRA-CHLORO-ETHANE	1,1,2-TRICHLORO-ETHANE
CLASS III (FRESH) SURFACE WATER STANDARD		CALC	5 µg/L	0.07 µg/L	6.3 µg/L	NA	CALC	NA	270 µg/L	10.8 µg/L	16 µg/L
GROUNDWATER STANDARD		100 µg/L*	50 µg/L*	100 µg/L**	2 µg/L*	49 µg/L***	5000 µg/L**	1.3 µg/L***	200 µg/L*	0.2 µg/L***	5 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
POND 1	11/9/2015	<2.5	<0.5	<0.05	<0.5	9.8 I	3.6 I	<0.5	<0.5	<0.12	<0.5
POND 1	4/6/2016	<2.5	<0.5	<0.05	<0.5	9.4 I	23.1	<0.5	<0.5	<0.12	<0.5
POND 1	10/31/2016	<2.5	<0.5	<0.05	<0.5	7.7 I	8.6	<0.5	<0.5	<0.12	<0.5
POND 1	3/23/2017	<2.5	<0.5	<0.05	<0.5	8.3 I	9.2	<0.5	<0.5	<0.12	<0.5
POND 1	10/30/2017	<2.5	<0.5	<0.05	<0.5	<5	25.5	<0.33	<0.48	<0.4	<0.29
POND 1 DUP	10/30/2017	<2.5	<0.5	<0.05	<0.5	12.9	6.9	<0.33	<0.48	<0.4	<0.29
POND 2	11/9/2015	<2.5	<0.5	<0.05	<0.5	13.9	7.1	<0.5	<0.5	<0.12	<0.5
POND 2	4/6/2016	<2.5	0.72 I	<0.05	<0.5	16.8	9.6	<0.5	<0.5	<0.12	<0.5
POND 2	10/31/2016	<2.5	0.61 I	<0.05	<0.5	18.2	4.7 I	<0.5	<0.5	<0.12	<0.5
POND 2	3/23/2017	<2.5	1.1	<0.05	<0.5	37.2	6.1	<0.5	<0.5	<0.12	<0.5
POND 2	4/28/2017	-	-	-	-	-	-	-	-	-	-
POND 2	10/30/2017	<2.5	<0.5	<0.05	<0.5	12.3	50.5	<0.33	<0.48	<0.4	<0.29

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JULY 2015 THROUGH DECEMBER 2017

PARAMETER		1,1-DICHLORO-ETHANE	1,1-DICHLORO-ETHENE	1,2,3-TRICHLORO-PROPANE	1,2-DIBROMO-3-CHLORO-PROPANE	1,2-DIBROMO-ETHANE (EDB)	1,2-DICHLORO-BENZENE	1,2-DICHLORO-ETHANE	1,2-DICHLORO-PROPANE	1,4-DICHLORO-BENZENE	2-HEXANONE
CLASS III (FRESH) SURFACE WATER STANDARD		NA	3.2 µg/L	0.2 µg/L	NA	13 µg/L	99 µg/L	37 µg/L	14 µg/L	3 µg/L	NA
GROUNDWATER STANDARD		70 µg/L***	7 µg/L*	0.02 µg/L***	0.2 µg/L*	0.02 µg/L*	600 µg/L*	3 µg/L*	5 µg/L*	75 µg/L*	280 µg/L***
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
POND 1	11/9/2015	<0.5	<0.5	<0.59	<0.0053	<0.0067	<0.5	<0.5	<0.5	<0.5	<5
POND 1	4/6/2016	<0.5	<0.5	<0.59	<0.0053	<0.0081	<0.5	<0.5	<0.5	<0.5	<5
POND 1	10/31/2016	<0.5	<0.5	<0.59	<0.0048	<0.0073	<0.5	<0.5	<0.5	<0.5	<5
POND 1	3/23/2017	<0.5	<0.5	<0.59	<0.0063	<0.0074	<0.5	<0.5	<0.5	<0.5	<5
POND 1	10/30/2017	<0.32	<0.56	<0.41	<0.0064	<0.0075	<0.3	<0.24	<0.27	<0.33	<0.46
POND 1 DUP	10/30/2017	<0.32	<0.56	<0.41	<0.0061	<0.0072	<0.3	<0.24	<0.27	<0.33	<0.46
POND 2	11/9/2015	<0.5	<0.5	<0.59	<0.0054	<0.0068	<0.5	<0.5	<0.5	<0.5	<5
POND 2	4/6/2016	<0.5	<0.5	<0.59	<0.0053	<0.0081	<0.5	<0.5	<0.5	<0.5	<5
POND 2	10/31/2016	<0.5	<0.5	<0.59	<0.0051	<0.0079	<0.5	<0.5	<0.5	<0.5	<5
POND 2	3/23/2017	<0.5	<0.5	<0.59	<0.0063	<0.0074	<0.5	<0.5	<0.5	<0.5	<5
POND 2	4/28/2017	-	-	-	-	-	-	-	-	-	-
POND 2	10/30/2017	<0.32	<0.56	<0.41	<0.0062	<0.0072	<0.3	<0.24	<0.27	<0.33	<0.46

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ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		4-METHYL-2-PENTANONE	ACETONE	ACRYLONI-TRILE	BENZENE	BROMO-CHLORO-METHANE	BROMO-DICHLORO-METHANE	BROMOFORM	BROMO-METHANE (METHYL BROMIDE)	CARBON DISULFIDE	CARBON TETRA-CHLORIDE
CLASS III (FRESH) SURFACE WATER STANDARD		NA	1700 µg/L	0.2 µg/L	71.28 µg/L annual average	NA	22 µg/L	360 µg/L	35 µg/L	110 µg/L	4.42 µg/L
GROUNDWATER STANDARD		350 µg/L**	6300 µg/L***	0.06µg/L***	1 µg/L*	91 µg/L***	0.6 µg/L***	4.4 µg/L***	9.8 µg/L***	700 µg/L***	3 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
POND 1	11/9/2015	<5	<10	<5	<0.1	<0.5	<0.27	<0.5	<0.5	<5	<0.5
POND 1	4/6/2016	<5	<10	<5	<0.1	<0.5	<0.27	<0.5	<0.5	<5	<0.5
POND 1	10/31/2016	<5	<10	<5	<0.1	<0.5	<0.27	<0.5	<0.5	<5	<0.5
POND 1	3/23/2017	<5	<10	<5	<0.1	<0.5	<0.27	<0.5	<0.5	<5	<0.5
POND 1	10/30/2017	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26	<0.29	<1.2	<0.25
POND 1 DUP	10/30/2017	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26	<0.29	<1.2	<0.25
POND 2	11/9/2015	<5	<10	<5	<0.1	<0.5	<0.27	<0.5	<0.5	<5	<0.5
POND 2	4/6/2016	<5	<10	<5	<0.1	<0.5	<0.27	<0.5	<0.5	<5	<0.5
POND 2	10/31/2016	<5	<10	<5	<0.1	<0.5	<0.27	<0.5	<0.5	<5	<0.5
POND 2	3/23/2017	<5	<10	<5	<0.1	<0.5	<0.27	<0.5	<0.5	<5	<0.5
POND 2	4/28/2017	-	-	-	-	-	-	-	-	-	-
POND 2	10/30/2017	<0.33	<10	<1.9	<0.25	<0.17	<0.18	<0.26	<0.29	<1.2	<0.25

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ALL DATA
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		CHLORO-BENZENE	CHLORO-ETHANE	CHLOROFORM	CHLORO-METHANE (METHYL CHLORIDE)	CIS-1,2-DICHLORO-ETHENE	CIS-1,3-DICHLORO-PROPENE	DIBROMO-CHLORO-METHANE	DICHLORO-METHANE	ETHYL-BENZENE	METHYL ETHYL KETONE
CLASS III (FRESH) SURFACE WATER STANDARD		17 µg/L	NA	470.8 µg/L	470.8 µg/L	NA	12 µg/L	34 µg/L	1580 µg/L	610 µg/L	120000 µg/L
GROUNDWATER STANDARD		100 µg/L*	12 µg/L***	70 µg/L***	2.7 µg/L***	70 µg/L*	0.4 µg/L***	0.4 µg/L***	5 µg/L*	30 µg/L**	4200 µg/L***
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
POND 1	11/9/2015	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26	<2.5	<0.5	<5
POND 1	4/6/2016	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26	<2.5	<0.5	<5
POND 1	10/31/2016	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26	<2.5	<0.5	<5
POND 1	3/23/2017	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26	<2.5	<0.5	<5
POND 1	10/30/2017	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21	<0.97	<0.3	<0.96
POND 1 DUP	10/30/2017	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21	<0.97	<0.3	<0.96
POND 2	11/9/2015	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26	<2.5	<0.5	<5
POND 2	4/6/2016	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26	<2.5	<0.5	<5
POND 2	10/31/2016	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26	<2.5	<0.5	<5
POND 2	3/23/2017	<0.5	<0.5	<0.5	<0.62	<0.5	<0.25	<0.26	<2.5	<0.5	<5
POND 2	4/28/2017	-	-	-	-	-	-	-	-	-	-
POND 2	10/30/2017	<0.23	<0.54	<0.14	<0.11	<0.19	<0.13	<0.21	<0.97	<0.3	<0.96

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SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
JULY 2015 THROUGH DECEMBER 2017

PARAMETER		METHYL-IODIDE	STYRENE	TETRA-CHLORO-ETHENE	TOLUENE	TRANS-1,2-DICHLORO-ETHENE	TRANS-1,3-DICHLORO-PROPENE	TRICHLORO-ETHENE	TRICHLORO-FLUORO-METHANE	VINYL ACETATE	VINYL CHLORIDE
CLASS III (FRESH) SURFACE WATER STANDARD		NA	460 µg/L	8.85 µg/L	480 µg/L	11000 µg/L	12 µg/L	80.7 µg/L	NA	700 µg/L	2.4 µg/L
GROUNDWATER STANDARD		(1)	100 µg/L*	3 µg/L*	40 µg/L**	100 µg/L*	0.4 µg/L***	3 µg/L*	2100 µg/L***	88 µg/L***	1 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
POND 1	11/9/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5	<0.5	<1	<0.5
POND 1	4/6/2016	<0.5	<0.5	<0.5	0.80 I	<0.5	<0.25	<0.5	<0.5	<1	<0.5
POND 1	10/31/2016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5	<0.5	<1	<0.5
POND 1	3/23/2017	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5	<0.5	<1	<0.5
POND 1	10/30/2017	<0.32	<0.26	<0.46	<0.26	<0.49	<0.26	<0.47	<0.2	<0.35	<0.62
POND 1 DUP	10/30/2017	<0.32	<0.26	<0.46	<0.26	<0.49	<0.26	<0.47	<0.2	<0.35	<0.62
POND 2	11/9/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5	<0.5	<1	<0.5
POND 2	4/6/2016	<0.5	<0.5	<0.5	0.50 I	<0.5	<0.25	<0.5	<0.5	<1	<0.5
POND 2	10/31/2016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5	<0.5	<1	<0.5
POND 2	3/23/2017	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.5	<0.5	<1	<0.5
POND 2	4/28/2017	-	-	-	-	-	-	-	-	-	-
POND 2	10/30/2017	<0.32	<0.26	<0.46	<0.26	<0.49	<0.26	<0.47	<0.2	<0.35	<0.62

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JULY 2015 THROUGH DECEMBER 2017

PARAMETER		XYLENES	(E)-1,4-DICHLORO-2-BUTENE	DIBROMO-METHANE
CLASS III (FRESH) SURFACE WATER STANDARD		370 µg/L	NA	NA
GROUNDWATER STANDARD		20 µg/L**	(1)	70 µg/L***
UNITS		µg/L	µg/L	µg/L
POND 1	11/9/2015	<0.5	<5	<0.5
POND 1	4/6/2016	<1.5	<5	<0.5
POND 1	10/31/2016	<1.5	<5	<0.5
POND 1	3/23/2017	<1.5	<5	<0.5
POND 1	10/30/2017	<1	<1	<0.21
POND 1 DUP	10/30/2017	<1	<1	<0.21
POND 2	11/9/2015	<0.5	<5	<0.5
POND 2	4/6/2016	<1.5	<5	<0.5
POND 2	10/31/2016	<1.5	<5	<0.5
POND 2	3/23/2017	<1.5	<5	<0.5
POND 2	4/28/2017	-	-	-
POND 2	10/30/2017	<1	<1	<0.21

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SARASOTA CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX

CLASS III (FRESH) SURFACE WATER STANDARDS
CALCULATED METAL STANDARDS BASED ON HARDNESS

POND 1

If Hardness is <25 use 25, if >400 use 400.

15S2

Hardness 160 mg/L

ln [H] 5.0752

Cadmium		**Lead**	
[H] calc	-0.9588	[H] calc	1.7557
STD	**0.38 ug/L**	**STD**	**5.79 ug/L**
Chromium		**Nickel**	
[H] calc	4.8414	[H] calc	4.3520
STD	**126.64 ug/L**	**STD**	**77.63 ug/L**
Copper		**Zinc**	
[H] calc	2.6347	[H] calc	5.1842
STD	**13.94 ug/L**	**STD**	**178.43 ug/L**

16S1

Hardness 165 mg/L

ln [H] 5.1059

Cadmium		**Lead**	
[H] calc	-0.9360	[H] calc	1.7949
STD	**0.39 ug/L**	**STD**	**6.02 ug/L**
Chromium		**Nickel**	
[H] calc	4.8666	[H] calc	4.3780
STD	**129.87 ug/L**	**STD**	**79.68 ug/L**
Copper		**Zinc**	
[H] calc	2.6610	[H] calc	5.2103
STD	**14.31 ug/L**	**STD**	**183.14 ug/L**

16S2

Hardness 151 mg/L

ln [H] 5.0173

Cadmium		**Lead**	
[H] calc	-1.0017	[H] calc	1.6820
STD	**0.37 ug/L**	**STD**	**5.38 ug/L**
Chromium		**Nickel**	
[H] calc	4.7940	[H] calc	4.3030
STD	**120.78 ug/L**	**STD**	**73.92 ug/L**
Copper		**Zinc**	
[H] calc	2.5853	[H] calc	5.1351
STD	**13.27 ug/L**	**STD**	**169.89 ug/L**

17S1

Hardness 187 mg/L

ln [H] 5.2311

Cadmium		**Lead**	
[H] calc	-0.8433	[H] calc	1.9542
STD	**0.43 ug/L**	**STD**	**7.06 ug/L**
Chromium		**Nickel**	
[H] calc	4.9691	[H] calc	4.4839
STD	**143.89 ug/L**	**STD**	**88.58 ug/L**
Copper		**Zinc**	
[H] calc	2.7680	[H] calc	5.3163
STD	**15.93 ug/L**	**STD**	**203.63 ug/L**

17S2

Hardness 136 mg/L

ln [H] 4.9127

Cadmium		**Lead**	
[H] calc	-1.0792	[H] calc	1.5488
STD	**0.34 ug/L**	**STD**	**4.71 ug/L**
Chromium		**Nickel**	
[H] calc	4.7083	[H] calc	4.2145
STD	**110.86 ug/L**	**STD**	**67.66 ug/L**
Copper		**Zinc**	
[H] calc	2.4959	[H] calc	5.0465
STD	**12.13 ug/L**	**STD**	**155.48 ug/L**

SARASOTA CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX

CLASS III (FRESH) SURFACE WATER STANDARDS
CALCULATED METAL STANDARDS BASED ON HARDNESS

POND 2

If Hardness is <25 use 25, if >400 use 400.

15S2

Hardness 141 mg/L

ln [H] 4.9488

Cadmium		**Lead**	
[H] calc	-1.0525	[H] calc	1.5948
STD	**0.35 ug/L**	**STD**	**4.93 ug/L**
Chromium		**Nickel**	
[H] calc	4.7378	[H] calc	4.2451
STD	**114.19 ug/L**	**STD**	**69.76 ug/L**
Copper		**Zinc**	
[H] calc	2.5267	[H] calc	5.0771
STD	**12.51 ug/L**	**STD**	**160.31 ug/L**

16S1

Hardness 84.3 mg/L

ln [H] 4.4344

Cadmium		**Lead**	
[H] calc	-1.4336	[H] calc	0.9400
STD	**0.24 ug/L**	**STD**	**2.56 ug/L**
Chromium		**Nickel**	
[H] calc	4.3166	[H] calc	3.8099
STD	**74.93 ug/L**	**STD**	**45.15 ug/L**
Copper		**Zinc**	
[H] calc	2.0872	[H] calc	4.6413
STD	**8.06 ug/L**	**STD**	**103.67 ug/L**

16S2

Hardness 129 mg/L

ln [H] 4.8598

Cadmium		**Lead**	
[H] calc	-1.1184	[H] calc	1.4815
STD	**0.33 ug/L**	**STD**	**4.40 ug/L**
Chromium		**Nickel**	
[H] calc	4.6650	[H] calc	4.1698
STD	**106.16 ug/L**	**STD**	**64.70 ug/L**
Copper		**Zinc**	
[H] calc	2.4507	[H] calc	5.0017
STD	**11.60 ug/L**	**STD**	**148.67 ug/L**

17S1

Hardness 143 mg/L

ln [H] 4.9628

Cadmium		**Lead**	
[H] calc	-1.0420	[H] calc	1.6127
STD	**0.35 ug/L**	**STD**	**5.02 ug/L**
Chromium		**Nickel**	
[H] calc	4.7494	[H] calc	4.2570
STD	**115.51 ug/L**	**STD**	**70.60 ug/L**
Copper		**Zinc**	
[H] calc	2.5388	[H] calc	5.0890
STD	**12.66 ug/L**	**STD**	**162.23 ug/L**

17S2

Hardness 110 mg/L

ln [H] 4.7005

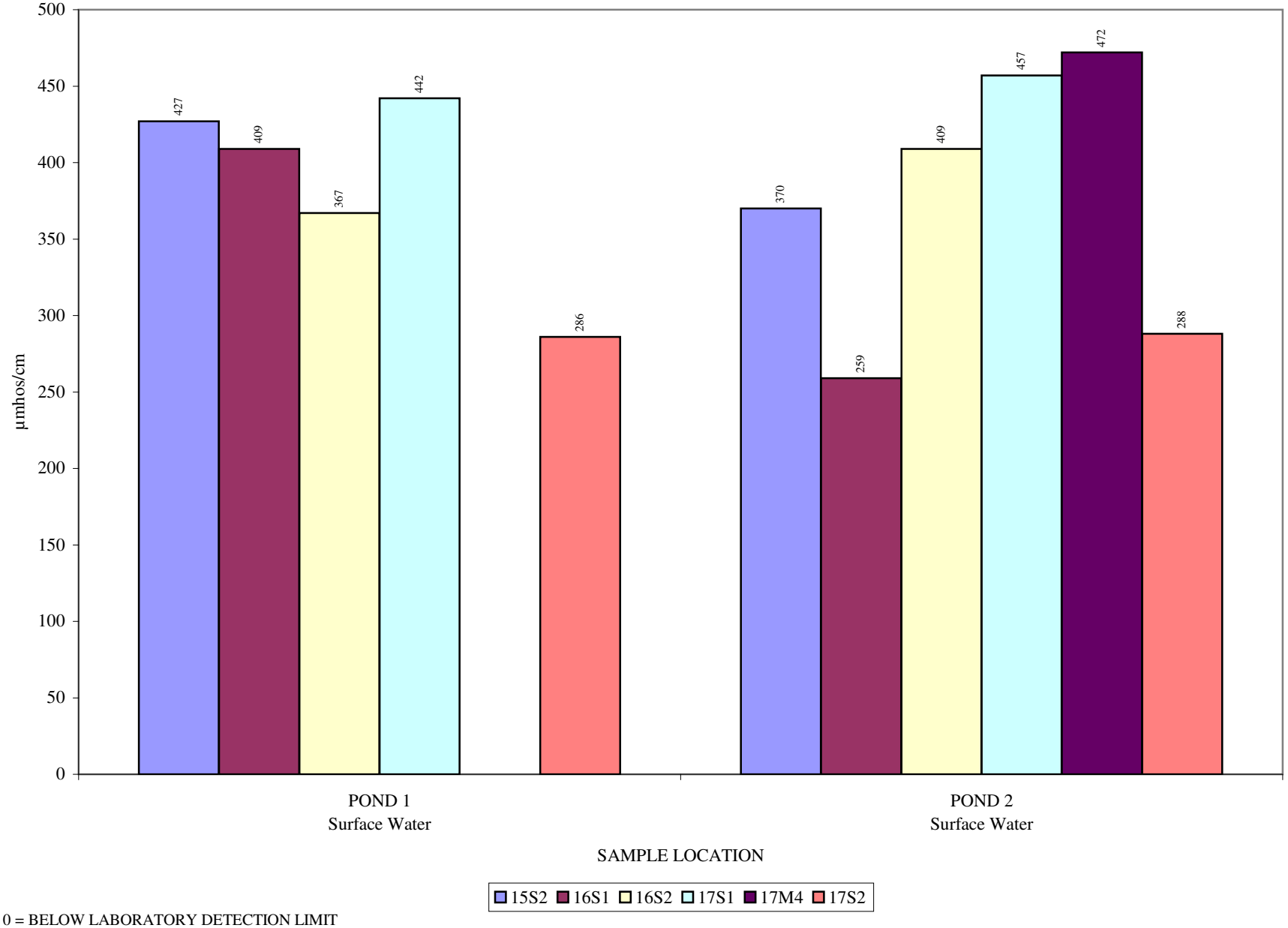
Cadmium		**Lead**	
[H] calc	-1.2364	[H] calc	1.2787
STD	**0.29 ug/L**	**STD**	**3.59 ug/L**
Chromium		**Nickel**	
[H] calc	4.5345	[H] calc	4.0350
STD	**93.18 ug/L**	**STD**	**56.54 ug/L**
Copper		**Zinc**	
[H] calc	2.3146	[H] calc	4.8667
STD	**10.12 ug/L**	**STD**	**129.89 ug/L**

Attachment 11

Surface Water Chemistry Graphs for the Report Period

CONDUCTIVITY (FIELD)

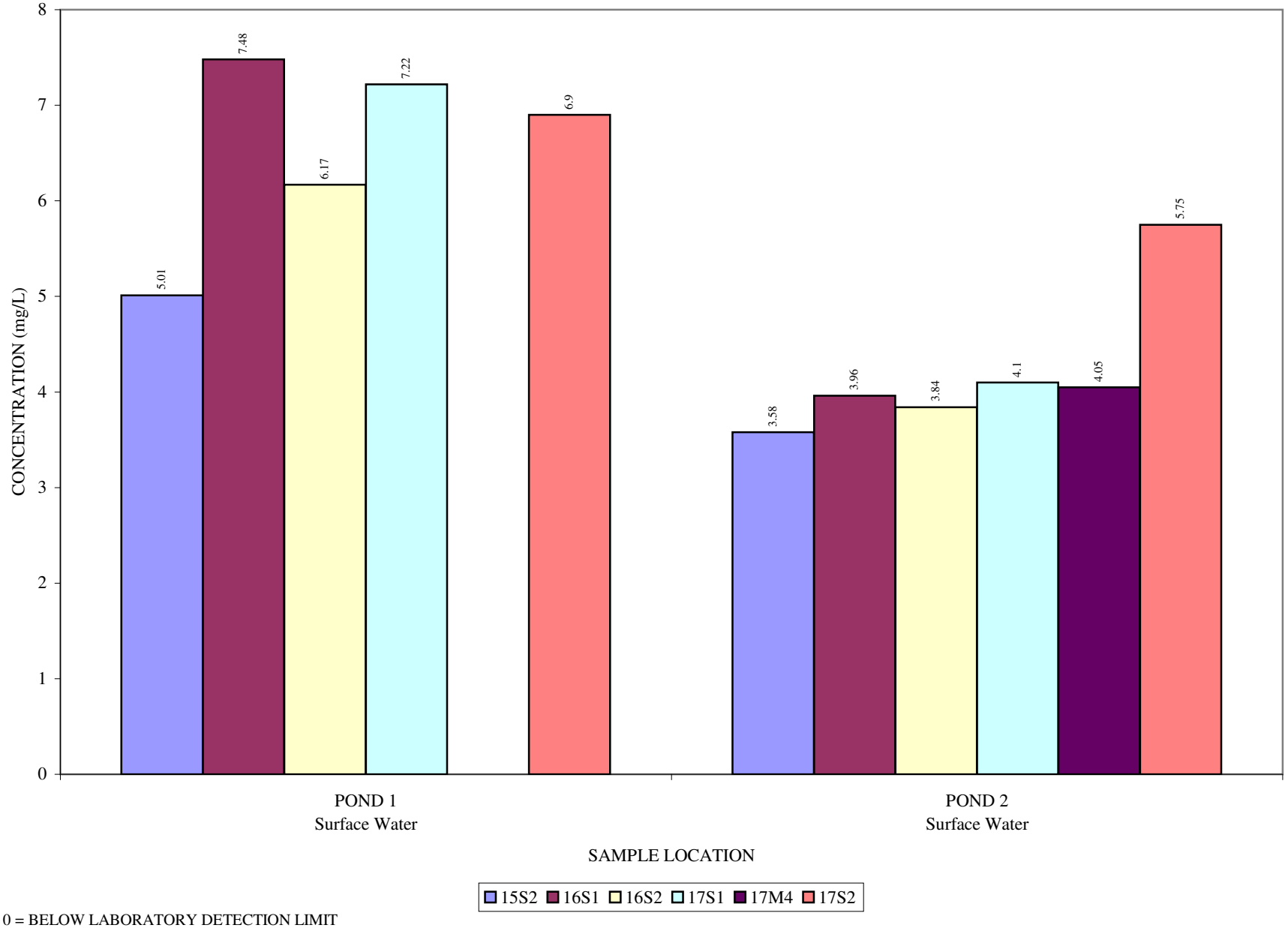
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

DISSOLVED OXYGEN (FIELD)

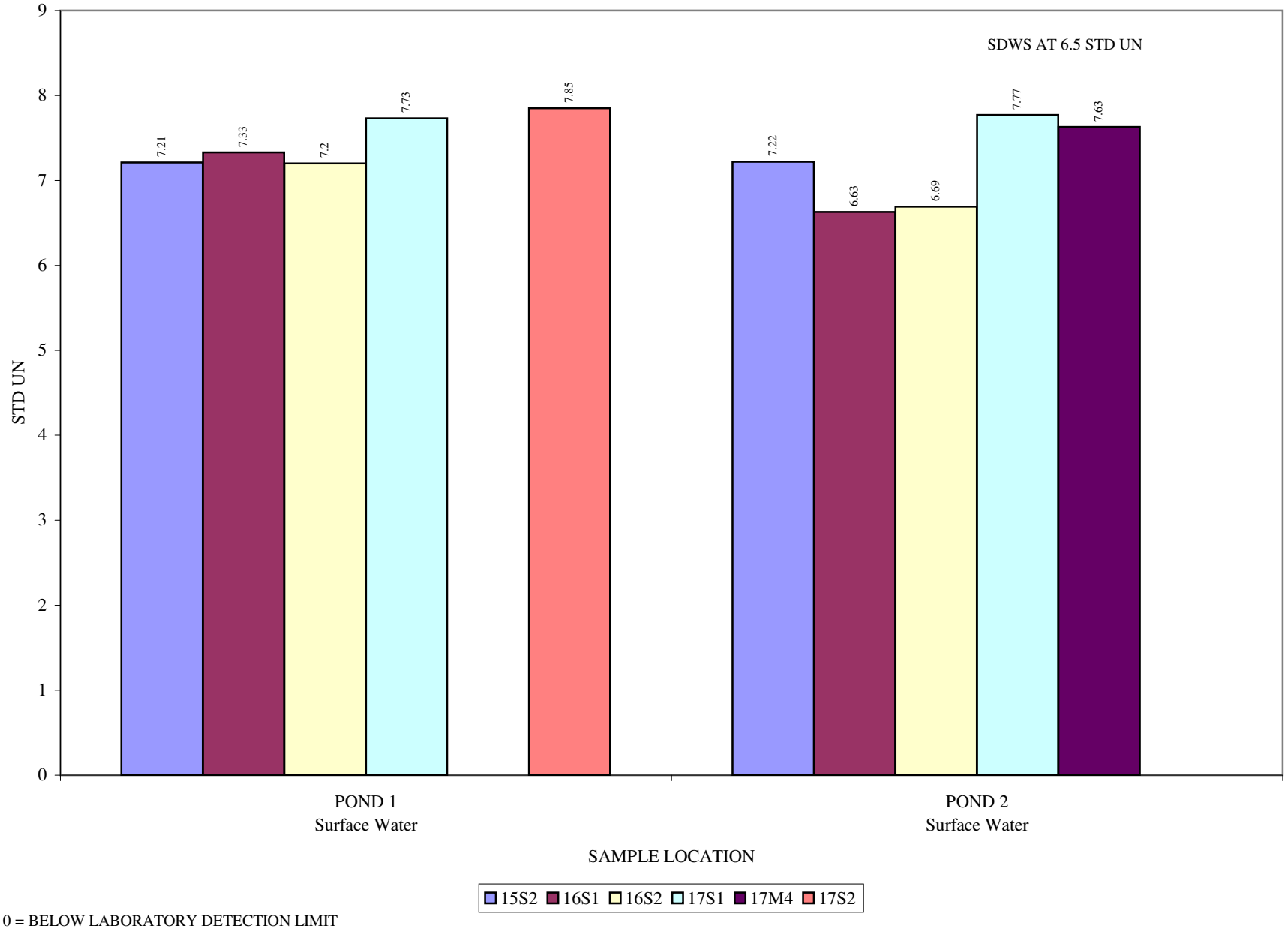
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

pH (FIELD)

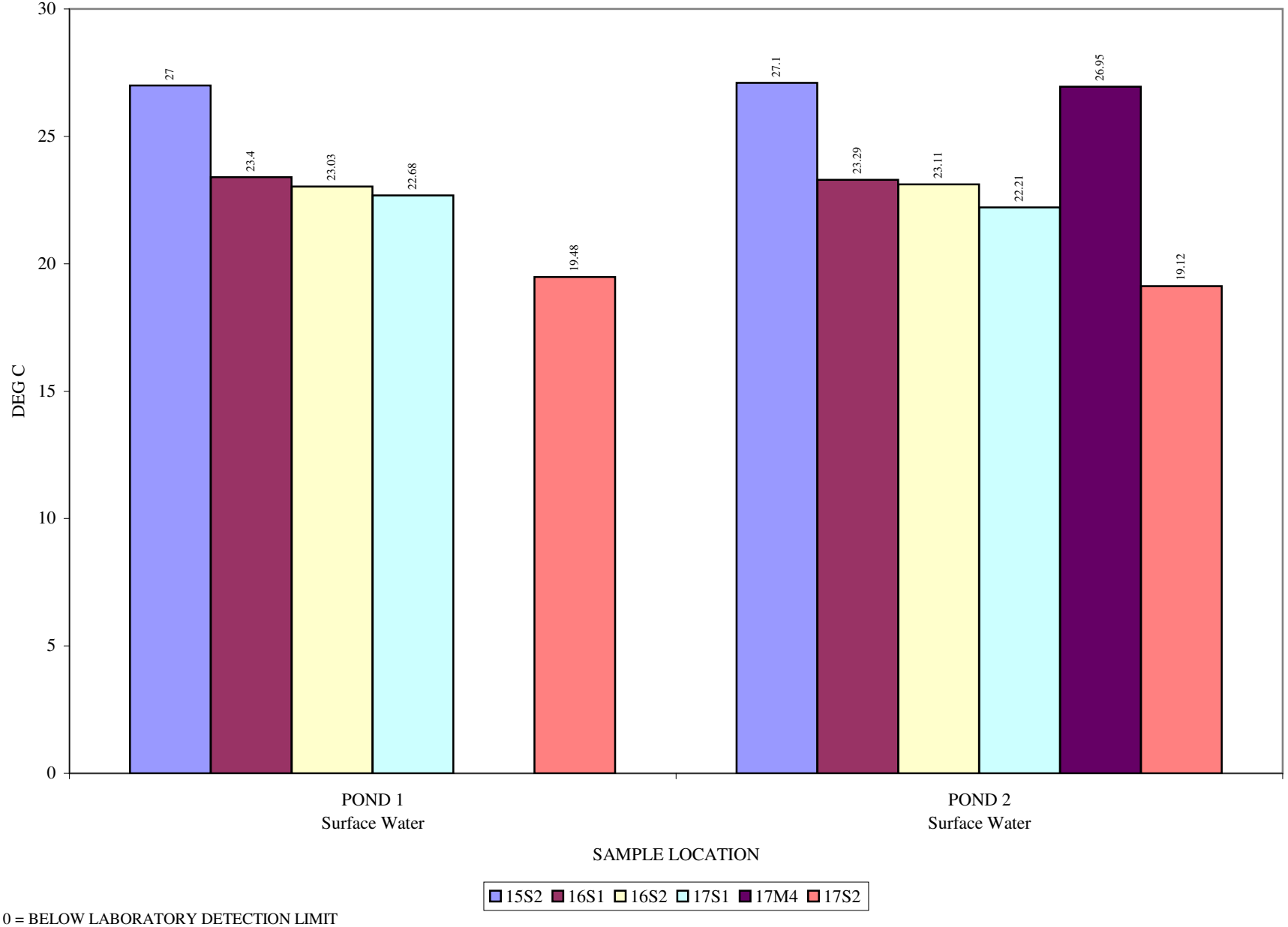
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TEMPERATURE (FIELD)

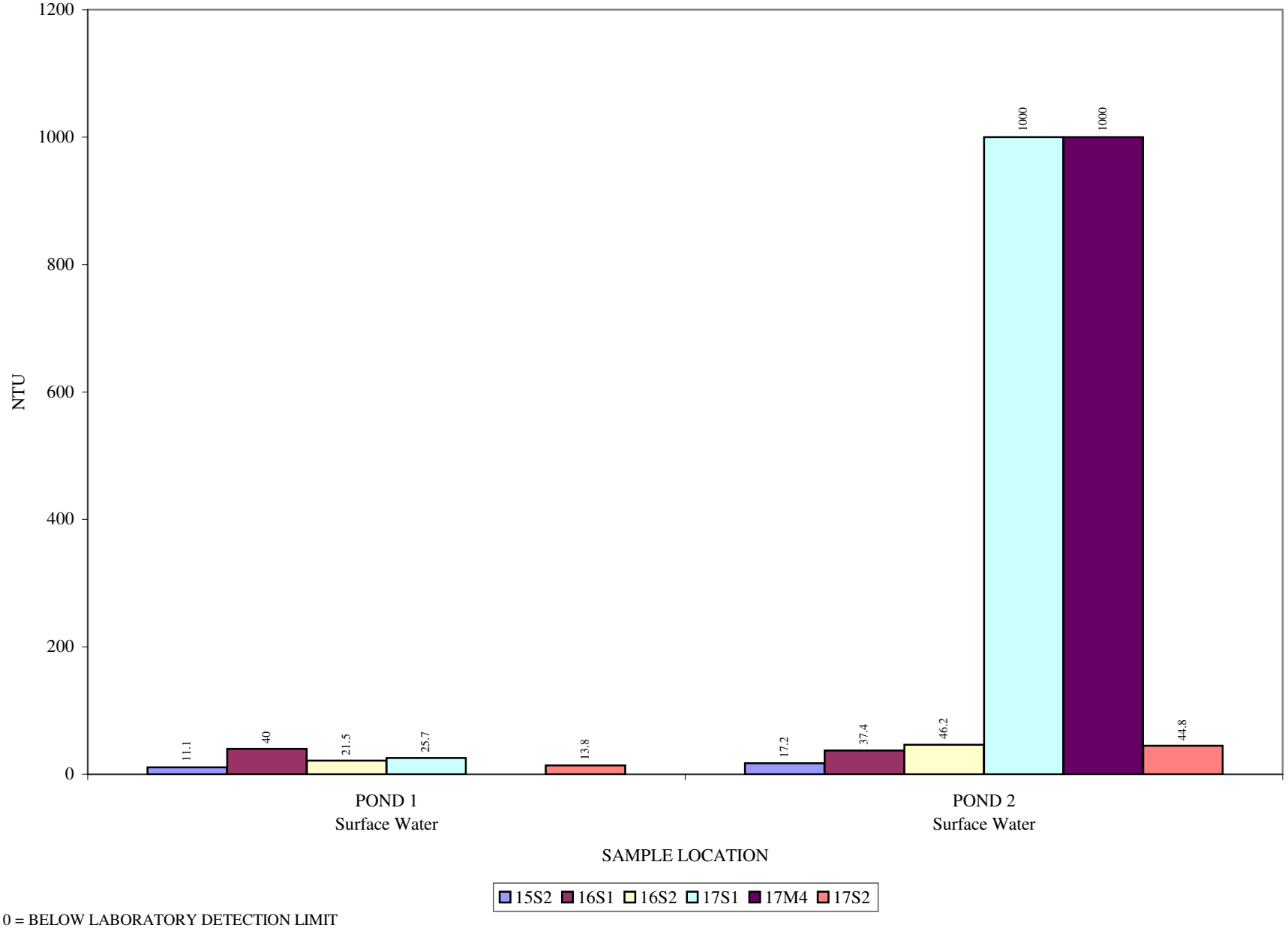
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TURBIDITY (FIELD)

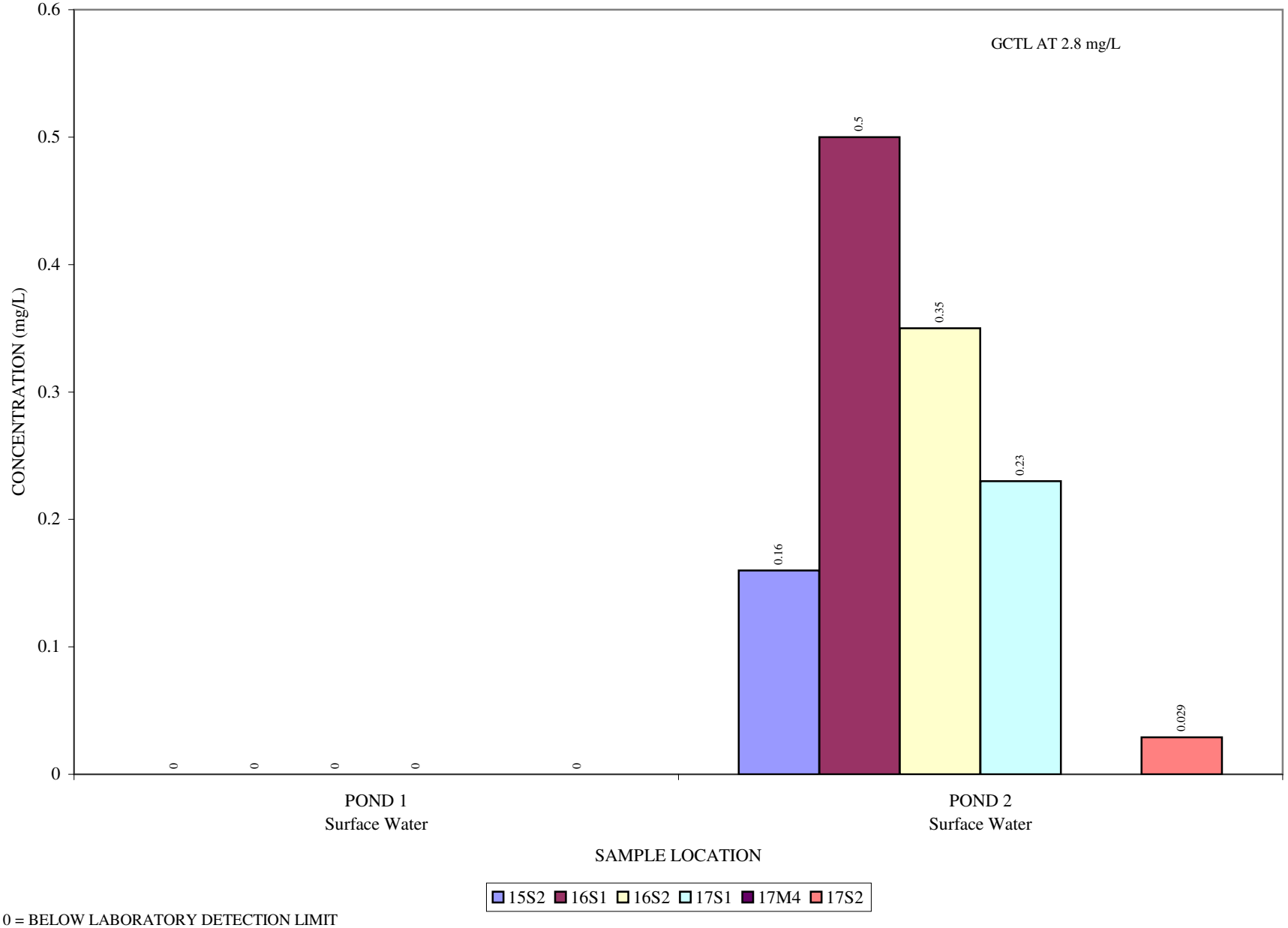
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

AMMONIA NITROGEN

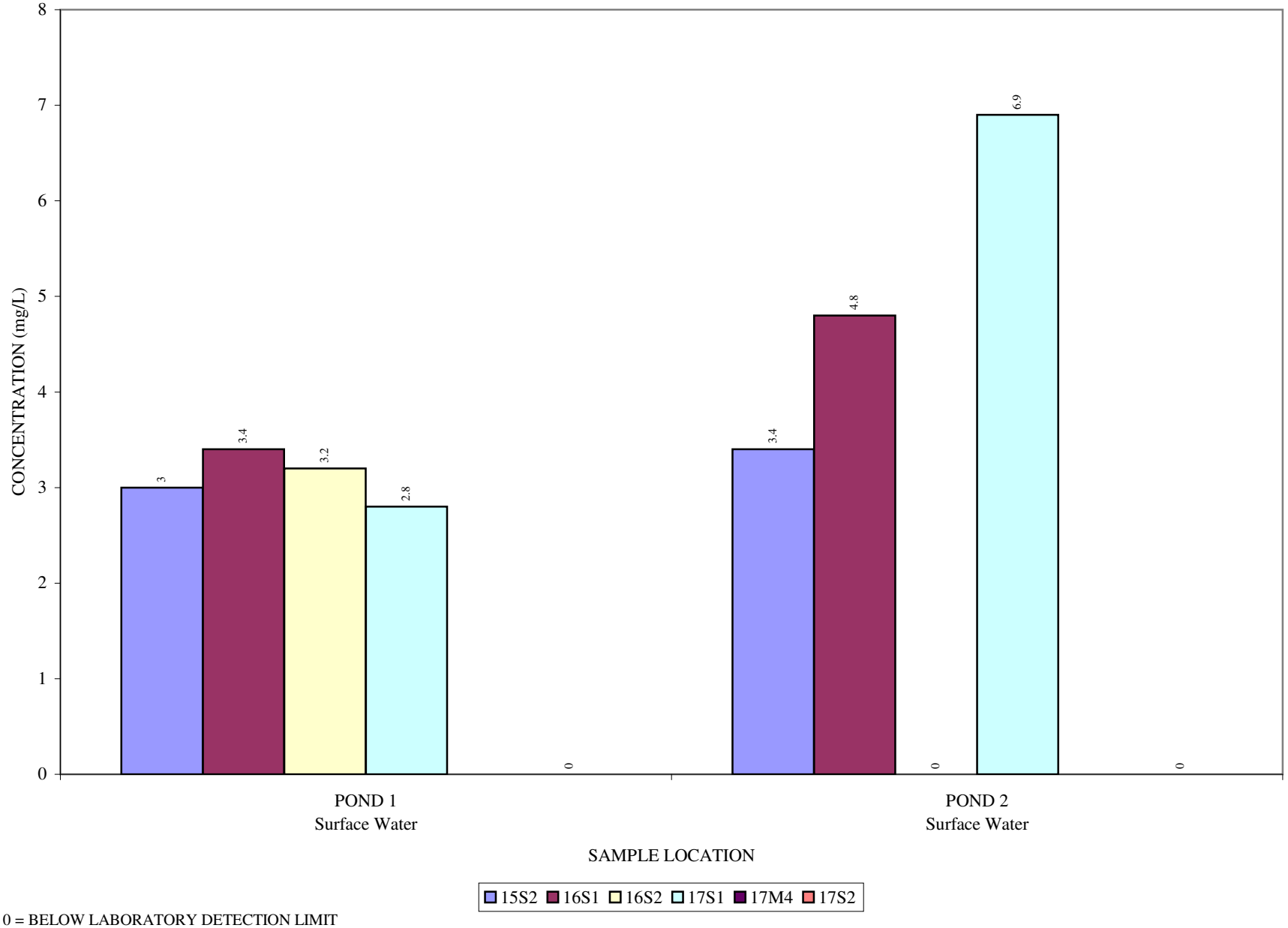
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

BIOCHEMICAL OXYGEN DEMAND

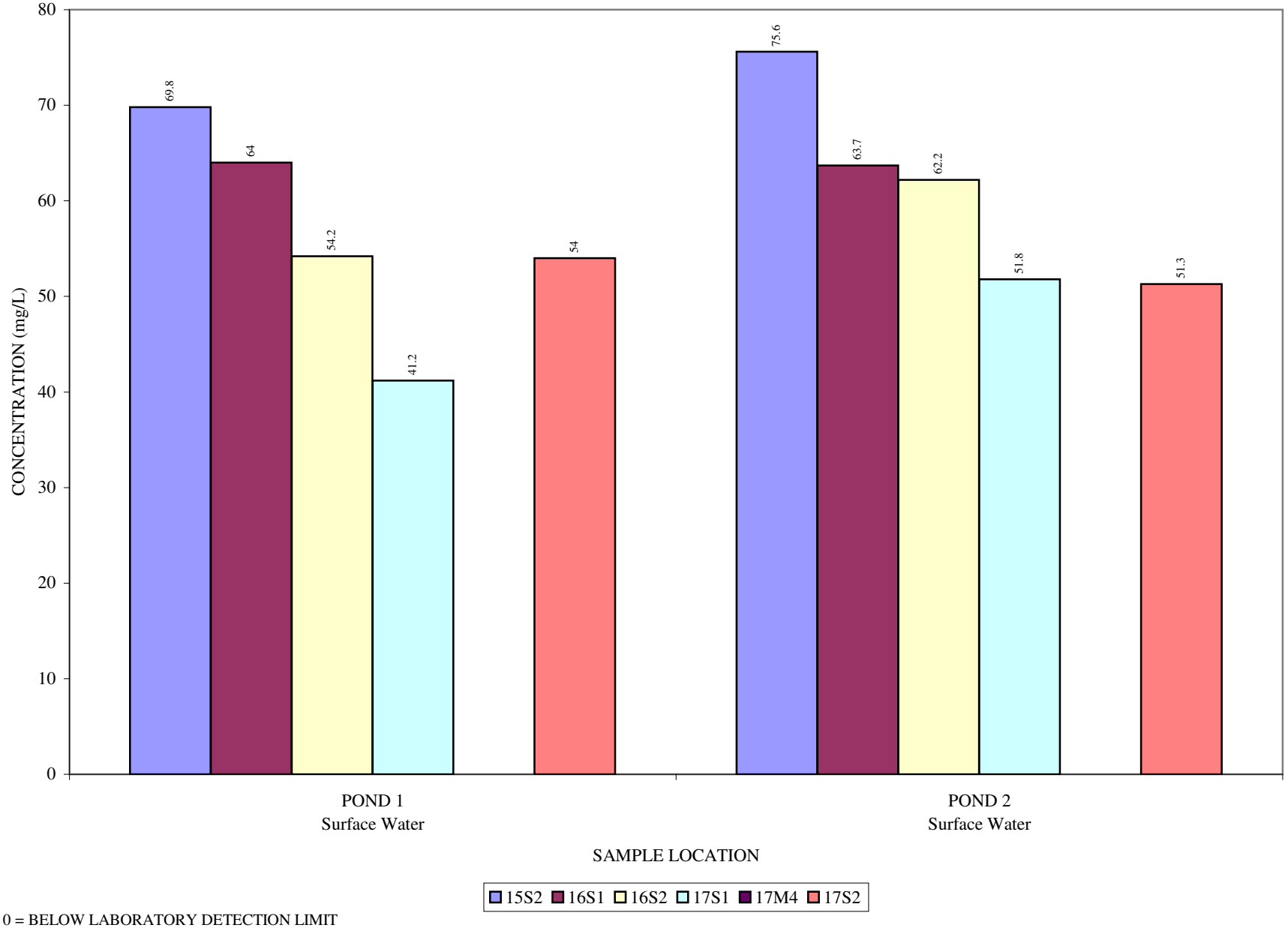
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CHEMICAL OXYGEN DEMAND

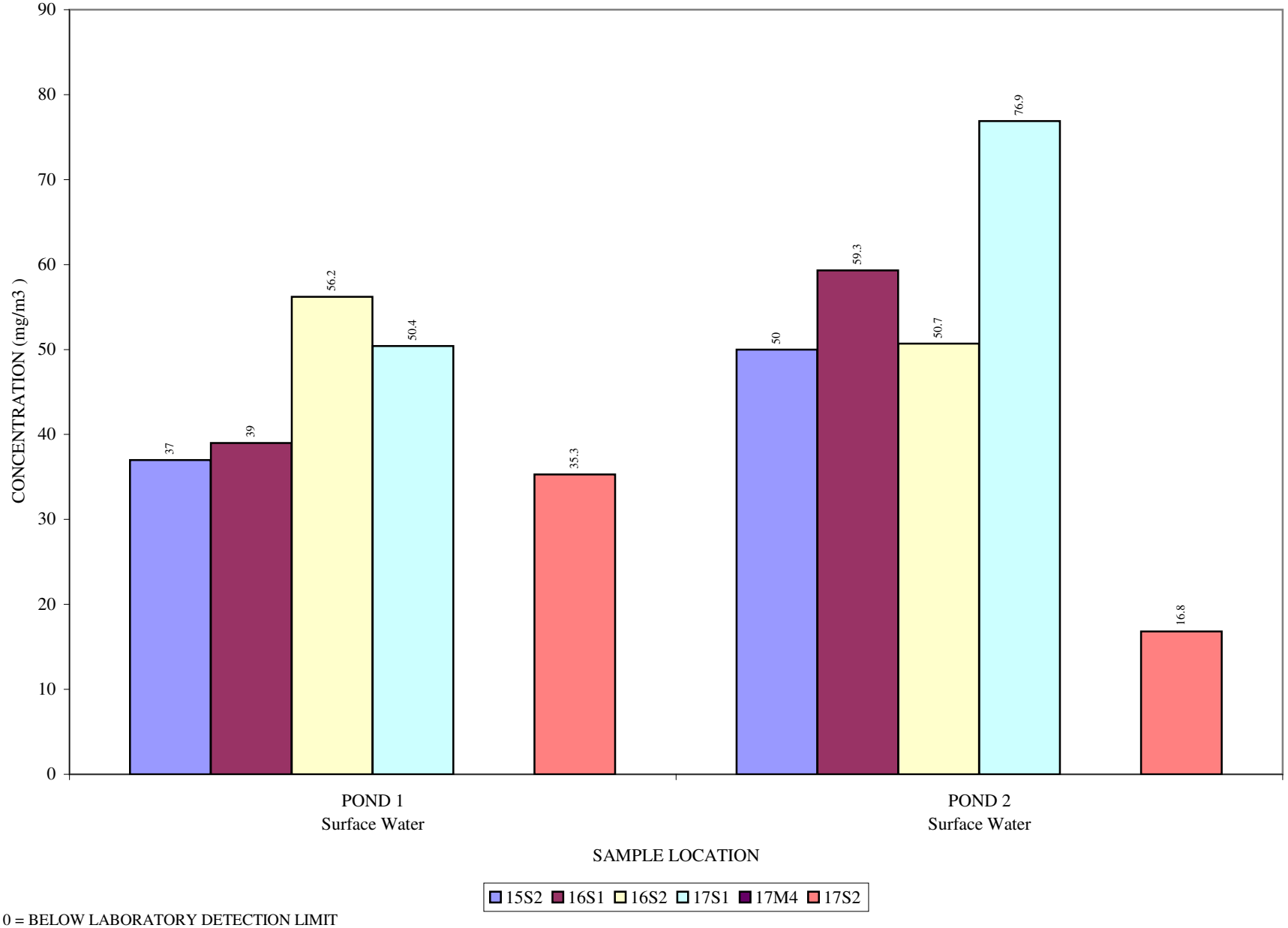
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

CHLOROPHYLL A

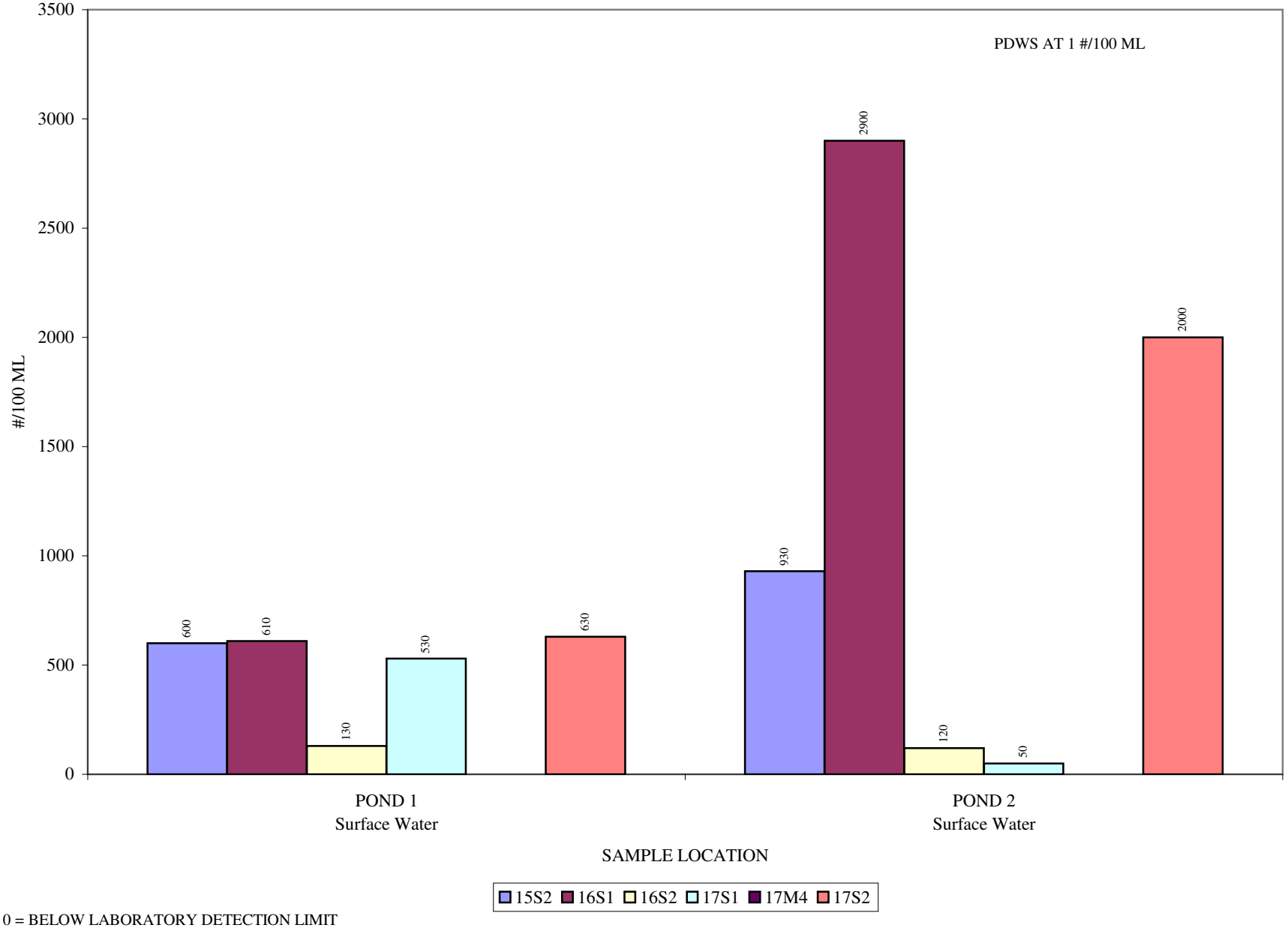
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

FECAL COLIFORM

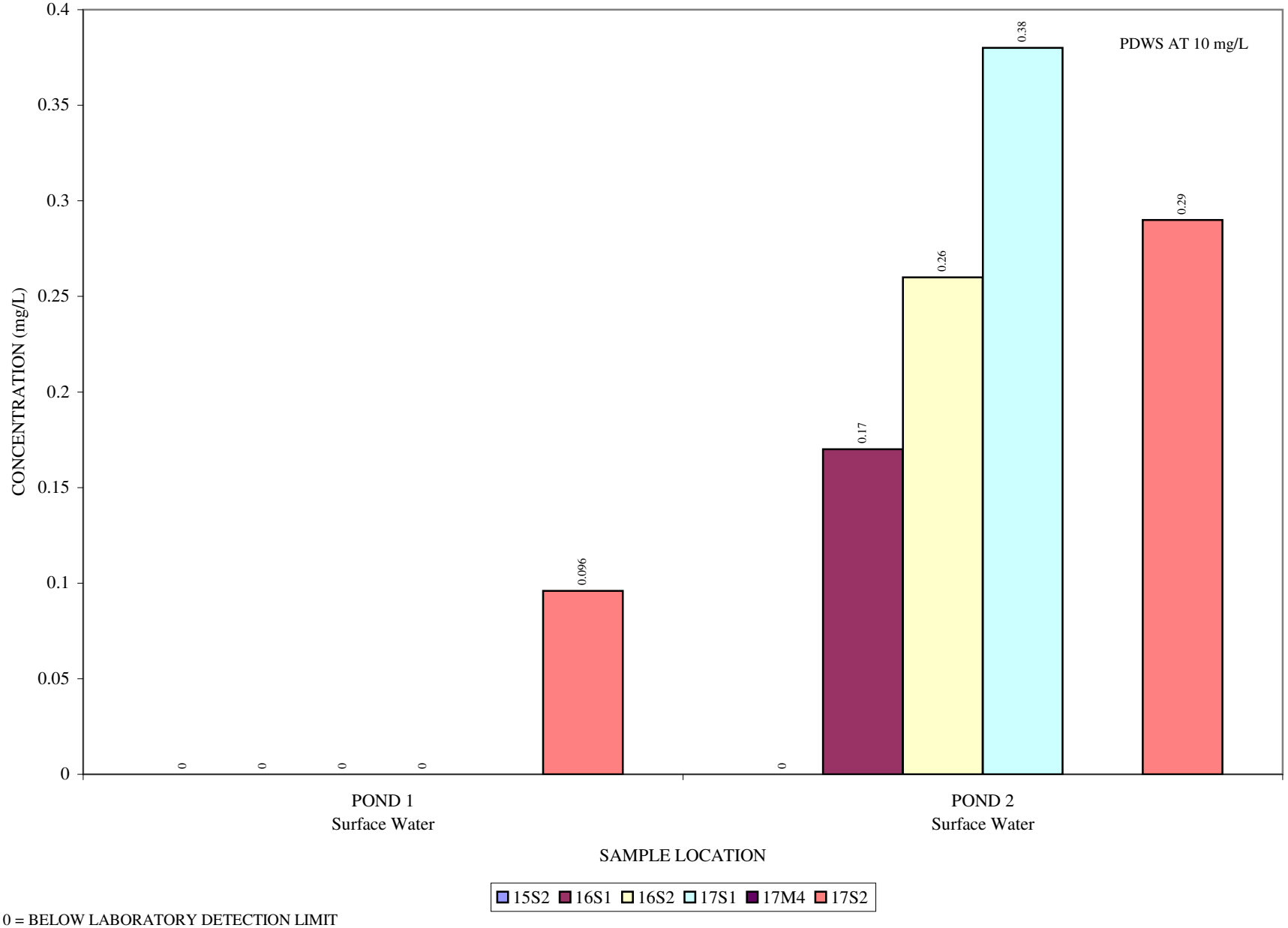
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

NITRATE NITROGEN

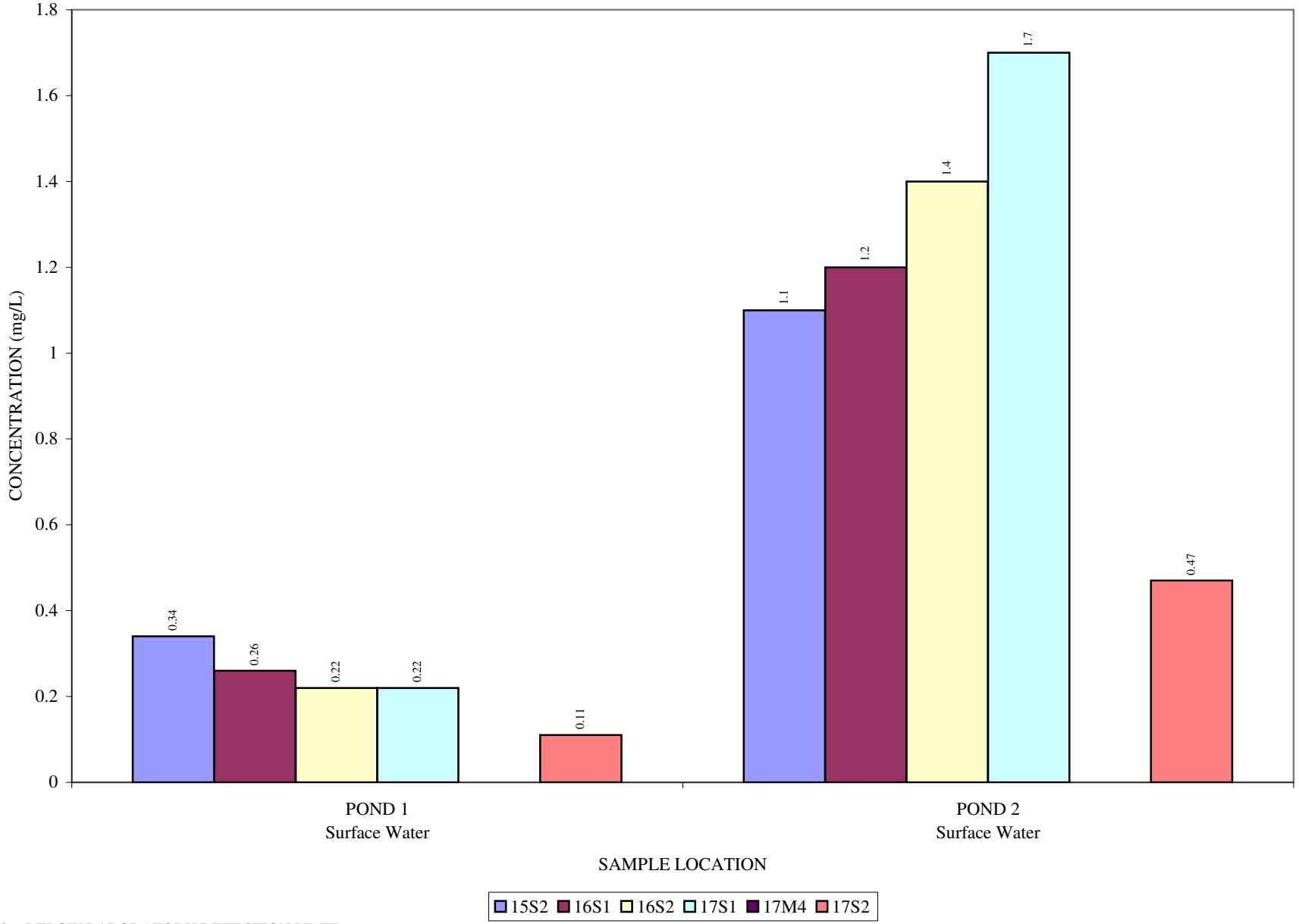
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

PHOSPHORUS

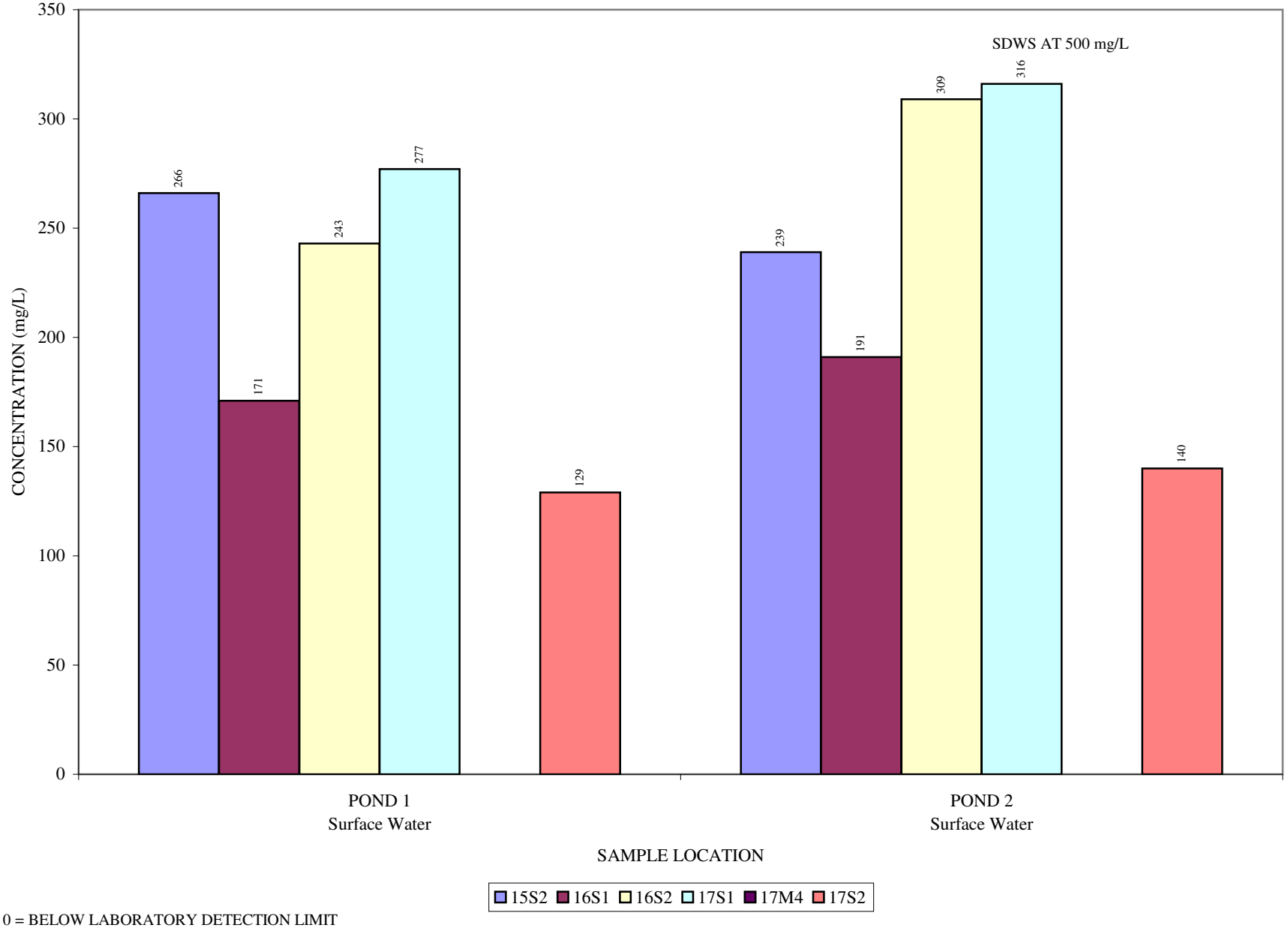
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TOTAL DISSOLVED SOLIDS

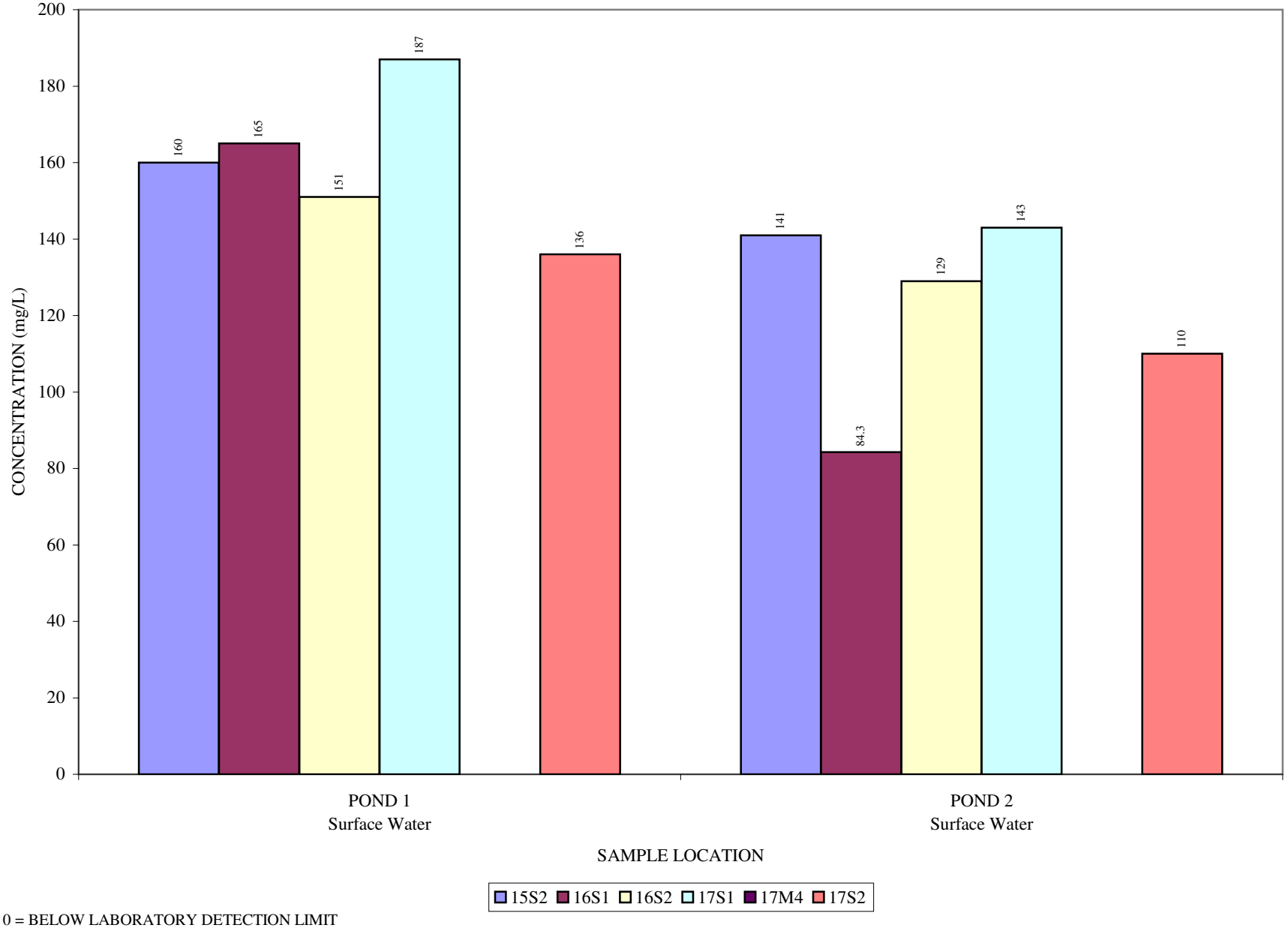
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TOTAL HARDNESS

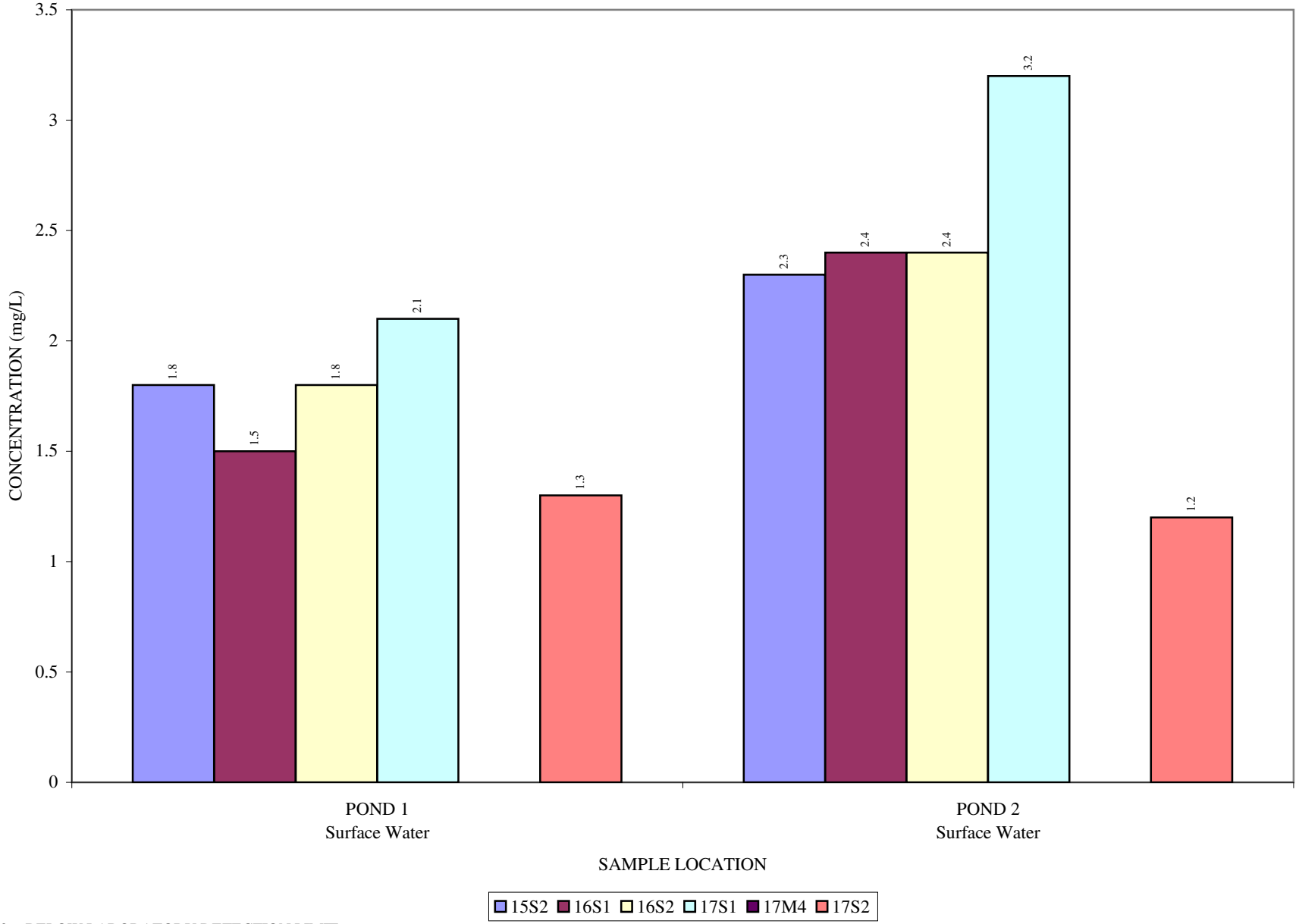
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TOTAL KJELDAHL NITROGEN

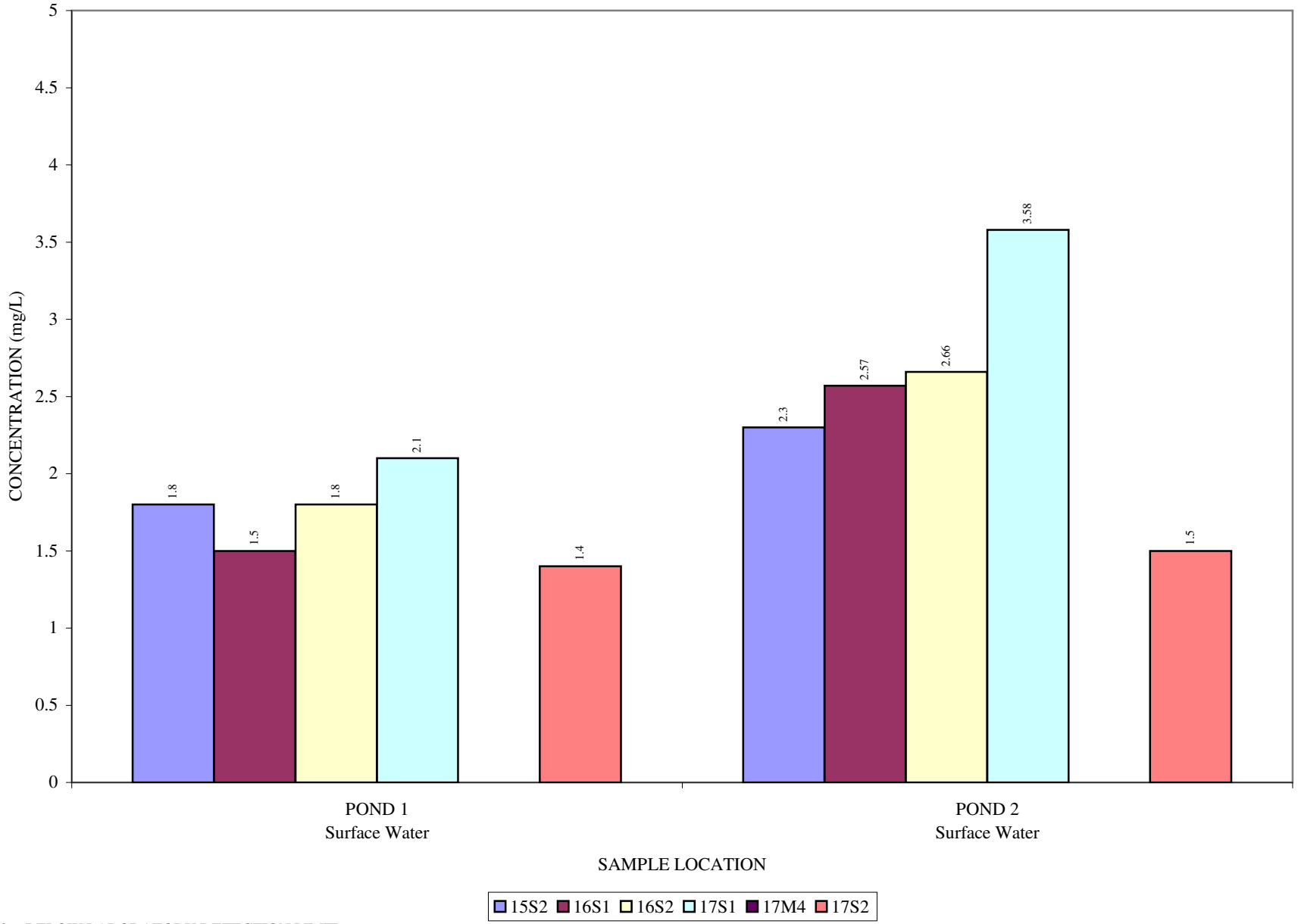
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TOTAL NITROGEN

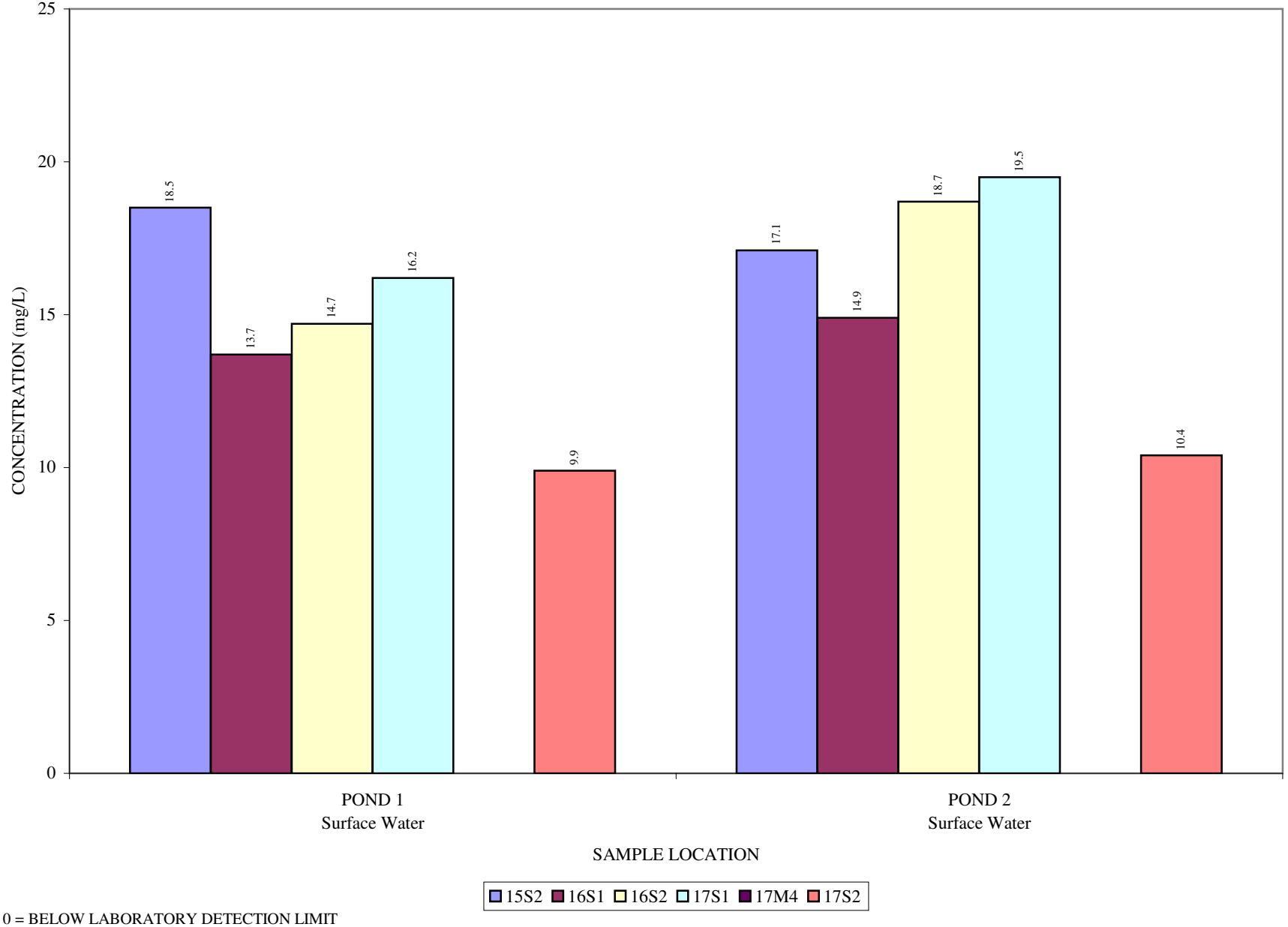
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TOTAL ORGANIC CARBON

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



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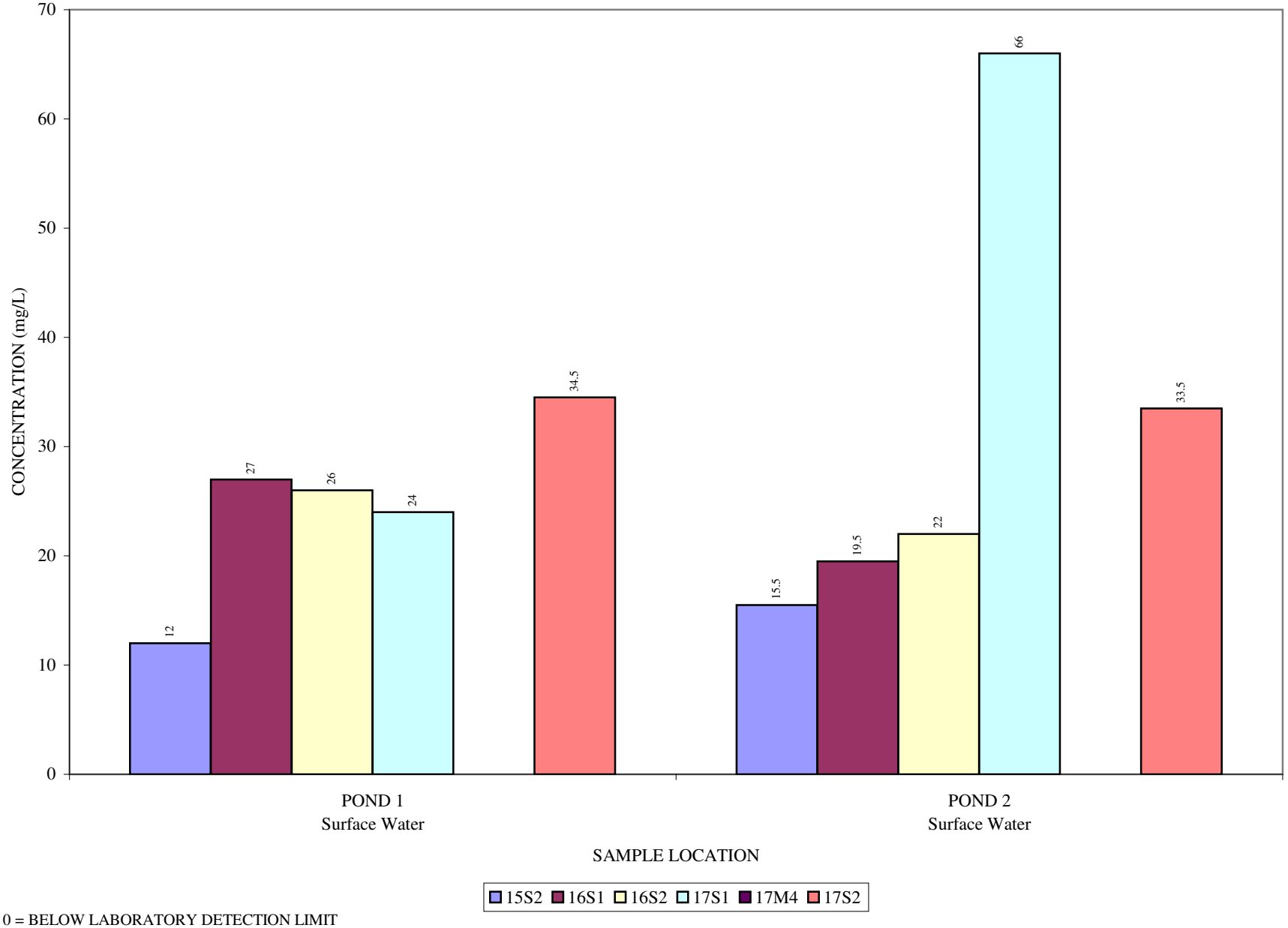
TOTAL SUSPENDED SOLIDS

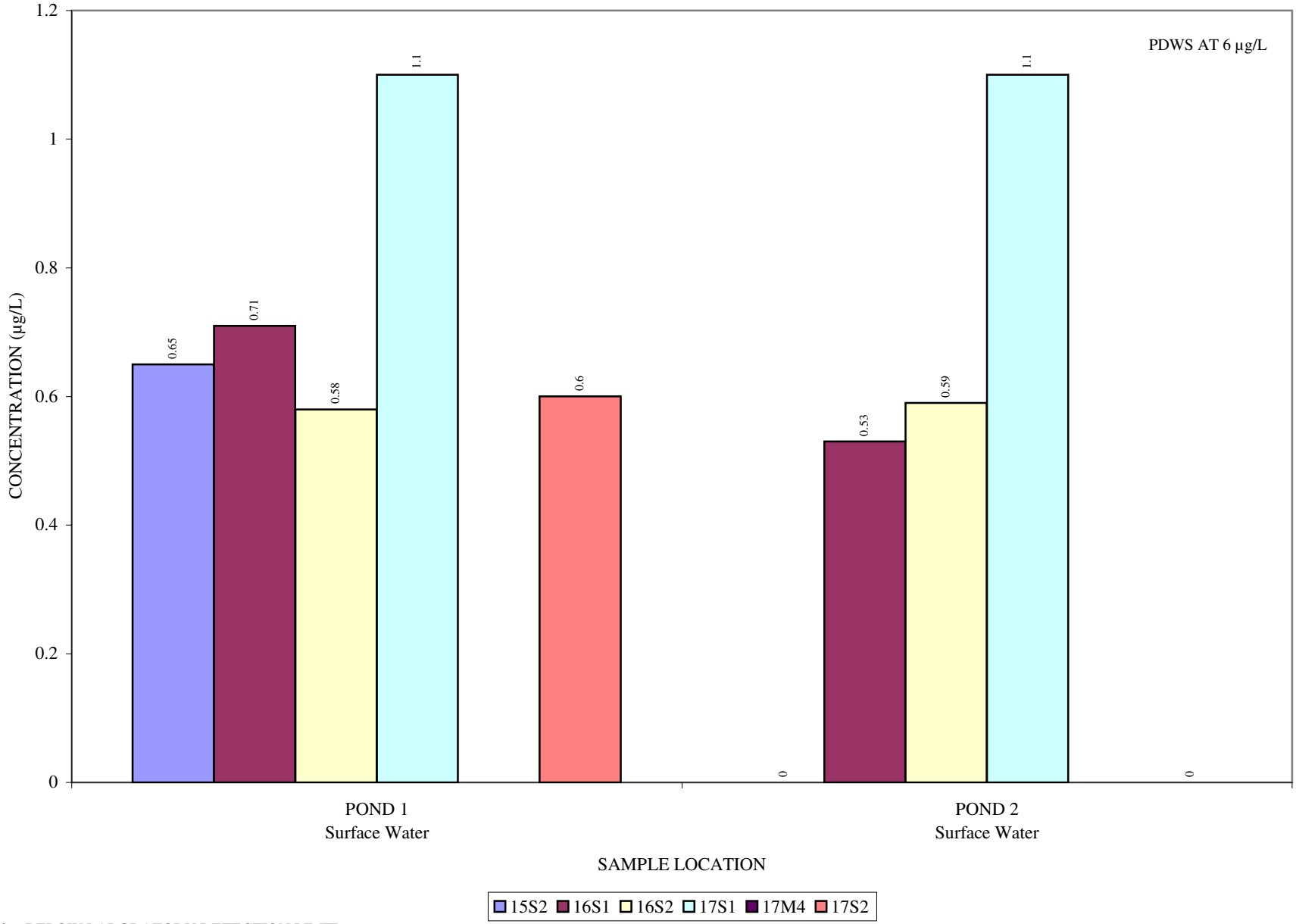
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

ANTIMONY

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



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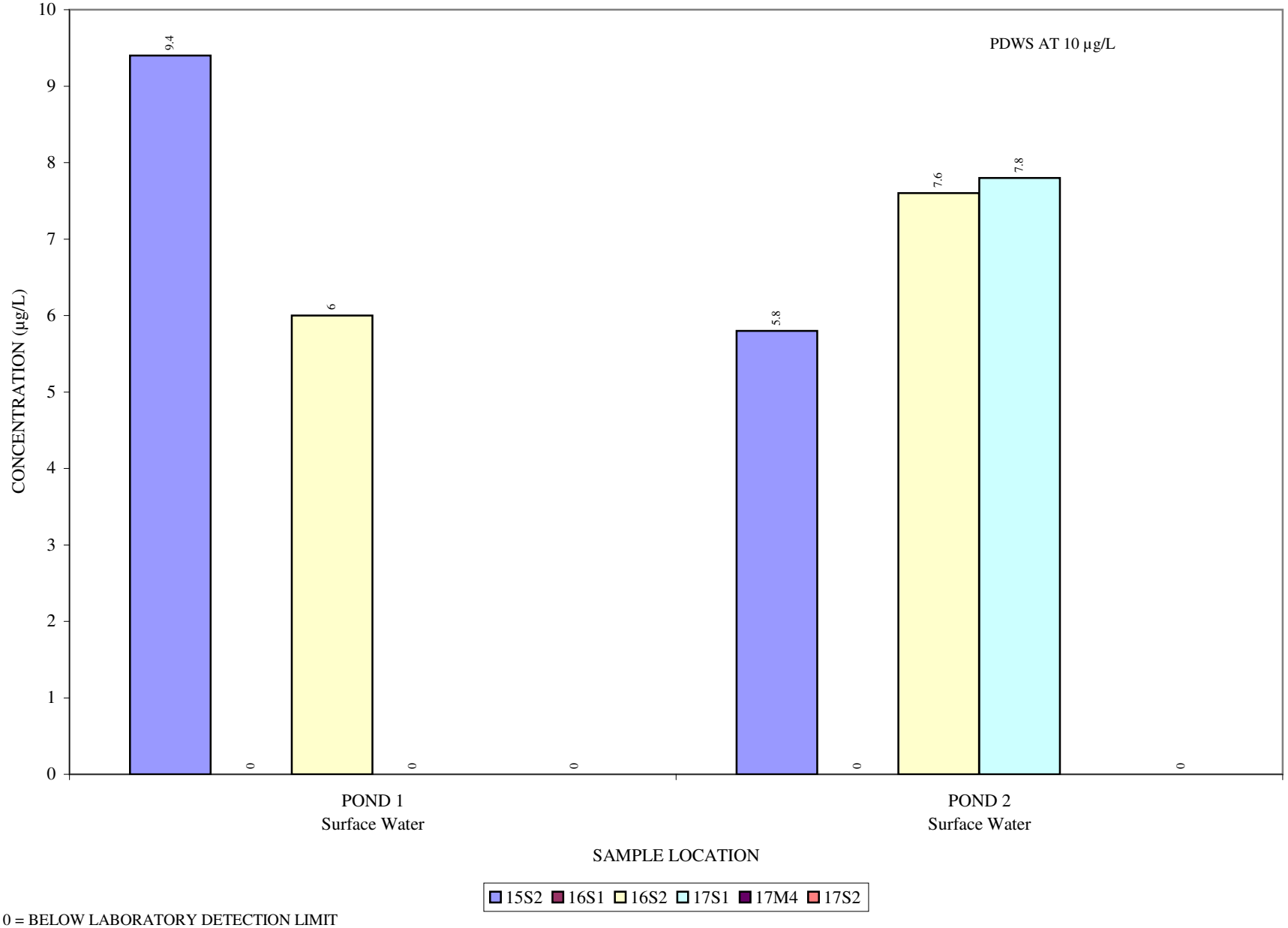
ARSENIC

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



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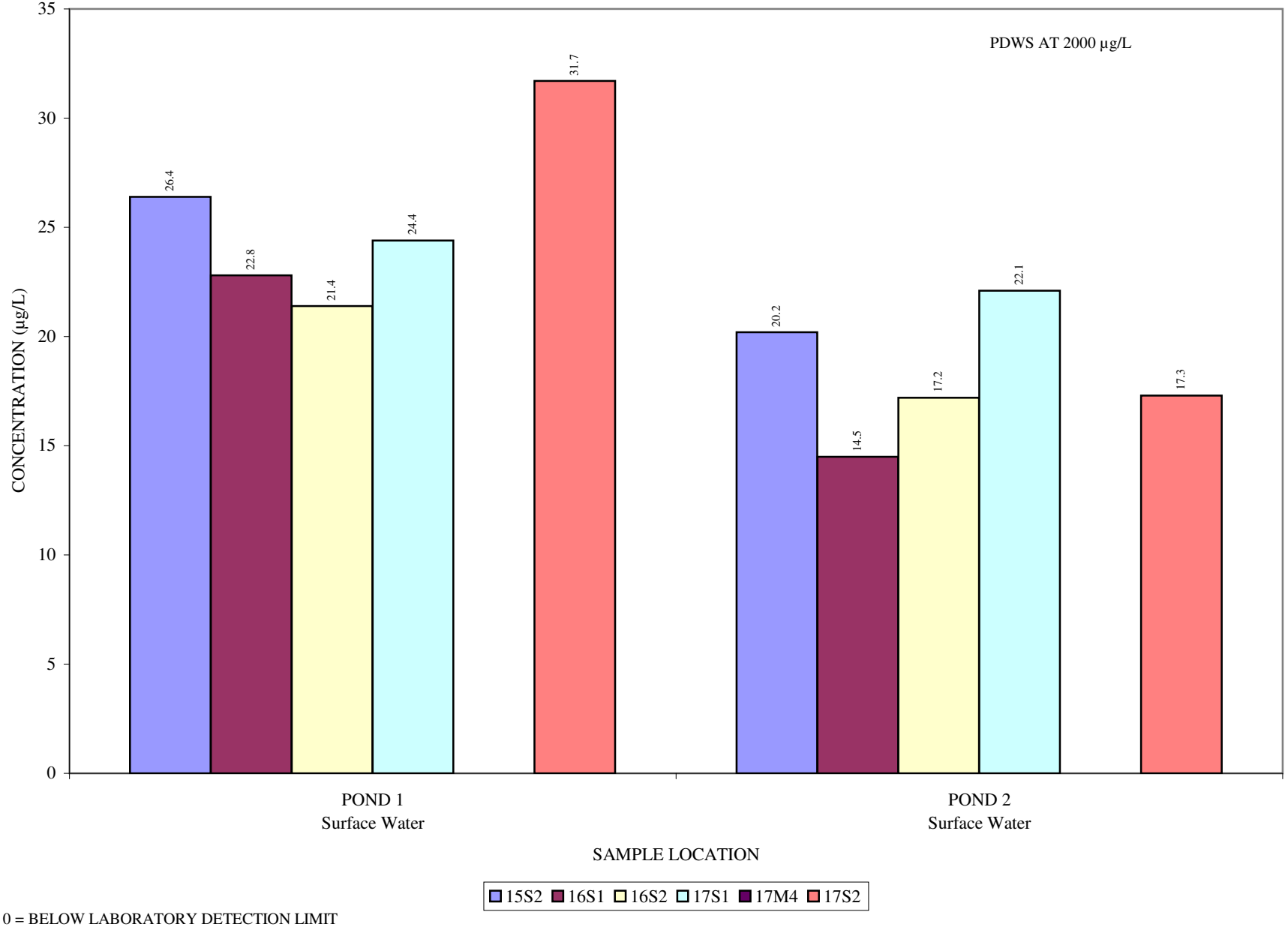
BARIUM

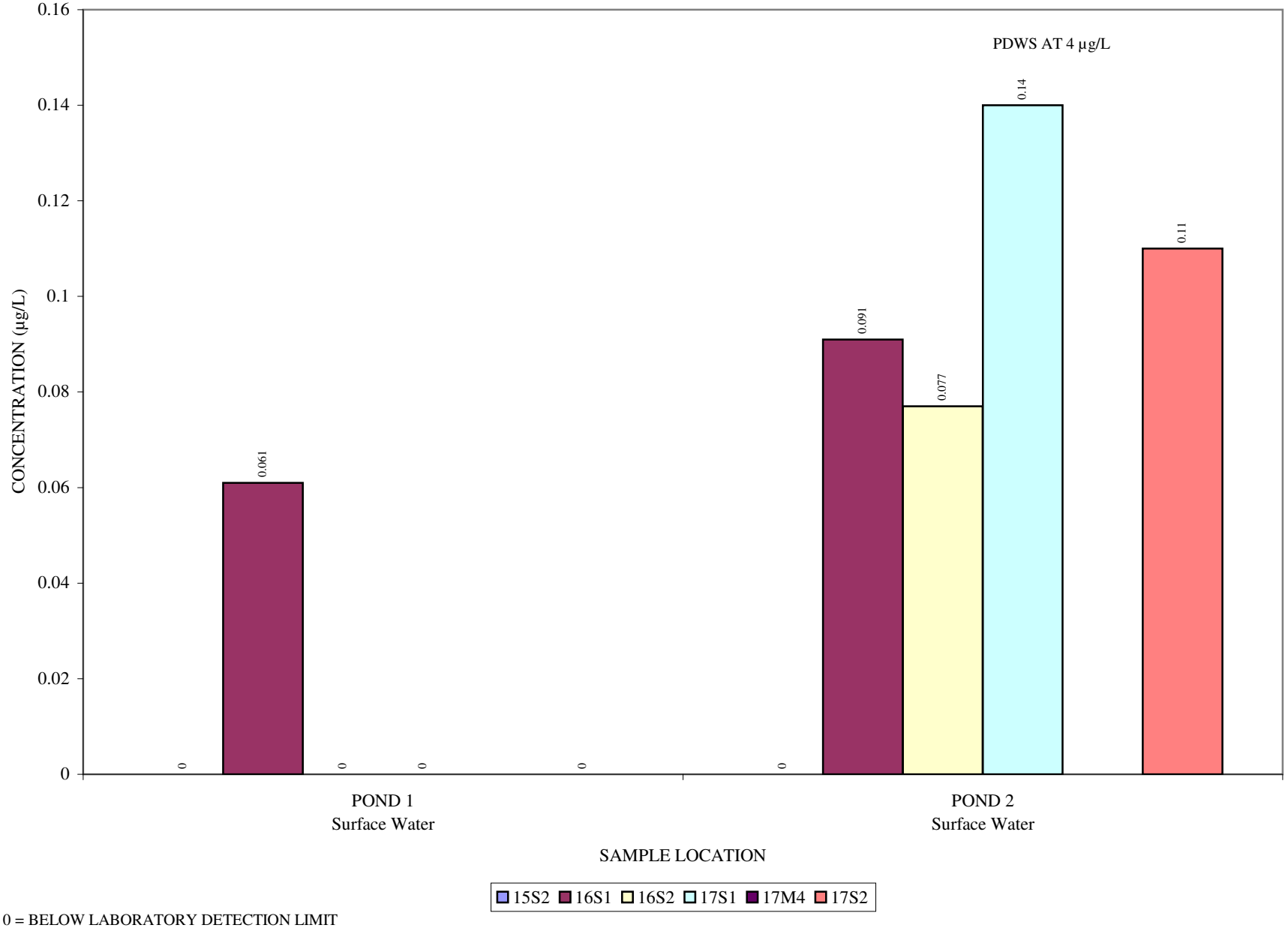
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

BERYLLIUM

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



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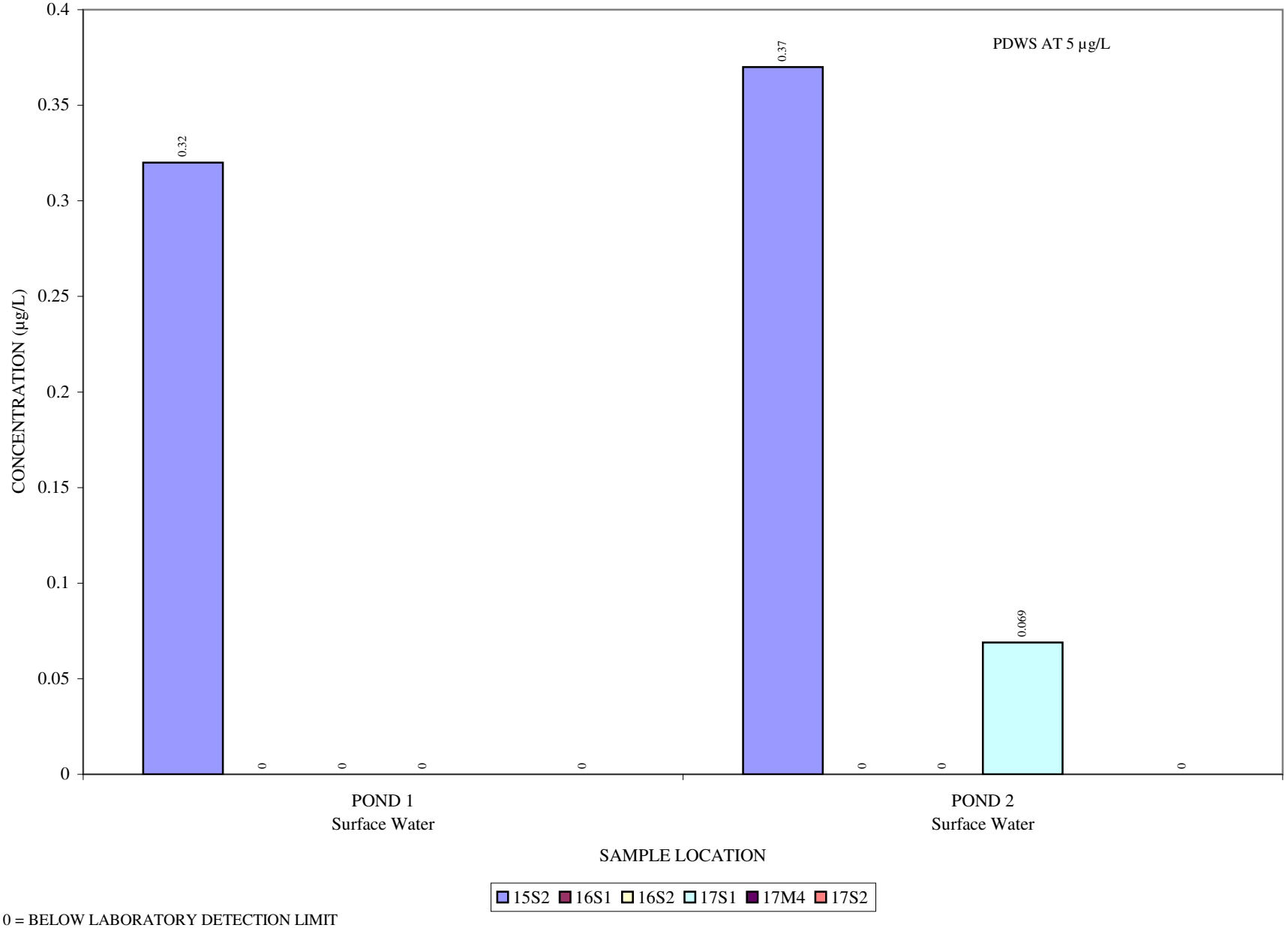
CADMIUM

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



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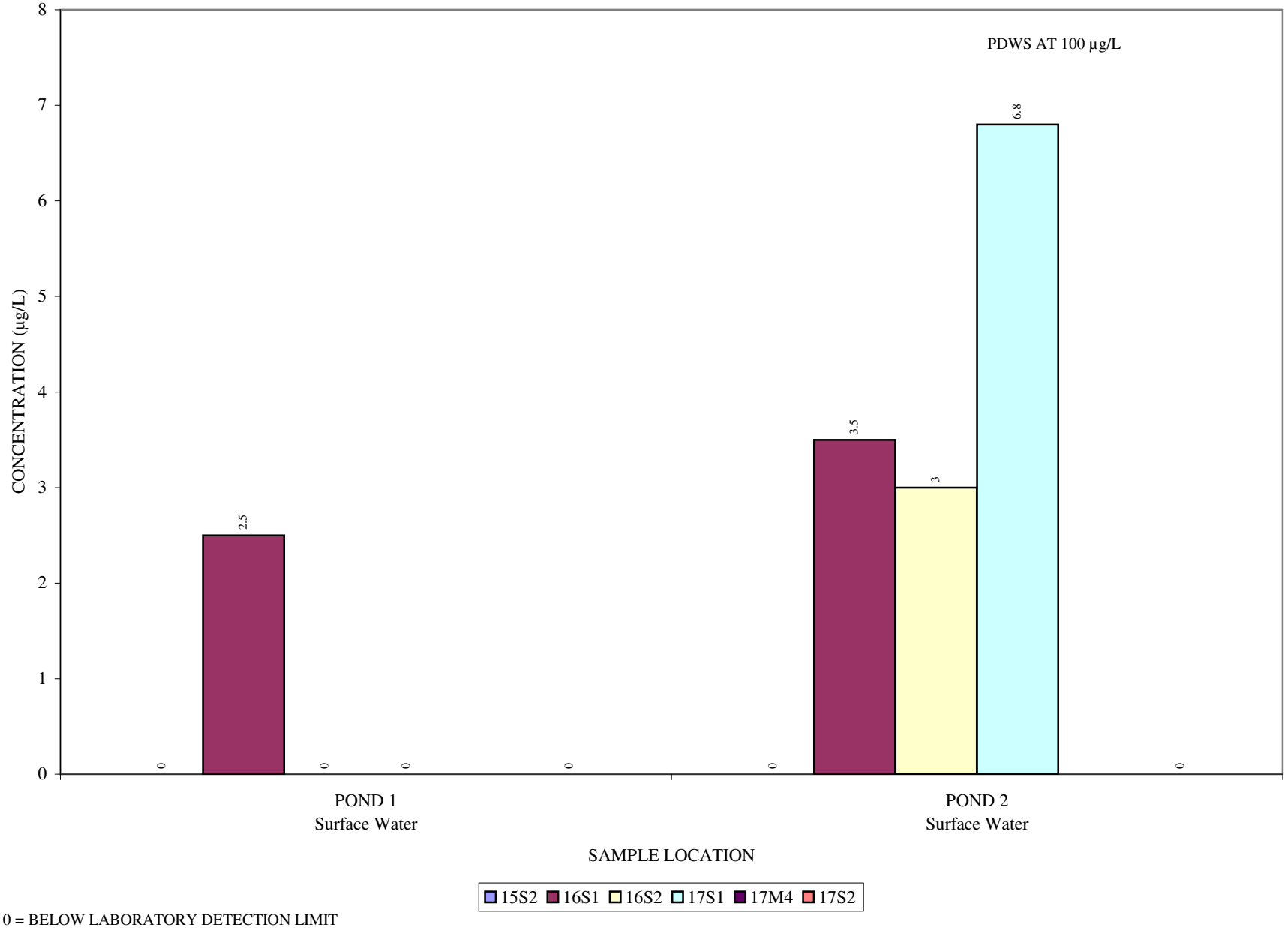
CHROMIUM

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



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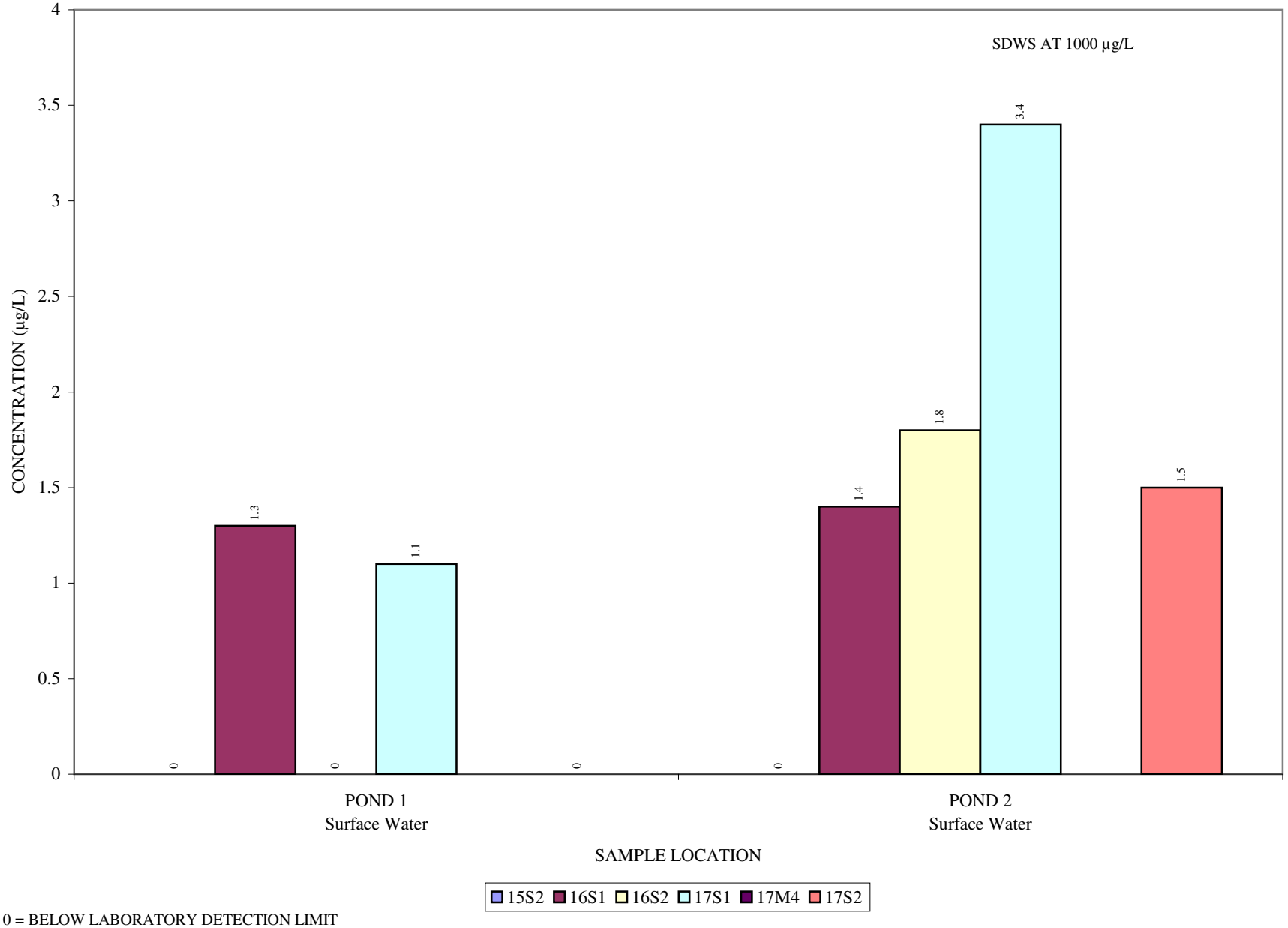
COPPER

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



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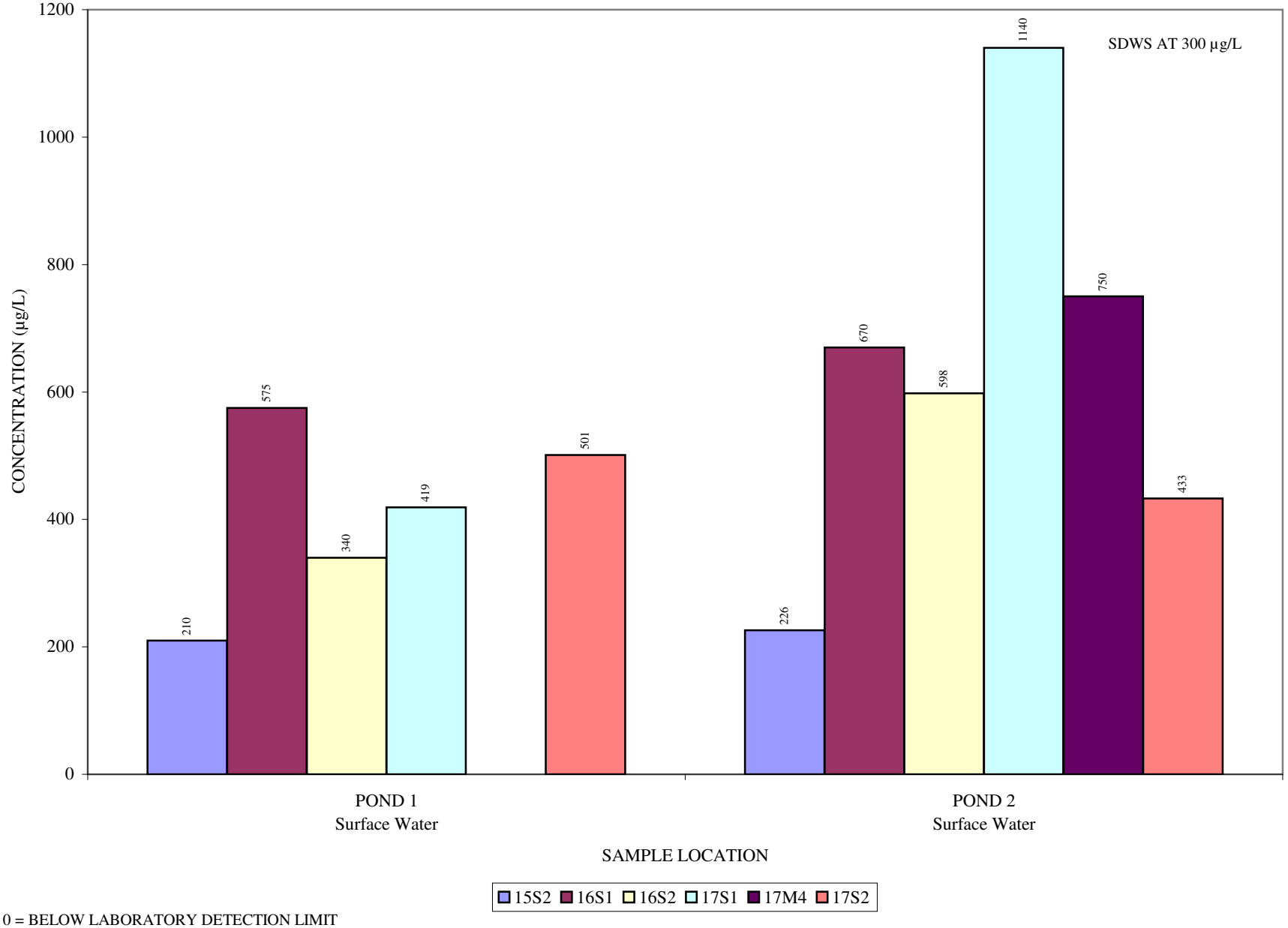
IRON

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



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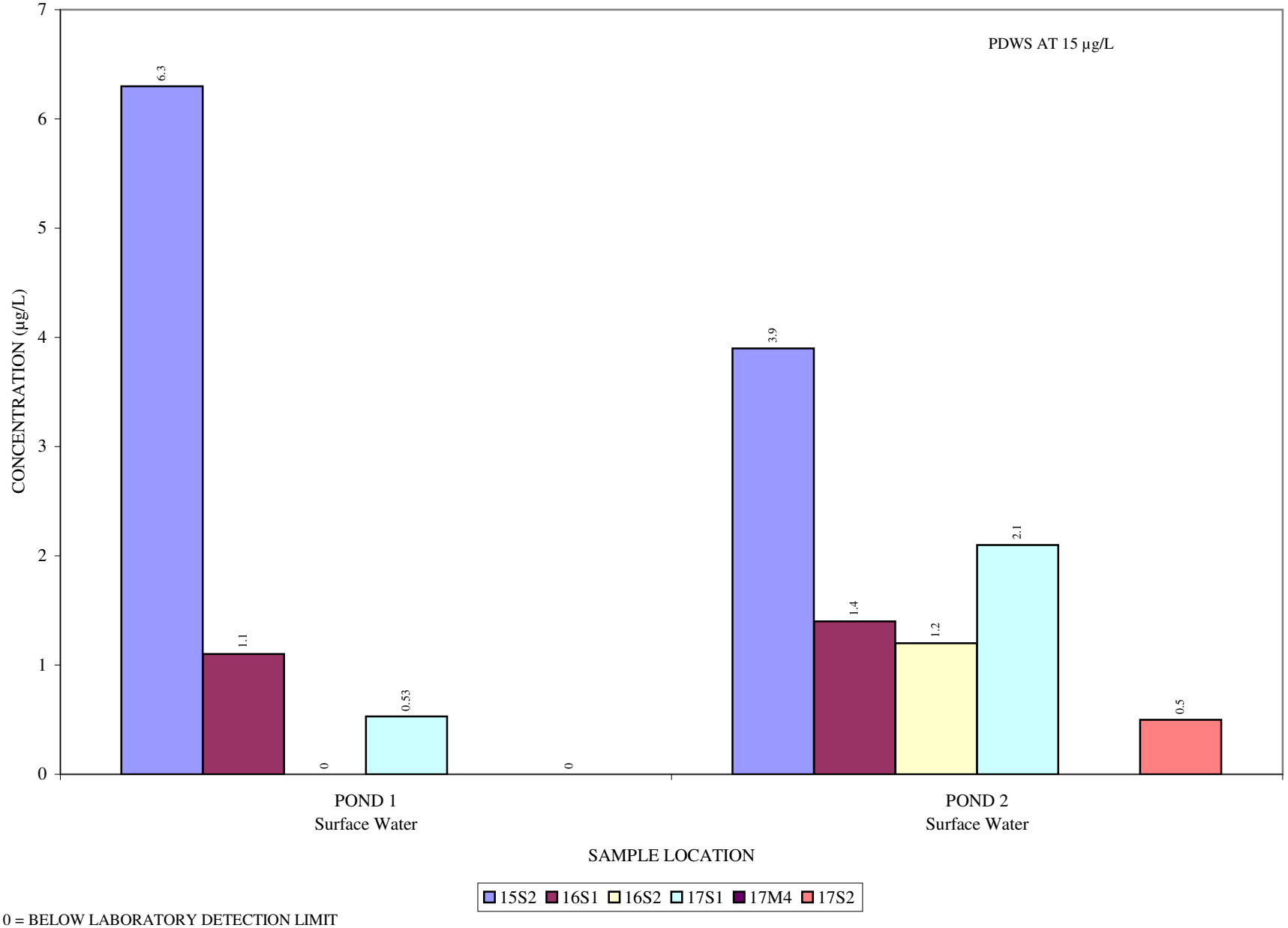
LEAD

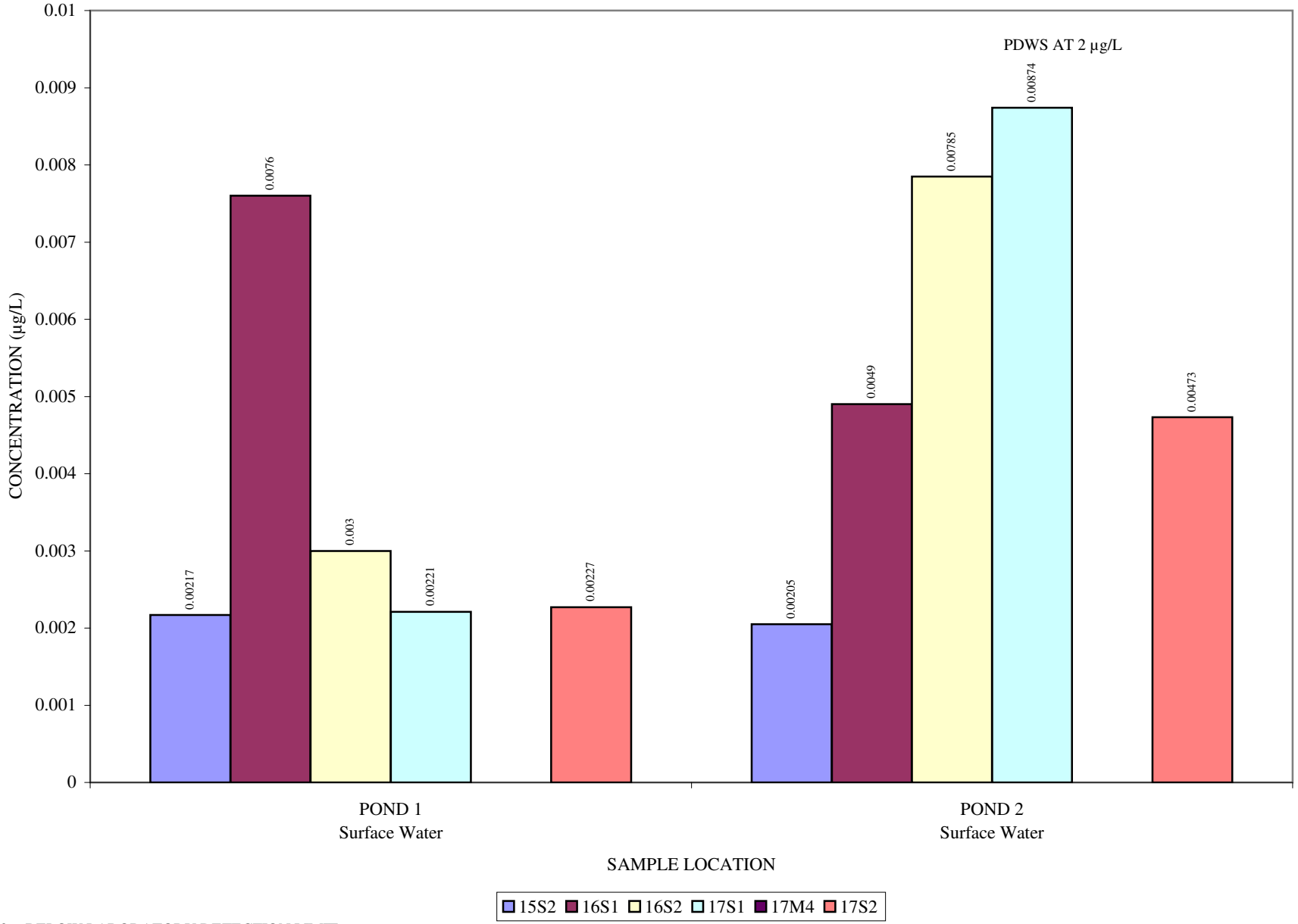
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

MERCURY

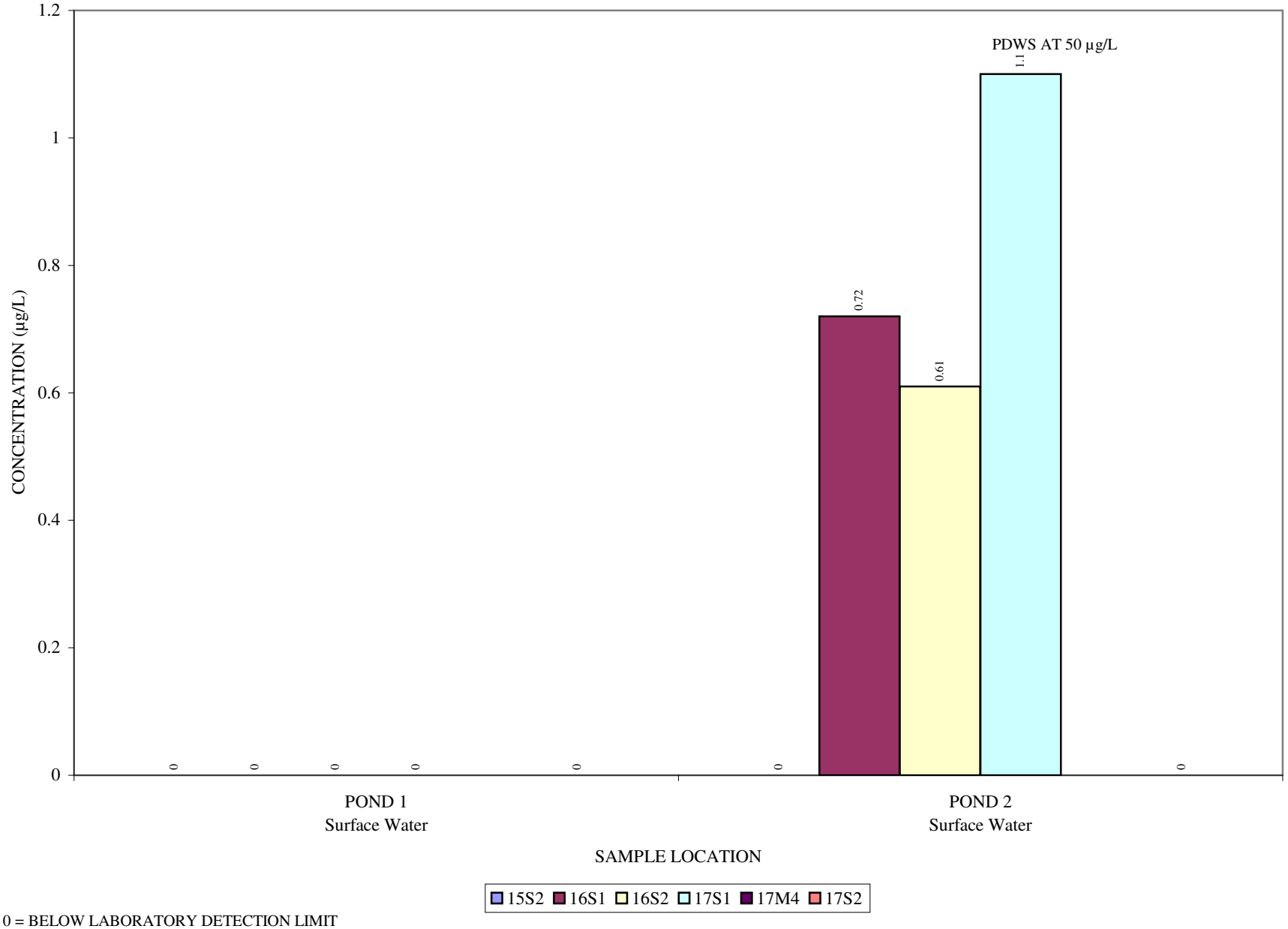
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

SELENIUM

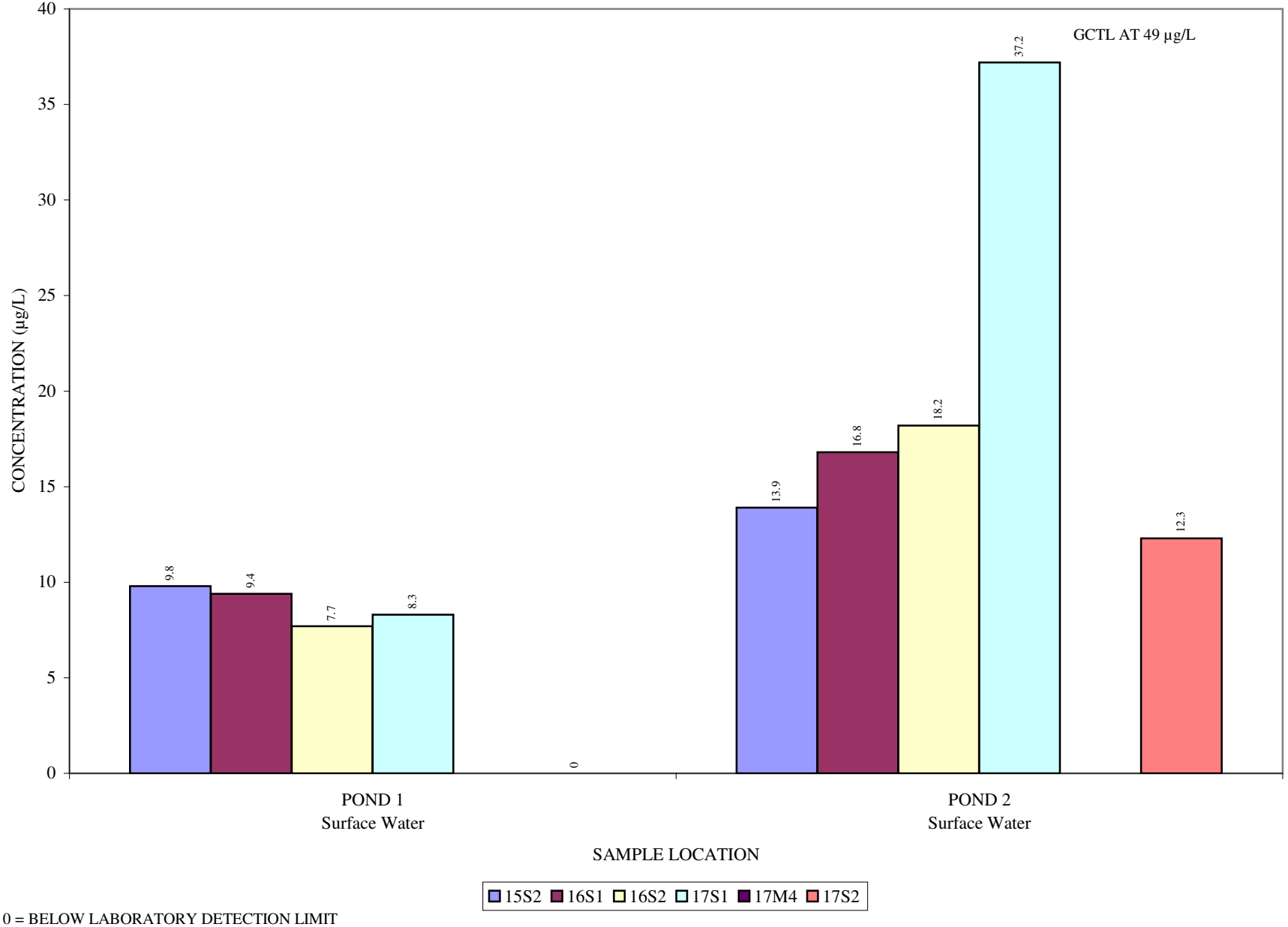
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

VANADIUM

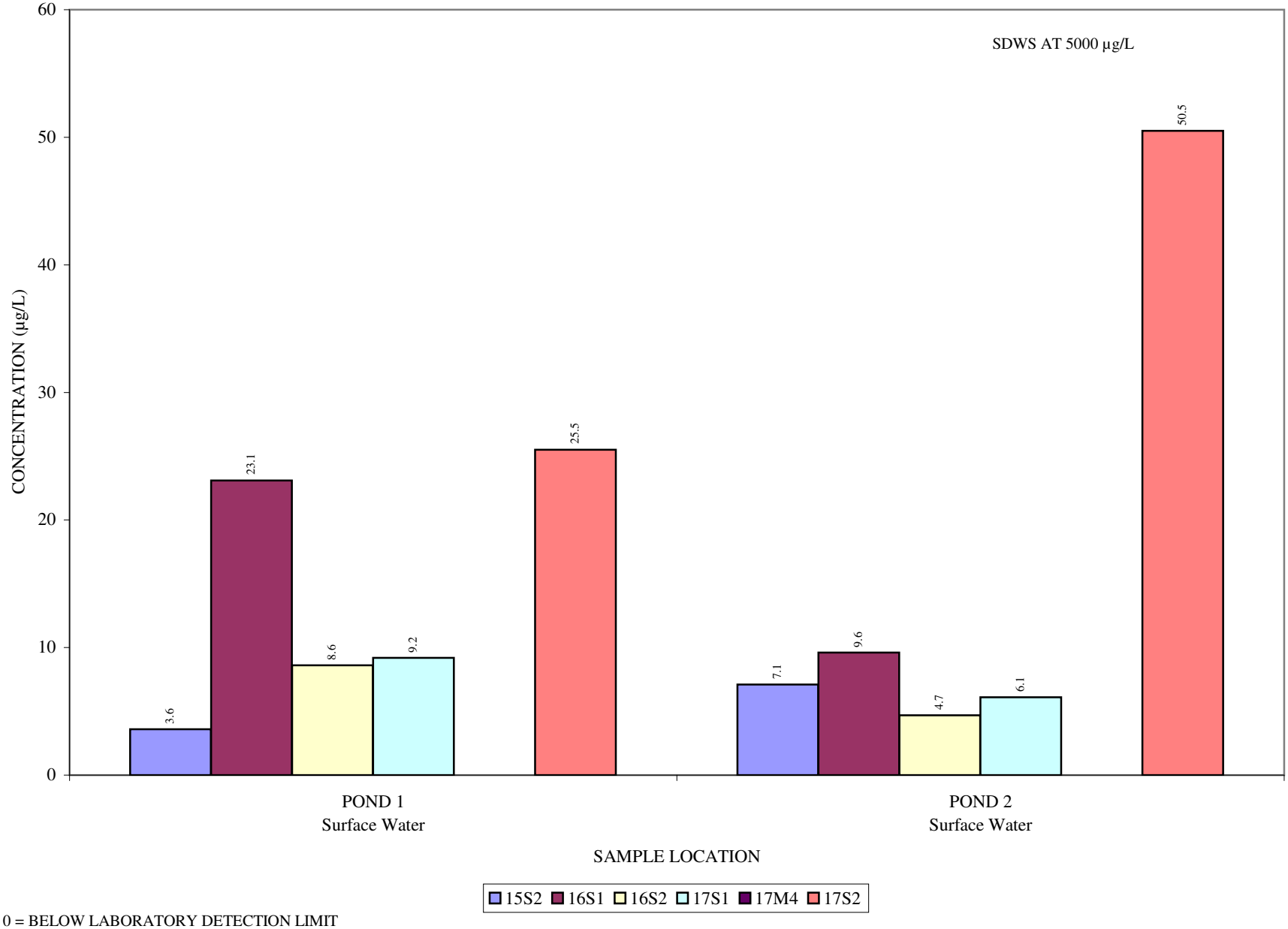
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

ZINC

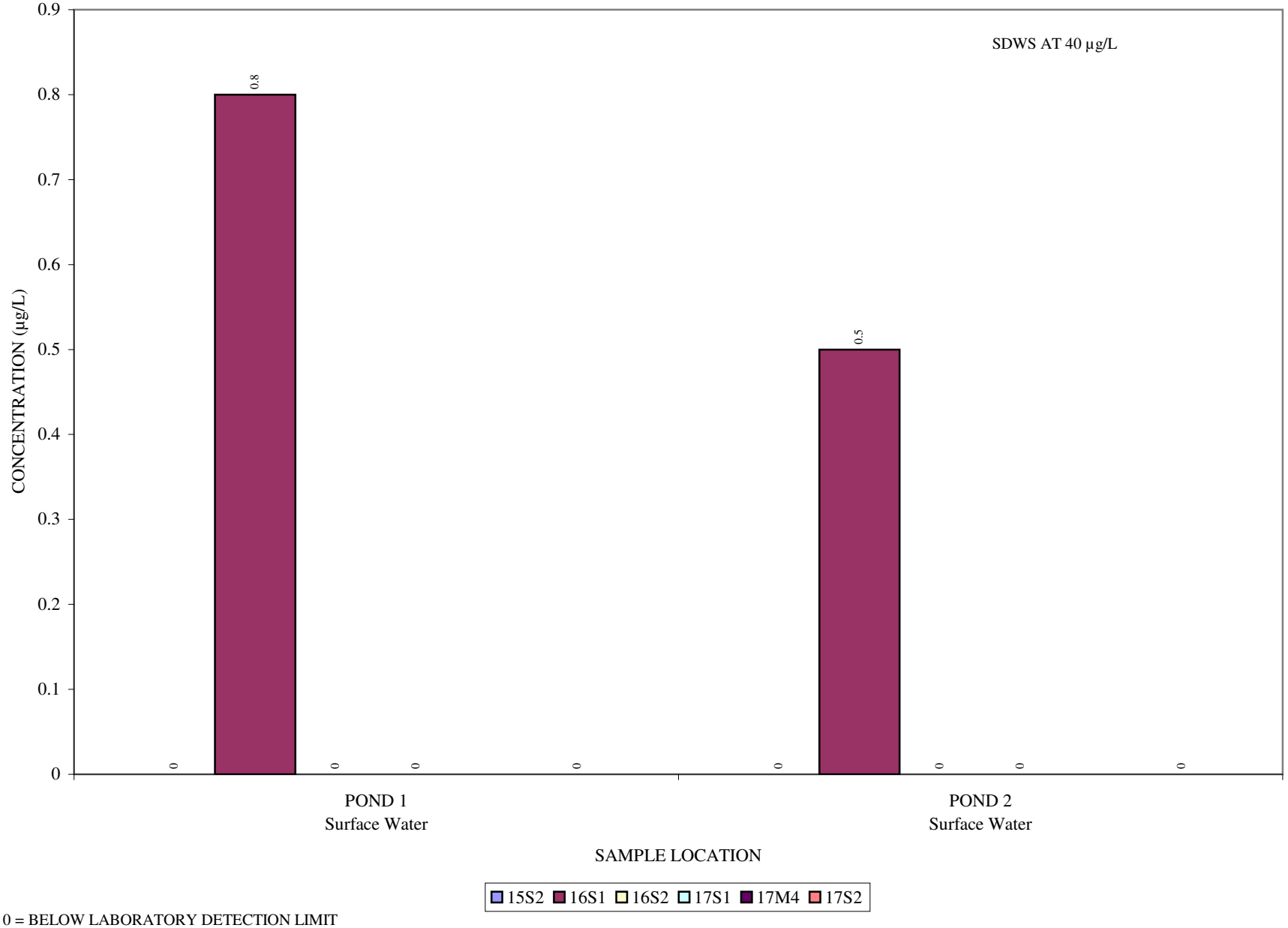
SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



0 = BELOW LABORATORY DETECTION LIMIT

TOLUENE

SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SURFACE WATER CHEMISTRY GRAPH



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