

**Georgia Power Company  
Grumman Road Private Industrial Landfill**  
Port Wentworth, Georgia  
PERMIT #: 025-061D(LI)  
Chatham County

**2020 ANNUAL GROUNDWATER MONITORING AND  
CORRECTIVE ACTION REPORT**



## PROFESSIONAL CERTIFICATION

This 2020 Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Company – Grumman Road Private Industrial Landfill has been prepared in compliance with the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 and 391-3-4-.14 by a qualified groundwater scientist or engineer with Atlantic Coast Consulting, Inc (ACC).

ATLANTIC COAST CONSULTING, INC.



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## TABLE OF CONTENTS

Section	Page No.
1.0 Introduction.....	4
1.1 Site Description and Background.....	4
1.2 Regional Geology and Hydrogeologic Setting .....	4
1.3 Site Geology and Hydrogeologic Setting.....	5
1.4 Groundwater Monitoring System and CCR Units .....	5
2.0 GROUNDWATER MONITORING ACTIVITIES.....	5
2.1 Monitoring Well Installation/Maintenance .....	6
2.2 Assessment Monitoring Program.....	6
3.0 SAMPLE METHODOLOGY AND ANALYSIS.....	6
3.1 Groundwater Flow Direction, Gradient, and Velocity.....	6
3.2 Groundwater Sampling.....	7
3.3 Laboratory Analyses .....	7
3.4 Quality Assurance and Quality Control .....	7
4.0 STATISTICAL ANALYSIS.....	8
4.1 Appendix I and III Detection Monitoring Statistical Methods.....	8
4.2 Appendix II and IV Assessment Monitoring Statistical Methods.....	9
4.3 Statistical Analyses Results .....	9
4.3.1 October 2019 Appendix I and III Detection Monitoring Parameters .....	10
4.3.2 October 2019 Appendix II and IV Assessment Monitoring Parameters.....	10
4.3.3 April 2020 Appendix I and III Detection Monitoring Parameters.....	10
4.3.4 April 2020 Appendix II and IV Assessment Monitoring Parameters.....	11
5.0 MONITORING PROGRAM STATUS .....	11
6.0 CONCLUSIONS AND FUTURE ACTIONS.....	11
7.0 REFERENCES .....	12

## Tables

- Table 1A – Monitoring Network Well Summary
- Table 1B – Non-Network Well Summary
- Table 2 – Groundwater Sampling Event Summary
- Table 3 – Summary of Groundwater Monitoring Parameters
- Table 4A – Summary of Groundwater Elevations – August 2019
- Table 4B – Summary of Groundwater Elevations – October 2019
- Table 4C – Summary of Groundwater Elevations – April 2020
- Table 5A – Groundwater Flow Velocity Calculations – August 2019
- Table 5B – Groundwater Flow Velocity Calculations – October 2019
- Table 5C – Groundwater Flow Velocity Calculations – April 2020
- Table 6A – Summary of Groundwater Analytical Data – August 2019
- Table 6B – Summary of Groundwater Analytical Data – October 2019
- Table 6C – Summary of Groundwater Analytical Data – April 2020
- Table 7 – Statistical Method Summary

## Figures

- Figure 1 – Site Location Map
- Figure 2 – Well Location Map
- Figure 3 – August 2019 Potentiometric Surface Map
- Figure 4 – October 2019 Potentiometric Surface Map
- Figure 5 – April 2020 Potentiometric Surface Map

## Appendices

- Appendix A – Laboratory Analytical and Field Sampling Reports
- Appendix B – Monitoring Well Survey Data
- Appendix C – Statistical Analyses

## 1.0 Introduction

In accordance with the Georgia Environmental Protection Division (GA EPD) Rules of Solid Waste Management 391-3-4-.10(6)(a)-(c) and 391-3-4-.14, Atlantic Coast Consulting, Inc. (ACC) has prepared this *2020 Annual Groundwater Monitoring and Corrective Action Report* to document groundwater monitoring activities conducted during the second half of 2019 and first half of 2020 at Georgia Power Company's (Georgia Power) Grumman Road Private Industrial Landfill (GRL). To specify groundwater monitoring requirements, GA EPD rule 391-3-4-.10(6)(a) incorporates by reference the United States Environmental Protection Agency (US EPA) Coal Combustion Residuals (CCR) Rule 40 Code of Federal Regulations (CFR) § 257 Subpart D.

To comply with GA EPD's 391-3-4-.10, a permit application package for GRL was submitted to GA EPD in November 2018 and is currently under review. To meet the requirements of 391-3-4-.10(6), Appendix III and IV parameters listed in 40 CFR § 257 were incorporated into the routine groundwater monitoring program through a minor modification in August 2017. The facility is continuing an Assessment of Corrective Measures (ACM) established under the existing EPD Permit No. 025-061D(LI). Semiannual reporting is completed pursuant to 391-3-4-.10(6)(c). This report documents monitoring events conducted during the second half of 2019 and first half of 2020. Monitoring results from the second half of 2019 were previously reported in the 2019 semi-annual groundwater monitoring report (ACC, 2020).

### 1.1 Site Description and Background

GRL is located on Gulfstream Road, in Chatham County, Georgia, approximately 0.8 miles east of Savannah/Hilton Head International Airport and 1.3 miles west of the city of Port Wentworth. GRL occupies approximately 36 acres. The Site ceased accepting CCR prior to October 19, 2015 and is therefore not subject to Federal monitoring requirements. GRL received CCR from Georgia Power – Plant Kraft and operated under EPD solid waste handling permit number 025-061D(LI). GRL is comprised of four cells or parcels: Parcel A [originally operated under permit number 025-034D(LI)], B1, B2, and B3. Closure of parcels B1, B2, and B3 was completed after CCR disposal ceased. Capping of the last remaining uncapped portion of Parcel A has recently been completed and was documented to EPD in a submittal dated November 27, 2019.

Figure 1, Site Location Map, depicts the location of GRL relative to the surrounding area. Figure 2, Well Location Map, depicts the general configuration of GRL and the location of the monitoring wells.

### 1.2 Regional Geology and Hydrogeologic Setting

GRL is underlain by Atlantic Coastal Plain Physiographic Province strata consisting of unconsolidated to consolidated layers of sand, silt, and clay and semi-consolidated to dense layers of limestone and dolomite (Clarke et al, 2010). These sediments constitute three major aquifer systems, which are, from shallow to deep, the surficial aquifer system, the Brunswick aquifer system, and the Floridan aquifer system. In the Atlantic Coastal Plain, the surficial aquifer system consists of Miocene and younger interlayered sand, silt, clay, and thin limestone beds (Clarke et al, 2010). The surficial aquifer system is unconfined and the fine silty sands and clay partings are found generally less than 80 feet below ground surface.

The surficial aquifer is underlain by a confining unit that separates it from the Brunswick aquifer. The confining unit consists of silty clay and dense thin, phosphatic Miocene limestone. The Oligocene to Miocene Brunswick aquifer consists of two water-bearing zones. The upper

Brunswick and lower Brunswick aquifers are separated by a low permeability, sandy phosphatic clay confining unit. The Brunswick aquifer is separated from the Upper Floridan aquifer with the Upper Confining unit and a non-water bearing limestone (NWBL) layer. The Floridan aquifer is confined by the overlying clay and NWBL layers.

### **1.3 Site Geology and Hydrogeologic Setting**

A subsurface characterization study at GRL identified two distinct units in the shallow subsurface (SCS, 1998). Unit 1 comprises the uppermost aquifer and has a thickness ranging from approximately 22 to 28 feet across GRL. Hydraulic conductivity is defined as the rate at which water can move through a permeable medium. In situ rising head and falling slug tests were performed at multiple locations on the Site. There is a limited range in hydraulic conductivity at these locations, indicating a fairly uniform medium across the upper aquifer or Unit 1 (typically range from  $10^{-3}$  to  $10^{-4}$  centimeters per second [cm/sec]). The average hydraulic conductivity is estimated at  $2.7 \times 10^{-3}$  cm/sec (7.6 feet per day). The values from the field test fall within the standard range of hydraulic conductivity values associated with a silty sand.

Unit 2 directly underlies Unit 1 and is comprised of fine grain sandy silt and clayey sands. Typically, Unit 2 has a lower permeability on the order of 10 times less ( $10^{-4}$  to  $10^{-5}$  cm/sec) than that of Unit 1 and is considered an aquitard. The thickness of Unit 2 in the Site area ranges from 5 feet to over 40 feet.

### **1.4 Groundwater Monitoring System and CCR Units**

A groundwater monitoring plan was submitted and approved January 13, 2000. The initial approved detection groundwater monitoring network included 17 monitoring wells: upgradient wells GWA-7 and GWA-8 and downgradient wells GWC-1 through GWC-6 and GWC-9 through GWC-17. As previously documented to EPD, in late 2018, three monitoring wells (GWC-4, GWC-5, and GWC-6) were replaced by new monitoring wells (GWB-4R, GWB-5R, and GWB-6R) and were also re-designated as side-gradient (i.e. "GWB" prefixes) locations. One well (GWC-3) was not replaced due to redundancy with GWC-20. These changes are detailed in the November 2018 permit application. Well installations have either been previously approved or pending permit application. Pursuant to § 257.91, the monitoring system is designed to monitor groundwater passing the waste boundary of GRL within the uppermost aquifer. Wells were located to serve as upgradient and downgradient monitoring points based on groundwater flow direction (Table 1A, Monitoring Network Well Summary). Existing locations not included in the monitoring network are presented in Table 1B, Non-Network Well Summary.

## **2.0 GROUNDWATER MONITORING ACTIVITIES**

The following describes monitoring-related activities performed at the Site during the reporting period. Samples were collected from each well in the monitoring system shown on Figure 2.

A notification for the implementation of assessment monitoring under 391-3-4-.10(6) was completed on November 13, 2019. Table 2, Groundwater Sampling Event Summary, presents a summary of groundwater sampling events completed at the Site during the reporting period. Groundwater events were conducted at the Site in August 2019, October 2019, and April 2020. An initial assessment monitoring event for Appendix IV constituents was completed in August 2019. This was followed by semi-annual monitoring events in October 2019 and April 2020. Groundwater samples were collected for the state-specific list of Appendix I and II metals specified in the permit, all Appendix III constituents, and the Appendix IV constituents detected

during the August 2019 monitoring event. Results of sampling activities conducted during the past year are presented in Appendix A, Laboratory Analytical and Field Sampling Reports.

## 2.1 Monitoring Well Installation/Maintenance

Monitoring well-related activities were limited to visual inspection of well conditions prior to sampling, recording the Site conditions, and performing exterior maintenance to provide safe access for sampling. All site monitoring wells were resurveyed initially in 2017 and replacement wells (GWB-4R, GWB-5R, and GWB-6R) were surveyed in 2019. A survey of the tops of casings for monitoring wells GWB-4R and GWC-2 was completed in May 2020. A drawing and data sheets surveyed by Georgia Registered Land Surveyors are provided in Appendix B, Monitoring Well Survey Data.

## 2.2 Assessment Monitoring Program

Georgia Power has initiated an assessment monitoring program for CCR Appendix IV constituents. The facility had previously implemented an assessment monitoring program for Appendix II metals included in its state permit. A summary of the analytes required by Appendix III, Appendix IV, and the existing permit is provided in Table 3, Summary of Groundwater Monitoring Parameters.

# 3.0 SAMPLE METHODOLOGY AND ANALYSIS

The following sections describe the methods used to conduct groundwater monitoring at the Site.

## 3.1 Groundwater Flow Direction, Gradient, and Velocity

Prior to each sampling event, groundwater elevations are recorded from the certified well network and piezometers at GRL. Groundwater elevations recorded during the monitoring events are summarized in Tables 4A, 4B, and 4C, Summary of Groundwater Elevations – August 2019, October 2019, and April 2020, respectively. Groundwater elevation data was used to develop Figure 3, August 2019 Potentiometric Surface Map, Figure 4, October 2019 Potentiometric Surface Map, and Figure 5, April 2020 Potentiometric Surface Map. A potentiometric high exists near wells GWA-7 in the northern portion of the Site and groundwater flows semi-radially from this high. In the southern portion of the Site groundwater flows to the south and southeast. The groundwater flow patterns observed during the August 2019, October 2019, and April 2020 monitoring events are consistent with historical patterns.

The groundwater flow velocity at GRL was calculated using a derivation of Darcy's Law.

Specifically:

### Equation

$$v = \frac{K ( dh/dl )}{P_e} \quad \text{where:} \quad \begin{aligned} v &= \text{ground water velocity} \\ K &= \text{hydraulic conductivity} \\ dh/dl &= \text{hydraulic gradient} \\ P_e &= \text{effective porosity} \end{aligned}$$

Groundwater flow velocities were calculated for the Site based on hydraulic gradients, average hydraulic conductivity based on previous slug test data, and an estimated effective porosity of 0.20 (based on a review of several sources, including Driscoll, 1986; US EPA, 1989; Freeze and

Cherry, 1979). Groundwater flow velocities have been calculated and are tabulated on Tables 5A, 5B, and 5C, Groundwater Flow Velocity Calculations – August 2019, October 2019, and April 2020, respectively. The calculated maximum flow velocities are 0.29 feet per day for August 2019, 0.29 feet per day for October 2019, and 0.30 feet per day for April 2020.

### 3.2 Groundwater Sampling

Groundwater samples were collected using low-flow sampling procedures in accordance with 40 CFR § 257.93(a). Purging and sampling was primarily performed using peristaltic pumps. Tubing was lowered into the well so that the intake was at the midpoint of the well screen (or as appropriate determined by the water level). Peristaltic pump samples were collected using new disposable polyethylene tubing. All non-disposable equipment was decontaminated before use and between well locations.

Monitoring wells were purged and sampled using low-flow sampling procedures. A SmarTroll (In-Situ field instrument) was used to monitor and record field water quality parameters (pH, conductivity, oxidation-reduction potential, dissolved oxygen [DO], and temperature) during well purging prior to sampling. Turbidity was measured using a Hach 2100Q portable turbidimeter. Groundwater samples were collected when the following stabilization criteria were met:

- $\pm 0.1$  standard units for pH
- $\pm 10\%$  for specific conductance
- $\pm 10\%$  for dissolved oxygen where  $DO > 0.5$  milligrams per liter (mg/L). No criterion applies if  $DO < 0.5$  mg/L.
- Turbidity measurements less than 10 nephelometric turbidity units (NTU)

Once stabilization was achieved, samples were collected directly into appropriately preserved laboratory-supplied sample containers. Sample bottles were placed in ice-packed coolers and submitted to Pace Analytical Services, LLC (Pace) of Peachtree Corners, Georgia and Greensburg, Pennsylvania following chain-of-custody protocol. Stabilization logs for each well during each monitoring event are included in Appendix A.

### 3.3 Laboratory Analyses

Mercury was not detected in the initial Appendix IV assessment monitoring event completed in August 2019 and therefore not included in the semiannual assessment monitoring events completed in October 2019 and April 2020. Analytical methods used for groundwater monitoring parameters are provided in laboratory reports in Appendix A. Analytical data collected in monitoring events during the reporting period are summarized in Tables 6A, 6B, and 6C, Summary of Groundwater Analytical Data – August 2019, October 2019, and April 2020, respectively.

Laboratory analyses were performed by Pace. Pace is accredited by the National Environmental Laboratory Accreditation Program (NELAP) and maintains a NELAP certification for all parameters analyzed for this project. In addition, Pace is certified to perform analysis by the State of Georgia. Laboratory reports and chain-of-custody records for the monitoring events are presented in Appendix A.

### 3.4 Quality Assurance and Quality Control

During each sampling event, quality assurance/quality control (QA/QC) samples are collected at a rate of one QA/QC sample per every 10 groundwater assessment samples. Equipment blanks

(where non-dedicated sampling equipment is used) and duplicate samples were collected during each sampling event. QA/QC sample data were evaluated during data validation and are included in Appendix A.

Groundwater quality data in this report was validated in accordance with US EPA guidance (US EPA, 2011) and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences, post digestions spikes, laboratory and field duplicate relative percent differences (RPDs), field and equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags are applied to the data using US EPA procedures as guidance (US EPA, 2017).

Values followed by a "J" flag indicate that the value is an estimated analyte concentration detected between the method detection limit (MDL) and the laboratory reporting limit (PQL). The estimated value is positively identified but is below the lowest level that can be reliably achieved within specified limits of precision and accuracy under routine laboratory operating conditions. "J" flagged data are used to establish background statistical limits but are not used when performing statistical analyses.

## 4.0 STATISTICAL ANALYSIS

The statistical method used at GRL was developed by Groundwater Stats Consulting, LLC (GSC), using methodology presented in *Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance*, March 2009, US EPA 530/R-09-007 (US EPA, 2009).

Statistical analysis of April 2020 groundwater monitoring data was performed by Groundwater Stats Consulting, LLC following the appropriate certified statistical methodology for GRL. The September 2019 statistical analysis of Appendix IV data was completed by ACC in April 2020. Statistical analysis of the September 2019 Appendix III data was previously submitted in the 2019 Semiannual Groundwater Monitoring Report.

Appendix I and III data are statistically evaluated for detection monitoring, and Appendix II and IV results are statistically evaluated for assessment monitoring. A summary of the statistical methodology used at GRL for routine groundwater monitoring is provided in Table 7, Statistical Method Summary. Statistical analysis methods and results are provided in Appendix C, Statistical Analysis Reports and summarized in the following sections.

### 4.1 Appendix I and III Detection Monitoring Statistical Methods

Analytical data collected during the background period were evaluated and used to develop interwell or intrawell statistical limits for each Appendix I and III parameter. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent, and the most recent sample from each downgradient well is compared to the same limit for each parameter. Intrawell prediction limits are constructed from historical data within a given well, and the most recent sample is compared to background. Sanitas groundwater statistical software was used to screen the data and perform the statistical analyses. Sanitas is a decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by US EPA regulations.

If an Appendix I or III analyte exceeds its relevant background statistical limit, an initial statistically significant increase (SSI) is identified. An independent resample in the case of a 1-of-2 verification plan or two resamples for a 1-of-3 verification plan may be collected and evaluated within 90 days to determine whether the initial exceedance is verified. If resample

results exceed the PL, the initial exceedance is verified, and an SSI is identified. When a resample result does not verify the initial result, and does not exceed the PL, there is no SSI. If resampling is not performed, the initial exceedance is a confirmed exceedance.

A permit minor modification was submitted to EPD following the 2019 *First Supplemental Semiannual Groundwater Monitoring Report* to allow for introwell methods to be used for evaluation of Appendix I metals. The statistical methodology was revised to an introwell method following the June 2019 monitoring event. Statistical tests used to evaluate the groundwater monitoring data consist of introwell prediction limits combined with a 1-of-2 verification resample plan for Appendix I metals. Introwell prediction limits are constructed from historical data within a given well through July 2018, and the most recent sample is compared to background. Appendix I metals that are identified as SSIs are also evaluated by trend tests.

Statistical tests used to evaluate the Appendix III groundwater monitoring data consist of interwell prediction limits for calcium, chloride, fluoride, pH and sulfate (combined with a 1-of-2 verification resample plan). Monitoring results for boron and TDS are evaluated using introwell prediction limits combined with a 1-of-3 verification resample plan.

#### **4.2 Appendix II and IV Assessment Monitoring Statistical Methods**

Appendix II constituents and Appendix IV constituent detected in the initial annual assessment sampling event (August 2019) were sampled during the October 2019 and April 2020 semiannual sampling events. To statistically compare groundwater data to GWPS, confidence intervals are constructed for each of the detected Appendix II and IV parameters in each downgradient well. Those confidence intervals are compared to both the state and federal GWPS. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its GWPS. If there is an exceedance of the established standard, a statistically significant level (SSL) exceedance is identified.

USEPA revised the federal CCR Rule on July 30, 2018, updating GWPS for cobalt, lead, lithium, and molybdenum. As described in 40 CFR § 257.95(h)(1-3), the GWPS is:

- (1) The maximum contaminant level (MCL) established under 40 CFR § 141.62 and 141.66.
- (2) Where an MCL has not been established:
  - (i). Cobalt 0.006 mg/L;
  - (ii). Lead 0.015 mg/L;
  - (iii). Lithium 0.040 mg/L; and
  - (iv). Molybdenum 0.100 mg/L.
- (3) Background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

USEPA's updated GWPS have not yet been incorporated under Georgia EPD's CCR Rule. The Georgia EPD CCR Rule GWPS is:

- (1) The federally established MCL.
- (2) Where an MCL has not been established, the background concentration.
- (3) Background levels for constituents where the background level is higher than the MCL.

#### **4.3 Statistical Analyses Results**

Analytical data from the semiannual assessment monitoring events were analyzed in accordance with the Statistical Analysis Plan. Appendix I parameters are compared to introwell prediction limits to determine if current concentrations constitute statistically significant increases above background (SSIs). Appendix III statistical analysis is performed to determine if constituents have

returned to background levels. Appendix II and Appendix IV assessment monitoring parameters were evaluated to determine if concentrations are statistically significant levels (SSLs) above a GWPS. The statistical analysis and comparison to prediction limits are included as Appendix C, Statistical Analyses.

Based on review of the Appendix I and III statistical analyses presented in Appendix C, constituents have not returned to background levels and assessment monitoring should continue pursuant to 391-3-4-.10(6)(a)

#### **4.3.1 October 2019 Appendix I and III Detection Monitoring Parameters**

Statistical analysis of Appendix I data identified SSIs for four groundwater monitoring parameters. The SSIs include:

- Arsenic: GWC-15, GWC-16, GWC-20
- Barium: GWC-16
- Selenium: GWC-15
- Zinc: GWC-13

Appendix III SSIs include:

- Boron: GWB-6R, GWC-16
- Calcium: GWB-4R, GWC-1, GWC-11, GWC-12, GWC-14, GWC-15, GWC-16, GWC-17, GWC-20, GWC-21
- Chloride: GWC-17
- pH: GWC-15, GWC-20
- Sulfate: GWB-6R, GWC-11, GWC-12, GWC-14, GWC-16, GWC-17
- TDS: GWB-5R, GWB-6R, GWC-16

The Appendix I and III SSIs were evaluated using the Sen's Slope/Mann-Kendall trend test. The only significant increasing trends identified were for arsenic (GWC-15 and GWC-20), boron (GWC-16), calcium (GWC-1 and GWC-16), and TDS (GWB-5R and GWC-16). Significant decreasing trends were identified for arsenic (GWC-16), calcium (GWC-12), and sulfate (GWC-12). No other Appendix I or III SSIs exhibited significant trends.

#### **4.3.2 October 2019 Appendix II and IV Assessment Monitoring Parameters**

Statistical analysis of Appendix II and IV data identified constituents (arsenic and molybdenum) to be at SSLs above the established GWPS for six groundwater monitoring wells. The SSLs include:

- Arsenic: GWC-15, GWC-16, and GWC-20 (SSLs of the state and federal derived GWPS)
- Molybdenum: GWB-4R, GWC-1, GWC-15, GWC-16, GWC-20, and GWC-21 (SSLs of the state derived GWPS, but not the federal GWPS)

#### **4.3.3 April 2020 Appendix I and III Detection Monitoring Parameters**

Statistical analysis of Appendix I data identified SSIs for two groundwater monitoring parameters. The SSIs include:

- Arsenic: GWC-1, GWC-15, GWC-16, GWC-20
- Barium: GWC-14, GWC-16, and GWC-20

Appendix III SSIs include:

- Boron: GWB-6R, GWC-11, GWC-16

- Calcium: GWB-4R, GWC-11, GWC-12, GWC-14, GWC-15, GWC-16, GWC-17, GWC-20, GWC-22
- Chloride: GWC-17
- Fluoride: GWC-17
- pH: GWC-12, GWC-20
- Sulfate: GWB-4R, GWB-5R, GWB-6R, GWC-11, GWC-12, GWC-14, GWC-16, GWC-17, GWC-20, GWC-22
- TDS: GWB-6R, GWC-11, GWC-16

The Appendix I and III SSIs were evaluated using the Sen's Slope/Mann-Kendall trend test. The only significant increasing trends identified were for arsenic (GWC-15 and GWC-20), barium (GWC-20), boron (GWC-16), calcium (GWC-11 and GWC-16), pH (GWC-15), and TDS (GWC-16). Significant decreasing trends were identified for arsenic (GWC-1), barium (GWC-14), calcium (GWC-12), and sulfate (GWC-12). No other Appendix I or III SSIs exhibited significant trends.

#### 4.3.4 April 2020 Appendix II and IV Assessment Monitoring Parameters

The same Appendix II and Appendix IV SSLs were identified for the monitoring network as during the October 2019 semiannual assessment monitoring event with the exception that molybdenum is an SSL for GWC-16 compared to both federal and state GWPS.

- Arsenic: GWC-15, GWC-16, and GWC-20 (SSLs of the state and federal derived GWPS)
- Molybdenum: GWB-4R, GWC-1, GWC-15, GWC-16, GWC-20, and GWC-21 (All SSLs of the state derived GWPS, but not the federal GWPS, except for GWC-16)

Consistent with prior monitoring events, the concentrations of arsenic in GWC-15, GWC-16, and GWC-20 statistically exceed the maximum contaminant level (MCL). Arsenic in wells GWC-15, GWC-16, and GWC-20 will continue to be addressed by the ongoing ACM. As documented in a notification dated July 9, 2020 an ACM has also been initiated for arsenic and molybdenum, per 40 CFR §257.96.

## 5.0 MONITORING PROGRAM STATUS

In accordance with GA EPD rule 391-3-4-.10(6)(a) and 40 CFR §257.94(e), the assessment monitoring program previously established under state permit requirements has been expanded to include Appendix IV constituents. An ongoing ACM to address arsenic concentrations in three wells was established under the state solid waste permit. The previously identified arsenic concentrations and recent SSLs of molybdenum are currently being addressed by an ACM.

## 6.0 CONCLUSIONS AND FUTURE ACTIONS

Statistical evaluations of the groundwater monitoring data identified SSIs of Appendix I and Appendix III groundwater monitoring constituents. Georgia Power has initiated assessment monitoring pursuant to § 257.95. During the first semiannual period of 2020, Georgia Power established groundwater protection standards for Appendix IV constituents and completed statistical analysis of the assessment monitoring results according to the regulations. An ongoing ACM for arsenic was established under EPD Rule 391-3-4-.14 and will continue contemporaneously with implementation of the State CCR Rule. An additional Appendix IV constituent, molybdenum was identified as an SSL and will be addressed by the ACM along with arsenic under the State CCR Rule.

The next semiannual monitoring event is tentatively planned for late September 2020.

## 7.0 REFERENCES

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## TABLES

**Table 1A**  
**Monitoring Network Well Summary**

Well ID	Installation Date (mm/dd/yyyy)	Bottom Depth (ft BTOC)	Bottom Elevation (ft NAVD)	Depth to Top of Screen (ft BTOC)	Top of Screen Elevation (ft NAVD)	Hydraulic Location
GWA-7	07/29/1998	21.2	26.08	16.2	31.08	Upgradient
GWA-8	07/29/1998	20.8	26.91	15.8	31.91	Upgradient
GWB-4R	10/09/2018	23.3	22.43	14.0	32.43	Sidegradient
GWB-5R	10/09/2018	26.5	21.31	14.0	31.31	Sidegradient
GWB-6R	10/09/2018	22.7	24.71	10.0	34.71	Sidegradient
GWC-1	03/10/1997	28.2	22.46	23.2	27.46	Downgradient
GWC-2	03/11/1997	33.8	*	28.8	*	Downgradient
GWC-9	07/24/1998	27.4	19.78	22.4	24.78	Downgradient
GWC-11	07/23/1998	22.6	26.78	17.6	31.78	Downgradient
GWC-12	07/22/1998	26.7	20.74	21.7	25.74	Downgradient
GWC-13	07/22/1998	23.8	23.98	18.8	28.98	Downgradient
GWC-14	07/22/1998	27.0	23.67	22.0	28.67	Downgradient
GWC-15	07/22/1998	26.8	21.28	21.8	26.28	Downgradient
GWC-16	07/21/1998	28.2	19.58	23.2	24.58	Downgradient
GWC-17	1998	23.2	20.94	18.2	25.94	Downgradient
GWC-20	2010	25.0	24.31	20.0	29.31	Downgradient
GWC-21	2010	23.8	23.29	18.8	28.29	Downgradient
GWC-22	2010	18.9	27.79	13.9	32.79	Downgradient

Notes:

1. ft NAVD indicates feet relative to North American Vertical Datum of 1988.
2. ft BTOC indicates feet below top of casing.
3. \* - Resurvey Pending.

**Table 1B**  
**Non-Network Well Summary**

Well ID	Installation Date (mm/dd/yyyy)	Bottom Depth (ft BTOC)	Bottom Elevation (ft NAVD)	Depth to Top of Screen (ft BTOC)	Top of Screen Elevation (ft NAVD)	Purpose
GWC-3	07/21/1998	22.9	26.87	17.9	31.87	Piezometer
GWC-4	07/20/1998	26.4	22.64	21.4	27.64	Piezometer
GWC-5	07/20/1998	26.7	21.81	21.7	26.81	Piezometer
GWC-6	07/28/1998	22.7	25.58	17.7	30.58	Piezometer
GWC-10	07/24/1998	20.6	26.79	15.6	31.79	Piezometer

Notes:

1. ft NAVD indicates feet relative to North American Vertical Datum of 1988.
2. ft BTOC indicates feet below top of casing.

**Table 2**  
**Groundwater Sampling Event Summary**

Well	Hydraulic Location	Aug. 26-28, 2019	Oct. 7-9, 2019	Apr. 6-8, 2020
Purpose of Sampling Event		Initial App. IV Assessment	Second 2019 Assessment	First 2020 Assessment
GWA-7	Upgradient	X	X	X
GWA-8	Upgradient	X	X	X
GWB-4R	Sidegradient	X	X	X
GWB-5R	Sidegradient	X	X	X
GWB-6R	Sidegradient	X	X	X
GWC-1	Downgradient	X	X	X
GWC-2	Downgradient	X	X	X
GWC-9	Downgradient	X	X	X
GWC-11	Downgradient	X	X	X
GWC-12	Downgradient	X	X	X
GWC-13	Downgradient	X	X	X
GWC-14	Downgradient	X	X	X
GWC-15	Downgradient	X	X	X
GWC-16	Downgradient	X	X	X
GWC-17	Downgradient	X	X	X
GWC-20	Downgradient	X	X	X
GWC-21	Downgradient	X	X	X
GWC-22	Downgradient	X	X	X

Notes:

1. X indicates sample was collected.
2. Initial Assessment Event included all Appendix IV analytes.
3. Second 2019 and First 2020 Assessment Events included Appendix III and Detected Appendix IV analytes.

**Table 3**  
**Summary of Groundwater Monitoring Parameters**

Appendix III (40 CFR 257)	Appendix IV (40 CFR 257)	Appendix I and II Metals (State Permit)
Boron	Antimony	Antimony
Calcium	Arsenic	Arsenic
Chloride	Barium	Barium
Fluoride	Beryllium	Chromium
pH	Cadmium	Lead
Sulfate	Chromium	Selenium
Total Dissolved Solids	Cobalt	Vanadium
	Fluoride	Zinc
	Lead	
	Lithium	
	Mercury	
	Molybdenum	
	Radium 226 and 228 combined	
	Selenium	
	Thallium	

**Table 4A**  
**Summary of Groundwater Elevations**  
**August 2019**

Well ID	TOC Elevation (SD)	Depth to Water (ft BTOC)	Groundwater Elevation (SD)
GWA-7	47.10	7.01	40.09
GWA-8	46.84	9.03	37.81
GWB-4R	45.86*	11.54	34.32
GWB-5R	47.82	10.58	37.24
GWB-6R	47.40	8.46	38.94
GWC-1	50.30	19.31	30.99
GWC-2	NA*	19.53	NA*
GWC-9	47.11	10.11	37.00
GWC-11	49.38	13.83	35.55
GWC-12	47.48	13.79	33.69
GWC-13	47.82	14.34	33.48
GWC-14	50.67	19.65	31.02
GWC-15	48.12	19.31	28.81
GWC-16	47.79	20.70	27.09
GWC-17	44.09	6.52	37.57
GWC-20	50.03	21.06	28.97
GWC-21	47.94	20.55	27.39
GWC-22	46.72	9.49	37.23

Notes:

1. ft BTOC indicates feet below top of casing.
2. SD indicates feet relative to Site Datum.
3. \* - New completions installed and resurveyed after the April 2020 monitoring event. New TOC elevation for GWB-4R is 49.58 SD; GWC-2 is 51.84 SD.
4. NA indicates not available.

**Table 4B**  
**Summary of Groundwater Elevations**  
**October 2019**

Well ID	TOC Elevation (SD)	Depth to Water (ft BTOC)	Groundwater Elevation (ft MSL)
GWA-7	47.10	7.37	39.73
GWA-8	46.84	8.81	38.03
GWB-4R	45.86*	11.85	34.01
GWB-5R	47.82	10.88	36.94
GWB-6R	47.40	8.50	38.90
GWC-1	50.30	19.55	30.75
GWC-2	NA*	19.94	NA*
GWC-9	47.11	10.33	36.78
GWC-11	49.38	14.15	35.23
GWC-12	47.48	13.60	33.88
GWC-13	47.82	14.76	33.06
GWC-14	50.67	19.92	30.75
GWC-15	48.12	19.54	28.58
GWC-16	47.79	20.92	26.87
GWC-17	44.09	7.35	36.74
GWC-20	50.03	21.39	28.64
GWC-21	47.94	20.85	27.09
GWC-22	46.72	9.64	37.08

Notes:

1. ft BTOC indicates feet below top of casing.
2. SD indicates feet relative to Site Datum.
3. \* - New completions installed and resurveyed after the April 2020 monitoring event. New TOC elevation for GWB-4R is 49.58 SD; GWC-2 is 51.84 SD.
4. NA indicates not available.

**Table 4C**  
**Summary of Groundwater Elevations**  
**April 2020**

Well ID	TOC Elevation (SD)	Depth to Water (ft BTOC)	Groundwater Elevation (SD)
GWA-7	47.10	5.99	41.11
GWA-8	46.84	7.38	39.46
GWB-4R	45.86	10.83	35.03
GWB-5R	47.82	8.66	39.16
GWB-6R	47.40	7.12	40.28
GWC-1	50.30	18.34	31.96
GWC-2	NA*	17.44	NA*
GWC-9	47.11	7.66	39.45
GWC-11	49.38	10.71	38.67
GWC-12	47.48	10.70	36.78
GWC-13	47.82	12.06	35.76
GWC-14	50.67	17.97	32.70
GWC-15	48.12	18.45	29.67
GWC-16	47.79	19.97	27.82
GWC-17	44.09	6.81	37.28
GWC-20	50.03	20.55	29.48
GWC-21	47.94	19.86	28.08
GWC-22	46.72	7.12	39.60

Notes:

1. SD indicates feet relative to Site Datum.
2. ft BTOC indicates feet below top of casing.
3. \* - New completions installed and resurveyed after the April 2020 monitoring event. New TOC elevation for GWB-4R is 49.58 SD; GWC-2 is 51.84 SD
4. NA indicates not available.

**Table 5A**  
**Groundwater Flow Velocity Calculations**  
**August 2019**

Equation

$$v = \frac{K(i)}{P_e}$$

where:  $v$  = ground water velocity  
 $K$  = hydraulic conductivity  
 $dh/dl$  = hydraulic gradient  
 $P_e$  = effective porosity

Values Used in Calculation

	Value	Source
$K =$	2.7E-03 cm/sec 7.60 ft/day	See note 1.
$i_1 =$	11.85/1576 ft/ft = 0.008	hydraulic gradient from GWB-6R to GWC-16
$i_2 =$	2.52/737 ft/ft = 0.003	hydraulic gradient from GWA-7 to GWC-17
$P_e =$	0.20	See note 2.

$$v_{\max} = \frac{(7.60)(0.008)}{0.20} \quad v_{\max} = 0.29 \text{ ft/day}$$

$$v_{\min} = \frac{(7.60)(0.003)}{0.20} \quad v_{\min} = 0.13 \text{ ft/day}$$

Notes

- (1) Grumman Road Monofill Groundwater Monitoring Plan (SCS, 1999)
- (2) Default value for silty sands from Interim Final RCRA Investigation (EPA, 1989)

**Table 5B**  
**Groundwater Flow Velocity Calculations**  
**October 2019**

Equation

$$v = \frac{K(i)}{P_e} \quad \text{where: } v = \text{ground water velocity}$$

K = hydraulic conductivity  
 $\frac{dh}{dl}$  = hydraulic gradient  
 $P_e$  = effective porosity

Values Used in Calculation

	Value	Source
K =	2.7E-03      cm/sec 7.60            ft/day	See note 1.
i <sub>1</sub> =	12.03/1576    ft/ft	hydraulic gradient from GWB-6R to GWC-16
i <sub>2</sub> =	2.99/737       ft/ft	hydraulic gradient from GWA-7 to GWC-17
P <sub>e</sub> =	0.20	See note 2.

$$v_{\max} = \frac{(7.60)(0.008)}{0.20} \quad v_{\max} = 0.29 \text{ ft/day}$$

$$v_{\min} = \frac{(7.60)(0.004)}{0.20} \quad v_{\min} = 0.15 \text{ ft/day}$$

Notes

- (1) Grumman Road Monofill Groundwater Monitoring Plan (SCS, 1999)
- (2) Default value for silty sands from Interim Final RCRA Investigation (EPA, 1989)

**Table 5C**  
**Groundwater Flow Velocity Calculations**  
**April 2020**

Equation

$$v = \frac{K(i)}{P_e}$$

where:  $v$  = ground water velocity  
 $K$  = hydraulic conductivity  
 $dh/dl$  = hydraulic gradient  
 $P_e$  = effective porosity

Values Used in Calculation

	Value	Source
$K =$	2.7E-03      cm/sec 7.60            ft/day	See note 1.
$i_1 =$	12.46/1576    ft/ft =                0.008	hydraulic gradient from GWB-6R to GWC-16
$i_2 =$	3.83/737      ft/ft =                0.005	hydraulic gradient from GWA-7 to GWC-17
$P_e =$	0.20	See note 2.

$$v_{max} = \frac{(7.60)(0.008)}{0.20} \quad v_{max} = 0.30 \text{ ft/day}$$

$$v_{min} = \frac{(7.60)(0.005)}{0.20} \quad v_{min} = 0.20 \text{ ft/day}$$

Notes

- (1) Grumman Road Monofill Groundwater Monitoring Plan (SCS, 1999)
- (2) Default value for silty sands from Interim Final RCRA Investigation (EPA, 1989)

**Table 6A**  
**Grumman Road Landfill**  
**Summary of Groundwater Analytical Data - August 2019**

Substance		Well ID							
		GWA-7	GWA-8	GWB-4R	GWB-5R	GWB-6R	GWC-1	GWC-2	GWC-9
		8/26/2019	8/26/2019	8/27/2019	8/28/2019	8/27/2019	8/27/2019	8/27/2019	8/28/2019
Appendix IV	Antimony	ND	ND	ND	ND (0.00054 J)	ND	ND	ND	ND
	Arsenic	ND (0.0041 J)	ND	ND (0.0023 J)	ND (0.0023 J)	ND (0.0035 J)	ND (0.0022 J)	ND	ND
	Barium	0.11	0.065	0.076	0.10	0.013	0.054	0.053	0.17
	Beryllium	ND	ND (0.00021 J)	ND	ND (0.000076 J)	ND	ND	ND	ND (0.00022 J)
	Cadmium	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	ND (0.024 J)	ND (0.0010 J)	ND (0.0027 J)	ND (0.0071 J)	ND (0.0097 J)	ND (0.0062 J)	ND	ND (0.00089 J)
	Cobalt	ND (0.0037 J)	ND (0.00042 J)	ND (0.0011 J)	ND (0.0024 J)	ND (0.00038 J)	ND	ND	ND (0.00099 J)
	Fluoride	ND	0.13	ND (0.031 J)	ND (0.097 J)	ND (0.13 J)	ND	ND	ND (0.088 J)
	Lead	ND (0.013 J)	ND	ND (0.0010 J)	ND (0.0011 J)	ND (0.0011 J)	ND	ND	ND (0.000061 J)
	Lithium	ND	ND (0.0012 J)	0.013	ND	ND	ND	ND	ND (0.0018 J)
	Mercury	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	ND	ND	0.10	ND (0.0012 J)	ND (0.0026 J)	0.060	ND	ND
	Radium	6.03	3.03	2.97	3.74	4.63	2.41	0.787 U	1.91
	Selenium	ND	ND	ND	ND (0.0033 J)	ND (0.0033 J)	ND (0.0016 J)	ND	ND
	Thallium	ND	ND	ND	ND (0.000057 J)	ND	ND	ND	ND

Notes:

1. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
2. Radium data are for Radium 226 & Radium 228 (combined).
3. ND (Not Detected) indicates the substance was not detected above the laboratory method detection limit (MDL).
4. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated value.
5. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
6. Appendix IV = parameters evaluated during Assessment Monitoring.

**Table 6A**  
**Grumman Road Landfill**  
**Summary of Groundwater Analytical Data - August 2019**

Substance		Well ID							
		GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16	GWC-17	GWC-20
		8/27/2019	8/27/2019	8/27/2019	8/27/2019	8/27/2019	8/28/2019	8/28/2019	8/28/2019
Appendix IV	Antimony	ND (0.00033 J)	ND	ND	ND	ND	ND	ND	ND
	Arsenic	ND	ND	ND	ND (0.0017 J)	0.17	0.091	ND (0.0011 J)	0.43
	Barium	0.12	0.017	0.024	0.067	0.049	0.090	0.026	0.078
	Beryllium	ND	ND (0.00047 J)	ND	ND	ND	ND (0.000080 J)	ND (0.0017 J)	ND
	Cadmium	ND (0.00044 J)	ND	ND	ND	ND	ND	ND	ND
	Chromium	ND (0.00092 J)	ND (0.00085 J)	ND	ND (0.0010 J)	ND (0.0016 J)	ND (0.0011 J)	ND (0.0013 J)	ND (0.00089 J)
	Cobalt	ND	ND (0.00090 J)	ND	ND	ND	ND	ND (0.0023 J)	ND
	Fluoride	ND	0.30	ND	ND	ND	ND	0.61	ND
	Lead	ND (0.00021 J)	ND	ND (0.00010 J)	ND (0.00051 J)	ND (0.00033 J)	ND (0.00010 J)	ND	ND (0.000065 J)
	Lithium	ND	ND (0.00094 J)	ND	ND	ND	ND	ND (0.0041 J)	ND
	Mercury	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	ND	ND	ND	0.028	0.095	0.22	ND (0.0040 J)	0.11
	Radium	5.09	2.09	1.27	1.32	1.75	2.04	2.01	1.13 U
	Selenium	ND	ND	ND	ND (0.0035 J)	ND (0.0092 J)	ND (0.0040 J)	ND	ND (0.0014 J)
	Thallium	ND	ND (0.00011 J)	ND	ND	ND	ND	ND (0.000066 J)	ND

Notes:

1. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
2. Radium data are for Radium 226 & Radium 228 (combined).
3. ND (Not Detected) indicates the substance was not detected above the laboratory method detection limit (MDL).
4. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated value.
5. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
6. Appendix IV = parameters evaluated during Assessment Monitoring.

**Table 6A**  
**Grumman Road Landfill**  
**Summary of Groundwater Analytical Data - August 2019**

Substance	Well ID		
	GWC-21	GWC-22	
	8/28/2019	8/27/2019	
<b>Appendix IV</b>	<b>Antimony</b>	ND	ND (0.00045 J)
	<b>Arsenic</b>	ND (0.0020 J)	ND (0.00044 J)
	<b>Barium</b>	0.063	0.097
	<b>Beryllium</b>	ND	ND (0.000090 J)
	<b>Cadmium</b>	ND	ND
	<b>Chromium</b>	ND (0.00087 J)	ND (0.00057 J)
	<b>Cobalt</b>	ND	ND (0.00077 J)
	<b>Fluoride</b>	ND	0.10
	<b>Lead</b>	ND (0.00018 J)	ND (0.0030 J)
	<b>Lithium</b>	ND	ND
	<b>Mercury</b>	ND	ND
	<b>Molybdenum</b>	0.070	ND
	<b>Radium</b>	1.40 U	7.04
	<b>Selenium</b>	0.019	ND
	<b>Thallium</b>	ND	ND (0.000086 J)

Notes:

1. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
2. Radium data are for Radium 226 & Radium 228 (combined).
3. ND (Not Detected) indicates the substance was not detected above the laboratory method detection limit (MDL).
4. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated value.
5. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
6. Appendix IV = parameters evaluated during Assessment Monitoring.

**Table 6B**  
**Grumman Road Landfill**  
**Summary of Groundwater Analytical Data - October 2019**

Substance		Well ID						
		GWA-7	GWA-8	GWB-4R	GWB-5R	GWB-6R	GWC-1	GWC-2
		10/8/2019	10/7/2019	10/9/2019	10/9/2019	10/9/2019	10/9/2019	10/9/2019
APPENDIX III	Boron	6.4	0.12	5.7	6.8	6.3	0.93	ND (0.024 J)
	Calcium	3.5	31.6	46.7	17.7	10.1	51.2	0.18
	Chloride	125	18.0	32.1	239	49.7	7.2	7.0
	Fluoride	ND	ND	ND	ND	ND	ND	ND (0.068 J)
	pH	5.74	4.24	5.79	6.11	5.66	5.82	4.79
	Sulfate	32.8	156	38.5	90.8	255	76.3	10.1
	TDS	1840	275	502	2010	903	338	46.0
APPENDIX IV	Antimony	ND	ND	ND	ND	ND	ND	ND
	Arsenic	ND (0.0030 J)	ND	ND (0.0024 J)	ND (0.0053 J)	ND (0.0018 J)	ND (0.0042 J)	ND
	Barium	0.10	0.069	0.076	0.13	ND (0.014 J)	0.058	0.050
	Beryllium	ND	ND (0.00024 J)	ND	ND	ND	ND	ND (0.00023 J)
	Cadmium	ND	ND	ND	ND	ND	ND	ND
	Chromium	ND (0.021 J)	ND (0.00052 J)	ND (0.0020 J)	ND (0.012 J)	ND (0.011 J)	ND (0.0019 J)	ND (0.00049 J)
	Cobalt	ND (0.0028 J)	ND (0.00046 J)	ND (0.0015 J)	ND (0.0037 J)	ND	ND	ND (0.00099 J)
	Lead	ND (0.0098 J)	ND	ND (0.00041 J)	ND (0.0025 J)	ND (0.00033 J)	ND	ND (0.000064 J)
	Lithium	ND	ND (0.0012 J)	0.013	ND	ND	ND	ND (0.0018 J)
	Molybdenum	ND	ND	0.10	ND	ND	0.060	ND
	Radium	33.8	2.83	2.17	7.23	5.45	3.13	0.220 U
	Selenium	ND (0.0072 J)	ND	ND	ND (0.0073 J)	ND	ND (0.0024 J)	ND
	Thallium	ND	ND (0.000062 J)	ND	ND (0.00031 J)	ND	ND (0.000054 J)	ND
See Note 8	Vanadium	0.11	ND	ND	ND (0.033 J)	ND (0.018 J)	ND	ND
	Zinc	0.095	ND (0.0077 J)	ND (0.0064 J)	ND (0.0081 J)	ND (0.016 J)	ND (0.0057 J)	ND (0.0050 J)
								ND (0.0054 J)

Notes:

1. Results for substances are reported in milligrams per liter (mg/L). Results for pH are reported in standard units (S.U.). Radium results are reported in picocuries per liter (pCi/L).
2. Radium data are for Radium 226 & Radium 228 (combined).
3. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
4. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
5. TDS indicates total dissolved solids.
6. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
7. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.
8. Appendix II parameter included to meet EPD Rule 391-3-4-.14 requirements that is not included in the Appendix IV parameter list .

**Table 6B**  
**Grumman Road Landfill**  
**Summary of Groundwater Analytical Data - October 2019**

Substance		Well ID							
		GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16	GWC-17	GWC-20
		10/8/2019	10/9/2019	10/8/2019	10/8/2019	10/8/2019	10/8/2019	10/9/2019	10/9/2019
APPENDIX III	Boron	0.22	8.2	0.18	0.048	1.1	8.4	1.3	0.79
	Calcium	69.2	54.2	2.3	146	129	205	56.6	80.1
	Chloride	89.0	44.1	4.0	40.2	2.9	46.4	330	5.4
	Fluoride	ND	ND	ND	ND	ND	ND	ND	ND
	pH	4.93	4.25	4.81	5.68	6.65	5.54	4.66	6.50
	Sulfate	310	392	22.0	428	45.8	872	346	58.5
	TDS	613	647	51.0	841	526	1500	1100	434
APPENDIX IV	Antimony	ND (0.00046 J)	ND	ND	ND	ND	ND	ND	ND
	Arsenic	ND	ND	ND	ND (0.0017 J)	0.13	0.088	ND (0.0011 J)	0.35
	Barium	0.13	0.019	0.024	0.085	0.057	0.13	0.032	0.078
	Beryllium	ND	ND (0.00046 J)	ND	ND	ND	ND (0.000098 J)	ND (0.0018 J)	ND
	Cadmium	ND (0.00043 J)	ND	ND	ND	ND	ND	ND	ND
	Chromium	ND (0.00091 J)	ND (0.00081 J)	ND	ND (0.00053 J)	ND (0.0017 J)	ND (0.00099 J)	ND (0.00081 J)	ND (0.0011 J)
	Cobalt	ND	ND (0.00094 J)	ND	ND	ND	ND	ND (0.0024 J)	ND
	Lead	ND (0.00028 J)	ND (0.000066 J)	ND (0.00013 J)	ND	ND (0.00012 J)	ND (0.00010 J)	ND (0.00015 J)	ND (0.00018 J)
	Lithium	ND	ND (0.0011 J)	ND	ND	ND	ND	ND (0.0046 J)	ND
	Molybdenum	ND	ND	ND	0.034	0.091	0.20	ND (0.0036 J)	0.071
	Radium	6.39	3.11	1.62	1.41	1.52	1.89	2.91	2.28
	Selenium	ND	ND	ND	ND (0.0026 J)	0.014	ND (0.0023 J)	ND	ND
	Thallium	ND (0.000098 J)	ND (0.00014 J)	ND	ND	ND	ND	ND (0.000076 J)	ND
See Note 8	Vanadium	ND	ND (0.0021 J)	ND	ND	ND	ND	ND	ND
	Zinc	ND (0.0061 J)	ND (0.0057 J)	0.053	ND (0.0052 J)	ND (0.0051 J)	0.010	0.011	ND (0.0049 J)

Notes:

1. Results for substances are reported in milligrams per liter (mg/L). Results for pH are reported in standard units (S.U.). Radium results are reported in picocuries per liter (pCi/L).
2. Radium data are for Radium 226 & Radium 228 (combined).
3. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
4. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
5. TDS indicates total dissolved solids.
6. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
7. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.
8. Appendix II parameter included to meet EPD Rule 391-3-4-.14 requirements that is not included in the Appendix IV parameter list .

**Table 6B**  
**Grumman Road Landfill**  
**Summary of Groundwater Analytical Data - October 2019**

Substance		Well ID	
		GWC-21	GWC-22
		10/8/2019	10/9/2019
APPENDIX III	Boron	1.0	0.39
	Calcium	49.5	30.1
	Chloride	7.8	25.3
	Fluoride	ND	ND
	pH	6.09	4.68
	Sulfate	85.6	80.2
	TDS	278	211
	Antimony	ND	ND
	Arsenic	ND (0.0028 J)	ND
	Barium	0.079	0.065
APPENDIX IV	Beryllium	ND	ND
	Cadmium	ND	ND (0.00012 J)
	Chromium	ND (0.00065 J)	ND (0.00072 J)
	Cobalt	ND	ND
	Lead	ND (0.00016 J)	ND (0.00032 J)
	Lithium	ND	ND
	Molybdenum	0.078	ND
	Radium	1.88	3.68
	Selenium	0.019	ND
	Thallium	ND	ND
	See Note 8	Vanadium	ND
	Zinc	ND (0.0071 J)	ND (0.0079 J)

Notes:

1. Results for substances are reported in milligrams per liter (mg/L). Results for pH are reported in standard units (S.U.). Radium results are reported in picocuries per liter (pCi/L).
2. Radium data are for Radium 226 & Radium 228 (combined).
3. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
4. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
5. TDS indicates total dissolved solids.
6. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
7. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.
8. Appendix II parameter included to meet EPD Rule 391-3-4-.14 requirements that is not included in the Appendix IV parameter list .

**Table 6C**  
**Grumman Road Landfill**  
**Summary of Groundwater Analytical Data - April 2020**

Substance		Well ID							
		GWA-7	GWA-8	GWB-4R	GWB-5R	GWB-6R	GWC-1	GWC-2	GWC-9
		4/6/2020	4/6/2020	4/7/2020	4/7/2020	4/7/2020	4/7/2020	4/8/2020	4/8/2020
APPENDIX III	Boron	6.1	0.14	5.5	4.6	5.6	1.0	0.031 J	0.023 J
	Calcium	3.1	35.8	62.1	34.1	7.8	31.1	0.24 J	5.3
	Chloride	30.2	13.5	14.5	44.3	56.4	7.7	5.2	16.9
	Fluoride	0.13 J	0.089 J	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.058 J
	pH	6.02	4.52	5.74	5.45	5.86	5.36	4.66	4.73
	Sulfate	20.3	123	221	180	180	83.0	12.9	34.2
	TDS	1670	214	482	483	775	195	38	80
APPENDIX IV	Antimony	< 0.0014	< 0.00027	< 0.00027	< 0.00027	< 0.0014	< 0.00027	0.0013 J	0.00033 J
	Arsenic	< 0.0018	0.00045 J	0.0027 J	0.0011 J	< 0.0018	0.027	0.00094 J	0.00084 J
	Barium	0.072	0.057	0.090	0.098	0.010 J	0.050	0.061	0.15
	Beryllium	< 0.00037	0.00017 J	< 0.000074	< 0.000074	< 0.00037	< 0.000074	0.000088 J	0.00019 J
	Cadmium	< 0.00057	< 0.00011	< 0.00011	< 0.00011	< 0.00057	< 0.00011	< 0.00011	< 0.00011
	Chromium	0.015 J	< 0.00039	0.0028 J	0.0022 J	0.0094 J	0.0015 J	0.00069 J	0.0015 J
	Cobalt	0.0021 J	0.00036 J	0.00090 J	0.00053 J	< 0.0015	< 0.00030	0.00036 J	0.0010 J
	Lead	0.0024 J	0.00010 J	0.00073 J	0.0014 J	0.00063 J	0.00012 J	< 0.000046	0.00021 J
	Lithium	< 0.0039	0.00086 J	0.014 J	< 0.00078	< 0.0039	< 0.00078	< 0.00078	0.0018 J
	Molybdenum	< 0.0047	< 0.00095	0.13	< 0.00095	< 0.0047	0.014	< 0.00095	< 0.00095
	Radium	25.7	2.83	2.44	3.57	6.25	1.97	1.13 U	1.92
	Selenium	0.0078 J	< 0.0013	0.0025 J	< 0.0013	< 0.0063	0.0013 J	< 0.0013	< 0.0013
See Note 8	Thallium	< 0.00026	< 0.000052	< 0.000052	< 0.000052	< 0.00026	0.000054 J	< 0.000052	< 0.000052
	Vanadium	0.12	< 0.00071	0.0037 J	0.0053 J	0.041 J	0.0015 J	< 0.00071	0.0015 J
	Zinc	< 0.018	< 0.018	< 0.018	< 0.018	< 0.018	< 0.018	< 0.018	< 0.018

Notes:

- Results for substances are reported in milligrams per liter (mg/L). Results for pH are reported in standard units (S.U.). Radium results are reported in picocuries per liter (pCi/L).
- Radium data are for Radium 226 & Radium 228 (combined).
- < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).
- J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- TDS indicates total dissolved solids.
- U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
- Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.
- Appendix II parameter included to meet EPD Rule 391-3-4-14 requirements that is not included in the Appendix IV parameter list .

**Table 6C**  
**Grumman Road Landfill**  
**Summary of Groundwater Analytical Data - April 2020**

Substance		Well ID							
		GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16	GWC-17	GWC-20
		4/7/2020	4/7/2020	4/8/2020	4/7/2020	4/7/2020	4/7/2020	4/8/2020	4/8/2020
APPENDIX III	Boron	0.67	5.3	0.28	0.061 J	0.96	10.5	0.99	2.5
	Calcium	84.7	52.1	2.5	135	129	225	53.1	175
	Chloride	103	32.5	4.5	41.6	3.4	49.3	277	20.2
	Fluoride	< 0.050	0.27 J	< 0.050	< 0.050	< 0.050	< 0.050	0.55	< 0.050
	pH	5.05	4.10	4.81	6.20	6.83	5.94	4.71	6.31
	Sulfate	446	297	30.7	456	26.9	844	239	428
	TDS	780	464	65	843	428	1500	881	986
APPENDIX IV	Antimony	0.00066 J	< 0.00027	< 0.00027	< 0.00027	< 0.00027	< 0.0014	< 0.00027	< 0.00027
	Arsenic	< 0.00035	< 0.00035	< 0.00035	0.0018 J	0.24	0.091	0.0013 J	0.33
	Barium	0.14	0.017	0.027	0.073	0.033	0.13	0.055	0.19
	Beryllium	< 0.000074	0.00051 J	< 0.000074	< 0.000074	< 0.000074	< 0.00037	0.0017 J	< 0.000074
	Cadmium	0.00051 J	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00057	< 0.00011	< 0.00011
	Chromium	0.00094 J	0.00082 J	0.00058 J	0.00074 J	0.0014 J	< 0.0020	0.00073 J	0.0010 J
	Cobalt	< 0.00030	0.00077 J	< 0.00030	< 0.00030	< 0.00030	< 0.0015	0.0024 J	< 0.00030
	Lead	0.00036 J	0.000081 J	0.00017 J	< 0.000046	0.000086 J	0.00023 J	0.000084 J	< 0.000046
	Lithium	< 0.00078	0.00094 J	< 0.00078	< 0.00078	< 0.00078	< 0.0039	0.0051 J	< 0.00078
	Molybdenum	< 0.00095	< 0.00095	0.0056 J	0.014	0.070	0.25	0.0024 J	0.060
	Radium	7.87	2.18	1.08 U	1.41	1.82	4.17	2.79	4.19
	Selenium	0.0021 J	< 0.0013	< 0.0013	0.0050 J	0.0029 J	< 0.0063	< 0.0013	0.0013 J
	Thallium	0.00019 J	0.00013 J	< 0.000052	< 0.000052	< 0.000052	< 0.00026	0.000056 J	< 0.000052
See Note 8	Vanadium	< 0.00071	0.0024 J	< 0.00071	0.0026 J	< 0.00071	< 0.0035	< 0.00071	< 0.00071
	Zinc	< 0.018	< 0.018	0.023	< 0.018	< 0.018	< 0.018	< 0.018	< 0.018

Notes:

- Results for substances are reported in milligrams per liter (mg/L). Results for pH are reported in standard units (S.U.). Radium results are reported in picocuries per liter (pCi/L).
- Radium data are for Radium 226 & Radium 228 (combined).
- < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).
- J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- TDS indicates total dissolved solids.
- U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
- Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.
- Appendix II parameter included to meet EPD Rule 391-3-4-14 requirements that is not included in the Appendix IV parameter list .

**Table 6C**  
**Grumman Road Landfill**  
**Summary of Groundwater Analytical Data - April 2020**

Substance		Well ID	
		GWC-21	GWC-22
		4/7/2020	4/7/2020
APPENDIX III	Boron	0.24	3.1
	Calcium	12.5	65.7
	Chloride	4.7	146
	Fluoride	< 0.050	< 0.050
	pH	6.00	4.80
	Sulfate	33.2	333
	TDS	106	819
APPENDIX IV	Antimony	< 0.00027	0.00049 J
	Arsenic	< 0.00035	0.00043 J
	Barium	0.054	0.10
	Beryllium	< 0.000074	< 0.000074
	Cadmium	< 0.00011	0.00054 J
	Chromium	< 0.00039	0.00049 J
	Cobalt	< 0.00030	0.00037 J
	Lead	< 0.000046	0.00067 J
	Lithium	< 0.00078	< 0.00078
	Molybdenum	0.012	< 0.00095
	Radium	1.80	7.66
	Selenium	0.012	< 0.0013
See Note 8	Thallium	< 0.000052	0.000065 J
	Vanadium	< 0.00071	0.0014 J
	Zinc	< 0.018	< 0.018

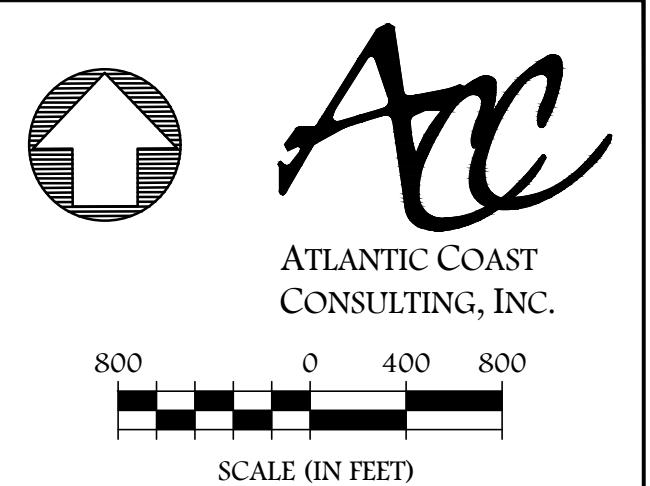
Notes:

1. Results for substances are reported in milligrams per liter (mg/L). Results for pH are reported in standard units (S.U.). Radium results are reported in picocuries per liter (pCi/L).
2. Radium data are for Radium 226 & Radium 228 (combined).
3. < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).
4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.  
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
5. TDS indicates total dissolved solids.
6. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
7. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.
8. Appendix II parameter included to meet EPD Rule 391-3-4-14 requirements that is not included in the Appendix IV parameter list .

**Table 7**  
**Statistical Method Summary**

Statistical Method Summary		
Monitoring Well Network	Upgradient Wells	GWA-7 and GWA-8
	Downgradient Wells	GWC-1, GWC-2, GWB-4R, GWB-5R, GWB-6R, GWC-9, GWC-11, GWC-12, GWC-13, GWC-14, GWC-15, GWC-16, GWC-17, GWC-20, GWC-21, and GWC-22
CCR Monitoring Parameters	Appendix III (Detection Monitoring)	Boron, Calcium, Chloride, Fluoride, pH, Sulfate, and TDS
	Appendix IV (Assessment Monitoring)	Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, combined Radium 226 + 228, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, and Thallium
EPD Permit Metals	Appendix I (Detection Monitoring)	Antimony, Arsenic, Barium, Chromium, Lead, Selenium, Vanadium, and Zinc
	Appendix II (Assessment Monitoring)	Antimony, Arsenic, Barium, Chromium, Lead, Selenium, Vanadium, and Zinc
Statistical Methodology	Data Screening Proposed Background	Evaluate outliers, trends, and seasonality when sufficient data are available
	Statistical Limits	Interwell (calcium, chloride, fluoride, pH, and sulfate) or intrawell (boron, TDS, Appendix I and II) statistical limits are on constituent specific basis, depending on the appropriateness of the method as determined by the Analysis of Variance

## FIGURES



## LEGEND:

EXISTING	DESCRIPTION
	PROPERTY BOUNDARY

### NOTES:

1. PROPERTY BOUNDARY SURVEYED BY GUNNIN LAND SURVEYING ON AUGUST 30, 2018.

### PROJECT



GEORGIA POWER COMPANY  
GRUMMAN ROAD PRIVATE INDUSTRIAL LANDFILL

### SITE MAP



PROJECT NO. I054-110

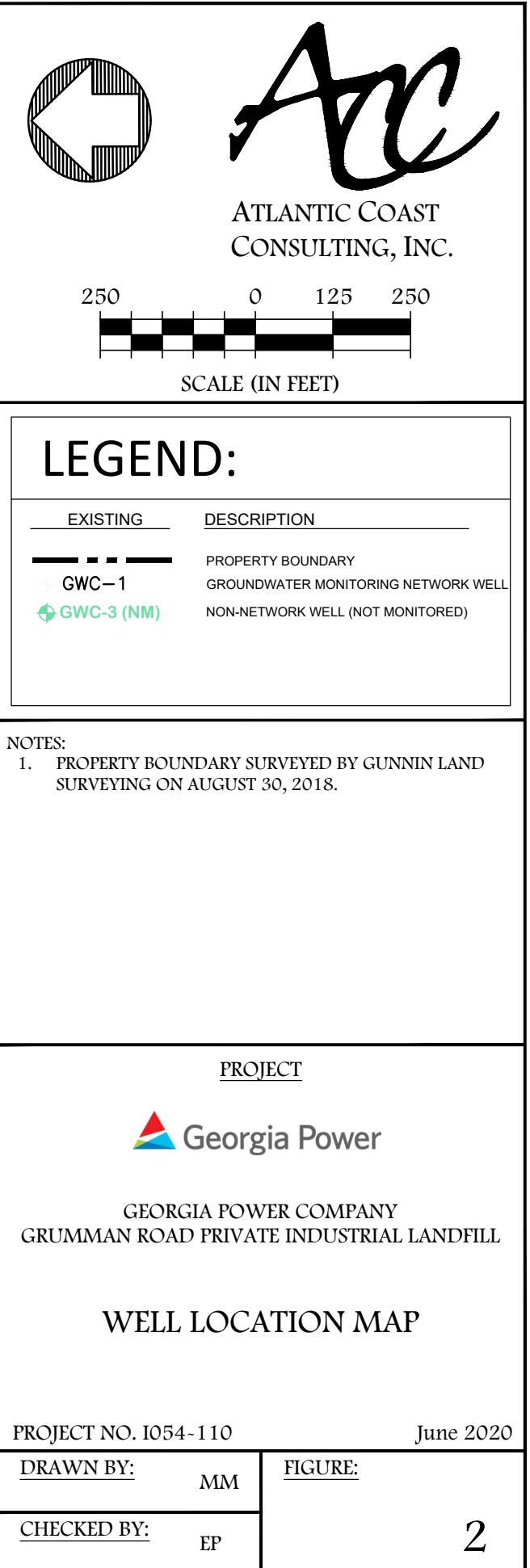
June 2020

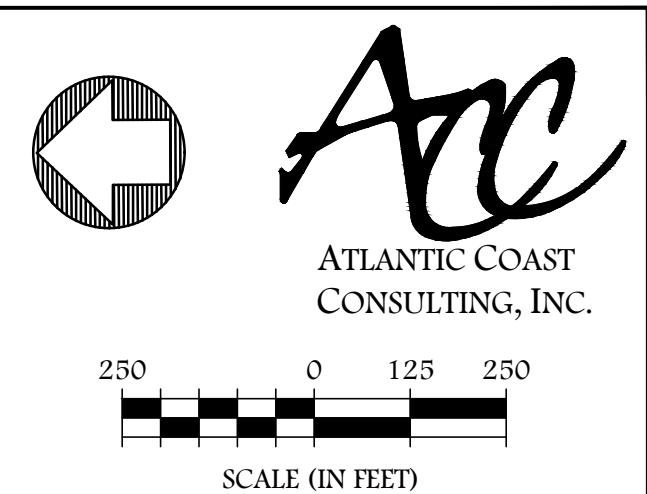
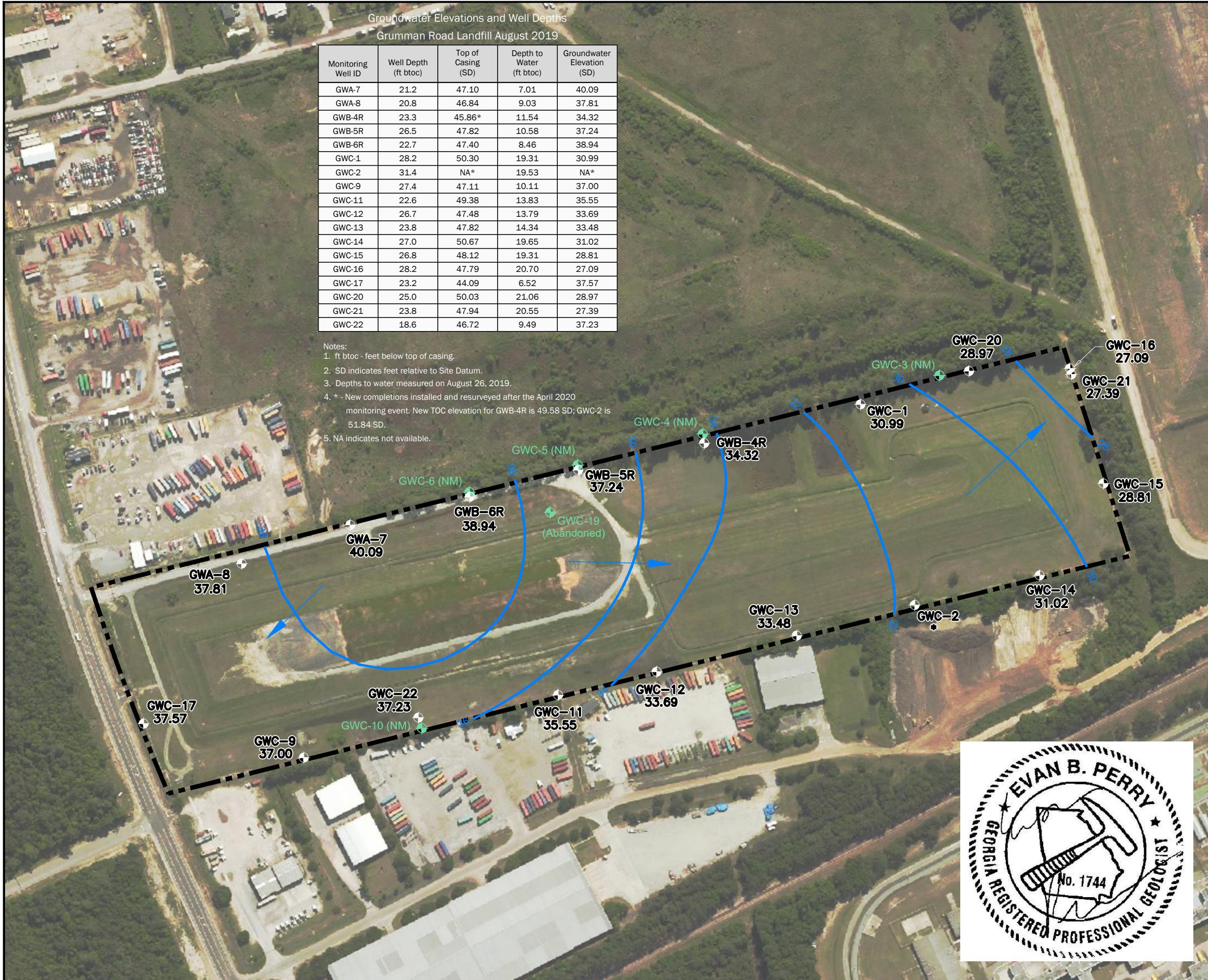
DRAWN BY: MM

FIGURE:

CHECKED BY: EP

1





LEGEND:	
EXISTING	DESCRIPTION
	PROPERTY BOUNDARY
	GROUNDWATER MONITORING NETWORK WELL
	GROUNDWATER ELEVATION
	NON-NETWORK WELL (NOT MONITORED)
	GROUNDWATER ELEVATION CONTOUR
	GROUNDWATER FLOW DIRECTION

NOTES:

1. PROPERTY BOUNDARY SURVEYED BY GUNNIN LAND SURVEYING ON AUGUST 30, 2018.
2. WATER LEVEL FROM GWC-16 NOT USED TO CALCULATE POTENTIOMETRIC SURFACE.

PROJECT

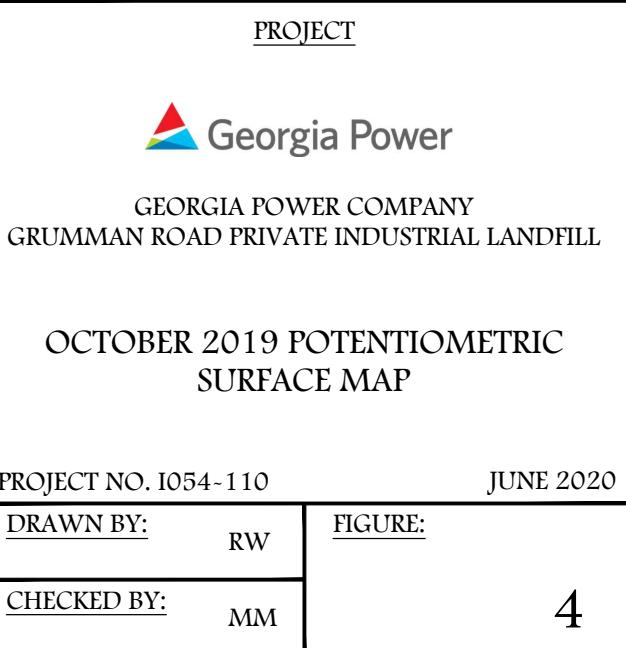
Georgia Power  
GEORGIA POWER COMPANY  
GRUMMAN ROAD PRIVATE INDUSTRIAL LANDFILL

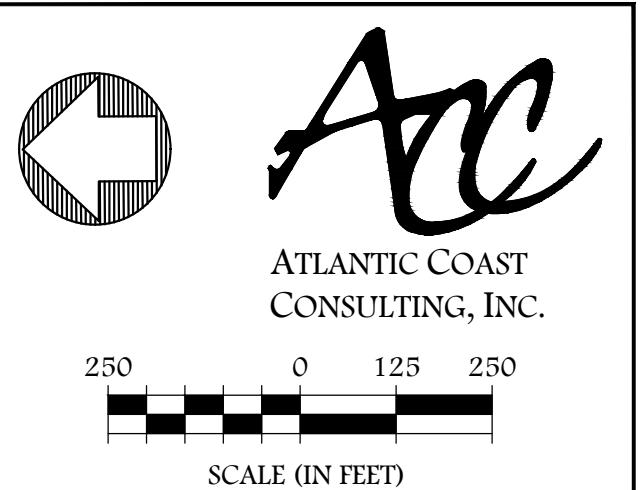
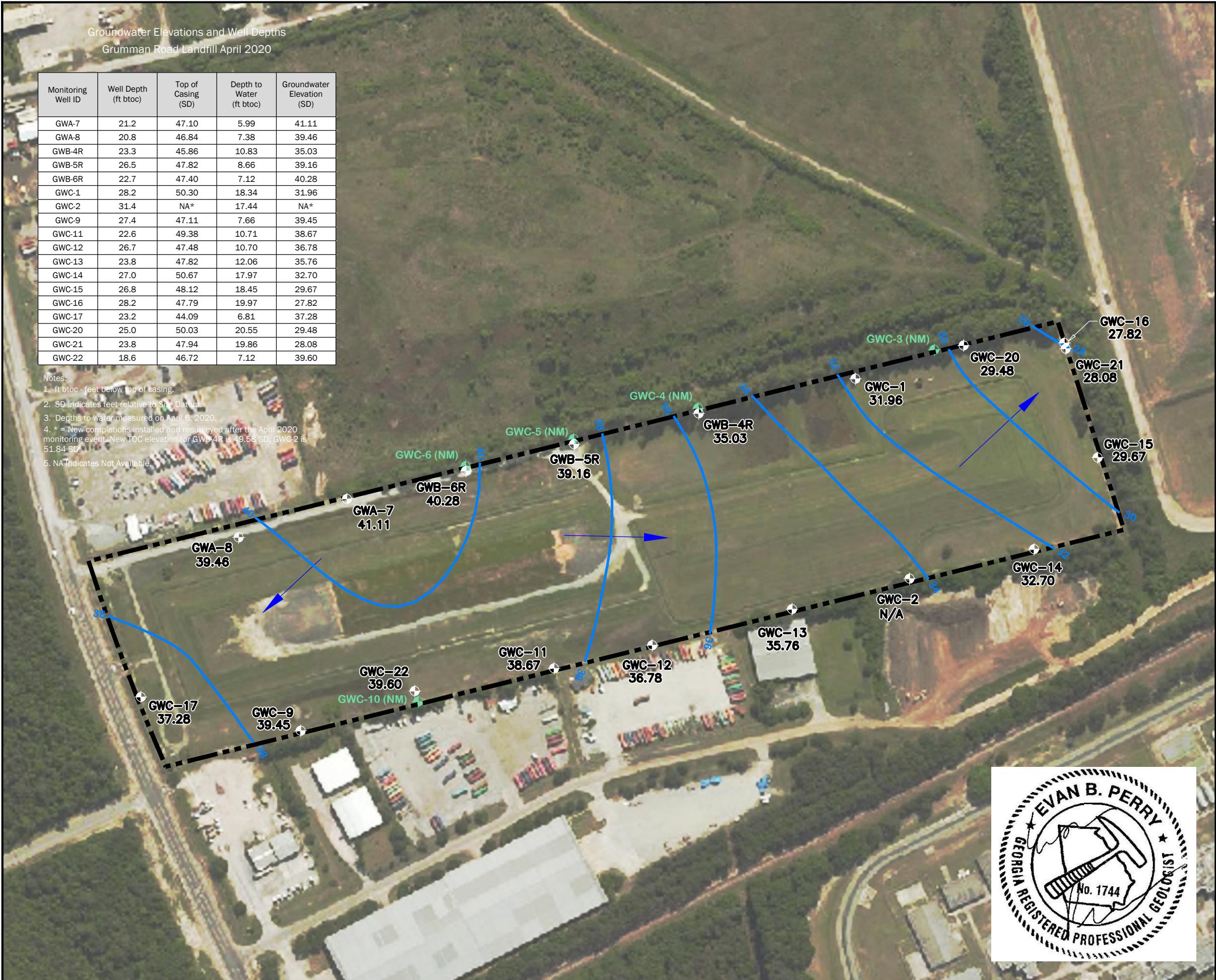
AUGUST 2019 POTENTIOMETRIC SURFACE MAP

PROJECT NO. I054-110	JUNE 2020
DRAWN BY: MM	FIGURE:
CHECKED BY: EP	

3







**LEGEND:**

EXISTING	DESCRIPTION
	PROPERTY BOUNDARY
	GROUNDWATER MONITORING NETWORK WELL
	GROUNDWATER ELEVATION
	NON-NETWORK WELL (NOT MONITORED)
	GROUNDWATER ELEVATION CONTOUR
	GROUNDWATER FLOW DIRECTION

NOTES:

1. PROPERTY BOUNDARY SURVEYED BY GUNNIN LAND SURVEYING ON AUGUST 30, 2018.
2. WATER LEVEL FROM GWC-16 NOT USED TO CALCULATE POTENTIOMETRIC SURFACE.
3. N/A = WATER LEVEL WAS UNABLE TO BE MEASURED.

**PROJECT**

Georgia Power

GEORGIA POWER COMPANY  
GRUMMAN ROAD PRIVATE INDUSTRIAL LANDFILL

APRIL 2020 POTENTIOMETRIC SURFACE MAP

PROJECT NO. I054-110 JUNE 2020

DRAWN BY: RW	FIGURE: 5
CHECKED BY: MM	





## APPENDICES



## APPENDIX A

### Laboratory Analytical and Field Sampling Reports

December 11, 2019

Joju Abraham  
Georgia Power - Coal Combustion Residuals  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622501

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for  
Betsy McDaniel  
betsy.mcdaniel@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Betsy McDaniel, Atlantic Coast Consulting  
Chris Parker, Atlantic Coast Consulting  
Evan Perry, Atlantic Coast Consulting  
Lauren Petty, Southern Company Services, Inc.  
Rebecca Thornton, Pace Analytical Atlanta



## REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622501

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### **Pace Analytical Services Atlanta**

110 Technology Parkway Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812  
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001  
Virginia Certification #: 460204

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622501

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622501001	GWA-7	Water	08/26/19 16:15	08/28/19 13:45
2622501002	GWB-6R	Water	08/27/19 14:15	08/28/19 13:45

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622501

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2622501001	GWA-7	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
2622501002	GWB-6R	EPA 6020B	CSW	12
		EPA 7470A	DRB	1

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622501

Sample: GWA-7	Lab ID: 2622501001	Collected: 08/26/19 16:15	Received: 08/28/19 13:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS, Dissolved</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony, Dissolved	<b>0.00029J</b>	mg/L	0.0030	0.00027	1	08/29/19 15:59	08/30/19 16:05	7440-36-0	
Arsenic, Dissolved	<b>0.0028J</b>	mg/L	0.0050	0.00035	1	08/29/19 15:59	08/30/19 16:05	7440-38-2	
Barium, Dissolved	<b>0.087</b>	mg/L	0.010	0.00049	1	08/29/19 15:59	08/30/19 16:05	7440-39-3	
Beryllium, Dissolved	<b>0.00012J</b>	mg/L	0.0030	0.000074	1	08/29/19 15:59	08/30/19 16:05	7440-41-7	
Cadmium, Dissolved	ND	mg/L	0.0025	0.00011	1	08/29/19 15:59	08/30/19 16:05	7440-43-9	
Chromium, Dissolved	<b>0.10</b>	mg/L	0.010	0.00039	1	08/29/19 15:59	08/30/19 16:05	7440-47-3	
Cobalt, Dissolved	<b>0.0045J</b>	mg/L	0.0050	0.00030	1	08/29/19 15:59	08/30/19 16:05	7440-48-4	
Lead, Dissolved	<b>0.00028J</b>	mg/L	0.0050	0.000046	1	08/29/19 15:59	08/30/19 16:05	7439-92-1	
Lithium, Dissolved	ND	mg/L	0.030	0.00078	1	08/29/19 15:59	08/30/19 16:05	7439-93-2	
Molybdenum, Dissolved	<b>0.0018J</b>	mg/L	0.010	0.00095	1	08/29/19 15:59	08/30/19 16:05	7439-98-7	
Selenium, Dissolved	<b>0.0075J</b>	mg/L	0.010	0.0013	1	08/29/19 15:59	08/30/19 16:05	7782-49-2	
Thallium, Dissolved	ND	mg/L	0.0010	0.000052	1	08/29/19 15:59	08/30/19 16:05	7440-28-0	
<b>7470 Mercury, Dissolved</b>	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury, Dissolved	ND	mg/L	0.00020	0.00014	1	09/04/19 08:28	09/04/19 12:45	7439-97-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622501

Sample: GWB-6R	Lab ID: 2622501002	Collected: 08/27/19 14:15	Received: 08/28/19 13:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS, Dissolved</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony, Dissolved	ND	mg/L	0.0030	0.00027	1	08/29/19 15:59	08/30/19 16:10	7440-36-0	
Arsenic, Dissolved	<b>0.0034J</b>	mg/L	0.0050	0.00035	1	08/29/19 15:59	08/30/19 16:10	7440-38-2	
Barium, Dissolved	<b>0.012</b>	mg/L	0.010	0.00049	1	08/29/19 15:59	08/30/19 16:10	7440-39-3	
Beryllium, Dissolved	ND	mg/L	0.0030	0.000074	1	08/29/19 15:59	08/30/19 16:10	7440-41-7	
Cadmium, Dissolved	ND	mg/L	0.0025	0.00011	1	08/29/19 15:59	08/30/19 16:10	7440-43-9	
Chromium, Dissolved	<b>0.011</b>	mg/L	0.010	0.00039	1	08/29/19 15:59	08/30/19 16:10	7440-47-3	
Cobalt, Dissolved	ND	mg/L	0.0050	0.00030	1	08/29/19 15:59	08/30/19 16:10	7440-48-4	
Lead, Dissolved	<b>0.000052J</b>	mg/L	0.0050	0.000046	1	08/29/19 15:59	08/30/19 16:10	7439-92-1	
Lithium, Dissolved	ND	mg/L	0.030	0.00078	1	08/29/19 15:59	08/30/19 16:10	7439-93-2	
Molybdenum, Dissolved	<b>0.0020J</b>	mg/L	0.010	0.00095	1	08/29/19 15:59	08/30/19 16:10	7439-98-7	
Selenium, Dissolved	<b>0.0036J</b>	mg/L	0.010	0.0013	1	08/29/19 15:59	08/30/19 16:10	7782-49-2	
Thallium, Dissolved	ND	mg/L	0.0010	0.000052	1	08/29/19 15:59	08/30/19 16:10	7440-28-0	
<b>7470 Mercury, Dissolved</b>	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury, Dissolved	ND	mg/L	0.00020	0.00014	1	09/04/19 08:28	09/04/19 12:55	7439-97-6	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622501

QC Batch:	34689	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury Dissolved
Associated Lab Samples:	2622501001, 2622501002		

METHOD BLANK: 156132 Matrix: Water

Associated Lab Samples: 2622501001, 2622501002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury, Dissolved	mg/L	ND	0.00020	0.00014	09/04/19 12:41	

LABORATORY CONTROL SAMPLE: 156133

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	mg/L	0.0025	0.0026	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 156134 156135

Parameter	Units	2622501001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury, Dissolved	mg/L	ND	0.0025	0.0025	0.0019	0.0019	77	78	75-125	0	20	

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## REPORT OF LABORATORY ANALYSIS

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## **QUALITY CONTROL DATA**

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622501

QC Batch: 34497 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020B MET Dissolved  
Associated Lab Samples: 2622501001, 2622501002

METHOD BLANK: 155181 Matrix: Water

Associated Lab Samples: 2622501001, 2622501002

Parameter	Units	Blank	Reporting	MDL	Analyzed	Qualifiers
		Result	Limit			
Antimony, Dissolved	mg/L	ND	0.0030	0.00027	08/30/19 14:48	
Arsenic, Dissolved	mg/L	ND	0.0050	0.00035	08/30/19 14:48	
Barium, Dissolved	mg/L	ND	0.010	0.00049	08/30/19 14:48	
Beryllium, Dissolved	mg/L	ND	0.0030	0.000074	08/30/19 14:48	
Cadmium, Dissolved	mg/L	ND	0.0025	0.00011	08/30/19 14:48	
Chromium, Dissolved	mg/L	ND	0.010	0.00039	08/30/19 14:48	
Cobalt, Dissolved	mg/L	ND	0.0050	0.00030	08/30/19 14:48	
Lead, Dissolved	mg/L	ND	0.0050	0.000046	08/30/19 14:48	
Lithium, Dissolved	mg/L	ND	0.030	0.00078	08/30/19 14:48	
Molybdenum, Dissolved	mg/L	ND	0.010	0.00095	08/30/19 14:48	
Selenium, Dissolved	mg/L	ND	0.010	0.0013	08/30/19 14:48	
Thallium, Dissolved	mg/L	ND	0.0010	0.000052	08/30/19 14:48	

METHOD BLANK: 155216 Matrix: Water

Associated Lab Samples: 2622501001, 2622501002

Parameter	Units	Blank	Reporting	MDL	Analyzed	Qualifiers
		Result	Limit			
Antimony, Dissolved	mg/L	ND	0.0030	0.00027	08/30/19 14:59	
Arsenic, Dissolved	mg/L	ND	0.0050	0.00035	08/30/19 14:59	
Barium, Dissolved	mg/L	ND	0.010	0.00049	08/30/19 14:59	
Beryllium, Dissolved	mg/L	ND	0.0030	0.000074	08/30/19 14:59	
Cadmium, Dissolved	mg/L	ND	0.0025	0.00011	08/30/19 14:59	
Chromium, Dissolved	mg/L	ND	0.010	0.00039	08/30/19 14:59	
Cobalt, Dissolved	mg/L	ND	0.0050	0.00030	08/30/19 14:59	
Lead, Dissolved	mg/L	ND	0.0050	0.000046	08/30/19 14:59	
Lithium, Dissolved	mg/L	ND	0.030	0.00078	08/30/19 14:59	
Molybdenum, Dissolved	mg/L	ND	0.010	0.00095	08/30/19 14:59	
Selenium, Dissolved	mg/L	ND	0.010	0.0013	08/30/19 14:59	
Thallium, Dissolved	mg/L	ND	0.0010	0.000052	08/30/19 14:59	

LABORATORY CONTROL SAMPLE: 155182

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	mg/L	0.1	0.10	101	80-120	
Arsenic, Dissolved	mg/L	0.1	0.098	98	80-120	
Barium, Dissolved	mg/L	0.1	0.10	101	80-120	
Beryllium, Dissolved	mg/L	0.1	0.098	98	80-120	
Cadmium, Dissolved	mg/L	0.1	0.10	101	80-120	

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## **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622501

LABORATORY CONTROL SAMPLE: 155182

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	mg/L	0.1	0.10	100	80-120	
Cobalt, Dissolved	mg/L	0.1	0.096	96	80-120	
Lead, Dissolved	mg/L	0.1	0.098	98	80-120	
Lithium, Dissolved	mg/L	0.1	0.10	101	80-120	
Molybdenum, Dissolved	mg/L	0.1	0.10	102	80-120	
Selenium, Dissolved	mg/L	0.1	0.099	99	80-120	
Thallium, Dissolved	mg/L	0.1	0.099	99	80-120	

LABORATORY CONTROL SAMPLE: 155217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	mg/L	0.1	0.10	102	80-120	
Arsenic, Dissolved	mg/L	0.1	0.10	100	80-120	
Barium, Dissolved	mg/L	0.1	0.10	101	80-120	
Beryllium, Dissolved	mg/L	0.1	0.10	101	80-120	
Cadmium, Dissolved	mg/L	0.1	0.10	100	80-120	
Chromium, Dissolved	mg/L	0.1	0.10	103	80-120	
Cobalt, Dissolved	mg/L	0.1	0.10	101	80-120	
Lead, Dissolved	mg/L	0.1	0.098	98	80-120	
Lithium, Dissolved	mg/L	0.1	0.10	102	80-120	
Molybdenum, Dissolved	mg/L	0.1	0.10	102	80-120	
Selenium, Dissolved	mg/L	0.1	0.10	100	80-120	
Thallium, Dissolved	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155252

155253

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2622396001	Result	Spike Conc.	Spike Conc.								
Antimony, Dissolved	mg/L	ND	0.1	0.1	0.11	0.11	101	104	75-125	2	20		
Arsenic, Dissolved	mg/L	ND	0.1	0.1	0.098	0.097	98	96	75-125	1	20		
Barium, Dissolved	mg/L	35.0 ug/L	0.1	0.1	0.13	0.14	100	103	75-125	2	20		
Beryllium, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Cadmium, Dissolved	mg/L	ND	0.1	0.1	0.099	0.10	98	99	75-125	1	20		
Chromium, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	99	102	75-125	3	20		
Cobalt, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	97	99	75-125	2	20		
Lead, Dissolved	mg/L	ND	0.1	0.1	0.096	0.10	96	100	75-125	4	20		
Lithium, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	99	101	75-125	2	20		
Molybdenum, Dissolved	mg/L	ND	0.1	0.1	0.11	0.11	101	104	75-125	3	20		
Selenium, Dissolved	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20		
Thallium, Dissolved	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20		

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## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622501

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2622501

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622501001	GWA-7	EPA 3005A	34497	EPA 6020B	34520
2622501002	GWB-6R	EPA 3005A	34497	EPA 6020B	34520
2622501001	GWA-7	EPA 7470A	34689	EPA 7470A	34709
2622501002	GWB-6R	EPA 7470A	34689	EPA 7470A	34709

### REPORT OF LABORATORY ANALYSIS

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## CHAIN OF CUSTODY RECORD

Pace Analytical<sup>®</sup>  
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 : FAX (770) 734-4201

PAGE: 21 of 21

CLIENT NAME:		ANALYSIS REQUESTED										PRESERVATION	
Georgia Power		CONTAINER TYPE:	P	P	P	P	P	P	P	P	P	P	P
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:		PRESERVATION:	3	7	3								
241 Ralph McGill Blvd SE B103B5 Atlanta, GA 30308 404-506-7239		# of											
REPORT TO: <u>E.PEARY@ATLCO.NET</u>		CC:	C	O	N	T	A	I	N	E	R	S	
REQUESTED COMPLETION DATE:		PO #:											
PROJECT NAME/STATE:		Plant Kraft Grumman Road											
PROJECT #:		2019 AIV Scan Event											
Collection DATE		Collection TIME	MATRIX CODE*	G	O	R	M	A	SAMPLE IDENTIFICATION	Fluoride			
8/26/19		16:15	GW	X	X	GWB-7	P	B		Metals App. VI (EPA 6020/7470)			
8/27/19		14:15	GW	X	GWB-GR					Radiium 226 & 228 (SW-846 9315/9320)			
SAMPLER BY AND TITLE:		DATE/TIME:		DATE/TIME:		RELINQUISHED BY:		DATE/TIME:		LAB #:			
D. FUDDEA-(Sr. II)		08/27/19 17:15		08/27/19 08:30		<u>Jerry</u>		08/27/19 08:30		FOR LAB USE ONLY			
RECEIVED BY LAB:		DATE/TIME:		DATE/TIME:		RELINQUISHED BY:		DATE/TIME:		LAB #:			
<u>Jerry Johnson</u>		08/27/19 13:45		08/27/19 08:30									
pH checked: Yes		Temperature: 40° F		Shipped via: UPS		SAMPLE SHIPPED VIA: FED-EX		CLIENT: F of Coolers		OTHER FS			
ICP checked: No		Mfr. No. NA		Breakaway Seal: Intact Broken		ARRIER: USPS		Courier ID: Not Present		Cooler ID: Not Present			

**MO# : 2622501**

2622501

Entered into LIMS:  
Tracking #: 2622501

Copies of Plant Kraft - Grumman Rd COC - 2019 AIV SCAN EVENT.xlsx



## Sample Condition Upon Receipt

Client Name: GAPower Project # \_\_\_\_\_Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yesPacking Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_Thermometer Used 83Type of Ice: Wet Blue NoneWO# : **2622501**

PM: BM Due Date: 09/05/19

Cooler Temperature 40

Biological Tissue is Frozen: Yes No

CLIENT: GAPower-CCR

Temp should be above freezing to 6°C

Comments: \_\_\_\_\_

 Samples on ice, cooling process has begunDate and Initials of person examining  
contents: 8/28/19 MW

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered volume received for Dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.	
-Includes date/time/ID/Analysis Matrix:	<u>W</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):			

## Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Manager Review: \_\_\_\_\_

Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

December 11, 2019

Joju Abraham  
Georgia Power - Coal Combustion Residuals  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This revised report replaces the report issued on 9/9/2019. The report has been revised to correct the project-required RLs per consultant request. No other changes have been made to this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for  
Betsy McDaniel  
betsy.mcdaniel@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Betsy McDaniel, Atlantic Coast Consulting  
Chris Parker, Atlantic Coast Consulting  
Evan Perry, Atlantic Coast Consulting  
Lauren Petty, Southern Company Services, Inc.  
Rebecca Thornton, Pace Analytical Atlanta



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

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### **Pace Analytical Services Atlanta**

110 Technology Parkway Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812  
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001  
Virginia Certification #: 460204

### **Pace Analytical Services Asheville**

2225 Riverside Drive, Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
Massachusetts Certification #: M-NC030  
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40  
South Carolina Certification #: 99030001  
Virginia/VELAP Certification #: 460222

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622502001	GWA-7	Water	08/26/19 16:15	08/28/19 13:45
2622502002	GWC-15	Water	08/27/19 09:25	08/28/19 13:45
2622502003	GWC-14	Water	08/27/19 10:20	08/28/19 13:45
2622502004	GWC-2	Water	08/27/19 11:15	08/28/19 13:45
2622502005	GWC-13	Water	08/27/19 12:30	08/28/19 13:45
2622502006	GWB-6R	Water	08/27/19 14:15	08/28/19 13:45
2622502007	GWB-4R	Water	08/27/19 17:15	08/28/19 13:45
2622502008	GWA-8	Water	08/26/19 15:40	08/28/19 13:45
2622502009	FB-1-8-27-19	Water	08/27/19 09:10	08/28/19 13:45
2622502010	GWC-12	Water	08/27/19 09:30	08/28/19 13:45
2622502011	GWC-11	Water	08/27/19 11:55	08/28/19 13:45
2622502012	GWC-22	Water	08/27/19 14:30	08/28/19 13:45
2622502013	EB-1-8-27-19	Water	08/27/19 15:30	08/28/19 13:45
2622502014	GWC-1	Water	08/27/19 17:00	08/28/19 13:45
2622502015	Dup-1	Water	08/27/19 00:00	08/28/19 13:45

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622502001	GWA-7	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0	MWB	1	PASI-GA
2622502002	GWC-15	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0	MWB	1	PASI-GA
2622502003	GWC-14	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0	MWB	1	PASI-GA
2622502004	GWC-2	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0	MWB	1	PASI-GA
2622502005	GWC-13	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0	MWB	1	PASI-GA
2622502006	GWB-6R	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0	MWB	1	PASI-GA
2622502007	GWB-4R	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0	MWB	1	PASI-GA
2622502008	GWA-8	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2622502009	FB-1-8-27-19	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2622502010	GWC-12	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2622502011	GWC-11	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2622502012	GWC-22	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2622502013	EB-1-8-27-19	EPA 6020B	CSW	12	PASI-GA

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## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622502014	GWC-1	EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
	Dup-1	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
2622502015	Dup-1	EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
		EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: GWA-7	Lab ID: 2622502001	Collected: 08/26/19 16:15	Received: 08/28/19 13:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.015	0.0014	5	08/29/19 18:05	09/03/19 22:40	7440-36-0	D3
Arsenic	<b>0.0041J</b>	mg/L	0.025	0.0018	5	08/29/19 18:05	09/03/19 22:40	7440-38-2	D3
Barium	<b>0.11</b>	mg/L	0.050	0.0024	5	08/29/19 18:05	09/03/19 22:40	7440-39-3	
Beryllium	ND	mg/L	0.015	0.00037	5	08/29/19 18:05	09/03/19 22:40	7440-41-7	D3
Cadmium	ND	mg/L	0.012	0.00057	5	08/29/19 18:05	09/03/19 22:40	7440-43-9	D3
Chromium	<b>0.024J</b>	mg/L	0.050	0.0020	5	08/29/19 18:05	09/03/19 22:40	7440-47-3	D3
Cobalt	<b>0.0037J</b>	mg/L	0.025	0.0015	5	08/29/19 18:05	09/03/19 22:40	7440-48-4	D3
Lead	<b>0.013J</b>	mg/L	0.025	0.00023	5	08/29/19 18:05	09/03/19 22:40	7439-92-1	D3
Lithium	ND	mg/L	0.15	0.0039	5	08/29/19 18:05	09/03/19 22:40	7439-93-2	D3
Molybdenum	ND	mg/L	0.050	0.0047	5	08/29/19 18:05	09/03/19 22:40	7439-98-7	D3
Selenium	ND	mg/L	0.050	0.0063	5	08/29/19 18:05	09/03/19 22:40	7782-49-2	D3
Thallium	ND	mg/L	0.0050	0.00026	5	08/29/19 18:05	09/03/19 22:40	7440-28-0	D3
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 14:52	7439-97-6	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Fluoride	ND	mg/L	0.30	0.029	1		09/04/19 04:53	16984-48-8	

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: GWC-15		Lab ID: 2622502002		Collected: 08/27/19 09:25		Received: 08/28/19 13:45		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>								Analytical Method: EPA 6020B Preparation Method: EPA 3005A	
Antimony	ND	mg/L	0.0030	0.00027	1	08/29/19 18:05	09/03/19 22:46	7440-36-0	
Arsenic	<b>0.17</b>	mg/L	0.0050	0.00035	1	08/29/19 18:05	09/03/19 22:46	7440-38-2	
Barium	<b>0.049</b>	mg/L	0.010	0.00049	1	08/29/19 18:05	09/03/19 22:46	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/29/19 18:05	09/03/19 22:46	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/29/19 18:05	09/03/19 22:46	7440-43-9	
Chromium	<b>0.0016J</b>	mg/L	0.010	0.00039	1	08/29/19 18:05	09/03/19 22:46	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/29/19 18:05	09/03/19 22:46	7440-48-4	
Lead	<b>0.00033J</b>	mg/L	0.0050	0.000046	1	08/29/19 18:05	09/03/19 22:46	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/29/19 18:05	09/03/19 22:46	7439-93-2	
Molybdenum	<b>0.095</b>	mg/L	0.010	0.00095	1	08/29/19 18:05	09/03/19 22:46	7439-98-7	
Selenium	<b>0.0092J</b>	mg/L	0.010	0.0013	1	08/29/19 18:05	09/03/19 22:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/29/19 18:05	09/03/19 22:46	7440-28-0	
<b>7470 Mercury</b>								Analytical Method: EPA 7470A Preparation Method: EPA 7470A	
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:13	7439-97-6	
<b>300.0 IC Anions 28 Days</b>								Analytical Method: EPA 300.0	
Fluoride	ND	mg/L	0.30	0.029	1			09/04/19 05:16	16984-48-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: GWC-14		Lab ID: 2622502003		Collected: 08/27/19 10:20		Received: 08/28/19 13:45		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	08/29/19 18:05	09/03/19 22:51	7440-36-0	
Arsenic	<b>0.0017J</b>	mg/L	0.0050	0.00035	1	08/29/19 18:05	09/03/19 22:51	7440-38-2	
Barium	<b>0.067</b>	mg/L	0.010	0.00049	1	08/29/19 18:05	09/03/19 22:51	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/29/19 18:05	09/03/19 22:51	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/29/19 18:05	09/03/19 22:51	7440-43-9	
Chromium	<b>0.0010J</b>	mg/L	0.010	0.00039	1	08/29/19 18:05	09/03/19 22:51	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/29/19 18:05	09/03/19 22:51	7440-48-4	
Lead	<b>0.00051J</b>	mg/L	0.0050	0.000046	1	08/29/19 18:05	09/03/19 22:51	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/29/19 18:05	09/03/19 22:51	7439-93-2	
Molybdenum	<b>0.028</b>	mg/L	0.010	0.00095	1	08/29/19 18:05	09/03/19 22:51	7439-98-7	
Selenium	<b>0.0035J</b>	mg/L	0.010	0.0013	1	08/29/19 18:05	09/03/19 22:51	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/29/19 18:05	09/03/19 22:51	7440-28-0	
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:15	7439-97-6	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Fluoride	ND	mg/L	0.30	0.029	1		09/04/19 05:39	16984-48-8	

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: GWC-2	Lab ID: 2622502004	Collected: 08/27/19 11:15	Received: 08/28/19 13:45	Matrix: Water				
Parameters	Results	Units	Report	Prepared	Analyzed	CAS No.	Qual	
			Limit					
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A						
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/03/19 23:26	7440-36-0
Arsenic	ND	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/03/19 23:26	7440-38-2
Barium	<b>0.053</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/03/19 23:26	7440-39-3
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/03/19 23:26	7440-41-7
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/03/19 23:26	7440-43-9
Chromium	ND	mg/L	0.010	0.00039	1	08/30/19 16:08	09/03/19 23:26	7440-47-3
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/03/19 23:26	7440-48-4
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/03/19 23:26	7439-92-1
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/03/19 23:26	7439-93-2
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/03/19 23:26	7439-98-7
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/03/19 23:26	7782-49-2
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/03/19 23:26	7440-28-0
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:18	7439-97-6
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Fluoride	ND	mg/L	0.30	0.029	1		09/04/19 06:01	16984-48-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: GWC-13	Lab ID: 2622502005	Collected: 08/27/19 12:30	Received: 08/28/19 13:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/03/19 23:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/03/19 23:31	7440-38-2	
Barium	<b>0.024</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/03/19 23:31	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/03/19 23:31	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/03/19 23:31	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/30/19 16:08	09/03/19 23:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/03/19 23:31	7440-48-4	
Lead	<b>0.00010J</b>	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/03/19 23:31	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/03/19 23:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/03/19 23:31	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/03/19 23:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/03/19 23:31	7440-28-0	
<b>7470 Mercury</b>	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:20	7439-97-6	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0								
Fluoride	ND	mg/L	0.30	0.029	1		09/04/19 07:32	16984-48-8	

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: GWB-6R		Lab ID: 2622502006		Collected: 08/27/19 14:15		Received: 08/28/19 13:45		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>								Analytical Method: EPA 6020B Preparation Method: EPA 3005A	
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/03/19 23:37	7440-36-0	
Arsenic	<b>0.0035J</b>	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/03/19 23:37	7440-38-2	
Barium	<b>0.013</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/03/19 23:37	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/03/19 23:37	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/03/19 23:37	7440-43-9	
Chromium	<b>0.0097J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/03/19 23:37	7440-47-3	
Cobalt	<b>0.00038J</b>	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/03/19 23:37	7440-48-4	
Lead	<b>0.0011J</b>	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/03/19 23:37	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/03/19 23:37	7439-93-2	
Molybdenum	<b>0.0026J</b>	mg/L	0.010	0.00095	1	08/30/19 16:08	09/03/19 23:37	7439-98-7	
Selenium	<b>0.0033J</b>	mg/L	0.010	0.0013	1	08/30/19 16:08	09/03/19 23:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/03/19 23:37	7440-28-0	
<b>7470 Mercury</b>								Analytical Method: EPA 7470A Preparation Method: EPA 7470A	
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:23	7439-97-6	
<b>300.0 IC Anions 28 Days</b>								Analytical Method: EPA 300.0	
Fluoride	<b>0.13J</b>	mg/L	0.30	0.029	1			09/04/19 07:54	16984-48-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: GWB-4R	Lab ID: 2622502007	Collected: 08/27/19 17:15	Received: 08/28/19 13:45	Matrix: Water				
Parameters	Results	Units	Report	Prepared	Analyzed	CAS No.	Qual	
			Limit					
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A						
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/03/19 23:43	7440-36-0
Arsenic	<b>0.0023J</b>	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/03/19 23:43	7440-38-2
Barium	<b>0.076</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/03/19 23:43	7440-39-3
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/03/19 23:43	7440-41-7
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/03/19 23:43	7440-43-9
Chromium	<b>0.0027J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/03/19 23:43	7440-47-3
Cobalt	<b>0.0011J</b>	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/03/19 23:43	7440-48-4
Lead	<b>0.0010J</b>	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/03/19 23:43	7439-92-1
Lithium	<b>0.013J</b>	mg/L	0.030	0.00078	1	08/30/19 16:08	09/03/19 23:43	7439-93-2
Molybdenum	<b>0.10</b>	mg/L	0.010	0.00095	1	08/30/19 16:08	09/03/19 23:43	7439-98-7
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/03/19 23:43	7782-49-2
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/03/19 23:43	7440-28-0
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:25	7439-97-6
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Fluoride	<b>0.031J</b>	mg/L	0.30	0.029	1		09/04/19 08:17	16984-48-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: GWA-8	Lab ID: 2622502008		Collected: 08/26/19 15:40	Received: 08/28/19 13:45	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/03/19 23:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/03/19 23:49	7440-38-2	
Barium	<b>0.065</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/03/19 23:49	7440-39-3	
Beryllium	<b>0.00021J</b>	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/03/19 23:49	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/03/19 23:49	7440-43-9	
Chromium	<b>0.0010J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/03/19 23:49	7440-47-3	
Cobalt	<b>0.00042J</b>	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/03/19 23:49	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/03/19 23:49	7439-92-1	
Lithium	<b>0.0012J</b>	mg/L	0.030	0.00078	1	08/30/19 16:08	09/03/19 23:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/03/19 23:49	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/03/19 23:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/03/19 23:49	7440-28-0	
<b>7470 Mercury</b>	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:27	7439-97-6	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	<b>0.13</b>	mg/L	0.10	0.050	1		09/06/19 17:32	16984-48-8	

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: FB-1-8-27-19		Lab ID: 2622502009		Collected: 08/27/19 09:10		Received: 08/28/19 13:45		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>								Analytical Method: EPA 6020B Preparation Method: EPA 3005A	
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/03/19 23:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/03/19 23:54	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	08/30/19 16:08	09/03/19 23:54	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/03/19 23:54	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/03/19 23:54	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/30/19 16:08	09/03/19 23:54	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/03/19 23:54	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/03/19 23:54	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/03/19 23:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/03/19 23:54	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/03/19 23:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/03/19 23:54	7440-28-0	
<b>7470 Mercury</b>								Analytical Method: EPA 7470A Preparation Method: EPA 7470A	
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:30	7439-97-6	
<b>300.0 IC Anions 28 Days</b>								Analytical Method: EPA 300.0 Rev 2.1 1993	
Fluoride	ND	mg/L	0.10	0.050	1			09/06/19 17:46	16984-48-8 M1,R1

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: GWC-12	Lab ID: 2622502010	Collected: 08/27/19 09:30	Received: 08/28/19 13:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 00:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 00:00	7440-38-2	
Barium	<b>0.017</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 00:00	7440-39-3	
Beryllium	<b>0.00047J</b>	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 00:00	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 00:00	7440-43-9	
Chromium	<b>0.00085J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 00:00	7440-47-3	
Cobalt	<b>0.00090J</b>	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 00:00	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 00:00	7439-92-1	
Lithium	<b>0.00094J</b>	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 00:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 00:00	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 00:00	7782-49-2	
Thallium	<b>0.00011J</b>	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 00:00	7440-28-0	
<b>7470 Mercury</b>	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:32	7439-97-6	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	<b>0.30</b>	mg/L	0.10	0.050	1		09/06/19 18:28	16984-48-8	

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: GWC-11	Lab ID: 2622502011	Collected: 08/27/19 11:55	Received: 08/28/19 13:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	<b>0.00033J</b>	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 00:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 00:06	7440-38-2	
Barium	<b>0.12</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 00:06	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 00:06	7440-41-7	
Cadmium	<b>0.00044J</b>	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 00:06	7440-43-9	
Chromium	<b>0.00092J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 00:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 00:06	7440-48-4	
Lead	<b>0.00021J</b>	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 00:06	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 00:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 00:06	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 00:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 00:06	7440-28-0	
<b>7470 Mercury</b>	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:34	7439-97-6	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.10	0.050	1		09/06/19 18:42	16984-48-8	

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: GWC-22	Lab ID: 2622502012	Collected: 08/27/19 14:30	Received: 08/28/19 13:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	<b>0.00045J</b>	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 00:40	7440-36-0	
Arsenic	<b>0.00044J</b>	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 00:40	7440-38-2	
Barium	<b>0.097</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 00:40	7440-39-3	
Beryllium	<b>0.000090J</b>	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 00:40	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 00:40	7440-43-9	
Chromium	<b>0.00057J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 00:40	7440-47-3	
Cobalt	<b>0.00077J</b>	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 00:40	7440-48-4	
Lead	<b>0.0030J</b>	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 00:40	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 00:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 00:40	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 00:40	7782-49-2	
Thallium	<b>0.000086J</b>	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 00:40	7440-28-0	
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:42	7439-97-6	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993							
Fluoride	<b>0.10</b>	mg/L	0.10	0.050	1		09/06/19 19:25	16984-48-8	

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: EB-1-8-27-19		Lab ID: 2622502013		Collected: 08/27/19 15:30		Received: 08/28/19 13:45		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>								Analytical Method: EPA 6020B Preparation Method: EPA 3005A	
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 00:46	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 00:46	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 00:46	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 00:46	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 00:46	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 00:46	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 00:46	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 00:46	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 00:46	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 00:46	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 00:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 00:46	7440-28-0	
<b>7470 Mercury</b>								Analytical Method: EPA 7470A Preparation Method: EPA 7470A	
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:44	7439-97-6	
<b>300.0 IC Anions 28 Days</b>								Analytical Method: EPA 300.0 Rev 2.1 1993	
Fluoride	ND	mg/L	0.10	0.050	1			09/06/19 19:39	16984-48-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: GWC-1	Lab ID: 2622502014	Collected: 08/27/19 17:00	Received: 08/28/19 13:45	Matrix: Water			
Parameters	Results	Units	Report	Prepared	Analyzed	CAS No.	Qual
			Limit				
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A					
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 00:52 7440-36-0
Arsenic	<b>0.0022J</b>	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 00:52 7440-38-2
Barium	<b>0.054</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 00:52 7440-39-3
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 00:52 7440-41-7
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 00:52 7440-43-9
Chromium	<b>0.0062J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 00:52 7440-47-3
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 00:52 7440-48-4
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 00:52 7439-92-1
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 00:52 7439-93-2
Molybdenum	<b>0.060</b>	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 00:52 7439-98-7
Selenium	<b>0.0016J</b>	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 00:52 7782-49-2
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 00:52 7440-28-0
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A					
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:46 7439-97-6
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993					
Fluoride	ND	mg/L	0.10	0.050	1		09/06/19 19:53 16984-48-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Sample: Dup-1	Lab ID: 2622502015	Collected: 08/27/19 00:00	Received: 08/28/19 13:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 00:57	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 00:57	7440-38-2	
Barium	<b>0.023</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 00:57	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 00:57	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 00:57	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 00:57	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 00:57	7440-48-4	
Lead	<b>0.000091J</b>	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 00:57	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 00:57	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 00:57	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 00:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 00:57	7440-28-0	
<b>7470 Mercury</b>	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	08/30/19 11:45	08/30/19 15:49	7439-97-6	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.10	0.050	1		09/06/19 20:07	16984-48-8	

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## **QUALITY CONTROL DATA**

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

QC Batch: 34545 Analysis Method: EPA 7470A  
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
Associated Lab Samples: 2622502001, 2622502002, 2622502003, 2622502004, 2622502005, 2622502006, 2622502007, 2622502008,  
2622502009, 2622502010, 2622502011, 2622502012, 2622502013, 2622502014, 2622502015

METHOD BLANK: 155582 Matrix: Water  
Associated Lab Samples: 2622502001, 2622502002, 2622502003, 2622502004, 2622502005, 2622502006, 2622502007, 2622502008,  
2622502009, 2622502010, 2622502011, 2622502012, 2622502013, 2622502014, 2622502015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	08/30/19 14:47	

LABORATORY CONTROL SAMPLE: 155583

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155584 155585

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2622502001	Spike Conc.	Spike Conc.	MS Result								
Mercury	mg/L	ND	0.0025	0.0025	0.0021	0.0021	84	85	75-125	1	20		

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

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## **QUALITY CONTROL DATA**

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622502

QC Batch: 34528 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020B MET  
Associated Lab Samples: 2622502001, 2622502002, 2622502003

METHOD BLANK: 155360 Matrix: Water

Associated Lab Samples: 2622502001, 2622502002, 2622502003

Parameter	Units	Blank	Reporting	MDL	Analyzed	Qualifiers
		Result	Limit			
Antimony	mg/L	ND	0.0030	0.00027	09/03/19 20:11	
Arsenic	mg/L	ND	0.0050	0.00035	09/03/19 20:11	
Barium	mg/L	ND	0.010	0.00049	09/03/19 20:11	
Beryllium	mg/L	ND	0.0030	0.000074	09/03/19 20:11	
Cadmium	mg/L	ND	0.0025	0.00011	09/03/19 20:11	
Chromium	mg/L	ND	0.010	0.00039	09/03/19 20:11	
Cobalt	mg/L	ND	0.0050	0.00030	09/03/19 20:11	
Lead	mg/L	ND	0.0050	0.000046	09/03/19 20:11	
Lithium	mg/L	ND	0.030	0.00078	09/03/19 20:11	
Molybdenum	mg/L	ND	0.010	0.00095	09/03/19 20:11	
Selenium	mg/L	ND	0.010	0.0013	09/03/19 20:11	
Thallium	mg/L	ND	0.0010	0.000052	09/03/19 20:11	

LABORATORY CONTROL SAMPLE: 155361

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.12	118	80-120	
Arsenic	mg/L	0.1	0.10	105	80-120	
Barium	mg/L	0.1	0.11	105	80-120	
Beryllium	mg/L	0.1	0.11	109	80-120	
Cadmium	mg/L	0.1	0.11	108	80-120	
Chromium	mg/L	0.1	0.11	107	80-120	
Cobalt	mg/L	0.1	0.11	106	80-120	
Lead	mg/L	0.1	0.10	105	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.11	108	80-120	
Selenium	mg/L	0.1	0.11	107	80-120	
Thallium	mg/L	0.1	0.10	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155362 155363

Parameter	Units	MS		MSD		MS Result	% Rec	MSD		% Rec Limits	RPD	Max RPD	Qual
		2622481002	Spike Conc.	Spike Conc.	MS Result			MSD % Rec	% Rec				
Antimony	mg/L	ND	0.1	0.1	0.11	0.12	114	117	75-125	2	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	100	103	75-125	3	20		
Barium	mg/L	0.027	0.1	0.1	0.13	0.13	101	107	75-125	4	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.11	103	106	75-125	2	20		

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## **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622502

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MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155362      155363

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max	
		2622481002	Spike Conc.	Spike Conc.	MS Result						RPD	RPD
Chromium	mg/L	0.0018J	0.1	0.1	0.11	0.11	104	107	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.11	103	107	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.10	101	104	75-125	3	20	
Lithium	mg/L	0.0014J	0.1	0.1	0.10	0.10	100	103	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	106	110	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.11	103	106	75-125	4	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	3	20	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

QC Batch:	34568	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020B MET
Associated Lab Samples:	2622502004, 2622502005, 2622502006, 2622502007, 2622502008, 2622502009, 2622502010, 2622502011, 2622502012, 2622502013, 2622502014, 2622502015		

METHOD BLANK: 155672 Matrix: Water

Associated Lab Samples: 2622502004, 2622502005, 2622502006, 2622502007, 2622502008, 2622502009, 2622502010, 2622502011,  
2622502012, 2622502013, 2622502014, 2622502015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/03/19 23:14	
Arsenic	mg/L	ND	0.0050	0.00035	09/03/19 23:14	
Barium	mg/L	ND	0.010	0.00049	09/03/19 23:14	
Beryllium	mg/L	ND	0.0030	0.000074	09/03/19 23:14	
Cadmium	mg/L	ND	0.0025	0.00011	09/03/19 23:14	
Chromium	mg/L	ND	0.010	0.00039	09/03/19 23:14	
Cobalt	mg/L	ND	0.0050	0.00030	09/03/19 23:14	
Lead	mg/L	ND	0.0050	0.000046	09/03/19 23:14	
Lithium	mg/L	ND	0.030	0.00078	09/03/19 23:14	
Molybdenum	mg/L	ND	0.010	0.00095	09/03/19 23:14	
Selenium	mg/L	ND	0.010	0.0013	09/03/19 23:14	
Thallium	mg/L	ND	0.0010	0.000052	09/03/19 23:14	

LABORATORY CONTROL SAMPLE: 155673

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	112	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.10	103	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155674 155675

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2622502011 Result	Spike Conc.	Spike Conc.	MS Result						
Antimony	mg/L	0.00033J	0.1	0.1	0.11	0.12	114	118	75-125	4	20
Arsenic	mg/L	ND	0.1	0.1	0.10	0.11	102	106	75-125	4	20
Barium	mg/L	0.12	0.1	0.1	0.22	0.22	100	107	75-125	3	20
Beryllium	mg/L	ND	0.1	0.1	0.10	0.11	101	106	75-125	5	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622502

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 155674      155675

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max	
		2622502011	Spike Conc.	Spike Conc.	MS Result						RPD	RPD
Cadmium	mg/L	0.00044J	0.1	0.1	0.10	0.11	103	105	75-125	2	20	
Chromium	mg/L	0.00092J	0.1	0.1	0.10	0.10	102	104	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	1	20	
Lead	mg/L	0.00021J	0.1	0.1	0.099	0.10	98	101	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.11	100	105	75-125	5	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	106	110	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.11	99	107	75-125	8	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

QC Batch:	34680	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
Associated Lab Samples:	2622502001, 2622502002, 2622502003, 2622502004, 2622502005, 2622502006, 2622502007		

METHOD BLANK: 156099 Matrix: Water

Associated Lab Samples: 2622502001, 2622502002, 2622502003, 2622502004, 2622502005, 2622502006, 2622502007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.30	0.029	09/03/19 20:58	

LABORATORY CONTROL SAMPLE: 156100

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	10	9.4	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 156101 156102

Parameter	Units	MS 2622398001 Result	MSD Spike Conc.	% Rec Limits	RPD	Max RPD	Qual						
Fluoride	mg/L	0.11J	10	10	9.4	9.2	92	91	90-110	1	15		

MATRIX SPIKE SAMPLE: 156103

Parameter	Units	2622402001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	ND	10	9.6	96	90-110	

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

QC Batch: 496440 Analysis Method: EPA 300.0 Rev 2.1 1993

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2622502008, 2622502009, 2622502010, 2622502011, 2622502012, 2622502013, 2622502014, 2622502015

METHOD BLANK: 2673683 Matrix: Water

Associated Lab Samples: 2622502008, 2622502009, 2622502010, 2622502011, 2622502012, 2622502013, 2622502014, 2622502015

Parameter	Units	Blank	Reporting	MDL	Analyzed	Qualifiers
		Result	Limit			
Fluoride	mg/L	ND	0.10	0.050	09/06/19 13:48	

LABORATORY CONTROL SAMPLE: 2673684

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Fluoride	mg/L	2.5	2.4	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2673685 2673686

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	RPD	Max
		2622572001	Spike	Spike	Spike	Result	Result	% Rec	% Rec	RPD	RPD
Fluoride	mg/L	0.78	2.5	2.5	2.5	4.9	4.8	164	160	90-110	2

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2673687 2673688

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	RPD	Max
		2622502009	Spike	Spike	Spike	Result	Result	% Rec	% Rec	RPD	RPD
Fluoride	mg/L	ND	2.5	2.5	2.5	3.1	2.7	124	106	90-110	16

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## QUALIFIERS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

### ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622502

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622502001	GWA-7	EPA 3005A	34528	EPA 6020B	34560
2622502002	GWC-15	EPA 3005A	34528	EPA 6020B	34560
2622502003	GWC-14	EPA 3005A	34528	EPA 6020B	34560
2622502004	GWC-2	EPA 3005A	34568	EPA 6020B	34599
2622502005	GWC-13	EPA 3005A	34568	EPA 6020B	34599
2622502006	GWB-6R	EPA 3005A	34568	EPA 6020B	34599
2622502007	GWB-4R	EPA 3005A	34568	EPA 6020B	34599
2622502008	GWA-8	EPA 3005A	34568	EPA 6020B	34599
2622502009	FB-1-8-27-19	EPA 3005A	34568	EPA 6020B	34599
2622502010	GWC-12	EPA 3005A	34568	EPA 6020B	34599
2622502011	GWC-11	EPA 3005A	34568	EPA 6020B	34599
2622502012	GWC-22	EPA 3005A	34568	EPA 6020B	34599
2622502013	EB-1-8-27-19	EPA 3005A	34568	EPA 6020B	34599
2622502014	GWC-1	EPA 3005A	34568	EPA 6020B	34599
2622502015	Dup-1	EPA 3005A	34568	EPA 6020B	34599
2622502001	GWA-7	EPA 7470A	34545	EPA 7470A	34574
2622502002	GWC-15	EPA 7470A	34545	EPA 7470A	34574
2622502003	GWC-14	EPA 7470A	34545	EPA 7470A	34574
2622502004	GWC-2	EPA 7470A	34545	EPA 7470A	34574
2622502005	GWC-13	EPA 7470A	34545	EPA 7470A	34574
2622502006	GWB-6R	EPA 7470A	34545	EPA 7470A	34574
2622502007	GWB-4R	EPA 7470A	34545	EPA 7470A	34574
2622502008	GWA-8	EPA 7470A	34545	EPA 7470A	34574
2622502009	FB-1-8-27-19	EPA 7470A	34545	EPA 7470A	34574
2622502010	GWC-12	EPA 7470A	34545	EPA 7470A	34574
2622502011	GWC-11	EPA 7470A	34545	EPA 7470A	34574
2622502012	GWC-22	EPA 7470A	34545	EPA 7470A	34574
2622502013	EB-1-8-27-19	EPA 7470A	34545	EPA 7470A	34574
2622502014	GWC-1	EPA 7470A	34545	EPA 7470A	34574
2622502015	Dup-1	EPA 7470A	34545	EPA 7470A	34574
2622502001	GWA-7	EPA 300.0	34680		
2622502002	GWC-15	EPA 300.0	34680		
2622502003	GWC-14	EPA 300.0	34680		
2622502004	GWC-2	EPA 300.0	34680		
2622502005	GWC-13	EPA 300.0	34680		
2622502006	GWB-6R	EPA 300.0	34680		
2622502007	GWB-4R	EPA 300.0	34680		
2622502008	GWA-8	EPA 300.0 Rev 2.1 1993	496440		
2622502009	FB-1-8-27-19	EPA 300.0 Rev 2.1 1993	496440		
2622502010	GWC-12	EPA 300.0 Rev 2.1 1993	496440		
2622502011	GWC-11	EPA 300.0 Rev 2.1 1993	496440		
2622502012	GWC-22	EPA 300.0 Rev 2.1 1993	496440		
2622502013	EB-1-8-27-19	EPA 300.0 Rev 2.1 1993	496440		
2622502014	GWC-1	EPA 300.0 Rev 2.1 1993	496440		
2622502015	Dup-1	EPA 300.0 Rev 2.1 1993	496440		

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## CHAIN OF CUSTODY RECORD



Pace Analytical Services, Inc.  
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OR 2

CLIENT NAME:		ANALYSIS REQUESTED										PRESERVATION													
Georgia Power		CONTAINER TYPE:	P	P	P	P	P	P	P	P	P	CONTAINER TYPE:	P - PLASTIC	A - AMBER GLASS	G - CLEAR GLASS	V - VOA VIAL	S - STERILE	O - OTHER	1 - HCl, ≤6°C	2 - H <sub>2</sub> SO <sub>4</sub> , ≤6°C	3 - HNO <sub>3</sub>	4 - NaOH, ≤6°C	5 - NaOH/ZnAc, ≤6°C	6 - Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , ≤6°C	7 - ≤6°C not frozen
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:		PREPARATION:	3	7	3							C	B	G	V	I	D								
241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		# of									O														
REPORT TO: <i>Plant Kraft -Grumman</i>		CC:									N														
REQUESTED COMPLETION DATE:		PO #:									T														
PROJECT NAME/STATE:		Plant Kraft Grumman Road										A	DW - DRINKING WATER	WW - WASTEWATER	GW - GROUNDWATER	SW - SURFACE WATER	ST - STORM WATER	W - WATER	S - SOIL	SL - SLUDGE	SD - SOLID	A - AIR	L - LIQUID	P - PRODUCT	
PROJECT #:		2019 AIV Scan Event										E													
Collection DATE		Collection TIME	MATRIX CODE*	C	O	R	M	A	N	A	SAMPLE IDENTIFICATION	Fluoride	Metals App. IV	EPAs 6020/7470	Radium 226 & 228	SW-B46 9315/9320	App IV only	REMARKS/ADDITIONAL INFORMATION							
8-26-19	1615	<i>GW</i>	X	X	X	X					<i>GWA-7</i>	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
8-27-19	0915	<i>GW</i>	X	X	X	X					<i>GWL-15</i>	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
8-27-19	1020	<i>GW</i>	X	X	X	X					<i>GWL-14</i>	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
8-27-19	1115	<i>GW</i>	X	X	X	X					<i>GWL-12</i>	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
8-27-19	1230	<i>GW</i>	X	X	X	X					<i>GWC-13</i>	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
8-27-19	1415	<i>GW</i>	X	X	X	X					<i>GWB-GR</i>	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
8-27-19	1715	<i>GW</i>	X	X	X	X					<i>GWB-4R</i>	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
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8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			
8-27-19		<i>GW</i>	X	X	X	X																			



**CHAIN OF CUSTODY RECORD**

Pace Analytical Services, Inc.  
1110 TECHNOLOGY PARKWAY  
(770) 734-4200 : FAX (770) 734-4201

PAGE: 2 OF 2

ANALYSIS REQUESTED												
CLIENT NAME: Georgia Power		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10-85 Atlanta, GA 30308 404-506-7239		PROJECT #: 2019 AIV Scan Event		CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER						
REQUESTED COMPLETION DATE: REPORT TO: <i>EPerry@atcll.net</i>		PO #: <i>Plant Kraft Grumman Road</i>		# of		PRESERVATION: 1 - HCl, ≤6°C 2 - H <sub>2</sub> SO <sub>4</sub> , ≤6°C 3 - HNO <sub>3</sub> 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , ≤6°C 7 - ≤6°C not frozen						
# C O N T A I N E R   T Y P E												
# M A T R I X   C O D E S:												
L CONTAINER TYPE A P - PLASTIC B A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER												
N M A T R I X   C O D E S:												
U M A T R I X   C O D E S:												
DW - DRINKING WATER   S - SOIL WW - WASTEWATER   SL - SLUDGE GW - GROUNDWATER   SD - SOLID SW - SURFACE WATER   A - AIR ST - STORM WATER   L - LIQUID W - WATER   P - PRODUCT												
REMARKS/ADDITIONAL INFORMATION												
App IV only												
(SW-846 9315/9320) Radium 226 & 228 (EPA 6020/7470)												
Metals App. VI Fluoride												
Collection DATE	Collection TIME	MATRIX CODE*	C O R M A P B	G	A	SAMPLE IDENTIFICATION						
8-26-19	1540	6w	X	6wA-8		4	V	V				
8-27-19	0910	w	X	FB-1-8-27-19		4	V	V	V	V	V	
8-27-19	0930	6+	X	6wC-12		4	V	V	V	V	V	
8-27-19	1155	6w	X	6wC-11		4	V	V	V	V	V	
8-27-19	1436	6w	X	6wC-22		4	V	V	V	V	V	
8-27-19	1530	w	X	EB-1-8-27-19		4	V	V	V	V	V	
8-27-19	1700	6w	X	6wC-1		6	V	V	V	V	V	
JO# : 2622502												
PM: BN Due Date: 09/05/19												
CLIENT: GAPower-CCR												
Entered into LIMS:												
Tracking #:												
FOR LAB USE ONLY												
LAB #: 0330												
DATETIME: 8-28-19 03:30												
DATETIME:												
SAMPLED BY AND TITLE: <i>J. Bentz-Jordan (F6)</i>												
RECEIVED BY: <i>Anna Dorian</i>												
RECEIVED BY LAB: <i>Yaya Luman</i>												
SAMPLE SHIPPED VIA: UPS FED-EX USPS												
COURIER:												
CLIENT: OTHER FS Cooler ID:												
Temperature: 41° F Max C° Min.												
Cooled Seal: Broken Not Present Inact.												
DATE/TIME: 8-27-19 1700 RELINQUISHED BY: <i>J. Bentz-Jordan (F6)</i>												
DATE/TIME: 08-28-19 03:30 RELINQUISHED BY:												

## Sample Condition Upon Receipt

*PaceAnalytical*Client Name: GAPower Project # \_\_\_\_\_Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yesPacking Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_Thermometer Used 83Type of Ice: Wet Blue NoneWO# : **2622502**

Due Date: 09/05/19

Cooler Temperature 40

Biological Tissue Is Frozen: Yes No

PM: BM

CLIENT: GAPower-CCR

Temp should be above freezing to 6°C

Comments: \_\_\_\_\_

 Samples on ice, cooling process has begunDate and Initials of person examining  
contents: 3/28/19 M

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12. <i>Dup-1 was not listed on the COC.</i>
-Includes date/time/ID/Analysis Matrix:	<i>w</i>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, californ, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Lot # of added preservative
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Pace Trip Blank Lot # (if purchased):		16.

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted:

Date/Time:

Comments/ Resolution: Dup-1 was added to the report.

Project Manager Review:

Date:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

September 24, 2019

Joju Abraham  
Georgia Power - Coal Combustion Residuals  
2480 Maner Road  
Atlanta, GA 30339

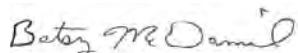
RE: Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622503

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Betsy McDaniel  
betsy.mcdaniel@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Chris Parker, Atlantic Coast Consulting  
Evan Perry, Atlantic Coast Consulting  
Lauren Petty, Southern Company Services, Inc.  
Rebecca Thornton, Pace Analytical Atlanta



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2622503

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### Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601	Missouri Certification #: 235
ANAB DOD-ELAP Rad Accreditation #: L2417	Montana Certification #: Cert0082
Alabama Certification #: 41590	Nebraska Certification #: NE-OS-29-14
Arizona Certification #: AZ0734	Nevada Certification #: PA014572018-1
Arkansas Certification	New Hampshire/TNI Certification #: 297617
California Certification #: 04222CA	New Jersey/TNI Certification #: PA051
Colorado Certification #: PA01547	New Mexico Certification #: PA01457
Connecticut Certification #: PH-0694	New York/TNI Certification #: 10888
Delaware Certification	North Carolina Certification #: 42706
EPA Region 4 DW Rad	North Dakota Certification #: R-190
Florida/TNI Certification #: E87683	Ohio EPA Rad Approval: #41249
Georgia Certification #: C040	Oregon/TNI Certification #: PA200002-010
Florida: Cert E871149 SEKS WET	Pennsylvania/TNI Certification #: 65-00282
Guam Certification	Puerto Rico Certification #: PA01457
Hawaii Certification	Rhode Island Certification #: 65-00282
Idaho Certification	South Dakota Certification
Illinois Certification	Tennessee Certification #: 02867
Indiana Certification	Texas/TNI Certification #: T104704188-17-3
Iowa Certification #: 391	Utah/TNI Certification #: PA014572017-9
Kansas/TNI Certification #: E-10358	USDA Soil Permit #: P330-17-00091
Kentucky Certification #: KY90133	Vermont Dept. of Health: ID# VT-0282
KY WW Permit #: KY0098221	Virgin Island/PADEP Certification
KY WW Permit #: KY0000221	Virginia/VELAP Certification #: 9526
Louisiana DHH/TNI Certification #: LA180012	Washington Certification #: C868
Louisiana DEQ/TNI Certification #: 4086	West Virginia DEP Certification #: 143
Maine Certification #: 2017020	West Virginia DHHR Certification #: 9964C
Maryland Certification #: 308	Wisconsin Approve List for Rad
Massachusetts Certification #: M-PA1457	Wyoming Certification #: 8TMS-L
Michigan/PADEP Certification #: 9991	

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2622503

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622503001	GWA-7	Water	08/26/19 16:15	08/28/19 13:45
2622503002	GWC-15	Water	08/27/19 09:25	08/28/19 13:45
2622503003	GWC-14	Water	08/27/19 10:20	08/28/19 13:45
2622503004	GWC-2	Water	08/27/19 11:15	08/28/19 13:45
2622503005	GWC-13	Water	08/27/19 12:30	08/28/19 13:45
2622503006	GWB-6R	Water	08/27/19 14:15	08/28/19 13:45
2622503007	GWB-4R	Water	08/27/19 17:15	08/28/19 13:45
2622503008	GWA-8	Water	08/26/19 15:40	08/28/19 13:45
2622503009	FB-1-8-27-19	Water	08/27/19 09:10	08/28/19 13:45
2622503010	GWC-12	Water	08/27/19 09:30	08/28/19 13:45
2622503011	GWC-11	Water	08/27/19 11:55	08/28/19 13:45
2622503012	GWC-22	Water	08/27/19 14:30	08/28/19 13:45
2622503013	EB-1-8-27-19	Water	08/27/19 15:30	08/28/19 13:45
2622503014	GWC-1	Water	08/27/19 17:00	08/28/19 13:45
2622503015	Dup-1	Water	08/27/19 00:00	08/28/19 13:45

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2622503

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622503001	GWA-7	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622503002	GWC-15	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622503003	GWC-14	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622503004	GWC-2	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622503005	GWC-13	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622503006	GWB-6R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622503007	GWB-4R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622503008	GWA-8	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622503009	FB-1-8-27-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622503010	GWC-12	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622503011	GWC-11	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622503012	GWC-22	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622503013	EB-1-8-27-19	EPA 9315	LAL	1	PASI-PA

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2622503

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622503014	GWC-1	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
2622503015	Dup-1	Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: GWA-7**      Lab ID: **2622503001**      Collected: 08/26/19 16:15      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>4.24 ± 0.830 (0.236)</b> C:61% T:NA	pCi/L	09/24/19 10:11	13982-63-3	
Radium-228	EPA 9320	<b>1.79 ± 0.668 (1.03)</b> C:75% T:81%	pCi/L	09/19/19 14:39	15262-20-1	
Total Radium	Total Radium Calculation	<b>6.03 ± 1.50 (1.27)</b>	pCi/L	09/24/19 12:59	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: GWC-15**      Lab ID: **2622503002**      Collected: 08/27/19 09:25      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.923 ± 0.366 (0.334)</b> C:95% T:NA	pCi/L	09/17/19 08:42	13982-63-3	
Radium-228	EPA 9320	<b>0.825 ± 0.462 (0.843)</b> C:78% T:85%	pCi/L	09/19/19 14:40	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.75 ± 0.828 (1.18)</b>	pCi/L	09/24/19 12:59	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

Sample: <b>GWC-14</b>	Lab ID: <b>2622503003</b>	Collected: 08/27/19 10:20	Received: 08/28/19 13:45	Matrix: Water
-----------------------	---------------------------	---------------------------	--------------------------	---------------

PWS:	Site ID:	Sample Type:
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Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.852 ± 0.389 (0.491)</b> C:86% T:NA	pCi/L	09/17/19 08:42	13982-63-3	
Radium-228	EPA 9320	<b>0.467 ± 0.405 (0.814)</b> C:75% T:81%	pCi/L	09/19/19 14:40	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.32 ± 0.794 (1.31)</b>	pCi/L	09/24/19 12:59	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2622503

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<b>Sample: GWC-2</b>	<b>Lab ID: 2622503004</b>	Collected: 08/27/19 11:15	Received: 08/28/19 13:45	Matrix: Water
PWS:	Site ID:	Sample Type:		

---

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.640 ± 0.326 (0.397)</b> C:92% T:NA	pCi/L	09/17/19 08:42	13982-63-3	
Radium-228	EPA 9320	<b>0.147 ± 0.437 (0.980)</b> C:79% T:75%	pCi/L	09/19/19 14:40	15262-20-1	
Total Radium	Total Radium Calculation	<b>0.787 ± 0.763 (1.38)</b>	pCi/L	09/24/19 12:59	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: GWC-13**      Lab ID: **2622503005**      Collected: 08/27/19 12:30      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.499 ± 0.278 (0.319)</b> C:91% T:NA	pCi/L	09/18/19 08:37	13982-63-3	
Radium-228	EPA 9320	<b>0.773 ± 0.469 (0.878)</b> C:72% T:75%	pCi/L	09/20/19 11:52	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.27 ± 0.747 (1.20)</b>	pCi/L	09/23/19 12:55	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: GWB-6R**      Lab ID: **2622503006**      Collected: 08/27/19 14:15      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>4.08 ± 0.937 (0.439)</b> C:89% T:NA	pCi/L	09/18/19 08:37	13982-63-3	
Radium-228	EPA 9320	<b>0.554 ± 0.554 (1.15)</b> C:71% T:68%	pCi/L	09/20/19 12:25	15262-20-1	
Total Radium	Total Radium Calculation	<b>4.63 ± 1.49 (1.59)</b>	pCi/L	09/23/19 12:55	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: GWB-4R**      Lab ID: **2622503007**      Collected: 08/27/19 17:15      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>2.03 ± 0.634 (0.469)</b> C:75% T:NA	pCi/L	09/18/19 08:37	13982-63-3	
Radium-228	EPA 9320	<b>0.941 ± 0.405 (0.634)</b> C:75% T:80%	pCi/L	09/20/19 11:53	15262-20-1	
Total Radium	Total Radium Calculation	<b>2.97 ± 1.04 (1.10)</b>	pCi/L	09/23/19 12:55	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: GWA-8**      Lab ID: **2622503008**      Collected: 08/26/19 15:40      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.69 ± 0.521 (0.310)</b> C:91% T:NA	pCi/L	09/17/19 08:42	13982-63-3	
Radium-228	EPA 9320	<b>1.34 ± 0.565 (0.928)</b> C:76% T:86%	pCi/L	09/19/19 14:39	15262-20-1	
Total Radium	Total Radium Calculation	<b>3.03 ± 1.09 (1.24)</b>	pCi/L	09/24/19 12:59	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: FB-1-8-27-19**      Lab ID: **2622503009**      Collected: 08/27/19 09:10      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.333 ± 0.258 (0.435)</b> C:91% T:NA	pCi/L	09/17/19 08:42	13982-63-3	
Radium-228	EPA 9320	<b>0.0955 ± 0.351 (0.797)</b> C:79% T:80%	pCi/L	09/19/19 14:40	15262-20-1	
Total Radium	Total Radium Calculation	<b>0.429 ± 0.609 (1.23)</b>	pCi/L	09/24/19 12:59	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: GWC-12**      Lab ID: **2622503010**      Collected: 08/27/19 09:30      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.34 ± 0.469 (0.402)</b> C:88% T:NA	pCi/L	09/17/19 08:42	13982-63-3	
Radium-228	EPA 9320	<b>0.746 ± 0.536 (1.05)</b> C:76% T:80%	pCi/L	09/19/19 15:41	15262-20-1	
Total Radium	Total Radium Calculation	<b>2.09 ± 1.01 (1.45)</b>	pCi/L	09/24/19 12:59	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: GWC-11**      Lab ID: **2622503011**      Collected: 08/27/19 11:55      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>2.75 ± 0.731 (0.557)</b> C:95% T:NA	pCi/L	09/18/19 08:31	13982-63-3	
Radium-228	EPA 9320	<b>2.34 ± 0.670 (0.810)</b> C:77% T:85%	pCi/L	09/20/19 11:52	15262-20-1	
Total Radium	Total Radium Calculation	<b>5.09 ± 1.40 (1.37)</b>	pCi/L	09/23/19 12:55	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: GWC-22**      Lab ID: **2622503012**      Collected: 08/27/19 14:30      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>3.75 ± 0.874 (0.401)</b> C:92% T:NA	pCi/L	09/18/19 08:37	13982-63-3	
Radium-228	EPA 9320	<b>3.29 ± 0.773 (0.565)</b> C:77% T:87%	pCi/L	09/20/19 11:53	15262-20-1	
Total Radium	Total Radium Calculation	<b>7.04 ± 1.65 (0.966)</b>	pCi/L	09/23/19 12:55	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: EB-1-8-27-19**      Lab ID: **2622503013**      Collected: 08/27/19 15:30      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.396 ± 0.277 (0.443)</b> C:94% T:NA	pCi/L	09/18/19 08:37	13982-63-3	
Radium-228	EPA 9320	<b>0.381 ± 0.316 (0.628)</b> C:79% T:81%	pCi/L	09/20/19 11:53	15262-20-1	
Total Radium	Total Radium Calculation	<b>0.777 ± 0.593 (1.07)</b>	pCi/L	09/23/19 12:55	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: GWC-1**      Lab ID: **2622503014**      Collected: 08/27/19 17:00      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.36 ± 0.472 (0.367)</b> C:92% T:NA	pCi/L	09/18/19 08:37	13982-63-3	
Radium-228	EPA 9320	<b>1.05 ± 0.420 (0.642)</b> C:78% T:83%	pCi/L	09/20/19 11:53	15262-20-1	
Total Radium	Total Radium Calculation	<b>2.41 ± 0.892 (1.01)</b>	pCi/L	09/23/19 12:55	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

**Sample: Dup-1**      Lab ID: **2622503015**      Collected: 08/27/19 00:00      Received: 08/28/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.645 ± 0.319 (0.389)</b> C:94% T:NA	pCi/L	09/17/19 08:42	13982-63-3	
Radium-228	EPA 9320	<b>0.0669 ± 0.345 (0.788)</b> C:78% T:85%	pCi/L	09/19/19 14:40	15262-20-1	
Total Radium	Total Radium Calculation	<b>0.712 ± 0.664 (1.18)</b>	pCi/L	09/24/19 12:59	7440-14-4	

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

QC Batch: 359960 Analysis Method: EPA 9315

QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Associated Lab Samples: 2622503001, 2622503002, 2622503003, 2622503004, 2622503008, 2622503009, 2622503010, 2622503015

METHOD BLANK: 1747379 Matrix: Water

Associated Lab Samples: 2622503001, 2622503002, 2622503003, 2622503004, 2622503008, 2622503009, 2622503010, 2622503015

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.192 ± 0.159 (0.292) C:91% T:NA	pCi/L	09/16/19 20:09	

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

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QC Batch: 359964 Analysis Method: EPA 9315

QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Associated Lab Samples: 2622503005, 2622503006, 2622503007, 2622503011, 2622503012, 2622503013, 2622503014

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METHOD BLANK: 1747386 Matrix: Water

Associated Lab Samples: 2622503005, 2622503006, 2622503007, 2622503011, 2622503012, 2622503013, 2622503014

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.204 ± 0.233 (0.472) C:94% T:NA	pCi/L	09/18/19 08:31	

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

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QC Batch: 359966 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Associated Lab Samples: 2622503005, 2622503006, 2622503007, 2622503011, 2622503012, 2622503013, 2622503014

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METHOD BLANK: 1747390 Matrix: Water

Associated Lab Samples: 2622503005, 2622503006, 2622503007, 2622503011, 2622503012, 2622503013, 2622503014

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.232 ± 0.311 (0.664) C:77% T:89%	pCi/L	09/20/19 11:52	

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

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QC Batch: 359961 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Associated Lab Samples: 2622503001, 2622503002, 2622503003, 2622503004, 2622503008, 2622503009, 2622503010, 2622503015

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METHOD BLANK: 1747380 Matrix: Water

Associated Lab Samples: 2622503001, 2622503002, 2622503003, 2622503004, 2622503008, 2622503009, 2622503010, 2622503015

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.232 ± 0.345 (0.742) C:77% T:84%	pCi/L	09/19/19 14:40	

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## QUALIFIERS

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622503

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622503

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622503001	GWA-7	EPA 9315	359960		
2622503002	GWC-15	EPA 9315	359960		
2622503003	GWC-14	EPA 9315	359960		
2622503004	GWC-2	EPA 9315	359960		
2622503005	GWC-13	EPA 9315	359964		
2622503006	GWB-6R	EPA 9315	359964		
2622503007	GWB-4R	EPA 9315	359964		
2622503008	GWA-8	EPA 9315	359960		
2622503009	FB-1-8-27-19	EPA 9315	359960		
2622503010	GWC-12	EPA 9315	359960		
2622503011	GWC-11	EPA 9315	359964		
2622503012	GWC-22	EPA 9315	359964		
2622503013	EB-1-8-27-19	EPA 9315	359964		
2622503014	GWC-1	EPA 9315	359964		
2622503015	Dup-1	EPA 9315	359960		
2622503001	GWA-7	EPA 9320	359961		
2622503002	GWC-15	EPA 9320	359961		
2622503003	GWC-14	EPA 9320	359961		
2622503004	GWC-2	EPA 9320	359961		
2622503005	GWC-13	EPA 9320	359966		
2622503006	GWB-6R	EPA 9320	359966		
2622503007	GWB-4R	EPA 9320	359966		
2622503008	GWA-8	EPA 9320	359961		
2622503009	FB-1-8-27-19	EPA 9320	359961		
2622503010	GWC-12	EPA 9320	359961		
2622503011	GWC-11	EPA 9320	359966		
2622503012	GWC-22	EPA 9320	359966		
2622503013	EB-1-8-27-19	EPA 9320	359966		
2622503014	GWC-1	EPA 9320	359966		
2622503015	Dup-1	EPA 9320	359961		
2622503001	GWA-7	Total Radium Calculation	362865		
2622503002	GWC-15	Total Radium Calculation	362865		
2622503003	GWC-14	Total Radium Calculation	362865		
2622503004	GWC-2	Total Radium Calculation	362865		
2622503005	GWC-13	Total Radium Calculation	362632		
2622503006	GWB-6R	Total Radium Calculation	362632		
2622503007	GWB-4R	Total Radium Calculation	362632		
2622503008	GWA-8	Total Radium Calculation	362865		
2622503009	FB-1-8-27-19	Total Radium Calculation	362865		
2622503010	GWC-12	Total Radium Calculation	362865		
2622503011	GWC-11	Total Radium Calculation	362632		
2622503012	GWC-22	Total Radium Calculation	362632		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2622503

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622503013	EB-1-8-27-19	Total Radium Calculation	362632		
2622503014	GWC-1	Total Radium Calculation	362632		
2622503015	Dup-1	Total Radium Calculation	362865		

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**CHAIN OF CUSTODY RECORD**

Pace Analytical Services, Inc.  
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 ; FAX (770) 734-4201

Pace Analytical Services, Inc.

110 TECHNOLOGY PARKWAY  
(770) 734-4200 : FAX (770) 7

PAGE:    OF

# CHAIN OF CUSTODY RECORD



Pace Analytical<sup>®</sup>  
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 : FAX (770) 734-4201

PAGE: 2 OF 2

ANALYSIS REQUESTED									
CLIENT NAME: Georgia Power	CONTAINER TYPE:		P	P	P	PRESERVATION			
CLIENT ADDRESS/SPHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-508-7239	# of	PRESERVATION:	3	7	3	A - PLASTIC	1 - HCl, ≤6°C		
REPORT TO: <i>Leanne Kraft</i> CC:			C - AMBER GLASS	G - CLEAR GLASS	V - VOA VIAL	S - STERILE	O - OTHER	2 - H <sub>2</sub> SO <sub>4</sub> , ≤6°C	
REQUESTED COMPLETION DATE:	PO #:						3 - HNO <sub>3</sub> , ≤6°C		
PROJECT NAME/STATE: Plant Kraft Grumman Road							4 - NaOH/ZnAc, ≤6°C		
PROJECT #: 2019 AIV Scan Event							5 - Na <sub>2</sub> SO <sub>3</sub> , ≤6°C		
Collection DATE	Collection TIME	MATRIX CODE*	C O R M A	G P B	6 - Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , ≤6°C				
8-26-19	1546	6.v	X	6wA-8	4	✓	✓	✓	7 - ≤6°C not frozen
8-27-19	0910	w	X	FB-1-8-27-19	4	✓	✓	✓	
8-27-19	0930	6.v	X	6wC-12	4	✓	✓	✓	
8-27-19	1155	GW	X	6wC-11	4	✓	✓	✓	
8-27-19	1436	GW	X	6wC-22	4	✓	✓	✓	
8-27-19	1530	w	X	EB-1-8-27-19	4	✓	✓	✓	
8-27-19	1700	GW	X	6wC-1	6	✓	✓	✓	
<b>WO# : 2622503</b>									
SAMPLED BY AND TITLE: <i>J. Bell (S0123)</i> (FB)	DATETIME:		RELINQUISHED BY:		RELINQUISHED BY:		FOR LAB USE ONLY		
RECEIVED BY <i>Leanne Kraft</i>	DATETIME: 08-28-19 0230		<i>Leanne Kraft</i>		<i>Leanne Kraft</i>		DATE/TIME: 08-28-19 0230	LAB #: 0230	
RECEIVED BY <i>Leanne Kraft</i>	DATETIME: 08-28-19 1045		SAMPLE SHIPPED VIA:		COURIER		Entered into LIMS:	Tracking #:	
PACKED IN:	Ice:	No	UPS	FED-EX	USPS	CLIENT	OTHER	FS	
Temperature:	Temp:	No	Carrier Seal:	Carrier Seal:	Carrier Seal:	Cooler ID:	Cooler ID:	Cooler ID:	
Shipped:	Shipped:	No	Intact	Intact	Intact	Not Present	Not Present	Not Present	

SAMPLED BY AND TITLE: <i>J. Bell (S0123)</i> (FB)	DATETIME:	RELINQUISHED BY:	RELINQUISHED BY:	FOR LAB USE ONLY
RECEIVED BY <i>Leanne Kraft</i>	DATETIME: 08-28-19 0230	<i>Leanne Kraft</i>	<i>Leanne Kraft</i>	Entered into LIMS:
RECEIVED BY <i>Leanne Kraft</i>	DATETIME: 08-28-19 1045	SAMPLE SHIPPED VIA:	COURIER	Tracking #:
PACKED IN:	Ice:	UPS	FED-EX	USPS
Temperature:	Temp:	Carrier Seal:	Carrier Seal:	Carrier Seal:
Shipped:	Shipped:	No	Intact	Not Present
Shipped:	Shipped:	No	Intact	Not Present



## Sample Condition Upon Receipt

Client Name: GAPowerProject # W0# : 2622503Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yesPacking Material:  Bubble Wrap  Bubble Bags  None  OtherThermometer Used 83Type of Ice:  Wet  Blue  None

PM: BM Due Date: 09/26/19

Cooler Temperature 40Biological Tissue Is Frozen: Yes  No

CLIENT: GAPower-CCR

Temp should be above freezing to 6°C

Comments: \_\_\_\_\_

 Samples on ice, cooling process has begunDate and Initials of person examining contents: 8/28/19 MR

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <i>Dup-1 was not listed on the COC.</i>	
-Includes date/time/ID/Analysis Matrix:	<i>W</i>		
All containers needing preservation have been checked:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):			

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: Dup-1 was added to the report.

Project Manager Review: \_\_\_\_\_

Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

December 11, 2019

Joju Abraham  
Georgia Power - Coal Combustion Residuals  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622578

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 29, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for  
Betsy McDaniel  
betsy.mcdaniel@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Betsy McDaniel, Atlantic Coast Consulting  
Chris Parker, Atlantic Coast Consulting  
Evan Perry, Atlantic Coast Consulting  
Lauren Petty, Southern Company Services, Inc.  
Rebecca Thornton, Pace Analytical Atlanta



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622578

---

### **Pace Analytical Services Atlanta**

110 Technology Parkway Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812  
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001  
Virginia Certification #: 460204

---

## REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622578

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622578001	GWB-5R	Water	08/28/19 15:50	08/29/19 11:52

## REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622578

Lab ID	Sample ID	Method	Analysts	Analytics Reported
2622578001	GWB-5R	EPA 6020B	CSW	10

## REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622578

Sample: GWB-5R	Lab ID: 2622578001	Collected: 08/28/19 15:50	Received: 08/29/19 11:52	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS, Dissolved</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony, Dissolved	ND	mg/L	0.0030	0.00027	1	09/03/19 13:22	09/04/19 11:50	7440-36-0	
Arsenic, Dissolved	<b>0.0022J</b>	mg/L	0.0050	0.00035	1	09/03/19 13:22	09/04/19 11:50	7440-38-2	
Barium, Dissolved	<b>0.098</b>	mg/L	0.010	0.00049	1	09/03/19 13:22	09/04/19 11:50	7440-39-3	
Boron, Dissolved	<b>5.6</b>	mg/L	0.040	0.0049	1	09/03/19 13:22	09/04/19 11:50	7440-42-8	M1
Calcium, Dissolved	<b>26.0</b>	mg/L	5.0	0.55	50	09/03/19 13:22	09/04/19 11:56	7440-70-2	M6
Chromium, Dissolved	<b>0.0062J</b>	mg/L	0.010	0.00039	1	09/03/19 13:22	09/04/19 11:50	7440-47-3	
Lead, Dissolved	<b>0.00014J</b>	mg/L	0.0050	0.000046	1	09/03/19 13:22	09/04/19 11:50	7439-92-1	
Selenium, Dissolved	<b>0.0018J</b>	mg/L	0.010	0.0013	1	09/03/19 13:22	09/04/19 11:50	7782-49-2	
Vanadium, Dissolved	<b>0.028</b>	mg/L	0.010	0.00071	1	09/03/19 13:22	09/04/19 11:50	7440-62-2	
Zinc, Dissolved	<b>0.0019J</b>	mg/L	0.010	0.0015	1	09/03/19 13:22	09/04/19 11:50	7440-66-6	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622578

QC Batch:	34656	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020B MET Dissolved
Associated Lab Samples:	2622578001		

METHOD BLANK: 156009                                  Matrix: Water

Associated Lab Samples: 2622578001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony, Dissolved	mg/L	ND	0.0030	0.00027	09/04/19 11:39	
Arsenic, Dissolved	mg/L	ND	0.0050	0.00035	09/04/19 11:39	
Barium, Dissolved	mg/L	ND	0.010	0.00049	09/04/19 11:39	
Boron, Dissolved	mg/L	ND	0.040	0.0049	09/04/19 11:39	
Calcium, Dissolved	mg/L	ND	0.10	0.011	09/04/19 11:39	
Chromium, Dissolved	mg/L	ND	0.010	0.00039	09/04/19 11:39	
Lead, Dissolved	mg/L	ND	0.0050	0.000046	09/04/19 11:39	
Selenium, Dissolved	mg/L	ND	0.010	0.0013	09/04/19 11:39	
Vanadium, Dissolved	mg/L	ND	0.010	0.00071	09/04/19 11:39	
Zinc, Dissolved	mg/L	ND	0.010	0.0015	09/04/19 11:39	

LABORATORY CONTROL SAMPLE: 156010

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	mg/L	0.1	0.12	118	80-120	
Arsenic, Dissolved	mg/L	0.1	0.10	103	80-120	
Barium, Dissolved	mg/L	0.1	0.11	105	80-120	
Boron, Dissolved	mg/L	1	1.1	105	80-120	
Calcium, Dissolved	mg/L	1	1.1	106	80-120	
Chromium, Dissolved	mg/L	0.1	0.11	105	80-120	
Lead, Dissolved	mg/L	0.1	0.10	102	80-120	
Selenium, Dissolved	mg/L	0.1	0.10	105	80-120	
Vanadium, Dissolved	mg/L	0.1	0.10	104	80-120	
Zinc, Dissolved	mg/L	0.1	0.11	105	80-120	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 156011                                  156012

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2622578001	Spike Conc.	Spike Conc.	MS Result						
Antimony, Dissolved	mg/L	ND	0.1	0.1	0.12	0.12	116	115	75-125	0	20
Arsenic, Dissolved	mg/L	0.0022J	0.1	0.1	0.10	0.11	102	105	75-125	2	20
Barium, Dissolved	mg/L	0.098	0.1	0.1	0.20	0.20	103	103	75-125	0	20
Boron, Dissolved	mg/L	5.6	1	1	6.7	6.9	107	129	75-125	3	20 M1
Calcium, Dissolved	mg/L	26.0	1	1	26.0	27.6	6	158	75-125	6	20 M6
Chromium, Dissolved	mg/L	0.0062J	0.1	0.1	0.11	0.11	103	105	75-125	1	20
Lead, Dissolved	mg/L	0.00014J	0.1	0.1	0.098	0.097	98	97	75-125	1	20
Selenium, Dissolved	mg/L	0.0018J	0.1	0.1	0.10	0.11	102	106	75-125	4	20
Vanadium, Dissolved	mg/L	0.028	0.1	0.1	0.14	0.14	107	108	75-125	0	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622578

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		156011		156012									
Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		2622578001	Spike Conc.	Spike Conc.	Result	Result	Result	% Rec	100	102	75-125		
Zinc, Dissolved	mg/L	0.0019J	0.1	0.1	0.10	0.10	0.10	100	102	102	75-125	2	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622578

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

M1        Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6        Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622578

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622578001	GWB-5R	EPA 3005A	34656	EPA 6020B	34674

## REPORT OF LABORATORY ANALYSIS

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**CHAIN OF CUSTODY RECORD**

Pace Analytical

Pace Analytical Services, Inc.  
110 TECHNOLOGY PARKWAY, PEA  
(770) 734-4200 : FAX (770) 734-4201

1110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 : FAX (770) 734-4201

PAGE  
1

7 OF

Page 10 of 11

**Plant Kraft Grumman Road State constituents:** As, Ba, Cr, Pb, Sb, Se, V, Zn

## Sample Condition Upon Receipt

Client Name: GAPower

Project #

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yesPacking Material:  Bubble Wrap  Bubble Bags  None  OtherThermometer Used 8.3Type of Ice: Wet Blue None

PM: BM

Due Date: 09/06/19

Cooler Temperature 0.4

Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

CLIENT: GAPower-CCR

Comments: \_\_\_\_\_

 Samples on ice, cooling process has begun  
 Date and Initials of person examining contents: B/29/19 M

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered volume received for Dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.	
-Includes date/time/ID/Analysis Matrix:	<u>W</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):			

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Manager Review: \_\_\_\_\_

Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

December 11, 2019

Joju Abraham  
Georgia Power - Coal Combustion Residuals  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 29, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This revised report replaces the report issued on 9/10/2019. The report has been revised to correct the project-required RLs per consultant request. No other changes have been made to this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for  
Betsy McDaniel  
betsy.mcdaniel@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Betsy McDaniel, Atlantic Coast Consulting  
Chris Parker, Atlantic Coast Consulting  
Evan Perry, Atlantic Coast Consulting  
Lauren Petty, Southern Company Services, Inc.  
Rebecca Thornton, Pace Analytical Atlanta



## REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

---

### Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812  
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001  
Virginia Certification #: 460204

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### Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
Massachusetts Certification #: M-NC030  
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40  
South Carolina Certification #: 99030001  
Virginia/VELAP Certification #: 460222

---

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622579001	Dup-2	Water	08/28/19 00:00	08/29/19 11:52
2622579002	GWC-16	Water	08/28/19 09:39	08/29/19 11:52
2622579003	GWC-21	Water	08/28/19 11:00	08/29/19 11:52
2622579004	GWC-20	Water	08/28/19 12:10	08/29/19 11:52
2622579005	FB-2-8-28-19	Water	08/28/19 10:00	08/29/19 11:52
2622579006	GWC-17	Water	08/28/19 12:00	08/29/19 11:52
2622579007	EB-2-8-28-19	Water	08/28/19 12:40	08/29/19 11:52
2622579008	GWC-9	Water	08/28/19 12:50	08/29/19 11:52
2622579009	GWB-5R	Water	08/28/19 15:50	08/29/19 11:52

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622579001	Dup-2	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A
2622579002	GWC-16	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A
2622579003	GWC-21	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A
2622579004	GWC-20	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A
2622579005	FB-2-8-28-19	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A
2622579006	GWC-17	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A
2622579007	EB-2-8-28-19	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A
2622579008	GWC-9	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A
2622579009	GWB-5R	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Sample: Dup-2	Lab ID: 2622579001	Collected: 08/28/19 00:00	Received: 08/29/19 11:52	Matrix: Water			
Parameters	Results	Units	Report	Prepared	Analyzed	CAS No.	Qual
			Limit				
<b>6020B MET ICPMS</b>							Analytical Method: EPA 6020B Preparation Method: EPA 3005A
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 23:26 7440-36-0
Arsenic	<b>0.089</b>	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 23:26 7440-38-2
Barium	<b>0.087</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 23:26 7440-39-3
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 23:26 7440-41-7
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 23:26 7440-43-9
Chromium	<b>0.0045J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 23:26 7440-47-3
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 23:26 7440-48-4
Lead	<b>0.00010J</b>	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 23:26 7439-92-1
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 23:26 7439-93-2
Molybdenum	<b>0.21</b>	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 23:26 7439-98-7
Selenium	<b>0.0032J</b>	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 23:26 7782-49-2
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 23:26 7440-28-0
<b>7470 Mercury</b>							Analytical Method: EPA 7470A Preparation Method: EPA 7470A
Mercury	ND	mg/L	0.00050	0.00014	1	09/04/19 09:14	09/04/19 13:37 7439-97-6
<b>300.0 IC Anions 28 Days</b>							Analytical Method: EPA 300.0 Rev 2.1 1993
Fluoride	ND	mg/L	0.10	0.050	1		09/08/19 01:45 16984-48-8

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Sample: GWC-16	Lab ID: 2622579002	Collected: 08/28/19 09:39	Received: 08/29/19 11:52	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 23:43	7440-36-0	
Arsenic	<b>0.091</b>	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 23:43	7440-38-2	
Barium	<b>0.090</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 23:43	7440-39-3	
Beryllium	<b>0.000080J</b>	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 23:43	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 23:43	7440-43-9	
Chromium	<b>0.0011J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 23:43	7440-47-3	B
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 23:43	7440-48-4	
Lead	<b>0.00010J</b>	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 23:43	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 23:43	7439-93-2	
Molybdenum	<b>0.22</b>	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 23:43	7439-98-7	
Selenium	<b>0.0040J</b>	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 23:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 23:43	7440-28-0	
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/04/19 09:14	09/04/19 13:44	7439-97-6	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993							
Fluoride	ND	mg/L	0.10	0.050	1		09/08/19 02:32	16984-48-8	

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Sample: GWC-21		Lab ID: 2622579003		Collected: 08/28/19 11:00		Received: 08/29/19 11:52		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>								Analytical Method: EPA 6020B Preparation Method: EPA 3005A	
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 23:49	7440-36-0	
Arsenic	<b>0.0020J</b>	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 23:49	7440-38-2	
Barium	<b>0.063</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 23:49	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 23:49	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 23:49	7440-43-9	
Chromium	<b>0.00087J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 23:49	7440-47-3	B
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 23:49	7440-48-4	
Lead	<b>0.00018J</b>	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 23:49	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 23:49	7439-93-2	
Molybdenum	<b>0.070</b>	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 23:49	7439-98-7	
Selenium	<b>0.019</b>	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 23:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 23:49	7440-28-0	
<b>7470 Mercury</b>								Analytical Method: EPA 7470A Preparation Method: EPA 7470A	
Mercury	ND	mg/L	0.00050	0.00014	1	09/04/19 09:14	09/04/19 13:46	7439-97-6	
<b>300.0 IC Anions 28 Days</b>								Analytical Method: EPA 300.0 Rev 2.1 1993	
Fluoride	ND	mg/L	0.10	0.050	1			09/08/19 02:47	16984-48-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Sample: GWC-20		Lab ID: 2622579004		Collected: 08/28/19 12:10		Received: 08/29/19 11:52		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>								Analytical Method: EPA 6020B Preparation Method: EPA 3005A	
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 23:55	7440-36-0	
Arsenic	<b>0.43</b>	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 23:55	7440-38-2	
Barium	<b>0.078</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 23:55	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 23:55	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 23:55	7440-43-9	
Chromium	<b>0.00089J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 23:55	7440-47-3	B
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 23:55	7440-48-4	
Lead	<b>0.000065J</b>	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 23:55	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 23:55	7439-93-2	
Molybdenum	<b>0.11</b>	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 23:55	7439-98-7	
Selenium	<b>0.0014J</b>	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 23:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 23:55	7440-28-0	
<b>7470 Mercury</b>								Analytical Method: EPA 7470A Preparation Method: EPA 7470A	
Mercury	ND	mg/L	0.00050	0.00014	1	09/04/19 09:14	09/04/19 13:48	7439-97-6	
<b>300.0 IC Anions 28 Days</b>								Analytical Method: EPA 300.0 Rev 2.1 1993	
Fluoride	ND	mg/L	0.10	0.050	1			09/08/19 03:03	16984-48-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Sample: FB-2-8-28-19		Lab ID: 2622579005		Collected: 08/28/19 10:00		Received: 08/29/19 11:52		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/05/19 00:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/05/19 00:00	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	08/30/19 16:08	09/05/19 00:00	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/05/19 00:00	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/05/19 00:00	7440-43-9	
Chromium	<b>0.00041J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/05/19 00:00	7440-47-3	B
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/05/19 00:00	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/05/19 00:00	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/05/19 00:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/05/19 00:00	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/05/19 00:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/05/19 00:00	7440-28-0	
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/04/19 09:14	09/04/19 13:51	7439-97-6	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993							
Fluoride	ND	mg/L	0.10	0.050	1		09/08/19 03:18	16984-48-8	

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Sample: GWC-17		Lab ID: 2622579006		Collected: 08/28/19 12:00		Received: 08/29/19 11:52		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>								Analytical Method: EPA 6020B Preparation Method: EPA 3005A	
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/05/19 00:06	7440-36-0	
Arsenic	<b>0.0011J</b>	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/05/19 00:06	7440-38-2	
Barium	<b>0.026</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/05/19 00:06	7440-39-3	
Beryllium	<b>0.0017J</b>	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/05/19 00:06	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/05/19 00:06	7440-43-9	
Chromium	<b>0.0013J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/05/19 00:06	7440-47-3	B
Cobalt	<b>0.0023J</b>	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/05/19 00:06	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/05/19 00:06	7439-92-1	
Lithium	<b>0.0041J</b>	mg/L	0.030	0.00078	1	08/30/19 16:08	09/05/19 00:06	7439-93-2	
Molybdenum	<b>0.0040J</b>	mg/L	0.010	0.00095	1	08/30/19 16:08	09/05/19 00:06	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/05/19 00:06	7782-49-2	
Thallium	<b>0.000066J</b>	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/05/19 00:06	7440-28-0	
<b>7470 Mercury</b>								Analytical Method: EPA 7470A Preparation Method: EPA 7470A	
Mercury	ND	mg/L	0.00050	0.00014	1	09/04/19 09:14	09/04/19 13:53	7439-97-6	
<b>300.0 IC Anions 28 Days</b>								Analytical Method: EPA 300.0 Rev 2.1 1993	
Fluoride	<b>0.61</b>	mg/L	0.10	0.050	1			09/08/19 03:34	16984-48-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Sample: EB-2-8-28-19		Lab ID: 2622579007		Collected: 08/28/19 12:40		Received: 08/29/19 11:52		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>								Analytical Method: EPA 6020B Preparation Method: EPA 3005A	
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/05/19 17:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/05/19 17:47	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	08/30/19 16:08	09/05/19 17:47	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/05/19 17:47	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/05/19 17:47	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/30/19 16:08	09/05/19 17:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/05/19 17:47	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/05/19 17:47	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/05/19 17:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/05/19 17:47	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/05/19 17:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/05/19 17:47	7440-28-0	
<b>7470 Mercury</b>								Analytical Method: EPA 7470A Preparation Method: EPA 7470A	
Mercury	ND	mg/L	0.00050	0.00014	1	09/04/19 09:14	09/04/19 13:56	7439-97-6	
<b>300.0 IC Anions 28 Days</b>								Analytical Method: EPA 300.0 Rev 2.1 1993	
Fluoride	ND	mg/L	0.10	0.050	1			09/08/19 03:49	16984-48-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Sample: GWC-9	Lab ID: 2622579008	Collected: 08/28/19 12:50	Received: 08/29/19 11:52	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/05/19 17:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/05/19 17:53	7440-38-2	
Barium	<b>0.17</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/05/19 17:53	7440-39-3	
Beryllium	<b>0.00022J</b>	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/05/19 17:53	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/05/19 17:53	7440-43-9	
Chromium	<b>0.00089J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/05/19 17:53	7440-47-3	
Cobalt	<b>0.00099J</b>	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/05/19 17:53	7440-48-4	
Lead	<b>0.000061J</b>	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/05/19 17:53	7439-92-1	
Lithium	<b>0.0018J</b>	mg/L	0.030	0.00078	1	08/30/19 16:08	09/05/19 17:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/05/19 17:53	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/05/19 17:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/05/19 17:53	7440-28-0	
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/04/19 09:14	09/04/19 13:58	7439-97-6	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993							
Fluoride	<b>0.088J</b>	mg/L	0.10	0.050	1		09/08/19 04:51	16984-48-8	

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Sample: GWB-5R	Lab ID: 2622579009	Collected: 08/28/19 15:50	Received: 08/29/19 11:52	Matrix: Water				
Parameters	Results	Units	Report	Prepared	Analyzed	CAS No.	Qual	
			Limit					
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A						
Antimony	<b>0.00054J</b>	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/05/19 18:45	7440-36-0
Arsenic	<b>0.0023J</b>	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/05/19 18:45	7440-38-2
Barium	<b>0.10</b>	mg/L	0.010	0.00049	1	08/30/19 16:08	09/05/19 18:45	7440-39-3
Beryllium	<b>0.000076J</b>	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/05/19 18:45	7440-41-7
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/05/19 18:45	7440-43-9
Chromium	<b>0.0071J</b>	mg/L	0.010	0.00039	1	08/30/19 16:08	09/05/19 18:45	7440-47-3
Cobalt	<b>0.0024J</b>	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/05/19 18:45	7440-48-4
Lead	<b>0.0011J</b>	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/05/19 18:45	7439-92-1
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/05/19 18:45	7439-93-2
Molybdenum	<b>0.0012J</b>	mg/L	0.010	0.00095	1	08/30/19 16:08	09/05/19 18:45	7439-98-7
Selenium	<b>0.0033J</b>	mg/L	0.010	0.0013	1	08/30/19 16:08	09/05/19 18:45	7782-49-2
Thallium	<b>0.000057J</b>	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/05/19 18:45	7440-28-0
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	ND	mg/L	0.00050	0.00014	1	09/04/19 09:14	09/04/19 14:00	7439-97-6
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993						
Fluoride	<b>0.097J</b>	mg/L	0.10	0.050	1		09/08/19 05:07	16984-48-8

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

QC Batch:	34690	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
Associated Lab Samples:	2622579001, 2622579002, 2622579003, 2622579004, 2622579005, 2622579006, 2622579007, 2622579008, 2622579009		

METHOD BLANK: 156136 Matrix: Water

Associated Lab Samples: 2622579001, 2622579002, 2622579003, 2622579004, 2622579005, 2622579006, 2622579007, 2622579008, 2622579009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/04/19 13:04	

LABORATORY CONTROL SAMPLE: 156137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 156138 156139

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0025	96	99	75-125	3	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622579

QC Batch: 34570 Analysis Method: EPA 6020B

QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2622579001, 2622579002, 2622579003, 2622579004, 2622579005, 2622579006

METHOD BLANK: 155680 Matrix: Water

Associated Lab Samples: 2622579001, 2622579002, 2622579003, 2622579004, 2622579005, 2622579006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/04/19 21:26	
Arsenic	mg/L	ND	0.0050	0.00035	09/04/19 21:26	
Barium	mg/L	ND	0.010	0.00049	09/04/19 21:26	
Beryllium	mg/L	ND	0.0030	0.000074	09/04/19 21:26	
Cadmium	mg/L	ND	0.0025	0.00011	09/04/19 21:26	
Chromium	mg/L	0.00055J	0.010	0.00039	09/04/19 21:26	
Cobalt	mg/L	ND	0.0050	0.00030	09/04/19 21:26	
Lead	mg/L	ND	0.0050	0.000046	09/04/19 21:26	
Lithium	mg/L	ND	0.030	0.00078	09/04/19 21:26	
Molybdenum	mg/L	ND	0.010	0.00095	09/04/19 21:26	
Selenium	mg/L	ND	0.010	0.0013	09/04/19 21:26	
Thallium	mg/L	ND	0.0010	0.000052	09/04/19 21:26	

LABORATORY CONTROL SAMPLE: 155681

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	113	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.11	105	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 155682 155683

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2622563003 Result	Spike Conc.	Spike Conc.	MS Result						
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	114	114	75-125	0	20
Arsenic	mg/L	0.00044J	0.1	0.1	0.10	0.10	101	101	75-125	0	20
Barium	mg/L	0.039	0.1	0.1	0.14	0.14	103	104	75-125	0	20
Beryllium	mg/L	0.00016J	0.1	0.1	0.10	0.099	101	99	75-125	2	20
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	2	20

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622579

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 155682      155683

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max	
		2622563003	Spike Conc.	Spike Conc.	MS Result						RPD	RPD
Chromium	mg/L	0.0071J	0.1	0.1	0.11	0.11	105	106	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.10	106	104	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	1	20	
Lithium	mg/L	0.0021J	0.1	0.1	0.10	0.098	98	96	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	108	107	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20	

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622579

QC Batch: 34572 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2622579007, 2622579008, 2622579009

METHOD BLANK: 155685 Matrix: Water

Associated Lab Samples: 2622579007, 2622579008, 2622579009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/05/19 17:36	
Arsenic	mg/L	ND	0.0050	0.00035	09/05/19 17:36	
Barium	mg/L	ND	0.010	0.00049	09/05/19 17:36	
Beryllium	mg/L	ND	0.0030	0.000074	09/05/19 17:36	
Cadmium	mg/L	ND	0.0025	0.00011	09/05/19 17:36	
Chromium	mg/L	ND	0.010	0.00039	09/05/19 17:36	
Cobalt	mg/L	ND	0.0050	0.00030	09/05/19 17:36	
Lead	mg/L	ND	0.0050	0.000046	09/05/19 17:36	
Lithium	mg/L	ND	0.030	0.00078	09/05/19 17:36	
Molybdenum	mg/L	ND	0.010	0.00095	09/05/19 17:36	
Selenium	mg/L	ND	0.010	0.0013	09/05/19 17:36	
Thallium	mg/L	ND	0.0010	0.000052	09/05/19 17:36	

LABORATORY CONTROL SAMPLE: 155686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	108	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.1	0.097	97	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 155687 155688

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2622579008 Result	Spike Conc.	Spike Conc.	MS Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20
Arsenic	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20
Barium	mg/L	0.17	0.1	0.1	0.25	0.27	84	96	75-125	4	20
Beryllium	mg/L	0.00022J	0.1	0.1	0.094	0.095	94	95	75-125	1	20
Cadmium	mg/L	ND	0.1	0.1	0.098	0.097	98	97	75-125	1	20

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622579

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 155687      155688

Parameter	Units	MS		MSD		MS Result	% Rec	MSD % Rec	% Rec	Max	
		2622579008	Spike Conc.	Spike Conc.	MS Result					RPD	RPD
Chromium	mg/L	0.00089J	0.1	0.1	0.096	0.099	95	98	75-125	2	20
Cobalt	mg/L	0.00099J	0.1	0.1	0.096	0.097	95	96	75-125	1	20
Lead	mg/L	0.000061J	0.1	0.1	0.096	0.098	96	98	75-125	2	20
Lithium	mg/L	0.0018J	0.1	0.1	0.097	0.098	95	96	75-125	1	20
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	103	75-125	3	20
Selenium	mg/L	ND	0.1	0.1	0.098	0.095	98	95	75-125	3	20
Thallium	mg/L	ND	0.1	0.1	0.095	0.098	95	98	75-125	3	20

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

QC Batch:	496583	Analysis Method:	EPA 300.0 Rev 2.1 1993
QC Batch Method:	EPA 300.0 Rev 2.1 1993	Analysis Description:	300.0 IC Anions
Associated Lab Samples:	2622579001, 2622579002, 2622579003, 2622579004, 2622579005, 2622579006, 2622579007, 2622579008, 2622579009		

METHOD BLANK:	2674483	Matrix:	Water
Associated Lab Samples:	2622579001, 2622579002, 2622579003, 2622579004, 2622579005, 2622579006, 2622579007, 2622579008, 2622579009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	09/07/19 20:35	

LABORATORY CONTROL SAMPLE:	2674484	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Parameter	Units					
Fluoride	mg/L	2.5	2.7	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	2674485	2674486									
Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	92443935013	2.5	2.5	2.5	2.6	99	102	90-110	3	10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	2674487	2674488									
Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	2622579001	ND	2.5	2.5	2.4	2.4	96	96	90-110	0

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## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622579

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622579001	Dup-2	EPA 3005A	34570	EPA 6020B	34601
2622579002	GWC-16	EPA 3005A	34570	EPA 6020B	34601
2622579003	GWC-21	EPA 3005A	34570	EPA 6020B	34601
2622579004	GWC-20	EPA 3005A	34570	EPA 6020B	34601
2622579005	FB-2-8-28-19	EPA 3005A	34570	EPA 6020B	34601
2622579006	GWC-17	EPA 3005A	34570	EPA 6020B	34601
2622579007	EB-2-8-28-19	EPA 3005A	34572	EPA 6020B	34602
2622579008	GWC-9	EPA 3005A	34572	EPA 6020B	34602
2622579009	GWB-5R	EPA 3005A	34572	EPA 6020B	34602
2622579001	Dup-2	EPA 7470A	34690	EPA 7470A	34713
2622579002	GWC-16	EPA 7470A	34690	EPA 7470A	34713
2622579003	GWC-21	EPA 7470A	34690	EPA 7470A	34713
2622579004	GWC-20	EPA 7470A	34690	EPA 7470A	34713
2622579005	FB-2-8-28-19	EPA 7470A	34690	EPA 7470A	34713
2622579006	GWC-17	EPA 7470A	34690	EPA 7470A	34713
2622579007	EB-2-8-28-19	EPA 7470A	34690	EPA 7470A	34713
2622579008	GWC-9	EPA 7470A	34690	EPA 7470A	34713
2622579009	GWB-5R	EPA 7470A	34690	EPA 7470A	34713
2622579001	Dup-2	EPA 300.0 Rev 2.1 1993	496583		
2622579002	GWC-16	EPA 300.0 Rev 2.1 1993	496583		
2622579003	GWC-21	EPA 300.0 Rev 2.1 1993	496583		
2622579004	GWC-20	EPA 300.0 Rev 2.1 1993	496583		
2622579005	FB-2-8-28-19	EPA 300.0 Rev 2.1 1993	496583		
2622579006	GWC-17	EPA 300.0 Rev 2.1 1993	496583		
2622579007	EB-2-8-28-19	EPA 300.0 Rev 2.1 1993	496583		
2622579008	GWC-9	EPA 300.0 Rev 2.1 1993	496583		
2622579009	GWB-5R	EPA 300.0 Rev 2.1 1993	496583		

**REPORT OF LABORATORY ANALYSIS**

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**CHAIN OF CUSTODY RECORD**



Pace Analytical<sup>®</sup>  
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 2

**CLIENT NAME:** Georgia Power

**CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:**

241 Ralph McGill Blvd SE B10185

Atlanta, GA 30308

404-506-7239

**REPORT TO:** CC:

**REQUESTED COMPLETION DATE:** PO #:

**PROJECT NAME/STATE:** Plant Kraft Grumman Road

**PROJECT #:** 2019 AIV Scan Event

**ANALYSIS REQUESTED**

**\*MATRIX CODES:**

**PRESERVATION**

**# of**

**C**

**O**

**N**

**T**

**A**

**I**

**E**

**R**

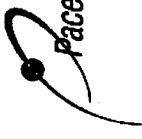
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**CHAIN OF CUSTODY RECORD**

Pace Analytical Services, Inc.  
110 TECHNOLOGY PARK  
(770) 734-4200 : FAX (770) 7

113 TECHNELOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 : FAX (770) 734-4201

PAGE: 2 OF 2

Copy of Plant Kraft -Grumman Rd COC - 2019 AIV SCAN EVENT.xlsx



## Sample Condition Upon Receipt

Client Name: GAPower

Project # \_\_\_\_\_

**WO# : 2622579**Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yesPacking Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_Thermometer Used 8.3Type of Ice: Wet Blue None Samples on ice, cooling process has begunCooler Temperature 0.4

Biological Tissue Is Frozen: Yes No

Date and Initials of person examining contents: 8/29/19 MZ

Temp should be above freezing to 6°C

Comments: \_\_\_\_\_

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>CW</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed _____ Lot # of added preservative _____
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Manager Review: \_\_\_\_\_

Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

September 24, 2019

Joju Abraham  
Georgia Power - Coal Combustion Residuals  
2480 Maner Road  
Atlanta, GA 30339

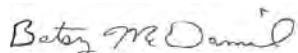
RE: Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622581

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 29, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Betsy McDaniel  
betsy.mcdaniel@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Chris Parker, Atlantic Coast Consulting  
Evan Perry, Atlantic Coast Consulting  
Lauren Petty, Southern Company Services, Inc.  
Rebecca Thornton, Pace Analytical Atlanta



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2622581

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### Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601	Missouri Certification #: 235
ANAB DOD-ELAP Rad Accreditation #: L2417	Montana Certification #: Cert0082
Alabama Certification #: 41590	Nebraska Certification #: NE-OS-29-14
Arizona Certification #: AZ0734	Nevada Certification #: PA014572018-1
Arkansas Certification	New Hampshire/TNI Certification #: 297617
California Certification #: 04222CA	New Jersey/TNI Certification #: PA051
Colorado Certification #: PA01547	New Mexico Certification #: PA01457
Connecticut Certification #: PH-0694	New York/TNI Certification #: 10888
Delaware Certification	North Carolina Certification #: 42706
EPA Region 4 DW Rad	North Dakota Certification #: R-190
Florida/TNI Certification #: E87683	Ohio EPA Rad Approval: #41249
Georgia Certification #: C040	Oregon/TNI Certification #: PA200002-010
Florida: Cert E871149 SEKS WET	Pennsylvania/TNI Certification #: 65-00282
Guam Certification	Puerto Rico Certification #: PA01457
Hawaii Certification	Rhode Island Certification #: 65-00282
Idaho Certification	South Dakota Certification
Illinois Certification	Tennessee Certification #: 02867
Indiana Certification	Texas/TNI Certification #: T104704188-17-3
Iowa Certification #: 391	Utah/TNI Certification #: PA014572017-9
Kansas/TNI Certification #: E-10358	USDA Soil Permit #: P330-17-00091
Kentucky Certification #: KY90133	Vermont Dept. of Health: ID# VT-0282
KY WW Permit #: KY0098221	Virgin Island/PADEP Certification
KY WW Permit #: KY0000221	Virginia/VELAP Certification #: 9526
Louisiana DHH/TNI Certification #: LA180012	Washington Certification #: C868
Louisiana DEQ/TNI Certification #: 4086	West Virginia DEP Certification #: 143
Maine Certification #: 2017020	West Virginia DHHR Certification #: 9964C
Maryland Certification #: 308	Wisconsin Approve List for Rad
Massachusetts Certification #: M-PA1457	Wyoming Certification #: 8TMS-L
Michigan/PADEP Certification #: 9991	

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## SAMPLE SUMMARY

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2622581

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622581001	Dup-2	Water	08/28/19 00:00	08/29/19 11:52
2622581002	GWC-16	Water	08/28/19 09:39	08/29/19 11:52
2622581003	GWC-21	Water	08/28/19 11:00	08/29/19 11:52
2622581004	GWC-20	Water	08/28/19 12:10	08/29/19 11:52
2622581005	FB-2-8-28-19	Water	08/28/19 10:00	08/29/19 11:52
2622581006	GWC-17	Water	08/28/19 12:00	08/29/19 11:52
2622581007	EB-2-8-28-19	Water	08/28/19 12:40	08/29/19 11:52
2622581008	GWC-9	Water	08/28/19 12:50	08/29/19 11:52
2622581009	GWB-5R	Water	08/28/19 15:50	08/29/19 11:52

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622581

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622581001	Dup-2	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622581002	GWC-16	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622581003	GWC-21	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622581004	GWC-20	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622581005	FB-2-8-28-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622581006	GWC-17	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622581007	EB-2-8-28-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622581008	GWC-9	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622581009	GWB-5R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2622581

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**Sample:** Dup-2      **Lab ID:** 2622581001      Collected: 08/28/19 00:00      Received: 08/29/19 11:52      Matrix: Water  
**PWS:**                      Site ID:                      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.19 ± 0.442 (0.480)</b> C:96% T:NA	pCi/L	09/13/19 08:10	13982-63-3	
Radium-228	EPA 9320	<b>1.15 ± 0.521 (0.870)</b> C:65% T:81%	pCi/L	09/19/19 15:19	15262-20-1	
Total Radium	Total Radium Calculation	<b>2.34 ± 0.963 (1.35)</b>	pCi/L	09/23/19 11:59	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2622581

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<b>Sample:</b> GWC-16	<b>Lab ID:</b> <b>2622581002</b>	Collected: 08/28/19 09:39	Received: 08/29/19 11:52	Matrix: Water
PWS:	Site ID:	Sample Type:		

---

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.10 ± 0.433 (0.486)</b> C:90% T:NA	pCi/L	09/13/19 08:10	13982-63-3	
Radium-228	EPA 9320	<b>0.944 ± 0.455 (0.771)</b> C:71% T:79%	pCi/L	09/19/19 15:19	15262-20-1	
Total Radium	Total Radium Calculation	<b>2.04 ± 0.888 (1.26)</b>	pCi/L	09/23/19 11:59	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622581

**Sample: GWC-21**      Lab ID: **2622581003**      Collected: 08/28/19 11:00      Received: 08/29/19 11:52      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.693 ± 0.462 (0.663)</b> C:30% T:NA	pCi/L	09/13/19 09:44	13982-63-3	
Radium-228	EPA 9320	<b>0.702 ± 0.421 (0.782)</b> C:79% T:83%	pCi/L	09/19/19 11:32	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.40 ± 0.883 (1.45)</b>	pCi/L	09/24/19 10:28	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622581

**Sample: GWC-20**      Lab ID: **2622581004**      Collected: 08/28/19 12:10      Received: 08/29/19 11:52      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.940 ± 0.460 (0.563)</b> C:60% T:NA	pCi/L	09/13/19 11:01	13982-63-3	
Radium-228	EPA 9320	<b>0.193 ± 0.344 (0.753)</b> C:80% T:93%	pCi/L	09/19/19 11:33	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.13 ± 0.804 (1.32)</b>	pCi/L	09/24/19 10:28	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622581

**Sample: FB-2-8-28-19**      Lab ID: **2622581005**      Collected: 08/28/19 10:00      Received: 08/29/19 11:52      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.180 ± 0.285 (0.635)</b> C:88% T:NA	pCi/L	09/13/19 08:10	13982-63-3	
Radium-228	EPA 9320	<b>0.726 ± 0.503 (0.956)</b> C:67% T:72%	pCi/L	09/19/19 16:56	15262-20-1	
Total Radium	Total Radium Calculation	<b>0.906 ± 0.788 (1.59)</b>	pCi/L	09/23/19 11:59	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622581

**Sample: GWC-17**      Lab ID: **2622581006**      Collected: 08/28/19 12:00      Received: 08/29/19 11:52      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.29 ± 0.492 (0.511)</b> C:72% T:NA	pCi/L	09/13/19 11:01	13982-63-3	
Radium-228	EPA 9320	<b>0.718 ± 0.436 (0.817)</b> C:77% T:86%	pCi/L	09/19/19 11:33	15262-20-1	
Total Radium	Total Radium Calculation	<b>2.01 ± 0.928 (1.33)</b>	pCi/L	09/24/19 10:28	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622581

**Sample: EB-2-8-28-19**      **Lab ID: 2622581007**      Collected: 08/28/19 12:40      Received: 08/29/19 11:52      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.210 ± 0.208 (0.376)</b> C:80% T:NA	pCi/L	09/13/19 11:01	13982-63-3	
Radium-228	EPA 9320	<b>0.169 ± 0.403 (0.898)</b> C:73% T:82%	pCi/L	09/19/19 11:33	15262-20-1	
Total Radium	Total Radium Calculation	<b>0.379 ± 0.611 (1.27)</b>	pCi/L	09/24/19 10:28	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2622581

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<b>Sample: GWC-9</b>	<b>Lab ID: 2622581008</b>	Collected: 08/28/19 12:50	Received: 08/29/19 11:52	Matrix: Water
PWS:	Site ID:	Sample Type:		

---

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.06 ± 0.449 (0.481)</b> C:68% T:NA	pCi/L	09/13/19 11:01	13982-63-3	
Radium-228	EPA 9320	<b>0.848 ± 0.485 (0.892)</b> C:75% T:80%	pCi/L	09/19/19 11:33	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.91 ± 0.934 (1.37)</b>	pCi/L	09/24/19 10:28	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622581

**Sample: GWB-5R**      Lab ID: **2622581009**      Collected: 08/28/19 15:50      Received: 08/29/19 11:52      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>2.60 ± 0.533 (0.175)</b> C:78% T:NA	pCi/L	09/23/19 08:23	13982-63-3	
Radium-228	EPA 9320	<b>1.14 ± 0.531 (0.911)</b> C:70% T:87%	pCi/L	09/19/19 11:33	15262-20-1	
Total Radium	Total Radium Calculation	<b>3.74 ± 1.06 (1.09)</b>	pCi/L	09/24/19 10:28	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622581

---

QC Batch: 359959 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Associated Lab Samples: 2622581003, 2622581004, 2622581006, 2622581007, 2622581008, 2622581009

---

METHOD BLANK: 1747376 Matrix: Water

Associated Lab Samples: 2622581003, 2622581004, 2622581006, 2622581007, 2622581008, 2622581009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0495 ± 0.365 (0.863) C:80% T:75%	pCi/L	09/19/19 11:35	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622581

---

QC Batch: 359955 Analysis Method: EPA 9315  
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium  
Associated Lab Samples: 2622581001, 2622581002, 2622581005

---

METHOD BLANK: 1747367 Matrix: Water

Associated Lab Samples: 2622581001, 2622581002, 2622581005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.428 ± 0.255 (0.325) C:92% T:NA	pCi/L	09/13/19 09:00	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622581

---

QC Batch: 359957 Analysis Method: EPA 9320  
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228  
Associated Lab Samples: 2622581001, 2622581002, 2622581005

---

METHOD BLANK: 1747374 Matrix: Water

Associated Lab Samples: 2622581001, 2622581002, 2622581005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.461 ± 0.411 (0.833) C:71% T:76%	pCi/L	09/19/19 12:11	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622581

---

QC Batch: 359958 Analysis Method: EPA 9315

QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Associated Lab Samples: 2622581003, 2622581004, 2622581006, 2622581007, 2622581008, 2622581009

---

METHOD BLANK: 1747375 Matrix: Water

Associated Lab Samples: 2622581003, 2622581004, 2622581006, 2622581007, 2622581008, 2622581009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.446 ± 0.266 (0.338) C:85% T:NA	pCi/L	09/13/19 11:01	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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## QUALIFIERS

Project: Plant Kraft - Grumman Road

Pace Project No.: 2622581

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2622581

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622581001	Dup-2	EPA 9315	359955		
2622581002	GWC-16	EPA 9315	359955		
2622581003	GWC-21	EPA 9315	359958		
2622581004	GWC-20	EPA 9315	359958		
2622581005	FB-2-8-28-19	EPA 9315	359955		
2622581006	GWC-17	EPA 9315	359958		
2622581007	EB-2-8-28-19	EPA 9315	359958		
2622581008	GWC-9	EPA 9315	359958		
2622581009	GWB-5R	EPA 9315	359958		
2622581001	Dup-2	EPA 9320	359957		
2622581002	GWC-16	EPA 9320	359957		
2622581003	GWC-21	EPA 9320	359959		
2622581004	GWC-20	EPA 9320	359959		
2622581005	FB-2-8-28-19	EPA 9320	359957		
2622581006	GWC-17	EPA 9320	359959		
2622581007	EB-2-8-28-19	EPA 9320	359959		
2622581008	GWC-9	EPA 9320	359959		
2622581009	GWB-5R	EPA 9320	359959		
2622581001	Dup-2	Total Radium Calculation	362617		
2622581002	GWC-16	Total Radium Calculation	362617		
2622581003	GWC-21	Total Radium Calculation	362814		
2622581004	GWC-20	Total Radium Calculation	362814		
2622581005	FB-2-8-28-19	Total Radium Calculation	362617		
2622581006	GWC-17	Total Radium Calculation	362814		
2622581007	EB-2-8-28-19	Total Radium Calculation	362814		
2622581008	GWC-9	Total Radium Calculation	362814		
2622581009	GWB-5R	Total Radium Calculation	362814		

### REPORT OF LABORATORY ANALYSIS

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**CHAIN OF CUSTODY RECORD**

Pace Analytical Services, Inc.  
110 TECHNOLOGY PARKWAY  
(770) 734-4200 : FAX (770) 7

Pace Analytical Services, Inc.  
1110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 : FAX (770) 734-4201

PAGE:    OF

CLIENT NAME: Georgia Power		ANALYSIS REQUESTED									
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER									
REPORT TO:		PRESERVATION: 1 - HCl, ≤6°C 2 - H <sub>2</sub> SO <sub>4</sub> , ≤6°C 3 - HNO <sub>3</sub> 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , ≤6°C 7 - ≤6°C not frozen									
REQUESTED COMPLETION DATE:		MATRIX CODES: DW - DRINKING WATER WW - WASTEWATER GW - GROUNDWATER SW - SURFACE WATER ST - STORM WATER W - WATER S - SOIL SL - SLUDGE SD - SOLID A - AIR L - LIQUID P - PRODUCT									
PROJECT NAME/STATE: Plant Kraft Grumman Road		REMARKS/ADDITIONAL INFORMATION									
PROJECT #: 2019 AlV Scan Event		APP IV only									
Collection DATE		Collection TIME	MATRIX CODE*	O	R	C	G	SAMPLE IDENTIFICATION			
P	B							DUP-2			
8-28-19	/	GW	X					✓	✓	✓	
8-28-19	0939	GW	X					✓	✓	✓	
8-28-19	1100	GW	X					✓	✓	✓	
8-28-19	1210	GW	X					✓	✓	✓	

Metals App. IV  
(EPA 6020/T470)  
Radium 226 & 228  
(SW-846 9315/9320)

M0# : 2622581

Barcode: 2622581

FOR LAB USE ONLY

LAB #: 152

DATE/TIME: 8-24-19  
DATETIME: 152

Entered into LIMS:  
Tracking #: \_\_\_\_\_

SAMPLED BY AND TITLE: <u>John</u> (EG)		DATE/TIME: 8-23-19 1210		SAMPLE SHIPPED VIA: UPS		RELINQUISHED BY: <u>John</u>		RELINQUISHED BY: <u>John</u>	
RECEIVED BY: <u>John</u>		DATE/TIME: 8-23-19 1152		FED-EX		COURIER		# of Coasters	
RECEIVED BY: <u>John</u>		DATE/TIME: 8-23-19 1152		USPS		CLIENT		OTHER	FS
PH Checked:	NA	Temperature:	0.4 °C	Custom Seal:	Not Broken	Client ID:	John		
PH Checked:	NA	Temperature:	0.4 °C	Custom Seal:	Not Broken	Client ID:	John		
PH Checked:	NA	Temperature:	0.4 °C	Custom Seal:	Not Broken	Client ID:	John		
PH Checked:	NA	Temperature:	0.4 °C	Custom Seal:	Not Broken	Client ID:	John		

Copy of Plant Kraft -Grumman Rd COC - 2019 AIV SCAN EVENT.xlsx



**CHAIN OF CUSTODY RECORD**

Pace Analytical Services, Inc.  
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 : FAX (770) 734-4201

PAGE: 2 OF 3

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## Sample Condition Upon Receipt

*Pace Analytical*Client Name: GCA Power Project # \_\_\_\_\_Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  Yes  no Seals intact:  YesPacking Material:  Bubble Wrap  Bubble Bags  None  OtherThermometer Used 83Type of Ice:  Wet  Blue  None Samples on ice, cooling process has begunCooler Temperature 0.4Biological Tissue is Frozen: Yes  NoDate and initials of person examining  
contents: 8/29/19 MZ

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>CW</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Lot # of added preservative
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank Lot # (if purchased):		16.

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Manager Review: \_\_\_\_\_

Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

**LEVEL 2A LABORATORY DATA VALIDATIONS**

**Grumman Road**

**Scan Event**

**August 2019**

## **Georgia Power Company – Grumman Road**

### **Quality Control Review of Analytical Data – August 2019**

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Pace Analytical Services, Atlanta, Asheville, and Pittsburgh for groundwater samples collected at Grumman Road between August 26, 2019 and August 28, 2019. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix. SDGs 2622502 and 2622579 were revised by the laboratory to correct the reporting limits (RLs) in accordance with project requirements.

In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detected monitoring constituents listed in 40 CFR, Part 257, Appendix III and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Test methods included Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Determination of Inorganic Anions (USEPA Method 300.0), Solids in Water (Standard Methods 2540C), Radium-226 (USEPA 9315), and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)<sup>1</sup> and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)<sup>2</sup>. The review included an assessment of the results for completeness, precision (laboratory duplicate recoveries and matrix spike/matrix spike duplicate recoveries), accuracy (laboratory control samples and matrix spike samples), and blank contamination (field, equipment, and laboratory blanks). Sample receipt conditions, holding times, and chains of custody (COCs) were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

## DATA QUALITY OBJECTIVES

- Laboratory Precision:** Laboratory goals for precision were met, with the exception of Radium-226 on GWC-1 (2622503014) as described in the qualifications section below.
- Field Precision:** Field goals for precision were met, with the exception of Chromium on GWC-16 (2622579002) and DUP-2 (2622579001) as described in the qualifications section below.
- Accuracy:** Laboratory goals for accuracy were met.
- Detection Limits:** Project goals for detection limits were met. Certain samples were diluted due to the concentration of target or non-target analyte interferences. Dilutions do not require qualifications based on USEPA guidelines. RLs of non-detect compounds are elevated proportional to the dilution when undiluted sample results were not provided by the laboratory. The data usability of diluted results was evaluated by the data user in the context of site-wide characterization.
- Completeness:** There were no rejected analytical results for this event, resulting in a completion of 100%.
- Holding Times:** Holding time requirements were met.

## QUALIFICATIONS

In general, chemical results for the samples collected at the site were qualified on the basis of low precision or low accuracy or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the validation process:

- J:** The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample
- ND:** The analyte was not detected above the method detection limit

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. The

applied qualifications may not have been required for all samples collected at the site. A summary of sample qualifications can be found in Table 2 of this Appendix.

- Sample GWC-1 (262250314) was qualified as estimated (J) for Radium-226 as the laboratory relative percent difference (RPD) exceeded QC criteria (65.94% above limit of 25).
- Samples GWC-16 (2622579002) and DUP-2 (2622579001) were qualified as estimated (J) for Chromium as the field RPD exceeded QC criteria (121.4% above limit of 25).
- Certain chromium results in SDG 2622579 were qualified as non-detect (ND) due to the analyte being detected at a similar concentration in an associated blank sample. As shown in Table 2, the method detection limit (MDL) was raised to the sample result as part of the qualification process.
- Certain radium results in SDGs 2622503 and 2622581 were qualified as non-detect (ND) due to the analyte being detected at a similar concentration in an associated blank sample. As shown in Table 2, the minimum detectable concentration (MDC) was raised to the sample result as part of the qualification process

Atlantic Coast Consulting, Inc. reviewed the laboratory data from Grumman Road sampled between August 26, 2019 and August 28, 2019 in accordance with the analytical methods, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

## REFERENCES

<sup>1</sup>USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy, Revision 2.0

<sup>2</sup>USEPA, January 2017, National Office of Superfund Remediation and Technology Innovation, National Functional Guidelines for Inorganic Superfund Methods Data Review, Revision 0.0

TABLE 1  
 Georgia Power Company – Grumman Road  
 Sample Summary Table – August 2019

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6020B, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
22502	GWA-7	8/26/2019	2622502001	GW		X	X		
22503	GWA-7	8/26/2019	2622503001	GW					X
22502	GWC-15	8/27/2019	2622502002	GW		X	X		
22503	GWC-15	8/27/2019	2622503002	GW					X
22502	GWC-14	8/27/2019	2622502003	GW		X	X		
22503	GWC-14	8/27/2019	2622503003	GW					X
22502	GWC-2	8/27/2019	2622502004	GW		X	X		
22503	GWC-2	8/27/2019	2622503004	GW					X
22502	GWC-13	8/27/2019	2622502005	GW		X	X		
22503	GWC-13	8/27/2019	2622503005	GW					X
22502	GWB-6R	8/27/2019	2622502006	GW		X	X		
22503	GWB-6R	8/27/2019	2622503006	GW					X
22502	GWB-4R	8/27/2019	2622502007	GW		X	X		
22503	GWB-4R	8/27/2019	2622503007	GW					X
22502	GWA-8	8/26/2019	2622502008	GW		X	X		
22503	GWA-8	8/26/2019	2622503008	GW					X
22502	FB-1-8-27-19	8/27/2019	2622502009	WQ	FB	X	X		
22503	FB-1-8-27-19	8/27/2019	2622503009	WQ	FB				X
22502	GWC-12	8/27/2019	2622502010	GW		X	X		
22503	GWC-12	8/27/2019	2622503010	GW					X
22502	GWC-11	8/27/2019	2622502011	GW		X	X		
22503	GWC-11	8/27/2019	2622503011	GW					X
22502	GWC-22	8/27/2019	2622502012	GW		X	X		
22503	GWC-22	8/27/2019	2622503012	GW					X
22502	EB-1-8-27-19	8/27/2019	2622502013	WQ	FB	X	X		
22503	EB-1-8-27-19	8/27/2019	2622503013	WQ	FB				X
22502	GWC-1	8/27/2019	2622502014	GW		X	X		
22503	GWC-1	8/27/2019	2622503014	GW					X

Abbreviations:

EB – Equipment Blank  
 FB – Field Blank  
 FD – Field Duplicate  
 GW – Groundwater  
 QC – Quality Control  
 TDS – Total Dissolved Solids  
 WQ – Water Quality Control

TABLE 1 (continued)  
 Georgia Power Company – Grumman Road  
 Sample Summary Table – August 2019

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6020B, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
22502	DUP-1	8/27/2019	2622502015	GW	FD (GWC-13)	X	X		
22503	DUP-1	8/27/2019	2622503015	GW	FD (GWC-13)				X
22579	DUP-2	8/28/2019	2622579001	GW	FD (GWC-16)	X	X		
22581	DUP-2	8/28/2019	2622581001	GW	FD (GWC-16)				X
22579	GWC-16	8/28/2019	2622579002	GW		X	X		
22581	GWC-16	8/28/2019	2622581002	GW					X
22579	GWC-21	8/28/2019	2622579003	GW		X	X		
22581	GWC-21	8/28/2019	2622581003	GW					X
22579	GWC-20	8/28/2019	2622579004	GW		X	X		
22581	GWC-20	8/28/2019	2622581004	GW					X
22579	FB-2-8-28-19	8/28/2019	2622579005	WQ	FB	X	X		
22581	FB-2-8-28-19	8/28/2019	2622581005	WQ	FB				X
22579	GWC-17	8/28/2019	2622579006	GW		X	X		
22581	GWC-17	8/28/2019	2622581006	GW					X
22579	EB-2-8-28-19	8/28/2019	2622579007	WQ	EB	X	X		
22581	EB-2-8-28-19	8/28/2019	2622581007	WQ	EB				X
22579	GWC-9	8/28/2019	2622579008	GW		X	X		
22581	GWC-9	8/28/2019	2522581008	GW					X
22579	GWB-5R	8/28/2019	2622579009	GW		X	X		
22581	GWB-5R	8/28/2019	2622581009	GW					X

Abbreviations:

EB – Equipment Blank  
 FB – Field Blank  
 FD – Field Duplicate  
 GW – Groundwater  
 QC – Quality Control  
 TDS – Total Dissolved Solids  
 WQ – Water Quality Control

TABLE 2  
 Georgia Power Company – Grumman Road  
 Qualifier Summary Table – August 2019

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
22503	GWA-7	Radium-226		0.236	ND	Blank detection
22503	GWB-4R	Radium-228		0.634	ND	Blank detection
22503	GWA-8	Radium-226		0.310	ND	Blank detection
22503	GWC-22	Radium-226		0.401	ND	Blank detection
22503	GWC-22	Radium-228		0.565	ND	Blank detection
22503	GWC-1	Radium-226			J	RPD exceeds laboratory goal
22503	GWC-1	Radium-228		0.642	ND	Blank detection
22579	DUP-2	Chromium			J	RPD exceeds field goal
22579	GWC-16	Chromium			J	RPD exceeds field goal
22579	GWC-21	Chromium		0.00087	ND	Blank detection
22579	GWC-20	Chromium		0.00089	ND	Blank detection
22579	GWC-17	Chromium		0.013	ND	Blank detection
22581	GWC-16	Radium-228		0.771	ND	Blank detection
22581	GWC-21	Radium-228		0.782	ND	Blank detection
22581	GWC-20	Radium-228		0.753	ND	Blank detection
22581	GWC-17	Radium-228		0.817	ND	Blank detection
22581	GWB-5R	Radium-226		0.175	ND	Blank detection

Abbreviations:

MDC – Minimum Detectable Concentration  
 MS/MSD – Matrix Spike / Matrix Spike Duplicate  
 MDL – Method Detection Limit  
 RL – Reporting Limit  
 RPD – Relative Percent Difference  
 SDG – Sample Delivery Group

Qualifiers:

J – Estimated Result  
 ND – Non-Detect Result

Product Name: Low-Flow System

Date: 2019-08-26 16:16:35

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name Grumman Road  
 Site Name Default Site  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 588863  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 25 ft

Pump placement from TOC 19.6 ft

## Well Information:

Well ID GWA-7  
 Well diameter 2 in  
 Well Total Depth 7.01 ft  
 Screen Length 5 ft  
 Depth to Water 7.01 ft

## Pumping Information:

Final Pumping Rate 225 mL/min  
 Total System Volume 0.2015856 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 5 in  
 Total Volume Pumped 11.25 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 0.2	+/- 100
Last 5	15:55:13	600.02	23.47	5.91	2020.04	509.00	7.50	0.03	88.98
Last 5	16:00:13	900.01	23.43	5.90	1997.06	598.00	7.50	0.03	87.46
Last 5	16:05:13	1200.01	23.36	5.89	2062.36	691.00	7.50	0.03	86.76
Last 5	16:10:16	1503.01	23.34	5.90	2060.91	708.00	7.50	0.03	85.89
Last 5	16:15:20	1807.00	23.38	5.91	2062.53	683.00	7.50	0.02	85.11
Variance 0		-0.06	-0.00		65.30			-0.00	-0.71
Variance 1		-0.02	0.01		-1.46			-0.00	-0.87
Variance 2		0.04	0.01		1.62			-0.00	-0.78

## Notes

Sampled at 1615. 88F cloudy.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-08-26 16:02:53

Project Information:

Operator Name J Berisford  
Company Name Atlantic Coast Consulting  
Project Name 2019 AIV Scan Event  
Site Name Grumman Road  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 501336  
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Peru Pump  
Tubing Type poly  
Tubing Diameter .17 in  
Tubing Length 20 ft

Pump placement from TOC 17 ft

Well Information:

Well ID GWA-8  
Well diameter 2 in  
Well Total Depth 20.9 ft  
Screen Length 5 ft  
Depth to Water 9.03 ft

Pumping Information:

Final Pumping Rate 200 mL/min  
Total System Volume 0.1792685 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 15.2 in  
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	15:20:29	300.09	26.23	4.82	359.21	15.50	10.00	0.18	78.83
Last 5	15:25:29	600.03	25.75	4.45	407.81	8.45	10.20	0.12	72.01
Last 5	15:30:29	900.02	25.55	4.33	428.73	7.30	10.30	0.09	70.76
Last 5	15:35:29	1200.02	25.26	4.29	432.67	5.52	10.30	0.08	69.12
Last 5	15:40:29	1500.02	25.33	4.26	437.82	4.11	10.30	0.07	67.22
Variance 0		-0.20	-0.12	20.92				-0.03	-1.25
Variance 1		-0.29	-0.04	3.94				-0.02	-1.64
Variance 2		0.07	-0.04	5.15				-0.01	-1.90

Notes

Cloudy, Sample time- 1540

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 17:15:51

Project Information:

Operator Name O. Fuquea  
Company Name ACC  
Project Name Grumman Road  
Site Name Default Site  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 588863  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type  
Tubing Type  
Tubing Diameter  
Tubing Length

Peri. Pump  
poly  
.17 in  
25 ft

Pump placement from TOC 20.8 ft

Well Information:

Well ID GWB-4R  
Well diameter 2 in  
Well Total Depth 23.30 ft  
Screen Length 5 ft  
Depth to Water 11.54 ft

Pumping Information:

Final Pumping Rate 300 mL/min  
Total System Volume 0.2015856 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 5 in  
Total Volume Pumped 55.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 0.2	+/- 100
Last 5	16:55:05	7201.96	22.64	5.70	703.23	9.80	12.00	0.05	104.39
Last 5	17:00:05	7501.95	22.62	5.70	700.91	7.20	12.00	0.05	103.57
Last 5	17:05:05	7801.94	22.61	5.70	701.53	6.10	12.00	0.05	102.80
Last 5	17:10:05	8101.94	22.63	5.70	696.31	5.78	12.00	0.05	101.85
Last 5	17:15:05	8401.93	22.64	5.70	696.91	4.98	12.00	0.05	101.23
Variance 0		-0.01	0.00		0.61			-0.00	-0.76
Variance 1		0.02	-0.01		-5.22			0.00	-0.95
Variance 2		0.01	0.00		0.60			-0.00	-0.62

Notes

Sampled at 1715. Rain 84F.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-28 15:52:01

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name Grumman Road  
 Site Name Default Site  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 588863  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 29 ft

Pump placement from TOC 24.00 ft

## Well Information:

Well ID GWB-5R  
 Well diameter 2 in  
 Well Total Depth 26.50 ft  
 Screen Length 10 ft  
 Depth to Water 10.58 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.2194393 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 5 in  
 Total Volume Pumped 35 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 0.2	+/- 100
Last 5	15:30:29	9605.92	24.33	5.95	1721.98	53.00	11.00	0.01	221.09
Last 5	15:35:29	9905.92	24.24	5.95	1747.03	55.00	11.00	0.01	199.88
Last 5	15:40:29	10205.93	24.34	5.94	1723.63	52.00	11.00	0.01	186.90
Last 5	15:45:29	10505.92	24.33	5.95	1731.01	54.00	11.00	0.01	178.36
Last 5	15:50:31	10807.91	24.38	5.95	1744.30	53.00	11.00	0.01	171.65
Variance 0		0.11	-0.01		-23.40			-0.00	-12.98
Variance 1			-0.01	0.01	7.39			-0.00	-8.55
Variance 2			0.05	0.00	13.28			-0.00	-6.71

## Notes

Sunny, sample Time-1550, 2nd Rad collected here.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 14:16:34

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name Grumman Road  
 Site Name Default Site  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 588863  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 25 ft

Pump placement from TOC 20.2 ft

## Well Information:

Well ID GWB-6R  
 Well diameter 2 in  
 Well Total Depth 22.70 ft  
 Screen Length 5 ft  
 Depth to Water 8.46 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.2015856 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 2 in  
 Total Volume Pumped 16 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 0.2	+/- 100
Last 5	13:55:13	1500.01	23.93	5.64	871.46	59.90	8.70	0.08	116.93
Last 5	14:00:13	1800.01	23.93	5.66	908.20	64.00	8.70	0.07	115.09
Last 5	14:05:13	2100.00	23.96	5.67	924.65	61.90	8.70	0.06	113.16
Last 5	14:10:14	2401.00	24.01	5.67	937.23	64.20	8.70	0.05	111.70
Last 5	14:15:14	2700.99	24.45	5.67	933.03	59.40	8.70	0.04	110.23
Variance 0		0.03	0.01		16.45			-0.00	-1.93
Variance 1		0.05	0.01		12.59			-0.01	-1.46
Variance 2		0.44	-0.00		-4.20			-0.01	-1.47

## Notes

Sampled at 1415. 82F heavy rain.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 17:01:53

## Project Information:

Operator Name J Berisford  
 Company Name Atlantic Coast Consulting  
 Project Name 2019 AIV Scan Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 501336  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Peru Pump  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 28 ft

Pump placement from TOC 25 ft

## Well Information:

Well ID GWC-1  
 Well diameter 2 in  
 Well Total Depth 28.10 ft  
 Screen Length 5 ft  
 Depth to Water 19.18 ft

## Pumping Information:

Final Pumping Rate 300 mL/min  
 Total System Volume 0.2149758 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 1.4 in  
 Total Volume Pumped 7.5 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	16:40:16	300.03	96.33	5.82	181.31	4.01	19.30	-0.04	97.05
Last 5	16:45:16	600.03	96.33	5.86	184.58	3.25	19.30	-0.06	96.71
Last 5	16:50:16	900.03	96.33	5.85	185.38	3.22	19.30	-0.07	97.00
Last 5	16:55:16	1200.03	96.33	5.84	184.49	3.05	19.30	-0.08	98.22
Last 5	17:00:16	1500.02	96.33	5.84	184.80	3.01	19.30	-0.09	97.97
Variance 0		-0.00	-0.00		0.80			-0.01	0.29
Variance 1		-0.01	-0.02		-0.90			-0.00	1.22
Variance 2		0.01	0.01		0.32			-0.01	-0.26

## Notes

Rain, Sample time 1700, 2nd rad here

## Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 11:15:46

Project Information:

Operator Name O. Fuquea  
Company Name ACC  
Project Name Grumman Road  
Site Name Default Site  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 588863  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type  
Tubing Type  
Tubing Diameter  
Tubing Length

Peri. Pump  
poly  
.17 in  
35 ft

Pump placement from TOC 28.8 ft

Well Information:

Well ID GWC-2  
Well diameter 2 in  
Well Total Depth 31.4 ft  
Screen Length 5 ft  
Depth to Water 19.53 ft

Pumping Information:

Final Pumping Rate 220 mL/min  
Total System Volume 0.2462198 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 1 in  
Total Volume Pumped 10.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 0.2	+/- 100
Last 5	10:55:02	600.02	21.77	4.77	62.09	2.30	19.60	0.14	115.48
Last 5	11:00:02	900.01	21.77	4.76	61.76	2.10	19.60	0.14	123.03
Last 5	11:05:02	1200.01	21.80	4.75	62.20	0.10	19.60	0.10	130.61
Last 5	11:10:02	1500.01	22.13	4.76	61.34	0.01	19.60	0.10	137.88
Last 5	11:15:04	1802.00	21.99	4.77	61.24	0.07	19.60	0.11	146.98
Variance 0		0.03	-0.01		0.44			-0.03	7.58
Variance 1		0.33	0.01		-0.86			-0.01	7.27
Variance 2		-0.14	0.01		-0.10			0.01	9.10

Notes

Sampled at 1115. Cloudy 85F.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 16:11:35

## Project Information:

Operator Name J Berisford  
 Company Name Atlantic Coast Consulting  
 Project Name 2019 AIV Scan Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 501336  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Peru Pump  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 27 ft

Pump placement from TOC 25 ft

## Well Information:

Well ID GWC-9  
 Well diameter 2 in  
 Well Total Depth 27.4 ft  
 Screen Length 5 ft  
 Depth to Water 10.13 ft

## Pumping Information:

Final Pumping Rate 110 mL/min  
 Total System Volume 0.2105124 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 0 in  
 Total Volume Pumped 0 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	15:50:03	2401.05	96.29	5.10	79.53	4.55	21.60	0.11	52.80
Last 5	15:55:03	2701.03	96.28	5.09	79.42	4.21	23.00	0.20	53.65
Last 5	16:00:03	3001.01	96.29	5.14	80.19	11.00	24.40	0.30	55.43
Last 5	16:05:03	3301.01	96.30	5.12	79.48	8.32	25.30	-0.02	52.53
Last 5	16:10:03	3601.01	96.30	5.11	79.55	6.62	26.60	0.00	50.55
Variance 0		0.01	0.05		0.77			0.10	1.78
Variance 1		0.01	-0.02		-0.71			-0.32	-2.90
Variance 2		-0.00	-0.01		0.07			0.02	-1.98

## Notes

Cloudy, well purged dry, allow for overnight recharge.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-08-28 12:54:13

## Project Information:

Operator Name J Berisford  
 Company Name Atlantic Coast Consulting  
 Project Name 2019 AIV Scan Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 642533  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Peru Pump  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 27 ft

Pump placement from TOC 25 ft

## Well Information:

Well ID GWC-9  
 Well diameter 2 in  
 Well Total Depth 27.4 ft  
 Screen Length 5 ft  
 Depth to Water 10.13 ft

## Pumping Information:

Final Pumping Rate 130 mL/min  
 Total System Volume 0.2105124 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 29.6 in  
 Total Volume Pumped 2.6 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	12:35:11	300.04	29.20	4.73	189.75	10.00	10.90	1.18	38.58
Last 5	12:40:11	600.03	27.57	4.71	194.27	8.21	11.60	0.66	36.63
Last 5	12:45:11	900.02	29.48	4.71	193.06	5.30	12.10	0.63	32.46
Last 5	12:50:11	1200.02	29.30	4.68	193.80	4.30	12.70	0.23	31.55
Last 5									
Variance 0			-1.63	-0.02	4.53			-0.52	-1.95
Variance 1				1.90	0.00	-1.22		-0.03	-4.17
Variance 2				-0.18	-0.03	0.75		-0.40	-0.91

## Notes

Sunny ,Sample time-1250

## Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 11:57:04

Project Information:

Operator Name J Berisford  
 Company Name Atlantic Coast Consulting  
 Project Name 2019 AIV Scan Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 501336  
 Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Peru Pump  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 22.5 ft  
 Pump placement from TOC 20 ft

Well Information:

Well ID GWC-11  
 Well diameter 2 in  
 Well Total Depth 22.55 ft  
 Screen Length 5 ft  
 Depth to Water 13.67 ft

Pumping Information:

Final Pumping Rate 130 mL/min  
 Total System Volume 0.190427 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 39.9 in  
 Total Volume Pumped 14.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization		+/- 100	+/- 0.1	+/- 5%	+/- 100	+/- 100	+/- 10%	+/- 100	
Last 5	11:35:14	5401.99	79.59	5.17	343.02	4.33	17.00	0.08	119.02
Last 5	11:40:14	5701.99	78.80	5.17	370.24	4.55	17.00	0.18	121.06
Last 5	11:45:14	6001.99	76.65	5.15	380.27	3.77	17.00	0.05	121.52
Last 5	11:50:14	6301.99	77.35	5.15	398.70	3.12	17.00	0.07	122.33
Last 5	11:55:14	6601.99	78.98	5.17	381.45	3.10	17.00	0.03	122.03
Variance 0		-2.14	-0.01		10.03			-0.13	0.46
Variance 1		0.70	-0.00		18.42			0.02	0.81
Variance 2		1.64	0.02		-17.25			-0.04	-0.30

Notes

Cloudy, Sample time -1155

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 09:33:15

Project Information:

Operator Name J Berisford  
 Company Name Atlantic Coast Consulting  
 Project Name 2019 AIV Scan Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 501336  
 Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Peru Pump  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 26 ft

Pump placement from TOC 23 ft

Well Information:

Well ID GWC-12  
 Well diameter 2 in  
 Well Total Depth 26.7 ft  
 Screen Length 5 ft  
 Depth to Water 13.34 ft

Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.206049 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 5.5 in  
 Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	09:10:22	1200.02	24.17	4.13	863.14	9.19	13.80	0.09	99.81
Last 5	09:15:22	1500.02	24.05	4.07	960.88	5.10	13.80	0.08	97.85
Last 5	09:20:22	1800.02	23.92	4.03	1035.26	4.22	13.80	0.07	93.76
Last 5	09:25:22	2100.02	24.19	4.02	1034.43	3.05	13.80	0.06	91.55
Last 5	09:30:22	2400.01	23.94	4.02	1041.03	4.62	13.80	0.06	90.17
Variance 0		-0.13	-0.04		74.38			-0.00	-4.09
Variance 1		0.27	-0.01		-0.83			-0.01	-2.21
Variance 2		-0.25	-0.01		6.61			-0.00	-1.38

Notes

Cloudy, Sample time 0930, FB-1-8-27-19 here at 0910

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 12:32:53

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name Grumman Road  
 Site Name Default Site  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 588863  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 50 ft

Pump placement from TOC 45.28 ft

## Well Information:

Well ID GWC-13  
 Well diameter 2 in  
 Well Total Depth 47.78 ft  
 Screen Length 5 ft  
 Depth to Water 14.34 ft

## Pumping Information:

Final Pumping Rate 225 mL/min  
 Total System Volume 0.3131711 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 6.5 in  
 Total Volume Pumped 11.25 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 0.2	+/- 100
Last 5	12:10:03	900.01	23.34	4.91	94.03	3.89	15.00	0.08	180.02
Last 5	12:15:03	1200.01	23.32	4.91	89.38	2.11	15.00	0.08	201.72
Last 5	12:20:03	1500.01	23.43	4.91	87.74	2.01	15.00	0.07	212.00
Last 5	12:25:03	1800.00	23.17	4.90	86.49	1.11	15.00	0.07	219.28
Last 5	12:30:03	2100.00	23.19	4.90	85.07	0.87	15.00	0.07	222.68
Variance 0		0.10	-0.00		-1.63			-0.01	10.28
Variance 1			-0.25	-0.01	-1.25			-0.00	7.28
Variance 2			0.01	0.01	-1.42			0.00	3.40

## Notes

Sampled at 1230. 87F cloudy.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 10:21:04

Project Information:

Operator Name O. Fuquea  
Company Name ACC  
Project Name Grumman Road  
Site Name Default Site  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 588863  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type  
Tubing Type  
Tubing Diameter  
Tubing Length

Peri. Pump  
poly  
.17 in  
30 ft

Pump placement from TOC 24.5 ft

Well Information:

Well ID GWC-14  
Well diameter 2 in  
Well Total Depth 27 ft  
Screen Length 5 ft  
Depth to Water 19.65 ft

Pumping Information:

Final Pumping Rate 220 mL/min  
Total System Volume 0.2239027 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 3.5 in  
Total Volume Pumped 8.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 0.2	+/- 100
Last 5	10:00:01	600.02	21.94	5.58	992.18	4.78	20.00	0.27	120.01
Last 5	10:05:01	900.01	21.86	5.58	1003.12	1.07	20.00	0.27	124.03
Last 5	10:10:06	1205.01	21.83	5.58	1002.97	1.16	20.00	0.25	128.65
Last 5	10:15:09	1508.01	21.76	5.58	999.96	0.01	20.00	0.27	133.84
Last 5	10:20:16	1815.00	21.71	5.58	999.72	0.01	20.00	0.27	138.60
Variance 0		-0.03	-0.00		-0.15			-0.02	4.61
Variance 1		-0.07	-0.00		-3.01			0.01	5.20
Variance 2		-0.05	-0.00		-0.24			0.01	4.75

Notes

Sampled at 1020. Cloudy 84F.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 09:26:49

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name Grumman Road  
 Site Name Default Site  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 588863  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 30 ft

Pump placement from TOC 24.3 ft

## Well Information:

Well ID GWC-15  
 Well diameter 2 in  
 Well Total Depth 26.8 ft  
 Screen Length 5 ft  
 Depth to Water 19.31 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.2239027 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 4 in  
 Total Volume Pumped 8.25 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 0.2	+/- 100
Last 5	09:04:59	600.02	23.05	6.54	784.46	21.00	19.60	0.18	115.44
Last 5	09:09:59	900.01	23.03	6.56	807.60	15.00	19.70	0.15	114.97
Last 5	09:14:59	1200.01	22.97	6.57	819.55	5.08	19.70	0.14	114.93
Last 5	09:19:59	1499.99	23.00	6.57	827.76	4.75	19.70	0.12	115.43
Last 5	09:25:03	1804.00	23.07	6.57	826.86	4.99	19.70	0.09	116.70
Variance 0		-0.05	0.01		11.96			-0.01	-0.04
Variance 1		0.03	0.00		8.21			-0.01	0.50
Variance 2		0.07	-0.00		-0.90			-0.03	1.27

## Notes

Sampled at 0925. 80F cloudy.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-08-28 09:23:24

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name Grumman Road  
 Site Name Default Site  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 588863  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 32 ft

Pump placement from TOC 25.7 ft

## Well Information:

Well ID GWC-16  
 Well diameter 2 in  
 Well Total Depth 28.20 ft  
 Screen Length 5 ft  
 Depth to Water 20.7 ft

## Pumping Information:

Final Pumping Rate 0 mL/min  
 Total System Volume 0.2328295 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 0 in  
 Total Volume Pumped 0 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 0.2	+/- 100
Last 5	09:00:55	900.01	22.43	5.10	1337.13	29.20	21.10	0.59	154.59
Last 5	09:05:55	1200.01	22.44	5.34	1386.66	34.90	21.10	0.54	152.24
Last 5	09:10:55	1500.01	22.44	5.42	1437.30	10.00	21.10	0.50	152.91
Last 5	09:15:55	1800.00	22.34	5.47	1439.00	9.70	21.10	0.51	153.74
Last 5	09:20:55	2100.00	22.26	5.51	1445.97	6.41	21.10	0.51	155.11
Variance 0		0.00	0.08		50.64			-0.04	0.68
Variance 1		-0.10	0.05		1.69			0.01	0.83
Variance 2		-0.07	0.04		6.97			-0.00	1.37

## Notes

Accidentally canceled purge.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-08-28 09:41:45

Project Information:

Operator Name O. Fuquea  
Company Name ACC  
Project Name Grumman Road  
Site Name Default Site  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 588863  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type  
Tubing Type  
Tubing Diameter  
Tubing Length

Peri. Pump  
poly  
.17 in  
32 ft

Pump placement from TOC 25.7 ft

Well Information:

Well ID GWC-16  
Well diameter 2 in  
Well Total Depth 28.2 ft  
Screen Length 5 ft  
Depth to Water 20.7 ft

Pumping Information:

Final Pumping Rate 230 mL/min  
Total System Volume 0.2328295 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 4 in  
Total Volume Pumped 18 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 0.2	+/- 100
Last 5	09:29:25	300.03	22.25	5.54	1467.40	3.41	21.10	0.49	155.56
Last 5	09:34:25	600.02	22.26	5.56	1439.05	4.64	21.10	0.47	154.82
Last 5	09:39:25	900.01	22.26	5.57	1460.28	0.56	21.10	0.46	155.19
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			0.02	0.02	-28.34			-0.02	-0.75
Variance 2			0.00	0.01	21.22			-0.01	0.38

Notes

Continued 2/2. Sampled at 0939. Sunny 85F.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-28 12:06:37

Project Information:

Operator Name J Berisford  
 Company Name Atlantic Coast Consulting  
 Project Name 2019 AIV Scan Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 642533  
 Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Peru Pump  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 23 ft

Pump placement from TOC 21 ft

Well Information:

Well ID GWC-17  
 Well diameter 2 in  
 Well Total Depth 23 ft  
 Screen Length 5 ft  
 Depth to Water 6.52 ft

Pumping Information:

Final Pumping Rate 100 mL/min  
 Total System Volume 0.1926587 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 15.3 in  
 Total Volume Pumped 18.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization		+/- 100	+/- 0.1	+/- 5%	+/- 100			+/- 10%	+/- 100
Last 5	11:40:08	9899.97	28.83	4.78	1686.39	16.00	7.80	0.09	46.79
Last 5	11:45:08	10199.96	28.41	4.59	1807.06	12.00	7.80	0.08	50.00
Last 5	11:50:08	10499.96	28.64	4.69	1728.24	11.00	7.80	0.08	48.88
Last 5	11:55:08	10799.96	28.83	4.64	1750.81	11.00	7.80	0.08	50.25
Last 5	12:00:08	11099.96	29.72	4.62	1785.53	9.52	7.80	0.06	50.52
Variance 0		0.23	0.10	-78.83				-0.00	-1.12
Variance 1		0.19	-0.04	22.57				0.00	1.38
Variance 2		0.89	-0.02	34.72				-0.02	0.27

Notes

Sunny, Sample time 1200, FB-2-8-28-19 here at 1000

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-28 12:12:16

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name Grumman Road  
 Site Name Default Site  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 588863  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 28 ft

Pump placement from TOC 22.4 ft

## Well Information:

Well ID GWC-20  
 Well diameter 2 in  
 Well Total Depth 24.90 ft  
 Screen Length 5 ft  
 Depth to Water 21.06 ft

## Pumping Information:

Final Pumping Rate 175 mL/min  
 Total System Volume 0.2149758 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 4.5 in  
 Total Volume Pumped 8 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 0.2	+/- 100
Last 5	11:50:29	1200.01	23.34	6.34	617.62	0.20	21.50	0.14	124.61
Last 5	11:55:29	1500.01	23.31	6.34	618.57	0.20	21.50	0.14	124.70
Last 5	12:00:30	1801.01	23.34	6.34	620.18	0.20	21.50	0.14	124.26
Last 5	12:05:30	2101.00	23.64	6.34	616.95	0.20	21.50	0.19	125.05
Last 5	12:10:34	2405.00	23.47	6.34	618.79	0.40	21.50	0.24	126.23
Variance 0		0.03	0.00		1.61			-0.00	-0.45
Variance 1		0.30	0.00		-3.23			0.06	0.79
Variance 2		-0.17	0.00		1.84			0.05	1.18

## Notes

Sampled at 1210. 84F cloudy.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-08-28 11:02:06

Project Information:

Operator Name O. Fuquea  
Company Name ACC  
Project Name Grumman Road  
Site Name Default Site  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 588863  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type  
Tubing Type  
Tubing Diameter  
Tubing Length

Peri. Pump  
poly  
.17 in  
25 ft

Pump placement from TOC 22 ft

Well Information:

Well ID GWC-21  
Well diameter 2 in  
Well Total Depth 23.8 ft  
Screen Length 5 ft  
Depth to Water 20.55 ft

Pumping Information:

Final Pumping Rate 115 mL/min  
Total System Volume 0.2015856 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 3 in  
Total Volume Pumped 10.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 0.2	+/- 100
Last 5	10:40:07	1500.01	23.32	6.00	218.38	4.61	20.80	2.80	258.56
Last 5	10:45:08	1801.00	24.06	6.13	291.95	4.55	20.80	1.95	234.74
Last 5	10:50:08	2101.00	24.23	6.07	254.79	7.58	20.80	2.39	236.20
Last 5	10:55:08	2401.00	24.16	6.06	251.47	2.05	20.80	2.54	236.57
Last 5	11:00:08	2700.99	24.19	6.05	252.63	--	--	2.50	232.72
Variance 0			0.18	-0.06	-37.16			0.44	1.46
Variance 1			-0.07	-0.01	-3.32			0.15	0.37
Variance 2			0.03	-0.01	1.16			-0.04	-3.85

Notes

Sampled at 1100. Sunny 86F.

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 14:35:06

Project Information:

Operator Name J Berisford  
Company Name Atlantic Coast Consulting  
Project Name 2019 AIV Scan Event  
Site Name Grumman Road  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 501336  
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Peru Pump  
Tubing Type poly  
Tubing Diameter .17 in  
Tubing Length 18.6 ft  
  
Pump placement from TOC 16 ft

Well Information:

Well ID GWC-22  
Well diameter 2 in  
Well Total Depth 18.6 ft  
Screen Length 5 ft  
Depth to Water 9.51 ft

Pumping Information:

Final Pumping Rate 165 mL/min  
Total System Volume 0.1730197 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.4 in  
Total Volume Pumped 10.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:10:30	2700.01	89.47	4.92	946.54	4.26	9.70	-0.04	179.05
Last 5	14:15:30	3000.01	90.82	4.91	998.23	4.55	9.70	-0.05	184.08
Last 5	14:20:30	3300.00	87.48	4.88	1068.28	4.92	9.70	-0.04	188.86
Last 5	14:25:30	3600.00	88.33	4.88	1103.13	3.77	9.70	-0.04	193.54
Last 5	14:30:30	3900.01	89.73	4.89	1114.20	3.03	9.70	-0.06	197.68
Variance 0			-3.34	-0.03	70.05			0.01	4.78
Variance 1			0.84	-0.00	34.85			-0.00	4.68
Variance 2			1.40	0.00	11.07			-0.01	4.15

Notes

Rain, Sample time-1430

Grab Samples

December 11, 2019

Joju Abraham  
Georgia Power - Coal Combustion Residuals  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624186

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 10, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for  
Betsy McDaniel  
betsy.mcdaniel@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Betsy McDaniel, Atlantic Coast Consulting  
Chris Parker, Atlantic Coast Consulting  
Evan Perry, Atlantic Coast Consulting  
Lauren Petty, Southern Company Services, Inc.  
Rebecca Thornton, Pace Analytical Atlanta



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## CERTIFICATIONS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624186

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**Pace Analytical Services Atlanta**

110 Technology Parkway Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812  
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001  
Virginia Certification #: 460204

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## SAMPLE SUMMARY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624186

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624186001	GWA-7	Water	10/08/19 09:45	10/10/19 13:45
2624186002	GWB-5R	Water	10/09/19 16:20	10/10/19 13:45

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## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624186

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2624186001	GWA-7	EPA 6020B	CSW	16
		EPA 7470A	DRB	1
2624186002	GWB-5R	EPA 6020B	CSW	16
		EPA 7470A	DRB	1

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624186

Sample: GWA-7	Lab ID: 2624186001	Collected: 10/08/19 09:45	Received: 10/10/19 13:45	Matrix: Water				
Parameters	Results	Units	Report	Prepared	Analyzed	CAS No.	Qual	
			Limit					
<b>6020B MET ICPMS, Dissolved</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A						
Antimony, Dissolved	ND	mg/L	0.015	0.0014	5	10/11/19 14:13	10/16/19 15:50	7440-36-0 D3
Arsenic, Dissolved	<b>0.0055J</b>	mg/L	0.025	0.0018	5	10/11/19 14:13	10/16/19 15:50	7440-38-2 B,D3
Barium, Dissolved	<b>0.077</b>	mg/L	0.050	0.0024	5	10/11/19 14:13	10/16/19 15:50	7440-39-3
Beryllium, Dissolved	ND	mg/L	0.015	0.00037	5	10/11/19 14:13	10/16/19 15:50	7440-41-7 D3
Boron, Dissolved	<b>6.2</b>	mg/L	0.20	0.025	5	10/11/19 14:13	10/16/19 15:50	7440-42-8 M1
Cadmium, Dissolved	ND	mg/L	0.012	0.00057	5	10/11/19 14:13	10/16/19 15:50	7440-43-9 D3
Calcium, Dissolved	<b>3.2</b>	mg/L	0.50	0.055	5	10/11/19 14:13	10/16/19 15:50	7440-70-2
Chromium, Dissolved	<b>0.014J</b>	mg/L	0.050	0.0020	5	10/11/19 14:13	10/16/19 15:50	7440-47-3 D3
Cobalt, Dissolved	<b>0.0025J</b>	mg/L	0.025	0.0015	5	10/11/19 14:13	10/16/19 15:50	7440-48-4 D3
Lead, Dissolved	<b>0.00031J</b>	mg/L	0.025	0.00023	5	10/11/19 14:13	10/16/19 15:50	7439-92-1 D3
Lithium, Dissolved	ND	mg/L	0.15	0.0039	5	10/11/19 14:13	10/16/19 15:50	7439-93-2 D3
Molybdenum, Dissolved	ND	mg/L	0.050	0.0047	5	10/11/19 14:13	10/16/19 15:50	7439-98-7 D3
Selenium, Dissolved	<b>0.0087J</b>	mg/L	0.050	0.0063	5	10/11/19 14:13	10/16/19 15:50	7782-49-2 D3
Thallium, Dissolved	ND	mg/L	0.0050	0.00026	5	10/11/19 14:13	10/16/19 15:50	7440-28-0 D3
Vanadium, Dissolved	<b>0.12</b>	mg/L	0.050	0.0035	5	10/11/19 14:13	10/17/19 16:37	7440-62-2
Zinc, Dissolved	ND	mg/L	0.050	0.0077	5	10/11/19 14:13	10/16/19 15:50	7440-66-6 D3
<b>7470 Mercury, Dissolved</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury, Dissolved	ND	mg/L	0.00020	0.00014	1	10/16/19 09:37	10/17/19 11:28	7439-97-6

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624186

Sample: GWB-5R	Lab ID: 2624186002	Collected: 10/09/19 16:20	Received: 10/10/19 13:45	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS, Dissolved</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony, Dissolved	ND	mg/L	0.015	0.0014	5	10/11/19 14:13	10/16/19 17:06	7440-36-0	D3
Arsenic, Dissolved	<b>0.0080J</b>	mg/L	0.025	0.0018	5	10/11/19 14:13	10/16/19 17:06	7440-38-2	B,D3
Barium, Dissolved	<b>0.13</b>	mg/L	0.050	0.0024	5	10/11/19 14:13	10/16/19 17:06	7440-39-3	
Beryllium, Dissolved	ND	mg/L	0.015	0.00037	5	10/11/19 14:13	10/16/19 17:06	7440-41-7	D3
Boron, Dissolved	<b>8.5</b>	mg/L	2.0	0.25	50	10/11/19 14:13	10/16/19 17:12	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.012	0.00057	5	10/11/19 14:13	10/16/19 17:06	7440-43-9	D3
Calcium, Dissolved	<b>18.2</b>	mg/L	0.50	0.055	5	10/11/19 14:13	10/16/19 17:06	7440-70-2	
Chromium, Dissolved	<b>0.012J</b>	mg/L	0.050	0.0020	5	10/11/19 14:13	10/16/19 17:06	7440-47-3	D3
Cobalt, Dissolved	<b>0.0042J</b>	mg/L	0.025	0.0015	5	10/11/19 14:13	10/16/19 17:06	7440-48-4	D3
Lead, Dissolved	ND	mg/L	0.025	0.00023	5	10/11/19 14:13	10/16/19 17:06	7439-92-1	D3
Lithium, Dissolved	ND	mg/L	0.15	0.0039	5	10/11/19 14:13	10/16/19 17:06	7439-93-2	D3
Molybdenum, Dissolved	ND	mg/L	0.050	0.0047	5	10/11/19 14:13	10/16/19 17:06	7439-98-7	D3
Selenium, Dissolved	ND	mg/L	0.050	0.0063	5	10/11/19 14:13	10/16/19 17:06	7782-49-2	D3
Thallium, Dissolved	ND	mg/L	0.0050	0.00026	5	10/11/19 14:13	10/16/19 17:06	7440-28-0	D3
Vanadium, Dissolved	<b>0.043J</b>	mg/L	0.050	0.0035	5	10/11/19 14:13	10/17/19 16:42	7440-62-2	
Zinc, Dissolved	ND	mg/L	0.050	0.0077	5	10/11/19 14:13	10/16/19 17:06	7440-66-6	D3
<b>7470 Mercury, Dissolved</b>	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury, Dissolved	ND	mg/L	0.00020	0.00014	1	10/16/19 09:37	10/17/19 11:37	7439-97-6	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624186

QC Batch:	37007	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury Dissolved
Associated Lab Samples:	2624186001, 2624186002		

METHOD BLANK: 167295 Matrix: Water

Associated Lab Samples: 2624186001, 2624186002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury, Dissolved	mg/L	ND	0.00020	0.00014	10/17/19 11:23	

LABORATORY CONTROL SAMPLE: 167296

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	mg/L	0.0025	0.0025	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 167297 167298

Parameter	Units	2624186001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Mercury, Dissolved	mg/L	ND	0.0025	0.0025	0.0024	0.0022	94	89	75-125	5	20	

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## **QUALITY CONTROL DATA**

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624186

QC Batch: 36866 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020B MET Dissolved  
Associated Lab Samples: 2624186001, 2624186002

METHOD BLANK: 166659 Matrix: Water

Associated Lab Samples: 2624186001, 2624186002

Parameter	Units	Blank	Reporting	MDL	Analyzed	Qualifiers
		Result	Limit			
Antimony, Dissolved	mg/L	ND	0.0030	0.00027	10/16/19 15:38	
Arsenic, Dissolved	mg/L	0.0011J	0.0050	0.00035	10/16/19 15:38	
Barium, Dissolved	mg/L	ND	0.010	0.00049	10/16/19 15:38	
Beryllium, Dissolved	mg/L	ND	0.0030	0.000074	10/16/19 15:38	
Boron, Dissolved	mg/L	ND	0.040	0.0049	10/16/19 15:38	
Cadmium, Dissolved	mg/L	ND	0.0025	0.00011	10/16/19 15:38	
Calcium, Dissolved	mg/L	ND	0.10	0.011	10/16/19 15:38	
Chromium, Dissolved	mg/L	ND	0.010	0.00039	10/16/19 15:38	
Cobalt, Dissolved	mg/L	ND	0.0050	0.00030	10/16/19 15:38	
Lead, Dissolved	mg/L	ND	0.0050	0.000046	10/16/19 15:38	
Lithium, Dissolved	mg/L	ND	0.030	0.00078	10/16/19 15:38	
Molybdenum, Dissolved	mg/L	ND	0.010	0.00095	10/16/19 15:38	
Selenium, Dissolved	mg/L	ND	0.010	0.0013	10/16/19 15:38	
Thallium, Dissolved	mg/L	ND	0.0010	0.000052	10/16/19 15:38	
Vanadium, Dissolved	mg/L	0.0058J	0.010	0.00071	10/16/19 15:38	
Zinc, Dissolved	mg/L	0.0046J	0.010	0.0015	10/16/19 15:38	

LABORATORY CONTROL SAMPLE: 166660

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	mg/L	0.1	0.097	97	80-120	
Arsenic, Dissolved	mg/L	0.1	0.10	100	80-120	
Barium, Dissolved	mg/L	0.1	0.10	100	80-120	
Beryllium, Dissolved	mg/L	0.1	0.11	111	80-120	
Boron, Dissolved	mg/L	1	1.1	111	80-120	
Cadmium, Dissolved	mg/L	0.1	0.10	102	80-120	
Calcium, Dissolved	mg/L	1	1.0	100	80-120	
Chromium, Dissolved	mg/L	0.1	0.10	103	80-120	
Cobalt, Dissolved	mg/L	0.1	0.10	101	80-120	
Lead, Dissolved	mg/L	0.1	0.10	101	80-120	
Lithium, Dissolved	mg/L	0.1	0.11	112	80-120	
Molybdenum, Dissolved	mg/L	0.1	0.10	100	80-120	
Selenium, Dissolved	mg/L	0.1	0.098	98	80-120	
Thallium, Dissolved	mg/L	0.1	0.10	102	80-120	
Vanadium, Dissolved	mg/L	0.1	0.11	106	80-120	
Zinc, Dissolved	mg/L	0.1	0.10	105	80-120	

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624186

Parameter	Units	2624186001		MS		MSD		166662		Max		
		Result	Spike Conc.	Spike	MS	MSD	MS	MSD	% Rec	Limits	RPD	RPD
				Conc.	Result	Result	% Rec	% Rec	% Rec			
Antimony, Dissolved	mg/L	ND	0.1	0.1	0.096	0.093	96	92	75-125	4	20	
Arsenic, Dissolved	mg/L	0.0055J	0.1	0.1	0.10	0.10	95	95	75-125	0	20	
Barium, Dissolved	mg/L	0.077	0.1	0.1	0.17	0.17	97	93	75-125	2	20	
Beryllium, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	3	20	
Boron, Dissolved	mg/L	6.2	1	1	7.7	7.8	145	161	75-125	2	20	M1
Cadmium, Dissolved	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	3	20	
Calcium, Dissolved	mg/L	3.2	1	1	4.3	4.2	117	104	75-125	3	20	
Chromium, Dissolved	mg/L	0.014J	0.1	0.1	0.11	0.11	97	98	75-125	1	20	
Cobalt, Dissolved	mg/L	0.0025J	0.1	0.1	0.098	0.099	96	96	75-125	1	20	
Lead, Dissolved	mg/L	0.00031J	0.1	0.1	0.093	0.092	93	92	75-125	1	20	
Lithium, Dissolved	mg/L	ND	0.1	0.1	0.10J	0.10J	102	105	75-125		20	
Molybdenum, Dissolved	mg/L	ND	0.1	0.1	0.097	0.098	97	97	75-125	1	20	
Selenium, Dissolved	mg/L	0.0087J	0.1	0.1	0.10	0.10	96	95	75-125	0	20	
Thallium, Dissolved	mg/L	ND	0.1	0.1	0.094	0.093	94	93	75-125	1	20	
Vanadium, Dissolved	mg/L	0.12	0.1	0.1	0.24	0.24	125	126	75-125	0	20	
Zinc, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	96	98	75-125	2	20	

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## QUALIFIERS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624186

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2624186

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624186001	GWA-7	EPA 3005A	36866	EPA 6020B	36889
2624186002	GWB-5R	EPA 3005A	36866	EPA 6020B	36889
2624186001	GWA-7	EPA 7470A	37007	EPA 7470A	37097
2624186002	GWB-5R	EPA 7470A	37007	EPA 7470A	37097

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**CHAIN OF CUSTODY RECORD**

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110 TECHNOLOGY PARKWAY  
(770) 734-4200 : FAX (770) 734-4201

**110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092**  
**(770) 734-4200 : FAX (770) 734-4201**

PAGE:    OF

Detected App IV Metals: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Molybdenum, Selenium, and Thallium  
State Metals: As, Ba, Cr, Pb, Sb, Se, V, Zn

## Sample Condition Upon Receipt

*Pace Analytical*Client Name: GAPower Project # \_\_\_\_\_Courier:  FedEx  UPS  USPS  Client  Commercial  Pace Other  
Tracking #: \_\_\_\_\_WO# : **2624186**Custody Seal on Cooler/Box Present:  Yes  no Seals intact:  yes

PM: BM Due Date: 10/17/19

CLIENT: GAPower-CCR

Packing Material:  Bubble Wrap  Bubble Bags  None  OtherThermometer Used 83Type of Ice:  Wet  Blue  None Samples on ice, cooling process has begunCooler Temperature 0.4Biological Tissue is Frozen: Yes  No

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 10/10/19 MR

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered volume received for Dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.	
All containers needing preservation have been checked:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):			

## Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Manager Review: \_\_\_\_\_

Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

December 11, 2019

Joju Abraham  
Georgia Power - Coal Combustion Residuals  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 10, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for  
Betsy McDaniel  
betsy.mcdaniel@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Betsy McDaniel, Atlantic Coast Consulting  
Chris Parker, Atlantic Coast Consulting  
Evan Perry, Atlantic Coast Consulting  
Lauren Petty, Southern Company Services, Inc.  
Rebecca Thornton, Pace Analytical Atlanta



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

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**Pace Analytical Services Atlanta**

110 Technology Parkway Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812  
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001  
Virginia Certification #: 460204

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624187001	Dup-1	Water	10/08/19 00:00	10/10/19 13:15
2624187002	EB-1-10-8-19	Water	10/08/19 16:15	10/10/19 13:15
2624187003	GWC-16	Water	10/08/19 12:30	10/10/19 13:15
2624187004	GWC-21	Water	10/08/19 14:25	10/10/19 13:15
2624187005	GWC-15	Water	10/08/19 15:25	10/10/19 13:15
2624187006	GWC-14	Water	10/08/19 16:30	10/10/19 13:15
2624187007	GWB-4R	Water	10/09/19 11:40	10/10/19 13:15
2624187008	GWC-2	Water	10/09/19 13:00	10/10/19 13:15
2624187009	FB-2-10-9-19	Water	10/09/19 13:20	10/10/19 13:15
2624187010	GWC-20	Water	10/09/19 14:25	10/10/19 13:15
2624187011	GWA-8	Water	10/07/19 17:25	10/10/19 13:15
2624187012	GWA-7	Water	10/08/19 09:45	10/10/19 13:15
2624187013	FB-1-10-8-19	Water	10/08/19 10:40	10/10/19 13:15
2624187014	GWC-13	Water	10/08/19 11:25	10/10/19 13:15
2624187015	GWC-11	Water	10/08/19 15:15	10/10/19 13:15
2624187016	GWC-12	Water	10/09/19 09:55	10/10/19 13:15
2624187017	Dup-2	Water	10/09/19 00:00	10/10/19 13:15
2624187018	GWC-17	Water	10/09/19 11:10	10/10/19 13:15
2624187019	GWC-22	Water	10/09/19 13:18	10/10/19 13:15
2624187020	GWB-6R	Water	10/09/19 15:13	10/10/19 13:15
2624187021	GWB-5R	Water	10/09/19 16:20	10/10/19 13:15
2624187022	GWC-1	Water	10/09/19 15:40	10/10/19 13:15
2624187023	GWC-9	Water	10/09/19 12:10	10/10/19 13:15
2624187024	EB-2-10-9-19	Water	10/09/19 12:30	10/10/19 13:15

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## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2624187001	Dup-1	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187002	EB-1-10-8-19	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187003	GWC-16	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187004	GWC-21	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187005	GWC-15	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187006	GWC-14	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187007	GWB-4R	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187008	GWC-2	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187009	FB-2-10-9-19	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187010	GWC-20	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187011	GWA-8	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187012	GWA-7	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187013	FB-1-10-8-19	EPA 6020B	CSW	16

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## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2624187014	GWC-13	SM 2540C	ALW	1
		EPA 300.0	MWB	3
		EPA 6020B	CSW	16
		SM 2540C	ALW	1
2624187015	GWC-11	EPA 300.0	MWB	3
		EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187016	GWC-12	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
		EPA 6020B	CSW	16
2624187017	Dup-2	SM 2540C	ALW	1
		EPA 300.0	MWB	3
		EPA 6020B	CSW	16
		SM 2540C	ALW	1
2624187018	GWC-17	EPA 300.0	MWB	3
		EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187019	GWC-22	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
		EPA 6020B	CSW	16
2624187020	GWB-6R	SM 2540C	ALW	1
		EPA 300.0	MWB	3
		EPA 6020B	CSW	16
		SM 2540C	ALW	1
2624187021	GWB-5R	EPA 300.0	MWB	3
		EPA 6020B	CSW	16
		EPA 7470A	DRB	1
		SM 2540C	ALW	1
2624187022	GWC-1	EPA 300.0	MWB	3
		EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624187023	GWC-9	EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
		EPA 6020B	CSW	16
2624187024	EB-2-10-9-19	SM 2540C	ALW	1
		EPA 300.0	MWB	3
		EPA 6020B	CSW	16
		SM 2540C	ALW	1
		EPA 300.0	MWB	3

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: Dup-1	Lab ID: 2624187001	Collected: 10/08/19 00:00	Received: 10/10/19 13:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 20:00	7440-36-0	
Arsenic	<b>0.089</b>	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 20:00	7440-38-2	
Barium	<b>0.13</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 20:00	7440-39-3	
Beryllium	<b>0.000088J</b>	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 20:00	7440-41-7	
Boron	<b>8.4</b>	mg/L	2.0	0.25	50	10/14/19 14:35	10/18/19 17:40	7440-42-8	M6
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 20:00	7440-43-9	
Calcium	<b>206</b>	mg/L	5.0	0.55	50	10/14/19 14:35	10/17/19 20:06	7440-70-2	M6
Chromium	<b>0.00087J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 20:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 20:00	7440-48-4	
Lead	<b>0.00010J</b>	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 20:00	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 20:00	7439-93-2	
Molybdenum	<b>0.20</b>	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 20:00	7439-98-7	
Selenium	<b>0.0024J</b>	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 20:00	7782-49-2	
Thallium	<b>0.00011J</b>	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 20:00	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 20:00	7440-62-2	
Zinc	<b>0.010</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 20:00	7440-66-6	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C								
Total Dissolved Solids	<b>1500</b>	mg/L	10.0	10.0	1			10/11/19 11:28	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0								
Chloride	<b>45.8</b>	mg/L	1.0	0.024	1			10/15/19 06:03	16887-00-6
Fluoride	ND	mg/L	0.30	0.029	1			10/15/19 06:03	16984-48-8
Sulfate	<b>943</b>	mg/L	20.0	0.34	20			10/15/19 22:29	14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: EB-1-10-8-19	Lab ID: 2624187002	Collected: 10/08/19 16:15	Received: 10/10/19 13:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 20:52	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 20:52	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 20:52	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 20:52	7440-41-7	
Boron	<b>0.0089J</b>	mg/L	0.040	0.0049	1	10/14/19 14:35	10/17/19 20:52	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 20:52	7440-43-9	
Calcium	<b>0.014J</b>	mg/L	0.10	0.011	1	10/14/19 14:35	10/17/19 20:52	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 20:52	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 20:52	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 20:52	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 20:52	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 20:52	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 20:52	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 20:52	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 20:52	7440-62-2	
Zinc	<b>0.0046J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 20:52	7440-66-6	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C								
Total Dissolved Solids	<b>20.0</b>	mg/L	10.0	10.0	1				10/11/19 11:29
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0								
Chloride	ND	mg/L	1.0	0.024	1				10/15/19 06:25
Fluoride	ND	mg/L	0.30	0.029	1				10/15/19 06:25
Sulfate	<b>0.26J</b>	mg/L	1.0	0.017	1				10/15/19 06:25
									16887-00-6
									16984-48-8
									14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-16		Lab ID: 2624187003		Collected: 10/08/19 12:30		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 20:57	7440-36-0	
Arsenic	<b>0.088</b>	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 20:57	7440-38-2	
Barium	<b>0.13</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 20:57	7440-39-3	
Beryllium	<b>0.000098J</b>	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 20:57	7440-41-7	
Boron	<b>8.4</b>	mg/L	2.0	0.25	50	10/14/19 14:35	10/18/19 17:45	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 20:57	7440-43-9	
Calcium	<b>205</b>	mg/L	5.0	0.55	50	10/14/19 14:35	10/17/19 21:03	7440-70-2	
Chromium	<b>0.00099J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 20:57	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 20:57	7440-48-4	
Lead	<b>0.00010J</b>	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 20:57	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 20:57	7439-93-2	
Molybdenum	<b>0.20</b>	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 20:57	7439-98-7	
Selenium	<b>0.0023J</b>	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 20:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 20:57	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 20:57	7440-62-2	
Zinc	<b>0.010</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 20:57	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	<b>1500</b>	mg/L	10.0	10.0	1				10/11/19 11:29
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>46.4</b>	mg/L	1.0	0.024	1				10/15/19 07:53
Fluoride	ND	mg/L	0.30	0.029	1				10/15/19 07:53
Sulfate	<b>872</b>	mg/L	50.0	0.85	50				10/15/19 22:52
									16887-00-6 16984-48-8 14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-21	Lab ID: 2624187004	Collected: 10/08/19 14:25	Received: 10/10/19 13:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 21:09	7440-41-7	
Boron	1.0	mg/L	0.040	0.0049	1	10/14/19 14:35	10/17/19 21:09	7440-42-8	
Chromium	0.00065J	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 21:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 21:09	7440-48-4	
Arsenic	0.0028J	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 21:09	7440-38-2	
Selenium	0.019	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 21:09	7782-49-2	
Molybdenum	0.078	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 21:09	7439-98-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 21:09	7440-43-9	
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 21:09	7440-36-0	
Barium	0.079	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 21:09	7440-39-3	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 21:09	7440-28-0	
Lead	0.00016J	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 21:09	7439-92-1	
Calcium	49.5	mg/L	1.0	0.11	10	10/14/19 14:35	10/18/19 17:51	7440-70-2	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 21:09	7439-93-2	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 21:09	7440-62-2	
Zinc	0.0071J	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 21:09	7440-66-6	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C								
Total Dissolved Solids	278	mg/L	10.0	10.0	1		10/11/19 11:29		
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0								
Chloride	7.8	mg/L	1.0	0.024	1		10/15/19 08:15	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		10/15/19 08:15	16984-48-8	
Sulfate	85.6	mg/L	5.0	0.085	5		10/15/19 23:36	14808-79-8	

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-15		Lab ID: 2624187005		Collected: 10/08/19 15:25		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 21:20	7440-36-0	
Arsenic	<b>0.13</b>	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 21:20	7440-38-2	
Barium	<b>0.057</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 21:20	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 21:20	7440-41-7	
Boron	<b>1.1</b>	mg/L	0.40	0.049	10	10/14/19 14:35	10/18/19 17:57	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 21:20	7440-43-9	
Calcium	<b>129</b>	mg/L	5.0	0.55	50	10/14/19 14:35	10/17/19 21:26	7440-70-2	
Chromium	<b>0.0017J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 21:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 21:20	7440-48-4	
Lead	<b>0.00012J</b>	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 21:20	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 21:20	7439-93-2	
Molybdenum	<b>0.091</b>	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 21:20	7439-98-7	
Selenium	<b>0.014</b>	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 21:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 21:20	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 21:20	7440-62-2	
Zinc	<b>0.0051J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 21:20	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	<b>526</b>	mg/L	10.0	10.0	1		10/14/19 11:50		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>2.9</b>	mg/L	1.0	0.024	1		10/15/19 08:37		
Fluoride	ND	mg/L	0.30	0.029	1		10/15/19 08:37		
Sulfate	<b>45.8</b>	mg/L	1.0	0.017	1		10/15/19 08:37		

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-14		Lab ID: 2624187006		Collected: 10/08/19 16:30		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 21:32	7440-36-0	
Arsenic	<b>0.0017J</b>	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 21:32	7440-38-2	
Barium	<b>0.085</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 21:32	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 21:32	7440-41-7	
Boron	<b>0.048</b>	mg/L	0.040	0.0049	1	10/14/19 14:35	10/17/19 21:32	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 21:32	7440-43-9	
Calcium	<b>146</b>	mg/L	5.0	0.55	50	10/14/19 14:35	10/17/19 21:38	7440-70-2	
Chromium	<b>0.00053J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 21:32	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 21:32	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 21:32	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 21:32	7439-93-2	
Molybdenum	<b>0.034</b>	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 21:32	7439-98-7	
Selenium	<b>0.0026J</b>	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 21:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 21:32	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 21:32	7440-62-2	
Zinc	<b>0.0052J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 21:32	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	<b>841</b>	mg/L	10.0	10.0	1				10/14/19 11:50
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>40.2</b>	mg/L	1.0	0.024	1				10/16/19 01:26
Fluoride	ND	mg/L	0.30	0.029	1				10/16/19 01:26
Sulfate	<b>428</b>	mg/L	50.0	0.85	50				10/16/19 22:49
									16887-00-6 M1
									16984-48-8
									14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWB-4R		Lab ID: 2624187007		Collected: 10/09/19 11:40		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 21:55	7440-36-0	
Arsenic	<b>0.0024J</b>	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 21:55	7440-38-2	
Barium	<b>0.076</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 21:55	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 21:55	7440-41-7	
Boron	<b>5.7</b>	mg/L	2.0	0.25	50	10/14/19 14:35	10/17/19 22:00	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 21:55	7440-43-9	
Calcium	<b>46.7</b>	mg/L	5.0	0.55	50	10/14/19 14:35	10/17/19 22:00	7440-70-2	
Chromium	<b>0.0020J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 21:55	7440-47-3	
Cobalt	<b>0.0015J</b>	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 21:55	7440-48-4	
Lead	<b>0.00041J</b>	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 21:55	7439-92-1	
Lithium	<b>0.013J</b>	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 21:55	7439-93-2	
Molybdenum	<b>0.10</b>	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 21:55	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 21:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 21:55	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 21:55	7440-62-2	
Zinc	<b>0.0064J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 21:55	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	<b>502</b>	mg/L	10.0	10.0	1				10/15/19 17:20
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>32.1</b>	mg/L	1.0	0.024	1				10/16/19 02:32
Fluoride	ND	mg/L	0.30	0.029	1				10/16/19 02:32
Sulfate	<b>38.5</b>	mg/L	10.0	0.17	10				10/16/19 23:11
									14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-2	Lab ID: 2624187008	Collected: 10/09/19 13:00	Received: 10/10/19 13:15	Matrix: Water				
Parameters	Results	Units	Report	Prepared	Analyzed	CAS No.	Qual	
			Limit					
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A						
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 22:06	7440-36-0
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 22:06	7440-38-2
Barium	<b>0.050</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 22:06	7440-39-3
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 22:06	7440-41-7
Boron	<b>0.024J</b>	mg/L	0.040	0.0049	1	10/14/19 14:35	10/17/19 22:06	7440-42-8
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 22:06	7440-43-9
Calcium	<b>0.18</b>	mg/L	0.10	0.011	1	10/14/19 14:35	10/17/19 22:06	7440-70-2
Chromium	<b>0.00049J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 22:06	7440-47-3
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 22:06	7440-48-4
Lead	<b>0.000064J</b>	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 22:06	7439-92-1
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 22:06	7439-93-2
Molybdenum	ND	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 22:06	7439-98-7
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 22:06	7782-49-2
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 22:06	7440-28-0
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 22:06	7440-62-2
Zinc	<b>0.0050J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 22:06	7440-66-6
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	<b>46.0</b>	mg/L	10.0	10.0	1			10/15/19 17:20
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Chloride	<b>7.0</b>	mg/L	1.0	0.024	1			10/16/19 02:55
Fluoride	ND	mg/L	0.30	0.029	1			10/16/19 02:55
Sulfate	<b>10.1</b>	mg/L	1.0	0.017	1			10/16/19 02:55
								16887-00-6
								16984-48-8
								14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: FB-2-10-9-19		Lab ID: 2624187009		Collected: 10/09/19 13:20		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 22:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 22:18	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 22:18	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 22:18	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	10/14/19 14:35	10/17/19 22:18	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 22:18	7440-43-9	
Calcium	<b>0.027J</b>	mg/L	0.10	0.011	1	10/14/19 14:35	10/17/19 22:18	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 22:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 22:18	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 22:18	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 22:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 22:18	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 22:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 22:18	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 22:18	7440-62-2	
Zinc	<b>0.0049J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 22:18	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	ND	mg/L	10.0	10.0	1				10/15/19 17:20
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	ND	mg/L	1.0	0.024	1				10/16/19 03:17
Fluoride	ND	mg/L	0.30	0.029	1				16887-00-6
Sulfate	<b>0.13J</b>	mg/L	1.0	0.017	1				10/16/19 03:17
									16984-48-8
									14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-20		Lab ID: 2624187010		Collected: 10/09/19 14:25		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 22:23	7440-36-0	
Arsenic	<b>0.35</b>	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 22:23	7440-38-2	
Barium	<b>0.078</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 22:23	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 22:23	7440-41-7	
Boron	<b>0.79</b>	mg/L	0.040	0.0049	1	10/14/19 14:35	10/17/19 22:23	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 22:23	7440-43-9	
Calcium	<b>80.1</b>	mg/L	5.0	0.55	50	10/14/19 14:35	10/17/19 22:29	7440-70-2	
Chromium	<b>0.0011J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 22:23	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 22:23	7440-48-4	
Lead	<b>0.00018J</b>	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 22:23	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 22:23	7439-93-2	
Molybdenum	<b>0.071</b>	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 22:23	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 22:23	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 22:23	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 22:23	7440-62-2	
Zinc	<b>0.0049J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 22:23	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	<b>434</b>	mg/L	10.0	10.0	1				10/15/19 17:20
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>5.4</b>	mg/L	1.0	0.024	1				10/16/19 03:39
Fluoride	ND	mg/L	0.30	0.029	1				10/16/19 03:39
Sulfate	<b>58.5</b>	mg/L	10.0	0.17	10				10/16/19 23:33
									14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWA-8	Lab ID: 2624187011	Collected: 10/07/19 17:25	Received: 10/10/19 13:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 22:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 22:35	7440-38-2	
Barium	<b>0.069</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 22:35	7440-39-3	
Beryllium	<b>0.00024J</b>	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 22:35	7440-41-7	
Boron	<b>0.12</b>	mg/L	0.040	0.0049	1	10/14/19 14:35	10/17/19 22:35	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 22:35	7440-43-9	
Calcium	<b>31.6</b>	mg/L	5.0	0.55	50	10/14/19 14:35	10/17/19 22:41	7440-70-2	
Chromium	<b>0.00052J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 22:35	7440-47-3	
Cobalt	<b>0.00046J</b>	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 22:35	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 22:35	7439-92-1	
Lithium	<b>0.0012J</b>	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 22:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 22:35	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 22:35	7782-49-2	
Thallium	<b>0.000062J</b>	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 22:35	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 22:35	7440-62-2	
Zinc	<b>0.0077J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 22:35	7440-66-6	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C								
Total Dissolved Solids	<b>275</b>	mg/L	10.0	10.0	1				10/11/19 11:27
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0								
Chloride	<b>18.0</b>	mg/L	1.0	0.024	1				10/16/19 04:01
Fluoride	ND	mg/L	0.30	0.029	1				10/16/19 04:01
Sulfate	<b>156</b>	mg/L	10.0	0.17	10				10/16/19 23:55
									14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWA-7		Lab ID: 2624187012		Collected: 10/08/19 09:45		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report						Qual
			Limit	MDL	DF	Prepared	Analyzed	CAS No.	
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.015	0.0014	5	10/14/19 14:35	10/17/19 22:58	7440-36-0	D3
Arsenic	<b>0.0030J</b>	mg/L	0.025	0.0018	5	10/14/19 14:35	10/17/19 22:58	7440-38-2	D3
Barium	<b>0.10</b>	mg/L	0.050	0.0024	5	10/14/19 14:35	10/17/19 22:58	7440-39-3	
Beryllium	ND	mg/L	0.015	0.00037	5	10/14/19 14:35	10/17/19 22:58	7440-41-7	D3
Boron	<b>6.4</b>	mg/L	0.20	0.025	5	10/14/19 14:35	10/17/19 22:58	7440-42-8	
Cadmium	ND	mg/L	0.012	0.00057	5	10/14/19 14:35	10/17/19 22:58	7440-43-9	D3
Calcium	<b>3.5</b>	mg/L	0.50	0.055	5	10/14/19 14:35	10/17/19 22:58	7440-70-2	
Chromium	<b>0.021J</b>	mg/L	0.050	0.0020	5	10/14/19 14:35	10/17/19 22:58	7440-47-3	D3
Cobalt	<b>0.0028J</b>	mg/L	0.025	0.0015	5	10/14/19 14:35	10/17/19 22:58	7440-48-4	D3
Lead	<b>0.0098J</b>	mg/L	0.025	0.00023	5	10/14/19 14:35	10/17/19 22:58	7439-92-1	D3
Lithium	ND	mg/L	0.15	0.0039	5	10/14/19 14:35	10/17/19 22:58	7439-93-2	D3
Molybdenum	ND	mg/L	0.050	0.0047	5	10/14/19 14:35	10/17/19 22:58	7439-98-7	D3
Selenium	<b>0.0072J</b>	mg/L	0.050	0.0063	5	10/14/19 14:35	10/17/19 22:58	7782-49-2	D3
Thallium	ND	mg/L	0.0050	0.00026	5	10/14/19 14:35	10/17/19 22:58	7440-28-0	D3
Vanadium	<b>0.11</b>	mg/L	0.050	0.0035	5	10/14/19 14:35	10/17/19 22:58	7440-62-2	
Zinc	<b>0.095</b>	mg/L	0.050	0.0077	5	10/14/19 14:35	10/17/19 22:58	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	<b>1840</b>	mg/L	10.0	10.0	1			10/14/19 11:51	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>125</b>	mg/L	20.0	0.48	20			10/17/19 00:18	16887-00-6
Fluoride	ND	mg/L	0.30	0.029	1			10/16/19 04:23	16984-48-8
Sulfate	<b>32.8</b>	mg/L	1.0	0.017	1			10/16/19 04:23	14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: FB-1-10-8-19		Lab ID: 2624187013		Collected: 10/08/19 10:40		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 23:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 23:09	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 23:09	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 23:09	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	10/14/19 14:35	10/17/19 23:09	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 23:09	7440-43-9	
Calcium	ND	mg/L	0.10	0.011	1	10/14/19 14:35	10/17/19 23:09	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 23:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 23:09	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 23:09	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 23:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 23:09	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 23:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 23:09	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 23:09	7440-62-2	
Zinc	<b>0.0044J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 23:09	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	<b>16.0</b>	mg/L	10.0	10.0	1				10/14/19 11:51
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>0.038J</b>	mg/L	1.0	0.024	1				10/16/19 04:45
Fluoride	ND	mg/L	0.30	0.029	1				10/16/19 04:45
Sulfate	<b>0.20J</b>	mg/L	1.0	0.017	1				10/16/19 04:45
									16887-00-6
									16984-48-8
									14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-13		Lab ID: 2624187014		Collected: 10/08/19 11:25		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 23:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 23:15	7440-38-2	
Barium	<b>0.024</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 23:15	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 23:15	7440-41-7	
Boron	<b>0.18</b>	mg/L	0.040	0.0049	1	10/14/19 14:35	10/17/19 23:15	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 23:15	7440-43-9	
Calcium	<b>2.3</b>	mg/L	0.10	0.011	1	10/14/19 14:35	10/17/19 23:15	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 23:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 23:15	7440-48-4	
Lead	<b>0.00013J</b>	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 23:15	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 23:15	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 23:15	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 23:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 23:15	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 23:15	7440-62-2	
Zinc	<b>0.053</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 23:15	7440-66-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	<b>51.0</b>	mg/L	10.0	10.0	1		10/14/19 11:51		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>4.0</b>	mg/L	1.0	0.024	1		10/16/19 06:13		
Fluoride	ND	mg/L	0.30	0.029	1		10/16/19 06:13		
Sulfate	<b>22.0</b>	mg/L	1.0	0.017	1		10/16/19 06:13		

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-11	Lab ID: 2624187015	Collected: 10/08/19 15:15	Received: 10/10/19 13:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	<b>0.00046J</b>	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 23:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 23:26	7440-38-2	
Barium	<b>0.13</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 23:26	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 23:26	7440-41-7	
Boron	<b>0.22</b>	mg/L	0.040	0.0049	1	10/14/19 14:35	10/17/19 23:26	7440-42-8	
Cadmium	<b>0.00043J</b>	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 23:26	7440-43-9	
Calcium	<b>69.2</b>	mg/L	5.0	0.55	50	10/14/19 14:35	10/17/19 23:32	7440-70-2	
Chromium	<b>0.00091J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 23:26	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 23:26	7440-48-4	
Lead	<b>0.00028J</b>	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 23:26	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 23:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 23:26	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 23:26	7782-49-2	
Thallium	<b>0.000098J</b>	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 23:26	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 23:26	7440-62-2	
Zinc	<b>0.0061J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 23:26	7440-66-6	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C								
Total Dissolved Solids	<b>613</b>	mg/L	10.0	10.0	1				10/14/19 11:51
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0								
Chloride	<b>89.0</b>	mg/L	10.0	0.24	10				10/17/19 00:40
Fluoride	ND	mg/L	0.30	0.029	1				10/16/19 06:36
Sulfate	<b>310</b>	mg/L	10.0	0.17	10				10/17/19 00:40
									16887-00-6
									16984-48-8
									14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-12		Lab ID: 2624187016		Collected: 10/09/19 09:55		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/17/19 23:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/17/19 23:38	7440-38-2	
Barium	<b>0.019</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/17/19 23:38	7440-39-3	
Beryllium	<b>0.00046J</b>	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/17/19 23:38	7440-41-7	
Boron	<b>8.2</b>	mg/L	2.0	0.25	50	10/14/19 14:35	10/17/19 23:43	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/17/19 23:38	7440-43-9	
Calcium	<b>54.2</b>	mg/L	5.0	0.55	50	10/14/19 14:35	10/17/19 23:43	7440-70-2	
Chromium	<b>0.00081J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/17/19 23:38	7440-47-3	
Cobalt	<b>0.00094J</b>	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/17/19 23:38	7440-48-4	
Lead	<b>0.000066J</b>	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/17/19 23:38	7439-92-1	
Lithium	<b>0.0011J</b>	mg/L	0.030	0.00078	1	10/14/19 14:35	10/17/19 23:38	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/14/19 14:35	10/17/19 23:38	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/17/19 23:38	7782-49-2	
Thallium	<b>0.00014J</b>	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/17/19 23:38	7440-28-0	
Vanadium	<b>0.0021J</b>	mg/L	0.010	0.00071	1	10/14/19 14:35	10/17/19 23:38	7440-62-2	
Zinc	<b>0.0057J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/17/19 23:38	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	<b>647</b>	mg/L	10.0	10.0	1				10/15/19 17:20
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>44.1</b>	mg/L	1.0	0.024	1				10/16/19 07:20
Fluoride	ND	mg/L	0.30	0.029	1				10/16/19 07:20
Sulfate	<b>392</b>	mg/L	50.0	0.85	50				10/17/19 01:02
									14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: Dup-2	Lab ID: 2624187017	Collected: 10/09/19 00:00	Received: 10/10/19 13:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/18/19 00:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/18/19 00:01	7440-38-2	
Barium	<b>0.018</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/18/19 00:01	7440-39-3	
Beryllium	<b>0.00055J</b>	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/18/19 00:01	7440-41-7	
Boron	<b>8.0</b>	mg/L	2.0	0.25	50	10/14/19 14:35	10/18/19 00:06	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/18/19 00:01	7440-43-9	
Calcium	<b>56.7</b>	mg/L	5.0	0.55	50	10/14/19 14:35	10/18/19 00:06	7440-70-2	
Chromium	<b>0.0010J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/18/19 00:01	7440-47-3	
Cobalt	<b>0.00092J</b>	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/18/19 00:01	7440-48-4	
Lead	<b>0.000060J</b>	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/18/19 00:01	7439-92-1	
Lithium	<b>0.0010J</b>	mg/L	0.030	0.00078	1	10/14/19 14:35	10/18/19 00:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/14/19 14:35	10/18/19 00:01	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/18/19 00:01	7782-49-2	
Thallium	<b>0.00014J</b>	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/18/19 00:01	7440-28-0	
Vanadium	<b>0.00099J</b>	mg/L	0.010	0.00071	1	10/14/19 14:35	10/18/19 00:01	7440-62-2	
Zinc	<b>0.0060J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/18/19 00:01	7440-66-6	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C								
Total Dissolved Solids	<b>705</b>	mg/L	10.0	10.0	1				10/15/19 17:20
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0								
Chloride	<b>43.3</b>	mg/L	1.0	0.024	1				10/16/19 07:42
Fluoride	ND	mg/L	0.30	0.029	1				10/16/19 07:42
Sulfate	<b>433</b>	mg/L	10.0	0.17	10				10/17/19 01:24
									16887-00-6
									16984-48-8
									14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-17		Lab ID: 2624187018		Collected: 10/09/19 11:10		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/18/19 00:12	7440-36-0	
Arsenic	<b>0.0011J</b>	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/18/19 00:12	7440-38-2	
Barium	<b>0.032</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/18/19 00:12	7440-39-3	
Beryllium	<b>0.0018J</b>	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/18/19 00:12	7440-41-7	
Boron	<b>1.3</b>	mg/L	0.040	0.0049	1	10/14/19 14:35	10/18/19 00:12	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/18/19 00:12	7440-43-9	
Calcium	<b>56.6</b>	mg/L	5.0	0.55	50	10/14/19 14:35	10/18/19 00:18	7440-70-2	
Chromium	<b>0.00081J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/18/19 00:12	7440-47-3	
Cobalt	<b>0.0024J</b>	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/18/19 00:12	7440-48-4	
Lead	<b>0.00015J</b>	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/18/19 00:12	7439-92-1	
Lithium	<b>0.0046J</b>	mg/L	0.030	0.00078	1	10/14/19 14:35	10/18/19 00:12	7439-93-2	
Molybdenum	<b>0.0036J</b>	mg/L	0.010	0.00095	1	10/14/19 14:35	10/18/19 00:12	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/18/19 00:12	7782-49-2	
Thallium	<b>0.000076J</b>	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/18/19 00:12	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/18/19 00:12	7440-62-2	
Zinc	<b>0.011</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/18/19 00:12	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	<b>1100</b>	mg/L	10.0	10.0	1		10/15/19 17:20		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>330</b>	mg/L	100	2.4	100		10/17/19 01:46		
Fluoride	ND	mg/L	0.30	0.029	1		10/16/19 08:04		
Sulfate	<b>346</b>	mg/L	100	1.7	100		10/17/19 01:46		

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-22		Lab ID: 2624187019		Collected: 10/09/19 13:18		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:35	10/18/19 00:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:35	10/18/19 00:24	7440-38-2	
Barium	<b>0.065</b>	mg/L	0.010	0.00049	1	10/14/19 14:35	10/18/19 00:24	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:35	10/18/19 00:24	7440-41-7	
Boron	<b>0.39</b>	mg/L	0.040	0.0049	1	10/14/19 14:35	10/18/19 00:24	7440-42-8	
Cadmium	<b>0.00012J</b>	mg/L	0.0025	0.00011	1	10/14/19 14:35	10/18/19 00:24	7440-43-9	
Calcium	<b>30.1</b>	mg/L	5.0	0.55	50	10/14/19 14:35	10/18/19 00:29	7440-70-2	
Chromium	<b>0.00072J</b>	mg/L	0.010	0.00039	1	10/14/19 14:35	10/18/19 00:24	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:35	10/18/19 00:24	7440-48-4	
Lead	<b>0.00032J</b>	mg/L	0.0050	0.000046	1	10/14/19 14:35	10/18/19 00:24	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:35	10/18/19 00:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/14/19 14:35	10/18/19 00:24	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:35	10/18/19 00:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:35	10/18/19 00:24	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:35	10/18/19 00:24	7440-62-2	
Zinc	<b>0.0079J</b>	mg/L	0.010	0.0015	1	10/14/19 14:35	10/18/19 00:24	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	<b>211</b>	mg/L	10.0	10.0	1				10/15/19 17:21
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>25.3</b>	mg/L	1.0	0.024	1				10/16/19 08:26
Fluoride	ND	mg/L	0.30	0.029	1				10/16/19 08:26
Sulfate	<b>80.2</b>	mg/L	20.0	0.34	20				10/17/19 02:08

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWB-6R		Lab ID: 2624187020		Collected: 10/09/19 15:13		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report						Qual
			Limit	MDL	DF	Prepared	Analyzed	CAS No.	
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.015	0.0014	5	10/14/19 14:35	10/18/19 00:35	7440-36-0	D3
Arsenic	<b>0.0018J</b>	mg/L	0.025	0.0018	5	10/14/19 14:35	10/18/19 00:35	7440-38-2	D3
Barium	<b>0.014J</b>	mg/L	0.050	0.0024	5	10/14/19 14:35	10/18/19 00:35	7440-39-3	D3
Beryllium	ND	mg/L	0.015	0.00037	5	10/14/19 14:35	10/18/19 00:35	7440-41-7	D3
Boron	<b>6.3</b>	mg/L	0.20	0.025	5	10/14/19 14:35	10/18/19 00:35	7440-42-8	
Cadmium	ND	mg/L	0.012	0.00057	5	10/14/19 14:35	10/18/19 00:35	7440-43-9	D3
Calcium	<b>10.1</b>	mg/L	0.50	0.055	5	10/14/19 14:35	10/18/19 00:35	7440-70-2	
Chromium	<b>0.011J</b>	mg/L	0.050	0.0020	5	10/14/19 14:35	10/18/19 00:35	7440-47-3	D3
Cobalt	ND	mg/L	0.025	0.0015	5	10/14/19 14:35	10/18/19 00:35	7440-48-4	D3
Lead	<b>0.00033J</b>	mg/L	0.025	0.00023	5	10/14/19 14:35	10/18/19 00:35	7439-92-1	D3
Lithium	ND	mg/L	0.15	0.0039	5	10/14/19 14:35	10/18/19 00:35	7439-93-2	D3
Molybdenum	ND	mg/L	0.050	0.0047	5	10/14/19 14:35	10/18/19 00:35	7439-98-7	D3
Selenium	ND	mg/L	0.050	0.0063	5	10/14/19 14:35	10/18/19 00:35	7782-49-2	D3
Thallium	ND	mg/L	0.0050	0.00026	5	10/14/19 14:35	10/18/19 00:35	7440-28-0	D3
Vanadium	<b>0.018J</b>	mg/L	0.050	0.0035	5	10/14/19 14:35	10/18/19 00:35	7440-62-2	
Zinc	<b>0.016J</b>	mg/L	0.050	0.0077	5	10/14/19 14:35	10/18/19 00:35	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	<b>903</b>	mg/L	10.0	10.0	1			10/15/19 17:21	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>49.7</b>	mg/L	1.0	0.024	1			10/16/19 08:48	16887-00-6
Fluoride	ND	mg/L	0.30	0.029	1			10/16/19 08:48	16984-48-8
Sulfate	<b>255</b>	mg/L	20.0	0.34	20			10/17/19 03:37	14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWB-5R		Lab ID: 2624187021		Collected: 10/09/19 16:20		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report Limit		DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS</b> Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	ND	mg/L	0.015	0.0014	5	10/14/19 14:09	10/16/19 16:28	7440-36-0	
Arsenic	<b>0.0053J</b>	mg/L	0.025	0.0018	5	10/14/19 14:09	10/16/19 16:28	7440-38-2	
Barium	<b>0.13</b>	mg/L	0.050	0.0024	5	10/14/19 14:09	10/16/19 16:28	7440-39-3	
Beryllium	ND	mg/L	0.015	0.00037	5	10/14/19 14:09	10/16/19 16:28	7440-41-7	
Boron	<b>6.8</b>	mg/L	0.20	0.025	5	10/14/19 14:09	10/16/19 16:28	7440-42-8	M1
Cadmium	ND	mg/L	0.012	0.00057	5	10/14/19 14:09	10/16/19 16:28	7440-43-9	
Calcium	<b>17.7</b>	mg/L	0.50	0.055	5	10/14/19 14:09	10/16/19 16:28	7440-70-2	M1
Chromium	<b>0.012J</b>	mg/L	0.050	0.0020	5	10/14/19 14:09	10/16/19 16:28	7440-47-3	B
Cobalt	<b>0.0037J</b>	mg/L	0.025	0.0015	5	10/14/19 14:09	10/16/19 16:28	7440-48-4	
Lead	<b>0.0025J</b>	mg/L	0.025	0.00023	5	10/14/19 14:09	10/16/19 16:28	7439-92-1	
Lithium	ND	mg/L	0.15	0.0039	5	10/14/19 14:09	10/16/19 16:28	7439-93-2	
Molybdenum	ND	mg/L	0.050	0.0047	5	10/14/19 14:09	10/16/19 16:28	7439-98-7	
Selenium	<b>0.0073J</b>	mg/L	0.050	0.0063	5	10/14/19 14:09	10/16/19 16:28	7782-49-2	
Thallium	<b>0.00031J</b>	mg/L	0.0050	0.00026	5	10/14/19 14:09	10/16/19 16:28	7440-28-0	
Vanadium	<b>0.033J</b>	mg/L	0.050	0.0035	5	10/14/19 14:09	10/16/19 16:28	7440-62-2	
Zinc	<b>0.0081J</b>	mg/L	0.050	0.0077	5	10/14/19 14:09	10/16/19 16:28	7440-66-6	B
<b>7470 Mercury</b> Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	ND	mg/L	0.00050	0.00014	1	10/16/19 09:16	10/17/19 10:02	7439-97-6	
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	<b>2010</b>	mg/L	10.0	10.0	1			10/15/19 17:21	
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Chloride	<b>239</b>	mg/L	10.0	0.24	10			10/17/19 03:59	16887-00-6
Fluoride	ND	mg/L	0.30	0.029	1			10/16/19 09:10	16984-48-8
Sulfate	<b>90.8</b>	mg/L	10.0	0.17	10			10/17/19 03:59	14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-1	Lab ID: 2624187022	Collected: 10/09/19 15:40	Received: 10/10/19 13:15	Matrix: Water				
Parameters	Results	Units	Report	Prepared	Analyzed	CAS No.	Qual	
			Limit					
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A						
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 17:26	7440-36-0
Arsenic	<b>0.0042J</b>	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 17:26	7440-38-2
Barium	<b>0.058</b>	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 17:26	7440-39-3
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 17:26	7440-41-7
Boron	<b>0.93</b>	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 17:26	7440-42-8
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 17:26	7440-43-9
Calcium	<b>51.2</b>	mg/L	5.0	0.55	50	10/14/19 14:09	10/16/19 17:32	7440-70-2
Chromium	<b>0.0019J</b>	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 17:26	7440-47-3
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 17:26	7440-48-4
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 17:26	7439-92-1
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 17:26	7439-93-2
Molybdenum	<b>0.060</b>	mg/L	0.010	0.00095	1	10/14/19 14:09	10/16/19 17:26	7439-98-7
Selenium	<b>0.0024J</b>	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 17:26	7782-49-2
Thallium	<b>0.000054J</b>	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 17:26	7440-28-0
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 17:26	7440-62-2
Zinc	<b>0.0057J</b>	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 17:26	7440-66-6
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	<b>338</b>	mg/L	10.0	10.0	1		10/15/19 17:21	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Chloride	<b>7.2</b>	mg/L	1.0	0.024	1		10/16/19 09:32	16887-00-6
Fluoride	ND	mg/L	0.30	0.029	1		10/16/19 09:32	16984-48-8
Sulfate	<b>76.3</b>	mg/L	10.0	0.17	10		10/17/19 04:21	14808-79-8

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: GWC-9	Lab ID: 2624187023	Collected: 10/09/19 12:10	Received: 10/10/19 13:15	Matrix: Water				
Parameters	Results	Units	Report	Prepared	Analyzed	CAS No.	Qual	
			Limit					
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A						
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 17:37	7440-36-0
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 17:37	7440-38-2
Barium	<b>0.18</b>	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 17:37	7440-39-3
Beryllium	<b>0.00023J</b>	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 17:37	7440-41-7
Boron	<b>0.019J</b>	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 17:37	7440-42-8
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 17:37	7440-43-9
Calcium	<b>6.0</b>	mg/L	0.10	0.011	1	10/14/19 14:09	10/16/19 17:37	7440-70-2
Chromium	<b>0.00090J</b>	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 17:37	7440-47-3
Cobalt	<b>0.00099J</b>	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 17:37	7440-48-4
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 17:37	7439-92-1
Lithium	<b>0.0018J</b>	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 17:37	7439-93-2
Molybdenum	ND	mg/L	0.010	0.00095	1	10/14/19 14:09	10/16/19 17:37	7439-98-7
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 17:37	7782-49-2
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 17:37	7440-28-0
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 17:37	7440-62-2
Zinc	<b>0.0054J</b>	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 17:37	7440-66-6
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	<b>128</b>	mg/L	10.0	10.0	1		10/15/19 17:21	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Chloride	<b>19.0</b>	mg/L	1.0	0.024	1		10/16/19 11:01	16887-00-6
Fluoride	<b>0.068J</b>	mg/L	0.30	0.029	1		10/16/19 11:01	16984-48-8
Sulfate	<b>41.1</b>	mg/L	1.0	0.017	1		10/16/19 11:01	14808-79-8

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Sample: EB-2-10-9-19		Lab ID: 2624187024		Collected: 10/09/19 12:30		Received: 10/10/19 13:15		Matrix: Water	
Parameters	Results	Units	Report				Analyzed	CAS No.	Qual
			Limit	MDL	DF	Prepared			
<b>6020B MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 17:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 17:49	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 17:49	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 17:49	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 17:49	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 17:49	7440-43-9	
Calcium	<b>0.018J</b>	mg/L	0.10	0.011	1	10/14/19 14:09	10/16/19 17:49	7440-70-2	
Chromium	<b>0.00041J</b>	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 17:49	7440-47-3	B
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 17:49	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 17:49	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 17:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/14/19 14:09	10/16/19 17:49	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 17:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 17:49	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 17:49	7440-62-2	
Zinc	<b>0.0054J</b>	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 17:49	7440-66-6	B
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	ND	mg/L	10.0	10.0	1			10/15/19 17:21	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Chloride	<b>0.042J</b>	mg/L	1.0	0.024	1			10/16/19 11:23	16887-00-6
Fluoride	ND	mg/L	0.30	0.029	1			10/16/19 11:23	16984-48-8
Sulfate	<b>0.23J</b>	mg/L	1.0	0.017	1			10/16/19 11:23	14808-79-8

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

QC Batch:	36917	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
Associated Lab Samples:	2624187021		

METHOD BLANK: 166881 Matrix: Water

Associated Lab Samples: 2624187021

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	10/17/19 09:58	

LABORATORY CONTROL SAMPLE: 166882

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 166883 166884

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	100	95	75-125	5	20	

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624187

QC Batch:	36893	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020B MET
Associated Lab Samples:	2624187001, 2624187002, 2624187003, 2624187004, 2624187005, 2624187006, 2624187007, 2624187008, 2624187009, 2624187010, 2624187011, 2624187012, 2624187013, 2624187014, 2624187015, 2624187016, 2624187017, 2624187018, 2624187019, 2624187020		

METHOD BLANK: 166795

Matrix: Water

Associated Lab Samples: 2624187001, 2624187002, 2624187003, 2624187004, 2624187005, 2624187006, 2624187007, 2624187008, 2624187009, 2624187010, 2624187011, 2624187012, 2624187013, 2624187014, 2624187015, 2624187016, 2624187017, 2624187018, 2624187019, 2624187020

Parameter	Units	Blank	Reporting	MDL	Analyzed	Qualifiers
		Result	Limit			
Antimony	mg/L	ND	0.0030	0.00027	10/17/19 19:46	
Arsenic	mg/L	ND	0.0050	0.00035	10/17/19 19:46	
Barium	mg/L	ND	0.010	0.00049	10/17/19 19:46	
Beryllium	mg/L	ND	0.0030	0.000074	10/17/19 19:46	
Boron	mg/L	ND	0.040	0.0049	10/17/19 19:46	
Cadmium	mg/L	ND	0.0025	0.00011	10/17/19 19:46	
Calcium	mg/L	ND	0.10	0.011	10/17/19 19:46	
Chromium	mg/L	ND	0.010	0.00039	10/17/19 19:46	
Cobalt	mg/L	ND	0.0050	0.00030	10/17/19 19:46	
Lead	mg/L	ND	0.0050	0.000046	10/17/19 19:46	
Lithium	mg/L	ND	0.030	0.00078	10/17/19 19:46	
Molybdenum	mg/L	ND	0.010	0.00095	10/17/19 19:46	
Selenium	mg/L	ND	0.010	0.0013	10/17/19 19:46	
Thallium	mg/L	ND	0.0010	0.000052	10/17/19 19:46	
Vanadium	mg/L	ND	0.010	0.00071	10/17/19 19:46	
Zinc	mg/L	0.0051J	0.010	0.0015	10/17/19 19:46	

LABORATORY CONTROL SAMPLE: 166796

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Antimony	mg/L	0.1	0.089	89	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.090	90	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Calcium	mg/L	1	0.96	96	80-120	
Chromium	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.095	95	80-120	
Lead	mg/L	0.1	0.095	95	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.093	93	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	
Vanadium	mg/L	0.1	0.097	97	80-120	
Zinc	mg/L	0.1	0.099	99	80-120	

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624187

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MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 166797      166798

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max	
		2624187001	Spike Conc.	Spike Conc.	MS Result						RPD	RPD
Antimony	mg/L	ND	0.1	0.1	0.097	0.095	97	94	75-125	3	20	
Arsenic	mg/L	0.089	0.1	0.1	0.19	0.19	96	104	75-125	4	20	
Barium	mg/L	0.13	0.1	0.1	0.24	0.23	108	101	75-125	3	20	
Beryllium	mg/L	0.000088J	0.1	0.1	0.096	0.094	96	94	75-125	2	20	
Boron	mg/L	8.4	1	1	10.5	11.0	212	255	75-125	4	20	M6
Cadmium	mg/L	ND	0.1	0.1	0.093	0.095	93	95	75-125	2	20	
Calcium	mg/L	206	1	1	198	205	-783	-148	75-125	3	20	M6
Chromium	mg/L	0.00087J	0.1	0.1	0.099	0.099	98	98	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.094	0.096	94	96	75-125	2	20	
Lead	mg/L	0.00010J	0.1	0.1	0.094	0.096	94	95	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.097	0.095	97	95	75-125	2	20	
Molybdenum	mg/L	0.20	0.1	0.1	0.30	0.30	100	97	75-125	1	20	
Selenium	mg/L	0.0024J	0.1	0.1	0.10	0.11	100	105	75-125	5	20	
Thallium	mg/L	0.00011J	0.1	0.1	0.094	0.095	94	95	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Zinc	mg/L	0.010	0.1	0.1	0.10	0.10	92	93	75-125	1	20	

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624187

QC Batch: 36894 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2624187021, 2624187022, 2624187023, 2624187024

METHOD BLANK: 166799 Matrix: Water

Associated Lab Samples: 2624187021, 2624187022, 2624187023, 2624187024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	10/16/19 16:16	
Arsenic	mg/L	ND	0.0050	0.00035	10/16/19 16:16	
Barium	mg/L	ND	0.010	0.00049	10/16/19 16:16	
Beryllium	mg/L	ND	0.0030	0.000074	10/16/19 16:16	
Boron	mg/L	ND	0.040	0.0049	10/16/19 16:16	
Cadmium	mg/L	ND	0.0025	0.00011	10/16/19 16:16	
Calcium	mg/L	ND	0.10	0.011	10/16/19 16:16	
Chromium	mg/L	0.00056J	0.010	0.00039	10/16/19 16:16	
Cobalt	mg/L	ND	0.0050	0.00030	10/16/19 16:16	
Lead	mg/L	ND	0.0050	0.000046	10/16/19 16:16	
Lithium	mg/L	ND	0.030	0.00078	10/16/19 16:16	
Molybdenum	mg/L	ND	0.010	0.00095	10/16/19 16:16	
Selenium	mg/L	ND	0.010	0.0013	10/16/19 16:16	
Thallium	mg/L	ND	0.0010	0.000052	10/16/19 16:16	
Vanadium	mg/L	ND	0.010	0.00071	10/16/19 16:16	
Zinc	mg/L	0.0050J	0.010	0.0015	10/16/19 16:16	

LABORATORY CONTROL SAMPLE: 166800

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.096	96	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.095	95	80-120	
Calcium	mg/L	1	0.95	95	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.095	95	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.094	94	80-120	
Selenium	mg/L	0.1	0.094	94	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	
Vanadium	mg/L	0.1	0.096	96	80-120	
Zinc	mg/L	0.1	0.10	102	80-120	

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624187

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MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 166801      166802

Parameter	Units	MS		MSD		MS		MSD		% Rec		Max	
		2624187021	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MSD % Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.089	0.097	89	96	75-125	8	20		
Arsenic	mg/L	0.0053J	0.1	0.1	0.096	0.098	91	93	75-125	3	20		
Barium	mg/L	0.13	0.1	0.1	0.21	0.22	87	96	75-125	4	20		
Beryllium	mg/L	ND	0.1	0.1	0.092	0.091	92	91	75-125	2	20		
Boron	mg/L	6.8	1	1	8.0	7.5	121	71	75-125	6	20	M1	
Cadmium	mg/L	ND	0.1	0.1	0.090	0.092	90	92	75-125	2	20		
Calcium	mg/L	17.7	1	1	19.4	18.5	163	79	75-125	4	20	M1	
Chromium	mg/L	0.012J	0.1	0.1	0.11	0.10	95	91	75-125	4	20		
Cobalt	mg/L	0.0037J	0.1	0.1	0.092	0.092	88	88	75-125	0	20		
Lead	mg/L	0.0025J	0.1	0.1	0.089	0.091	86	89	75-125	3	20		
Lithium	mg/L	ND	0.1	0.1	0.092J	0.092J	92	91	75-125		20		
Molybdenum	mg/L	ND	0.1	0.1	0.092	0.10	89	97	75-125	8	20		
Selenium	mg/L	0.0073J	0.1	0.1	0.088	0.10	81	95	75-125	15	20		
Thallium	mg/L	0.00031J	0.1	0.1	0.088	0.089	87	89	75-125	1	20		
Vanadium	mg/L	0.033J	0.1	0.1	0.14	0.14	104	103	75-125	1	20		
Zinc	mg/L	0.0081J	0.1	0.1	0.11	0.10	98	93	75-125	6	20		

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

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QC Batch:	36858	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	2624187001, 2624187002, 2624187003, 2624187004, 2624187011		

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LABORATORY CONTROL SAMPLE: 166584

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	411	103	84-108	

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SAMPLE DUPLICATE: 166585

Parameter	Units	2624021007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	7930	8140	3	10	

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SAMPLE DUPLICATE: 166586

Parameter	Units	2624140002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	324	337	4	10	

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

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QC Batch:	36914	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	2624187005, 2624187006, 2624187012, 2624187013, 2624187014, 2624187015		

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LABORATORY CONTROL SAMPLE: 166870

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	366	92	84-108	

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SAMPLE DUPLICATE: 166871

Parameter	Units	2624187005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	526	532	1	10	

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SAMPLE DUPLICATE: 166872

Parameter	Units	2624140004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	18.0	13.0	32	10	D6

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

QC Batch:	36986	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	2624187007, 2624187008, 2624187009, 2624187010, 2624187016, 2624187017, 2624187018, 2624187019, 2624187020, 2624187021, 2624187022, 2624187023, 2624187024		

LABORATORY CONTROL SAMPLE: 167157

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	400	100	84-108	

SAMPLE DUPLICATE: 167158

Parameter	Units	2624142008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	115	101	13	10	D6

SAMPLE DUPLICATE: 167159

Parameter	Units	2624187019 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	211	210	0	10	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

QC Batch:	36938	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
Associated Lab Samples:	2624187001, 2624187002, 2624187003, 2624187004, 2624187005		

METHOD BLANK: 166950 Matrix: Water

Associated Lab Samples: 2624187001, 2624187002, 2624187003, 2624187004, 2624187005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.024	10/14/19 21:35	
Fluoride	mg/L	ND	0.30	0.029	10/14/19 21:35	
Sulfate	mg/L	ND	1.0	0.017	10/14/19 21:35	

LABORATORY CONTROL SAMPLE: 166951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.7	97	90-110	
Fluoride	mg/L	10	9.9	99	90-110	
Sulfate	mg/L	10	9.7	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 166952 166953

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2624142005	Spike Conc.	Spike Conc.	MS Result								
Chloride	mg/L	4.1	10	10	13.6	13.6	95	95	95	90-110	0	15	
Fluoride	mg/L	ND	10	10	9.9	9.8	99	99	98	90-110	1	15	

MATRIX SPIKE SAMPLE: 166954

Parameter	Units	2624142006		Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
		Result	Conc.					
Chloride	mg/L	2.3	10	10	12.1	97	90-110	
Fluoride	mg/L	ND	10	10	10.2	102	90-110	
Sulfate	mg/L	279	10	10	23.4	-2560	90-110 M1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624187

QC Batch: 36992 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2624187006, 2624187007, 2624187008, 2624187009, 2624187010, 2624187011, 2624187012, 2624187013, 2624187014, 2624187015, 2624187016, 2624187017, 2624187018, 2624187019, 2624187020, 2624187021, 2624187022, 2624187023, 2624187024

METHOD BLANK: 167194

Matrix: Water

Associated Lab Samples: 2624187006, 2624187007, 2624187008, 2624187009, 2624187010, 2624187011, 2624187012, 2624187013, 2624187014, 2624187015, 2624187016, 2624187017, 2624187018, 2624187019, 2624187020, 2624187021, 2624187022, 2624187023, 2624187024

Parameter	Units	Blank	Reporting	MDL	Analyzed	Qualifiers
		Result	Limit			
Chloride	mg/L	ND	1.0	0.024	10/16/19 00:42	
Fluoride	mg/L	ND	0.30	0.029	10/16/19 00:42	
Sulfate	mg/L	ND	1.0	0.017	10/16/19 00:42	

LABORATORY CONTROL SAMPLE: 167195

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Chloride	mg/L	10	10.0	100	90-110	
Fluoride	mg/L	10	10.3	103	90-110	
Sulfate	mg/L	10	10.0	100	90-110	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 167196

167197

Parameter	Units	2624187006	MS	MSD	MS	MSD	% Rec	MSD	% Rec	% Rec	RPD	RPD	Max
		Result	Spike	Spike									
Chloride	mg/L	40.2	10	10	44.8	44.5	47	43	90-110	90-110	1	15	M1
Fluoride	mg/L	ND	10	10	10.1	10.4	101	104	90-110	90-110	3	15	

MATRIX SPIKE SAMPLE: 167198

Parameter	Units	2624187015	Spike	MS	MS	% Rec	% Rec	Limits	Qualifiers
		Result	Conc.	Result					
Fluoride	mg/L	ND	10	10.4	10.4	104	104	90-110	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624187001	Dup-1	EPA 3005A	36893	EPA 6020B	36929
2624187002	EB-1-10-8-19	EPA 3005A	36893	EPA 6020B	36929
2624187003	GWC-16	EPA 3005A	36893	EPA 6020B	36929
2624187004	GWC-21	EPA 3005A	36893	EPA 6020B	36929
2624187005	GWC-15	EPA 3005A	36893	EPA 6020B	36929
2624187006	GWC-14	EPA 3005A	36893	EPA 6020B	36929
2624187007	GWB-4R	EPA 3005A	36893	EPA 6020B	36929
2624187008	GWC-2	EPA 3005A	36893	EPA 6020B	36929
2624187009	FB-2-10-9-19	EPA 3005A	36893	EPA 6020B	36929
2624187010	GWC-20	EPA 3005A	36893	EPA 6020B	36929
2624187011	GWA-8	EPA 3005A	36893	EPA 6020B	36929
2624187012	GWA-7	EPA 3005A	36893	EPA 6020B	36929
2624187013	FB-1-10-8-19	EPA 3005A	36893	EPA 6020B	36929
2624187014	GWC-13	EPA 3005A	36893	EPA 6020B	36929
2624187015	GWC-11	EPA 3005A	36893	EPA 6020B	36929
2624187016	GWC-12	EPA 3005A	36893	EPA 6020B	36929
2624187017	Dup-2	EPA 3005A	36893	EPA 6020B	36929
2624187018	GWC-17	EPA 3005A	36893	EPA 6020B	36929
2624187019	GWC-22	EPA 3005A	36893	EPA 6020B	36929
2624187020	GWB-6R	EPA 3005A	36893	EPA 6020B	36929
2624187021	GWB-5R	EPA 3005A	36894	EPA 6020B	36932
2624187022	GWC-1	EPA 3005A	36894	EPA 6020B	36932
2624187023	GWC-9	EPA 3005A	36894	EPA 6020B	36932
2624187024	EB-2-10-9-19	EPA 3005A	36894	EPA 6020B	36932
2624187021	GWB-5R	EPA 7470A	36917	EPA 7470A	37089
2624187001	Dup-1	SM 2540C	36858		
2624187002	EB-1-10-8-19	SM 2540C	36858		
2624187003	GWC-16	SM 2540C	36858		
2624187004	GWC-21	SM 2540C	36858		
2624187005	GWC-15	SM 2540C	36914		
2624187006	GWC-14	SM 2540C	36914		
2624187007	GWB-4R	SM 2540C	36986		
2624187008	GWC-2	SM 2540C	36986		
2624187009	FB-2-10-9-19	SM 2540C	36986		
2624187010	GWC-20	SM 2540C	36986		
2624187011	GWA-8	SM 2540C	36858		
2624187012	GWA-7	SM 2540C	36914		
2624187013	FB-1-10-8-19	SM 2540C	36914		
2624187014	GWC-13	SM 2540C	36914		
2624187015	GWC-11	SM 2540C	36914		
2624187016	GWC-12	SM 2540C	36986		
2624187017	Dup-2	SM 2540C	36986		
2624187018	GWC-17	SM 2540C	36986		
2624187019	GWC-22	SM 2540C	36986		
2624187020	GWB-6R	SM 2540C	36986		

**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624187

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624187021	GWB-5R	SM 2540C	36986		
2624187022	GWC-1	SM 2540C	36986		
2624187023	GWC-9	SM 2540C	36986		
2624187024	EB-2-10-9-19	SM 2540C	36986		
2624187001	Dup-1	EPA 300.0	36938		
2624187002	EB-1-10-8-19	EPA 300.0	36938		
2624187003	GWC-16	EPA 300.0	36938		
2624187004	GWC-21	EPA 300.0	36938		
2624187005	GWC-15	EPA 300.0	36938		
2624187006	GWC-14	EPA 300.0	36992		
2624187007	GWB-4R	EPA 300.0	36992		
2624187008	GWC-2	EPA 300.0	36992		
2624187009	FB-2-10-9-19	EPA 300.0	36992		
2624187010	GWC-20	EPA 300.0	36992		
2624187011	GWA-8	EPA 300.0	36992		
2624187012	GWA-7	EPA 300.0	36992		
2624187013	FB-1-10-8-19	EPA 300.0	36992		
2624187014	GWC-13	EPA 300.0	36992		
2624187015	GWC-11	EPA 300.0	36992		
2624187016	GWC-12	EPA 300.0	36992		
2624187017	Dup-2	EPA 300.0	36992		
2624187018	GWC-17	EPA 300.0	36992		
2624187019	GWC-22	EPA 300.0	36992		
2624187020	GWB-6R	EPA 300.0	36992		
2624187021	GWB-5R	EPA 300.0	36992		
2624187022	GWC-1	EPA 300.0	36992		
2624187023	GWC-9	EPA 300.0	36992		
2624187024	EB-2-10-9-19	EPA 300.0	36992		

### REPORT OF LABORATORY ANALYSIS

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## CHAIN OF CUSTODY RECORD

**Pace Analytical®**

Pace Analytical Services, Inc.  
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
 (770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 3

ANALYSIS REQUESTED									
CLIENT NAME: Georgia Power									
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-508-7239									
REPORT TO: <i>John H.</i> REQUERED COMPLETION DATE:	PO #:								
PROJECT NAME/STATE: Plant Kraft Grumman Road									
PROJECT #:									
Collection DATE	Collection TIME	MATRIX CODE*	C	O	R	M	A	G	SAMPLE IDENTIFICATION
10-8-19	/	GW	X		DUD-1				
10-8-19	10:15	W	X	EB-1-10-8-19					
10-8-19	12:30	GW	X	GWC-1e					
10-8-19	14:25	GW	X	GWC-2L					
10-8-19	15:25	BW	X	GWC-15	44	IP-2-14			
10-8-19	16:30	GW	X	GWC-14	6				
10-9-19	08:44	GW	X	GWB-4R	4				
10-9-19	11:40	BW	X	GWB-4R	4				
10-9-19	13:00	GW	X	GWC-2	4				
10-9-19	13:20	W	X	FB-2-10-9-19	4				
10-9-19	14:25	BW	X	Bull-20	4				
SAMPLER BY AND TITLE: <i>J. Finch (acc)</i>									
RECEIVED BY: <i>J. D. Johnson</i>									
RECEIVED BY LAB: No									
RECEIVED BY OTHER: Yes									
DATE/TIME: 10-9-19 14:25									
RELINQUISHED BY: <i>J. D. Johnson</i>									
RELINQUISHED DATE/TIME: 10-10-19 13:45									
SAMPLE SHIPPED VIA: UPS									
Carrier Seal: Intact									
Temp/Pressure: NA									
Mat: <i>g-14</i> Max: <i>NA</i>									
# of Coolers: <i>1</i>									
Net Present: <i>No</i>									
Client ID: <i>1345</i>									
Other ID: <i>1345</i>									
DATE/TIME: 10/10/19 13:45									
DATE/TIME: 10/10/19 13:45									
LAB #: <b>2624187</b>									
FOR LAB USE ONLY									
PRESERVATION									
P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER									
1 - HCl, 56°C 2 - HSO <sub>4</sub> , 56°C 3 - HNO <sub>3</sub> 4 - NaOH, 56°C 5 - NaOH/ZnAc, 56°C 6 - Na <sub>2</sub> SO <sub>3</sub> , 56°C 7 - 56°C not frozen									
*MATRIX CODES:									
B - DW- DRINKING WATER E - WW- WASTEWATER R - GW- GROUNDWATER SW - SURFACE WATER ST - STORM WATER W - WATER									
S - SOIL SL - SLUDGE SD - SOLID A - AIR L - LIQUID P - PRODUCT									
REMARKS/ADDITIONAL INFORMATION									
Detected App IV Metals: (see list below) (SW-846 8315/8320)									
State Metals (see below) (EPA 300.0 & SM 2540C)									
Metals App. III Boron, Cadmium CI, F, SO <sub>4</sub> , & TDS									
Metals App. II Boron, Calcium									
App. I and detected App IV									

Detected App IV Metals: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Molybdenum, Selenium, a. State Metals: As, Ba, Cr, Pb, Sb, Se, V, Zn

2624187



**CHAIN OF CUSTODY RECORD**

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(770) 734-4200 ; FAX (770) 734-4201

**PEACHTREE CORNERS, GA 30092**  
110 PEACHTREE PARKWAY, PEACHTREE CORNERS, GA 30092  
**(770) 734-4200 • FAX (770) 734-4201**  
PACE ANALYTICAL SERVICES, INC.

PAGE: 2 OF 3

CLIENT NAME: Georgia Power		ANALYSIS REQUESTED									
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph Meade Blvd SE B10185 Atlanta, GA 30308 404-506-7239		CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER									
REPORT TO: <i>Eppenbach</i>		# of PRESERVATION: 3									
RECEIVED BY LAB: <i>John Luman (Aic)</i>		PRESERVATION: 7									
REQUESTED COMPLETION DATE: 10-9-19		PRESERVATION: 7									
PROJECT NAME/STATE: Plant Kraft Grumman Road		PRESERVATION: 7									
PROJECT #:		SAMPLE IDENTIFICATION									
Collection DATE	Collection TIME	MATRIX CODE*	C O R P B	G R A M A	SAMPLE IDENTIFICATION					REMARKS/ADDITIONAL INFORMATION	
10-7-19	1725	Gw	/	GWA-3						App III and detected App IV	
10-8-19	0945	Gw	/	GWA-7							
10-8-19	1040	Gw	/	KB-10-FB-1-10-8-19							
10-8-19	1125	Gw	/	GWL-13							
10-8-19	1515	Gw	/	GWL-11							
10-9-19	0955	Gw	/	GWC-12							
—	—	Gw	/	DUP-2							
10-9-19	1110	Gw	/	GWL-17							
10-9-19	1318	Gw	/	GWL-22							
10-9-19	1513	Gw	/	GWB-16R							
10-9-19	1620	Gw	/	GWB-5R							
SAMPLED BY AND TITLE: <i>H. Hild</i>		DATE/TIME: 10-9-19 1620									
RECEIVED BY: <i>John Luman</i>		DATE/TIME: 10-9-19 1345									
RECEIVED BY LAB: <i>John Luman (Aic)</i>		DATE/TIME: 10-9-19 1345									
RELINQUISHED BY: <i>H. Hild</i>		RELINQUISHED BY: H. Hild									
SAMPLE SHIPPED VIA: UPS FED-EX		SAMPLE SHIPPED VIA: UPS FED-EX									
Temperature: Edit: 0.4 Mac.		Temperature: Edit: 0.4 Mac.									
Damaged Seal: Edit: Broken		Damaged Seal: Edit: Broken									
# of Oceans: Edit: 1		# of Oceans: Edit: 1									
Not Present: Edit: No		Not Present: Edit: No									
CLIENT ID: Edit: 1345		CLIENT ID: Edit: 1345									
FS DATE/TIME: Edit: 10/10/19 1345		FS DATE/TIME: Edit: 10/10/19 1345									
FOR LAB USE ONLY											
LAB #: <b>2624187</b>											
PM: BM Due Date: 10/17/19											
CLIENT: GAPower-CCR											

Detected App IV Metals: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Molybdenum, Selenium, and Zinc

**CHAIN OF CUSTODY RECORD**

Pace Analytical Services, Inc.  
110 TECHNOLOGY PARKWAY  
SUITE 100  
ATLANTA, GA 30339

Pace Analytical Services, Inc.  
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 • FAX (770) 734-4201

3 OF 3 PAGE:

OF  
2  
PAGE:

110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 : FAX (770) 734-4201

Detected App IV Metals: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Molybdenum, Selenium, and State Metals: As, Ba, Cr, Pb. See V-70.

## Sample Condition Upon Receipt

*Pace Analytical*Client Name: GAPower

Project # \_\_\_\_\_

**WO# : 2624187**Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yesPacking Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_Thermometer Used 83Type of Ice:  Wet  Blue  None

PM: 8M Due Date: 10/17/19

Cooler Temperature 0.4Biological Tissue is Frozen: Yes  No

Temp should be above freezing to 6°C

Comments: \_\_\_\_\_

Samples on ice, cooling process has begun  
Date and Initials of person examining  
contents: 10/10/19 MR

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>W</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed      Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Manager Review: \_\_\_\_\_

Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e out of hold, incorrect preservative, out of temp, incorrect containers)

November 20, 2019

Joju Abraham  
Georgia Power - Coal Combustion Residuals  
2480 Maner Road  
Atlanta, GA 30339

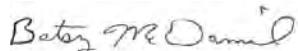
RE: Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624188

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 10, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Betsy McDaniel  
betsy.mcdaniel@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Betsy McDaniel, Atlantic Coast Consulting  
Chris Parker, Atlantic Coast Consulting  
Evan Perry, Atlantic Coast Consulting  
Lauren Petty, Southern Company Services, Inc.  
Rebecca Thornton, Pace Analytical Atlanta



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Plant Kraft - Grumman Road  
 Pace Project No.: 2624188

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### Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601	Missouri Certification #: 235
ANAB DOD-ELAP Rad Accreditation #: L2417	Montana Certification #: Cert0082
Alabama Certification #: 41590	Nebraska Certification #: NE-OS-29-14
Arizona Certification #: AZ0734	Nevada Certification #: PA014572018-1
Arkansas Certification	New Hampshire/TNI Certification #: 297617
California Certification #: 04222CA	New Jersey/TNI Certification #: PA051
Colorado Certification #: PA01547	New Mexico Certification #: PA01457
Connecticut Certification #: PH-0694	New York/TNI Certification #: 10888
Delaware Certification	North Carolina Certification #: 42706
EPA Region 4 DW Rad	North Dakota Certification #: R-190
Florida/TNI Certification #: E87683	Ohio EPA Rad Approval: #41249
Georgia Certification #: C040	Oregon/TNI Certification #: PA200002-010
Florida: Cert E871149 SEKS WET	Pennsylvania/TNI Certification #: 65-00282
Guam Certification	Puerto Rico Certification #: PA01457
Hawaii Certification	Rhode Island Certification #: 65-00282
Idaho Certification	South Dakota Certification
Illinois Certification	Tennessee Certification #: 02867
Indiana Certification	Texas/TNI Certification #: T104704188-17-3
Iowa Certification #: 391	Utah/TNI Certification #: PA014572017-9
Kansas/TNI Certification #: E-10358	USDA Soil Permit #: P330-17-00091
Kentucky Certification #: KY90133	Vermont Dept. of Health: ID# VT-0282
KY WW Permit #: KY0098221	Virgin Island/PADEP Certification
KY WW Permit #: KY0000221	Virginia/VELAP Certification #: 9526
Louisiana DHH/TNI Certification #: LA180012	Washington Certification #: C868
Louisiana DEQ/TNI Certification #: 4086	West Virginia DEP Certification #: 143
Maine Certification #: 2017020	West Virginia DHHR Certification #: 9964C
Maryland Certification #: 308	Wisconsin Approve List for Rad
Massachusetts Certification #: M-PA1457	Wyoming Certification #: 8TMS-L
Michigan/PADEP Certification #: 9991	

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624188

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624188001	Dup-1	Water	10/08/19 00:00	10/10/19 13:45
2624188002	EB-1-10-8-19	Water	10/08/19 16:15	10/10/19 13:45
2624188003	GWC-16	Water	10/08/19 12:30	10/10/19 13:45
2624188004	GWC-21	Water	10/08/19 14:25	10/10/19 13:45
2624188005	GWC-15	Water	10/08/19 15:25	10/10/19 13:45
2624188006	GWC-14	Water	10/08/19 16:30	10/10/19 13:45
2624188007	GWB-4R	Water	10/09/19 11:40	10/10/19 13:45
2624188008	GWC-2	Water	10/09/19 13:00	10/10/19 13:45
2624188009	FB-2-10-9-19	Water	10/09/19 13:20	10/10/19 13:45
2624188010	GWC-20	Water	10/09/19 14:25	10/10/19 13:45
2624188011	GWA-8	Water	10/07/19 17:25	10/10/19 13:45
2624188012	GWA-7	Water	10/08/19 09:45	10/10/19 13:45
2624188013	FB-1-10-8-19	Water	10/08/19 10:40	10/10/19 13:45
2624188014	GWC-13	Water	10/08/19 11:25	10/10/19 13:45
2624188015	GWC-11	Water	10/08/19 15:15	10/10/19 13:45
2624188016	GWC-12	Water	10/09/19 09:55	10/10/19 13:45
2624188017	Dup-2	Water	10/09/19 00:00	10/10/19 13:45
2624188018	GWC-17	Water	10/09/19 11:10	10/10/19 13:45
2624188019	GWC-22	Water	10/09/19 13:18	10/10/19 13:45
2624188020	GWB-6R	Water	10/09/19 15:13	10/10/19 13:45
2624188021	GWB-5R	Water	10/09/19 16:20	10/10/19 13:45
2624188022	GWC-1	Water	10/09/19 15:40	10/10/19 13:45
2624188023	GWC-9	Water	10/09/19 12:10	10/10/19 13:45
2624188024	EB-2-10-9-19	Water	10/09/19 12:30	10/10/19 13:45

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624188

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2624188001	Dup-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624188002	EB-1-10-8-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624188003	GWC-16	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624188004	GWC-21	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624188005	GWC-15	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624188006	GWC-14	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624188007	GWB-4R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624188008	GWC-2	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624188009	FB-2-10-9-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624188010	GWC-20	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624188011	GWA-8	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624188012	GWA-7	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624188013	FB-1-10-8-19	EPA 9315	LAL	1	PASI-PA

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## SAMPLE ANALYTE COUNT

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624188

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2624188014	GWC-13	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2624188015	GWC-11	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2624188016	GWC-12	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2624188017	Dup-2	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2624188018	GWC-17	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2624188019	GWC-22	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2624188020	GWB-6R	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2624188021	GWB-5R	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2624188022	GWC-1	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2624188023	GWC-9	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2624188024	EB-2-10-9-19	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: Dup-1**      Lab ID: **2624188001**      Collected: 10/08/19 00:00      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.40 ± 0.391 (0.281)</b> C:98% T:NA	pCi/L	11/04/19 08:31	13982-63-3	
Radium-228	EPA 9320	<b>0.422 ± 0.462 (0.968)</b> C:69% T:74%	pCi/L	11/01/19 15:45	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.82 ± 0.853 (1.25)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: EB-1-10-8-19**      Lab ID: **2624188002**      Collected: 10/08/19 16:15      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.402 ± 0.220 (0.336)</b> C:96% T:NA	pCi/L	11/04/19 08:31	13982-63-3	
Radium-228	EPA 9320	<b>0.129 ± 0.382 (0.861)</b> C:68% T:73%	pCi/L	11/01/19 15:45	15262-20-1	
Total Radium	Total Radium Calculation	<b>0.531 ± 0.602 (1.20)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWC-16**      Lab ID: **2624188003**      Collected: 10/08/19 12:30      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.17 ± 0.350 (0.273)</b> C:98% T:NA	pCi/L	11/04/19 08:31	13982-63-3	
Radium-228	EPA 9320	<b>0.715 ± 0.388 (0.688)</b> C:74% T:83%	pCi/L	11/01/19 15:45	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.89 ± 0.738 (0.961)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624188

**Sample: GWC-21**      Lab ID: **2624188004**      Collected: 10/08/19 14:25      Received: 10/10/19 13:45      Matrix: Water  
PWS:                      Site ID:                      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.28 ± 0.368 (0.269)</b> C:98% T:NA	pCi/L	11/04/19 08:31	13982-63-3	
Radium-228	EPA 9320	<b>0.597 ± 0.406 (0.772)</b> C:71% T:74%	pCi/L	11/01/19 15:45	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.88 ± 0.774 (1.04)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWC-15**      Lab ID: **2624188005**      Collected: 10/08/19 15:25      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.882 ± 0.301 (0.286)</b> C:100% T:NA	pCi/L	11/04/19 08:31	13982-63-3	
Radium-228	EPA 9320	<b>0.639 ± 0.379 (0.691)</b> C:70% T:86%	pCi/L	11/01/19 15:45	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.52 ± 0.680 (0.977)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWC-14**      Lab ID: **2624188006**      Collected: 10/08/19 16:30      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.684 ± 0.264 (0.260)</b> C:95% T:NA	pCi/L	11/04/19 08:31	13982-63-3	
Radium-228	EPA 9320	<b>0.721 ± 0.474 (0.896)</b> C:59% T:80%	pCi/L	11/01/19 15:45	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.41 ± 0.738 (1.16)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWB-4R**      Lab ID: **2624188007**      Collected: 10/09/19 11:40      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.61 ± 0.435 (0.331)</b> C:95% T:NA	pCi/L	11/04/19 08:31	13982-63-3	
Radium-228	EPA 9320	<b>0.558 ± 0.466 (0.946)</b> C:72% T:79%	pCi/L	11/01/19 15:46	15262-20-1	
Total Radium	Total Radium Calculation	<b>2.17 ± 0.901 (1.28)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624188

<b>Sample: GWC-2</b>	<b>Lab ID: 2624188008</b>	Collected: 10/09/19 13:00	Received: 10/10/19 13:45	Matrix: Water		
PWS:	Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.220 ± 0.191 (0.362)</b> C:92% T:NA	pCi/L	11/04/19 08:31	13982-63-3	
Radium-228	EPA 9320	<b>-0.833 ± 0.475 (1.18)</b> C:67% T:83%	pCi/L	11/01/19 15:46	15262-20-1	
Total Radium	Total Radium Calculation	<b>0.220 ± 0.666 (1.54)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: FB-2-10-9-19**      Lab ID: **2624188009**      Collected: 10/09/19 13:20      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.462 ± 0.211 (0.235)</b> C:95% T:NA	pCi/L	11/04/19 08:31	13982-63-3	
Radium-228	EPA 9320	<b>-0.173 ± 0.299 (0.731)</b> C:72% T:92%	pCi/L	11/01/19 15:46	15262-20-1	
Total Radium	Total Radium Calculation	<b>0.462 ± 0.510 (0.966)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWC-20**      Lab ID: **2624188010**      Collected: 10/09/19 14:25      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.25 ± 0.383 (0.358)</b> C:91% T:NA	pCi/L	11/04/19 08:31	13982-63-3	
Radium-228	EPA 9320	<b>1.03 ± 0.563 (1.04)</b> C:71% T:78%	pCi/L	11/01/19 16:20	15262-20-1	
Total Radium	Total Radium Calculation	<b>2.28 ± 0.946 (1.40)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624188

<b>Sample: GWA-8</b>	<b>Lab ID:</b> 2624188011	Collected: 10/07/19 17:25	Received: 10/10/19 13:45	Matrix: Water		
PWS:	Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.66 ± 0.438 (0.307)</b> C:95% T:NA	pCi/L	11/04/19 08:37	13982-63-3	
Radium-228	EPA 9320	<b>1.17 ± 0.536 (0.912)</b> C:69% T:83%	pCi/L	11/04/19 12:58	15262-20-1	
Total Radium	Total Radium Calculation	<b>2.83 ± 0.974 (1.22)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWA-7**      Lab ID: **2624188012**      Collected: 10/08/19 09:45      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>32.3 ± 4.86 (0.298)</b> C:98% T:NA	pCi/L	11/18/19 17:53	13982-63-3	
Radium-228	EPA 9320	<b>1.52 ± 0.681 (1.15)</b> C:70% T:86%	pCi/L	11/04/19 13:43	15262-20-1	
Total Radium	Total Radium Calculation	<b>33.8 ± 5.54 (1.45)</b>	pCi/L	11/20/19 14:11	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: FB-1-10-8-19**      Lab ID: **2624188013**      Collected: 10/08/19 10:40      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.654 ± 0.262 (0.274)</b> C:89% T:NA	pCi/L	11/04/19 08:45	13982-63-3	
Radium-228	EPA 9320	<b>0.485 ± 0.409 (0.820)</b> C:69% T:93%	pCi/L	11/04/19 13:43	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.14 ± 0.671 (1.09)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWC-13**      Lab ID: **2624188014**      Collected: 10/08/19 11:25      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.792 ± 0.289 (0.273)</b> C:90% T:NA	pCi/L	11/04/19 08:45	13982-63-3	
Radium-228	EPA 9320	<b>0.830 ± 0.529 (1.01)</b> C:70% T:86%	pCi/L	11/04/19 13:43	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.62 ± 0.818 (1.28)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWC-11**      Lab ID: **2624188015**      Collected: 10/08/19 15:15      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>3.31 ± 0.704 (0.235)</b> C:89% T:NA	pCi/L	11/04/19 08:45	13982-63-3	
Radium-228	EPA 9320	<b>3.08 ± 0.862 (1.01)</b> C:72% T:82%	pCi/L	11/04/19 13:44	15262-20-1	
Total Radium	Total Radium Calculation	<b>6.39 ± 1.57 (1.25)</b>	pCi/L	11/05/19 14:24	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWC-12**      Lab ID: **2624188016**      Collected: 10/09/19 09:55      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.884 ± 0.326 (0.366)</b> C:91% T:NA	pCi/L	11/04/19 08:45	13982-63-3	
Radium-228	EPA 9320	<b>2.23 ± 0.691 (0.884)</b> C:67% T:88%	pCi/L	11/04/19 13:44	15262-20-1	
Total Radium	Total Radium Calculation	<b>3.11 ± 1.02 (1.25)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624188

<b>Sample:</b> Dup-2	<b>Lab ID:</b> 2624188017	Collected: 10/09/19 00:00	Received: 10/10/19 13:45	Matrix: Water		
PWS:	Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.895 ± 0.311 (0.275)</b> C:91% T:NA	pCi/L	11/04/19 08:45	13982-63-3	
Radium-228	EPA 9320	<b>2.26 ± 0.706 (0.930)</b> C:67% T:84%	pCi/L	11/04/19 12:59	15262-20-1	
Total Radium	Total Radium Calculation	<b>3.16 ± 1.02 (1.21)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWC-17**      Lab ID: **2624188018**      Collected: 10/09/19 11:10      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.36 ± 0.383 (0.176)</b> C:96% T:NA	pCi/L	11/04/19 08:45	13982-63-3	
Radium-228	EPA 9320	<b>1.55 ± 0.610 (0.954)</b> C:69% T:86%	pCi/L	11/04/19 13:44	15262-20-1	
Total Radium	Total Radium Calculation	<b>2.91 ± 0.993 (1.13)</b>	pCi/L	11/05/19 14:24	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWC-22**      Lab ID: **2624188019**      Collected: 10/09/19 13:18      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.65 ± 0.436 (0.247)</b> C:93% T:NA	pCi/L	11/04/19 08:50	13982-63-3	
Radium-228	EPA 9320	<b>2.03 ± 0.729 (1.09)</b> C:67% T:74%	pCi/L	11/04/19 13:00	15262-20-1	
Total Radium	Total Radium Calculation	<b>3.68 ± 1.17 (1.34)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWB-6R**      Lab ID: **2624188020**      Collected: 10/09/19 15:13      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>4.01 ± 0.798 (0.221)</b> C:95% T:NA	pCi/L	11/04/19 08:50	13982-63-3	
Radium-228	EPA 9320	<b>1.44 ± 0.640 (1.05)</b> C:67% T:82%	pCi/L	11/04/19 13:00	15262-20-1	
Total Radium	Total Radium Calculation	<b>5.45 ± 1.44 (1.27)</b>	pCi/L	11/05/19 14:24	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWB-5R**      Lab ID: **2624188021**      Collected: 10/09/19 16:20      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>4.90 ± 0.947 (0.348)</b> C:92% T:NA	pCi/L	11/04/19 08:50	13982-63-3	
Radium-228	EPA 9320	<b>2.33 ± 0.782 (1.08)</b> C:65% T:86%	pCi/L	11/04/19 13:00	15262-20-1	
Total Radium	Total Radium Calculation	<b>7.23 ± 1.73 (1.43)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWC-1**      Lab ID: **2624188022**      Collected: 10/09/19 15:40      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.11 ± 0.339 (0.202)</b> C:94% T:NA	pCi/L	11/04/19 08:50	13982-63-3	
Radium-228	EPA 9320	<b>2.02 ± 0.724 (1.08)</b> C:67% T:76%	pCi/L	11/04/19 13:00	15262-20-1	
Total Radium	Total Radium Calculation	<b>3.13 ± 1.06 (1.28)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: GWC-9**      Lab ID: **2624188023**      Collected: 10/09/19 12:10      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>1.46 ± 0.412 (0.294)</b> C:90% T:NA	pCi/L	11/04/19 08:50	13982-63-3	
Radium-228	EPA 9320	<b>1.63 ± 0.584 (0.861)</b> C:68% T:87%	pCi/L	11/04/19 13:00	15262-20-1	
Total Radium	Total Radium Calculation	<b>3.09 ± 0.996 (1.16)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

**Sample: EB-2-10-9-19**      Lab ID: **2624188024**      Collected: 10/09/19 12:30      Received: 10/10/19 13:45      Matrix: Water

PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	<b>0.385 ± 0.203 (0.261)</b> C:94% T:NA	pCi/L	11/04/19 08:50	13982-63-3	
Radium-228	EPA 9320	<b>1.40 ± 0.551 (0.840)</b> C:70% T:83%	pCi/L	11/04/19 13:43	15262-20-1	
Total Radium	Total Radium Calculation	<b>1.79 ± 0.754 (1.10)</b>	pCi/L	11/05/19 14:24	7440-14-4	

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

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QC Batch: 366966 Analysis Method: EPA 9315  
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium  
Associated Lab Samples: 2624188001, 2624188002, 2624188003, 2624188004, 2624188005, 2624188006, 2624188007, 2624188008,  
2624188009, 2624188010

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METHOD BLANK: 1780028 Matrix: Water

Associated Lab Samples: 2624188001, 2624188002, 2624188003, 2624188004, 2624188005, 2624188006, 2624188007, 2624188008,  
2624188009, 2624188010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.371 ± 0.194 (0.239) C:96% T:NA	pCi/L	11/04/19 08:29	

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

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QC Batch: 366971 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Associated Lab Samples: 2624188011, 2624188012, 2624188013, 2624188014, 2624188015, 2624188016, 2624188017, 2624188018, 2624188019, 2624188020, 2624188021, 2624188022, 2624188023, 2624188024

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METHOD BLANK: 1780043 Matrix: Water

Associated Lab Samples: 2624188011, 2624188012, 2624188013, 2624188014, 2624188015, 2624188016, 2624188017, 2624188018, 2624188019, 2624188020, 2624188021, 2624188022, 2624188023, 2624188024

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.325 ± 0.327 (0.672) C:75% T:91%	pCi/L	11/04/19 13:01	

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# QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624188

QC Batch: 366967 Analysis Method: EPA 9320  
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228  
Associated Lab Samples: 2624188001, 2624188002, 2624188003, 2624188004, 2624188005, 2624188006, 2624188007, 2624188008,  
2624188009, 2624188010

METHOD BLANK: 1780030 Matrix: Water

Associated Lab Samples: 2624188001, 2624188002, 2624188003, 2624188004, 2624188005, 2624188006, 2624188007, 2624188008, 2624188009, 2624188010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0313 ± 0.302 (0.696) C:73% T:90%	pCi/L	11/01/19 12:27	

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## **QUALITY CONTROL - RADIOCHEMISTRY**

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624188

QC Batch: 366969 Analysis Method: EPA 9315  
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium  
Associated Lab Samples: 2624188011, 2624188013, 2624188014, 2624188015, 2624188016, 2624188017, 2624188018, 2624188019,  
2624188020, 2624188021, 2624188022, 2624188023, 2624188024

METHOD BLANK: 1780037 Matrix: Water

Associated Lab Samples: 2624188011, 2624188013, 2624188014, 2624188015, 2624188016, 2624188017, 2624188018, 2624188019, 2624188020, 2624188021, 2624188022, 2624188023, 2624188024

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.340 ± 0.211 (0.351) C:96% T:NA	pCi/L	11/04/19 08:33	

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

QC Batch: 370852

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 2624188012

METHOD BLANK: 1799486

Matrix: Water

Associated Lab Samples: 2624188012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.487 ± 0.286 (0.389) C:88% T:NA	pCi/L	11/19/19 08:38	

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## QUALIFIERS

Project: Plant Kraft - Grumman Road

Pace Project No.: 2624188

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624188

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624188001	Dup-1	EPA 9315	366966		
2624188002	EB-1-10-8-19	EPA 9315	366966		
2624188003	GWC-16	EPA 9315	366966		
2624188004	GWC-21	EPA 9315	366966		
2624188005	GWC-15	EPA 9315	366966		
2624188006	GWC-14	EPA 9315	366966		
2624188007	GWB-4R	EPA 9315	366966		
2624188008	GWC-2	EPA 9315	366966		
2624188009	FB-2-10-9-19	EPA 9315	366966		
2624188010	GWC-20	EPA 9315	366966		
2624188011	GWA-8	EPA 9315	366969		
2624188012	GWA-7	EPA 9315	370852		
2624188013	FB-1-10-8-19	EPA 9315	366969		
2624188014	GWC-13	EPA 9315	366969		
2624188015	GWC-11	EPA 9315	366969		
2624188016	GWC-12	EPA 9315	366969		
2624188017	Dup-2	EPA 9315	366969		
2624188018	GWC-17	EPA 9315	366969		
2624188019	GWC-22	EPA 9315	366969		
2624188020	GWB-6R	EPA 9315	366969		
2624188021	GWB-5R	EPA 9315	366969		
2624188022	GWC-1	EPA 9315	366969		
2624188023	GWC-9	EPA 9315	366969		
2624188024	EB-2-10-9-19	EPA 9315	366969		
2624188001	Dup-1	EPA 9320	366967		
2624188002	EB-1-10-8-19	EPA 9320	366967		
2624188003	GWC-16	EPA 9320	366967		
2624188004	GWC-21	EPA 9320	366967		
2624188005	GWC-15	EPA 9320	366967		
2624188006	GWC-14	EPA 9320	366967		
2624188007	GWB-4R	EPA 9320	366967		
2624188008	GWC-2	EPA 9320	366967		
2624188009	FB-2-10-9-19	EPA 9320	366967		
2624188010	GWC-20	EPA 9320	366967		
2624188011	GWA-8	EPA 9320	366971		
2624188012	GWA-7	EPA 9320	366971		
2624188013	FB-1-10-8-19	EPA 9320	366971		
2624188014	GWC-13	EPA 9320	366971		
2624188015	GWC-11	EPA 9320	366971		
2624188016	GWC-12	EPA 9320	366971		
2624188017	Dup-2	EPA 9320	366971		
2624188018	GWC-17	EPA 9320	366971		
2624188019	GWC-22	EPA 9320	366971		
2624188020	GWB-6R	EPA 9320	366971		
2624188021	GWB-5R	EPA 9320	366971		
2624188022	GWC-1	EPA 9320	366971		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Kraft - Grumman Road  
Pace Project No.: 2624188

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624188023	GWC-9	EPA 9320	366971		
2624188024	EB-2-10-9-19	EPA 9320	366971		
2624188001	Dup-1	Total Radium Calculation	369493		
2624188002	EB-1-10-8-19	Total Radium Calculation	369493		
2624188003	GWC-16	Total Radium Calculation	369493		
2624188004	GWC-21	Total Radium Calculation	369493		
2624188005	GWC-15	Total Radium Calculation	369493		
2624188006	GWC-14	Total Radium Calculation	369493		
2624188007	GWB-4R	Total Radium Calculation	369493		
2624188008	GWC-2	Total Radium Calculation	369493		
2624188009	FB-2-10-9-19	Total Radium Calculation	369493		
2624188010	GWC-20	Total Radium Calculation	369493		
2624188011	GWA-8	Total Radium Calculation	369493		
2624188012	GWA-7	Total Radium Calculation	371954		
2624188013	FB-1-10-8-19	Total Radium Calculation	369493		
2624188014	GWC-13	Total Radium Calculation	369493		
2624188015	GWC-11	Total Radium Calculation	369493		
2624188016	GWC-12	Total Radium Calculation	369493		
2624188017	Dup-2	Total Radium Calculation	369495		
2624188018	GWC-17	Total Radium Calculation	369495		
2624188019	GWC-22	Total Radium Calculation	369495		
2624188020	GWB-6R	Total Radium Calculation	369495		
2624188021	GWB-5R	Total Radium Calculation	369495		
2624188022	GWC-1	Total Radium Calculation	369495		
2624188023	GWC-9	Total Radium Calculation	369495		
2624188024	EB-2-10-9-19	Total Radium Calculation	369495		

### REPORT OF LABORATORY ANALYSIS

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**CHAIN OF CUSTODY RECORD**

Pace Analytical®

Pace Analytical Services, Inc.  
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 3

ANALYSIS REQUESTED									
CONTAINER TYPE:		P	P	P	P	P	P	P	P
PRESERVATION:		3	7	7	7	7	7	7	7
# of									
C									
O									
N									
T									
A									
I									
E									
R									
S									
State Metals (see below)									
Detected App IV Metals: (see list below)									
(SVL-B46 9315/9320) Radium 226 & 228									
Metals App III: Barren, Calcium, CI, F, SO <sub>4</sub> , & TDS (EPA 300.0 & SM 2540C)									
PROJECT NAME/STATE: Plant Kraft Grumman Road									
PROJECT #: PO #:									
Collection DATE	Collection TIME	MATRIX CODE*	C G	O R	M A	SAMPLE IDENTIFICATION	P B	P	P
10-8-19	/	GW	X	X		DUD-1			
10-8-19	1015	W	X	X		EB-1-10-8-19			
10-8-19	1230	GW	X	X		GWC-14			
10-8-19	1425	GW	X	X		GWC-21			
10-8-19	1525	BW	X	X		GBC-15			
10-8-19	1630	GW	X	X		GWC-14			
10-9-19	0840	GW	X	X		GWB-4R			
10-9-19	1140	BW	X	X		GWB-4R			
10-9-19	1300	GW	X	X		GWC-2			
10-9-19	1320	W	X	X		FB-2-10-9-19			
10-9-19	1425	BW	X	X		GBC-20			
SAMPLED BY AND TITLE: O. F. Uquea (AC)		DATE/TIME: 10-9-19 1425		RELINQUISHED BY: H. B. O.		DATE/TIME: 10-9-19 1425		LAB #: 1345	
RECEIVED BY: D. Mann		DATE/TIME: 10-9-19 1345		SAMPLE SHIPPED VIA: UPS		DATE/TIME: 10-10-19 1345		Entered into LIMS: Tracking #:	
RECEIVED BY LAB: D. Mann		DATE/TIME: 10-9-19 1345		SAMPLE SHIPPED VIA: FED-EX		DATE/TIME: 10-10-19 1345		Client Other FS Carrier ID:	
Dropping off: No		Temporarily: NA		USPS: No		Courier: No		# of Coolers: 0	
Dropping off: Yes		Temporarily: NA		USPS: No		Courier: No		# of Coolers: 0	
Detected App IV Metals: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Molybdenum, Selenium, and Thallium									
State Metals: As, Ba, Cr, Pb, Sb, Se, V, Zn									

**CHAIN OF CUSTODY RECORD**

Pace Analytical  
• Pace Analytical Services, Inc.  
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 :FAX (770) 734-4201

PAGE: 2 OF 3

ANALYSIS REQUESTED										
CLIENT NAME: Georgia Power	CONTAINER TYPE: PRESERVATION: # of	P	P	P	P	P	P	P	P	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McCall Blvd SE B10185 Atlanta, GA 30308 404-505-7239	C	3	7	7	7	7	7	7	7	
REPORT TO: <i>Berry@Power.com</i>	O	State Metals (see below)								
REQUESTED COMPLETION DATE:	T	Detected APP IV Metals: (see list below)								
PROJECT NAME/STATE: Plant Kraft Grumman Road	A	(SW-846 8315/9320)								
PROJECT #:	N	Detected APP IV: Radium 226 & 228								
Collection DATE	E	(EPA 300.0 & SM 2540C)								
Collection TIME	R	Metals App. III Boron, Calcium								
MATRIX CODE*	S	Cl, F, SO <sub>4</sub> , & TDS								
Collection DATE	G	App III and detected App IV								
Collection TIME	O	App III and detected App IV								
Collection DATE	M	App III and detected App IV								
Collection TIME	A	App III and detected App IV								
SAMPLE IDENTIFICATION	P	App III and detected App IV								
10-7-19	1725	GW	✓							
10-8-19	0945	GW	✓							
10-8-19	1040	GW	✓							
10-8-19	1125	GW	✓							
10-8-19	1515	GW	✓							
10-9-19	0955	GW	✓							
—	—	GW	✓							
10-9-19	1110	GW	✓							
10-9-19	1318	GW	✓							
10-9-19	1513	GW	✓							
10-9-19	1620	GW	✓							
SAMPLED BY AND TITLE: <i>H. Bush (ms)</i>										
RECEIVED BY LAB:	DATE/TIME: <i>John Duman 10/19/19</i>		DATE/TIME: <i>10:19 1620</i>		RELINQUISHED BY: <i>John Duman</i>		DATE/TIME: <i>10/19 1345</i>		LAB #: <i>1345</i>	
PH Shipped: Yes No	Temp: 63° NA	DATE/TIME: <i>10/19 1345</i>	DATE/TIME: <i>10/19 1345</i>	DATE/TIME: <i>10/19 1345</i>	DATE/TIME: <i>10/19 1345</i>	DATE/TIME: <i>10/19 1345</i>	DATE/TIME: <i>10/19 1345</i>	DATE/TIME: <i>10/19 1345</i>		
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS Priority Svc: <i>Not Present</i> # of Coasters Temp: <i>Not Present</i> Case ID: <i>Not Present</i>										
REMARKS/ADDITIONAL INFORMATION										
*MATRIX CODES: A - PLASTIC B - AMBER GLASS G - CLEAR GLASS V - VIAL S - STERILE O - OTHER N - U - M - DW - DRINKING WATER E - WW - WASTEWATER R - GW - GROUNDWATER S - SW - SURFACE WATER ST - ST - STORM WATER W - W - WATER S - SOIL SL - SLUDGE SD - SOLID A - AIR L - LIQUID P - PRODUCT										
PRESERVATION 1 - HCl, 56°C 2 - H <sub>2</sub> SO <sub>4</sub> , 56°C 3 - HNO <sub>3</sub> 4 - NaOH, 56°C 5 - NaOH/ZnAc, 56°C 6 - Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , 56°C 7 - 56°C not frozen										
Entered into LIMS: <i>Entered into LIMS</i>										
Tracking #: <i>W0# : 2624188</i>										
FOR LAB USE ONLY										

Detected App IV Metals: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Molybdenum, Selenium, and Thallium  
State Metals: As, Ba, Cr, Pb, Sb, Se, V, Zn

**CHAIN OF CUSTODY RECORD**

Pace Analytical®  
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092  
(770) 734-4200 : FAX (770) 734-4201

3 OF 3

ANALYSIS REQUESTED											
CONTAINER TYPE:		P	P	P	P	P	P	P	P	P	P
# of		3	7	7	7	7	7	7	7	7	7
C O N T A I N E R   T Y P E											
P - PLASTIC      A - AMBER GLASS G - CLEAR GLASS      V - VOA VIAL S - STERILE      O - OTHER N - N/A      D - D											
PRESERVATION											
1 - HCl, 50°C      2 - H <sub>2</sub> SO <sub>4</sub> , 50°C 3 - HNO <sub>3</sub> 4 - NaOH, 50°C 5 - NaOH/ZnAc, 50°C      6 - Na-S <sub>2</sub> O <sub>3</sub> , 50°C 7 - 50°C not frozen											
M A T R I X   C O D E S :											
B - DRINKING WATER      S - SOIL E - WASTEWATER      S L - SLUDGE R - GROUNDWATER      S D - SOLID S - SURFACE WATER      A - AIR T - STORM WATER      L - LIQUID A - WATER      P - PRODUCT											
R E M A R K S / A D D I T I O N A L   I N F O R M A T I O N											
App III and detected App IV											
State Metals (see below)											
Detected App IV Metals: (see list below)											
(SW-846 8315/8320)											
Detected App IV: Redline 226 & 228											
(EPA 300.0 & SM 2540C)											
Metals App. III Boron, Calcium											
C, F, S0, & TDS											
PROJECT NAME/STATE: Plant Kraft Grumman Road											
PROJECT #: <i>EP01@Pace</i>											
REQUESTED COMPLETION DATE: PO #:											
Collection Date Collection Time Matrix Code Sample Identification											
10-9-19	15410	GW	X	GWL-1							
10-9-19	1210	GW	X	GWL-9	✓	✓	✓	✓	✓	✓	
10-9-19	1230	W	X	EB-2-10-9-11	✓	✓	✓	✓	✓	✓	
SAMPLED BY AND TITLE: DATE/TIME: RELINQUISHED BY: DATE/TIME: FOR LAB USE ONLY											
RECEIVED BY: DATE/TIME: RELINQUISHED BY: DATE/TIME: LAB #: Entered into LIMS: Tracking #:											
RECEIVED BY LAB: DATE/TIME: SAMPLE SHIPPED VIA: CLIENT OTHER FS											
CARRIER: UPS FED-EX USPS COURIER Client Other FS											
Temperature: Current Seal: If or Coated Client ID: Carrier ID:											
Custody Seal: Intact Broken Not Present											
Log No. NA Min. 0 Max.											
Checklist: Yes No NA											

Detected App IV Metals: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Molybdenum, Selenium, and Thallium  
State Metals: As, Ba, Cr, Pb, Sb, Se, V, Zn

## Sample Condition Upon Receipt

Pace Analytical

Client Name: GAPower

Project # \_\_\_\_\_

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yesPacking Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_Thermometer Used 83Type of Ice: Wet Blue NoneCooler Temperature 0°4

Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments: \_\_\_\_\_

 Samples on ice, cooling process has begunDate and Initials of person examining  
contents: 10/10/19 ms

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>w</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Lot # of added preservative
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Pace Trip Blank Lot # (if purchased):		16.

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Manager Review: \_\_\_\_\_

Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

**LEVEL 2A LABORATORY DATA VALIDATIONS**

**Grumman Road**  
**2<sup>nd</sup> Semi-Annual Event**  
**October 2019**

## **Georgia Power Company – Grumman Road**

### **Quality Control Review of Analytical Data – October 2019**

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Pace Analytical Services, Atlanta and Pittsburgh for groundwater samples collected at Grumman Road between October 7, 2019 and October 9, 2019. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix. SDG 2624187 was revised by the laboratory to add target analytes that were missing from the original report. Sample GWA-7 (2624188012) had limited sample volume for radium analysis; the radium-226 result may have a high bias.

In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detected monitoring constituents listed in 40 CFR, Part 257, Appendix III and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Test methods included Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Determination of Inorganic Anions (USEPA Method 300.0), Solids in Water (Standard Methods 2540C), Radium-226 (USEPA 9315), and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)<sup>1</sup> and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)<sup>2</sup>. The review included an assessment of the results for completeness, precision (laboratory duplicate recoveries and matrix spike/matrix spike duplicate recoveries), accuracy (laboratory control samples and matrix spike samples), and blank contamination (field, equipment, and laboratory blanks). Sample receipt conditions, holding times, and chains of custody (COCs) were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

## DATA QUALITY OBJECTIVES

**Laboratory Precision:** Laboratory goals for precision were met, with the exceptions of Radium-226 on GWA-8 (2624188011) as described in the qualifications section below. Additionally, Radium-228 in SDG 2624188 yielded a relative percent difference (RPD) for the laboratory control sample/laboratory control sample duplicate that exceeded the QC criteria (53.11% above limit of 36). This batch was passed on the individual recoveries, and no batch qualification was necessary for Radium-228.

**Field Precision:** Field goals for precision were met, with the exception of Vanadium on GWC-12 (2624187016) and DUP-2 (2624187017) as described in the qualifications section below.

**Accuracy:** Laboratory goals for accuracy were met, with the exceptions of Boron, Calcium, and Chloride in SDG 2624187 as described in the qualifications section below.

**Detection Limits:** Project goals for detection limits were met. Certain samples were diluted due to the concentration of target or non-target analyte interferences. Dilutions do not require qualifications based on USEPA guidelines. Reporting limits (RLs) of non-detect compounds are elevated proportional to the dilution when undiluted sample results were not provided by the laboratory. The data usability of diluted results was evaluated by the data user in the context of site-wide characterization.

**Completeness:** There were no rejected analytical results for this event, resulting in a completion of 100%.

**Holding Times:** Holding time requirements were met.

## QUALIFICATIONS

In general, chemical results for the samples collected at the site were qualified on the basis of low precision or low accuracy or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the validation process:

**J:** The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample

**ND:** The analyte was not detected above the method detection limit

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. The applied qualifications may not have been required for all samples collected at the site. A summary of sample qualifications can be found in Table 2 of this Appendix.

- Sample GWC-14 (2624187006) was qualified as estimated (J) for Chloride as the associated matrix spike and matrix spike duplicate recoveries were below QC criteria (47% and 43% below the range of 90-110).
- Sample DUP-1 (2624187001) was qualified as estimated (J) for Boron and Calcium as the associated matrix spike and matrix spike duplicate recoveries were outside the QC criteria. The sample received 50-times dilution, which yielded spike recoveries that could not be evaluated.
- Sample GWB-5R (2624187021) was qualified as estimated (J) for Boron as the associated matrix spike duplicate recovery was below QC criteria (71% below the range of 75-125).
- Sample GWB-5R (2624187021) was qualified as estimated (J) for Calcium as the associated matrix spike recovery was above QC criteria (163% above the range of 75-125).
- Sample GWA-8 (2624188011) was qualified as estimated (J) for Radium-226 as the laboratory RPD exceeded QC criteria (27.58% above limit of 25).
- Samples GWC-12 (2624187016) and DUP-2 (2624187017) were qualified as estimated (J) for Vanadium as the field RPD exceeded QC criteria (71.8% above limit of 25).
- Certain chromium and/or zinc results in SDG 2624187 were qualified as non-detect (ND) due to the analyte being detected at a similar concentration in an associated blank sample. As shown in Table 2, when the original sample result was above the RL, both the RL and method detection limit (MDL) were raised to the sample result as part of the qualification process. When the original sample result was below the RL, only the MDL was raised to the sample result as part of the qualification process.

- Certain radium results in SDG 2624188 were qualified as non-detect (ND) due to the analyte being detected at a similar concentration in an associated blank sample. As shown in Table 2, the minimum detectable concentration (MDC) was raised to the sample result as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from Grumman Road sampled between October 7, 2019 and October 9, 2019 in accordance with the analytical methods, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

## **REFERENCES**

<sup>1</sup>USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy, Revision 2.0

<sup>2</sup>USEPA, January 2017, National Office of Superfund Remediation and Technology Innovation, National Functional Guidelines for Inorganic Superfund Methods Data Review, Revision 0.0

TABLE 1  
 Georgia Power Company – Grumman Road  
 Sample Summary Table – October 2019

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6020B, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
24187	DUP-1	10/8/2019	2624187001	GW	FD (GWC-16)	X	X	X	
24188	DUP-1	10/8/2019	2624188001	GW	FD (GWC-16)				X
24187	EB-1-10-8-19	10/8/2019	2624187002	WQ	EB	X	X	X	
24188	EB-1-10-8-19	10/8/2019	2624188002	WQ	EB				X
24187	GWC-16	10/8/2019	2624187003	GW		X	X	X	
24188	GWC-16	10/8/2019	2624188003	GW					X
24187	GWC-21	10/8/2019	2624187004	GW		X	X	X	
24188	GWC-21	10/8/2019	2624188004	GW					X
24187	GWC-15	10/8/2019	2624187005	GW		X	X	X	
24188	GWC-15	10/8/2019	2624188005	GW					X
24187	GWC-14	10/8/2019	2624187006	GW		X	X	X	
24188	GWC-14	10/8/2019	2624188006	GW					X
24187	GWB-4R	10/9/2019	2624187007	GW		X	X	X	
24188	GWB-4R	10/9/2019	2624188007	GW					X
24187	GWC-2	10/9/2019	2624187008	GW		X	X	X	
24188	GWC-2	10/9/2019	2624188008	GW					X
24187	FB-2-10-9-19	10/9/2019	2624187009	WQ	FB	X	X	X	
24188	FB-2-10-9-19	10/9/2019	2624188009	WQ	FB				X
24187	GWC-20	10/9/2019	2624187010	GW		X	X	X	
24188	GWC-20	10/9/2019	2624188010	GW					X
24187	GWA-8	10/7/2019	2624187011	GW		X	X	X	
24188	GWA-8	10/7/2019	2624188011	GW					X
24187	GWA-7	10/8/2019	2624187012	GW		X	X	X	
24188	GWA-7	10/8/2019	2624188012	GW					X
24187	FB-1-10-8-19	10/8/2019	2624187013	WQ	FB	X	X	X	
24188	FB-1-10-8-19	10/8/2019	2624188013	WQ	FB				X
24187	GWC-13	10/8/2019	2624187014	GW		X	X	X	
24188	GWC-13	10/8/2019	2624188014	GW					X

Abbreviations:

EB – Equipment Blank  
 FB – Field Blank  
 FD – Field Duplicate  
 GW – Groundwater  
 QC – Quality Control  
 TDS – Total Dissolved Solids  
 WQ – Water Quality Control

TABLE 1 (continued)  
 Georgia Power Company – Grumman Road  
 Sample Summary Table – October 2019

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6020B, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
24187	GWC-11	10/8/2019	2624187015	GW		X	X	X	
24188	GWC-11	10/8/2019	2624188015	GW					X
24187	GWC-12	10/9/2019	2624187016	GW		X	X	X	
24188	GWC-12	10/9/2019	2624188016	GW					X
24187	DUP-2	10/9/2019	2624187017	GW	FD (GWC-12)	X	X	X	
24188	DUP-2	10/9/2019	2624188017	GW	FD (GWC-12)				X
24187	GWC-17	10/9/2019	2624187018	GW		X	X	X	
24188	GWC-17	10/9/2019	2624188018	GW					X
24187	GWC-22	10/9/2019	2624187019	GW		X	X	X	
24188	GWC-22	10/9/2019	2624188019	GW					X
24187	GWB-6R	10/9/2019	2624187020	GW		X	X	X	
24188	GWB-6R	10/9/2019	2624188020	GW					X
24187	GWB-5R	10/9/2019	2624187021	GW		X	X	X	
24188	GWB-5R	10/9/2019	2624188021	GW					X
24187	GWC-1	10/9/2019	2624187022	GW		X	X	X	
24188	GWC-1	10/9/2019	2624188022	GW					X
24187	GWC-9	10/9/2019	2624187023	GW		X	X	X	
24188	GWC-9	10/9/2019	2624188023	GW					X
24187	EB-2-10-9-19	10/9/2019	2624187024	WQ	EB	X	X	X	
24188	EB-2-10-9-19	10/9/2019	2624188024	WQ	EB				X

Abbreviations:  
 EB – Equipment Blank  
 FB – Field Blank  
 FD – Field Duplicate  
 GW – Groundwater  
 QC – Quality Control  
 TDS – Total Dissolved Solids  
 WQ – Water Quality Control

TABLE 2  
 Georgia Power Company – Grumman Road  
 Qualifier Summary Table – October 2019

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
24187	DUP-1	Boron			J	MS/MSD outside QC criteria
24187	DUP-1	Calcium			J	MS/MSD outside QC criteria
24187	GWC-16	Zinc	0.01	0.01	ND	Blank detection
24188	GWC-16	Radium-228		0.688	ND	Blank detection
24187	GWC-21	Zinc		0.0071	ND	Blank detection
24187	GWC-15	Zinc		0.0051	ND	Blank detection
24188	GWC-15	Radium-228		0.691	ND	Blank detection
24187	GWC-14	Zinc		0.0052	ND	Blank detection
24187	GWC-14	Chloride			J	MS/MSD below QC criteria
24187	GWB-4R	Zinc		0.0064	ND	Blank detection
24187	GWC-2	Zinc		0.005	ND	Blank detection
24187	GWC-20	Zinc		0.0049	ND	Blank detection
24187	GWA-8	Zinc		0.0077	ND	Blank detection
24188	GWA-8	Radium-226			J	RPD exceeds laboratory goal
24187	GWA-7	Zinc	0.095	0.095	ND	Blank detection
24188	GWA-7	Radium-226		0.298	ND	Blank detection
24188	GWC-13	Radium-226		0.273	ND	Blank detection
24187	GWC-11	Zinc		0.0061	ND	Blank detection
24188	GWC-11	Radium-226		0.235	ND	Blank detection
24187	GWC-12	Zinc		0.0057	ND	Blank detection
24187	GWC-12	Vanadium			J	RPD exceeds field goal
24187	DUP-2	Vanadium			J	RPD exceeds field goal
24187	GWC-17	Zinc	0.011	0.011	ND	Blank detection
24188	GWC-17	Radium-226		0.176	ND	Blank detection
24187	GWC-22	Zinc		0.0079	ND	Blank detection
24188	GWC-22	Radium-226		0.247	ND	Blank detection
24187	GWB-6R	Zinc		0.016	ND	Blank detection
24188	GWB-6R	Radium-226		0.221	ND	Blank detection

Abbreviations:

MDC – Minimum Detectable Concentration  
 MS/MSD – Matrix Spike / Matrix Spike Duplicate  
 MDL – Method Detection Limit  
 RL – Reporting Limit  
 RPD – Relative Percent Difference  
 SDG – Sample Delivery Group

Qualifiers:

J – Estimated Result  
 ND – Non-Detect Result

TABLE 2 (continued)  
 Georgia Power Company – Grumman Road  
 Qualifier Summary Table – October 2019

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
24187	GWB-5R	Boron			J	MSD below QC criteria
24187	GWB-5R	Calcium			J	MS above QC criteria
24187	GWB-5R	Chromium		0012	ND	Blank detection
24187	GWB-5R	Zinc		0.0081	ND	Blank detection
24188	GWB-5R	Radium-226		0.348	ND	Blank detection
24187	GWC-1	Chromium		0019	ND	Blank detection
24187	GWC-1	Zinc		0.0057	ND	Blank detection
24188	GWC-1	Radium-226		0.202	ND	Blank detection
24187	GWC-9	Chromium		0.009	ND	Blank detection
24187	GWC-9	Zinc		0.0054	ND	Blank detection
24188	GWC-9	Radium-226		0.294	ND	Blank detection

Abbreviations:

MDC – Minimum Detectable Concentration  
 MS/MSD – Matrix Spike / Matrix Spike Duplicate  
 MDL – Method Detection Limit  
 RL – Reporting Limit  
 RPD – Relative Percent Difference  
 SDG – Sample Delivery Group

Qualifiers:

J – Estimated Result  
 ND – Non-Detect Result

Product Name: Low-Flow System

Date: 2019-10-08 09:52:40

Project Information:

Operator Name H. Auld  
Company Name Atlantic Coast Consulting  
Project Name October Monitoring Event  
Site Name Grumman Road  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 369323  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Peri. Pump  
Tubing Type poly  
Tubing Diameter .17 in  
Tubing Length 21 ft

Pump placement from TOC 16.5 ft

Well Information:

Well ID GWA-7  
Well diameter 2 in  
Well Total Depth 21.10 ft  
Screen Length 5 ft  
Depth to Water 7.37 ft

Pumping Information:

Final Pumping Rate 220 mL/min  
Total System Volume 0.1837319 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 5.2 in  
Total Volume Pumped 5.9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	09:23:19	300.10	24.35	5.70	1726.78	96.00	7.70	0.05	1.20
Last 5	09:28:19	600.04	24.26	5.71	1724.79	153.00	7.70	0.04	-3.82
Last 5	09:33:19	900.03	24.31	5.72	1723.72	230.00	7.80	0.03	-7.47
Last 5	09:38:19	1200.02	24.31	5.73	1717.46	303.00	7.80	0.02	-10.45
Last 5	09:43:19	1500.01	24.27	5.74	1700.46	315.00	7.80	0.02	-13.33
Variance 0		0.04	0.01		-1.07			-0.01	-3.65
Variance 1		-0.00	0.01		-6.26			-0.01	-2.98
Variance 2		-0.04	0.01		-17.00			-0.00	-2.87

Notes

Sampled at 0945 on 10-8-19. Cloudy 70s.

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-07 17:25:50

## Project Information:

Operator Name H. Auld  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 369323  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 21 ft

Pump placement from TOC 16 ft

## Well Information:

Well ID GWA-8  
 Well diameter 2 in  
 Well Total Depth 20.9 ft  
 Screen Length 5 ft  
 Depth to Water 8.81 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.1837319 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 20.3 in  
 Total Volume Pumped 7 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	17:02:59	300.10	25.22	4.19	352.82	1.80	10.50	0.15	151.17
Last 5	17:07:59	600.03	25.09	4.22	350.93	1.90	10.50	0.13	139.76
Last 5	17:12:59	900.03	25.03	4.23	350.57	2.04	10.50	0.12	132.97
Last 5	17:17:59	1200.02	24.94	4.22	349.79	2.20	10.50	0.11	130.70
Last 5	17:22:59	1500.01	24.91	4.24	349.77	2.20	10.50	0.10	128.68
Variance 0		-0.06	0.01	-0.36				-0.01	-6.80
Variance 1		-0.09	-0.01	-0.78				-0.01	-2.27
Variance 2		-0.03	0.01	-0.02				-0.01	-2.02

## Notes

Sampled at 1725 on 10-7-19. Cloudy 80s.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-09 11:41:24

## Project Information:

Operator Name O. Fuquea  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 478733  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 26 ft

Pump placement from TOC 18.3 ft

## Well Information:

Well ID GWB-4R  
 Well diameter 2 in  
 Well Total Depth 23.3 ft  
 Screen Length 10 ft  
 Depth to Water 11.85 ft

## Pumping Information:

Final Pumping Rate 230 mL/min  
 Total System Volume 0.206049 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 4 in  
 Total Volume Pumped 39 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	11:20:14	7804.91	23.51	5.79	715.49	8.33	12.20	0.15	-90.81
Last 5	11:25:14	8104.90	23.51	5.79	717.39	8.69	12.20	0.15	-91.51
Last 5	11:30:16	8406.90	23.51	5.79	716.17	8.49	12.20	0.15	-91.13
Last 5	11:35:17	8707.89	23.54	5.79	714.78	8.84	12.20	0.15	-90.04
Last 5	11:40:17	9007.89	23.61	5.79	715.81	9.00	12.20	0.14	-89.35
Variance 0		0.00	0.00		-1.22			-0.00	0.37
Variance 1		0.03	-0.00		-1.40			-0.00	1.10
Variance 2		0.08	0.00		1.04			-0.00	0.69

## Notes

Sampled at 1140. Cloudy 71F.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-09 16:26:08

## Project Information:

Operator Name H. Auld  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 369323  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 26.5 ft

Pump placement from TOC

24 ft

## Well Information:

Well ID GWB-5R  
 Well diameter 2 in  
 Well Total Depth 26.5 ft  
 Screen Length 5 ft  
 Depth to Water 10.94 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.2082807 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 5.5 in  
 Total Volume Pumped 7 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	15:54:11	300.05	26.40	6.04	1997.48	92.00	11.30	0.10	-58.64
Last 5	15:59:11	600.04	25.98	6.08	2125.48	94.00	11.40	0.07	-63.05
Last 5	16:09:11	1200.03	25.87	6.11	2106.10	90.00	11.40	0.04	-65.41
Last 5	16:14:11	1500.02	25.89	6.12	2141.80	102.00	11.40	0.03	-65.84
Last 5	16:19:11	1800.02	25.54	6.11	2115.42	107.00	11.40	0.02	-65.75
Variance 0		-0.11	0.03		-19.38			-0.03	-2.36
Variance 1		0.02	0.01		35.70			-0.01	-0.44
Variance 2		-0.35	-0.01		-26.38			-0.00	0.10

## Notes

Sampled at 1620 on 10-9-19. Sunny 80s.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-09 15:17:16

## Project Information:

Operator Name H. Auld  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 369323  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 22.7 ft

Pump placement from TOC

20 ft

## Well Information:

Well ID GWB-6R  
 Well diameter 2 in  
 Well Total Depth 22.7 ft  
 Screen Length 5 ft  
 Depth to Water 8.67 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.1913197 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 2 in  
 Total Volume Pumped 14.6 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:51:10	3000.00	26.40	5.71	915.07	5.70	7.80	0.04	-25.90
Last 5	14:56:10	3299.97	26.38	5.68	925.29	5.40	7.80	0.04	-25.79
Last 5	15:01:10	3600.00	26.43	5.66	919.07	5.50	7.80	0.04	-24.95
Last 5	15:06:10	3899.98	26.58	5.71	905.96	5.00	7.80	0.03	-26.45
Last 5	15:11:10	4199.97	26.90	5.66	920.53	4.90	7.80	0.03	-24.57
Variance 0		0.05	-0.02		-6.23			-0.00	0.84
Variance 1		0.15	0.04		-13.11			-0.00	-1.50
Variance 2		0.32	-0.05		14.58			-0.00	1.88

## Notes

Sampled at 1513 on 10-9-19. Sunny 80s.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-09 15:42:23

## Project Information:

Operator Name O. Fuquea  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 478733  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type Peri. Pump  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 32 ft

Pump placement from TOC 25.6 ft

## Well Information:

Well ID GWC-1  
 Well diameter 2 in  
 Well Total Depth 28.1 ft  
 Screen Length 5 ft  
 Depth to Water 19.55 ft

## Pumping Information:

Final Pumping Rate 275 mL/min  
 Total System Volume 0.2328295 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 12 in  
 Total Volume Pumped 8.25 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	15:20:21	900.01	24.67	5.83	446.90	0.95	20.60	0.22	75.75
Last 5	15:25:21	1200.01	24.87	5.83	444.23	0.33	20.60	0.20	81.05
Last 5	15:30:24	1503.00	24.77	5.82	446.30	0.42	20.60	0.19	81.46
Last 5	15:35:24	1803.00	24.81	5.82	443.87	0.39	20.70	0.18	78.64
Last 5	15:40:26	2105.00	24.63	5.82	444.59	0.47	20.70	0.18	74.75
Variance 0		-0.10	-0.02		2.07			-0.01	0.41
Variance 1		0.04	0.00		-2.43			-0.01	-2.82
Variance 2		-0.18	-0.00		0.72			-0.00	-3.89

## Notes

Sampled at 1540. 77F clear.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-09 13:01:54

## Project Information:

Operator Name O. Fuquea  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 478733  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 36 ft

Pump placement from TOC 30 ft

## Well Information:

Well ID GWC-2  
 Well diameter 2 in  
 Well Total Depth 33.75 ft  
 Screen Length 5 ft  
 Depth to Water 19.94 ft

## Pumping Information:

Final Pumping Rate 225 mL/min  
 Total System Volume 0.2506832 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 3 in  
 Total Volume Pumped 9.5 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	12:35:10	900.01	23.34	4.78	60.12	3.62	20.20	0.20	20.90
Last 5	12:40:10	1200.06	23.15	4.80	60.51	3.54	20.20	0.19	17.18
Last 5	12:45:10	1500.01	22.88	4.79	60.78	2.48	20.20	0.18	16.89
Last 5	12:50:12	1802.00	22.71	4.79	60.59	2.56	20.20	0.18	15.32
Last 5	13:00:19	2408.99	22.75	4.79	60.18	2.29	20.20	0.18	14.92
Variance 0		-0.26	-0.01		0.27			-0.01	-0.29
Variance 1		-0.17	-0.01		-0.19			-0.00	-1.57
Variance 2		0.04	0.00		-0.40			-0.00	-0.40

## Notes

Sampled at 1300. 73F cloudy.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-09 12:09:17

## Project Information:

Operator Name H. Auld  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 369323  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 26 ft

Pump placement from TOC

23 ft

## Well Information:

Well ID GWC-9  
 Well diameter 2 in  
 Well Total Depth 25.7 ft  
 Screen Length 5 ft  
 Depth to Water 10.1 ft

## Pumping Information:

Final Pumping Rate 100 mL/min  
 Total System Volume 0.206049 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 32.4 in  
 Total Volume Pumped 2 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	11:55:48	300.04	23.51	4.67	147.29	0.80	11.10	0.39	18.71
Last 5	12:00:48	600.04	23.44	4.66	146.80	1.30	11.90	0.23	17.35
Last 5	12:05:48	900.03	23.37	4.62	146.89	1.10	12.80	0.19	18.21
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.07	-0.01	-0.49			-0.16	-1.36
Variance 2			-0.07	-0.04	0.09			-0.04	0.86

## Notes

Sampled at 1210 on 10-9-19. Cloudy 70s.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-08 16:56:20

## Project Information:

Operator Name H. Auld  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 369323  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 26 ft

Pump placement from TOC 23 ft

## Well Information:

Well ID GWC-9  
 Well diameter 2 in  
 Well Total Depth 25.7 ft  
 Screen Length 5 ft  
 Depth to Water 9.93 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.206049 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 162.8 in  
 Total Volume Pumped 10.6 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	16:33:53	1800.01	24.49	4.65	152.33	1.70	18.70	0.13	49.14
Last 5	16:38:53	2100.01	24.58	4.64	151.23	2.80	20.10	0.14	53.52
Last 5	16:43:53	2400.00	24.26	4.57	150.42	3.30	21.20	0.20	62.39
Last 5	16:48:53	2700.00	24.20	4.52	148.67	5.30	22.20	0.34	73.38
Last 5	16:53:53	2999.99	24.31	4.49	149.05	5.60	23.50	0.58	71.91
Variance 0		-0.32	-0.07	-0.81				0.06	8.88
Variance 1		-0.06	-0.05	-1.75				0.14	10.99
Variance 2		0.11	-0.02	0.38				0.24	-1.47

## Notes

Purged dry, allow for overnight recharge.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-08 15:26:33

## Project Information:

Operator Name H. Auld  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 369323  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type Peri. Pump  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 23 ft

Pump placement from TOC 20 ft

## Well Information:

Well ID GWC-11  
 Well diameter 2 in  
 Well Total Depth 22.5 ft  
 Screen Length 5 ft  
 Depth to Water 10.15 ft

## Pumping Information:

Final Pumping Rate 100 mL/min  
 Total System Volume 0.1926587 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 32 in  
 Total Volume Pumped 15 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:50:27	7501.90	25.85	4.95	636.99	0.80	16.80	0.20	176.12
Last 5	14:55:27	7801.90	25.53	4.94	698.53	0.90	16.80	0.15	172.00
Last 5	15:00:27	8101.89	25.35	4.95	757.63	0.90	16.80	0.14	171.03
Last 5	15:05:27	8401.89	25.76	4.93	775.65	1.00	16.80	0.14	171.50
Last 5	15:10:28	8702.88	25.48	4.93	794.80	0.40	16.80	0.14	166.94
Variance 0		-0.18	0.00		59.10			-0.01	-0.97
Variance 1		0.41	-0.02		18.02			0.00	0.47
Variance 2		-0.27	0.00		19.15			0.00	-4.56

## Notes

Sampled at 1515 on 10-8-19. Sunny, 80s.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-09 09:59:28

Project Information:

Operator Name H. Auld  
Company Name Atlantic Coast Consulting  
Project Name October Monitoring Event  
Site Name Grumman Road  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 369323  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Peri. Pump  
Tubing Type poly  
Tubing Diameter .17 in  
Tubing Length 26.5 ft

Pump placement from TOC 23 ft

Well Information:

Well ID GWC-12  
Well diameter 2 in  
Well Total Depth 26.7 ft  
Screen Length 5 ft  
Depth to Water 13.7 ft

Pumping Information:

Final Pumping Rate 200 mL/min  
Total System Volume 0.2082807 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 2.4 in  
Total Volume Pumped 5.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	09:33:48	300.04	23.32	4.31	628.47	1.50	13.90	0.87	74.69
Last 5	09:38:48	600.03	23.32	4.31	624.01	2.00	13.90	0.27	69.94
Last 5	09:43:48	900.03	23.35	4.28	623.44	1.40	13.90	0.19	66.52
Last 5	09:48:48	1200.02	23.27	4.29	623.48	1.10	13.90	0.18	63.02
Last 5	09:53:48	1500.01	23.17	4.25	649.52	1.10	13.90	0.17	57.18
Variance 0			0.03	-0.04	-0.57			-0.08	-3.42
Variance 1			-0.08	0.01	0.04			-0.01	-3.50
Variance 2			-0.11	-0.03	26.04			-0.02	-5.83

Notes

Sampled at 0955 on 10-9-19. Cloudy, 60s.

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-08 11:28:13

## Project Information:

Operator Name H. Auld  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 369323  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 24 ft

Pump placement from TOC

21 ft

## Well Information:

Well ID GWC-13  
 Well diameter 2 in  
 Well Total Depth 24.1 ft  
 Screen Length 5 ft  
 Depth to Water 14.76 ft

## Pumping Information:

Final Pumping Rate 150 mL/min  
 Total System Volume 0.1971222 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 4.1 in  
 Total Volume Pumped 9.2 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	10:54:06	1800.01	23.86	4.73	80.54	4.50	15.10	0.16	149.23
Last 5	10:59:06	2100.00	23.90	4.81	77.97	2.10	15.10	0.15	149.15
Last 5	11:14:06	2999.99	24.76	4.81	74.19	1.20	15.10	0.13	135.78
Last 5	11:19:06	3299.97	24.98	4.81	73.50	1.70	15.10	0.13	134.04
Last 5	11:24:06	3599.97	24.86	4.81	72.97	1.30	15.10	0.13	133.07
Variance 0		0.86	0.00		-3.78			-0.02	-13.37
Variance 1		0.22	0.00		-0.69			0.00	-1.75
Variance 2		-0.12	0.00		-0.54			-0.00	-0.97

## Notes

Sampled at 1125 on 10-8-19. Sunny 70s. FB-1-10-8-19 here at 1040.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-08 16:32:02

Project Information:

Operator Name O. Fuquea  
Company Name Atlantic Coast Consulting  
Project Name October Monitoring Event  
Site Name Grumman Road  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 478733  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Peri. Pump  
Tubing Type poly  
Tubing Diameter .17 in  
Tubing Length 32 ft

Pump placement from TOC 24.5 ft

Well Information:

Well ID GWC-14  
Well diameter 2 in  
Well Total Depth 27 ft  
Screen Length 5 ft  
Depth to Water 19.92 ft

Pumping Information:

Final Pumping Rate 200 mL/min  
Total System Volume 0.2328295 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 3 in  
Total Volume Pumped 6.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	16:10:02	600.02	23.64	5.69	1091.73	2.08	20.20	0.37	53.48
Last 5	16:15:02	900.01	23.60	5.69	1097.36	1.68	20.20	0.35	27.18
Last 5	16:20:02	1200.01	23.42	5.69	1096.01	1.91	20.20	0.37	11.57
Last 5	16:25:04	1502.01	23.35	5.68	1095.65	1.25	20.20	0.37	4.22
Last 5	16:30:09	1807.00	23.42	5.68	1091.53	1.51	20.20	0.37	3.33
Variance 0		-0.18	-0.00		-1.35			0.01	-15.60
Variance 1		-0.06	-0.00		-0.36			0.00	-7.35
Variance 2		0.06	-0.00		-4.11			0.00	-0.88

Notes

Sampled at 1630. 83F Sunny.

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-08 15:27:16

## Project Information:

Operator Name O. Fuquea  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 478733  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type Peri. Pump  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 30 ft

Pump placement from TOC 24.3 ft

## Well Information:

Well ID GWC-15  
 Well diameter 2 in  
 Well Total Depth 26.8 ft  
 Screen Length 5 ft  
 Depth to Water 19.54 ft

## Pumping Information:

Final Pumping Rate 185 mL/min  
 Total System Volume 0.2239027 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 4 in  
 Total Volume Pumped 6.25 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	15:05:03	300.06	25.86	6.62	704.18	3.38	19.90	0.25	39.70
Last 5	15:10:03	600.02	25.49	6.63	742.35	3.19	19.90	0.22	38.57
Last 5	15:15:03	900.02	25.68	6.64	746.95	5.13	19.90	0.20	40.50
Last 5	15:20:03	1201.01	25.74	6.65	751.00	4.89	19.90	0.19	41.87
Last 5	15:25:10	1507.01	25.47	6.65	752.43	4.20	19.90	0.19	41.37
Variance 0		0.18	0.01		4.60			-0.02	1.94
Variance 1		0.07	0.01		4.05			-0.01	1.36
Variance 2		-0.27	0.00		1.43			-0.00	-0.49

## Notes

Sampled at 1525. 86F Sunny.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-08 12:35:45

## Project Information:

Operator Name O. Fuquea  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 478733  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 32 ft

Pump placement from TOC 25.7 ft

## Well Information:

Well ID GWC-16  
 Well diameter 2 in  
 Well Total Depth 28.2 ft  
 Screen Length 5 ft  
 Depth to Water 20.92 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.2328295 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 3 in  
 Total Volume Pumped 13.25 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	12:10:03	1200.01	24.07	5.43	1777.15	10.90	21.10	0.33	-44.23
Last 5	12:15:03	1500.00	24.27	5.47	1759.57	5.39	21.20	0.35	-46.30
Last 5	12:20:05	1802.00	24.37	5.50	1744.14	8.97	21.20	0.39	-47.21
Last 5	12:25:05	2102.05	24.36	5.52	1744.57	4.24	21.20	0.39	-48.10
Last 5	12:30:05	2402.01	24.39	5.54	1737.96	4.33	21.20	0.43	-48.91
Variance 0		0.10	0.03		-15.43			0.04	-0.92
Variance 1		-0.01	0.02		0.42			0.01	-0.88
Variance 2		0.03	0.02		-6.61			0.04	-0.81

## Notes

Sampled at 1230. Sunny 83F.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-09 11:13:17

Project Information:

Operator Name	H. Auld
Company Name	Atlantic Coast Consulting
Project Name	October Monitoring Event
Site Name	Grumman Road
Latitude	0° 0' 0"
Longitude	0° 0' 0"
Sonde SN	369323
Turbidity Make/Model	Hach 2100Q

Pump Information:

Pump Model/Type	Peri. Pump
Tubing Type	poly
Tubing Diameter	.17 in
Tubing Length	23 ft

Pump placement from TOC	20.5 ft
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Well Information:

Well ID	GWC-17
Well diameter	2 in
Well Total Depth	23 ft
Screen Length	5 ft
Depth to Water	7.35 ft

Pumping Information:

Final Pumping Rate	100 mL/min
Total System Volume	0.1926587 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	16.2 in
Total Volume Pumped	13.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	10:48:17	300.03	23.88	4.43	1559.79	2.80	8.60	0.15	55.88
Last 5	10:53:17	600.03	23.90	4.61	1472.84	3.10	8.70	0.14	47.42
Last 5	10:58:17	900.03	23.83	4.68	1458.43	2.90	8.70	0.13	42.32
Last 5	11:03:17	1200.02	23.86	4.70	1441.66	3.80	8.70	0.12	41.13
Last 5	11:08:17	1500.02	23.86	4.66	1454.25	4.00	8.70	0.12	41.11
Variance 0		-0.07	0.07		-14.40			-0.01	-5.09
Variance 1		0.03	0.03		-16.77			-0.01	-1.20
Variance 2		-0.01	-0.04		12.58			-0.01	-0.02

Notes

Sampled at 1110 on 10-9-19. Cloudy 60s.

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-09 14:26:23

## Project Information:

Operator Name O. Fuquea  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 478733  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type  
 Tubing Type  
 Tubing Diameter  
 Tubing Length

Peri. Pump  
 poly  
 .17 in  
 28 ft

Pump placement from TOC 23.4 ft

## Well Information:

Well ID GWC-20  
 Well diameter 2 in  
 Well Total Depth 24.9 ft  
 Screen Length 5 ft  
 Depth to Water 21.39 ft

## Pumping Information:

Final Pumping Rate 150 mL/min  
 Total System Volume 0.2149758 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 4 in  
 Total Volume Pumped 8 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:05:05	1500.00	23.69	6.52	638.87	0.80	21.80	0.76	-46.60
Last 5	14:10:05	1800.00	23.70	6.51	637.98	0.70	21.80	0.71	-49.58
Last 5	14:15:05	2100.00	23.74	6.51	637.11	0.77	21.80	0.71	-51.87
Last 5	14:20:05	2399.99	23.86	6.51	634.22	0.66	21.80	0.69	-52.96
Last 5	14:25:06	2700.99	23.96	6.50	638.35	0.82	21.80	0.66	-54.61
Variance 0		0.04	-0.00		-0.88			-0.00	-2.28
Variance 1		0.13	0.00		-2.88			-0.02	-1.09
Variance 2		0.09	-0.01		4.13			-0.03	-1.65

## Notes

Sampled at 1425. 75F cloudy.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-08 14:27:40

## Project Information:

Operator Name O. Fuquea  
 Company Name Atlantic Coast Consulting  
 Project Name October Monitoring Event  
 Site Name Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 478733  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type Peri. Pump  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 25 ft

Pump placement from TOC 22.8 ft

## Well Information:

Well ID GWC-21  
 Well diameter 2 in  
 Well Total Depth 23.8 ft  
 Screen Length 5 ft  
 Depth to Water 20.85 ft

## Pumping Information:

Final Pumping Rate 165 mL/min  
 Total System Volume 0.2015856 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 1 in  
 Total Volume Pumped 11 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:05:01	2699.99	25.60	6.06	360.58	3.47	21.00	2.14	-15.02
Last 5	14:10:01	2999.98	25.54	6.07	367.22	3.38	21.00	2.12	-19.81
Last 5	14:15:01	3299.98	25.31	6.07	384.86	1.53	21.00	2.12	-26.50
Last 5	14:20:01	3599.97	25.46	6.09	393.39	1.40	21.00	2.10	-32.36
Last 5	14:25:01	3899.97	25.33	6.09	399.71	1.41	21.00	2.06	-36.37
Variance 0		-0.23	0.00		17.64			-0.00	-6.69
Variance 1		0.15	0.01		8.53			-0.02	-5.86
Variance 2		-0.13	0.01		6.31			-0.04	-4.02

## Notes

Sampled at 1425. Sunny 87F.

## Grab Samples

Product Name: Low-Flow System

Date: 2019-10-09 13:20:38

Project Information:

Operator Name H. Auld  
Company Name Atlantic Coast Consulting  
Project Name October Monitoring Event  
Site Name Grumman Road  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 369323  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type  
Tubing Type  
Tubing Diameter  
Tubing Length

Peri. Pump  
poly  
.17 in  
18.6 ft

Pump placement from TOC

16 ft

Well Information:

Well ID GWC-22  
Well diameter 2 in  
Well Total Depth 18.6 ft  
Screen Length 5 ft  
Depth to Water 9.74 ft

Pumping Information:

Final Pumping Rate 165 mL/min  
Total System Volume 0.1730197 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 1.9 in  
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	12:54:58	300.04	25.58	4.65	213.75	4.60	9.90	0.34	106.88
Last 5	12:59:58	600.04	25.53	4.64	254.42	2.10	9.90	0.23	108.76
Last 5	13:04:58	900.03	25.44	4.66	262.99	5.10	9.90	0.19	107.67
Last 5	13:09:58	1200.02	25.43	4.66	263.87	2.50	9.90	0.17	108.65
Last 5	13:14:58	1500.02	25.49	4.68	263.46	3.10	9.90	0.15	109.73
Variance 0		-0.09	0.02		8.57			-0.04	-1.09
Variance 1		-0.01	0.00		0.88			-0.02	0.98
Variance 2		0.06	0.01		-0.41			-0.02	1.08

Notes

Sampled at 1318 on 10-9-19. Cloudy 70s.

Grab Samples

May 07, 2020

Joju Abraham  
Georgia Power - Coal Combustion Residuals  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between April 08, 2020 and April 09, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Atlanta, GA

All TDS samples within the project were originally performed within hold time. They were all then reanalyzed for confirmation after the hold time was exceeded. Sample GWC-14 did not confirm the original TDS result. Therefore, sample GWC-14 had to be revised with a new TDS result and was qualified that it exceeded the hold time.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Tyler Forney for  
Kevin Herring  
kevin.herring@pacelabs.com  
(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Owens Fuquea, ACC  
Monte Jones, ACC  
Kristen Jurinko  
Matt Malone, Atlantic Coast Consulting  
Betsy McDaniel, Atlantic Coast Consulting  
Evan Perry, Atlantic Coast Consulting

Lauren Petty, Southern Company Services, Inc.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

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### Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812  
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001  
Virginia Certification #: 460204

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### Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
Massachusetts Certification #: M-NC030  
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40  
South Carolina Certification #: 99030001  
Virginia/VELAP Certification #: 460222

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2630818001	GWB-4R	Water	04/07/20 09:32	04/08/20 13:10
2630818002	GWC-1	Water	04/07/20 11:30	04/08/20 13:10
2630818003	GWB-5R	Water	04/07/20 15:35	04/08/20 13:10
2630818004	GWB-6R	Water	04/07/20 16:58	04/08/20 13:10
2630818005	GWC-16	Water	04/07/20 10:45	04/08/20 13:10
2630818006	GWC-21	Water	04/07/20 13:45	04/08/20 13:10
2630818007	GWC-15	Water	04/07/20 16:10	04/08/20 13:10
2630818008	GWC-14	Water	04/07/20 13:55	04/08/20 13:10
2630818009	FB-1-4-6-20	Water	04/07/20 17:05	04/08/20 13:10
2630818010	DUP-1	Water	04/07/20 00:00	04/08/20 13:10
2630818011	GWA-8	Water	04/06/20 14:40	04/08/20 13:10
2630818012	GWA-7	Water	04/06/20 16:10	04/08/20 13:10
2630818013	GWC-12	Water	04/07/20 10:00	04/08/20 13:10
2630818014	GWC-11	Water	04/07/20 12:35	04/08/20 13:10
2630818015	GWC-22	Water	04/07/20 15:40	04/08/20 13:10
2630818016	EB-1-4-7-2020	Water	04/07/20 13:30	04/08/20 13:10
2630818017	GWC-13	Water	04/08/20 09:53	04/09/20 09:21
2630818018	GWC-2	Water	04/08/20 12:25	04/09/20 09:21
2630818019	GWC-9	Water	04/08/20 10:00	04/09/20 09:21
2630818020	GWC-20	Water	04/08/20 12:00	04/09/20 09:21
2630818021	GWC-17	Water	04/08/20 15:35	04/09/20 09:21
2630818022	EB-2-4-7-20	Water	04/08/20 14:45	04/09/20 09:21
2630818023	FB-2-4-7-20	Water	04/08/20 12:30	04/09/20 09:21
2630818024	DUP-2	Water	04/08/20 00:00	04/09/20 09:21

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2630818001	GWB-4R	EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630818002	GWC-1	EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630818003	GWB-5R	EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630818004	GWB-6R	EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630818005	GWC-16	EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630818006	GWC-21	EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630818007	GWC-15	EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630818008	GWC-14	EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630818009	FB-1-4-6-20	EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630818010	DUP-1	EPA 6010D	DRB	2	PASI-GA

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2630818011	GWA-8	EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
2630818012	GWA-7	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
2630818013	GWC-12	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
2630818014	GWC-11	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
2630818015	GWC-22	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
2630818016	EB-1-4-7-2020	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	CSW	14	PASI-GA
		SM 2540C	VHB	1	PASI-GA
2630818017	GWC-13	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	KLH	14	PASI-GA
		SM 2540C	KN	1	PASI-GA
2630818018	GWC-2	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	KLH	14	PASI-GA
		SM 2540C	KN	1	PASI-GA
2630818019	GWC-9	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	KLH	14	PASI-GA

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2630818020	GWC-20	SM 2540C	KN	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	KLH	14	PASI-GA
		SM 2540C	KN	1	PASI-GA
2630818021	GWC-17	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	KLH	14	PASI-GA
		SM 2540C	KN	1	PASI-GA
2630818022	EB-2-4-7-20	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	KLH	14	PASI-GA
		SM 2540C	KN	1	PASI-GA
2630818023	FB-2-4-7-20	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	KLH	14	PASI-GA
		SM 2540C	KN	1	PASI-GA
2630818024	DUP-2	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	DRB	2	PASI-GA
		EPA 6020B	KLH	14	PASI-GA
		SM 2540C	KN	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Atlanta, GA

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## SUMMARY OF DETECTION

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>2630818001</b>	<b>GWB-4R</b>					
EPA 6010D	Field pH	5.74	Std. Units		04/13/20 10:26	
EPA 6020B	Calcium	62.1	mg/L	1.0	04/16/20 17:57	
EPA 6020B	Arsenic	0.0027J	mg/L	0.0050	04/13/20 17:34	
EPA 6020B	Barium	0.090	mg/L	0.010	04/13/20 17:34	
EPA 6020B	Boron	5.5	mg/L	0.10	04/13/20 17:34	
EPA 6020B	Chromium	0.0028J	mg/L	0.010	04/13/20 17:34	
EPA 6020B	Cobalt	0.00090J	mg/L	0.0050	04/13/20 17:34	
EPA 6020B	Lead	0.00073J	mg/L	0.0050	04/13/20 17:34	
EPA 6020B	Lithium	0.014J	mg/L	0.030	04/13/20 17:34	
EPA 6020B	Molybdenum	0.13	mg/L	0.010	04/13/20 17:34	
EPA 6020B	Selenium	0.0025J	mg/L	0.010	04/13/20 17:34	
EPA 6020B	Vanadium	0.0037J	mg/L	0.010	04/13/20 17:34	
SM 2540C	Total Dissolved Solids	482	mg/L	10.0	04/09/20 11:04	
EPA 300.0 Rev 2.1 1993	Chloride	14.5	mg/L	1.0	04/10/20 05:47	
EPA 300.0 Rev 2.1 1993	Sulfate	221	mg/L	5.0	04/10/20 21:17	
<b>2630818002</b>	<b>GWC-1</b>					
EPA 6010D	Field pH	5.30	Std. Units		04/13/20 10:26	
EPA 6020B	Calcium	31.1	mg/L	1.0	04/16/20 18:00	
EPA 6020B	Arsenic	0.027	mg/L	0.0050	04/13/20 18:08	
EPA 6020B	Barium	0.050	mg/L	0.010	04/13/20 18:08	
EPA 6020B	Boron	1.0	mg/L	0.10	04/13/20 18:08	
EPA 6020B	Chromium	0.0015J	mg/L	0.010	04/13/20 18:08	
EPA 6020B	Lead	0.00012J	mg/L	0.0050	04/13/20 18:08	
EPA 6020B	Molybdenum	0.014	mg/L	0.010	04/13/20 18:08	
EPA 6020B	Selenium	0.0013J	mg/L	0.010	04/13/20 18:08	
EPA 6020B	Thallium	0.000054J	mg/L	0.0010	04/13/20 18:08	
EPA 6020B	Vanadium	0.0015J	mg/L	0.010	04/13/20 18:08	
SM 2540C	Total Dissolved Solids	195	mg/L	10.0	04/09/20 11:05	
EPA 300.0 Rev 2.1 1993	Chloride	7.7	mg/L	1.0	04/10/20 06:02	
EPA 300.0 Rev 2.1 1993	Sulfate	83.0	mg/L	1.0	04/10/20 06:02	
<b>2630818003</b>	<b>GWB-5R</b>					
EPA 6010D	Field pH	5.45	Std. Units		04/13/20 10:26	
EPA 6020B	Calcium	34.1	mg/L	1.0	04/16/20 18:04	
EPA 6020B	Arsenic	0.0011J	mg/L	0.0050	04/13/20 18:14	
EPA 6020B	Barium	0.098	mg/L	0.010	04/13/20 18:14	
EPA 6020B	Boron	4.6	mg/L	0.10	04/13/20 18:14	
EPA 6020B	Chromium	0.0022J	mg/L	0.010	04/13/20 18:14	
EPA 6020B	Cobalt	0.00053J	mg/L	0.0050	04/13/20 18:14	
EPA 6020B	Lead	0.0014J	mg/L	0.0050	04/13/20 18:14	
EPA 6020B	Vanadium	0.0053J	mg/L	0.010	04/13/20 18:14	
SM 2540C	Total Dissolved Solids	483	mg/L	10.0	04/09/20 11:05	
EPA 300.0 Rev 2.1 1993	Chloride	44.3	mg/L	1.0	04/10/20 06:17	
EPA 300.0 Rev 2.1 1993	Sulfate	180	mg/L	4.0	04/10/20 21:32	
<b>2630818004</b>	<b>GWB-6R</b>					
EPA 6010D	Field pH	5.86	Std. Units		04/13/20 10:26	
EPA 6010D	Calcium	7.8	mg/L	1.0	04/16/20 18:07	

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>2630818004</b>	<b>GWB-6R</b>						
EPA 6020B	Barium	0.010J	mg/L	0.050	04/13/20 18:19	D3	
EPA 6020B	Boron	5.6	mg/L	0.50	04/13/20 18:19		
EPA 6020B	Chromium	0.0094J	mg/L	0.050	04/13/20 18:19	D3	
EPA 6020B	Lead	0.00063J	mg/L	0.025	04/13/20 18:19	D3	
EPA 6020B	Vanadium	0.041J	mg/L	0.050	04/13/20 18:19	B,D3	
SM 2540C	Total Dissolved Solids	775	mg/L	10.0	04/09/20 11:08		
EPA 300.0 Rev 2.1 1993	Chloride	56.4	mg/L	1.0	04/10/20 06:32		
EPA 300.0 Rev 2.1 1993	Sulfate	180	mg/L	4.0	04/10/20 21:47		
<b>2630818005</b>	<b>GWC-16</b>						
	Field pH	5.94	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	225	mg/L	1.0	04/16/20 18:11		
EPA 6020B	Arsenic	0.091	mg/L	0.025	04/14/20 16:19		
EPA 6020B	Barium	0.13	mg/L	0.050	04/14/20 16:19		
EPA 6020B	Boron	10.5	mg/L	0.50	04/14/20 16:19		
EPA 6020B	Lead	0.00023J	mg/L	0.025	04/14/20 16:19		
EPA 6020B	Molybdenum	0.25	mg/L	0.050	04/14/20 16:19		
SM 2540C	Total Dissolved Solids	1500	mg/L	10.0	04/09/20 11:09		
EPA 300.0 Rev 2.1 1993	Chloride	49.3	mg/L	1.0	04/10/20 06:47		
EPA 300.0 Rev 2.1 1993	Sulfate	844	mg/L	16.0	04/10/20 22:02		
<b>2630818006</b>	<b>GWC-21</b>						
	Field pH	6.00	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	12.5	mg/L	1.0	04/16/20 18:15		
EPA 6020B	Barium	0.054	mg/L	0.010	04/13/20 18:31		
EPA 6020B	Boron	0.24	mg/L	0.10	04/13/20 18:31		
EPA 6020B	Molybdenum	0.012	mg/L	0.010	04/13/20 18:31		
EPA 6020B	Selenium	0.012	mg/L	0.010	04/13/20 18:31		
SM 2540C	Total Dissolved Solids	106	mg/L	10.0	04/09/20 11:09		
EPA 300.0 Rev 2.1 1993	Chloride	4.7	mg/L	1.0	04/10/20 07:47		
EPA 300.0 Rev 2.1 1993	Sulfate	33.2	mg/L	1.0	04/10/20 07:47		
<b>2630818007</b>	<b>GWC-15</b>						
	Field pH	6.83	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	129	mg/L	1.0	04/16/20 18:18		
EPA 6020B	Arsenic	0.24	mg/L	0.0050	04/13/20 18:37		
EPA 6020B	Barium	0.033	mg/L	0.010	04/13/20 18:37		
EPA 6020B	Boron	0.96	mg/L	0.10	04/13/20 18:37		
EPA 6020B	Chromium	0.0014J	mg/L	0.010	04/13/20 18:37		
EPA 6020B	Lead	0.000086J	mg/L	0.0050	04/13/20 18:37		
EPA 6020B	Molybdenum	0.070	mg/L	0.010	04/13/20 18:37		
EPA 6020B	Selenium	0.0029J	mg/L	0.010	04/13/20 18:37		
SM 2540C	Total Dissolved Solids	428	mg/L	10.0	04/09/20 11:10	D6	
EPA 300.0 Rev 2.1 1993	Chloride	3.4	mg/L	1.0	04/10/20 08:02		
EPA 300.0 Rev 2.1 1993	Sulfate	26.9	mg/L	1.0	04/10/20 08:02		
<b>2630818008</b>	<b>GWC-14</b>						
	Field pH	6.20	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	135	mg/L	1.0	04/16/20 18:22		

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>2630818008</b>	<b>GWC-14</b>						
EPA 6020B	Arsenic	0.0018J	mg/L	0.0050	04/13/20 18:42		
EPA 6020B	Barium	0.073	mg/L	0.010	04/13/20 18:42		
EPA 6020B	Boron	0.061J	mg/L	0.10	04/13/20 18:42		
EPA 6020B	Chromium	0.00074J	mg/L	0.010	04/13/20 18:42		
EPA 6020B	Molybdenum	0.014	mg/L	0.010	04/13/20 18:42		
EPA 6020B	Selenium	0.0050J	mg/L	0.010	04/13/20 18:42		
EPA 6020B	Vanadium	0.0026J	mg/L	0.010	04/13/20 18:42	B	
SM 2540C	Total Dissolved Solids	843	mg/L	10.0	04/30/20 11:05	H1	
EPA 300.0 Rev 2.1 1993	Chloride	41.6	mg/L	1.0	04/10/20 08:17		
EPA 300.0 Rev 2.1 1993	Sulfate	456	mg/L	9.0	04/10/20 22:17		
<b>2630818009</b>	<b>FB-1-4-6-20</b>						
EPA 6020B	Boron	0.0056J	mg/L	0.10	04/13/20 18:48		
<b>2630818010</b>	<b>DUP-1</b>						
EPA 6010D	Calcium	30.9	mg/L	1.0	04/16/20 18:35		
EPA 6020B	Arsenic	0.027	mg/L	0.0050	04/13/20 18:54		
EPA 6020B	Barium	0.050	mg/L	0.010	04/13/20 18:54		
EPA 6020B	Boron	0.98	mg/L	0.10	04/13/20 18:54		
EPA 6020B	Chromium	0.0015J	mg/L	0.010	04/13/20 18:54		
EPA 6020B	Lead	0.000053J	mg/L	0.0050	04/13/20 18:54		
EPA 6020B	Molybdenum	0.014	mg/L	0.010	04/13/20 18:54		
EPA 6020B	Vanadium	0.0016J	mg/L	0.010	04/13/20 18:54	B	
SM 2540C	Total Dissolved Solids	248	mg/L	10.0	04/09/20 11:26		
EPA 300.0 Rev 2.1 1993	Chloride	7.8	mg/L	1.0	04/10/20 08:47		
EPA 300.0 Rev 2.1 1993	Sulfate	82.4	mg/L	1.0	04/10/20 08:47	M1	
<b>2630818011</b>	<b>GWA-8</b>						
	Field pH	4.52	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	35.8	mg/L	1.0	04/16/20 18:39		
EPA 6020B	Arsenic	0.00045J	mg/L	0.0050	04/13/20 18:59		
EPA 6020B	Barium	0.057	mg/L	0.010	04/13/20 18:59		
EPA 6020B	Beryllium	0.00017J	mg/L	0.0030	04/13/20 18:59		
EPA 6020B	Boron	0.14	mg/L	0.10	04/13/20 18:59		
EPA 6020B	Cobalt	0.00036J	mg/L	0.0050	04/13/20 18:59		
EPA 6020B	Lead	0.00010J	mg/L	0.0050	04/13/20 18:59		
EPA 6020B	Lithium	0.00086J	mg/L	0.030	04/13/20 18:59		
SM 2540C	Total Dissolved Solids	214	mg/L	10.0	04/09/20 11:03		
EPA 300.0 Rev 2.1 1993	Chloride	13.5	mg/L	1.0	04/10/20 09:32		
EPA 300.0 Rev 2.1 1993	Fluoride	0.089J	mg/L	0.30	04/10/20 09:32		
EPA 300.0 Rev 2.1 1993	Sulfate	123	mg/L	3.0	04/10/20 23:03		
<b>2630818012</b>	<b>GWA-7</b>						
	Field pH	6.02	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	3.1	mg/L	1.0	04/16/20 18:42		
EPA 6020B	Barium	0.072	mg/L	0.050	04/13/20 19:17		
EPA 6020B	Boron	6.1	mg/L	0.50	04/13/20 19:17		
EPA 6020B	Chromium	0.015J	mg/L	0.050	04/13/20 19:17	D3	
EPA 6020B	Cobalt	0.0021J	mg/L	0.025	04/13/20 19:17	D3	

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>2630818012</b>	<b>GWA-7</b>						
EPA 6020B	Lead	0.0024J	mg/L	0.025	04/13/20 19:17	D3	
EPA 6020B	Selenium	0.0078J	mg/L	0.050	04/13/20 19:17	D3	
EPA 6020B	Vanadium	0.12	mg/L	0.050	04/13/20 19:17		
SM 2540C	Total Dissolved Solids	1670	mg/L	10.0	04/09/20 11:03		
EPA 300.0 Rev 2.1 1993	Chloride	30.2	mg/L	1.0	04/10/20 09:47		
EPA 300.0 Rev 2.1 1993	Fluoride	0.13J	mg/L	0.30	04/10/20 09:47		
EPA 300.0 Rev 2.1 1993	Sulfate	20.3	mg/L	1.0	04/10/20 09:47		
<b>2630818013</b>	<b>GWC-12</b>						
	Field pH	4.10	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	52.1	mg/L	1.0	04/16/20 18:46		
EPA 6020B	Barium	0.017	mg/L	0.010	04/13/20 19:22		
EPA 6020B	Beryllium	0.00051J	mg/L	0.0030	04/13/20 19:22		
EPA 6020B	Boron	5.3	mg/L	0.10	04/13/20 19:22		
EPA 6020B	Chromium	0.00082J	mg/L	0.010	04/13/20 19:22		
EPA 6020B	Cobalt	0.00077J	mg/L	0.0050	04/13/20 19:22		
EPA 6020B	Lead	0.000081J	mg/L	0.0050	04/13/20 19:22		
EPA 6020B	Lithium	0.00094J	mg/L	0.030	04/13/20 19:22		
EPA 6020B	Thallium	0.00013J	mg/L	0.0010	04/13/20 19:22		
EPA 6020B	Vanadium	0.0024J	mg/L	0.010	04/13/20 19:22	B	
SM 2540C	Total Dissolved Solids	464	mg/L	10.0	04/09/20 11:26		
EPA 300.0 Rev 2.1 1993	Chloride	32.5	mg/L	1.0	04/10/20 10:02		
EPA 300.0 Rev 2.1 1993	Fluoride	0.27J	mg/L	0.30	04/10/20 10:02		
EPA 300.0 Rev 2.1 1993	Sulfate	297	mg/L	7.0	04/11/20 00:02		
<b>2630818014</b>	<b>GWC-11</b>						
	Field pH	5.05	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	84.7	mg/L	1.0	04/16/20 18:49		
EPA 6020B	Antimony	0.00066J	mg/L	0.0030	04/29/20 17:16	B	
EPA 6020B	Barium	0.14	mg/L	0.010	04/29/20 17:16		
EPA 6020B	Boron	0.67	mg/L	0.10	04/29/20 17:16		
EPA 6020B	Cadmium	0.00051J	mg/L	0.0025	04/29/20 17:16		
EPA 6020B	Chromium	0.00094J	mg/L	0.010	04/29/20 17:16		
EPA 6020B	Lead	0.00036J	mg/L	0.0050	04/29/20 17:16		
EPA 6020B	Selenium	0.0021J	mg/L	0.010	04/29/20 17:16		
EPA 6020B	Thallium	0.00019J	mg/L	0.0010	04/29/20 17:16		
SM 2540C	Total Dissolved Solids	780	mg/L	10.0	04/09/20 11:27		
EPA 300.0 Rev 2.1 1993	Chloride	103	mg/L	9.0	04/11/20 00:17		
EPA 300.0 Rev 2.1 1993	Sulfate	446	mg/L	9.0	04/11/20 00:17		
<b>2630818015</b>	<b>GWC-22</b>						
	Field pH	4.80	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	65.7	mg/L	1.0	04/20/20 18:41	M1	
EPA 6020B	Antimony	0.00049J	mg/L	0.0030	04/13/20 19:34		
EPA 6020B	Arsenic	0.00043J	mg/L	0.0050	04/13/20 19:34		
EPA 6020B	Barium	0.10	mg/L	0.010	04/13/20 19:34		
EPA 6020B	Boron	3.1	mg/L	0.10	04/13/20 19:34		
EPA 6020B	Cadmium	0.00054J	mg/L	0.0025	04/13/20 19:34		
EPA 6020B	Chromium	0.00049J	mg/L	0.010	04/13/20 19:34		

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## SUMMARY OF DETECTION

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>2630818015</b>	<b>GWC-22</b>						
EPA 6020B	Cobalt	0.00037J	mg/L	0.0050	04/13/20 19:34		
EPA 6020B	Lead	0.00067J	mg/L	0.0050	04/13/20 19:34		
EPA 6020B	Thallium	0.000065J	mg/L	0.0010	04/13/20 19:34		
EPA 6020B	Vanadium	0.0014J	mg/L	0.010	04/13/20 19:34	B	
SM 2540C	Total Dissolved Solids	819	mg/L	10.0	04/09/20 11:27		
EPA 300.0 Rev 2.1 1993	Chloride	146	mg/L	7.0	04/11/20 00:32		
EPA 300.0 Rev 2.1 1993	Sulfate	333	mg/L	7.0	04/11/20 00:32		
<b>2630818016</b>	<b>EB-1-4-7-2020</b>						
EPA 6020B	Boron	0.0090J	mg/L	0.10	04/13/20 19:45		
EPA 6020B	Lead	0.000072J	mg/L	0.0050	04/13/20 19:45		
<b>2630818017</b>	<b>GWC-13</b>						
	Field pH	4.81	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	2.5	mg/L	1.0	04/15/20 17:25		
EPA 6010D	Zinc	0.023	mg/L	0.020	04/15/20 17:25		
EPA 6020B	Barium	0.027	mg/L	0.010	04/15/20 16:27		
EPA 6020B	Boron	0.28	mg/L	0.10	04/15/20 16:27		
EPA 6020B	Chromium	0.00058J	mg/L	0.010	04/15/20 16:27		
EPA 6020B	Lead	0.00017J	mg/L	0.0050	04/15/20 16:27		
EPA 6020B	Molybdenum	0.0056J	mg/L	0.010	04/15/20 16:27		
SM 2540C	Total Dissolved Solids	65.0	mg/L	10.0	04/14/20 17:46		
EPA 300.0 Rev 2.1 1993	Chloride	4.5	mg/L	1.0	04/14/20 15:50		
EPA 300.0 Rev 2.1 1993	Sulfate	30.7	mg/L	1.0	04/14/20 15:50		
<b>2630818018</b>	<b>GWC-2</b>						
	Field pH	4.66	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	0.24J	mg/L	1.0	04/15/20 17:28		
EPA 6020B	Antimony	0.0013J	mg/L	0.0030	04/15/20 16:50		
EPA 6020B	Arsenic	0.00094J	mg/L	0.0050	04/15/20 16:50		
EPA 6020B	Barium	0.061	mg/L	0.010	04/15/20 16:50		
EPA 6020B	Beryllium	0.000088J	mg/L	0.0030	04/15/20 16:50		
EPA 6020B	Boron	0.031J	mg/L	0.10	04/15/20 16:50		
EPA 6020B	Chromium	0.00069J	mg/L	0.010	04/15/20 16:50		
EPA 6020B	Cobalt	0.00036J	mg/L	0.0050	04/15/20 16:50		
SM 2540C	Total Dissolved Solids	38.0	mg/L	10.0	04/14/20 17:46		
EPA 300.0 Rev 2.1 1993	Chloride	5.2	mg/L	1.0	04/14/20 16:04		
EPA 300.0 Rev 2.1 1993	Sulfate	12.9	mg/L	1.0	04/14/20 16:04		
<b>2630818019</b>	<b>GWC-9</b>						
	Field pH	4.73	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	5.3	mg/L	1.0	04/15/20 17:32		
EPA 6020B	Antimony	0.00033J	mg/L	0.0030	04/15/20 16:56		
EPA 6020B	Arsenic	0.00084J	mg/L	0.0050	04/15/20 16:56		
EPA 6020B	Barium	0.15	mg/L	0.010	04/15/20 16:56		
EPA 6020B	Beryllium	0.00019J	mg/L	0.0030	04/15/20 16:56		
EPA 6020B	Boron	0.023J	mg/L	0.10	04/15/20 16:56		
EPA 6020B	Chromium	0.0015J	mg/L	0.010	04/15/20 16:56		
EPA 6020B	Cobalt	0.0010J	mg/L	0.0050	04/15/20 16:56		

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>2630818019</b>	<b>GWC-9</b>						
EPA 6020B	Lead	0.00021J	mg/L	0.0050	04/15/20 16:56		
EPA 6020B	Lithium	0.0018J	mg/L	0.030	04/15/20 16:56		
EPA 6020B	Vanadium	0.0015J	mg/L	0.010	04/15/20 16:56		
SM 2540C	Total Dissolved Solids	80.0	mg/L	10.0	04/14/20 17:47		
EPA 300.0 Rev 2.1 1993	Chloride	16.9	mg/L	1.0	04/14/20 16:19		
EPA 300.0 Rev 2.1 1993	Fluoride	0.058J	mg/L	0.30	04/14/20 16:19		
EPA 300.0 Rev 2.1 1993	Sulfate	34.2	mg/L	1.0	04/14/20 16:19		
<b>2630818020</b>	<b>GWC-20</b>						
	Field pH	6.31	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	175	mg/L	1.0	04/29/20 16:55	M1	
EPA 6020B	Arsenic	0.33	mg/L	0.0050	04/15/20 17:23		
EPA 6020B	Barium	0.19	mg/L	0.010	04/15/20 17:23		
EPA 6020B	Boron	2.5	mg/L	0.10	04/15/20 17:23		
EPA 6020B	Chromium	0.0010J	mg/L	0.010	04/15/20 17:23		
EPA 6020B	Molybdenum	0.060	mg/L	0.010	04/15/20 17:23		
EPA 6020B	Selenium	0.0013J	mg/L	0.010	04/15/20 17:23		
SM 2540C	Total Dissolved Solids	986	mg/L	10.0	04/14/20 17:47		
EPA 300.0 Rev 2.1 1993	Chloride	20.2	mg/L	1.0	04/14/20 16:33		
EPA 300.0 Rev 2.1 1993	Sulfate	428	mg/L	9.0	04/15/20 10:07		
<b>2630818021</b>	<b>GWC-17</b>						
	Field pH	4.71	Std. Units		04/13/20 10:26		
EPA 6010D	Calcium	53.1	mg/L	1.0	04/15/20 18:17		
EPA 6020B	Arsenic	0.0013J	mg/L	0.0050	04/15/20 17:28		
EPA 6020B	Barium	0.055	mg/L	0.010	04/15/20 17:28		
EPA 6020B	Beryllium	0.0017J	mg/L	0.0030	04/15/20 17:28		
EPA 6020B	Boron	0.99	mg/L	0.10	04/15/20 17:28		
EPA 6020B	Chromium	0.00073J	mg/L	0.010	04/15/20 17:28		
EPA 6020B	Cobalt	0.0024J	mg/L	0.0050	04/15/20 17:28		
EPA 6020B	Lead	0.000084J	mg/L	0.0050	04/15/20 17:28		
EPA 6020B	Lithium	0.0051J	mg/L	0.030	04/15/20 17:28		
EPA 6020B	Molybdenum	0.0024J	mg/L	0.010	04/15/20 17:28		
EPA 6020B	Thallium	0.000056J	mg/L	0.0010	04/15/20 17:28		
SM 2540C	Total Dissolved Solids	881	mg/L	10.0	04/14/20 17:47		
EPA 300.0 Rev 2.1 1993	Chloride	277	mg/L	6.0	04/15/20 10:22		
EPA 300.0 Rev 2.1 1993	Fluoride	0.55	mg/L	0.30	04/14/20 16:48		
EPA 300.0 Rev 2.1 1993	Sulfate	239	mg/L	6.0	04/15/20 10:22		
<b>2630818022</b>	<b>EB-2-4-7-20</b>						
EPA 6020B	Boron	0.0083J	mg/L	0.10	04/15/20 17:34		
<b>2630818024</b>	<b>DUP-2</b>						
EPA 6010D	Calcium	2.6	mg/L	1.0	04/15/20 18:27		
EPA 6010D	Zinc	0.020	mg/L	0.020	04/15/20 18:27		
EPA 6020B	Arsenic	0.00045J	mg/L	0.0050	04/15/20 17:46		
EPA 6020B	Barium	0.031	mg/L	0.010	04/15/20 17:46		
EPA 6020B	Boron	0.26	mg/L	0.10	04/15/20 17:46		
EPA 6020B	Chromium	0.00043J	mg/L	0.010	04/15/20 17:46		

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>2630818024</b>	<b>DUP-2</b>						
EPA 6020B	Lead	0.00015J	mg/L	0.0050	04/15/20 17:46		
SM 2540C	Total Dissolved Solids	53.0	mg/L	10.0	04/14/20 17:49		
EPA 300.0 Rev 2.1 1993	Chloride	4.5	mg/L	1.0	04/14/20 18:44		
EPA 300.0 Rev 2.1 1993	Sulfate	31.0	mg/L	1.0	04/14/20 18:44		

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## PROJECT NARRATIVE

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

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**Method:** EPA 6010D  
**Description:** 6010D MET ICP  
**Client:** Georgia Power  
**Date:** May 07, 2020

### General Information:

24 samples were analyzed for EPA 6010D by Pace Analytical Services Atlanta, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 45533

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2630862003

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- MS (Lab ID: 210190)
  - Calcium
- MSD (Lab ID: 210191)
  - Calcium

QC Batch: 45592

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2630908002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 210528)
  - Calcium
- MSD (Lab ID: 210529)
  - Calcium

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## PROJECT NARRATIVE

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

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**Method:** EPA 6010D  
**Description:** 6010D MET ICP  
**Client:** Georgia Power  
**Date:** May 07, 2020

QC Batch: 45628

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2630818015

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 210936)
  - Calcium
- MSD (Lab ID: 210937)
  - Calcium

QC Batch: 45905

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2630818020

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 212459)
  - Calcium
- MSD (Lab ID: 212460)
  - Calcium

### Additional Comments:

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## PROJECT NARRATIVE

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

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**Method:** **EPA 6020B**

**Description:** 6020B MET ICPMS

**Client:** Georgia Power

**Date:** May 07, 2020

### **General Information:**

24 samples were analyzed for EPA 6020B by Pace Analytical Services Atlanta, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### **Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

### **Sample Preparation:**

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

### **Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

### **Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

### **Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

### **Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 45464

B: Analyte was detected in the associated method blank.

- BLANK for HBN 45464 [MPRP/5049 (Lab ID: 209861)]
  - Vanadium

QC Batch: 45904

B: Analyte was detected in the associated method blank.

- BLANK for HBN 45904 [MPRP/5128 (Lab ID: 212453)]
  - Antimony

### **Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### **Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### **Additional Comments:**

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## PROJECT NARRATIVE

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

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**Method:** EPA 6020B  
**Description:** 6020B MET ICPMS  
**Client:** Georgia Power  
**Date:** May 07, 2020

Analyte Comments:

QC Batch: 45464

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- GWA-7 (Lab ID: 2630818012)

- Arsenic
- Beryllium
- Cadmium
- Cobalt
- Chromium
- Lithium
- Molybdenum
- Lead
- Antimony
- Selenium
- Thallium

- GWB-6R (Lab ID: 2630818004)

- Arsenic
- Barium
- Beryllium
- Cadmium
- Cobalt
- Chromium
- Lithium
- Molybdenum
- Lead
- Antimony
- Selenium
- Thallium
- Vanadium

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

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**Method:** **SM 2540C**

**Description:** 2540C Total Dissolved Solids

**Client:** Georgia Power

**Date:** May 07, 2020

**General Information:**

24 samples were analyzed for SM 2540C by Pace Analytical Services Atlanta, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.

- GWC-14 (Lab ID: 2630818008)

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 45370

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 209274)
- Total Dissolved Solids

**Additional Comments:**

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## PROJECT NARRATIVE

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

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**Method:** **EPA 300.0 Rev 2.1 1993**

**Description:** 300.0 IC Anions 28 Days

**Client:** Georgia Power

**Date:** May 07, 2020

**General Information:**

24 samples were analyzed for EPA 300.0 Rev 2.1 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 535486

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2630818010,92472966003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2857321)
  - Fluoride
  - Sulfate
- MSD (Lab ID: 2857322)
  - Fluoride
  - Sulfate

QC Batch: 535954

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2630818022,2630873001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2859460)
  - Chloride
  - Sulfate
- MS (Lab ID: 2859462)
  - Fluoride
- MSD (Lab ID: 2859463)
  - Fluoride

R1: RPD value was outside control limits.

- MSD (Lab ID: 2859461)
  - Chloride
  - Sulfate

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: GWB-4R		Lab ID: 2630818001		Collected: 04/07/20 09:32		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	5.74	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	62.1	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 17:57	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 17:57	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 17:34	7440-36-0	
Arsenic	0.0027J	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 17:34	7440-38-2	
Barium	0.090	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 17:34	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 17:34	7440-41-7	
Boron	5.5	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 17:34	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 17:34	7440-43-9	
Chromium	0.0028J	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 17:34	7440-47-3	
Cobalt	0.00090J	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 17:34	7440-48-4	
Lead	0.00073J	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 17:34	7439-92-1	
Lithium	0.014J	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 17:34	7439-93-2	
Molybdenum	0.13	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 17:34	7439-98-7	
Selenium	0.0025J	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 17:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 17:34	7440-28-0	
Vanadium	0.0037J	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 17:34	7440-62-2	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	482	mg/L	10.0	10.0	1			04/09/20 11:04	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	14.5	mg/L	1.0	0.60	1			04/10/20 05:47	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/10/20 05:47	16984-48-8
Sulfate	221	mg/L	5.0	2.5	5			04/10/20 21:17	14808-79-8

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Sample: GWC-1		Lab ID: 2630818002		Collected: 04/07/20 11:30		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	5.30	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	31.1	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:00	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:00	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 18:08	7440-36-0	
Arsenic	0.027	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 18:08	7440-38-2	
Barium	0.050	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 18:08	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 18:08	7440-41-7	
Boron	1.0	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 18:08	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 18:08	7440-43-9	
Chromium	0.0015J	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 18:08	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 18:08	7440-48-4	
Lead	0.00012J	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 18:08	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 18:08	7439-93-2	
Molybdenum	0.014	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 18:08	7439-98-7	
Selenium	0.0013J	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 18:08	7782-49-2	
Thallium	0.000054J	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 18:08	7440-28-0	
Vanadium	0.0015J	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 18:08	7440-62-2	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	195	mg/L	10.0	10.0	1			04/09/20 11:05	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	7.7	mg/L	1.0	0.60	1			04/10/20 06:02	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/10/20 06:02	16984-48-8
Sulfate	83.0	mg/L	1.0	0.50	1			04/10/20 06:02	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: GWB-5R		Lab ID: 2630818003		Collected: 04/07/20 15:35		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	5.45	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	34.1	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:04	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:04	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 18:14	7440-36-0	
Arsenic	0.0011J	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 18:14	7440-38-2	
Barium	0.098	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 18:14	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 18:14	7440-41-7	
Boron	4.6	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 18:14	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 18:14	7440-43-9	
Chromium	0.0022J	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 18:14	7440-47-3	
Cobalt	0.00053J	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 18:14	7440-48-4	
Lead	0.0014J	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 18:14	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 18:14	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 18:14	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 18:14	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 18:14	7440-28-0	
Vanadium	0.0053J	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 18:14	7440-62-2	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	483	mg/L	10.0	10.0	1			04/09/20 11:05	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	44.3	mg/L	1.0	0.60	1			04/10/20 06:17	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/10/20 06:17	16984-48-8
Sulfate	180	mg/L	4.0	2.0	4			04/10/20 21:32	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Sample: GWB-6R		Lab ID: 2630818004		Collected: 04/07/20 16:58		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	5.86	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	7.8	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:07	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:07	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.015	0.0014	5	04/13/20 13:00	04/13/20 18:19	7440-36-0	D3
Arsenic	ND	mg/L	0.025	0.0018	5	04/13/20 13:00	04/13/20 18:19	7440-38-2	D3
Barium	0.010J	mg/L	0.050	0.0024	5	04/13/20 13:00	04/13/20 18:19	7440-39-3	D3
Beryllium	ND	mg/L	0.015	0.00037	5	04/13/20 13:00	04/13/20 18:19	7440-41-7	D3
Boron	5.6	mg/L	0.50	0.025	5	04/13/20 13:00	04/13/20 18:19	7440-42-8	
Cadmium	ND	mg/L	0.012	0.00057	5	04/13/20 13:00	04/13/20 18:19	7440-43-9	D3
Chromium	0.0094J	mg/L	0.050	0.0020	5	04/13/20 13:00	04/13/20 18:19	7440-47-3	D3
Cobalt	ND	mg/L	0.025	0.0015	5	04/13/20 13:00	04/13/20 18:19	7440-48-4	D3
Lead	0.00063J	mg/L	0.025	0.00023	5	04/13/20 13:00	04/13/20 18:19	7439-92-1	D3
Lithium	ND	mg/L	0.15	0.0039	5	04/13/20 13:00	04/13/20 18:19	7439-93-2	D3
Molybdenum	ND	mg/L	0.050	0.0047	5	04/13/20 13:00	04/13/20 18:19	7439-98-7	D3
Selenium	ND	mg/L	0.050	0.0063	5	04/13/20 13:00	04/13/20 18:19	7782-49-2	D3
Thallium	ND	mg/L	0.0050	0.00026	5	04/13/20 13:00	04/13/20 18:19	7440-28-0	D3
Vanadium	0.041J	mg/L	0.050	0.0035	5	04/13/20 13:00	04/13/20 18:19	7440-62-2	B,D3
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	775	mg/L	10.0	10.0	1			04/09/20 11:08	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	56.4	mg/L	1.0	0.60	1			04/10/20 06:32	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/10/20 06:32	16984-48-8
Sulfate	180	mg/L	4.0	2.0	4			04/10/20 21:47	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: GWC-16		Lab ID: 2630818005		Collected: 04/07/20 10:45		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	5.94	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	225	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:11	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:11	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.015	0.0014	5	04/13/20 13:00	04/14/20 16:19	7440-36-0	
Arsenic	0.091	mg/L	0.025	0.0018	5	04/13/20 13:00	04/14/20 16:19	7440-38-2	
Barium	0.13	mg/L	0.050	0.0024	5	04/13/20 13:00	04/14/20 16:19	7440-39-3	
Beryllium	ND	mg/L	0.015	0.00037	5	04/13/20 13:00	04/14/20 16:19	7440-41-7	
Boron	10.5	mg/L	0.50	0.025	5	04/13/20 13:00	04/14/20 16:19	7440-42-8	
Cadmium	ND	mg/L	0.012	0.00057	5	04/13/20 13:00	04/14/20 16:19	7440-43-9	
Chromium	ND	mg/L	0.050	0.0020	5	04/13/20 13:00	04/14/20 16:19	7440-47-3	
Cobalt	ND	mg/L	0.025	0.0015	5	04/13/20 13:00	04/14/20 16:19	7440-48-4	
Lead	0.00023J	mg/L	0.025	0.00023	5	04/13/20 13:00	04/14/20 16:19	7439-92-1	
Lithium	ND	mg/L	0.15	0.0039	5	04/13/20 13:00	04/14/20 16:19	7439-93-2	
Molybdenum	0.25	mg/L	0.050	0.0047	5	04/13/20 13:00	04/14/20 16:19	7439-98-7	
Selenium	ND	mg/L	0.050	0.0063	5	04/13/20 13:00	04/14/20 16:19	7782-49-2	
Thallium	ND	mg/L	0.0050	0.00026	5	04/13/20 13:00	04/14/20 16:19	7440-28-0	
Vanadium	ND	mg/L	0.050	0.0035	5	04/13/20 13:00	04/14/20 16:19	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	1500	mg/L	10.0	10.0	1			04/09/20 11:09	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	49.3	mg/L	1.0	0.60	1			04/10/20 06:47	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/10/20 06:47	16984-48-8
Sulfate	844	mg/L	16.0	8.0	16			04/10/20 22:02	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Sample: GWC-21		Lab ID: 2630818006		Collected: 04/07/20 13:45		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	6.00	Std. Units			1				04/13/20 10:26
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	12.5	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:15	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:15	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 18:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 18:31	7440-38-2	
Barium	0.054	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 18:31	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 18:31	7440-41-7	
Boron	0.24	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 18:31	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 18:31	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 18:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 18:31	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 18:31	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 18:31	7439-93-2	
Molybdenum	0.012	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 18:31	7439-98-7	
Selenium	0.012	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 18:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 18:31	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 18:31	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	106	mg/L	10.0	10.0	1				04/09/20 11:09
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	4.7	mg/L	1.0	0.60	1				04/10/20 07:47
Fluoride	ND	mg/L	0.30	0.050	1				16887-00-6
Sulfate	33.2	mg/L	1.0	0.50	1				04/10/20 07:47
									16984-48-8
									14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: GWC-15		Lab ID: 2630818007		Collected: 04/07/20 16:10		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	6.83	Std. Units						04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	129	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:18	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:18	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 18:37	7440-36-0	
Arsenic	0.24	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 18:37	7440-38-2	
Barium	0.033	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 18:37	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 18:37	7440-41-7	
Boron	0.96	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 18:37	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 18:37	7440-43-9	
Chromium	0.0014J	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 18:37	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 18:37	7440-48-4	
Lead	0.000086J	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 18:37	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 18:37	7439-93-2	
Molybdenum	0.070	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 18:37	7439-98-7	
Selenium	0.0029J	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 18:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 18:37	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 18:37	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	428	mg/L	10.0	10.0	1				D6
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	3.4	mg/L	1.0	0.60	1				
Fluoride	ND	mg/L	0.30	0.050	1				
Sulfate	26.9	mg/L	1.0	0.50	1				

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: GWC-14		Lab ID: 2630818008		Collected: 04/07/20 13:55		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	6.20	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	135	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:22	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:22	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 18:42	7440-36-0	
Arsenic	0.0018J	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 18:42	7440-38-2	
Barium	0.073	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 18:42	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 18:42	7440-41-7	
Boron	0.061J	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 18:42	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 18:42	7440-43-9	
Chromium	0.00074J	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 18:42	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 18:42	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 18:42	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 18:42	7439-93-2	
Molybdenum	0.014	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 18:42	7439-98-7	
Selenium	0.0050J	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 18:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 18:42	7440-28-0	
Vanadium	0.0026J	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 18:42	7440-62-2	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	843	mg/L	10.0	10.0	1			04/30/20 11:05	H1
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	41.6	mg/L	1.0	0.60	1			04/10/20 08:17	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/10/20 08:17	16984-48-8
Sulfate	456	mg/L	9.0	4.5	9			04/10/20 22:17	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: FB-1-4-6-20	Lab ID: 2630818009	Collected: 04/07/20 17:05	Received: 04/08/20 13:10	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	ND	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:25	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:25	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 18:48	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 18:48	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 18:48	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 18:48	7440-41-7	
Boron	<b>0.0056J</b>	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 18:48	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 18:48	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 18:48	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 18:48	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 18:48	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 18:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 18:48	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 18:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 18:48	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 18:48	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1			04/09/20 11:25	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1			04/10/20 08:32	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/10/20 08:32	16984-48-8
Sulfate	ND	mg/L	1.0	0.50	1			04/10/20 08:32	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Sample: DUP-1	Lab ID: 2630818010		Collected: 04/07/20 00:00	Received: 04/08/20 13:10	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	<b>30.9</b>	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:35	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:35	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 18:54	7440-36-0	
Arsenic	<b>0.027</b>	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 18:54	7440-38-2	
Barium	<b>0.050</b>	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 18:54	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 18:54	7440-41-7	
Boron	<b>0.98</b>	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 18:54	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 18:54	7440-43-9	
Chromium	<b>0.0015J</b>	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 18:54	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 18:54	7440-48-4	
Lead	<b>0.000053J</b>	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 18:54	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 18:54	7439-93-2	
Molybdenum	<b>0.014</b>	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 18:54	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 18:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 18:54	7440-28-0	
Vanadium	<b>0.0016J</b>	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 18:54	7440-62-2	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	<b>248</b>	mg/L	10.0	10.0	1				04/09/20 11:26
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	<b>7.8</b>	mg/L	1.0	0.60	1				04/10/20 08:47
Fluoride	ND	mg/L	0.30	0.050	1				04/10/20 08:47
Sulfate	<b>82.4</b>	mg/L	1.0	0.50	1				04/10/20 08:47
									M1
									M1

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: GWA-8		Lab ID: 2630818011		Collected: 04/06/20 14:40		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	4.52	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	35.8	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:39	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:39	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 18:59	7440-36-0	
Arsenic	0.00045J	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 18:59	7440-38-2	
Barium	0.057	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 18:59	7440-39-3	
Beryllium	0.00017J	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 18:59	7440-41-7	
Boron	0.14	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 18:59	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 18:59	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 18:59	7440-47-3	
Cobalt	0.00036J	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 18:59	7440-48-4	
Lead	0.00010J	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 18:59	7439-92-1	
Lithium	0.00086J	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 18:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 18:59	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 18:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 18:59	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 18:59	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	214	mg/L	10.0	10.0	1			04/09/20 11:03	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	13.5	mg/L	1.0	0.60	1			04/10/20 09:32	16887-00-6
Fluoride	0.089J	mg/L	0.30	0.050	1			04/10/20 09:32	16984-48-8
Sulfate	123	mg/L	3.0	1.5	3			04/10/20 23:03	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Sample: GWA-7		Lab ID: 2630818012		Collected: 04/06/20 16:10		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	6.02	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	3.1	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:42	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:42	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.015	0.0014	5	04/13/20 13:00	04/13/20 19:17	7440-36-0	D3
Arsenic	ND	mg/L	0.025	0.0018	5	04/13/20 13:00	04/13/20 19:17	7440-38-2	D3
Barium	0.072	mg/L	0.050	0.0024	5	04/13/20 13:00	04/13/20 19:17	7440-39-3	
Beryllium	ND	mg/L	0.015	0.00037	5	04/13/20 13:00	04/13/20 19:17	7440-41-7	D3
Boron	6.1	mg/L	0.50	0.025	5	04/13/20 13:00	04/13/20 19:17	7440-42-8	
Cadmium	ND	mg/L	0.012	0.00057	5	04/13/20 13:00	04/13/20 19:17	7440-43-9	D3
Chromium	0.015J	mg/L	0.050	0.0020	5	04/13/20 13:00	04/13/20 19:17	7440-47-3	
Cobalt	0.0021J	mg/L	0.025	0.0015	5	04/13/20 13:00	04/13/20 19:17	7440-48-4	D3
Lead	0.0024J	mg/L	0.025	0.00023	5	04/13/20 13:00	04/13/20 19:17	7439-92-1	D3
Lithium	ND	mg/L	0.15	0.0039	5	04/13/20 13:00	04/13/20 19:17	7439-93-2	D3
Molybdenum	ND	mg/L	0.050	0.0047	5	04/13/20 13:00	04/13/20 19:17	7439-98-7	D3
Selenium	0.0078J	mg/L	0.050	0.0063	5	04/13/20 13:00	04/13/20 19:17	7782-49-2	D3
Thallium	ND	mg/L	0.0050	0.00026	5	04/13/20 13:00	04/13/20 19:17	7440-28-0	D3
Vanadium	0.12	mg/L	0.050	0.0035	5	04/13/20 13:00	04/13/20 19:17	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	1670	mg/L	10.0	10.0	1			04/09/20 11:03	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	30.2	mg/L	1.0	0.60	1			04/10/20 09:47	16887-00-6
Fluoride	0.13J	mg/L	0.30	0.050	1			04/10/20 09:47	16984-48-8
Sulfate	20.3	mg/L	1.0	0.50	1			04/10/20 09:47	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Sample: GWC-12		Lab ID: 2630818013		Collected: 04/07/20 10:00		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	4.10	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	52.1	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:46	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:46	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 19:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 19:22	7440-38-2	
Barium	0.017	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 19:22	7440-39-3	
Beryllium	0.00051J	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 19:22	7440-41-7	
Boron	5.3	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 19:22	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 19:22	7440-43-9	
Chromium	0.00082J	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 19:22	7440-47-3	
Cobalt	0.00077J	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 19:22	7440-48-4	
Lead	0.000081J	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 19:22	7439-92-1	
Lithium	0.00094J	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 19:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 19:22	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 19:22	7782-49-2	
Thallium	0.00013J	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 19:22	7440-28-0	
Vanadium	0.0024J	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 19:22	7440-62-2	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	464	mg/L	10.0	10.0	1			04/09/20 11:26	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	32.5	mg/L	1.0	0.60	1			04/10/20 10:02	16887-00-6
Fluoride	0.27J	mg/L	0.30	0.050	1			04/10/20 10:02	16984-48-8
Sulfate	297	mg/L	7.0	3.5	7			04/11/20 00:02	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: GWC-11		Lab ID: 2630818014		Collected: 04/07/20 12:35		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	5.05	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	84.7	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:49	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:49	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	0.00066J	mg/L	0.0030	0.00027	1	04/28/20 17:43	04/29/20 17:16	7440-36-0	B
Arsenic	ND	mg/L	0.0050	0.00035	1	04/28/20 17:43	04/29/20 17:16	7440-38-2	
Barium	0.14	mg/L	0.010	0.00049	1	04/28/20 17:43	04/29/20 17:16	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/28/20 17:43	04/29/20 17:16	7440-41-7	
Boron	0.67	mg/L	0.10	0.0049	1	04/28/20 17:43	04/29/20 17:16	7440-42-8	
Cadmium	0.00051J	mg/L	0.0025	0.00011	1	04/28/20 17:43	04/29/20 17:16	7440-43-9	
Chromium	0.00094J	mg/L	0.010	0.00039	1	04/28/20 17:43	04/29/20 17:16	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/28/20 17:43	04/29/20 17:16	7440-48-4	
Lead	0.00036J	mg/L	0.0050	0.000046	1	04/28/20 17:43	04/29/20 17:16	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/28/20 17:43	04/29/20 17:16	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/28/20 17:43	04/29/20 17:16	7439-98-7	
Selenium	0.0021J	mg/L	0.010	0.0013	1	04/28/20 17:43	04/29/20 17:16	7782-49-2	
Thallium	0.00019J	mg/L	0.0010	0.000052	1	04/28/20 17:43	04/29/20 17:16	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/28/20 17:43	04/29/20 17:16	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	780	mg/L	10.0	10.0	1			04/09/20 11:27	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	103	mg/L	9.0	5.4	9			04/11/20 00:17	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/10/20 11:02	16984-48-8
Sulfate	446	mg/L	9.0	4.5	9			04/11/20 00:17	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: GWC-22		Lab ID: 2630818015		Collected: 04/07/20 15:40		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	4.80	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	65.7	mg/L	1.0	0.14	1	04/17/20 14:16	04/20/20 18:41	7440-70-2	M1
Zinc	ND	mg/L	0.020	0.018	1	04/17/20 14:16	04/20/20 18:41	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	0.00049J	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 19:34	7440-36-0	
Arsenic	0.00043J	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 19:34	7440-38-2	
Barium	0.10	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 19:34	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 19:34	7440-41-7	
Boron	3.1	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 19:34	7440-42-8	
Cadmium	0.00054J	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 19:34	7440-43-9	
Chromium	0.00049J	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 19:34	7440-47-3	
Cobalt	0.00037J	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 19:34	7440-48-4	
Lead	0.00067J	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 19:34	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 19:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 19:34	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 19:34	7782-49-2	
Thallium	0.000065J	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 19:34	7440-28-0	
Vanadium	0.0014J	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 19:34	7440-62-2	B
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	819	mg/L	10.0	10.0	1			04/09/20 11:27	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	146	mg/L	7.0	4.2	7			04/11/20 00:32	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/10/20 11:17	16984-48-8
Sulfate	333	mg/L	7.0	3.5	7			04/11/20 00:32	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: EB-1-4-7-2020	Lab ID: 2630818016		Collected: 04/07/20 13:30	Received: 04/08/20 13:10	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	ND	mg/L	1.0	0.14	1	04/16/20 13:14	04/16/20 18:53	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/16/20 13:14	04/16/20 18:53	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 19:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 19:45	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 19:45	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 19:45	7440-41-7	
Boron	<b>0.0090J</b>	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 19:45	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 19:45	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 19:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 19:45	7440-48-4	
Lead	<b>0.000072J</b>	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 19:45	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 19:45	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 19:45	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 19:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 19:45	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 19:45	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1			04/09/20 11:28	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1			04/10/20 11:32	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/10/20 11:32	16984-48-8
Sulfate	ND	mg/L	1.0	0.50	1			04/10/20 11:32	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: GWC-13		Lab ID: 2630818017		Collected: 04/08/20 09:53		Received: 04/09/20 09:21		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	4.81	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	2.5	mg/L	1.0	0.14	1	04/14/20 18:37	04/15/20 17:25	7440-70-2	
Zinc	0.023	mg/L	0.020	0.018	1	04/14/20 18:37	04/15/20 17:25	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/14/20 18:32	04/15/20 16:27	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/14/20 18:32	04/15/20 16:27	7440-38-2	
Barium	0.027	mg/L	0.010	0.00049	1	04/14/20 18:32	04/15/20 16:27	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/14/20 18:32	04/15/20 16:27	7440-41-7	
Boron	0.28	mg/L	0.10	0.0049	1	04/14/20 18:32	04/15/20 16:27	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/14/20 18:32	04/15/20 16:27	7440-43-9	
Chromium	0.00058J	mg/L	0.010	0.00039	1	04/14/20 18:32	04/15/20 16:27	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/14/20 18:32	04/15/20 16:27	7440-48-4	
Lead	0.00017J	mg/L	0.0050	0.000046	1	04/14/20 18:32	04/15/20 16:27	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/14/20 18:32	04/15/20 16:27	7439-93-2	
Molybdenum	0.0056J	mg/L	0.010	0.00095	1	04/14/20 18:32	04/15/20 16:27	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/14/20 18:32	04/15/20 16:27	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/14/20 18:32	04/15/20 16:27	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/14/20 18:32	04/15/20 16:27	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	65.0	mg/L	10.0	10.0	1			04/14/20 17:46	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	4.5	mg/L	1.0	0.60	1			04/14/20 15:50	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/14/20 15:50	16984-48-8
Sulfate	30.7	mg/L	1.0	0.50	1			04/14/20 15:50	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: GWC-2	Lab ID: 2630818018		Collected: 04/08/20 12:25	Received: 04/09/20 09:21	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	4.66	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	0.24J	mg/L	1.0	0.14	1	04/14/20 18:37	04/15/20 17:28	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/14/20 18:37	04/15/20 17:28	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	0.0013J	mg/L	0.0030	0.00027	1	04/14/20 18:32	04/15/20 16:50	7440-36-0	
Arsenic	0.00094J	mg/L	0.0050	0.00035	1	04/14/20 18:32	04/15/20 16:50	7440-38-2	
Barium	0.061	mg/L	0.010	0.00049	1	04/14/20 18:32	04/15/20 16:50	7440-39-3	
Beryllium	0.000088J	mg/L	0.0030	0.000074	1	04/14/20 18:32	04/15/20 16:50	7440-41-7	
Boron	0.031J	mg/L	0.10	0.0049	1	04/14/20 18:32	04/15/20 16:50	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/14/20 18:32	04/15/20 16:50	7440-43-9	
Chromium	0.00069J	mg/L	0.010	0.00039	1	04/14/20 18:32	04/15/20 16:50	7440-47-3	
Cobalt	0.00036J	mg/L	0.0050	0.00030	1	04/14/20 18:32	04/15/20 16:50	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	04/14/20 18:32	04/15/20 16:50	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/14/20 18:32	04/15/20 16:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/14/20 18:32	04/15/20 16:50	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/14/20 18:32	04/15/20 16:50	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/14/20 18:32	04/15/20 16:50	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/14/20 18:32	04/15/20 16:50	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	38.0	mg/L	10.0	10.0	1			04/14/20 17:46	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	5.2	mg/L	1.0	0.60	1			04/14/20 16:04	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/14/20 16:04	16984-48-8
Sulfate	12.9	mg/L	1.0	0.50	1			04/14/20 16:04	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Sample: GWC-9		Lab ID: 2630818019		Collected: 04/08/20 10:00		Received: 04/09/20 09:21		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	4.73	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	5.3	mg/L	1.0	0.14	1	04/14/20 18:37	04/15/20 17:32	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/14/20 18:37	04/15/20 17:32	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	0.00033J	mg/L	0.0030	0.00027	1	04/14/20 18:32	04/15/20 16:56	7440-36-0	
Arsenic	0.00084J	mg/L	0.0050	0.00035	1	04/14/20 18:32	04/15/20 16:56	7440-38-2	
Barium	0.15	mg/L	0.010	0.00049	1	04/14/20 18:32	04/15/20 16:56	7440-39-3	
Beryllium	0.00019J	mg/L	0.0030	0.000074	1	04/14/20 18:32	04/15/20 16:56	7440-41-7	
Boron	0.023J	mg/L	0.10	0.0049	1	04/14/20 18:32	04/15/20 16:56	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/14/20 18:32	04/15/20 16:56	7440-43-9	
Chromium	0.0015J	mg/L	0.010	0.00039	1	04/14/20 18:32	04/15/20 16:56	7440-47-3	
Cobalt	0.0010J	mg/L	0.0050	0.00030	1	04/14/20 18:32	04/15/20 16:56	7440-48-4	
Lead	0.00021J	mg/L	0.0050	0.000046	1	04/14/20 18:32	04/15/20 16:56	7439-92-1	
Lithium	0.0018J	mg/L	0.030	0.00078	1	04/14/20 18:32	04/15/20 16:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/14/20 18:32	04/15/20 16:56	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/14/20 18:32	04/15/20 16:56	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/14/20 18:32	04/15/20 16:56	7440-28-0	
Vanadium	0.0015J	mg/L	0.010	0.00071	1	04/14/20 18:32	04/15/20 16:56	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	80.0	mg/L	10.0	10.0	1			04/14/20 17:47	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	16.9	mg/L	1.0	0.60	1			04/14/20 16:19	16887-00-6
Fluoride	0.058J	mg/L	0.30	0.050	1			04/14/20 16:19	16984-48-8
Sulfate	34.2	mg/L	1.0	0.50	1			04/14/20 16:19	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: GWC-20		Lab ID: 2630818020		Collected: 04/08/20 12:00		Received: 04/09/20 09:21		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	6.31	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	175	mg/L	1.0	0.14	1	04/28/20 17:46	04/29/20 16:55	7440-70-2	M1
Zinc	ND	mg/L	0.020	0.018	1	04/28/20 17:46	04/29/20 16:55	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/14/20 18:32	04/15/20 17:23	7440-36-0	
Arsenic	0.33	mg/L	0.0050	0.00035	1	04/14/20 18:32	04/15/20 17:23	7440-38-2	
Barium	0.19	mg/L	0.010	0.00049	1	04/14/20 18:32	04/15/20 17:23	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/14/20 18:32	04/15/20 17:23	7440-41-7	
Boron	2.5	mg/L	0.10	0.0049	1	04/14/20 18:32	04/15/20 17:23	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/14/20 18:32	04/15/20 17:23	7440-43-9	
Chromium	0.0010J	mg/L	0.010	0.00039	1	04/14/20 18:32	04/15/20 17:23	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/14/20 18:32	04/15/20 17:23	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	04/14/20 18:32	04/15/20 17:23	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/14/20 18:32	04/15/20 17:23	7439-93-2	
Molybdenum	0.060	mg/L	0.010	0.00095	1	04/14/20 18:32	04/15/20 17:23	7439-98-7	
Selenium	0.0013J	mg/L	0.010	0.0013	1	04/14/20 18:32	04/15/20 17:23	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/14/20 18:32	04/15/20 17:23	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/14/20 18:32	04/15/20 17:23	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	986	mg/L	10.0	10.0	1			04/14/20 17:47	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	20.2	mg/L	1.0	0.60	1			04/14/20 16:33	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/14/20 16:33	16984-48-8
Sulfate	428	mg/L	9.0	4.5	9			04/15/20 10:07	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Sample: GWC-17		Lab ID: 2630818021		Collected: 04/08/20 15:35		Received: 04/09/20 09:21		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	4.71	Std. Units			1			04/13/20 10:26	
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	53.1	mg/L	1.0	0.14	1	04/14/20 18:37	04/15/20 18:17	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/14/20 18:37	04/15/20 18:17	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/14/20 18:32	04/15/20 17:28	7440-36-0	
Arsenic	0.0013J	mg/L	0.0050	0.00035	1	04/14/20 18:32	04/15/20 17:28	7440-38-2	
Barium	0.055	mg/L	0.010	0.00049	1	04/14/20 18:32	04/15/20 17:28	7440-39-3	
Beryllium	0.0017J	mg/L	0.0030	0.000074	1	04/14/20 18:32	04/15/20 17:28	7440-41-7	
Boron	0.99	mg/L	0.10	0.0049	1	04/14/20 18:32	04/15/20 17:28	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/14/20 18:32	04/15/20 17:28	7440-43-9	
Chromium	0.00073J	mg/L	0.010	0.00039	1	04/14/20 18:32	04/15/20 17:28	7440-47-3	
Cobalt	0.0024J	mg/L	0.0050	0.00030	1	04/14/20 18:32	04/15/20 17:28	7440-48-4	
Lead	0.000084J	mg/L	0.0050	0.000046	1	04/14/20 18:32	04/15/20 17:28	7439-92-1	
Lithium	0.0051J	mg/L	0.030	0.00078	1	04/14/20 18:32	04/15/20 17:28	7439-93-2	
Molybdenum	0.0024J	mg/L	0.010	0.00095	1	04/14/20 18:32	04/15/20 17:28	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/14/20 18:32	04/15/20 17:28	7782-49-2	
Thallium	0.000056J	mg/L	0.0010	0.000052	1	04/14/20 18:32	04/15/20 17:28	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/14/20 18:32	04/15/20 17:28	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	881	mg/L	10.0	10.0	1			04/14/20 17:47	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	277	mg/L	6.0	3.6	6			04/15/20 10:22	16887-00-6
Fluoride	0.55	mg/L	0.30	0.050	1			04/14/20 16:48	16984-48-8
Sulfate	239	mg/L	6.0	3.0	6			04/15/20 10:22	14808-79-8

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: EB-2-4-7-20	Lab ID: 2630818022		Collected: 04/08/20 14:45	Received: 04/09/20 09:21	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	ND	mg/L	1.0	0.14	1	04/14/20 18:37	04/15/20 18:20	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/14/20 18:37	04/15/20 18:20	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/14/20 18:32	04/15/20 17:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/14/20 18:32	04/15/20 17:34	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	04/14/20 18:32	04/15/20 17:34	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/14/20 18:32	04/15/20 17:34	7440-41-7	
Boron	<b>0.0083J</b>	mg/L	0.10	0.0049	1	04/14/20 18:32	04/15/20 17:34	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/14/20 18:32	04/15/20 17:34	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	04/14/20 18:32	04/15/20 17:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/14/20 18:32	04/15/20 17:34	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	04/14/20 18:32	04/15/20 17:34	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/14/20 18:32	04/15/20 17:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/14/20 18:32	04/15/20 17:34	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/14/20 18:32	04/15/20 17:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/14/20 18:32	04/15/20 17:34	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/14/20 18:32	04/15/20 17:34	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1			04/14/20 17:48	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1			04/14/20 17:02	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/14/20 17:02	16984-48-8
Sulfate	ND	mg/L	1.0	0.50	1			04/14/20 17:02	M1 14808-79-8

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Sample: FB-2-4-7-20	Lab ID: 2630818023	Collected: 04/08/20 12:30	Received: 04/09/20 09:21	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	ND	mg/L	1.0	0.14	1	04/14/20 18:37	04/15/20 18:24	7440-70-2	
Zinc	ND	mg/L	0.020	0.018	1	04/14/20 18:37	04/15/20 18:24	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/14/20 18:32	04/15/20 17:40	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/14/20 18:32	04/15/20 17:40	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	04/14/20 18:32	04/15/20 17:40	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/14/20 18:32	04/15/20 17:40	7440-41-7	
Boron	ND	mg/L	0.10	0.0049	1	04/14/20 18:32	04/15/20 17:40	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/14/20 18:32	04/15/20 17:40	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	04/14/20 18:32	04/15/20 17:40	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/14/20 18:32	04/15/20 17:40	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	04/14/20 18:32	04/15/20 17:40	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/14/20 18:32	04/15/20 17:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/14/20 18:32	04/15/20 17:40	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/14/20 18:32	04/15/20 17:40	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/14/20 18:32	04/15/20 17:40	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/14/20 18:32	04/15/20 17:40	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1			04/14/20 17:48	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1			04/14/20 18:30	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/14/20 18:30	16984-48-8
Sulfate	ND	mg/L	1.0	0.50	1			04/14/20 18:30	14808-79-8

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Sample: DUP-2	Lab ID: 2630818024	Collected: 04/08/20 00:00	Received: 04/09/20 09:21	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	<b>2.6</b>	mg/L	1.0	0.14	1	04/14/20 18:37	04/15/20 18:27	7440-70-2	
Zinc	<b>0.020</b>	mg/L	0.020	0.018	1	04/14/20 18:37	04/15/20 18:27	7440-66-6	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/14/20 18:32	04/15/20 17:46	7440-36-0	
Arsenic	<b>0.00045J</b>	mg/L	0.0050	0.00035	1	04/14/20 18:32	04/15/20 17:46	7440-38-2	
Barium	<b>0.031</b>	mg/L	0.010	0.00049	1	04/14/20 18:32	04/15/20 17:46	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/14/20 18:32	04/15/20 17:46	7440-41-7	
Boron	<b>0.26</b>	mg/L	0.10	0.0049	1	04/14/20 18:32	04/15/20 17:46	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/14/20 18:32	04/15/20 17:46	7440-43-9	
Chromium	<b>0.00043J</b>	mg/L	0.010	0.00039	1	04/14/20 18:32	04/15/20 17:46	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/14/20 18:32	04/15/20 17:46	7440-48-4	
Lead	<b>0.00015J</b>	mg/L	0.0050	0.000046	1	04/14/20 18:32	04/15/20 17:46	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/14/20 18:32	04/15/20 17:46	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/14/20 18:32	04/15/20 17:46	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/14/20 18:32	04/15/20 17:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/14/20 18:32	04/15/20 17:46	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	04/14/20 18:32	04/15/20 17:46	7440-62-2	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	<b>53.0</b>	mg/L	10.0	10.0	1			04/14/20 17:49	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	<b>4.5</b>	mg/L	1.0	0.60	1			04/14/20 18:44	16887-00-6
Fluoride	ND	mg/L	0.30	0.050	1			04/14/20 18:44	16984-48-8
Sulfate	<b>31.0</b>	mg/L	1.0	0.50	1			04/14/20 18:44	14808-79-8

## REPORT OF LABORATORY ANALYSIS

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## **QUALITY CONTROL DATA**

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

QC Batch:	45533	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D MET
		Laboratory:	Pace Analytical Services - Atlanta, GA
Associated Lab Samples:	2630818017, 2630818018, 2630818019, 2630818021, 2630818022, 2630818023, 2630818024		

METHOD BLANK: 210181 Matrix: Water

Associated Lab Samples: 2630818017, 2630818018, 2630818019, 2630818021, 2630818022, 2630818023, 2630818024

Parameter	Units	Blank	Reporting		Analyzed	Qualifiers
		Result	Limit	MDL		
Calcium	mg/L	ND	1.0	0.14	04/15/20 16:53	
Zinc	mg/L	ND	0.020	0.018	04/15/20 16:53	

LABORATORY CONTROL SAMPLE: 210182

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	104	80-120	
Zinc	mg/L	1	0.96	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 210190 210191

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max	
		2630862003	Spike Conc.	Spike Conc.	MS Result					RPD	Qual
Calcium	mg/L	362	1	1	368	365	604	75-125	1	20	M6
Zinc	mg/L	0.038	1	1	1.0	1.0	97	98	75-125	2	20

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## **REPORT OF LABORATORY ANALYSIS**

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## **QUALITY CONTROL DATA**

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

QC Batch: 45592 Analysis Method: EPA 6010D  
QC Batch Method: EPA 3010A Analysis Description: 6010D MET  
Laboratory: Pace Analytical Services - Atlanta, GA  
Associated Lab Samples: 2630818001, 2630818002, 2630818003, 2630818004, 2630818005, 2630818006, 2630818007, 2630818008,  
2630818009, 2630818010, 2630818011, 2630818012, 2630818013, 2630818014, 2630818016

METHOD BLANK: 210512 Matrix: Water  
Associated Lab Samples: 2630818001, 2630818002, 2630818003, 2630818004, 2630818005, 2630818006, 2630818007, 2630818008,  
2630818009, 2630818010, 2630818011, 2630818012, 2630818013, 2630818014, 2630818016

Parameter	Units	Blank	Reporting	MDL	Analyzed	Qualifiers
		Result	Limit			
Calcium	mg/L	ND	1.0	0.14	04/16/20 17:18	
Zinc	mg/L	ND	0.020	0.018	04/16/20 17:18	

LABORATORY CONTROL SAMPLE: 210513						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	101	80-120	
Zinc	mcg/L	1	0.85	85	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		210528		210529													
Parameter	Units	MS		MSD		MS		MSD		MS		MSD		% Rec		Max RPD	
		2630908002	Spike Conc.	Spike Conc.	Result	MS Result	MSD Result	% Rec	% Rec	RPD	Qual						
Calcium	mg/L	258	1	1	262	265	333	619	75-125	1	20	M1					
Zinc	mg/L	ND	1	1	0.92	0.93	91	93	75-125	2	20						

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

QC Batch:	45628	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D MET
		Laboratory:	Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630818015			

METHOD BLANK: 210934 Matrix: Water

Associated Lab Samples: 2630818015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.14	04/20/20 18:27	
Zinc	mg/L	ND	0.020	0.018	04/20/20 18:27	

LABORATORY CONTROL SAMPLE: 210935

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Zinc	mg/L	1	0.99	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 210936 210937

Parameter	Units	MS		MSD		MS		MSD		% Rec		Max RPD	RPD	Qual
		2630818015	Result	Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits				
Calcium	mg/L	65.7	1	1	69.0	69.1	326	340	75-125	0	20	M1		
Zinc	mg/L	ND	1	1	0.99	1.0	99	101	75-125	3	20			

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

QC Batch:	45905	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D MET
		Laboratory:	Pace Analytical Services - Atlanta, GA
Associated Lab Samples:	2630818020		

METHOD BLANK: 212457 Matrix: Water

Associated Lab Samples: 2630818020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.14	04/29/20 16:46	
Zinc	mg/L	ND	0.020	0.018	04/29/20 16:46	

LABORATORY CONTROL SAMPLE: 212458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0J	100	80-120	
Zinc	mg/L	1	0.90	90	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 212459 212460

Parameter	Units	2630818020 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.								
Calcium	mg/L	175	1	1	177	174	154	-107	75-125	1	20	M1
Zinc	mg/L	ND	1	1	0.85	0.85	85	85	75-125	0	20	

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## **QUALITY CONTROL DATA**

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

QC Batch: 45464 Analysis Method: EPA 6020B

QC Batch Method: EPA 3005A Analysis Description: 6020B METTLE

Laboratory: Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630818001, 2630818002, 2630818003, 2630818004, 2630818005, 2630818006, 2630818007, 2630818008, 2630818009, 2630818010, 2630818011, 2630818012, 2630818013, 2630818015, 2630818016

METHOD BLANK: 209861

## Matrix: Water

Associated Lab Samples: 2630818001, 2630818002, 2630818003, 2630818004, 2630818005, 2630818006, 2630818007, 2630818008, 2630818009, 2630818010, 2630818011, 2630818012, 2630818013, 2630818015, 2630818016

Parameter	Units	Blank	Reporting	MDL	Analyzed	Qualifiers
		Result	Limit			
Antimony	mg/L	ND	0.0030	0.00027	04/13/20 16:42	
Arsenic	mg/L	ND	0.0050	0.00035	04/13/20 16:42	
Barium	mg/L	ND	0.010	0.00049	04/13/20 16:42	
Beryllium	mg/L	ND	0.0030	0.000074	04/13/20 16:42	
Boron	mg/L	ND	0.10	0.0049	04/13/20 16:42	
Cadmium	mg/L	ND	0.0025	0.00011	04/13/20 16:42	
Chromium	mg/L	ND	0.010	0.00039	04/13/20 16:42	
Cobalt	mg/L	ND	0.0050	0.00030	04/13/20 16:42	
Lead	mg/L	ND	0.0050	0.000046	04/13/20 16:42	
Lithium	mg/L	ND	0.030	0.00078	04/13/20 16:42	
Molybdenum	mg/L	ND	0.010	0.00095	04/13/20 16:42	
Selenium	mg/L	ND	0.010	0.0013	04/13/20 16:42	
Thallium	mg/L	ND	0.0010	0.000052	04/13/20 16:42	
Vanadium	mg/L	0.0018J	0.010	0.00071	04/13/20 16:42	

LABORATORY CONTROL SAMPLE: 209862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	112	80-120	
Arsenic	mg/L	0.1	0.11	106	80-120	
Barium	mg/L	0.1	0.10	105	80-120	
Beryllium	mg/L	0.1	0.10	104	80-120	
Boron	mg/L	1	1.1	105	80-120	
Cadmium	mg/L	0.1	0.11	107	80-120	
Chromium	mg/L	0.1	0.11	107	80-120	
Cobalt	mg/L	0.1	0.11	105	80-120	
Lead	mg/L	0.1	0.11	105	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.10	105	80-120	
Thallium	mg/L	0.1	0.11	107	80-120	
Vanadium	mg/L	0.1	0.11	108	80-120	

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Parameter	Units	209904		209905						Max			
		MS		MSD		MS		MSD		% Rec		RPD	RPD
		2630907001	Spike Conc.	Spike Conc.	Result	MSD Result	% Rec	MSD % Rec	Limits	Qual	RPD		
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	113	109	75-125	4	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	105	101	75-125	3	20		
Barium	mg/L	0.18	0.1	0.1	0.28	0.28	99	98	75-125	1	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	1	20		
Boron	mg/L	0.74	1	1	1.8	1.9	109	111	75-125	1	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	105	101	75-125	4	20		
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	105	101	75-125	4	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	104	100	75-125	3	20		
Lead	mg/L	0.00026J	0.1	0.1	0.10	0.097	100	97	75-125	4	20		
Lithium	mg/L	0.20	0.1	0.1	0.30	0.31	102	108	75-125	2	20		
Molybdenum	mg/L	0.014	0.1	0.1	0.13	0.12	113	107	75-125	5	20		
Selenium	mg/L	ND	0.1	0.1	0.097	0.098	96	98	75-125	2	20		
Thallium	mg/L	ND	0.1	0.1	0.098	0.095	98	95	75-125	3	20		
Vanadium	mg/L	ND	0.1	0.1	0.11	0.10	110	104	75-125	6	20		

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

QC Batch:	45531	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020B MET
		Laboratory:	Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630818017, 2630818018, 2630818019, 2630818020, 2630818021, 2630818022, 2630818023, 2630818024

METHOD BLANK: 210136

Matrix: Water

Associated Lab Samples: 2630818017, 2630818018, 2630818019, 2630818020, 2630818021, 2630818022, 2630818023, 2630818024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	04/15/20 16:04	
Arsenic	mg/L	ND	0.0050	0.00035	04/15/20 16:04	
Barium	mg/L	ND	0.010	0.00049	04/15/20 16:04	
Beryllium	mg/L	ND	0.0030	0.000074	04/15/20 16:04	
Boron	mg/L	ND	0.10	0.0049	04/15/20 16:04	
Cadmium	mg/L	ND	0.0025	0.00011	04/15/20 16:04	
Chromium	mg/L	ND	0.010	0.00039	04/15/20 16:04	
Cobalt	mg/L	ND	0.0050	0.00030	04/15/20 16:04	
Lead	mg/L	ND	0.0050	0.000046	04/15/20 16:04	
Lithium	mg/L	ND	0.030	0.00078	04/15/20 16:04	
Molybdenum	mg/L	ND	0.010	0.00095	04/15/20 16:04	
Selenium	mg/L	ND	0.010	0.0013	04/15/20 16:04	
Thallium	mg/L	ND	0.0010	0.000052	04/15/20 16:04	
Vanadium	mg/L	ND	0.010	0.00071	04/15/20 16:04	

LABORATORY CONTROL SAMPLE: 210137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.1	105	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	
Vanadium	mg/L	0.1	0.10	102	80-120	

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Parameter	Units	2630818017		MS		MSD		210193		Max		
		Result	Spike Conc.	Spike	MS	MSD	MS	MSD	% Rec	Limits	RPD	RPD
				Conc.	Result	Result	% Rec	% Rec	% Rec			
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	105	104	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	99	99	75-125	1	20	
Barium	mg/L	0.027	0.1	0.1	0.13	0.13	100	99	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	1	20	
Boron	mg/L	0.28	1	1	1.2	1.2	92	91	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.096	98	96	75-125	3	20	
Chromium	mg/L	0.00058J	0.1	0.1	0.10	0.10	102	101	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	104	101	75-125	3	20	
Lead	mg/L	0.00017J	0.1	0.1	0.10	0.099	101	99	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.098	99	98	75-125	1	20	
Molybdenum	mg/L	0.0056J	0.1	0.1	0.10	0.10	97	95	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.093	0.095	93	95	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	1	20	

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## **QUALITY CONTROL DATA**

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

QC Batch: 45904 Analysis Method: EPA 6020B

QC Batch Method: EPA 3005A Analysis Description: 6020B METT

Laboratory: Pace Analysis

Associated Lab Samples: 2630818014

METHOD BLANK: 212453

## Matrix: Water

Associated Lab Samples: 2630818014

Parameter	Units	Blank	Reporting	MDL	Analyzed	Qualifiers
		Result	Limit			
Antimony	mg/L	0.00034J	0.0030	0.00027	04/29/20 17:04	
Arsenic	mg/L	0.0012J	0.0050	0.00035	04/29/20 17:04	
Barium	mg/L	ND	0.010	0.00049	04/29/20 17:04	
Beryllium	mg/L	ND	0.0030	0.000074	04/29/20 17:04	
Boron	mg/L	ND	0.10	0.0049	04/29/20 17:04	
Cadmium	mg/L	ND	0.0025	0.00011	04/29/20 17:04	
Chromium	mg/L	ND	0.010	0.00039	04/29/20 17:04	
Cobalt	mg/L	ND	0.0050	0.00030	04/29/20 17:04	
Lead	mg/L	ND	0.0050	0.000046	04/29/20 17:04	
Lithium	mg/L	ND	0.030	0.00078	04/29/20 17:04	
Molybdenum	mg/L	ND	0.010	0.00095	04/29/20 17:04	
Selenium	mg/L	ND	0.010	0.0013	04/29/20 17:04	
Thallium	mg/L	ND	0.0010	0.000052	04/29/20 17:04	
Vanadium	mg/L	0.0054J	0.010	0.00071	04/29/20 17:04	

LABORATORY CONTROL SAMPLE: 212454

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.099	99	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Boron	mg/L	1	1.0	102	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.11	109	80-120	

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

Parameter	Units	212455		212456		% Rec	Limits	RPD	Max				
		MS		MSD									
		2630818014	Spike Conc.	Spike Conc.	MS Result								
Antimony	mg/L	0.00066J	0.1	0.1	0.098	0.099	98	98	75-125	0	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Barium	mg/L	0.14	0.1	0.1	0.23	0.23	94	94	75-125	0	20		
Beryllium	mg/L	ND	0.1	0.1	0.094	0.096	94	96	75-125	2	20		
Boron	mg/L	0.67	1	1	1.7	1.8	106	113	75-125	4	20		
Cadmium	mg/L	0.00051J	0.1	0.1	0.097	0.099	97	98	75-125	2	20		
Chromium	mg/L	0.00094J	0.1	0.1	0.10	0.10	99	99	75-125	1	20		
Cobalt	mg/L	ND	0.1	0.1	0.099	0.096	98	96	75-125	3	20		
Lead	mg/L	0.00036J	0.1	0.1	0.098	0.10	97	99	75-125	2	20		
Lithium	mg/L	ND	0.1	0.1	0.096	0.099	95	98	75-125	3	20		
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	3	20		
Selenium	mg/L	0.0021J	0.1	0.1	0.10	0.10	99	100	75-125	1	20		
Thallium	mg/L	0.00019J	0.1	0.1	0.096	0.099	96	99	75-125	3	20		
Vanadium	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20		

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

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QC Batch:	45370	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Atlanta, GA
Associated Lab Samples:	2630818001, 2630818002, 2630818003, 2630818004, 2630818005, 2630818006, 2630818007, 2630818009, 2630818010, 2630818011, 2630818012, 2630818013, 2630818014, 2630818015, 2630818016		

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LABORATORY CONTROL SAMPLE: 209272

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	365	91	84-108	

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SAMPLE DUPLICATE: 209273

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	92471969033	2520	2610	4	10

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SAMPLE DUPLICATE: 209274

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2630818007	428	810	62	10 D6

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

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QC Batch:	45512	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630818017, 2630818018, 2630818019, 2630818020, 2630818021, 2630818022, 2630818023, 2630818024

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LABORATORY CONTROL SAMPLE: 209985

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	379	95	84-108	

SAMPLE DUPLICATE: 209986

Parameter	Units	2630821024 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	223	244	9	10	

SAMPLE DUPLICATE: 209987

Parameter	Units	92473254002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	17.0	18.0	6	10	

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

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QC Batch:	45964	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Atlanta, GA

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Associated Lab Samples: 2630818008

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LABORATORY CONTROL SAMPLE: 212751

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	407	102	84-108	

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

QC Batch: 535486 Analysis Method: EPA 300.0 Rev 2.1 1993

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 2630818001, 2630818002, 2630818003, 2630818004, 2630818005, 2630818006, 2630818007, 2630818008, 2630818009, 2630818010, 2630818011, 2630818012, 2630818013, 2630818014, 2630818015, 2630818016

METHOD BLANK: 2857317

Matrix: Water

Associated Lab Samples: 2630818001, 2630818002, 2630818003, 2630818004, 2630818005, 2630818006, 2630818007, 2630818008, 2630818009, 2630818010, 2630818011, 2630818012, 2630818013, 2630818014, 2630818015, 2630818016

Parameter	Units	Blank	Reporting	MDL	Analyzed	Qualifiers
		Result	Limit			
Chloride	mg/L	ND	1.0	0.60	04/10/20 04:32	
Fluoride	mg/L	ND	0.10	0.050	04/10/20 04:32	
Sulfate	mg/L	ND	1.0	0.50	04/10/20 04:32	

LABORATORY CONTROL SAMPLE: 2857318

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Chloride	mg/L	50	49.7	99	90-110	
Fluoride	mg/L	2.5	2.7	109	90-110	
Sulfate	mg/L	50	50.5	101	90-110	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2857319 2857320

Parameter	Units	MS		MSD		MS	MSD	% Rec	% Rec	RPD	RPD	Max
		92472966003	Result	Spike	Conc.	MS	Result	% Rec	MS	MSD	Limits	RPD
Chloride	mg/L	12.4	50	50	63.8	64.0	103	103	103	90-110	0	10
Fluoride	mg/L	ND	2.5	2.5	2.7	2.8	106	106	109	90-110	3	10
Sulfate	mg/L	6.1	50	50	58.4	58.7	105	105	105	90-110	1	10

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2857321 2857322

Parameter	Units	MS		MSD		MS	MSD	% Rec	% Rec	RPD	RPD	Max
		2630818010	Result	Spike	Conc.	MS	Result	% Rec	MS	MSD	Limits	RPD
Chloride	mg/L	7.8	50	50	58.1	58.9	101	101	102	90-110	1	10
Fluoride	mg/L	ND	2.5	2.5	3.4	3.4	135	135	135	90-110	0	10 M1
Sulfate	mg/L	82.4	50	50	120	121	76	77	77	90-110	0	10 M1

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630818

QC Batch: 535954 Analysis Method: EPA 300.0 Rev 2.1 1993

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 2630818017, 2630818018, 2630818019, 2630818020, 2630818021, 2630818022, 2630818023, 2630818024

METHOD BLANK: 2859458 Matrix: Water

Associated Lab Samples: 2630818017, 2630818018, 2630818019, 2630818020, 2630818021, 2630818022, 2630818023, 2630818024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	04/14/20 12:42	
Fluoride	mg/L	ND	0.10	0.050	04/14/20 12:42	
Sulfate	mg/L	ND	1.0	0.50	04/14/20 12:42	

LABORATORY CONTROL SAMPLE: 2859459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.5	97	90-110	
Fluoride	mg/L	2.5	2.7	106	90-110	
Sulfate	mg/L	50	49.2	98	90-110	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2859460 2859461

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	RPD	RPD	Max Qual
		2630873001	Spike Conc.	Spike Conc.	Result	Result	% Rec	Limits				
Chloride	mg/L	123	50	50	143	170	39	93	90-110	17	10	M1,R1
Fluoride	mg/L	0.64	2.5	2.5	3.2	3.2	101	103	90-110	2	10	
Sulfate	mg/L	96.8	50	50	120	144	47	93	90-110	18	10	M1,R1

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2859462 2859463

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	RPD	RPD	Max Qual
		2630818022	Spike Conc.	Spike Conc.	Result	Result	% Rec	Limits				
Chloride	mg/L	ND	50	50	51.2	51.9	102	104	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.9	2.9	116	115	90-110	1	10	M1
Sulfate	mg/L	ND	50	50	51.5	52.2	103	104	90-110	1	10	

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## QUALIFIERS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

H1 Analysis conducted outside the EPA method holding time.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

R1 RPD value was outside control limits.

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2630818001	GWB-4R				
2630818002	GWC-1				
2630818003	GWB-5R				
2630818004	GWB-6R				
2630818005	GWC-16				
2630818006	GWC-21				
2630818007	GWC-15				
2630818008	GWC-14				
2630818011	GWA-8				
2630818012	GWA-7				
2630818013	GWC-12				
2630818014	GWC-11				
2630818015	GWC-22				
2630818017	GWC-13				
2630818018	GWC-2				
2630818019	GWC-9				
2630818020	GWC-20				
2630818021	GWC-17				
2630818001	GWB-4R	EPA 3010A	45592	EPA 6010D	45599
2630818002	GWC-1	EPA 3010A	45592	EPA 6010D	45599
2630818003	GWB-5R	EPA 3010A	45592	EPA 6010D	45599
2630818004	GWB-6R	EPA 3010A	45592	EPA 6010D	45599
2630818005	GWC-16	EPA 3010A	45592	EPA 6010D	45599
2630818006	GWC-21	EPA 3010A	45592	EPA 6010D	45599
2630818007	GWC-15	EPA 3010A	45592	EPA 6010D	45599
2630818008	GWC-14	EPA 3010A	45592	EPA 6010D	45599
2630818009	FB-1-4-6-20	EPA 3010A	45592	EPA 6010D	45599
2630818010	DUP-1	EPA 3010A	45592	EPA 6010D	45599
2630818011	GWA-8	EPA 3010A	45592	EPA 6010D	45599
2630818012	GWA-7	EPA 3010A	45592	EPA 6010D	45599
2630818013	GWC-12	EPA 3010A	45592	EPA 6010D	45599
2630818014	GWC-11	EPA 3010A	45592	EPA 6010D	45599
2630818015	GWC-22	EPA 3010A	45628	EPA 6010D	45630
2630818016	EB-1-4-7-2020	EPA 3010A	45592	EPA 6010D	45599
2630818017	GWC-13	EPA 3010A	45533	EPA 6010D	45546
2630818018	GWC-2	EPA 3010A	45533	EPA 6010D	45546
2630818019	GWC-9	EPA 3010A	45533	EPA 6010D	45546
2630818020	GWC-20	EPA 3010A	45905	EPA 6010D	45910
2630818021	GWC-17	EPA 3010A	45533	EPA 6010D	45546
2630818022	EB-2-4-7-20	EPA 3010A	45533	EPA 6010D	45546
2630818023	FB-2-4-7-20	EPA 3010A	45533	EPA 6010D	45546
2630818024	DUP-2	EPA 3010A	45533	EPA 6010D	45546
2630818001	GWB-4R	EPA 3005A	45464	EPA 6020B	45489
2630818002	GWC-1	EPA 3005A	45464	EPA 6020B	45489
2630818003	GWB-5R	EPA 3005A	45464	EPA 6020B	45489

**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2630818004	GWB-6R	EPA 3005A	45464	EPA 6020B	45489
2630818005	GWC-16	EPA 3005A	45464	EPA 6020B	45489
2630818006	GWC-21	EPA 3005A	45464	EPA 6020B	45489
2630818007	GWC-15	EPA 3005A	45464	EPA 6020B	45489
2630818008	GWC-14	EPA 3005A	45464	EPA 6020B	45489
2630818009	FB-1-4-6-20	EPA 3005A	45464	EPA 6020B	45489
2630818010	DUP-1	EPA 3005A	45464	EPA 6020B	45489
2630818011	GWA-8	EPA 3005A	45464	EPA 6020B	45489
2630818012	GWA-7	EPA 3005A	45464	EPA 6020B	45489
2630818013	GWC-12	EPA 3005A	45464	EPA 6020B	45489
2630818014	GWC-11	EPA 3005A	45904	EPA 6020B	45908
2630818015	GWC-22	EPA 3005A	45464	EPA 6020B	45489
2630818016	EB-1-4-7-2020	EPA 3005A	45464	EPA 6020B	45489
2630818017	GWC-13	EPA 3005A	45531	EPA 6020B	45544
2630818018	GWC-2	EPA 3005A	45531	EPA 6020B	45544
2630818019	GWC-9	EPA 3005A	45531	EPA 6020B	45544
2630818020	GWC-20	EPA 3005A	45531	EPA 6020B	45544
2630818021	GWC-17	EPA 3005A	45531	EPA 6020B	45544
2630818022	EB-2-4-7-20	EPA 3005A	45531	EPA 6020B	45544
2630818023	FB-2-4-7-20	EPA 3005A	45531	EPA 6020B	45544
2630818024	DUP-2	EPA 3005A	45531	EPA 6020B	45544
2630818001	GWB-4R	SM 2540C	45370		
2630818002	GWC-1	SM 2540C	45370		
2630818003	GWB-5R	SM 2540C	45370		
2630818004	GWB-6R	SM 2540C	45370		
2630818005	GWC-16	SM 2540C	45370		
2630818006	GWC-21	SM 2540C	45370		
2630818007	GWC-15	SM 2540C	45370		
2630818008	GWC-14	SM 2540C	45964		
2630818009	FB-1-4-6-20	SM 2540C	45370		
2630818010	DUP-1	SM 2540C	45370		
2630818011	GWA-8	SM 2540C	45370		
2630818012	GWA-7	SM 2540C	45370		
2630818013	GWC-12	SM 2540C	45370		
2630818014	GWC-11	SM 2540C	45370		
2630818015	GWC-22	SM 2540C	45370		
2630818016	EB-1-4-7-2020	SM 2540C	45370		
2630818017	GWC-13	SM 2540C	45512		
2630818018	GWC-2	SM 2540C	45512		
2630818019	GWC-9	SM 2540C	45512		
2630818020	GWC-20	SM 2540C	45512		
2630818021	GWC-17	SM 2540C	45512		
2630818022	EB-2-4-7-20	SM 2540C	45512		
2630818023	FB-2-4-7-20	SM 2540C	45512		
2630818024	DUP-2	SM 2540C	45512		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630818

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2630818001	GWB-4R	EPA 300.0 Rev 2.1 1993	535486		
2630818002	GWC-1	EPA 300.0 Rev 2.1 1993	535486		
2630818003	GWB-5R	EPA 300.0 Rev 2.1 1993	535486		
2630818004	GWB-6R	EPA 300.0 Rev 2.1 1993	535486		
2630818005	GWC-16	EPA 300.0 Rev 2.1 1993	535486		
2630818006	GWC-21	EPA 300.0 Rev 2.1 1993	535486		
2630818007	GWC-15	EPA 300.0 Rev 2.1 1993	535486		
2630818008	GWC-14	EPA 300.0 Rev 2.1 1993	535486		
2630818009	FB-1-4-6-20	EPA 300.0 Rev 2.1 1993	535486		
2630818010	DUP-1	EPA 300.0 Rev 2.1 1993	535486		
2630818011	GWA-8	EPA 300.0 Rev 2.1 1993	535486		
2630818012	GWA-7	EPA 300.0 Rev 2.1 1993	535486		
2630818013	GWC-12	EPA 300.0 Rev 2.1 1993	535486		
2630818014	GWC-11	EPA 300.0 Rev 2.1 1993	535486		
2630818015	GWC-22	EPA 300.0 Rev 2.1 1993	535486		
2630818016	EB-1-4-7-2020	EPA 300.0 Rev 2.1 1993	535486		
2630818017	GWC-13	EPA 300.0 Rev 2.1 1993	535954		
2630818018	GWC-2	EPA 300.0 Rev 2.1 1993	535954		
2630818019	GWC-9	EPA 300.0 Rev 2.1 1993	535954		
2630818020	GWC-20	EPA 300.0 Rev 2.1 1993	535954		
2630818021	GWC-17	EPA 300.0 Rev 2.1 1993	535954		
2630818022	EB-2-4-7-20	EPA 300.0 Rev 2.1 1993	535954		
2630818023	FB-2-4-7-20	EPA 300.0 Rev 2.1 1993	535954		
2630818024	DUP-2	EPA 300.0 Rev 2.1 1993	535954		

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**CHAN-OF-CUSTODY / Analytical Request Document**

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a **LEGAL DOCUMENT**. All relevant fields must be completed accurately.

Section A Required Client Information		Section B Required Project Information		Section C Investigation Information	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	ACC Contacts	Company Name:	
Email To:	SCS Contacts	Purchase Order No.:		Address:	
Phone:	FAX	Project Name:	Grumman Road - 1st 2020 SA GYM	Pace Crew:	
Requested Due Date/TAT:	48 Day	Project Number:		Reference:	
		Pace Project #:	2026-1	Pace Project Manager:	Kevin Henning
		Pace Phone #:	2026-1	Site Location:	GA
				STATE:	GA
				Requested Analysis/Filtration (Y/N)	
Section D Required Client Information		SAMPLE ID (A-Z 0-9 / -) Sample IDs MUST BE UNIQUE		Valid Matrix Codes CODE	
MATRIX	DRINKING WATER	WATER	WASTE WATER	WATER	WATER
PRODUCT	0	1	2	3	4
SCALAR/SCALAR	SL	CL	WP	AR	OT
Oil					
Water					
Other					
ASR					
Tissue					
		MATRIX CODE (see valid codes to left)		COLLECTED	
		SAMPLE TYPE (G=GRAB C=C-OFFP)		Preservatives	
		DATE	TIME	DATE	TIME
		COPROTE		COPROTE	
SAMPLE TEMP AT COLLECTION					
# OF CONTAINERS					
Preservatives					
V/N					
Unpreserved					
$H_2SO_4$					
$HNO_3$					
HCl					
NaOH					
$Na_2S_2O_3$					
Methanol					
Other					
Analysis Test					
TDS					
Chloride/Fluoride/Sulfate 300.0					
App. II+IV+State Metals 6010/6020					
RAD 226/228					
Residual Chlorine (Y/N)					
Pace Project No./Lab ID. <i>2678618</i>					
SAMPLE CONDITIONS		ACCEPTED BY / AFFILIATION	DATE	TIME	
PRINT NAME OF SAMPLER: <i>Jesse Substitution</i>		REPRODUCED BY / AFFILIATION	DATE <i>4-12-20</i>	TIME <i>0830</i>	
SIGNATURE OF SAMPLER: <i>Jesse Substitution</i>					
Temp in °C					
Received on Ice (Y/N)					
Custody Sealed Cooler (Y/N)					
Samples Intact (Y/N)					

# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

**Section A**  
 Required Client Information:

**Company:** GA Power  
**Address:** Atlanta, GA  
**Email To:** SCS Contacts  
**Phone:** Fax  
**Requested Due Date/AT:** 10 Day

**Section B**  
 Required Project Information:  
**Report To:** SCS Contacts  
**Copy To:** ACC Contacts  
**Purchase Order No.:**  
**Project Name:** Grumman Road - 1st 2020 SA GWM  
**Project Number:**
**Section C**  
 Invoice Information:  
**Attention:** Southern Co.  
**Company Name:**  
**Address:**  
**Phone/Quote:**  
**Project Manager:** Kevin Hennig  
**Pace Profile #:** 2026-1

 Page: **3** of **3**
**REGULATORY AGENCY**  
 NIDES     GROUND WATER     DRINKING WATER  
 UST     RCRA     OTHER CCR—

**SITE LOCATION**  
**STATE:** GA

**REQUESTED ANALYSIS Filtered (Y/N)**  
 Residual Chlorine (Y/N)  
 Pace Project No./Lab ID. **2630616**
**SECTION D**  
 Required Client Information  
**Valid Matrix Codes**  
**MATRIX CODE**  
 DRINKING WATER DW  
 WATER WWT  
 WASTE WASTE WW  
 PRODUCT PW  
 SOLVED SL  
 OIL OIL  
 AIR AIR  
 OTHER OT  
 TISSUE TISSUE

**Purchase Order No.:**  
**Project Name:** Grumman Road - 1st 2020 SA GWM  
**Project Number:**
**Phone/Quote:**  
**Project Manager:** Kevin Hennig  
**Pace Profile #:** 2026-1

**SAMPLE ID**  
 (A-Z, 0-9)  
 Sample IDs MUST BE UNIQUE

ITEM #	DATE	TIME	DATE	TIME	COLLECTED	Preservatives	SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	Analysis Test	Y/N
							Composite	Composite			
1	1/1/20	09:53	1/1/20	09:53	9					TDS	X
2	1/1/20	09:53	1/1/20	09:53	9					Chloride/Fluoride/Sulfate 300.0	X
3	1/1/20	09:53	1/1/20	09:53	9					App. III+IV+State Metals 6010/6022	X
4	1/1/20	09:53	1/1/20	09:53	9					RAD 228/228	X
5	1/1/20	09:53	1/1/20	09:53	9						
6	1/1/20	09:53	1/1/20	09:53	9						
7	1/1/20	09:53	1/1/20	09:53	9						
8	1/1/20	09:53	1/1/20	09:53	9						
9	1/1/20	09:53	1/1/20	09:53	9						
10	1/1/20	09:53	1/1/20	09:53	9						
11	1/1/20	09:53	1/1/20	09:53	9						
12	1/1/20	09:53	1/1/20	09:53	9						

**ADDITIONAL COMMENTS**  
 Please note when the test sample for the event has been taken.

REINFORCED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	
						Temp in °C	Sample In tact (Y/N)
All Samples Collected	Jan 1, 2020	09:21	John Schmitz	Jan 1, 2020	09:51	41	Y
*Meth-S, Ca, SiO <sub>2</sub> , Ba, Be, Cd, Cr, Cu, Pb, Li, Sn, Mo, Ti, V, Zn							

<b>SAMPLER NAME AND SIGNATURE</b>	
PRINT Name of SAMPLER: <i>John Schmitz</i>	DATE Signed: 1/9/20
SIGNATURE of SAMPLER: <i>John Schmitz</i>	INSTRUMENT: 4/9/20

April 17, 2020

Joju Abraham  
Georgia Power - Coal Combustion Residuals  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630820

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on April 08, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Atlanta, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring  
kevin.herring@pacelabs.com  
(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Owens Fuquea, ACC  
Monte Jones, ACC  
Kristen Jurinko  
Matt Malone, Atlantic Coast Consulting  
Betsy McDaniel, Atlantic Coast Consulting  
Evan Perry, Atlantic Coast Consulting  
Lauren Petty, Southern Company Services, Inc.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630820

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### **Pace Analytical Services Atlanta**

110 Technology Parkway Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812  
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001  
Virginia Certification #: 460204

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## SAMPLE SUMMARY

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630820

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2630820001	GWA-7 FILTERED	Water	04/06/20 16:10	04/08/20 13:10
2630820002	GWB-5R FILTERED	Water	04/07/20 15:35	04/08/20 13:10
2630820003	GWB-6R FILTERED	Water	04/07/20 16:58	04/08/20 13:10

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## SAMPLE ANALYTE COUNT

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
 Pace Project No.: 2630820

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2630820001	<b>GWA-7 FILTERED</b>	EPA 6010D	DRB	2
		EPA 6020B	CSW	14
2630820002	<b>GWB-5R FILTERED</b>	EPA 6010D	DRB	2
		EPA 6020B	CSW	14
2630820003	<b>GWB-6R FILTERED</b>	EPA 6010D	DRB	2
		EPA 6020B	CSW	14

PASI-GA = Pace Analytical Services - Atlanta, GA

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630820

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>2630820001</b>						
	<b>GWA-7 FILTERED</b>					
EPA 6010D	Field pH	6.02	Std. Units	04/13/20 10:21		
EPA 6020B	Calcium, Dissolved	3.2	mg/L	1.0	04/14/20 19:35	
EPA 6020B	Barium, Dissolved	0.069	mg/L	0.050	04/13/20 20:14	
EPA 6020B	Boron, Dissolved	6.6	mg/L	0.50	04/13/20 20:14	M1
EPA 6020B	Chromium, Dissolved	0.012J	mg/L	0.050	04/13/20 20:14	D3
EPA 6020B	Cobalt, Dissolved	0.0018J	mg/L	0.025	04/13/20 20:14	D3
EPA 6020B	Vanadium, Dissolved	0.12	mg/L	0.050	04/13/20 20:14	
<b>2630820002</b>						
	<b>GWB-5R FILTERED</b>					
EPA 6010D	Field pH	5.45	Std. Units	04/13/20 10:21		
EPA 6020B	Calcium, Dissolved	32.2	mg/L	1.0	04/14/20 19:56	
EPA 6020B	Antimony, Dissolved	0.00036J	mg/L	0.0030	04/13/20 20:37	
EPA 6020B	Arsenic, Dissolved	0.0011J	mg/L	0.0050	04/13/20 20:37	
EPA 6020B	Barium, Dissolved	0.089	mg/L	0.010	04/13/20 20:37	
EPA 6020B	Boron, Dissolved	4.7	mg/L	0.10	04/13/20 20:37	
EPA 6020B	Chromium, Dissolved	0.0015J	mg/L	0.010	04/13/20 20:37	
EPA 6020B	Cobalt, Dissolved	0.00047J	mg/L	0.0050	04/13/20 20:37	
EPA 6020B	Lead, Dissolved	0.000081J	mg/L	0.0050	04/13/20 20:37	
EPA 6020B	Vanadium, Dissolved	0.0043J	mg/L	0.010	04/13/20 20:37	
<b>2630820003</b>						
	<b>GWB-6R FILTERED</b>					
EPA 6010D	Field pH	5.80	Std. Units	04/13/20 10:21		
EPA 6020B	Calcium, Dissolved	7.3	mg/L	1.0	04/14/20 19:59	
EPA 6020B	Arsenic, Dissolved	0.0026J	mg/L	0.025	04/13/20 20:42	D3
EPA 6020B	Barium, Dissolved	0.0082J	mg/L	0.050	04/13/20 20:42	D3
EPA 6020B	Boron, Dissolved	5.6	mg/L	0.50	04/13/20 20:42	
EPA 6020B	Chromium, Dissolved	0.0078J	mg/L	0.050	04/13/20 20:42	D3
EPA 6020B	Vanadium, Dissolved	0.041J	mg/L	0.050	04/13/20 20:42	D3

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630820

Sample: GWA-7 FILTERED		Lab ID: 2630820001		Collected: 04/06/20 16:10		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	6.02	Std. Units			1			04/13/20 10:21	
<b>6010D MET ICP Dissolved</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium, Dissolved	3.2	mg/L	1.0	0.14	1	04/13/20 19:00	04/14/20 19:35	7440-70-2	
Zinc, Dissolved	ND	mg/L	0.020	0.018	1	04/13/20 19:00	04/14/20 19:35	7440-66-6	
<b>6020B MET ICPMS, Dissolved</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony, Dissolved	ND	mg/L	0.015	0.0014	5	04/13/20 13:00	04/13/20 20:14	7440-36-0	D3
Arsenic, Dissolved	ND	mg/L	0.025	0.0018	5	04/13/20 13:00	04/13/20 20:14	7440-38-2	D3
Barium, Dissolved	0.069	mg/L	0.050	0.0024	5	04/13/20 13:00	04/13/20 20:14	7440-39-3	
Beryllium, Dissolved	ND	mg/L	0.015	0.00037	5	04/13/20 13:00	04/13/20 20:14	7440-41-7	D3
Boron, Dissolved	6.6	mg/L	0.50	0.025	5	04/13/20 13:00	04/13/20 20:14	7440-42-8	M1
Cadmium, Dissolved	ND	mg/L	0.012	0.00057	5	04/13/20 13:00	04/13/20 20:14	7440-43-9	D3
Chromium, Dissolved	0.012J	mg/L	0.050	0.0020	5	04/13/20 13:00	04/13/20 20:14	7440-47-3	D3
Cobalt, Dissolved	0.0018J	mg/L	0.025	0.0015	5	04/13/20 13:00	04/13/20 20:14	7440-48-4	D3
Lead, Dissolved	ND	mg/L	0.025	0.00023	5	04/13/20 13:00	04/13/20 20:14	7439-92-1	D3
Lithium, Dissolved	ND	mg/L	0.15	0.0039	5	04/13/20 13:00	04/13/20 20:14	7439-93-2	D3
Molybdenum, Dissolved	ND	mg/L	0.050	0.0047	5	04/13/20 13:00	04/13/20 20:14	7439-98-7	D3
Selenium, Dissolved	ND	mg/L	0.050	0.0063	5	04/13/20 13:00	04/13/20 20:14	7782-49-2	D3
Thallium, Dissolved	ND	mg/L	0.0050	0.00026	5	04/13/20 13:00	04/13/20 20:14	7440-28-0	D3
Vanadium, Dissolved	0.12	mg/L	0.050	0.0035	5	04/13/20 13:00	04/13/20 20:14	7440-62-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630820

Sample: GWB-5R FILTERED		Lab ID: 2630820002		Collected: 04/07/20 15:35		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	5.45	Std. Units			1			04/13/20 10:21	
<b>6010D MET ICP Dissolved</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium, Dissolved	32.2	mg/L	1.0	0.14	1	04/13/20 19:00	04/14/20 19:56	7440-70-2	
Zinc, Dissolved	ND	mg/L	0.020	0.018	1	04/13/20 19:00	04/14/20 19:56	7440-66-6	
<b>6020B MET ICPMS, Dissolved</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony, Dissolved	0.00036J	mg/L	0.0030	0.00027	1	04/13/20 13:00	04/13/20 20:37	7440-36-0	
Arsenic, Dissolved	0.0011J	mg/L	0.0050	0.00035	1	04/13/20 13:00	04/13/20 20:37	7440-38-2	
Barium, Dissolved	0.089	mg/L	0.010	0.00049	1	04/13/20 13:00	04/13/20 20:37	7440-39-3	
Beryllium, Dissolved	ND	mg/L	0.0030	0.000074	1	04/13/20 13:00	04/13/20 20:37	7440-41-7	
Boron, Dissolved	4.7	mg/L	0.10	0.0049	1	04/13/20 13:00	04/13/20 20:37	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.0025	0.00011	1	04/13/20 13:00	04/13/20 20:37	7440-43-9	
Chromium, Dissolved	0.0015J	mg/L	0.010	0.00039	1	04/13/20 13:00	04/13/20 20:37	7440-47-3	
Cobalt, Dissolved	0.00047J	mg/L	0.0050	0.00030	1	04/13/20 13:00	04/13/20 20:37	7440-48-4	
Lead, Dissolved	0.000081J	mg/L	0.0050	0.000046	1	04/13/20 13:00	04/13/20 20:37	7439-92-1	
Lithium, Dissolved	ND	mg/L	0.030	0.00078	1	04/13/20 13:00	04/13/20 20:37	7439-93-2	
Molybdenum, Dissolved	ND	mg/L	0.010	0.00095	1	04/13/20 13:00	04/13/20 20:37	7439-98-7	
Selenium, Dissolved	ND	mg/L	0.010	0.0013	1	04/13/20 13:00	04/13/20 20:37	7782-49-2	
Thallium, Dissolved	ND	mg/L	0.0010	0.000052	1	04/13/20 13:00	04/13/20 20:37	7440-28-0	
Vanadium, Dissolved	0.0043J	mg/L	0.010	0.00071	1	04/13/20 13:00	04/13/20 20:37	7440-62-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630820

Sample: GWB-6R FILTERED		Lab ID: 2630820003		Collected: 04/07/20 16:58		Received: 04/08/20 13:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	5.80	Std. Units			1			04/13/20 10:21	
<b>6010D MET ICP Dissolved</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium, Dissolved	7.3	mg/L	1.0	0.14	1	04/13/20 19:00	04/14/20 19:59	7440-70-2	
Zinc, Dissolved	ND	mg/L	0.020	0.018	1	04/13/20 19:00	04/14/20 19:59	7440-66-6	
<b>6020B MET ICPMS, Dissolved</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony, Dissolved	ND	mg/L	0.015	0.0014	5	04/13/20 13:00	04/13/20 20:42	7440-36-0	D3
Arsenic, Dissolved	<b>0.0026J</b>	mg/L	0.025	0.0018	5	04/13/20 13:00	04/13/20 20:42	7440-38-2	D3
Barium, Dissolved	<b>0.0082J</b>	mg/L	0.050	0.0024	5	04/13/20 13:00	04/13/20 20:42	7440-39-3	D3
Beryllium, Dissolved	ND	mg/L	0.015	0.00037	5	04/13/20 13:00	04/13/20 20:42	7440-41-7	D3
Boron, Dissolved	5.6	mg/L	0.50	0.025	5	04/13/20 13:00	04/13/20 20:42	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.012	0.00057	5	04/13/20 13:00	04/13/20 20:42	7440-43-9	D3
Chromium, Dissolved	<b>0.0078J</b>	mg/L	0.050	0.0020	5	04/13/20 13:00	04/13/20 20:42	7440-47-3	D3
Cobalt, Dissolved	ND	mg/L	0.025	0.0015	5	04/13/20 13:00	04/13/20 20:42	7440-48-4	D3
Lead, Dissolved	ND	mg/L	0.025	0.00023	5	04/13/20 13:00	04/13/20 20:42	7439-92-1	D3
Lithium, Dissolved	ND	mg/L	0.15	0.0039	5	04/13/20 13:00	04/13/20 20:42	7439-93-2	D3
Molybdenum, Dissolved	ND	mg/L	0.050	0.0047	5	04/13/20 13:00	04/13/20 20:42	7439-98-7	D3
Selenium, Dissolved	ND	mg/L	0.050	0.0063	5	04/13/20 13:00	04/13/20 20:42	7782-49-2	D3
Thallium, Dissolved	ND	mg/L	0.0050	0.00026	5	04/13/20 13:00	04/13/20 20:42	7440-28-0	D3
Vanadium, Dissolved	<b>0.041J</b>	mg/L	0.050	0.0035	5	04/13/20 13:00	04/13/20 20:42	7440-62-2	D3

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630820

QC Batch:	45501	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D MET Dissolved
		Laboratory:	Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630820001, 2630820002, 2630820003			

METHOD BLANK: 209960 Matrix: Water

Associated Lab Samples: 2630820001, 2630820002, 2630820003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	ND	1.0	0.14	04/14/20 19:27	
Zinc, Dissolved	mg/L	ND	0.020	0.018	04/14/20 19:27	

LABORATORY CONTROL SAMPLE: 209961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	1	1.0	102	80-120	
Zinc, Dissolved	mg/L	1	0.95	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 209962 209963

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	RPD	Max RPD	Qual
		2630820001 Result	Spike Conc.									
Calcium, Dissolved	mg/L	3.2	1	1	4.3	4.2	104	95	75-125	2	20	
Zinc, Dissolved	mg/L	ND	1	1	0.99	1.0	99	101	75-125	2	20	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630820

QC Batch:	45470	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020B MET Dissolved
		Laboratory:	Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630820001, 2630820002, 2630820003

METHOD BLANK: 209873   Matrix: Water

Associated Lab Samples: 2630820001, 2630820002, 2630820003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony, Dissolved	mg/L	ND	0.0030	0.00027	04/13/20 20:02	
Arsenic, Dissolved	mg/L	ND	0.0050	0.00035	04/13/20 20:02	
Barium, Dissolved	mg/L	ND	0.010	0.00049	04/13/20 20:02	
Beryllium, Dissolved	mg/L	ND	0.0030	0.000074	04/13/20 20:02	
Boron, Dissolved	mg/L	ND	0.10	0.0049	04/13/20 20:02	
Cadmium, Dissolved	mg/L	ND	0.0025	0.00011	04/13/20 20:02	
Chromium, Dissolved	mg/L	ND	0.010	0.00039	04/13/20 20:02	
Cobalt, Dissolved	mg/L	ND	0.0050	0.00030	04/13/20 20:02	
Lead, Dissolved	mg/L	ND	0.0050	0.000046	04/13/20 20:02	
Lithium, Dissolved	mg/L	ND	0.030	0.00078	04/13/20 20:02	
Molybdenum, Dissolved	mg/L	ND	0.010	0.00095	04/13/20 20:02	
Selenium, Dissolved	mg/L	ND	0.010	0.0013	04/13/20 20:02	
Thallium, Dissolved	mg/L	ND	0.0010	0.000052	04/13/20 20:02	
Vanadium, Dissolved	mg/L	ND	0.010	0.00071	04/13/20 20:02	

LABORATORY CONTROL SAMPLE: 209874

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	mg/L	0.1	0.12	116	80-120	
Arsenic, Dissolved	mg/L	0.1	0.11	106	80-120	
Barium, Dissolved	mg/L	0.1	0.11	107	80-120	
Beryllium, Dissolved	mg/L	0.1	0.11	110	80-120	
Boron, Dissolved	mg/L	1	1.1	108	80-120	
Cadmium, Dissolved	mg/L	0.1	0.11	107	80-120	
Chromium, Dissolved	mg/L	0.1	0.10	105	80-120	
Cobalt, Dissolved	mg/L	0.1	0.10	102	80-120	
Lead, Dissolved	mg/L	0.1	0.11	106	80-120	
Lithium, Dissolved	mg/L	0.1	0.11	109	80-120	
Molybdenum, Dissolved	mg/L	0.1	0.10	104	80-120	
Selenium, Dissolved	mg/L	0.1	0.11	107	80-120	
Thallium, Dissolved	mg/L	0.1	0.10	104	80-120	
Vanadium, Dissolved	mg/L	0.1	0.10	103	80-120	

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## QUALITY CONTROL DATA

Project: GRUMMAN ROAD 1ST 2020 SA GWM

Pace Project No.: 2630820

Parameter	Units	209875		209876		% Rec	Limits	RPD	RPD	Max Qual					
		MS		MSD											
		2630820001	Spike Conc.	Spike Conc.	MS Result										
Antimony, Dissolved	mg/L	ND	0.1	0.1	0.11	0.11	111	110	75-125	1 20					
Arsenic, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	101	105	75-125	3 20					
Barium, Dissolved	mg/L	0.069	0.1	0.1	0.17	0.17	102	104	75-125	1 20					
Beryllium, Dissolved	mg/L	ND	0.1	0.1	0.10	0.11	101	106	75-125	4 20					
Boron, Dissolved	mg/L	6.6	1	1	7.7	8.1	105	150	75-125	6 20 M1					
Cadmium, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1 20					
Chromium, Dissolved	mg/L	0.012J	0.1	0.1	0.11	0.11	101	102	75-125	1 20					
Cobalt, Dissolved	mg/L	0.0018J	0.1	0.1	0.10	0.10	100	101	75-125	1 20					
Lead, Dissolved	mg/L	ND	0.1	0.1	0.096	0.099	96	99	75-125	3 20					
Lithium, Dissolved	mg/L	ND	0.1	0.1	0.10J	0.11J	101	105	75-125	20					
Molybdenum, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0 20					
Selenium, Dissolved	mg/L	ND	0.1	0.1	0.10	0.11	96	100	75-125	4 20					
Thallium, Dissolved	mg/L	ND	0.1	0.1	0.096	0.098	96	98	75-125	2 20					
Vanadium, Dissolved	mg/L	0.12	0.1	0.1	0.22	0.22	103	107	75-125	2 20					

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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## QUALIFIERS

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630820

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

D3        Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

M1        Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GRUMMAN ROAD 1ST 2020 SA GWM  
Pace Project No.: 2630820

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2630820001	GWA-7 FILTERED				
2630820002	GWB-5R FILTERED				
2630820003	GWB-6R FILTERED				
2630820001	GWA-7 FILTERED	EPA 3010A	45501	EPA 6010D	45521
2630820002	GWB-5R FILTERED	EPA 3010A	45501	EPA 6010D	45521
2630820003	GWB-6R FILTERED	EPA 3010A	45501	EPA 6010D	45521
2630820001	GWA-7 FILTERED	EPA 3005A	45470	EPA 6020B	45488
2630820002	GWB-5R FILTERED	EPA 3005A	45470	EPA 6020B	45488
2630820003	GWB-6R FILTERED	EPA 3005A	45470	EPA 6020B	45488

### REPORT OF LABORATORY ANALYSIS

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## **CHAIN-OF-CUSTODY / Analytical Request Document**

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant facts must be contained herein.

मानविकी विद्या के लिए इसका अध्ययन बहुत ज़रूरी है।



**Document Name:  
Bottle Identification Form (BIF)**

Document Issued: March 14, 2019  
Page 1 of 1  
Issuing Authority:  
Pace Carolinas Quality Office

\*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

**Exceptions:** VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LiMg

~~bottom half of box is to list number of bottle~~

**Project #**

Matrix	Item#	Description	Preservative	Conc.	Notes
1	BP45-225 mL Plastic Unpreserved [N/A][Cl-]				
2	BP3U-250 mL Plastic Unpreserved [N/A]				
3	BP2U-500 mL Plastic Unpreserved [N/A]				
4	BP1U-1 liter Plastic Unpreserved [N/A]				
5	BP4S-125 mL Plastic H2SO4 (pH < 2) [Cl-]				
6	BP4M-250 mL Plastic NaOH (pH > 12) [Cl-]				
7	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)				
8	WGFLU-Wide-mouthed Glass jar Unpreserved				
9	AG1U-1 liter Amber HCl (pH < 2)				
10	AG1H-1 liter Amber HCl (pH < 2)				
11	AG3U-250 mL Amber Unpreserved [N/A][Cl-]				
12	AG3L-1 liter Amber H2SO4 (pH < 2)				
13	AG3S-250 mL Amber H2SO4 (pH < 2)				
14	AG3A(DGBA)-250 mL Amber NH4Cl [N/A][Cl-]				
15	DGBA-40 mL VOA HCl [N/A]				
16	VG3T-40 mL VOA NaHSO3 [N/A]				
17	VGAU-40 mL VOA Unp [N/A]				
18	DGBP-40 mL VOA H3PO4 [N/A]				
19	V/GK (6 vials per lot) VPH/gas lit [N/A]				
20	V/GK (3 vials per lot) VPH/gas lit [N/A]				
21	SP5T-125 mL Sterile plastic [N/A - lab]				
22	SP2T-250 mL Sterile Plastic [N/A - lab]				
23	BP3A-250 mL Plastic [NH4]2S2O4 (9.3-9.7)				
24	AGD01-100 mL Amber Unpreserved vials [N/A]				
25	VSGU-20 mL Scintillation vials [N/A]				

## **pH Adjustment Log for Preserved Samples**

pH Adjustment Log for PCB, PCB-1918						
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #
53						

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office.  
Out of hold, incorrect preservative, out of temp, incorrect containers.

May 01, 2020

Mr. Joju Abraham  
Georgia Power  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: 2630818 Grumman Road 1st 2020  
Pace Project No.: 30358463

Dear Mr. Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on April 10, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jacquelyn Collins  
jacquelyn.collins@pacelabs.com  
(724)850-5612  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 2630818 Grumman Road 1st 2020  
 Pace Project No.: 30358463

### Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601  
 ANAB DOD-ELAP Rad Accreditation #: L2417  
 Alabama Certification #: 41590  
 Arizona Certification #: AZ0734  
 Arkansas Certification  
 California Certification #: 04222CA  
 Colorado Certification #: PA01547  
 Connecticut Certification #: PH-0694  
 Delaware Certification  
 EPA Region 4 DW Rad  
 Florida/TNI Certification #: E87683  
 Georgia Certification #: C040  
 Florida: Cert E871149 SEKS WET  
 Guam Certification  
 Hawaii Certification  
 Idaho Certification  
 Illinois Certification  
 Indiana Certification  
 Iowa Certification #: 391  
 Kansas/TNI Certification #: E-10358  
 Kentucky Certification #: KY90133  
 KY WW Permit #: KY0098221  
 KY WW Permit #: KY0000221  
 Louisiana DHH/TNI Certification #: LA180012  
 Louisiana DEQ/TNI Certification #: 4086  
 Maine Certification #: 2017020  
 Maryland Certification #: 308  
 Massachusetts Certification #: M-PA1457  
 Michigan/PADEP Certification #: 9991

Missouri Certification #: 235  
 Montana Certification #: Cert0082  
 Nebraska Certification #: NE-OS-29-14  
 Nevada Certification #: PA014572018-1  
 New Hampshire/TNI Certification #: 297617  
 New Jersey/TNI Certification #: PA051  
 New Mexico Certification #: PA01457  
 New York/TNI Certification #: 10888  
 North Carolina Certification #: 42706  
 North Dakota Certification #: R-190  
 Ohio EPA Rad Approval: #41249  
 Oregon/TNI Certification #: PA200002-010  
 Pennsylvania/TNI Certification #: 65-00282  
 Puerto Rico Certification #: PA01457  
 Rhode Island Certification #: 65-00282  
 South Dakota Certification  
 Tennessee Certification #: 02867  
 Texas/TNI Certification #: T104704188-17-3  
 Utah/TNI Certification #: PA014572017-9  
 USDA Soil Permit #: P330-17-00091  
 Vermont Dept. of Health: ID# VT-0282  
 Virgin Island/PADEP Certification  
 Virginia/VELAP Certification #: 9526  
 Washington Certification #: C868  
 West Virginia DEP Certification #: 143  
 West Virginia DHHR Certification #: 9964C  
 Wisconsin Approve List for Rad  
 Wyoming Certification #: 8TMS-L

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 2630818 Grumman Road 1st 2020  
Pace Project No.: 30358463

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2630818001	GWB-4R	Water	04/07/20 09:32	04/10/20 09:15
2630818002	GWC-1	Water	04/07/20 11:30	04/10/20 09:15
2630818003	GWB-5R	Water	04/07/20 15:35	04/10/20 09:15
2630818004	GWB-6R	Water	04/07/20 16:58	04/10/20 09:15
2630818005	GWC-16	Water	04/07/20 10:45	04/10/20 09:15
2630818006	GWC-21	Water	04/07/20 13:45	04/10/20 09:15
2630818007	GWC-15	Water	04/07/20 16:10	04/10/20 09:15
2630818008	GWC-14	Water	04/07/20 13:55	04/10/20 09:15
2630818009	FB-1-4-6-20	Water	04/07/20 17:05	04/10/20 09:15
2630818010	DUP-1	Water	04/07/20 00:01	04/10/20 09:15
2630818011	GWA-8	Water	04/06/20 14:40	04/10/20 09:15
2630818012	GWA-7	Water	04/06/20 16:10	04/10/20 09:15
2630818013	GWC-12	Water	04/07/20 10:00	04/10/20 09:15
2630818014	GWC-11	Water	04/07/20 12:35	04/10/20 09:15
2630818015	GWC-22	Water	04/07/20 15:40	04/10/20 09:15
2630818016	EB-1-4-7-2020	Water	04/07/20 13:30	04/10/20 09:15
2630818017	GWC-13	Water	04/08/20 09:53	04/10/20 09:15
2630818018	GWC-2	Water	04/08/20 12:25	04/10/20 09:15
2630818019	GWC-9	Water	04/08/20 10:00	04/10/20 09:15
2630818020	GWC-20	Water	04/08/20 12:00	04/10/20 09:15
2630818021	GWC-17	Water	04/08/20 15:35	04/10/20 09:15
2630818022	EB-2-4-7-20	Water	04/08/20 14:45	04/10/20 09:15
2630818023	FB-2-4-7-20	Water	04/08/20 12:30	04/10/20 09:15
2630818024	DUP-2	Water	04/08/20 00:01	04/10/20 09:15

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: 2630818 Grumman Road 1st 2020  
Pace Project No.: 30358463

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2630818001	GWB-4R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818002	GWC-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818003	GWB-5R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818004	GWB-6R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818005	GWC-16	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818006	GWC-21	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818007	GWC-15	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818008	GWC-14	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818009	FB-1-4-6-20	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818010	DUP-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818011	GWA-8	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818012	GWA-7	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818013	GWC-12	EPA 9315	LAL	1	PASI-PA

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## SAMPLE ANALYTE COUNT

Project: 2630818 Grumman Road 1st 2020  
Pace Project No.: 30358463

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2630818014	GWC-11	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
2630818015	GWC-22	Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818016	EB-1-4-7-2020	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2630818017	GWC-13	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
2630818018	GWC-2	Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818019	GWC-9	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2630818020	GWC-20	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
2630818021	GWC-17	Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630818022	EB-2-4-7-20	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
2630818023	FB-2-4-7-20	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
2630818024	DUP-2	Total Radium Calculation	CMC	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

<b>Sample: GWB-4R</b>	<b>Lab ID: 2630818001</b>	Collected: 04/07/20 09:32	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>1.51 ± 0.540 (0.624)</b> C:97% T:NA	pCi/L	04/21/20 06:38 13982-63-3
	Pace Analytical Services - Greensburg			Qual
Radium-228	EPA 9320	<b>0.928 ± 0.504 (0.905)</b> C:70% T:78%	pCi/L	04/28/20 16:41 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>2.44 ± 1.04 (1.53)</b>	pCi/L	04/30/20 09:05 7440-14-4
<b>Sample: GWC-1</b>	<b>Lab ID: 2630818002</b>	Collected: 04/07/20 11:30	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>0.989 ± 0.434 (0.469)</b> C:82% T:NA	pCi/L	04/21/20 06:38 13982-63-3
	Pace Analytical Services - Greensburg			Qual
Radium-228	EPA 9320	<b>0.985 ± 0.459 (0.762)</b> C:75% T:77%	pCi/L	04/28/20 16:41 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>1.97 ± 0.893 (1.23)</b>	pCi/L	04/30/20 09:05 7440-14-4
<b>Sample: GWB-5R</b>	<b>Lab ID: 2630818003</b>	Collected: 04/07/20 15:35	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>2.52 ± 0.842 (0.660)</b> C:31% T:NA	pCi/L	04/21/20 06:38 13982-63-3
	Pace Analytical Services - Greensburg			Qual
Radium-228	EPA 9320	<b>1.05 ± 0.435 (0.671)</b> C:76% T:83%	pCi/L	04/28/20 16:41 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>3.57 ± 1.28 (1.33)</b>	pCi/L	04/30/20 09:05 7440-14-4

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

<b>Sample: GWB-6R</b>	<b>Lab ID: 2630818004</b>	Collected: 04/07/20 16:58	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			
Radium-226	EPA 9315	<b>5.50 ± 1.17 (0.540)</b> C:88% T:NA	pCi/L	04/21/20 06:38 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>0.752 ± 0.463 (0.860)</b> C:70% T:77%	pCi/L	04/28/20 16:41 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>6.25 ± 1.63 (1.40)</b>	pCi/L	04/30/20 09:05 7440-14-4
<hr/>				
<b>Sample: GWC-16</b>	<b>Lab ID: 2630818005</b>	Collected: 04/07/20 10:45	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			
Radium-226	EPA 9315	<b>1.75 ± 0.553 (0.419)</b> C:93% T:NA	pCi/L	04/21/20 06:38 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>2.42 ± 0.711 (0.845)</b> C:73% T:78%	pCi/L	04/28/20 16:41 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>4.17 ± 1.26 (1.26)</b>	pCi/L	04/30/20 09:05 7440-14-4
<hr/>				
<b>Sample: GWC-21</b>	<b>Lab ID: 2630818006</b>	Collected: 04/07/20 13:45	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			
Radium-226	EPA 9315	<b>1.01 ± 0.456 (0.607)</b> C:85% T:NA	pCi/L	04/21/20 06:38 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>0.791 ± 0.417 (0.734)</b> C:67% T:92%	pCi/L	04/28/20 16:41 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>1.80 ± 0.873 (1.34)</b>	pCi/L	04/30/20 09:07 7440-14-4

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

<b>Sample: GWC-15</b>	<b>Lab ID: 2630818007</b>	Collected: 04/07/20 16:10	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			
Radium-226	EPA 9315	<b>0.831 ± 0.397 (0.518)</b> C:85% T:NA	pCi/L	04/21/20 06:38 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>0.991 ± 0.411 (0.620)</b> C:72% T:89%	pCi/L	04/28/20 16:41 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>1.82 ± 0.808 (1.14)</b>	pCi/L	04/30/20 09:07 7440-14-4
<hr/>				
<b>Sample: GWC-14</b>	<b>Lab ID: 2630818008</b>	Collected: 04/07/20 13:55	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			
Radium-226	EPA 9315	<b>0.533 ± 0.309 (0.415)</b> C:90% T:NA	pCi/L	04/21/20 06:39 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>0.872 ± 0.428 (0.714)</b> C:68% T:84%	pCi/L	04/28/20 16:41 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>1.41 ± 0.737 (1.13)</b>	pCi/L	04/30/20 09:07 7440-14-4
<hr/>				
<b>Sample: FB-1-4-6-20</b>	<b>Lab ID: 2630818009</b>	Collected: 04/07/20 17:05	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			
Radium-226	EPA 9315	<b>-0.173 ± 0.153 (0.615)</b> C:74% T:NA	pCi/L	04/21/20 06:39 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>0.642 ± 0.418 (0.791)</b> C:72% T:83%	pCi/L	04/28/20 16:41 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>0.642 ± 0.571 (1.41)</b>	pCi/L	04/30/20 09:07 7440-14-4

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

<b>Sample: DUP-1</b>	<b>Lab ID: 2630818010</b>	Collected: 04/07/20 00:01	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>1.01 ± 0.450 (0.502)</b> C:77% T:NA	pCi/L	04/21/20 06:39 13982-63-3
Radium-228	EPA 9320	<b>1.01 ± 0.477 (0.810)</b> C:71% T:85%	pCi/L	04/28/20 16:41 15262-20-1
Total Radium	Total Radium Calculation	<b>2.02 ± 0.927 (1.31)</b>	pCi/L	04/30/20 09:07 7440-14-4
<b>Sample: GWA-8</b>	<b>Lab ID: 2630818011</b>	Collected: 04/06/20 14:40	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>1.67 ± 0.552 (0.474)</b> C:85% T:NA	pCi/L	04/21/20 06:39 13982-63-3
Radium-228	EPA 9320	<b>1.16 ± 0.473 (0.737)</b> C:69% T:89%	pCi/L	04/28/20 16:41 15262-20-1
Total Radium	Total Radium Calculation	<b>2.83 ± 1.03 (1.21)</b>	pCi/L	04/30/20 09:07 7440-14-4
<b>Sample: GWA-7</b>	<b>Lab ID: 2630818012</b>	Collected: 04/06/20 16:10	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>24.2 ± 3.93 (0.503)</b> C:87% T:NA	pCi/L	04/21/20 06:39 13982-63-3
Radium-228	EPA 9320	<b>1.50 ± 0.620 (0.954)</b> C:69% T:63%	pCi/L	04/28/20 16:42 15262-20-1
Total Radium	Total Radium Calculation	<b>25.7 ± 4.55 (1.46)</b>	pCi/L	04/30/20 09:07 7440-14-4

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

<b>Sample: GWC-12</b>	<b>Lab ID: 2630818013</b>	Collected: 04/07/20 10:00	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>1.19 ± 0.480 (0.600)</b> C:87% T:NA	pCi/L	04/21/20 06:39 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>0.990 ± 0.488 (0.843)</b> C:72% T:82%	pCi/L	04/28/20 16:42 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>2.18 ± 0.968 (1.44)</b>	pCi/L	04/30/20 09:07 7440-14-4
<b>Sample: GWC-11</b>	<b>Lab ID: 2630818014</b>	Collected: 04/07/20 12:35	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>4.24 ± 0.971 (0.443)</b> C:87% T:NA	pCi/L	04/21/20 06:39 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>3.63 ± 0.871 (0.706)</b> C:75% T:87%	pCi/L	04/28/20 16:42 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>7.87 ± 1.84 (1.15)</b>	pCi/L	04/30/20 09:07 7440-14-4
<b>Sample: GWC-22</b>	<b>Lab ID: 2630818015</b>	Collected: 04/07/20 15:40	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>4.64 ± 1.02 (0.443)</b> C:89% T:NA	pCi/L	04/21/20 06:39 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>3.02 ± 0.776 (0.686)</b> C:71% T:84%	pCi/L	04/28/20 16:42 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>7.66 ± 1.80 (1.13)</b>	pCi/L	04/30/20 09:07 7440-14-4

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

<b>Sample: EB-1-4-7-2020</b>	<b>Lab ID: 2630818016</b>	Collected: 04/07/20 13:30	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>0.118 ± 0.186 (0.402)</b> C:83% T:NA	pCi/L	04/21/20 06:57 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>0.851 ± 0.434 (0.740)</b> C:71% T:80%	pCi/L	04/28/20 16:42 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>0.969 ± 0.620 (1.14)</b>	pCi/L	04/30/20 09:07 7440-14-4
<b>Sample: GWC-13</b>	<b>Lab ID: 2630818017</b>	Collected: 04/08/20 09:53	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>0.450 ± 0.295 (0.444)</b> C:85% T:NA	pCi/L	04/21/20 06:39 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>0.625 ± 0.432 (0.827)</b> C:72% T:78%	pCi/L	04/28/20 16:42 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>1.08 ± 0.727 (1.27)</b>	pCi/L	04/30/20 09:10 7440-14-4
<b>Sample: GWC-2</b>	<b>Lab ID: 2630818018</b>	Collected: 04/08/20 12:25	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>0.682 ± 0.397 (0.624)</b> C:81% T:NA	pCi/L	04/21/20 06:39 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>0.444 ± 0.441 (0.912)</b> C:68% T:84%	pCi/L	04/28/20 16:40 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>1.13 ± 0.838 (1.54)</b>	pCi/L	04/30/20 09:10 7440-14-4

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

<b>Sample: GWC-9</b>	<b>Lab ID: 2630818019</b>	Collected: 04/08/20 10:00	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>1.13 ± 0.454 (0.536)</b> C:91% T:NA	pCi/L	04/21/20 06:39 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>0.793 ± 0.510 (0.976)</b> C:65% T:84%	pCi/L	04/28/20 16:40 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>1.92 ± 0.964 (1.51)</b>	pCi/L	04/30/20 09:10 7440-14-4
<b>Sample: GWC-20</b>	<b>Lab ID: 2630818020</b>	Collected: 04/08/20 12:00	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>1.36 ± 0.476 (0.442)</b> C:91% T:NA	pCi/L	04/21/20 06:39 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>2.83 ± 0.945 (1.35)</b> C:79% T:78%	pCi/L	04/28/20 20:06 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>4.19 ± 1.42 (1.79)</b>	pCi/L	04/30/20 09:10 7440-14-4
<b>Sample: GWC-17</b>	<b>Lab ID: 2630818021</b>	Collected: 04/08/20 15:35	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
	Pace Analytical Services - Greensburg			CAS No.
Radium-226	EPA 9315	<b>2.07 ± 0.610 (0.383)</b> C:88% T:NA	pCi/L	04/22/20 06:41 13982-63-3
	Pace Analytical Services - Greensburg			
Radium-228	EPA 9320	<b>0.718 ± 0.389 (0.692)</b> C:75% T:85%	pCi/L	04/24/20 12:49 15262-20-1
	Pace Analytical Services - Greensburg			
Total Radium	Total Radium Calculation	<b>2.79 ± 0.999 (1.08)</b>	pCi/L	04/30/20 09:10 7440-14-4

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

<b>Sample: EB-2-4-7-20</b>	<b>Lab ID: 2630818022</b>	Collected: 04/08/20 14:45	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
		Pace Analytical Services - Greensburg		CAS No.
Radium-226	EPA 9315	<b>-0.0470 ± 0.0675 (0.312)</b> C:88% T:NA	pCi/L	04/22/20 06:41 13982-63-3
		Pace Analytical Services - Greensburg		
Radium-228	EPA 9320	<b>0.497 ± 0.404 (0.807)</b> C:74% T:82%	pCi/L	04/24/20 12:49 15262-20-1
		Pace Analytical Services - Greensburg		
Total Radium	Total Radium Calculation	<b>0.497 ± 0.472 (1.12)</b>	pCi/L	04/30/20 09:10 7440-14-4

<b>Sample: FB-2-4-7-20</b>	<b>Lab ID: 2630818023</b>	Collected: 04/08/20 12:30	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
		Pace Analytical Services - Greensburg		CAS No.
Radium-226	EPA 9315	<b>0.00483 ± 0.161 (0.449)</b> C:86% T:NA	pCi/L	04/22/20 06:41 13982-63-3
		Pace Analytical Services - Greensburg		
Radium-228	EPA 9320	<b>0.618 ± 0.376 (0.692)</b> C:70% T:92%	pCi/L	04/24/20 12:49 15262-20-1
		Pace Analytical Services - Greensburg		
Total Radium	Total Radium Calculation	<b>0.623 ± 0.537 (1.14)</b>	pCi/L	04/30/20 09:10 7440-14-4

<b>Sample: DUP-2</b>	<b>Lab ID: 2630818024</b>	Collected: 04/08/20 00:01	Received: 04/10/20 09:15	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed
		Pace Analytical Services - Greensburg		CAS No.
Radium-226	EPA 9315	<b>0.479 ± 0.278 (0.348)</b> C:88% T:NA	pCi/L	04/22/20 06:41 13982-63-3
		Pace Analytical Services - Greensburg		
Radium-228	EPA 9320	<b>0.309 ± 0.356 (0.748)</b> C:78% T:88%	pCi/L	04/24/20 12:50 15262-20-1
		Pace Analytical Services - Greensburg		
Total Radium	Total Radium Calculation	<b>0.788 ± 0.634 (1.10)</b>	pCi/L	04/30/20 09:10 7440-14-4

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

QC Batch:	392203	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	2630818001, 2630818002, 2630818003, 2630818004, 2630818005, 2630818006, 2630818007, 2630818008, 2630818009, 2630818010, 2630818011, 2630818012, 2630818013, 2630818014, 2630818015, 2630818016, 2630818017, 2630818018, 2630818019, 2630818020		

METHOD BLANK: 1899021 Matrix: Water

Associated Lab Samples: 2630818001, 2630818002, 2630818003, 2630818004, 2630818005, 2630818006, 2630818007, 2630818008, 2630818009, 2630818010, 2630818011, 2630818012, 2630818013, 2630818014, 2630818015, 2630818016, 2630818017, 2630818018, 2630818019, 2630818020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.499 ± 0.341 (0.645) C:75% T:89%	pCi/L	04/28/20 16:41	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

QC Batch: 392399 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630818021, 2630818022, 2630818023, 2630818024

METHOD BLANK: 1900027 Matrix: Water

Associated Lab Samples: 2630818021, 2630818022, 2630818023, 2630818024

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0256 ± 0.341 (0.798) C:73% T:87%	pCi/L	04/24/20 12:50	

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

QC Batch:	392202	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	2630818001, 2630818002, 2630818003, 2630818004, 2630818005, 2630818006, 2630818007, 2630818008, 2630818009, 2630818010, 2630818011, 2630818012, 2630818013, 2630818014, 2630818015, 2630818016, 2630818017, 2630818018, 2630818019, 2630818020		

METHOD BLANK: 1899018 Matrix: Water

Associated Lab Samples: 2630818001, 2630818002, 2630818003, 2630818004, 2630818005, 2630818006, 2630818007, 2630818008, 2630818009, 2630818010, 2630818011, 2630818012, 2630818013, 2630818014, 2630818015, 2630818016, 2630818017, 2630818018, 2630818019, 2630818020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0165 ± 0.137 (0.386) C:90% T:NA	pCi/L	04/21/20 06:37	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

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QC Batch: 392396 Analysis Method: EPA 9315  
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium  
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630818021, 2630818022, 2630818023, 2630818024

---

METHOD BLANK: 1900025 Matrix: Water

Associated Lab Samples: 2630818021, 2630818022, 2630818023, 2630818024

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0749 ± 0.154 (0.360) C:90% T:NA	pCi/L	04/22/20 06:40	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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## QUALIFIERS

Project: 2630818 Grumman Road 1st 2020

Pace Project No.: 30358463

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## REPORT OF LABORATORY ANALYSIS

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Transfers	Released By	Date/Time	Received By	Date/Time
1	<i>John E.</i>	4/18/2017 00	<i>John E.</i>	4-18-2017 05
2				
3				
Cooler Temperature on Receipt <i>NA</i> °C	Custody Seal <input checked="" type="checkbox"/> Y or <input type="checkbox"/> N	Received on Ice <input type="checkbox"/> Y or <input checked="" type="checkbox"/> N		Samples Intact <input checked="" type="checkbox"/> or <input type="checkbox"/> N

\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
 This chain of custody is considered complete as is since this information is available in the owner/laboratory.



### **Chain of Custody**

Samples were sent directly to the Subcontracting Laboratory.

Workorder: 2633818	Report Date:	Workorder Name: GRUMMAN ROAD 1ST 2020 SA GWM	Cert. Needed: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Owner Received Date: 4/8/2020	Results Requested By: 4/22/2020
Kevin Herring		Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600			
Pace Analytical Charlotte 9800 Kincer Ave. Suite 100 Huntersville, NC 28078 Phone (704)875-9092					
W0# : 30358463	PH: JAC	Due Date: 05/01/20	CLIENT: PACE_26_ATGA		
RAD 9315	RAD 9320				
Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	<i>Bethelle</i>	4/8/2017 17:00	<i>JAC</i>	7-6-20 9:15	Project
2					
3					
Cooler Temperature on Receipt		°C	Custody Seal Y or N	Received on ice Y or N	Samples intact Y or N

**\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.**

WO# : 30358463

## Pittsburgh Lab Sample Condition Upon Receipt

Client Name: Pace GA

PM: JAC

Due Date: 05/01/20

CLIENT: PACE\_26\_ATGA

Courier:  FedEx  UPS  USPS  Client  Commercial  Pace Other \_\_\_\_\_  
 Tracking #: 1657 9507 4159

Label	<u>DC</u>
LIMS Login	<u>DC</u>

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  noThermometer Used N/A Type of Ice: Wet Blue NoneCooler Temperature Observed Temp - °C Correction Factor: - °C Final Temp: - °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot#	Date and Initials of person examining contents:
Chain of Custody Present:	/			<u>1CD2191</u>	<u>DC 4-10-20</u>
Chain of Custody Filled Out:	/			1.	
Chain of Custody Relinquished:	/			2.	
Sampler Name & Signature on COC:		/		3.	
Sample Labels match COC:	/			4.	
-Includes date/time/ID Matrix:	<u>WT</u>			5.	
Samples Arrived within Hold Time:	/			6.	
Short Hold Time Analysis (<72hr remaining):	/			7.	
Rush Turn Around Time Requested:	/			8.	
Sufficient Volume:	/			9.	
Correct Containers Used:	/			10.	
-Pace Containers Used:	/				
Containers Intact:	/			11.	
Orthophosphate field filtered		/		12.	
Hex Cr Aqueous sample field filtered		/		13.	
Organic Samples checked for dechlorination:		/		14.	
Filtered volume received for Dissolved tests		/		15.	
All containers have been checked for preservation.	/			16.	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix					<u>PTL</u>
All containers meet method preservation requirements.	/				Initial when completed: <u>PTL</u> Date/time of preservation: <u>4-10-20</u> Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			/	17.	
Trip Blank Present:			/	18.	
Trip Blank Custody Seals Present			/		
Rad Samples Screened < 0.5 mrem/hr	/		/	Initial when completed: <u>PTL</u> Date: <u>4-10-20</u>	

## Client Notification/ Resolution:

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted By: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ A check in this box indicates that additional information has been stored in reports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

\*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS, the review is in the Status section of the Workorder Edit Screen.



## Quality Control Sample Performance Assessment

*Analyist Must Manually Enter All Fields Highlighted in Yellow.*

Test:	Ra-228 VAL	Analyst:	4/14/2020	Sample Collection Date:	4/2/2020	MS/MSD 1
Worklist:	53349 WT	Matrix:		Sample I.D.:	50253791010	
Method Blank Assessment		MB Sample ID:	18956130	Sample MS I.D.:	50253791020	
		MB Concentration:	0.335	Sample MSD I.D.:	50253791021	
		MB 2 Sigma CSU:	0.306	Spike I.D.:	19-057	
		MB MDC:	0.618	MS/MSD Decay Corrected Spike Concentration (pCi/mL):	34.630	
		MB Numerical Performance Indicator:	2.15	Spike Volume Used in MS (mL):	0.20	
		ME Status vs Numerical Indicator:	Warning	Spike Volume Used in MSD (mL):	0.20	
		ME Status vs. MDC:	Pass	MS Aliquot (L, g, F):	8.806	
Laboratory Control Sample Assessment	LCSD (Y or N)?	Count Date:	4/23/2020	MS Target Conc. (pCi/L, g, F):	8.593	
	LCSD3349			MSD Aliquot (L, g, F):	8.806	
		Spike I.D.:	19-057	MSD Target Conc. (pCi/L, g, F):	8.595	
		Decay Corrected Spike Concentration (pCi/mL):	34.391	MS Spike Uncertainty (calculated):	0.619	
		Volume Used (mL):	0.10	MSD Spike Uncertainty (calculated):	0.619	
		Aliquot Volume (L, g, F):	0.815	Sample Result 2 Sigma CSU (pCi/L, g, F):	0.388	
		Target Conc. (pCi/L, g, F):	4.220	Sample Matrix Spike Result:	11.396	
		Uncertainty (Calculated):	0.304	Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.347	
		Result (pCi/L, g, F):	5.906	Sample Matrix Spike Duplicate Result:	9.879	
		Numerical Performance Indicator:	1.280	Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.070	
		Percent Recovery:	139.94%	MS Numerical Performance Indicator:	1.663	
		Status vs Numerical Indicator:	Warning	MSD Numerical Performance Indicator:	0.528	
		Upper % Recovery:	Fail High***	MS Percent Recovery:	124.56%	
		Lower % Recovery:	135%	MSD Percent Recovery:	106.88%	
			60%	MS Status vs Numerical Indicator:	Pass	
Duplicate Sample Assessment				MSD Status vs Numerical Indicator:	Pass	
				MS Status vs Recovery:	Pass	
				MS/MSD Upper % Recovery Limits:	135%	
				MS/MSD Lower % Recovery Limits:	60%	
Matrix Spike/Matrix Spike Duplicate Sample Assessment						
				Sample I.D.:	50253791010	
				Sample MS I.D.:	50253791020	
				Sample MSD I.D.:	50253791021	
				Sample Matrix Spike Result:	11.396	
				Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.347	
				Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	9.879	
				Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.070	
				Duplicate Numerical Performance Indicator:	0.950	
				(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	15.28%	
				MS/MSD Duplicate Status vs Numerical Indicator:	Pass	
				MS/MSD Duplicate Status vs RPD:	Pass	
				% RPD Limit:	36%	

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

\*If all sample results are below MDC, the batch is acceptable, otherwise this batch must be reprocessed due to TCS failure.

NPI < 3

4/17/20

STJ  
WJ

4/21/20

AT < 3 acceptable for now - DCD  
Met/MCs



## Quality Control Sample Performance Assessment

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Test: Ra-228 VAL		Analyst: 4/21/2020 Date: 53435 WT		Worklist: Matrix:	
<b>Method Blank Assessment</b>					
MB Sample ID: 1900027 MB concentration: -0.026 M/B 2 Sigma CSU: 0.341 MB MDC: 0.798 MB Numerical Performance Indicator: MB Status vs Numerical Indicator: Pass MB Status vs. MDC: Pass					
MS/MSD Decay Corrected Spike Concentration (pCi/ml): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc.(pCi/L, g, F): MSD Aliquot (L, g, F): MSD Target Conc. (pCi/L, g, F): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated): Sample Result: Sample Result 2 Sigma CSU (pCi/L, g, F): Matrix Spike Result: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F): MS Numerical Performance Indicator: MSD Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limits: MS/MSD Lower % Recovery Limits:					
LCSD (Y or N)?: Y LCSD3495 Count Date: 4/24/2020 LCSD3495 4/24/2020 Spike ID.: 19-057 Spike ID.: 34-379 Decay Corrected Spike Concentration (pCi/ml): 0.10 Volume Used (mL): 0.10 Aliquot Volume (L, g, F): 0.817 Target Conc. (pCi/L, g, F): 4.206 Uncertainty (Calculated): 4.250 Uncertainty (Calculated): 0.303 Result (pCi/L, g, F): 5.214 LCS/LCSD 2 Sigma CSU (pCi/L, g, F): 1.185 Numerical Performance Indicator: 1.61 Percent Recovery: 123.97% Status vs Numerical Indicator: N/A Status vs Recovery: Pass Upper % Recovery Limits: 135% Lower % Recovery Limits: 60%					
Matrix Spike/Matrix Spike Duplicate Sample Assessment					
Sample I.D.: LCSD3495 Duplicate Sample I.D.: LCSD3495 Sample Result (pCi/L, g, F): 5.214 Sample Result 2 Sigma CSU (pCi/L, g, F): 1.185 Sample Duplicate Result (pCi/L, g, F): 3.581 Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F): 0.884 Are sample and/or duplicate results below RL? NO Duplicate Numerical Performance Indicator: 21.56 (Based on the LCS/LCSD Percent Recoveries) Duplicate RPD: 38.15% Duplicate Status vs Numerical Indicator: Warning Duplicate Status vs RPD: Fail*** Duplicate Status vs RPD: 36%					
## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC. Comments: <i>DNPI L3 acceptable for NQON-Duo method C&amp;S</i> <i>100-100</i> <i>100-100</i>					



## Quality Control Sample Performance Assessment

***Analyst Must Manually Enter All Fields Highlighted in Yellow.***

<b>Method Blank Assessment</b>		Test: Ra-226 Analyst: LAL Date: 4/21/2020 Worklist: 53493 Matrix: DW	Sample Matrix Spike Control Assessment Sample Collection Date: Sample I.D.: Sample MS I.D.: Sample MSD I.D.: Spike I.D.: MS/MSD Decay Corrected Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc. (pCi/L, g, F): MSD Aliquot (L, g, F): MSD Target Conc. (pCi/L, g, F): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated): MS Sample Result: MS Sample Result Counting Uncertainty (pCi/L, g, F): MS Sample Matrix Spike Result: MS Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F): MS Sample Matrix Spike Duplicate Result: MS Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): MS Sample Matrix Spike Duplicate Result Recovery: MS Sample Matrix Spike Duplicate Result Recovery %: MS Sample Matrix Spike Duplicate Result Status: MS Sample Matrix Spike Duplicate Result Status %: MS Sample Matrix Spike Duplicate Result Upper % Recovery Limit: MS Sample Matrix Spike Duplicate Result Upper % Recovery Limit %: MS Sample Matrix Spike Duplicate Result Lower % Recovery Limit: MS Sample Matrix Spike Duplicate Result Lower % Recovery Limit %:
<b>Laboratory Control Sample Assessment</b>		Count Date: 4/22/2020 LCS53493 4/22/2020 19-033 24.049 0.10 0.505 0.505 4.716 4.761 0.057 5.210 5.125 0.803 0.839 1.20 0.85 110.48% N/A Pass 125% 75% 125% 75%	Y LCS53493 4/22/2020 19-033 24.049 0.10 0.505 0.505 4.716 4.761 0.057 5.210 5.125 0.803 0.839 1.20 0.85 110.48% N/A Pass 125% 75% 125% 75%
<b>Duplicate Sample Assessment</b>		Sample I.D.: LCS53493 Duplicate Sample I.D.: LCS53493 Sample Result (pCi/L, g, F): 5.210 Sample Result Counting Uncertainty (pCi/L, g, F): 0.803 Sample Duplicate Result (pCi/L, g, F): 5.125 Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.839 Are sample and/or duplicate results below RL?: NO Duplicate Numerical Performance Indicator: 0.144 (Based on the LCS/LCSD Percent Recoveries) Duplicate RPD: 2.61% Duplicate Status vs Numerical Indicator: N/A Duplicate Status vs RPD: Pass % RPD limit: 25%	Enter Duplicate Sample IDs if other than LCS/LCSD in the space below.  Sample I.D.: Sample MS I.D.: Sample MSD I.D.: Sample Matrix Spike Result: Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): Sample Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): MS Sample Status vs Numerical Indicator: MS Sample Status vs Recovery: MS/MSD Status vs Recovery: MS/MSD Status vs Recovery %: MS/MSD Duplicate Status vs Recovery: MS/MSD Duplicate Status vs Recovery %: % RPD limit:

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

Yann Jizzar

11/20/20



## Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

	Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2																																
Method Blank Assessment	<p>NB Sample ID: 1899021 NB Concentration: 0.499 MB 2 Sigma CSU: 0.341 MB MDC: 0.645 MB Numerical Performance Indicator: 2.87 MB Status vs Numerical Indicator: Warning MB Status vs. MDC: Pass</p>	<p>MS/MSD Decay Corrected Spike Concentration (pCi/mL); Spike Volume Used in MS (mL); Spike Volume Used in MSD (mL); MS Aliquot (L, g, F); MS Target Conc. (pCi/L, g, F); MSD Aliquot (L, g, F); MSD Target Conc. (pCi/L, g, F); MS Spike Uncertainty (calculated); MSD Spike Uncertainty (calculated); Sample Result:</p>	<p>Sample I.D.; Sample MS I.D.; Sample MSD I.D.; Spike I.D.;</p>																																
Laboratory Control Sample Assessment	<table border="1"> <thead> <tr> <th>LCSD (Y or N)?</th> <th>Y</th> </tr> </thead> <tbody> <tr> <td>LCSD53450</td> <td>LCSD53450</td> </tr> <tr> <td>Count Date: 4/28/2020</td> <td>4/28/2020</td> </tr> <tr> <td>Spike I.D.: 19-057</td> <td>34.332</td> </tr> <tr> <td>Decay Corrected Spike Concentration (pCi/mL): 0.10</td> <td>0.10</td> </tr> <tr> <td>Volume Used (mL): 0.810</td> <td>0.817</td> </tr> <tr> <td>Aliquot Volume (L, g, F): 4.241</td> <td>4.205</td> </tr> <tr> <td>Target Conc. (pCi/L, g, F): 0.305</td> <td>0.303</td> </tr> <tr> <td>Uncertainty (Calculated): 3.737</td> <td>4.461</td> </tr> <tr> <td>Result (pCi/L, g, F): 0.907</td> <td>1.027</td> </tr> <tr> <td>LC/MSD 2 Sigma CSU (pCi/L, g, F): -1.03</td> <td>0.47</td> </tr> <tr> <td>Numerical Performance Indicator: 88.11%</td> <td>106.10%</td> </tr> <tr> <td>Percent Recovery: N/A</td> <td>N/A</td> </tr> <tr> <td>Status vs Numerical Indicator: Pass</td> <td>Pass</td> </tr> <tr> <td>Upper % Recovery Limit: 135%</td> <td>135%</td> </tr> <tr> <td>Lower % Recovery Limit: 60%</td> <td>60%</td> </tr> </tbody> </table>	LCSD (Y or N)?	Y	LCSD53450	LCSD53450	Count Date: 4/28/2020	4/28/2020	Spike I.D.: 19-057	34.332	Decay Corrected Spike Concentration (pCi/mL): 0.10	0.10	Volume Used (mL): 0.810	0.817	Aliquot Volume (L, g, F): 4.241	4.205	Target Conc. (pCi/L, g, F): 0.305	0.303	Uncertainty (Calculated): 3.737	4.461	Result (pCi/L, g, F): 0.907	1.027	LC/MSD 2 Sigma CSU (pCi/L, g, F): -1.03	0.47	Numerical Performance Indicator: 88.11%	106.10%	Percent Recovery: N/A	N/A	Status vs Numerical Indicator: Pass	Pass	Upper % Recovery Limit: 135%	135%	Lower % Recovery Limit: 60%	60%	<p>Sample Matrix Spike Result: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F); Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F); MS Numerical Performance Indicator: MSD Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MS Status vs Recovery: MS/MSD Upper % Recovery Limit: MS/MSD Lower % Recovery Limit:</p>	<p>Sample I.D., Sample MS I.D., Sample MSD I.D., Sample Matrix Spike Result: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F); Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F); Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) Duplicate RPD; MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD; % RPD Limit:</p>
LCSD (Y or N)?	Y																																		
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Numerical Performance Indicator: 88.11%	106.10%																																		
Percent Recovery: N/A	N/A																																		
Status vs Numerical Indicator: Pass	Pass																																		
Upper % Recovery Limit: 135%	135%																																		
Lower % Recovery Limit: 60%	60%																																		
Duplicate Sample Assessment	<p>Sample I.D.: LCS53450 Duplicate Sample I.D.: LCS53450 Sample Result (pCi/L, g, F): 3.737 Sample Result 2 Sigma CSU (pCi/L, g, F): 0.907 Sample Duplicate Result (pCi/L, g, F): 4.461 Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F): 1.027 Are sample and/or duplicate results below RPD? Duplicate Numerical Performance Indicator: (Based on the LC/MSD Percent Recoveries) Duplicate RPD; Duplicate Status vs Numerical Indicator: Duplicate Status vs RPD; % RPD Limit:</p>	<p>Enter Duplicate sample I.D.s if other than LC/MSD in the space below.</p>	<p>Sample I.D., Sample MS I.D., Sample MSD I.D., Sample Matrix Spike Result: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F); Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F); Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) MS/MSD Duplicate RPD; MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD; % RPD Limit:</p>																																

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

**LEVEL 2A LABORATORY DATA VALIDATIONS**

**Grumman Road**

**1<sup>st</sup> Semi-Annual Event**

**April 2020**

## **Georgia Power Company – Grumman Road**

### **Quality Control Review of Analytical Data – April 2020**

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Pace Analytical Services, Asheville, Atlanta and Pittsburgh for groundwater samples collected at Grumman Road between April 6, 2020 and April 8, 2020. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix. SDG 2630818 was revised by the laboratory to correct errant Total Dissolved Solids (TDS) data.

In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detected monitoring constituents listed in 40 CFR, Part 257, Appendix III and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Test methods included Inductively Coupled Plasma (USEPA 6010D), Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B), Determination of Inorganic Anions (USEPA Method 300.0), Solids in Water (Standard Methods 2540C), Radium-226 (USEPA 9315), and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)<sup>1</sup> and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)<sup>2</sup>. The review included an assessment of the results for completeness, precision (laboratory duplicate recoveries and matrix spike/matrix spike duplicate recoveries), accuracy (laboratory control samples and matrix spike samples), and blank contamination (field, equipment, and laboratory blanks). Sample receipt conditions, holding times, and chains of custody (COCs) were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

## DATA QUALITY OBJECTIVES

- Laboratory Precision:** Laboratory goals for precision were met, with the exceptions of TDS and Radium-228 in SDG 2630818. The TDS relative percent difference (RPD) on GWC-15 (2630818007) is described in the qualifications section below. The Radium-228 laboratory control sample/laboratory control sample duplicate RPD exceeded the QC criteria (38.15% above limit of 36). This batch was passed on the individual recoveries, and no batch qualification was necessary for Radium-228.
- Field Precision:** Field goals for precision were met, with the exceptions of Lead on GWC-1 (2630818002) and Chromium and Radium-228 on GWC-13 (2630818017) as described in the qualifications section below.
- Accuracy:** Laboratory goals for accuracy were met, with the exceptions of Calcium and Radium-228 in SDG 2630818. The Calcium matrix spike (MS) and matrix spike duplicate (MSD) recoveries on GWC-20 (2630818020) and GWC-22 (2630818015) that were outside criteria are described in the qualifications section below. The Radium-228 batch yielded a high LCS recovery (139.94% above range of 60-135). The batch was passed on the MS and MSD recoveries as well as the Numerical Performance Indicator (2.51 passing the limit of <3).
- Detection Limits:** Project goals for detection limits were met. Certain samples were diluted due to the concentration of target or non-target analyte interferences. Dilutions do not require qualifications based on USEPA guidelines. Reporting limits (RLs) of non-detect compounds are elevated proportional to the dilution when undiluted sample results were not provided by the laboratory. The data usability of diluted results was evaluated by the data user in the context of site-wide characterization.
- Completeness:** There were no rejected analytical results for this event, resulting in a completion of 100%.
- Holding Times:** Holding time requirements were met, with the exception of TDS on GWC-14 (2630818008) as described in the qualifications section below.

## **QUALIFICATIONS**

In general, chemical results for the samples collected at the site were qualified on the basis of low precision or low accuracy or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the validation process:

- J:** The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample
- U:** The analyte was not detected above the method detection limit
- H:** The analysis was performed outside the method holding time

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. The applied qualifications may not have been required for all samples collected at the site. A summary of sample qualifications can be found in Table 2 of this Appendix.

- Sample GWC-20 (2630818020) was qualified as estimated (J) for Calcium as the associated MS and MSD recoveries were outside QC criteria (154% and -107% outside the range of 75-125).
- Sample GWC-22 (2630818015) was qualified as estimated (J) for Calcium as the associated MS and MSD recoveries were above QC criteria (326% and 340% above the range of 75-125).
- Sample GWC-15 (2630818007) was qualified as estimated (J) for TDS as the laboratory RPD exceeded QC criteria (62% above the limit of 10).
- Samples GWC-1 (2630818002) and DUP-1 (2630818010) were qualified as estimated (J) for Lead as the field RPD exceeded QC criteria (77.46% above limit of 25).
- Samples GWC-13 (2630818017) and DUP-2 (2630818024) were qualified as estimated (J) for Chromium and Radium-228 as the respective field RPDs exceeded QC criteria (29.70% and 67.67% above limit of 25).

- Sample GWC-14 (2630818008) was qualified as estimated (H) for TDS as the reanalysis was performed outside the method holding time (23<sup>rd</sup> day past holding time of 7 days). The sample was originally analyzed within holding time but yielded data that were uncertain. The reanalysis in duplicate did not confirm the original result but was more consistent with historical data.
- Certain Vanadium and/or Antimony results in SDG 2630818 were qualified as non-detect (ND) due to the analyte(s) being detected at a similar concentration in an associated blank sample. As shown in Table 2, when the original sample result was below the RL, the method detection limit (MDL) was raised to the sample result as part of the qualification process.
- Certain Radium results in SDG 2630818 were qualified as non-detect (ND) due to the analyte being detected at a similar concentration in an associated blank sample. As shown in Table 2, the minimum detectable concentration (MDC) was raised to the sample result as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from Grumman Road sampled between April 6, 2020 and April 8, 2020 in accordance with the analytical methods, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

## REFERENCES

<sup>1</sup>USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy, Revision 2.0

<sup>2</sup>USEPA, January 2017, National Office of Superfund Remediation and Technology Innovation, National Functional Guidelines for Inorganic Superfund Methods Data Review, Revision 0.0

TABLE 1  
 Georgia Power Company – Grumman Road  
 Sample Summary Table – April 2020

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6010D, 6020B)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
30818	GWB-4R	4/7/2020	2630818001	GW		X	X	X	X
30818	GWC-1	4/7/2020	2630818002	GW		X	X	X	X
30818	GWB-5R	4/7/2020	2630818003	GW		X	X	X	X
30818	GWB-6R	4/7/2020	2630818004	GW		X	X	X	X
30818	GWC-16	4/7/2020	2630818005	GW		X	X	X	X
30818	GWC-21	4/7/2020	2630818006	GW		X	X	X	X
30818	GWC-15	4/7/2020	2630818007	GW		X	X	X	X
30818	GWC-14	4/7/2020	2630818008	GW		X	X	X	X
30818	FB-1-4-6-20	4/7/2020	2630818009	WQ	FB	X	X	X	X
30818	DUP-1	4/7/2020	2630818010	GW	FD (GWC-1)	X	X	X	X
30818	GWA-8	4/6/2020	2630818011	GW		X	X	X	X
30818	GWA-7	4/6/2020	2630818012	GW		X	X	X	X
30818	GWC-12	4/7/2020	2630818013	GW		X	X	X	X
30818	GWC-11	4/7/2020	2630818014	GW		X	X	X	X
30818	GWC-22	4/7/2020	2630818015	GW		X	X	X	X
30818	EB-1-4-7-2020	4/7/2020	2630818016	WQ	EB	X	X	X	X
30818	GWC-13	4/8/2020	2630818017	GW		X	X	X	X
30818	GWC-2	4/8/2020	2630818018	GW		X	X	X	X
30818	GWC-9	4/8/2020	2630818019	GW		X	X	X	X
30818	GWC-20	4/8/2020	2630818020	GW		X	X	X	X
30818	GWC-17	4/8/2020	2630818021	GW		X	X	X	X
30818	EB-2-4-7-20	4/8/2020	2630818022	WQ	EB	X	X	X	X
30818	FB-2-4-7-20	4/8/2020	2630818023	WQ	FB	X	X	X	X
30818	DUP-2	4/8/2020	2630818024	GW	FD (GWC-13)	X	X	X	X

Abbreviations:

- EB – Equipment Blank
- FB – Field Blank
- FD – Field Duplicate
- GW – Groundwater
- QC – Quality Control
- TDS – Total Dissolved Solids
- WQ – Water Quality Control

TABLE 2  
 Georgia Power Company – Grumman Road  
 Qualifier Summary Table – April 2020

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
30818	GWC-14	TDS			H	Holding time exceeded
30818	GWC-20	Calcium			J	MS/MSD outside QC criteria
30818	GWC-22	Calcium			J	MS/MSD outside QC criteria
30818	GWB-4R	Vanadium		0.0037	ND	Blank detection
30818	GWC-1	Vanadium		0.0015	ND	Blank detection
30818	GWB-5R	Vanadium		0.0053	ND	Blank detection
30818	GWB-6R	Vanadium		0.041	ND	Blank detection
30818	GWC-12	Vanadium		0.0024	ND	Blank detection
30818	GWC-22	Vanadium		0.0014	ND	Blank detection
30818	GWC-11	Antimony			ND	Blank detection
30818	GWC-1	Lead			J	RPD exceeds field goal
30818	DUP-1	Lead			J	RPD exceeds field goal
30818	GWC-13	Chromium			J	RPD exceeds field goal
30818	DUP-2	Chromium			J	RPD exceeds field goal
30818	GWC-15	TDS			J	RPD exceeds laboratory goal
30818	GWC-13	Radium-228			J	RPD exceeds field goal
30818	DUP-2	Radium-228			J	RPD exceeds field goal
30818	GWB-4R	Radium-226		0.624	ND	Blank detection
30818	GWB-4R	Radium-228		0.905	ND	Blank detection
30818	GWC-1	Radium-226		0.469	ND	Blank detection
30818	GWC-1	Radium-228		0.762	ND	Blank detection
30818	GWB-5R	Radium-226		0.660	ND	Blank detection
30818	GWB-5R	Radium-228		0.671	ND	Blank detection
30818	GWB-6R	Radium-226		0.540	ND	Blank detection
30818	GWB-6R	Radium-228		0.860	ND	Blank detection
30818	GWC-16	Radium-226		0.419	ND	Blank detection
30818	GWC-16	Radium-228		0.845	ND	Blank detection
30818	GWC-21	Radium-226		0.607	ND	Blank detection
30818	GWC-21	Radium-228		0.734	ND	Blank detection
30818	GWC-15	Radium-226		0.518	ND	Blank detection

Abbreviations:

MDC – Minimum Detectable Concentration  
 MS/MSD – Matrix Spike / Matrix Spike Duplicate  
 MDL – Method Detection Limit  
 RL – Reporting Limit  
 RPD – Relative Percent Difference  
 SDG – Sample Delivery Group  
 TDS – Total Dissolved Solids

Qualifiers:

J – Estimated Result  
 ND – Non-Detect Result  
 H – Holding Time Exceeded

TABLE 2 (continued)  
 Georgia Power Company – Grumman Road  
 Qualifier Summary Table – April 2020

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
30818	GWC-14	Radium-226		0.415	ND	Blank detection
30818	GWC-14	Radium-228		0.714	ND	Blank detection
30818	GWA-8	Radium-226		0.474	ND	Blank detection
30818	GWA-8	Radium-228		0.737	ND	Blank detection
30818	GWA-7	Radium-226		0.503	ND	Blank detection
30818	GWA-7	Radium-228		0.954	ND	Blank detection
30818	GWC-12	Radium-226		0.600	ND	Blank detection
30818	GWC-12	Radium-228		0.843	ND	Blank detection
30818	GWC-11	Radium-226		0.443	ND	Blank detection
30818	GWC-11	Radium-228		0.706	ND	Blank detection
30818	GWC-22	Radium-226		0.443	ND	Blank detection
30818	GWC-22	Radium-228		0.686	ND	Blank detection
30818	GWC-13	Radium-226		0.444	ND	Blank detection
30818	GWC-13	Radium-228		0.827	ND	Blank detection
30818	GWC-2	Radium-226		0.624	ND	Blank detection
30818	GWC-2	Radium-228		0.912	ND	Blank detection
30818	GWC-9	Radium-226		0.536	ND	Blank detection
30818	GWC-9	Radium-228		0.976	ND	Blank detection
30818	GWC-20	Radium-226		0.442	ND	Blank detection
30818	GWC-20	Radium-228		1.35	ND	Blank detection
30818	GWC-17	Radium-226		0.383	ND	Blank detection

Abbreviations:

MDC – Minimum Detectable Concentration  
 MS/MSD – Matrix Spike / Matrix Spike Duplicate  
 MDL – Method Detection Limit  
 RL – Reporting Limit  
 RPD – Relative Percent Difference  
 SDG – Sample Delivery Group  
 TDS – Total Dissolved Solids

Qualifiers:

J – Estimated Result  
 ND – Non-Detect Result  
 H – Holding Time Exceeded

Product Name: Low-Flow System

Date: 2020-04-06 16:06:35

Project Information:

Operator Name	Anna Schnittker
Company Name	ACC
Project Name	1st SA
Site Name	Plant Kraft - Grumman Rd
Latitude	0° 0' 0"
Longitude	0° 0' 0"
Sonde SN	369323
Turbidity Make/Model	Hach 2100

Pump Information:

Pump Model/Type	Peri poly
Tubing Type	0.17 in
Tubing Diameter	20 ft
Tubing Length	

Pump placement from TOC	16 ft
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Well Information:

Well ID	GWA-7
Well diameter	2 in
Well Total Depth	21.1 ft
Screen Length	5 ft
Depth to Water	5.95 ft

Pumping Information:

Final Pumping Rate	225 mL/min
Total System Volume	0.1792685 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	5 in
Total Volume Pumped	6.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	15:36:01	300.05	22.81	5.98	1852.10	60.00	6.40	0.03	-72.82
Last 5	15:46:01	900.01	22.51	6.02	1853.70	59.00	6.40	0.00	-80.24
Last 5	15:51:01	1200.01	22.61	6.03	1857.00	61.00	6.40	-0.00	-82.00
Last 5	15:56:01	1500.01	22.28	6.02	1863.40	59.00	6.40	-0.00	-80.92
Last 5	16:01:01	1800.00	22.24	6.02	1880.05	67.00	6.40	-0.00	-81.35
Variance 0		0.10	0.00		3.29			-0.00	-1.76
Variance 1		-0.34	-0.00		6.40			-0.00	1.08
Variance 2		-0.03	-0.00		16.65			0.00	-0.43

Notes

Sample time: 16:00. Weather: Sunny 80s

Grab Samples

Product Name: Low-Flow System

Date: 2020-04-06 14:36:35

## Project Information:

Operator Name: Anna Schnittker  
 Company Name: ACC  
 Project Name: 1st SA  
 Site Name: Plant Kraft Grumman Rd  
 Latitude: 0° 0' 0"  
 Longitude: 0° 0' 0"  
 Sonde SN: 369323  
 Turbidity Make/Model: Hach 2100Q

## Pump Information:

Pump Model/Type: Peru  
 Tubing Type: poly  
 Tubing Diameter: 0.17 in  
 Tubing Length: 16 ft

Pump placement from TOC

18 ft

## Well Information:

Well ID: GWA-8  
 Well diameter: 2 in  
 Well Total Depth: 20.9 ft  
 Screen Length: 5 ft  
 Depth to Water: 7.38 ft

## Pumping Information:

Final Pumping Rate: 200 mL/min  
 Total System Volume: 0.1614148 L  
 Calculated Sample Rate: 300 sec  
 Stabilization Drawdown: 20 in  
 Total Volume Pumped: 1.5 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	14:11:47	600.02	22.08	4.68	316.58	1.40	9.10	0.12	131.03
Last 5	14:16:47	900.01	21.97	4.61	318.26	1.30	9.10	0.12	109.71
Last 5	14:21:47	1200.01	22.16	4.56	321.53	1.40	9.10	0.10	95.93
Last 5	14:26:47	1500.00	22.16	4.54	324.58	1.50	9.10	0.09	85.22
Last 5	14:31:47	1800.00	21.85	4.52	327.49	1.60	9.10	0.08	78.73
Variance 0			0.19	-0.04	3.27			-0.01	-13.78
Variance 1			0.00	-0.03	3.04			-0.01	-10.71
Variance 2			-0.31	-0.02	2.92			-0.01	-6.49

## Notes

Sample time: 14:40. Weather: sunny 80s

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-07 09:35:07

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name 1st SA  
 Site Name Plant Kraft - Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 601533  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Perri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 23.8 ft

Pump placement from TOC 20.8 ft

## Well Information:

Well ID GWB-4R  
 Well diameter 2 in  
 Well Total Depth 23.3 ft  
 Screen Length 5 ft  
 Depth to Water 10.83 ft

## Pumping Information:

Final Pumping Rate 175 mL/min  
 Total System Volume 0.1962295 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 4 in  
 Total Volume Pumped 189 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	09:17:42	300.02	20.14	5.73	728.61	7.80	11.20	0.16	14.23
Last 5	09:22:42	600.01	20.15	5.73	699.71	7.70	11.20	0.14	8.59
Last 5	09:27:42	900.01	20.17	5.74	700.36	8.40	11.20	0.13	5.18
Last 5	09:32:42	1200.00	20.16	5.74	700.38	4.90	11.20	0.12	3.52
Last 5									
Variance 0			0.01	0.00	-28.90			-0.02	-5.64
Variance 1			0.02	0.00	0.64			-0.00	-3.41
Variance 2			-0.01	0.00	0.03			-0.02	-1.66

## Notes

Extended purge. Sampled at 0932. 72F Cloudy.

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-07 15:37:24

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name 1st SA  
 Site Name Plant Kraft - Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 601533  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Perri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 27 ft

Pump placement from TOC 24 ft

## Well Information:

Well ID GWB-5R  
 Well diameter 2 in  
 Well Total Depth 26.5 ft  
 Screen Length 5 ft  
 Depth to Water 9.31 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.2105124 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 3 in  
 Total Volume Pumped 36 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization		+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100	
Last 5	15:15:26	9305.86	22.47	5.45	687.54	77.40	9.60	0.01	-9.45
Last 5	15:20:26	9605.85	22.34	5.45	688.19	76.00	9.60	0.01	-9.51
Last 5	15:25:26	9905.87	22.31	5.44	689.10	76.90	9.60	0.01	-9.85
Last 5	15:30:26	10205.85	22.64	5.45	684.83	76.40	9.60	0.01	-9.42
Last 5	15:35:27	10506.83	22.44	5.45	688.92	72.60	9.60	0.01	-11.62
Variance 0		-0.03	-0.01	0.91			-0.00	-0.34	
Variance 1		0.33	0.00	-4.27			-0.00	0.44	
Variance 2		-0.19	0.00	4.09			0.00	-2.20	

## Notes

Sampled at 1535. 85F cloudy.

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-07 16:59:30

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name 1st SA  
 Site Name Plant Kraft - Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 601533  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Perri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 23.2 ft

Pump placement from TOC 20.2 ft

## Well Information:

Well ID GWB-6R  
 Well diameter 2 in  
 Well Total Depth 22.7 ft  
 Screen Length 5 ft  
 Depth to Water 7.18 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.1935514 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 1 in  
 Total Volume Pumped 6 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	16:37:54	900.01	21.83	5.85	1004.56	18.40	7.30	0.04	-25.56
Last 5	16:42:54	1200.00	21.56	5.85	1000.87	18.60	7.30	0.04	-26.52
Last 5	16:47:54	1499.99	21.55	5.84	997.94	26.10	7.30	0.03	-26.67
Last 5	16:52:55	1800.99	21.46	5.84	996.75	20.70	7.30	0.03	-27.18
Last 5	16:57:55	2100.98	21.46	5.86	1002.94	21.00	7.30	0.03	-27.99
Variance 0		-0.02	-0.01		-2.92			-0.01	-0.15
Variance 1		-0.09	0.00		-1.19			-0.00	-0.51
Variance 2		0.01	0.01		6.19			-0.00	-0.81

## Notes

Sampled at 1658. 85F cloudy.

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-07 11:31:48

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name 1st SA  
 Site Name Plant Kraft - Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 601533  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Perri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 28.6 ft

Pump placement from TOC 25.6 ft

## Well Information:

Well ID GWC-1  
 Well diameter 2 in  
 Well Total Depth 28.1 ft  
 Screen Length 5 ft  
 Depth to Water 18.36 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.2176539 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 1 in  
 Total Volume Pumped 6 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	11:10:36	300.02	22.60	5.37	307.54	1.49	18.40	0.17	104.53
Last 5	11:15:36	600.01	22.80	5.37	311.30	1.12	18.40	0.11	103.22
Last 5	11:20:36	900.00	22.89	5.36	306.46	0.87	18.40	0.09	100.89
Last 5	11:25:36	1200.00	23.20	5.36	305.52	0.91	18.40	0.08	101.29
Last 5	11:30:36	1500.00	23.07	5.36	302.89	0.88	18.40	0.08	96.75
Variance 0		0.09	-0.01		-4.83			-0.03	-2.33
Variance 1		0.31	-0.01		-0.94			-0.01	0.40
Variance 2		-0.13	0.00		-2.63			0.00	-4.54

## Notes

Sampled at 1130. 78F cloudy.

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-08 12:27:33

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name 1st SA  
 Site Name Plant Kraft - Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 601533  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Peri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 31.9 ft

Pump placement from TOC 28.9 ft

## Well Information:

Well ID GWC-2  
 Well diameter 2 in  
 Well Total Depth 31.4 ft  
 Screen Length 5 ft  
 Depth to Water 17.54 ft

## Pumping Information:

Final Pumping Rate 225 mL/min  
 Total System Volume 0.2323832 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 1 in  
 Total Volume Pumped 19.6 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	12:05:20	3599.95	22.95	4.66	77.44	8.42	17.70	0.03	76.49
Last 5	12:10:20	3899.95	22.80	4.67	75.86	7.21	17.70	0.04	73.71
Last 5	12:15:20	4199.95	22.73	4.66	76.89	6.16	17.70	0.03	72.89
Last 5	12:20:21	4500.94	22.80	4.66	77.27	5.32	17.70	0.04	70.91
Last 5	12:25:21	4800.94	23.09	4.66	77.37	4.55	17.70	0.03	72.72
Variance 0		-0.07	-0.01		1.03			-0.00	-0.82
Variance 1		0.08	0.00		0.38			0.00	-1.99
Variance 2		0.28	0.00		0.10			-0.01	1.82

## Notes

Sampled at 1225. 77F cloudy.

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-08 09:59:59

Project Information:

Operator Name Anna Schnittker  
Company Name ACC  
Project Name 1st SA  
Site Name Plant Kraft - Grumman Rd  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 369323  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Peri  
Tubing Type poly  
Tubing Diameter 0.17 in  
Tubing Length 30 ft

Pump placement from TOC 23 ft

Well Information:

Well ID GWC-9  
Well diameter 2 in  
Well Total Depth 25.7 ft  
Screen Length 5 ft  
Depth to Water 8.18 ft

Pumping Information:

Final Pumping Rate 130 mL/min  
Total System Volume 0.2239027 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 33 in  
Total Volume Pumped 13.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	09:34:07	300.02	21.02	5.47	130.20	7.10	8.70	0.32	115.55
Last 5	09:39:07	600.01	21.04	4.89	130.18	7.00	9.60	0.23	117.36
Last 5	09:44:07	900.01	21.47	4.77	130.50	6.90	10.00	0.20	120.71
Last 5	09:49:07	1200.01	21.80	4.74	130.38	6.70	11.20	0.22	116.00
Last 5	09:54:07	1500.00	21.75	4.73	129.51	7.80	12.20	0.21	116.57
Variance 0			0.43	-0.12	0.31			-0.04	3.35
Variance 1			0.32	-0.02	-0.11			0.02	-4.71
Variance 2			-0.05	-0.02	-0.87			-0.01	0.57

Notes

Sample time: 1000. Weather: cloudy 70s

Grab Samples

Product Name: Low-Flow System

Date: 2020-04-07 12:32:01

Project Information:

Operator Name	Anna Schnittker
Company Name	ACC
Project Name	1st SA
Site Name	Plant Kraft - Grumman Rd
Latitude	0° 0' 0"
Longitude	0° 0' 0"
Sonde SN	369323
Turbidity Make/Model	Hach 2100Q

Pump Information:

Pump Model/Type	Peri poly
Tubing Type	0.17 in
Tubing Diameter	25 ft
Tubing Length	

Pump placement from TOC	20 ft
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Well Information:

Well ID	GWC-11
Well diameter	2 in
Well Total Depth	22.55 ft
Screen Length	5 ft
Depth to Water	10.74 ft

Pumping Information:

Final Pumping Rate	130 mL/min
Total System Volume	0.2015856 L
Calculated Sample Rate	300 sec
Stabilization Drawdown	47 in
Total Volume Pumped	12.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	12:08:02	4501.97	22.82	5.06	784.42	5.40	14.60	0.18	247.33
Last 5	12:13:02	4801.97	23.79	5.07	950.72	5.80	14.60	0.12	247.08
Last 5	12:18:02	5101.97	24.04	5.06	985.74	4.80	14.60	0.12	246.52
Last 5	12:23:02	5401.97	24.04	5.05	1020.90	4.90	14.60	0.12	246.60
Last 5	12:28:02	5702.00	23.91	5.05	1030.57	3.90	14.60	0.12	246.71
Variance 0		0.25	-0.00		35.02			-0.00	-0.56
Variance 1		-0.01	-0.01		35.15			-0.00	0.08
Variance 2		-0.13	-0.00		9.68			0.00	0.11

Notes

Sample time: 12:35 Weather: sunny 80s

Grab Samples

Product Name: Low-Flow System

Date: 2020-04-07 09:57:34

## Project Information:

Operator Name Anna Schnittker  
 Company Name ACC  
 Project Name 1st SA  
 Site Name Plant Kraft - Grumman Rd  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 369323  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type Peri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 27 ft

Pump placement from TOC 24 ft

## Well Information:

Well ID GWC-12  
 Well diameter 2 in  
 Well Total Depth 26.70 ft  
 Screen Length 5 ft  
 Depth to Water 10.68 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.2105124 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 6 in  
 Total Volume Pumped 6 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	09:34:41	600.02	21.67	4.05	760.75	0.60	11.20	0.10	239.82
Last 5	09:39:41	900.02	21.84	4.07	765.04	0.70	11.20	0.09	224.85
Last 5	09:44:41	1200.01	21.72	4.08	756.48	0.80	11.20	0.08	202.91
Last 5	09:49:41	1500.01	21.68	4.09	747.75	0.70	11.20	0.07	195.62
Last 5	09:54:41	1800.00	21.73	4.10	744.01	0.70	11.20	0.07	176.38
Variance 0		-0.12	0.01		-8.56			-0.01	-21.94
Variance 1		-0.04	0.01		-8.73			-0.01	-7.30
Variance 2		0.05	0.01		-3.74			-0.00	-19.24

## Notes

Sampling time: 1000. Weather: sunny 70s

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-08 09:56:20

## Project Information:

Operator Name O. Fuquea  
 Company Name ACC  
 Project Name 1st SA  
 Site Name Plant Kraft - Grumman Road  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 601533  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Perri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 24.6 ft  
 Pump placement from TOC 21.6 ft

## Well Information:

Well ID GWC-13  
 Well diameter 2 in  
 Well Total Depth 24.1 ft  
 Screen Length 5 ft  
 Depth to Water 12.49 ft

## Pumping Information:

Final Pumping Rate 250 mL/min  
 Total System Volume 0.1998002 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 0 in  
 Total Volume Pumped 15.75 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	09:33:16	600.01	20.57	4.79	134.56	5.95	12.40	0.16	110.39
Last 5	09:38:16	900.01	20.60	4.79	136.40	3.24	12.40	0.14	100.65
Last 5	09:43:18	1202.00	20.96	4.80	135.81	3.60	12.40	0.11	93.49
Last 5	09:48:19	1502.99	21.06	4.80	131.00	2.14	12.40	0.11	90.59
Last 5	09:53:19	1802.99	21.03	4.81	131.63	3.00	12.40	0.11	87.03
Variance 0		0.37	0.01	-0.59				-0.02	-7.16
Variance 1		0.10	0.01	-4.81				-0.01	-2.90
Variance 2		-0.02	0.00	0.63				0.01	-3.56

## Notes

Sampled at 0953. 78F cloudy.

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-07 17:55:21

## Project Information:

Operator Name Z. Davis  
 Company Name ACC  
 Project Name 1st SA  
 Site Name Plant Kraft - Grumman Rd  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 407447  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Perri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 28 ft

Pump placement from TOC 25 ft

## Well Information:

Well ID GWC-14  
 Well diameter 2 in  
 Well Total Depth 27.0 ft  
 Screen Length 5 ft  
 Depth to Water 17.97 ft

## Pumping Information:

Final Pumping Rate 175 mL/min  
 Total System Volume 0.2149758 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 4 in  
 Total Volume Pumped 6.125 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 100
Last 5	17:34:24	300.16	20.71	6.17	1101.14	26.20	18.40	0.49	100.56
Last 5	17:39:23	600.03	20.54	6.17	1094.01	21.50	18.40	0.63	93.77
Last 5	17:44:23	1200.03	20.24	6.17	1107.72	15.00	18.40	0.57	97.09
Last 5	17:49:23	1500.03	20.26	6.16	1108.35	11.10	18.40	0.57	89.17
Last 5	17:54:26	1803.02	20.21	6.20	1105.56	4.23	18.40	0.63	84.89
Variance 0		-0.30	0.00		13.71			-0.06	3.31
Variance 1		0.02	-0.01		0.63			-0.00	-7.92
Variance 2		-0.04	0.03		-2.79			0.06	-4.28

## Notes

Sampled 17:55. Cloudy at 80 degrees F.

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-07 16:02:33

## Project Information:

Operator Name Z. Davis  
 Company Name ACC  
 Project Name 1st SA  
 Site Name Plant Kraft - Grumman Rd  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 407447  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Perri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 28 ft

Pump placement from TOC 25 ft

## Well Information:

Well ID GWC-15  
 Well diameter 2 in  
 Well Total Depth 26.6 ft  
 Screen Length 5 ft  
 Depth to Water 18.45 ft

## Pumping Information:

Final Pumping Rate 175 mL/min  
 Total System Volume 0.2149758 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 4 in  
 Total Volume Pumped 7 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization		+/- 100	+/- 0.1	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 100
Last 5	15:40:06	600.03	22.56	6.84	716.82	4.36	18.80	0.29	81.33
Last 5	15:45:54	1067.62	22.56	6.85	714.01	3.81	18.80	0.20	75.21
Last 5	15:50:54	1367.62	22.66	6.85	711.56	3.75	18.80	0.17	71.45
Last 5	15:55:02	1675.62	22.71	6.84	709.36	3.16	18.80	0.16	69.59
Last 5	16:00:05	1978.30	22.49	6.83	710.39	3.08	18.80	0.14	67.38
Variance 0		0.11	-0.00		-2.46			-0.03	-3.76
Variance 1		0.05	-0.01		-2.20			-0.01	-1.86
Variance 2		-0.23	-0.01		1.03			-0.02	-2.21

## Notes

GWC-15. Sampled 4/7/20 at 16:10. Weather is cloudy, 85 degrees F

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-08 10:44:41

## Project Information:

Operator Name Z. David  
 Company Name ACC  
 Project Name 1st SA  
 Site Name Plant Kraft - Grumman Rd  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 407447  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Perri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 29.2 ft

Pump placement from TOC 25.5 ft

## Well Information:

Well ID GWC-16  
 Well diameter 2 in  
 Well Total Depth 28.2 ft  
 Screen Length 5 ft  
 Depth to Water 19.97 ft

## Pumping Information:

Final Pumping Rate 160 mL/min  
 Total System Volume 0.2203319 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 3 in  
 Total Volume Pumped 14.4 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 100
Last 5	10:24:43	1608.09	22.71	5.95	1813.16	7.04	20.20	1.09	71.25
Last 5	10:29:43	1908.08	22.82	5.95	1806.76	6.31	20.20	1.08	67.07
Last 5	10:34:46	2211.08	22.96	5.94	1810.12	6.12	20.20	1.08	64.68
Last 5	10:39:46	2511.08	23.00	5.94	1810.20	5.96	20.30	1.06	62.40
Last 5	10:44:46	2811.08	23.08	5.94	1815.76	4.95	20.30	1.04	60.81
Variance 0		0.13	-0.01		3.35			0.00	-2.39
Variance 1		0.04	-0.00		0.08			-0.02	-2.28
Variance 2		0.08	0.00		5.57			-0.02	-1.59

## Notes

GWC-16. Sampled at 10:45. Weather is cloudy, 76 degrees

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-08 15:30:43

## Project Information:

Operator Name Z. Davis  
 Company Name ACC  
 Project Name 1st SA  
 Site Name Plant Kraft - Grumman Rd  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 407447  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Perri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 23 ft

Pump placement from TOC 21 ft

## Well Information:

Well ID GWC-17  
 Well diameter 2 in  
 Well Total Depth 23.0 ft  
 Screen Length 5 ft  
 Depth to Water 6.81 ft

## Pumping Information:

Final Pumping Rate 100 mL/min  
 Total System Volume 0.1926587 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 15.6 in  
 Total Volume Pumped 18.9 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 100
Last 5	15:09:48	17792.33	22.80	4.67	1327.18	29.50	8.10	0.23	77.86
Last 5	15:15:01	18105.34	22.96	4.66	1326.62	23.90	8.10	0.21	80.70
Last 5	15:20:01	18405.34	22.47	4.72	1319.36	21.80	8.10	0.25	73.80
Last 5	15:25:01	18705.34	22.59	4.72	1320.70	17.00	8.10	0.26	74.22
Last 5	15:30:01	19005.33	22.46	4.71	1330.65	9.80	8.10	0.24	73.26
Variance 0		-0.49	0.07		-7.25			0.04	-6.90
Variance 1		0.12	-0.00		1.34			0.01	0.42
Variance 2		-0.14	-0.01		9.95			-0.02	-0.95

## Notes

Started purge during cal at 0900 Sample time: 15:35. Weather cloudy 70s

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-08 11:57:07

Project Information:

Operator Name Anna Schnittker  
Company Name ACC  
Project Name 1st SA  
Site Name Plant Kraft - Grumman Rd  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 369323  
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Peri  
Tubing Type poly  
Tubing Diameter 0.17 in  
Tubing Length 28 ft

Pump placement from TOC 22.5 ft

Well Information:

Well ID GWC-20  
Well diameter 2 in  
Well Total Depth 24.91 ft  
Screen Length 5 ft  
Depth to Water 20.36 ft

Pumping Information:

Final Pumping Rate 175 mL/min  
Total System Volume 0.2149758 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 3 in  
Total Volume Pumped 8.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	11:33:52	1800.00	22.80	6.29	1152.15	0.90	20.60	0.12	-15.62
Last 5	11:38:52	2100.00	22.96	6.30	1146.21	0.70	20.60	0.13	-16.88
Last 5	11:43:52	2400.00	22.96	6.30	1127.23	0.60	20.60	0.14	-16.22
Last 5	11:48:52	2699.99	22.96	6.31	1130.34	0.50	20.60	0.13	-16.76
Last 5	11:53:52	2999.99	23.18	6.31	1136.19	0.60	20.60	0.16	-15.41
Variance 0		-0.00	0.00		-18.97			0.01	0.66
Variance 1		0.00	0.01		3.11			-0.01	-0.54
Variance 2		0.22	0.01		5.85			0.03	1.35

Notes

Sample time: 1200. Weather: cloudy 70s

Grab Samples

Product Name: Low-Flow System

Date: 2020-04-07 13:43:06

## Project Information:

Operator Name Z. Davis  
 Company Name ACC  
 Project Name 1st SA  
 Site Name Plant Kraft - Grumman Rd  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 407447  
 Turbidity Make/Model HACH 2100Q

## Pump Information:

Pump Model/Type Perri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 24 ft

Pump placement from TOC 21 ft

## Well Information:

Well ID GWC-21  
 Well diameter 2 in  
 Well Total Depth 23.8 ft  
 Screen Length 5 ft  
 Depth to Water 19.86 ft

## Pumping Information:

Final Pumping Rate 125 mL/min  
 Total System Volume 0.1971222 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 3 in  
 Total Volume Pumped 15 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 100
Last 5	13:21:13	4804.03	25.37	5.92	101.49	0.87	20.10	4.99	84.22
Last 5	13:26:25	5416.03	24.91	5.96	101.39	0.84	20.10	5.05	81.73
Last 5	13:31:25	5716.03	25.24	5.96	107.15	0.77	20.10	4.91	83.21
Last 5	13:36:26	6017.03	25.30	5.98	108.86	0.79	20.10	4.95	82.58
Last 5	13:41:26	6317.03	25.06	6.00	112.57	0.76	20.10	4.58	82.35
Variance 0		0.34	0.00		5.75			-0.14	1.48
Variance 1		0.06	0.02		1.71			0.04	-0.63
Variance 2		-0.24	0.02		3.71			-0.38	-0.23

## Notes

GWC-21. Sampled at 13:45. Weather is cloudy, 84 degrees F

## Grab Samples

Product Name: Low-Flow System

Date: 2020-04-07 15:37:08

## Project Information:

Operator Name Anna Schnittker  
 Company Name ACC  
 Project Name Plant Kraft Grumman Rd 1st SA  
 Site Name Plant Kraft Grumman Rd  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 369323  
 Turbidity Make/Model Hach 2100Q

## Pump Information:

Pump Model/Type Peri  
 Tubing Type poly  
 Tubing Diameter 0.17 in  
 Tubing Length 19 ft

Pump placement from TOC 15 ft

## Well Information:

Well ID GWC-22  
 Well diameter 2 in  
 Well Total Depth 18.6 ft  
 Screen Length 5 ft  
 Depth to Water 7.10 ft

## Pumping Information:

Final Pumping Rate 165 mL/min  
 Total System Volume 0.1748051 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 2 in  
 Total Volume Pumped 14.9 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	15:13:29	4804.98	23.28	4.80	741.91	1.40	7.30	0.06	249.14
Last 5	15:18:29	5104.96	22.06	4.81	819.78	1.30	7.30	0.04	246.53
Last 5	15:23:31	5406.96	22.32	4.79	940.79	1.30	7.30	0.04	252.55
Last 5	15:28:31	5706.96	21.75	4.80	938.79	1.30	7.30	0.03	252.19
Last 5	15:33:31	6006.96	21.42	4.80	970.79	1.30	7.30	0.02	256.19
Variance 0		0.26	-0.02		121.02			0.00	6.02
Variance 1		-0.57	0.01		-2.00			-0.01	-0.36
Variance 2		-0.34	0.00		31.99			-0.00	4.00

## Notes

Sample time: 15:40. Weather: cloudy 80s

## Grab Samples



## APPENDIX B

### Monitoring Well Survey Data

AS-BUILT/RECORD SURVEY FOR:  
**PLANT KRAFT**  
**GRUMMAN ROAD LANDFILL**  
 120 GULFSTREAM ROAD  
 PORT WENTWORTH, GEORGIA  
 NOVEMBER 13, 2017

REVISION

DATE

SHEET OF

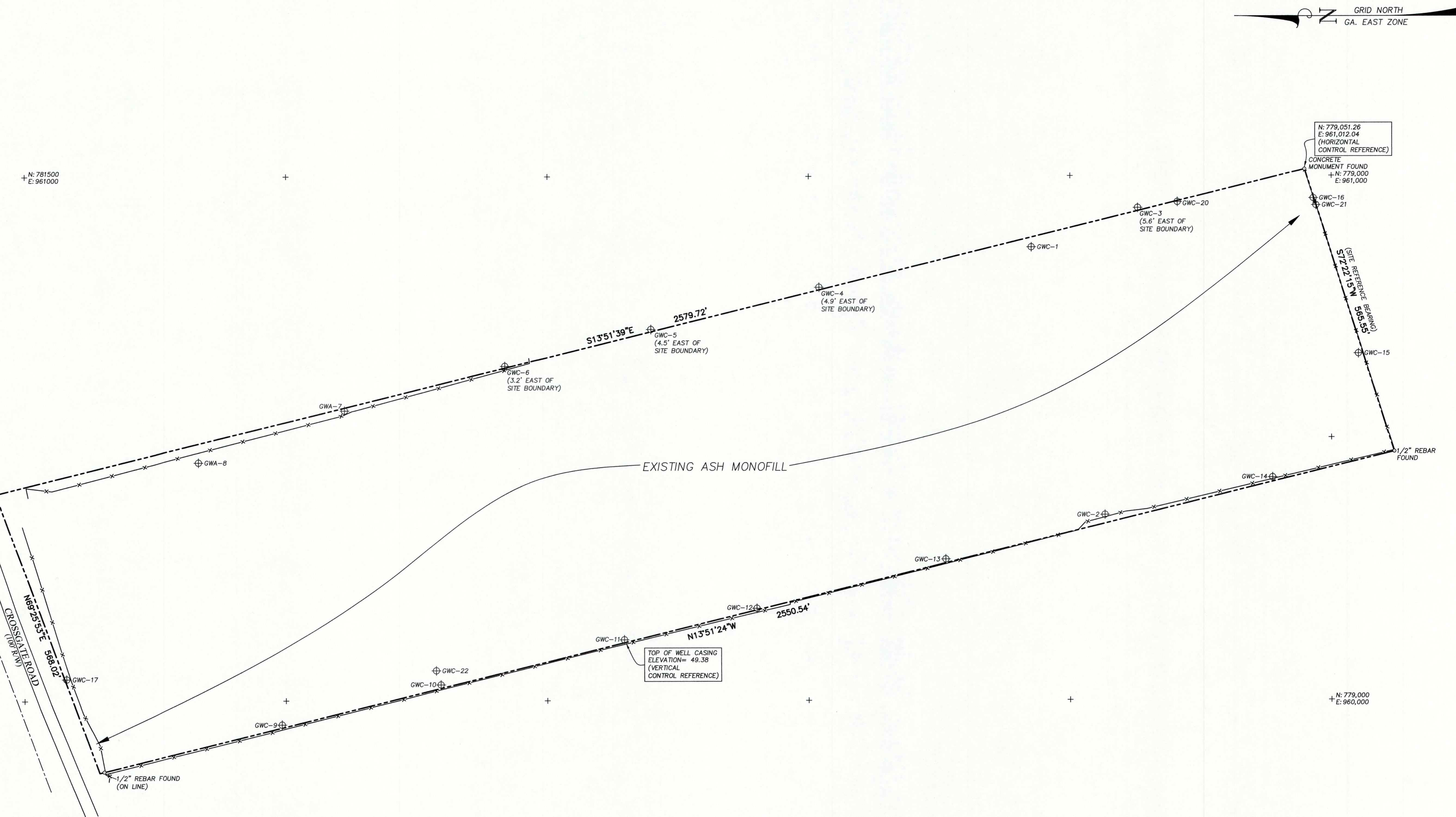
1 1

**Gunnin**  
 LAND SURVEYING, LLC

107 MOUNTAIN BRICK DRIVE, SUITE 104  
 CANTON, GA 30115  
 Tel: 678.880.7502  
 Fax: 678.889.4731

www.gunninlandsurveying.com  
 Land Surveyor Firm License No. LS#00333

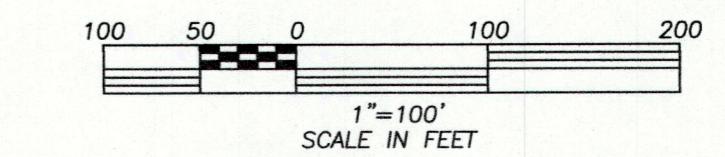
PROJECT NO. 17137



**GROUNDWATER MONITORING WELL  
COORDINATE/ELEVATION TABLE**

Well ID	Easting	Northing	Top of Casing Base	Ground Surface
GWC-1	960864.07	779574.06	50.30	47.17
GWC-2	960353.27	779433.44	49.15	46.95
GWC-3	960938.90	779370.58	49.76	46.88
GWC-4	960787.86	779980.30	48.96	46.61
GWC-5	960707.98	780302.13	48.33	45.74
GWC-6	960637.83	780581.14	48.27	45.11
GWA-7	960553.30	780887.99	47.10	44.71
GWA-8	960453.78	781167.66	46.84	44.14
GWC-9	959954.35	781007.52	47.11	43.70
GWC-10	960030.15	780703.64	47.43	44.81
GWC-11	960115.63	780352.70	49.38	46.07
GWC-12	960175.37	780099.06	47.48	44.45
GWC-13	960268.64	779737.90	47.82	44.67
GWC-14	960423.84	779112.64	50.70	47.94
GWC-15	960660.49	778948.31	48.12	45.52
GWC-16	960956.85	779034.61	47.79	45.06
GWC-17	960041.65	781420.05	44.09	41.45
GWC-20	960950.04	779294.68	50.03	46.96
GWC-21	960941.58	779031.11	47.94	44.84
GWC-22	960057.05	780712.60	46.72	43.77
				43.71

- NOTES:**
- 1) THE SPECIFIC PURPOSE OF THIS SURVEY MAP IS TO PROVIDE LOCATIONS/ELEVATIONS OF MONITORING WELLS IN RELATION TO SITE BOUNDARIES.
  - 2) SITE BOUNDARIES/ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE FOLLOWING FURNISHED DATA:
    - A. "PLANT CRAFT GRUMMAN ROAD MONOFILL EXISTING CONDITIONS DATA" BY HUSSEY, GAY & BELL, DATED SEPTEMBER, 1986.
    - B. "SAVANNAH ELECTRIC & POWER CO. ASH DISPOSAL SITE SUPPORTING DATA" BY HUSSEY, GAY & BELL, DATED SEPTEMBER, 1986.  - 3) THE CERTIFICATION SHOWN HEREON IS LIMITED TO ABOVE NOTES 1) AND 2)
  - 4) HORIZONTAL/VERTICAL DATUM SHOWN HEREON IS REFERENCED TO EXISTING SITE DATUM (SEE ABOVE NOTATIONS)
  - 5) DATE OF FIELD SURVEY: 10/26/2017



**LEGEND**  
 — GROUNDWATER MONITORING WELL  
 -X- FENCE  
 --- SITE BOUNDARY

107 Mountain Brook Dr., Ste. 104  
Canton, GA 30115



www.gunninsurvey.com  
678.880.7502

DATE: October 23, 2018

TO: Atlantic Coast Consulting, Inc.  
630 Colonial Park Dr # 110,  
Roswell, GA 30075

ATTN: Evan Perry

SUBJECT: Grumman Road Landfill - Monitoring Well Data

The following data has been established on the new wells using existing site datum.

Well ID	Northing	Easting	Surface Elev.	Concrete Elev.	PVC Elev.	TOC Elev.
GWB-4R	779976.24	960771.51	46.37	46.43	45.86	46.50
GWB-5R	780294.37	960686.46	45.09	45.31	47.82	48.06
GWB-6R	780573.41	960610.31	44.55	44.71	47.40	47.70

Sincerely yours,

Gunnin Land Surveying, LLC.

A handwritten signature in blue ink that reads "Gary D. Martin".

Gary D. Martin, L.S. Principal Surveyor



107 Mountain Brook Dr., Ste. 104  
Canton, GA 30115



www.gunninsurvey.com  
678.880.7502

DATE: June 17, 2020

TO: Atlantic Coastal Consulting, Inc  
1150 Northmeadow Parkway  
Suite 100  
Roswell, GA 30076

ATTN: Evan Perry of Atlantic Coastal Consulting

SUBJECT: Grumman Road Landfill: 2 Wells

The following data has been established on the new wells using existing site datum. The Surveyor can provide Georgia State Plane East Zone (NAD 83 horizontal and NAVD 88 vertical) coordinates upon request.

WELL ID	NORTHING	EASTING	ELEVATION	ELEVATION	ELEVATION
	NAIL	Nail	NAIL	TOP OF CASE	TOP OF PVC
GWC-2	779433.81	960353.99	48.11	51.90	51.84

WELL ID	NORTHING	EASTING	ELEVATION	ELEVATION	ELEVATION
	TOP OF CASE	TOP OF CASE	PAD	TOP OF CASE	TOP OF PVC
GWB-4R	779975.87	960770.83	46.82	50.48	49.58

Sincerely yours,  
Gunnin Land Surveying, LLC.



Jesse R. Gunnin, L.S. Principal Surveyor



## APPENDIX C

### Statistical Analyses



**Second 2019 Semiannual  
Statistical Analysis of  
Appendix IV Constituents**  
(Completed by ACC, Inc.)



1150 Northmeadow Pkwy.  
Suite 100  
Roswell, GA 30076  
(770) 594-5998  
[www.atlcc.net](http://www.atlcc.net)

April 10, 2020

Ms. Lauren Petty, P.G.  
Southern Company – Environmental Solutions  
3535 Colonnade Pkwy., Bin S530 EC  
Birmingham, Alabama 35243

RE: 2019 Semi-Annual Groundwater Monitoring & Corrective Action Statistical Summary  
Grumman Road Private Industrial Landfill  
GA EPD Permit No. 025-061D(LI)  
Chatham County

Dear Ms. Petty:

This letter presents statistical analysis for Georgia Power Company's Grumman Road Private Industrial Landfill (Site) October 2019 assessment monitoring event. The statistical methods comply with the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10 and follow the United States Environmental Protection Agency (USEPA) Unified Guidance (2009). Appendix I and II metals required by the existing state permit, Appendix III parameters, and Appendix IV parameters detected during the August 2019 monitoring event are included in the statistical analysis (Table 1, Summary of Groundwater Monitoring Parameters). Statistical methods used for the Site and Appendix I/II and III statistical results previously included in the *2019 Second Semiannual Groundwater Monitoring and Corrective Action Report* are summarized in the following sections of this letter. The Appendix I/II, III, and IV statistical data are provided in Attachment A.

**Table 1. Summary of Groundwater Monitoring Parameters**

<b>Appendix III (40 CFR 257)</b>	<b>Appendix IV (40 CFR 257)</b>	<b>Appendix I/II (40 CFR 258)</b>
Boron Calcium Chloride Fluoride pH Sulfate Total Dissolved Solids	Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Fluoride Lead Lithium Molybdenum Radium 226 and 228 combined Selenium Thallium	Antimony Arsenic Barium Chromium Lead Selenium Vanadium Zinc

A perimeter groundwater monitoring system has been installed within the uppermost aquifer at the Site. The monitoring system is designed to monitor groundwater passing the unit boundary within

the uppermost aquifer. The network includes two upgradient monitoring wells (GWA-7 and GWA-8) and 16 downgradient/sidegradient monitoring wells (GWB-4R, GWB-5R, GWB-6R, GWC-1, GWC-2, GWC-9, GWC-11, GWC-12, GWC-13, GWC-14, GWC-15, GWC-16, GWC-17, GWC-20, GWC-21, and GWC-22).

### **Statistical Methods**

All screened historical background data through July 2018 were used to construct statistical limits for both Appendix I/II metals and Appendix III constituents. Sanitas groundwater statistical software was used to perform the statistical analyses. Sanitas is a decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by USEPA regulations. Wells and analytes with all data below the reporting limit (i.e., 100% non-detect) do not require statistical analysis.

- **Appendix I/II Groundwater Monitoring Data:** Statistical tests consist of introwell prediction limits combined with a 1-of-2 verification resample plan for all required metals. In an introwell comparison, analytical results from an individual well are compared to historical analytical results in that same well. If a result from a sampling event initially exceeds the PL, then verification resampling may be used. In 1-of-2 resampling, an independent resample may be collected and evaluated within 90 days to determine whether the initial exceedance is verified. If a resample exceeds the PL, the initial exceedance is verified, and a statistically significant increase (SSI) is identified. When a re-sample result does not verify the initial result, and does not exceed the PL, there is no SSI. If resampling is not performed, the initial exceedance is a confirmed exceedance.
- **Appendix III Groundwater Monitoring Data:** Statistical tests consist of interwell prediction limits combined with a 1-of-2 verification resample plan for calcium, chloride, fluoride, pH, and sulfate. Monitoring results for boron and total dissolved solids (TDS) are evaluated using introwell prediction limits combined with a 1-of-3 verification resample plan. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent, and the most recent sample from each downgradient well is compared to the same limit for each parameter. Introwell prediction limits are constructed from historical data within a given well, and the most recent sample is compared to background. If the most recent sample exceeds its respective background statistical limit, an initial SSI is identified.
- **Confidence Intervals for Appendix II Metals and Appendix IV Parameters:** Parametric tolerance limits were used to calculate background limits, when pooled upgradient well data followed a normal or transformed-normal distribution, with a target of 95% confidence and 95% coverage. Nonparametric tolerance limits are used when the percentage of nondetects is greater than 50% or when data do not follow a normal or transformed normal distribution. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. The background limits were then used when determining the groundwater protection standard (GWPS) established under 40 CFR § 257.95(h) and GA EPD Rule 391-3-4-10(6)(a).

As described in 40 CFR § 257.95(h)(1-3), the GWPS is:

- (1) The maximum contaminant level (MCL);
- (2) Where an MCL has not been established, the background concentration;
- (3) Background maximum contaminant level levels for constituents where the background level is higher than the MCL.

USEPA revised the Federal Coal Combustion Residuals (CCR) Rule on July 30, 2018, providing GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR

257.95(h)(2). Presently those updated GWPS have not yet been incorporated in the current GA EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); and therefore, background concentrations are considered when determining the GWPS for constituents where an MCL has not been established (or where background is higher than the MCL), and used to evaluate the existence of a statistically significant level (SSL).

Following the above rule requirements, GWPS have been established for statistical comparison of Appendix II and IV constituents and are presented in Table 2, Summary of Background Levels and Groundwater Protection Standards. To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix II and Appendix IV parameters in each downgradient well. Those confidence intervals were compared to the GWPS established under the State rules. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed the GWPS at an SSL.

**Table 2. Summary of Background Levels and Groundwater Protection Standards**

Constituent	Units	Site Background	MCL	RSL	State GWPS
Antimony	mg/L	0.003	0.006		0.006
Arsenic	mg/L	0.029	0.01		0.029
Barium	mg/L	0.22	2		2
Beryllium	mg/L	0.003	0.004		0.004
Cadmium	mg/L	0.005	0.005		0.005
Chromium	mg/L	0.068	0.1		0.1
Cobalt	mg/L	0.010		0.006	0.010
Fluoride	mg/L	0.51	4		4
Lead	mg/L	0.013		0.015	0.013
Lithium	mg/L	0.050		0.040	0.030
Mercury	mg/L	0.0005	0.002		0.002
Molybdenum	mg/L	0.01		0.1	0.01
Selenium	mg/L	0.044	0.050		0.050
Radium	pCi/L	13.2	5		13.2
Thallium	mg/L	0.001	0.002		0.002
Vanadium	mg/L	0.43			0.43
Zinc	mg/L	0.085			0.085

Notes:

1. Site Background = Tolerance limits calculated from pooled upgradient well data through October 2019.
2. MCL = Maximum Contaminant Level, per Georgia EPD Rule 391-3-5-.18(1)(a).
3. RSL = Regional Screening Level, per 40 CFR 257.95(h)(1-3).
4. State GWPS = Groundwater protection standard, per Georgia EPD Rule 391-3-4-.10(6)(a).
5. Units are milligrams per liter (mg/L), except for radium, which are picocuries per liter (pCi/L).
6. The background tolerance limit (TL) used to evaluate State GWPS for lithium is equal to the most recent laboratory-specified reporting limit (RL). Per the SAP, and in accordance with the Unified Guidance, a non-parametric limit approach was used because the data set contains greater than 50% non-detect results for this analyte. Under this approach, the TL equals the highest value reported, for which is the laboratory RL. However, the highest laboratory RL in background was 0.05 mg/L. As a result, the GWPS has been modified to be equal to the most recently used RL, which is 0.03 mg/L.

### **Statistical Results**

- **Appendix I/II Groundwater Monitoring Data (Previously Reported):** Concentrations of target metals were within their respective intrawell prediction limits during the October 2019 sampling event.

The following Appendix I/II SSIs were reported:

- Arsenic: GWC-15, GWC-16, GWC-20
- Barium: GWC-16
- Selenium: GWC-15
- Zinc: GWC-13
- **Appendix III Groundwater Monitoring Data (Previously Reported):** Analytical data from the October 2019 monitoring event at the Site were analyzed in accordance with the statistical methods.

The following Appendix III SSIs were reported:

- Boron: GWB-6R, GWC-16
- Calcium: GWB-4R, GWC-1, GWC-11, GWC-12, GWC-14, GWC-15, GWC-16, GWC-17, GWC-20, GWC-21
- Chloride: GWC-17
- pH: GWC-15, GWC-20
- Sulfate: GWB-6R, GWC-11, GWC-12, GWC-14, GWC-16, GWC-17
- TDS: GWB-5R, GWB-6R, GWC-16
- **Confidence Intervals for Appendix II Metals and Appendix IV Parameters:** Review of the statistical analysis included in Attachment A indicates that using the GWPS established according to 391-3-4-.10(6)(a), the following SSLs were identified:
  - Arsenic: GWC-15, GWC-16, GWC-20
  - Molybdenum: GWB-4R, GWC-1, GWC-15, GWC-16, GWC-20, GWC-21

If you have any questions regarding this letter or the attached data, please contact either of the undersigned at (770) 594-5998.

Sincerely,  
**Atlantic Coast Consulting, Inc.**

  
William M. Malone  
Project Scientist

Enclosures  
Copy: ACC Project Folder



## **ATTACHMENT A**



**Appendix I/II Statistics (from 2019 Semiannual Groundwater Monitoring and  
Corrective Action Report)**

## Intrawell Prediction Limits Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 2/17/2020, 3:56 PM

Constituent	Well	<u>Upper Lim.</u>	Date	<u>Observ.</u>	Sig.	Bg N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	GWC-15	<b>0.09</b>	10/8/2019	0.13	Yes	43	58.14	n/a	<b>0.001037</b>	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWC-16	<b>0.0944</b>	10/8/2019	0.13	Yes	59	0	n/a	<b>0.0005506</b>	NP Intra (normality) 1 of 2
Selenium (mg/L)	GWC-15	<b>0.01</b>	10/8/2019	0.014	Yes	39	92.31	n/a	<b>0.001226</b>	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWA-7	<b>0.0853</b>	10/8/2019	0.095	Yes	39	30.77	n/a	<b>0.001226</b>	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-13	<b>0.036</b>	10/8/2019	0.053	Yes	38	28.95	n/a	<b>0.001294</b>	NP Intra (normality) 1 of 2

# Intrawell Prediction Limits All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 2/17/2020, 3:56 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GWA-7	0.015	10/8/2019	0.015ND	No	41	85.37	n/a	0.001118	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-11	0.003	10/8/2019	0.00046	No	43	90.7	n/a	0.001037	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-13	0.003	10/8/2019	0.003ND	No	43	97.67	n/a	0.001037	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-14	0.005	10/8/2019	0.003ND	No	64	98.44	n/a	0.0004732	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-16	0.006	10/8/2019	0.003ND	No	64	98.44	n/a	0.0004732	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-20	0.003	10/9/2019	0.003ND	No	22	95.45	n/a	0.003707	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-22	0.003	10/9/2019	0.003ND	No	21	100	n/a	0.003999	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-9	0.003	10/9/2019	0.003ND	No	43	97.67	n/a	0.001037	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWB-4R	0.003	10/9/2019	0.003ND	No	43	93.02	n/a	0.001037	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWB-5R	0.015	10/9/2019	0.015ND	No	43	100	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-7	0.0287	10/8/2019	0.003	No	41	58.54	n/a	0.001118	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-8	0.005	10/7/2019	0.005ND	No	63	92.06	n/a	0.000487	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-1	0.0071	10/9/2019	0.0042	No	39	69.23	n/a	0.001226	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-12	0.005	10/9/2019	0.005ND	No	43	93.02	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-13	0.0064	10/8/2019	0.005ND	No	43	95.35	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-14	0.011	10/8/2019	0.0017	No	64	81.25	n/a	0.0004732	NP Intra (NDs) 1 of 2
<b>Arsenic (mg/L)</b>	<b>GWC-15</b>	<b>0.09</b>	<b>10/8/2019</b>	<b>0.13</b>	<b>Yes</b>	<b>43</b>	<b>58.14</b>	<b>n/a</b>	<b>0.001037</b>	<b>NP Intra (NDs) 1 of 2</b>
Arsenic (mg/L)	GWC-16	0.1212	10/8/2019	0.088	No	62	0	No	0.0004115	Param Intra 1 of 2
Arsenic (mg/L)	GWC-17	0.005	10/9/2019	0.0011	No	43	86.05	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-2	0.005	10/9/2019	0.005ND	No	41	97.56	n/a	0.001118	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-20	0.5741	10/9/2019	0.35	No	22	4.545	No	0.0004115	Param Intra 1 of 2
Arsenic (mg/L)	GWC-21	0.005	10/8/2019	0.0028	No	17	76.47	n/a	0.005914	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-22	0.005	10/9/2019	0.005ND	No	21	61.9	n/a	0.003999	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWB-4R	0.0068	10/9/2019	0.0024	No	39	61.54	n/a	0.001226	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWB-5R	0.023	10/9/2019	0.0053	No	42	71.43	n/a	0.001077	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWB-6R	0.025	10/9/2019	0.0018	No	43	60.47	n/a	0.001037	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWA-7	0.2043	10/8/2019	0.1	No	41	0	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWA-8	0.14	10/7/2019	0.069	No	60	0	n/a	0.0005281	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-1	0.1141	10/9/2019	0.058	No	42	0	sqrt(x)	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-11	0.2074	10/8/2019	0.13	No	42	0	sqrt(x)	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-12	0.1722	10/9/2019	0.019	No	38	0	ln(x)	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-13	0.03175	10/8/2019	0.024	No	42	14.29	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-14	0.1324	10/8/2019	0.085	No	62	0	x^(1/3)	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-15	0.05948	10/8/2019	0.057	No	40	0	No	0.0004115	Param Intra 1 of 2
<b>Barium (mg/L)</b>	<b>GWC-16</b>	<b>0.0944</b>	<b>10/8/2019</b>	<b>0.13</b>	<b>Yes</b>	<b>59</b>	<b>0</b>	<b>n/a</b>	<b>0.0005506</b>	<b>NP Intra (normality) 1 of 2</b>
Barium (mg/L)	GWC-17	0.247	10/9/2019	0.032	No	42	0	x^2	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-2	0.07214	10/9/2019	0.05	No	39	0	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-20	0.1775	10/9/2019	0.078	No	22	0	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-21	0.1503	10/8/2019	0.079	No	21	0	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-22	0.1535	10/9/2019	0.065	No	21	0	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-9	0.356	10/9/2019	0.18	No	42	0	n/a	0.001077	NP Intra (normality) 1 of 2
Barium (mg/L)	GWB-4R	0.261	10/9/2019	0.076	No	42	0	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWB-5R	0.3072	10/9/2019	0.13	No	40	0	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWB-6R	0.2605	10/9/2019	0.014	No	42	0	sqrt(x)	0.0004115	Param Intra 1 of 2
Chromium (mg/L)	GWA-7	0.068	10/8/2019	0.021	No	41	36.59	n/a	0.001118	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWA-8	0.014	10/7/2019	0.00052	No	61	93.44	n/a	0.0005144	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-1	0.0021	10/9/2019	0.0019	No	41	70.73	n/a	0.001118	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-11	0.01	10/8/2019	0.00091	No	43	69.77	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-12	0.01	10/9/2019	0.00081	No	43	72.09	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-13	0.01	10/8/2019	0.01ND	No	43	79.07	n/a	0.001037	NP Intra (NDs) 1 of 2

# Intrawell Prediction Limits All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 2/17/2020, 3:56 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Chromium (mg/L)	GWC-14	0.014	10/8/2019	0.00053	No	61	67.21	n/a	0.0005144	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-15	0.01	10/8/2019	0.0017	No	43	72.09	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-16	0.01	10/8/2019	0.00099	No	62	80.65	n/a	0.0005007	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-17	0.01	10/9/2019	0.00081	No	42	78.57	n/a	0.001077	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-2	0.01	10/9/2019	0.00049	No	41	90.24	n/a	0.001118	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-20	0.01	10/9/2019	0.0011	No	22	54.55	n/a	0.003707	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-21	0.01	10/8/2019	0.00065	No	21	57.14	n/a	0.003999	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-22	0.01	10/9/2019	0.00072	No	21	80.95	n/a	0.003999	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-9	0.014	10/9/2019	0.0009	No	43	65.12	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWB-4R	0.03411	10/9/2019	0.002	No	43	0	No	0.0004115	Param Intra 1 of 2
Chromium (mg/L)	GWB-5R	0.03	10/9/2019	0.012	No	38	39.47	n/a	0.001294	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWB-6R	0.025	10/9/2019	0.011	No	42	7.143	n/a	0.001077	NP Intra (normality) 1 of 2
Lead (mg/L)	GWA-7	0.013	10/8/2019	0.0098	No	40	65	n/a	0.001159	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-8	0.0095	10/7/2019	0.005ND	No	62	90.32	n/a	0.0005007	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-1	0.005	10/9/2019	0.005ND	No	43	97.67	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-11	0.013	10/8/2019	0.00028	No	42	78.57	n/a	0.001077	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-12	0.005	10/9/2019	0.000066	No	43	76.74	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-13	0.0078	10/8/2019	0.00013	No	43	81.4	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-14	0.005	10/8/2019	0.005ND	No	62	95.16	n/a	0.0005007	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-15	0.0065	10/8/2019	0.00012	No	43	88.37	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-16	0.017	10/8/2019	0.0001	No	62	88.71	n/a	0.0005007	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-17	0.005	10/9/2019	0.00015	No	43	93.02	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-2	0.0069	10/9/2019	0.000064	No	41	90.24	n/a	0.001118	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-20	0.005	10/9/2019	0.00018	No	22	86.36	n/a	0.003707	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-21	0.005	10/8/2019	0.00016	No	21	80.95	n/a	0.003999	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-22	0.013	10/9/2019	0.00032	No	21	57.14	n/a	0.003999	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-9	0.0051	10/9/2019	0.005ND	No	42	88.1	n/a	0.001077	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWB-4R	0.011	10/9/2019	0.00041	No	37	59.46	n/a	0.001361	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWB-5R	0.075	10/9/2019	0.0025	No	42	64.29	n/a	0.001077	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWB-6R	0.025	10/9/2019	0.00033	No	43	81.4	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-7	0.0438	10/8/2019	0.0072	No	40	65	n/a	0.001159	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-8	0.01	10/7/2019	0.01ND	No	62	96.77	n/a	0.0005007	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-1	0.023	10/9/2019	0.0024	No	41	58.54	n/a	0.001118	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-11	0.036	10/8/2019	0.01ND	No	43	62.79	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-12	0.01	10/9/2019	0.01ND	No	43	93.02	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-14	0.1	10/8/2019	0.0026	No	63	23.81	n/a	0.000487	NP Intra (normality) 1 of 2
<b>Selenium (mg/L)</b>	<b>GWC-15</b>	<b>0.01</b>	<b>10/8/2019</b>	<b>0.014</b>	<b>Yes</b>	<b>39</b>	<b>92.31</b>	<b>n/a</b>	<b>0.001226</b>	<b>NP Intra (NDs) 1 of 2</b>
Selenium (mg/L)	GWC-16	0.0085	10/8/2019	0.0023	No	62	75.81	n/a	0.0005007	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-17	0.01	10/9/2019	0.01ND	No	43	83.72	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-2	0.01	10/9/2019	0.01ND	No	41	92.68	n/a	0.001118	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-20	0.01	10/9/2019	0.01ND	No	22	86.36	n/a	0.003707	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-21	0.04932	10/8/2019	0.019	No	21	4.762	No	0.0004115	Param Intra 1 of 2
Selenium (mg/L)	GWC-22	0.01	10/9/2019	0.01ND	No	21	80.95	n/a	0.003999	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-9	0.01	10/9/2019	0.01ND	No	43	97.67	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWB-4R	0.01	10/9/2019	0.01ND	No	34	67.65	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWB-5R	0.011	10/9/2019	0.0073	No	43	88.37	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWB-6R	0.05	10/9/2019	0.05ND	No	43	83.72	n/a	0.001037	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-7	0.425	10/8/2019	0.11	No	41	29.27	n/a	0.001118	NP Intra (normality) 1 of 2
Vanadium (mg/L)	GWA-8	0.01	10/7/2019	0.01ND	No	60	91.67	n/a	0.0005281	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-1	0.01	10/9/2019	0.01ND	No	39	58.97	n/a	0.001226	NP Intra (NDs) 1 of 2

# Intrawell Prediction Limits All Results

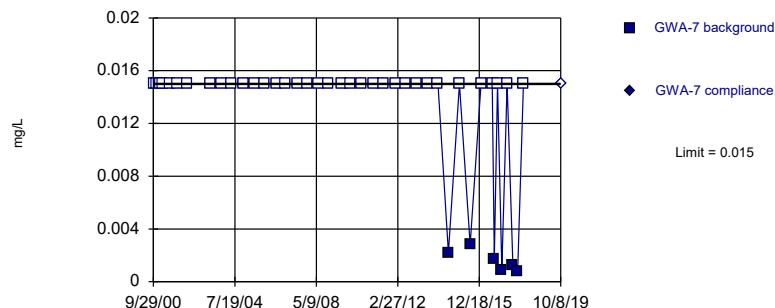
Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 2/17/2020, 3:56 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Vanadium (mg/L)	GWC-11	0.01	10/8/2019	0.01ND	No	40	55	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-12	0.01	10/9/2019	0.0021	No	40	80	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-13	0.01	10/8/2019	0.01ND	No	40	80	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-14	0.04797	10/8/2019	0.01ND	No	62	16.13	x^(1/3)	0.0004115	Param Intra 1 of 2
Vanadium (mg/L)	GWC-15	0.01	10/8/2019	0.01ND	No	40	72.5	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-16	0.012	10/8/2019	0.01ND	No	62	50	n/a	0.0005007	NP Intra (normality) 1 of 2
Vanadium (mg/L)	GWC-17	0.01	10/9/2019	0.01ND	No	40	75	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-2	0.01	10/9/2019	0.01ND	No	38	100	n/a	0.001294	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-20	0.01	10/9/2019	0.01ND	No	21	38.1	n/a	0.003999	NP Intra (normality) 1 of 2
Vanadium (mg/L)	GWC-21	0.007919	10/8/2019	0.01ND	No	18	33.33	ln(x)	0.0004115	Param Intra 1 of 2
Vanadium (mg/L)	GWC-22	0.01	10/9/2019	0.01ND	No	18	61.11	n/a	0.005373	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-9	0.014	10/9/2019	0.01ND	No	40	87.5	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWB-4R	0.1423	10/9/2019	0.01ND	No	40	0	sqrt(x)	0.0004115	Param Intra 1 of 2
Vanadium (mg/L)	GWB-5R	0.04817	10/9/2019	0.033	No	33	15.15	ln(x)	0.0004115	Param Intra 1 of 2
Vanadium (mg/L)	GWB-6R	0.18	10/9/2019	0.018	No	40	7.5	n/a	0.001159	NP Intra (normality) 1 of 2
<b>Zinc (mg/L)</b>	<b>GWA-7</b>	<b>0.0853</b>	<b>10/8/2019</b>	<b>0.095</b>	<b>Yes</b>	<b>39</b>	<b>30.77</b>	<b>n/a</b>	<b>0.001226</b>	<b>NP Intra (normality) 1 of 2</b>
Zinc (mg/L)	GWA-8	0.01	10/7/2019	0.0077	No	57	24.56	n/a	0.0005955	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-1	0.011	10/9/2019	0.0057	No	40	85	n/a	0.001159	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-11	0.013	10/8/2019	0.0061	No	39	69.23	n/a	0.001226	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-12	0.053	10/9/2019	0.0057	No	35	25.71	n/a	0.001497	NP Intra (normality) 1 of 2
<b>Zinc (mg/L)</b>	<b>GWC-13</b>	<b>0.036</b>	<b>10/8/2019</b>	<b>0.053</b>	<b>Yes</b>	<b>38</b>	<b>28.95</b>	<b>n/a</b>	<b>0.001294</b>	<b>NP Intra (normality) 1 of 2</b>
Zinc (mg/L)	GWC-14	0.011	10/8/2019	0.0052	No	63	87.3	n/a	0.000487	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-15	0.011	10/8/2019	0.0051	No	41	90.24	n/a	0.001118	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-16	0.01	10/8/2019	0.01	No	61	67.21	n/a	0.0005144	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-17	0.0175	10/9/2019	0.011	No	40	32.5	n/a	0.001159	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-2	0.012	10/9/2019	0.005	No	37	81.08	n/a	0.001361	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-20	0.01	10/9/2019	0.0049	No	20	85	n/a	0.004291	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-21	0.01	10/8/2019	0.0071	No	17	58.82	n/a	0.005914	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-22	0.02471	10/9/2019	0.0079	No	17	11.76	No	0.0004115	Param Intra 1 of 2
Zinc (mg/L)	GWC-9	0.0059	10/9/2019	0.0054	No	37	45.95	n/a	0.001361	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWB-4R	0.1912	10/9/2019	0.0064	No	40	17.5	ln(x)	0.0004115	Param Intra 1 of 2
Zinc (mg/L)	GWB-5R	0.036	10/9/2019	0.0081	No	33	51.52	n/a	0.001701	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWB-6R	0.05	10/9/2019	0.016	No	19	26.32	n/a	0.004832	NP Intra (normality) 1 of 2

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Hollow symbols indicate censored values.

Within Limit

Antimony  
Intrawell Non-parametric

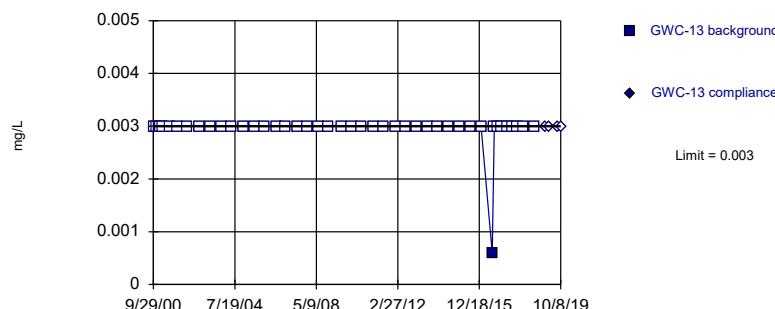


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 85.37% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

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Hollow symbols indicate censored values.

Within Limit

Antimony  
Intrawell Non-parametric



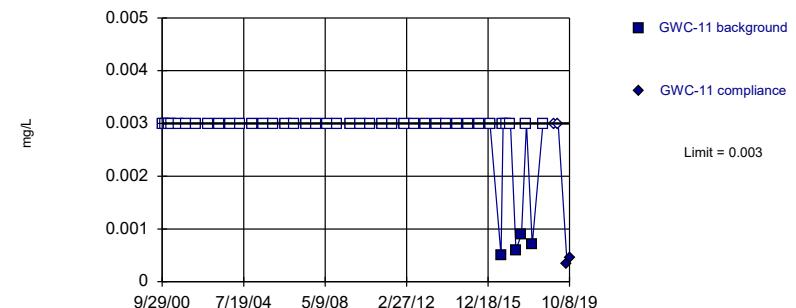
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 90.7% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:42 PM View: Intrawell PL  
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Within Limit

Antimony  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 90.7% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC, UG  
Hollow symbols indicate censored values.

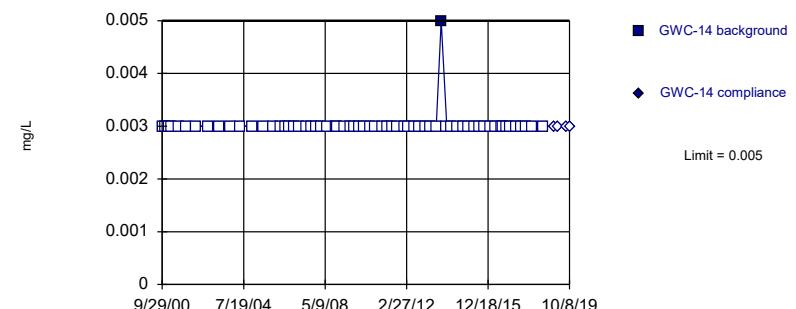
Within Limit

Antimony  
Intrawell Non-parametric

Sanitas™ v.9.6.25 Sanitas software licensed to ACC, UG  
Hollow symbols indicate censored values.

Within Limit

Antimony  
Intrawell Non-parametric



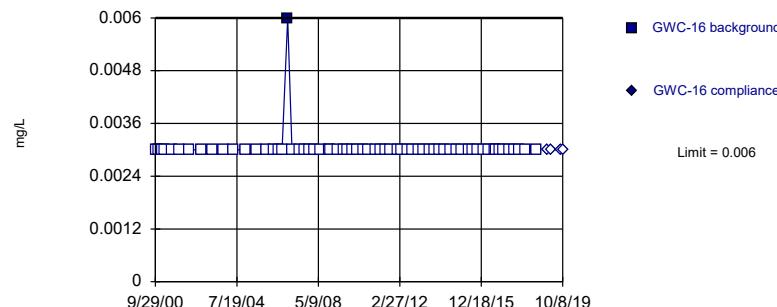
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 64 background values. 98.44% NDs. Well-constituent pair annual alpha = 0.0009462. Individual comparison alpha = 0.0004732 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

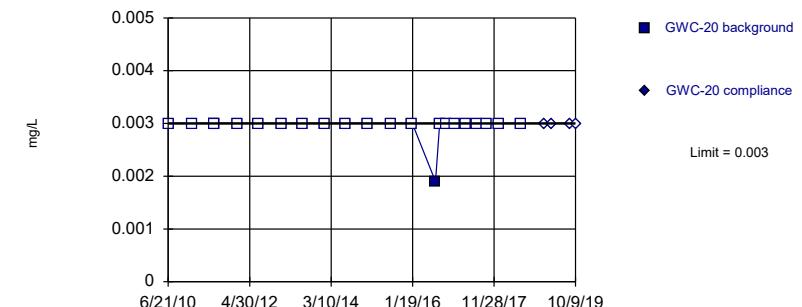
Antimony  
Intrawell Non-parametric



Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Antimony  
Intrawell Non-parametric



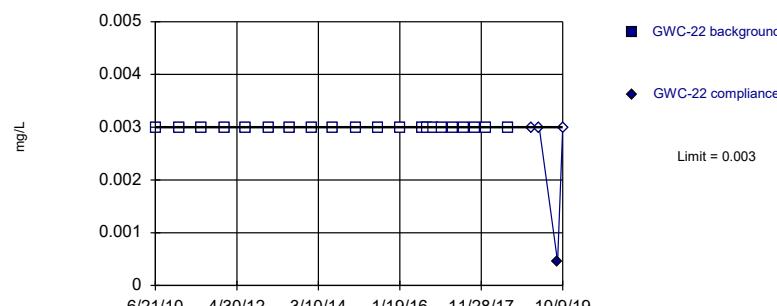
Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

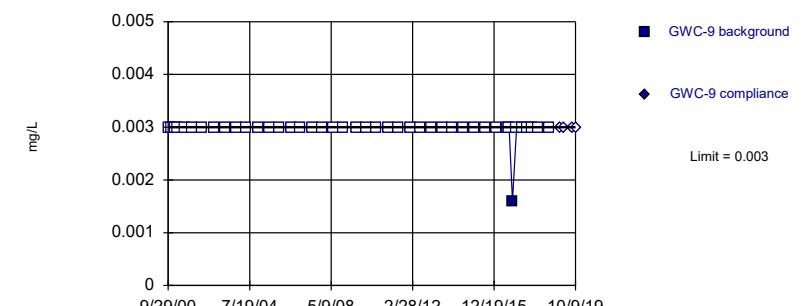
Antimony  
Intrawell Non-parametric



Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Antimony  
Intrawell Non-parametric



Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

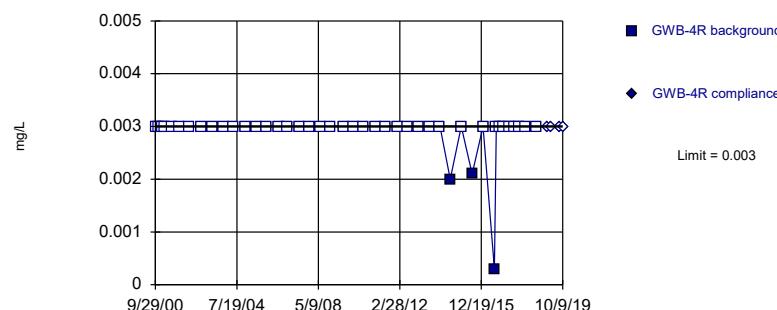
Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Antimony

Intrawell Non-parametric



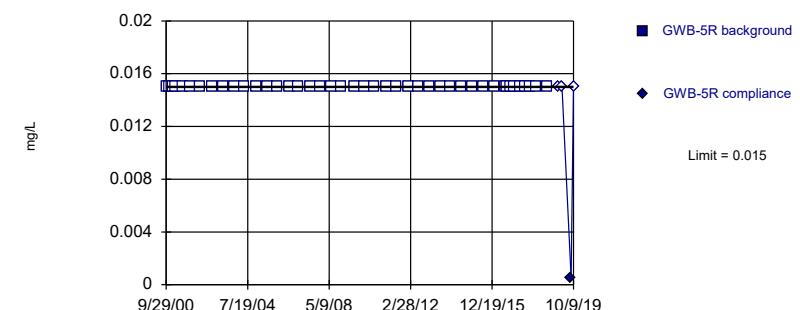
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 93.02% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Antimony

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 100% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

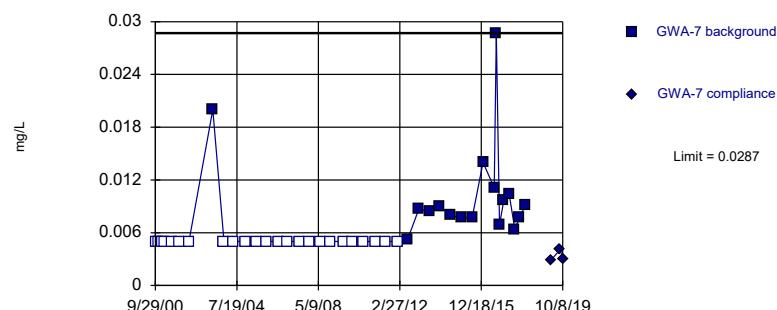
Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Arsenic

Intrawell Non-parametric



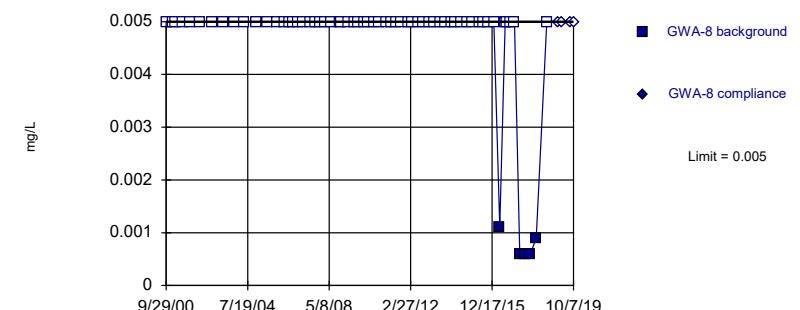
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 58.54% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Arsenic

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 63 background values. 92.06% NDs. Well-constituent pair annual alpha = 0.0009737. Individual comparison alpha = 0.000487 (1 of 2).

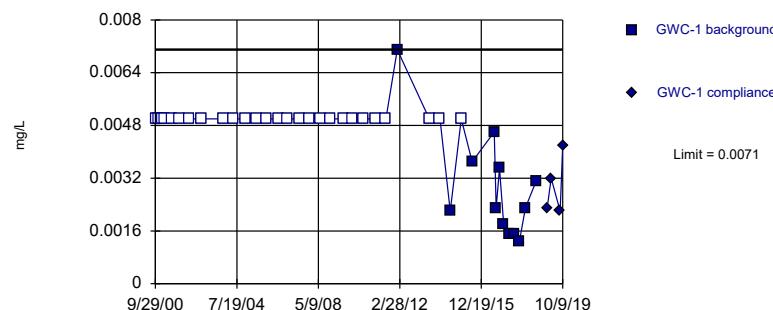
Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Arsenic  
Intrawell Non-parametric

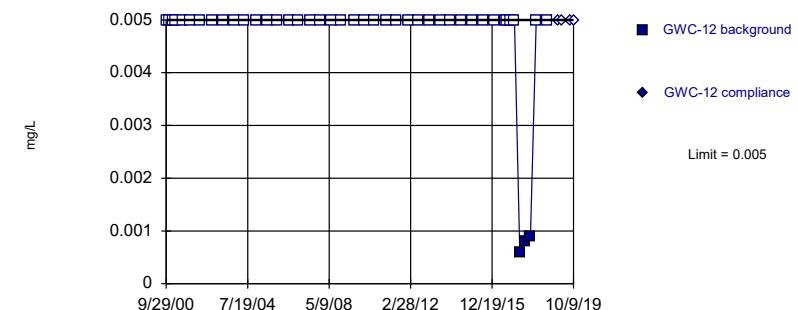


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Arsenic  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 93.02% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

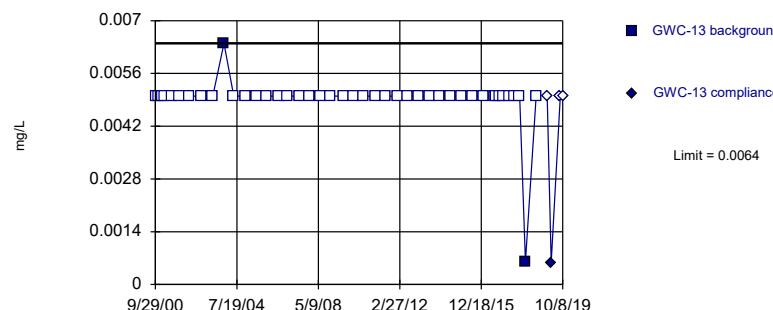
Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Arsenic  
Intrawell Non-parametric

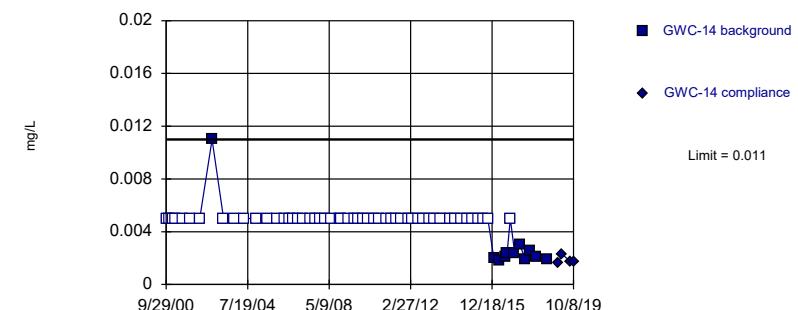


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 95.35% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Arsenic  
Intrawell Non-parametric



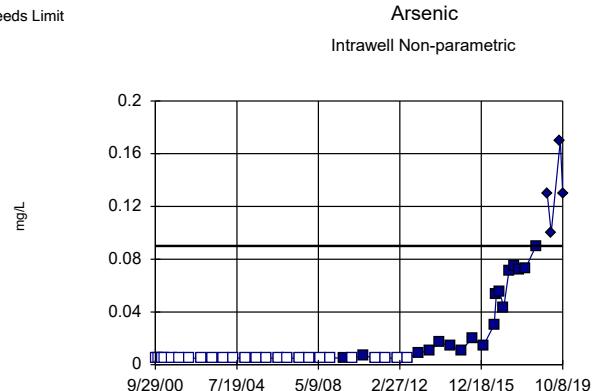
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 64 background values. 81.25% NDs. Well-constituent pair annual alpha = 0.0009462. Individual comparison alpha = 0.0004732 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

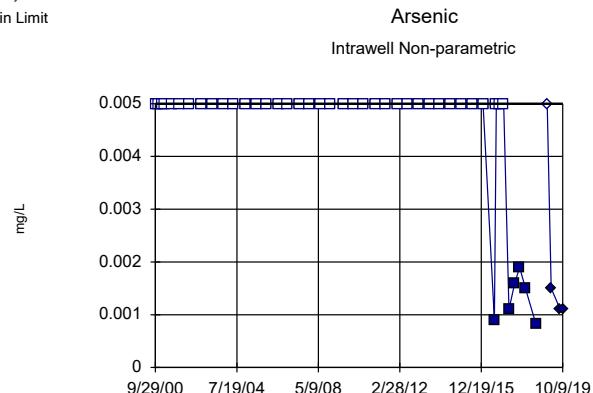
Exceeds Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 58.14% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 86.05% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

Within Limit

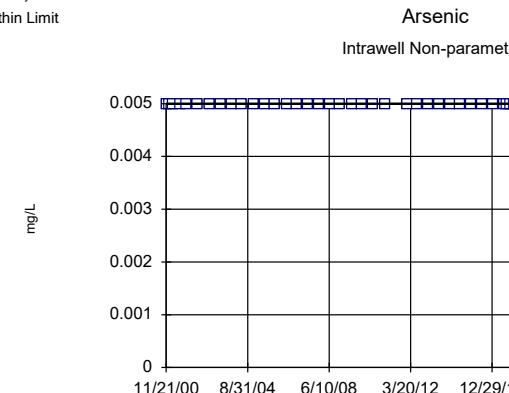


Background Data Summary: Mean=0.07945, Std. Dev.=0.01932, n=62. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9486, critical = 0.947. Kappa = 2.162 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Prediction Limit Analysis Run 2/17/2020 3:43 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

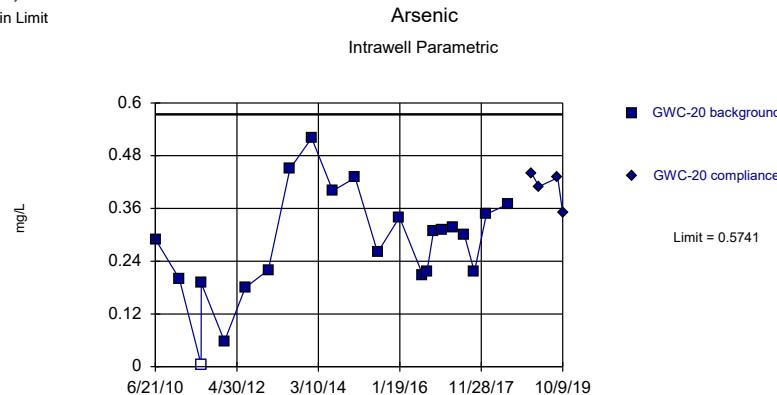


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 97.56% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

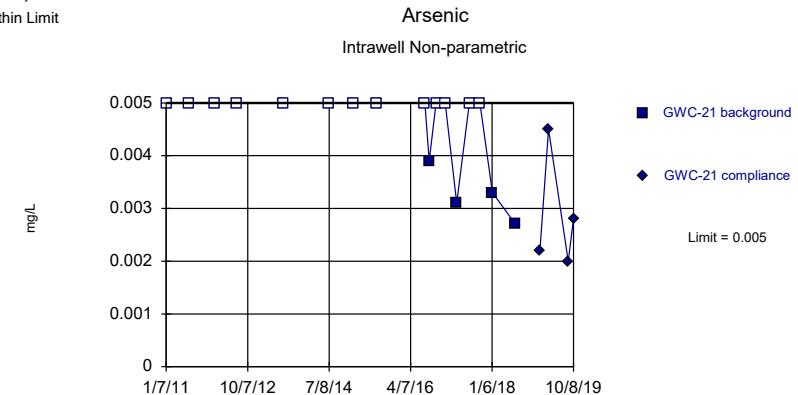
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

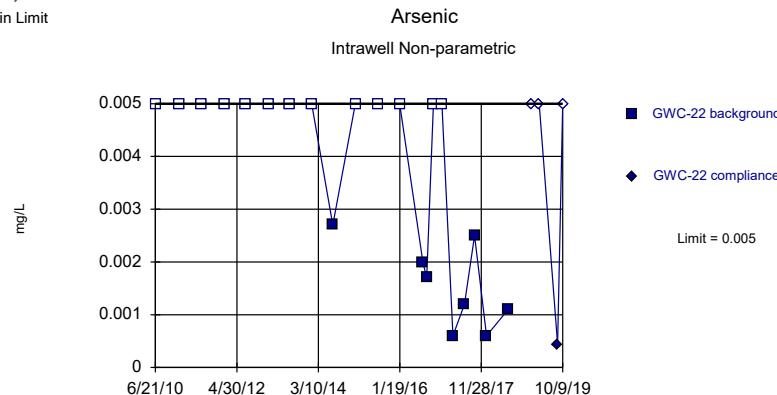


Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

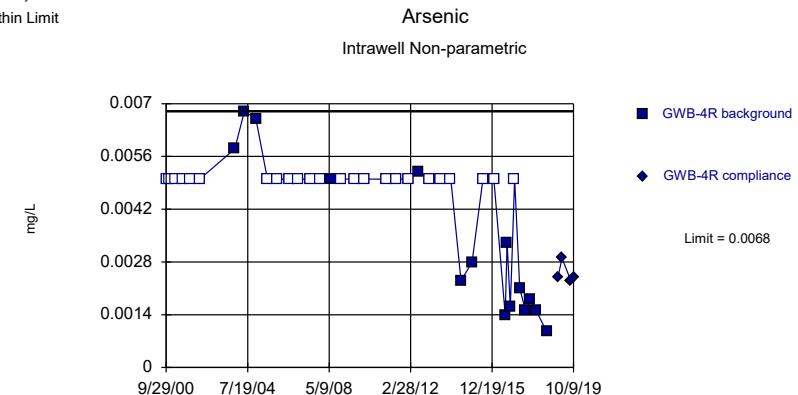
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

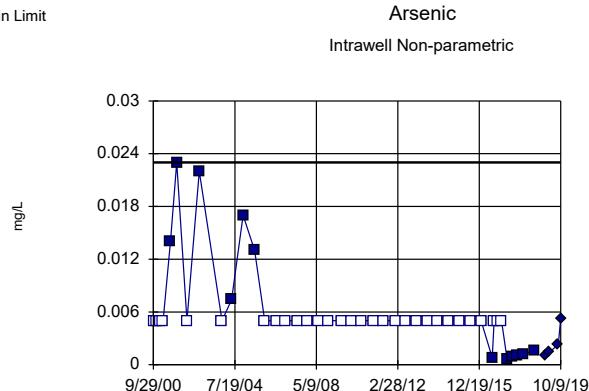


Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

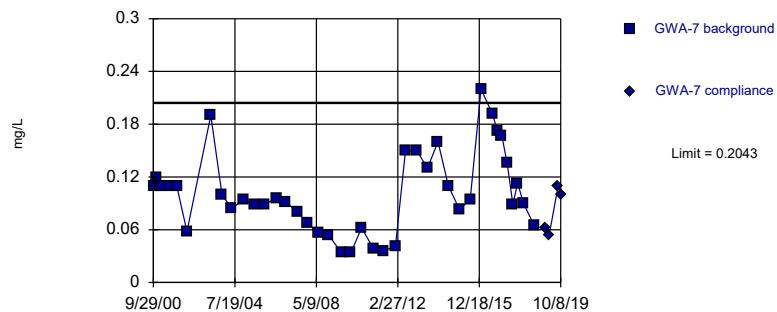


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 71.43% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

Within Limit

Barium  
Intrawell Parametric

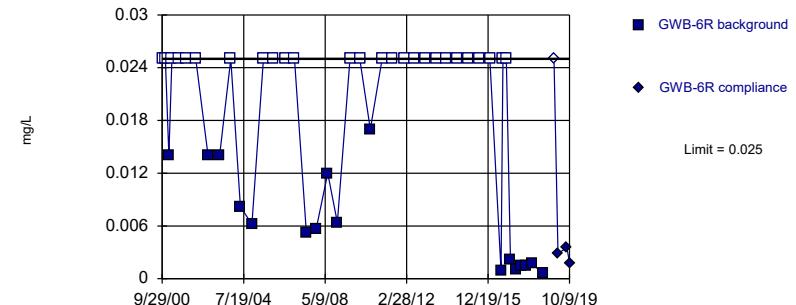


Background Data Summary: Mean=0.1021, Std. Dev.=0.04574, n=41. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9479, critical = 0.92. Kappa = 2.233 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

Arsenic  
Intrawell Non-parametric

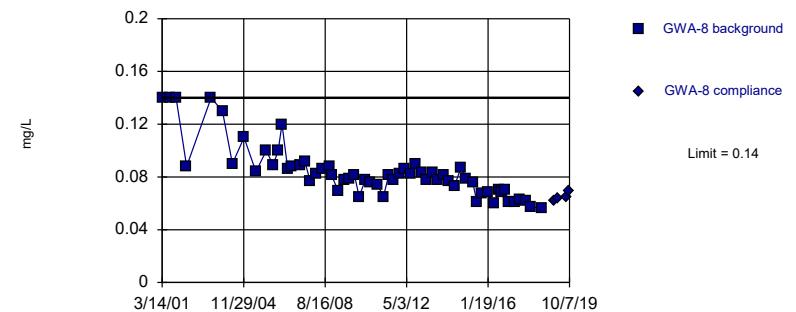


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 60.47% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

Barium  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. Well-constituent pair annual alpha = 0.001056. Individual comparison alpha = 0.0005281 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

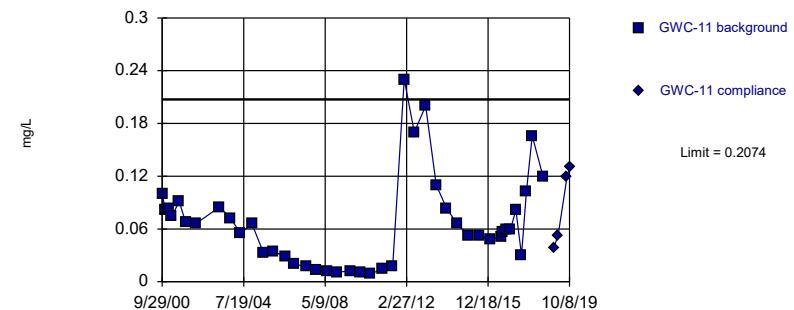
**Barium**  
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.2379, Std. Dev.=0.04483, n=42.  
 Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9416, critical = 0.922. Kappa = 2.228 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Within Limit

**Barium**  
Intrawell Parametric



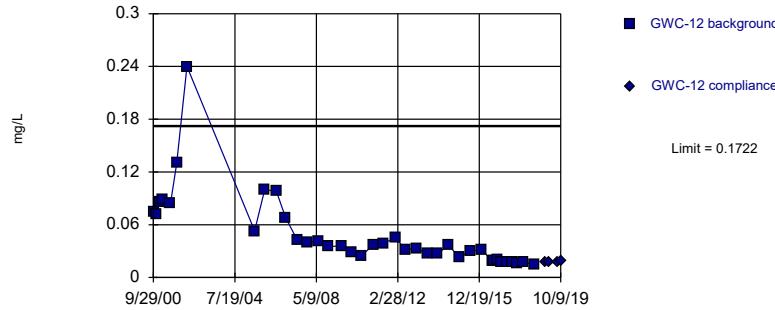
Background Data Summary (based on square root transformation): Mean=0.2407, Std. Dev.=0.09636, n=42.  
 Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9464, critical = 0.922. Kappa = 2.228 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

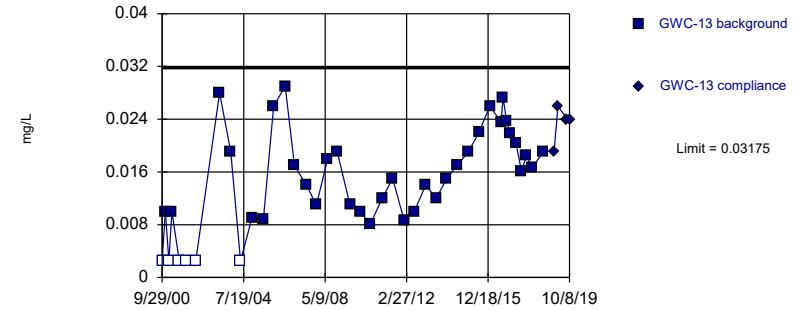
**Barium**  
Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.263, Std. Dev.=0.6683, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9444, critical = 0.916. Kappa = 2.25 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Within Limit

**Barium**  
Intrawell Parametric



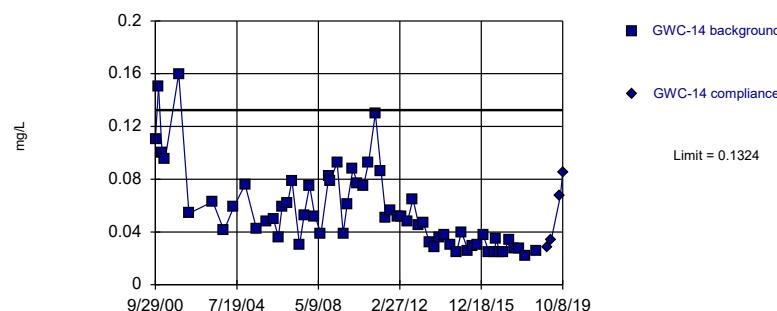
Background Data Summary: Mean=0.01478, Std. Dev.=0.00762, n=42, 14.29% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9482, critical = 0.922. Kappa = 2.228 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

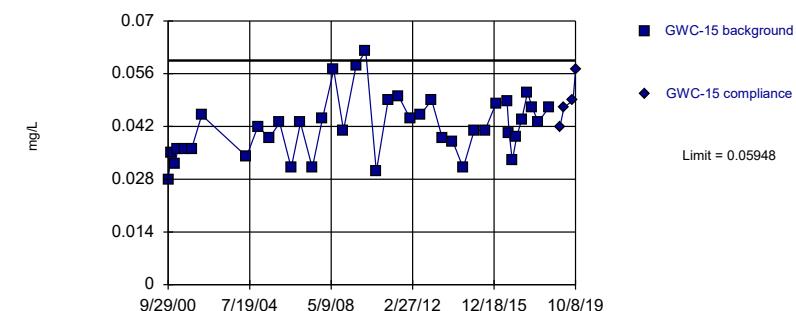
**Barium**  
Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=0.3719, Std. Dev.=0.06371, n=62.  
Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9525, critical = 0.947. Kappa = 2.162 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Within Limit

**Barium**  
Intrawell Parametric



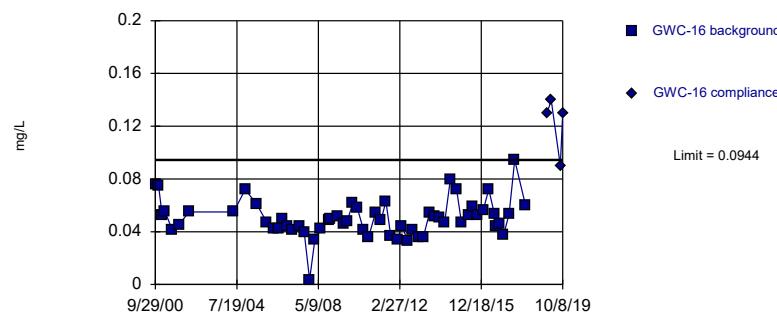
Background Data Summary: Mean=0.04178, Std. Dev.=0.00791, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.969, critical = 0.919. Kappa = 2.238 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Prediction Limit Analysis Run 2/17/2020 3:44 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Exceeds Limit

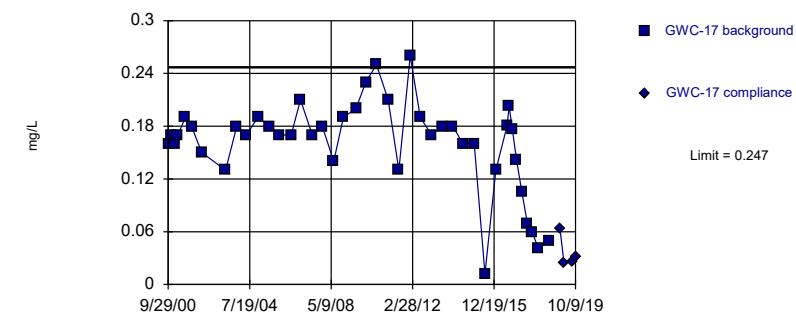
**Barium**  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 59 background values. Well-constituent pair annual alpha = 0.001101. Individual comparison alpha = 0.0005506 (1 of 2).

Within Limit

**Barium**  
Intrawell Parametric



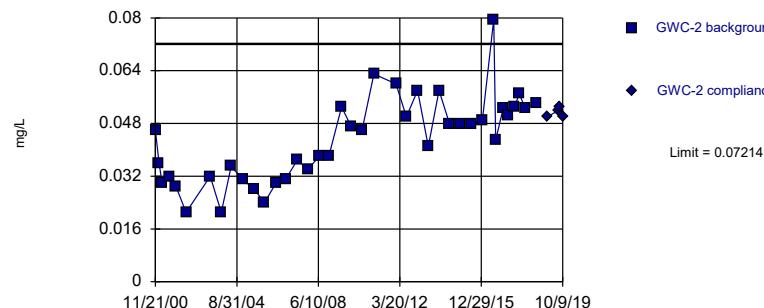
Background Data Summary (based on square transformation): Mean=0.02849, Std. Dev.=0.01459, n=42. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9442, critical = 0.922. Kappa = 2.228 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

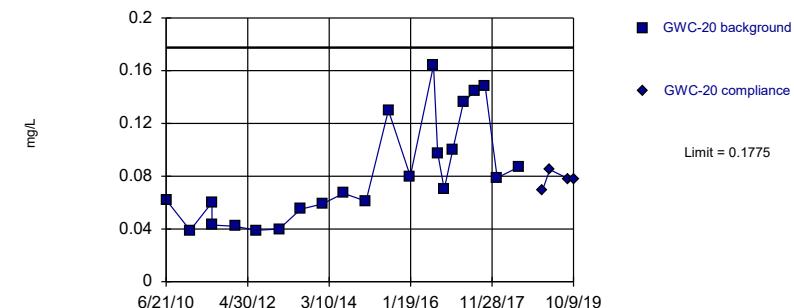
**Barium**  
Intrawell Parametric



Background Data Summary: Mean=0.04318, Std. Dev.=0.0129, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9652, critical = 0.917. Kappa = 2.244 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Within Limit

**Barium**  
Intrawell Parametric



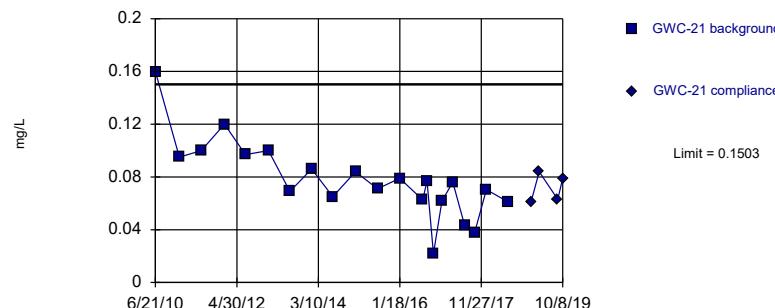
Background Data Summary: Mean=0.08198, Std. Dev.=0.03928, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8843, critical = 0.878. Kappa = 2.431 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

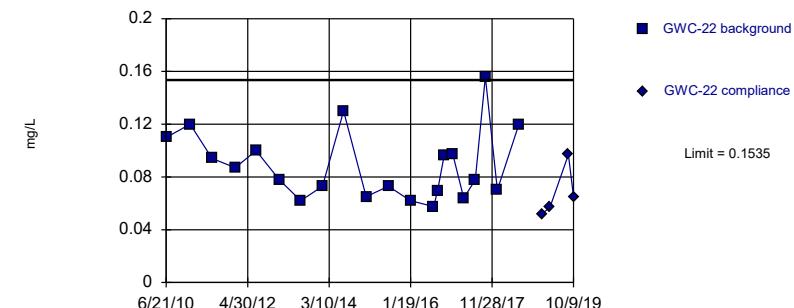
**Barium**  
Intrawell Parametric



Background Data Summary: Mean=0.07795, Std. Dev.=0.0295, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9451, critical = 0.873. Kappa = 2.452 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Within Limit

**Barium**  
Intrawell Parametric



Background Data Summary: Mean=0.08871, Std. Dev.=0.02642, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9073, critical = 0.873. Kappa = 2.452 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

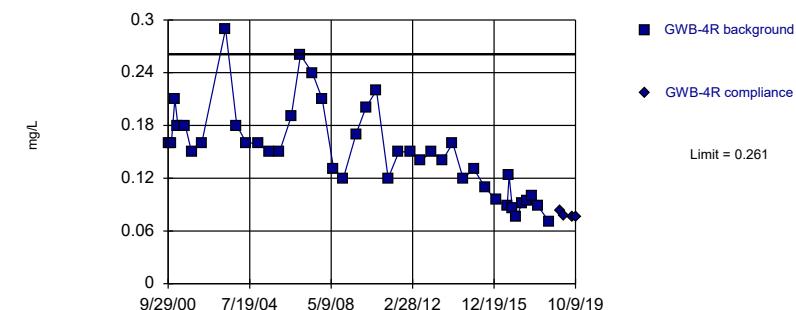
**Barium**  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 42 background values. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Within Limit

**Barium**  
Intrawell Parametric



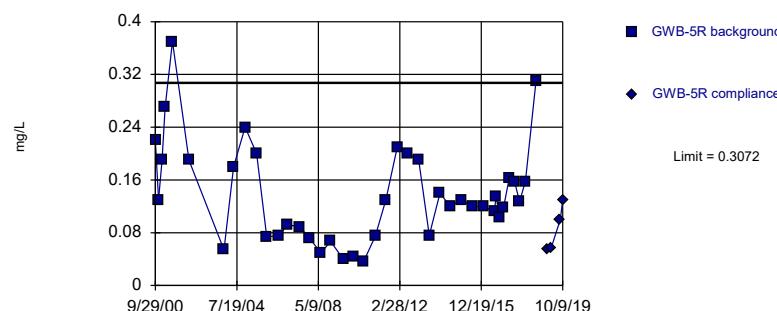
Background Data Summary: Mean=0.1503, Std. Dev.=0.04972, n=42. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9535, critical = 0.922. Kappa = 2.228 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

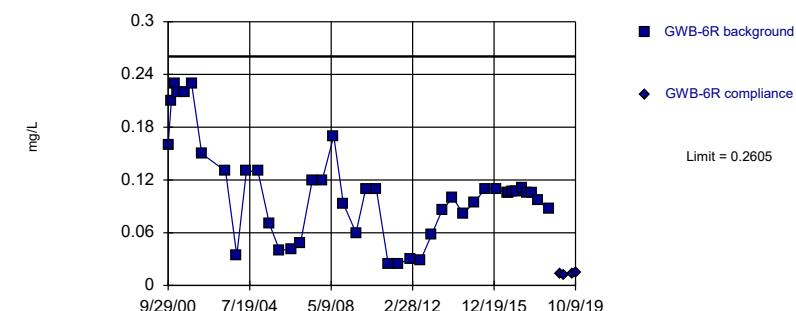
**Barium**  
Intrawell Parametric



Background Data Summary: Mean=0.1394, Std. Dev.=0.07497, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.93, critical = 0.919. Kappa = 2.238 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Within Limit

**Barium**  
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.3159, Std. Dev.=0.0873, n=42. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9364, critical = 0.922. Kappa = 2.228 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

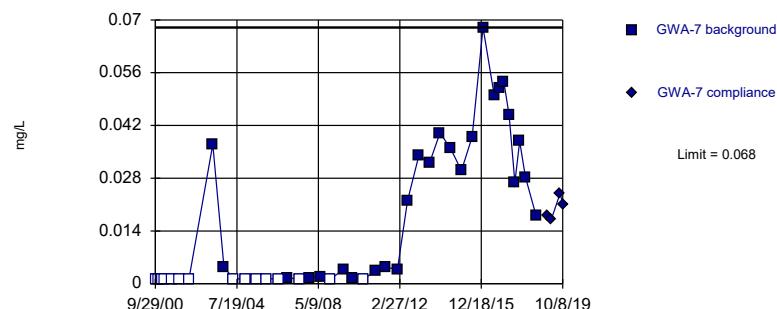
Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric

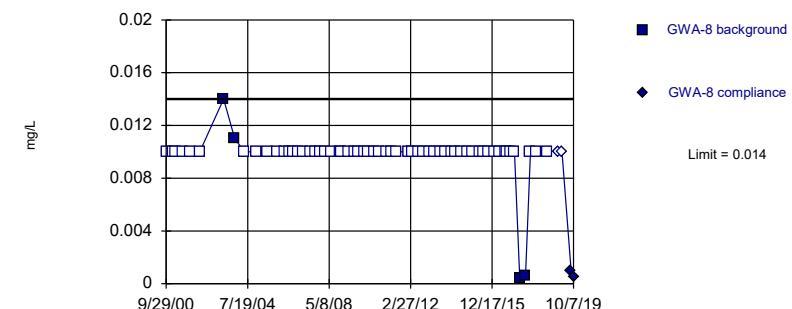


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 41 background values. 36.59% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 61 background values. 93.44% NDs. Well-constituent pair annual alpha = 0.001029. Individual comparison alpha = 0.0005144 (1 of 2).

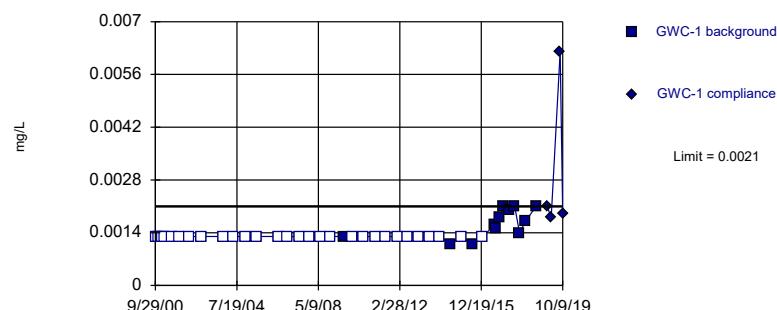
Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric

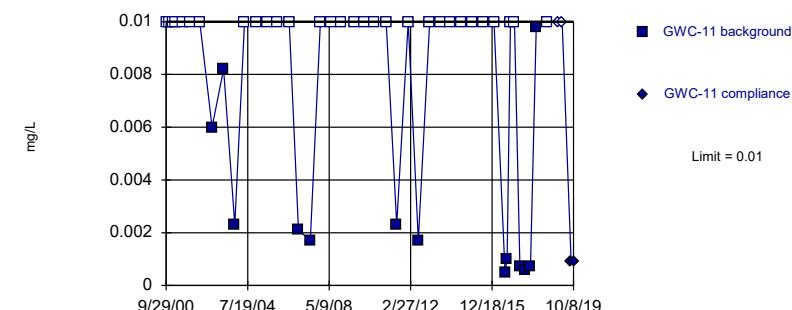


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 70.73% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 69.77% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

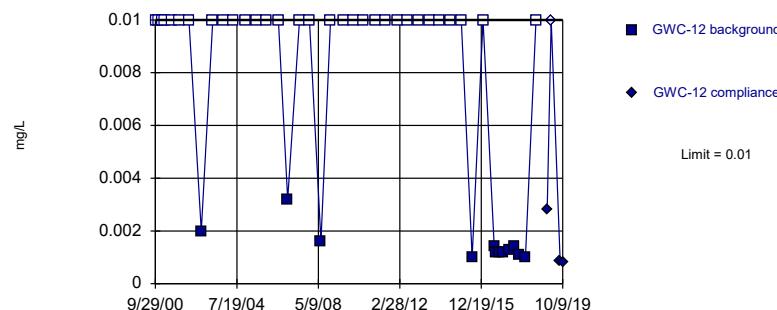
Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:45 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric

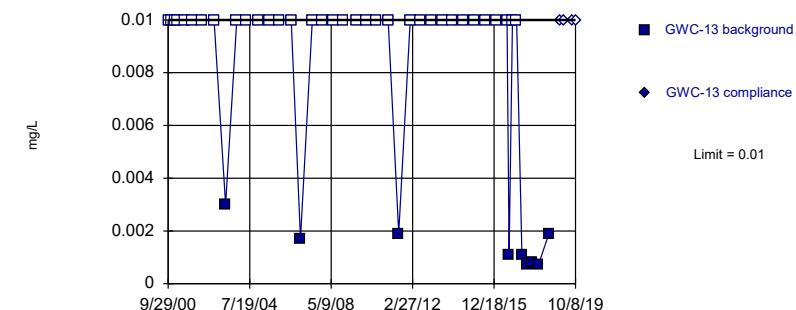


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 72.09% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 79.07% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

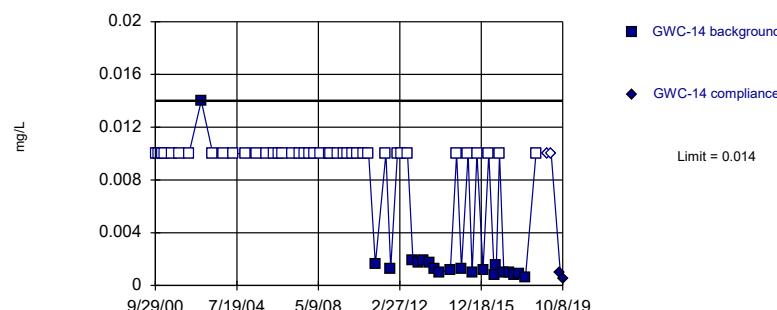
Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric

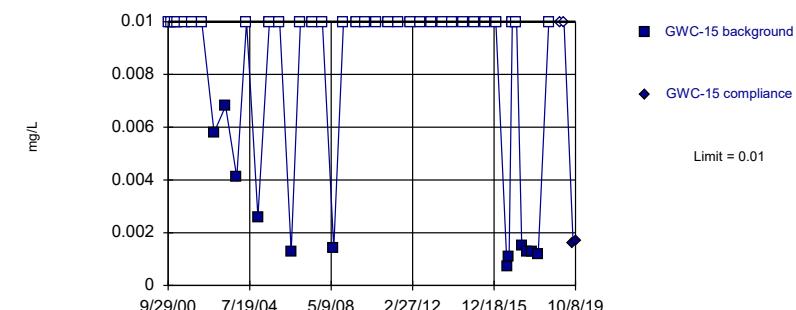


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 61 background values. 67.21% NDs. Well-constituent pair annual alpha = 0.001029. Individual comparison alpha = 0.0005144 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 72.09% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

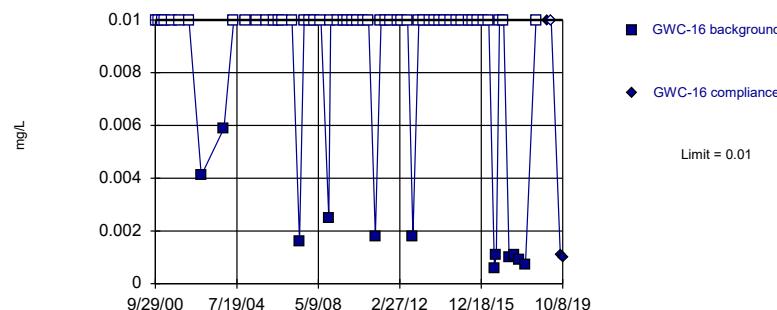
Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric

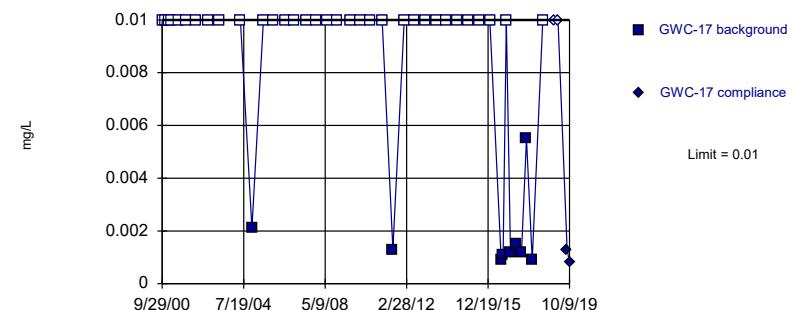


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 62 background values. 80.65% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 78.57% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

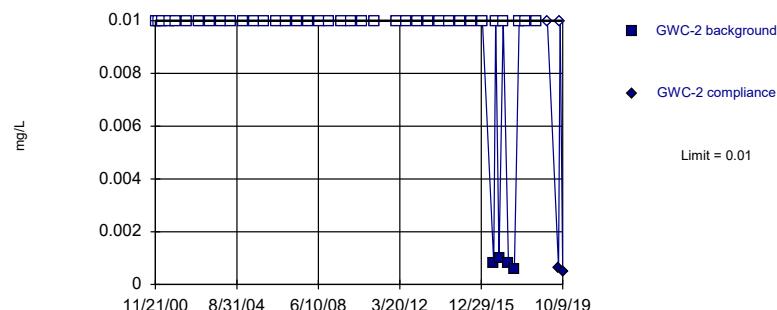
Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric

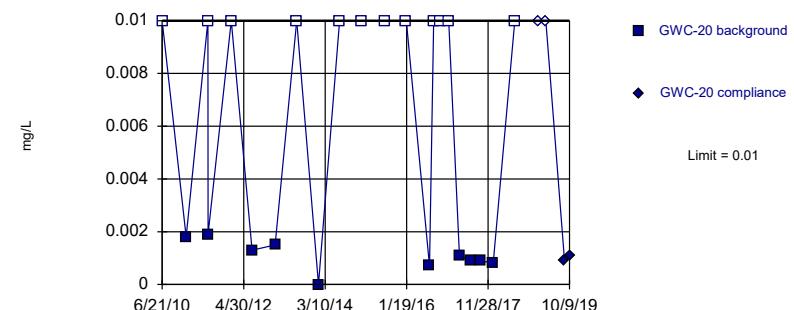


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 90.24% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

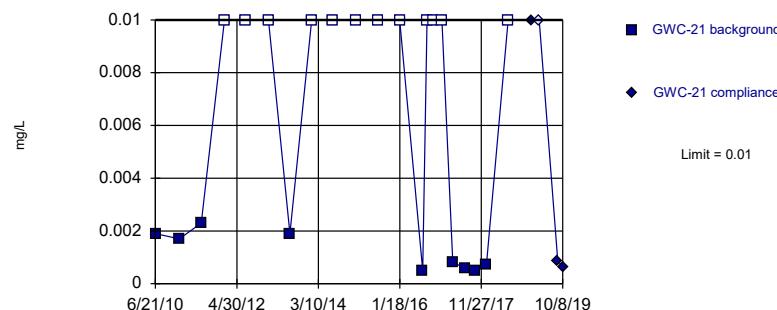
Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric

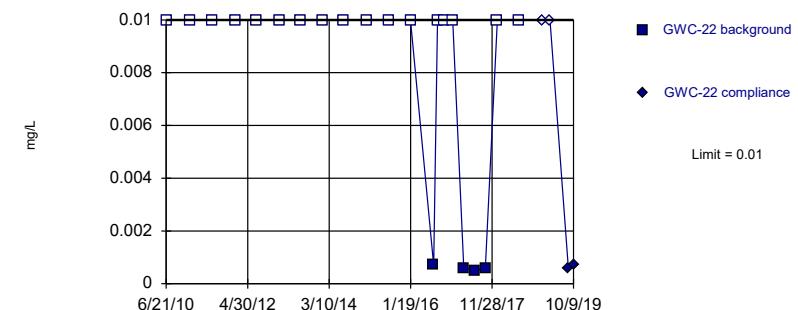


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 80.95% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

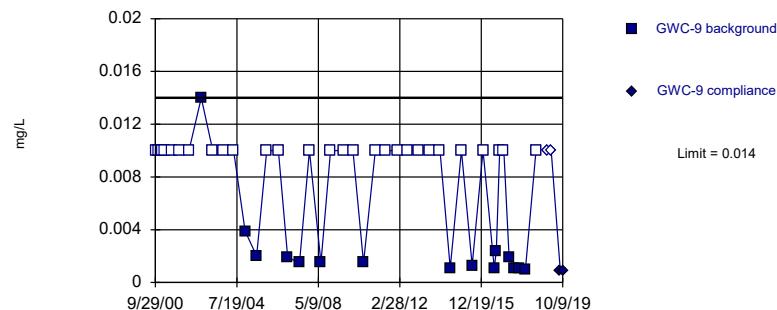
Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric

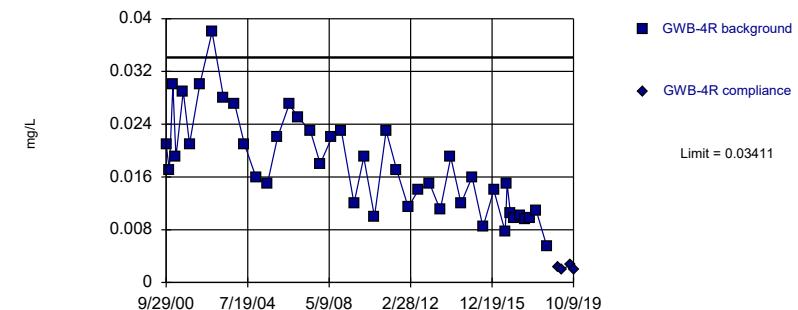


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 65.12% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

Within Limit

Chromium  
Intrawell Parametric



Background Data Summary: Mean=0.01774, Std. Dev.=0.007368, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9562, critical = 0.923. Kappa = 2.222 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

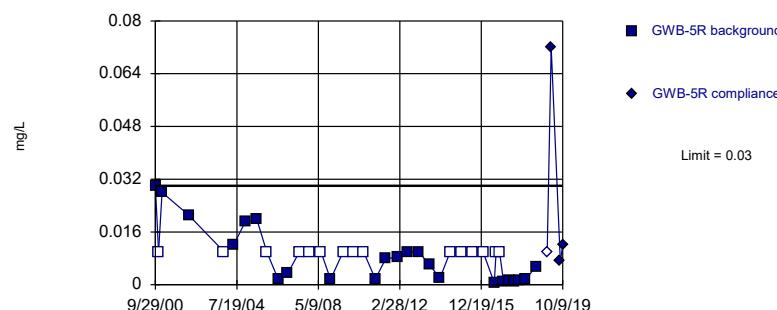
Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric

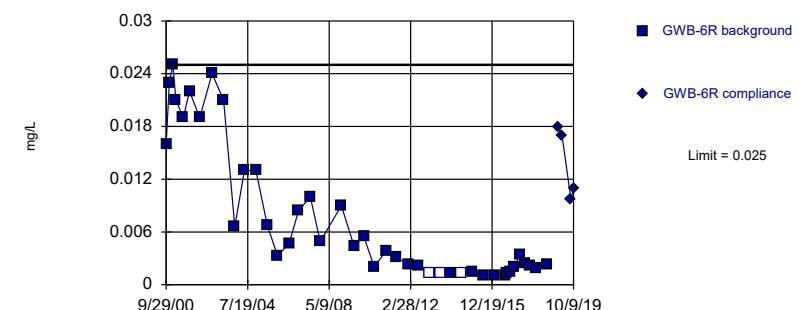


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 38 background values. 39.47% NDs. Well-constituent pair annual alpha = 0.002586. Individual comparison alpha = 0.001294 (1 of 2).

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Hollow symbols indicate censored values.

Within Limit

Chromium  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 42 background values. 7.143% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

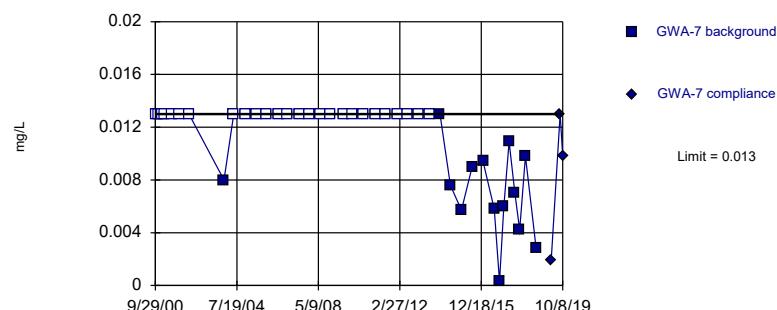
Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Lead  
Intrawell Non-parametric

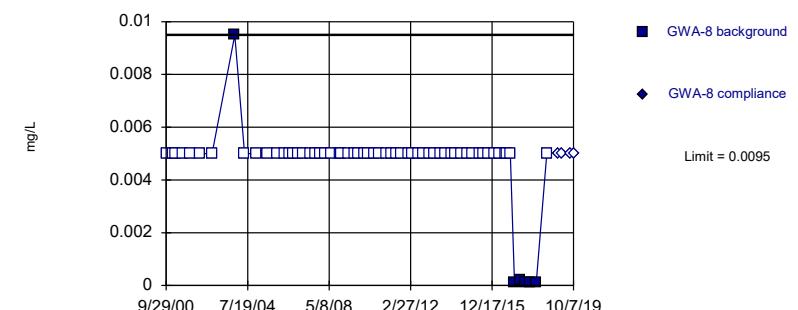


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 65% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Lead  
Intrawell Non-parametric



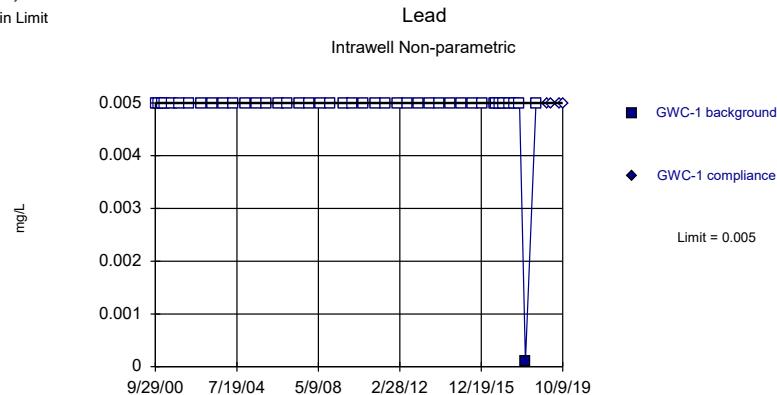
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 62 background values. 90.32% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:46 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

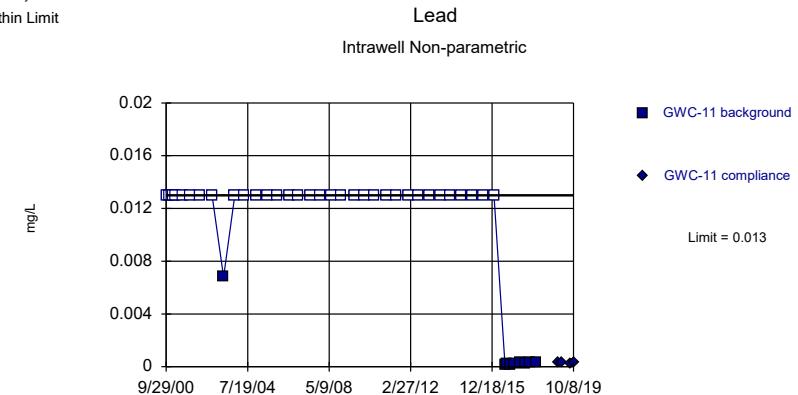
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 97.67% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



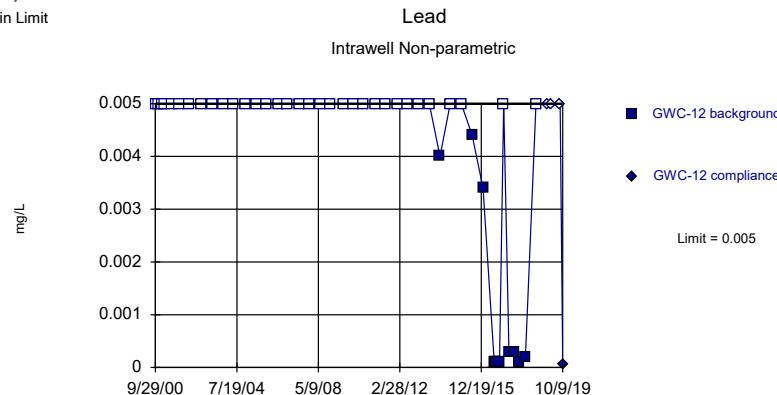
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 78.57% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

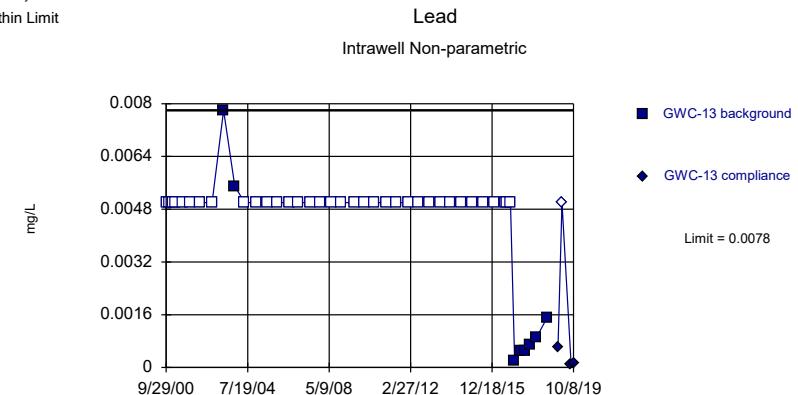
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 76.74% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 81.4% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

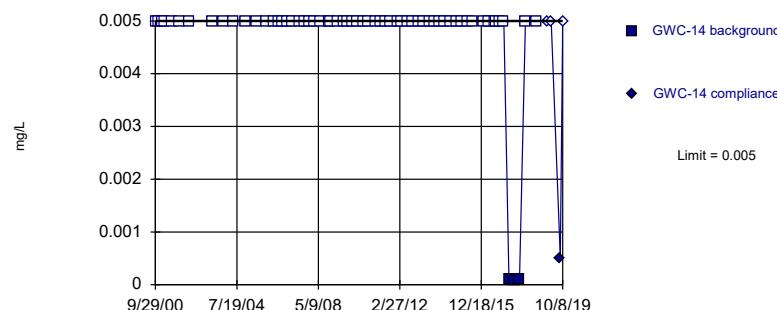
Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Lead  
Intrawell Non-parametric

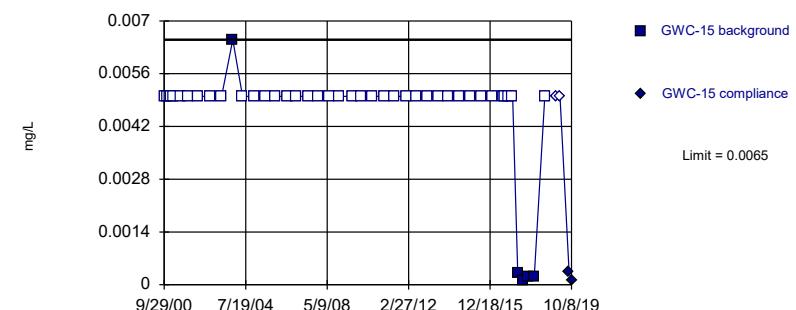


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 62 background values. 95.16% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Lead  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 88.37% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

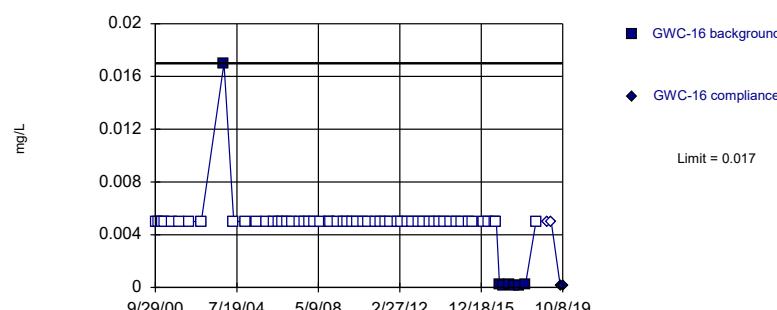
Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Lead  
Intrawell Non-parametric

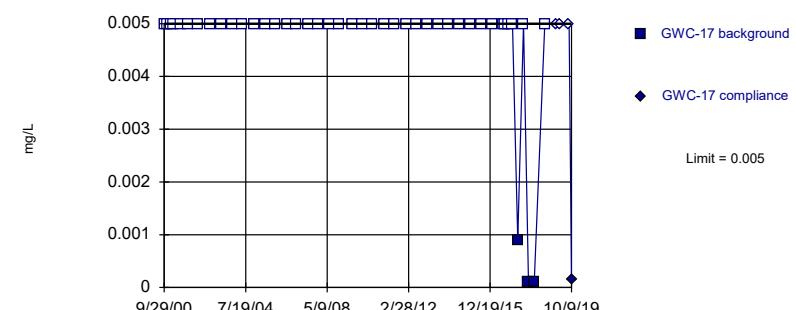


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 62 background values. 88.71% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Lead  
Intrawell Non-parametric



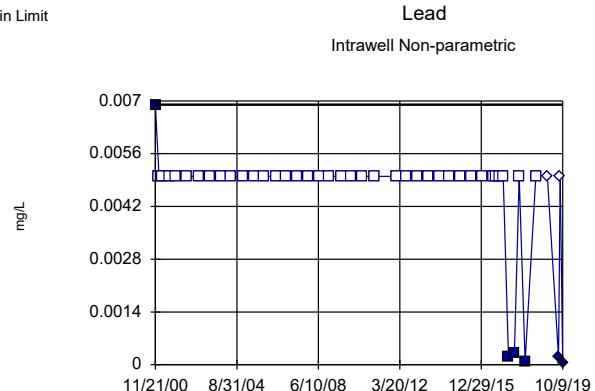
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 93.02% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

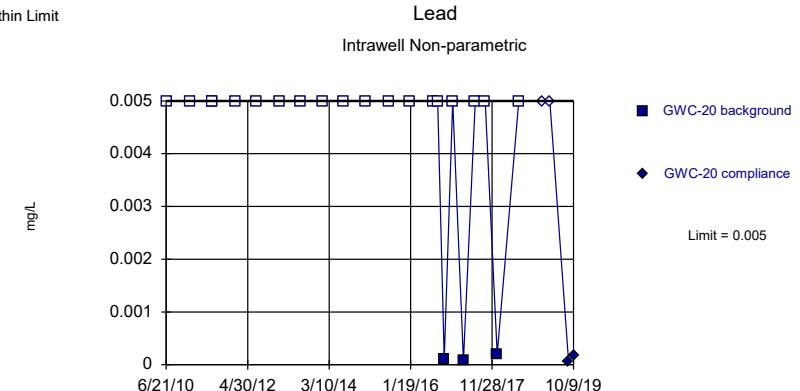
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 90.24% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



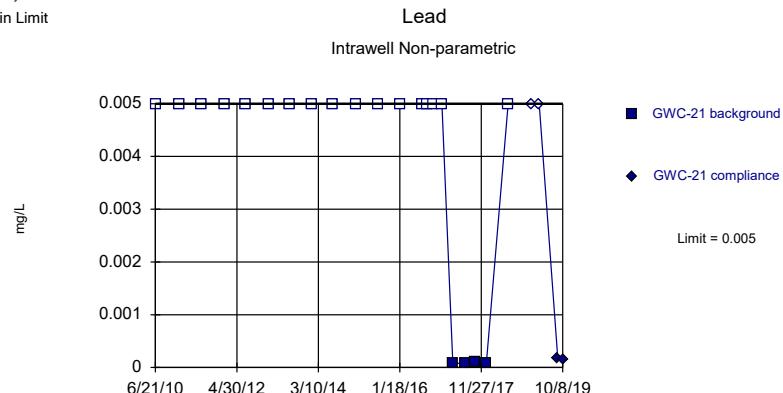
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 86.36% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

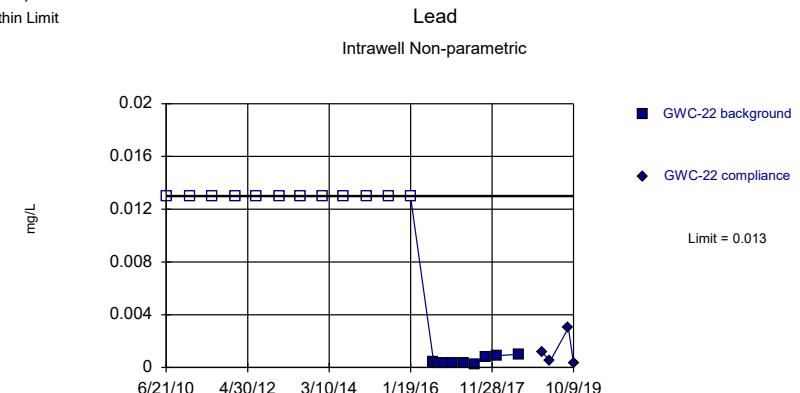
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 80.95% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

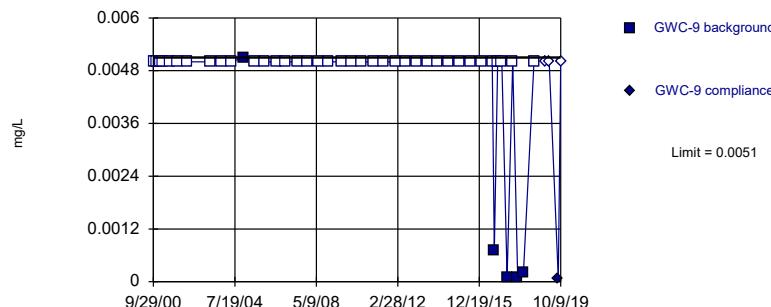
Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Lead  
Intrawell Non-parametric

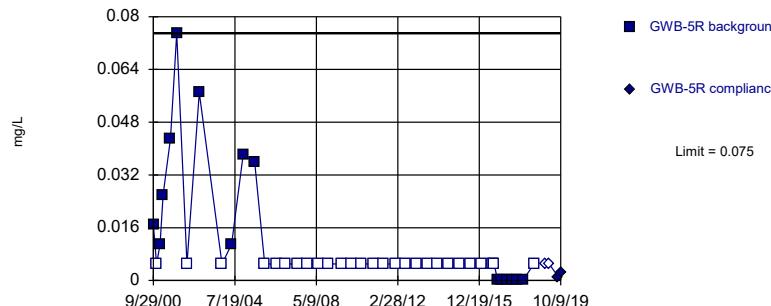


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 88.1% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Lead  
Intrawell Non-parametric



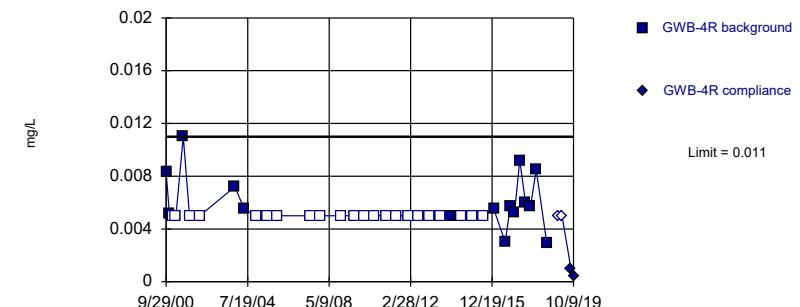
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 64.29% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Lead  
Intrawell Non-parametric



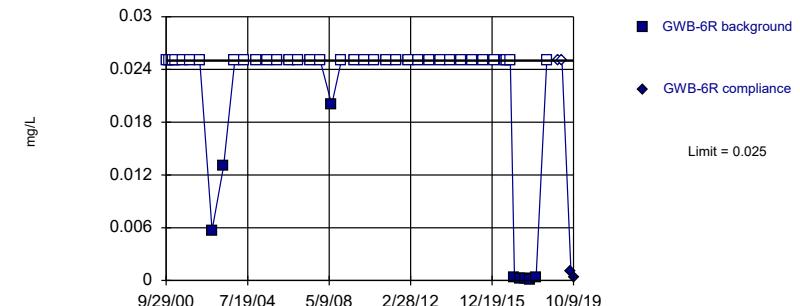
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 37 background values. 59.46% NDs. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha = 0.001361 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Lead  
Intrawell Non-parametric

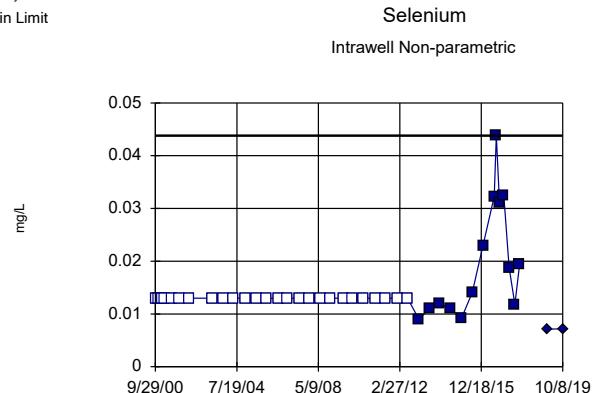


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 81.4% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:47 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

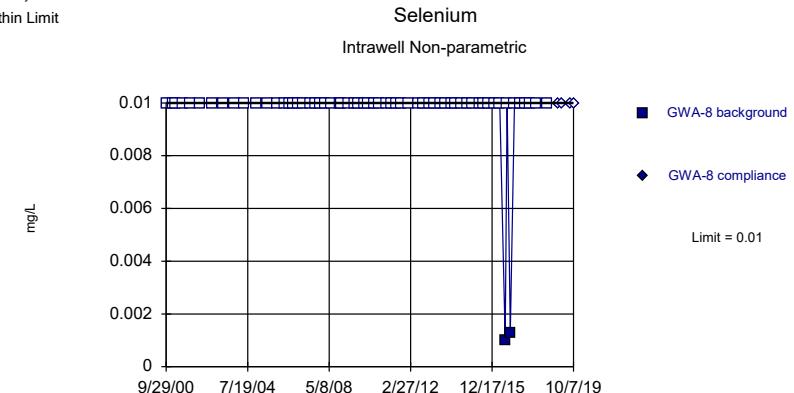
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 65% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



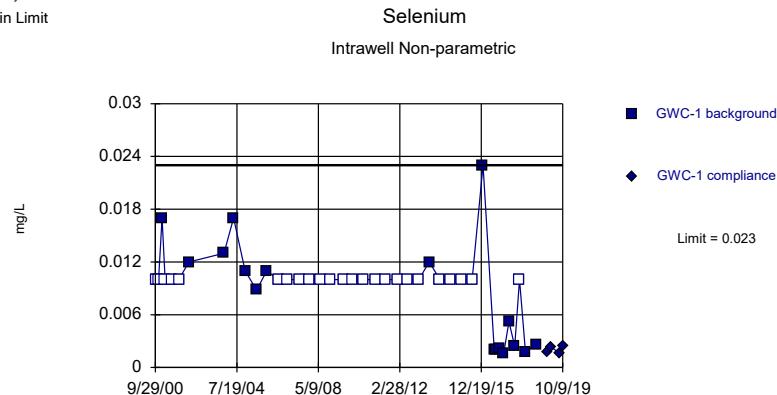
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 62 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

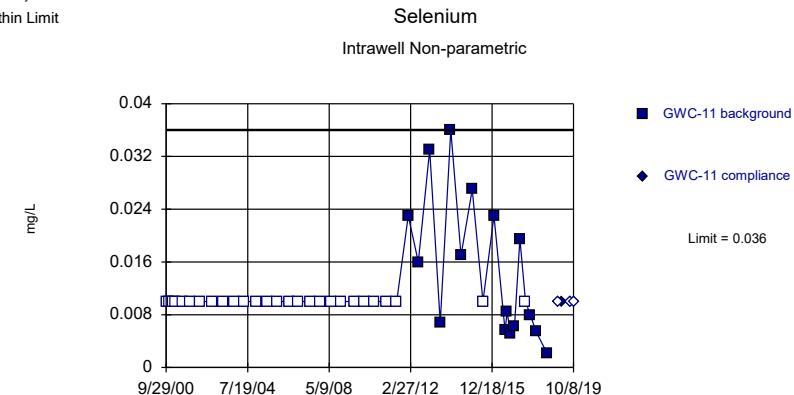
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 58.54% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



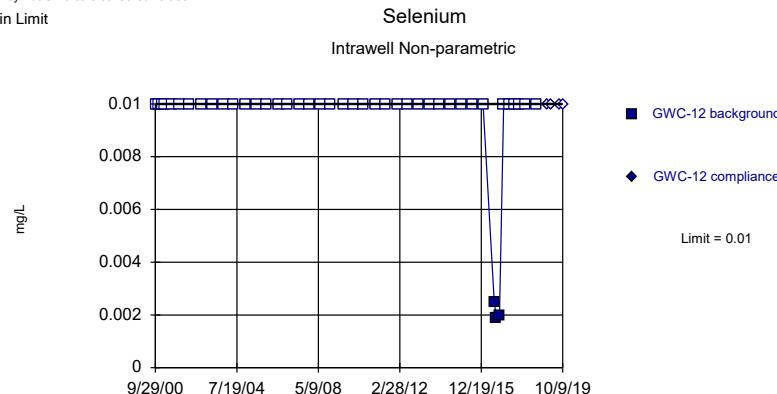
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 62.79% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

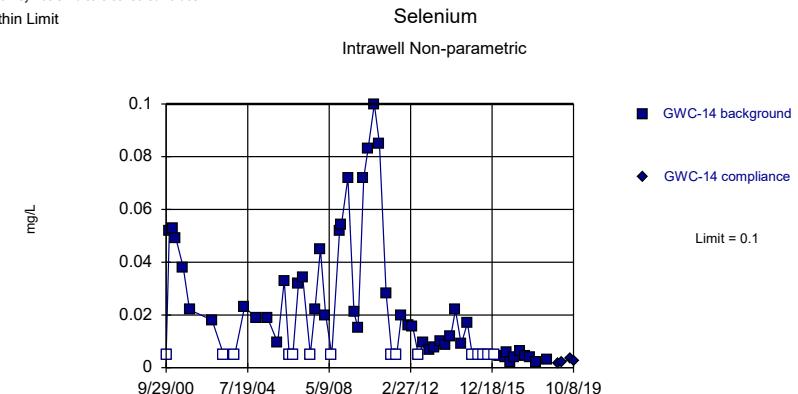
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 93.02% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



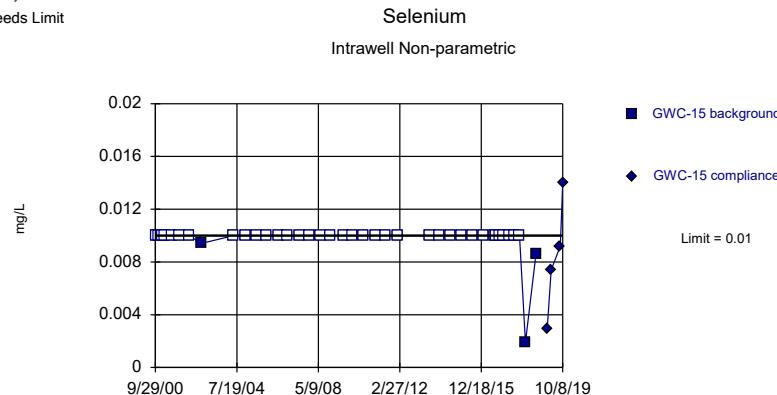
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 63 background values. 23.81% NDs. Well-constituent pair annual alpha = 0.0009737. Individual comparison alpha = 0.000487 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

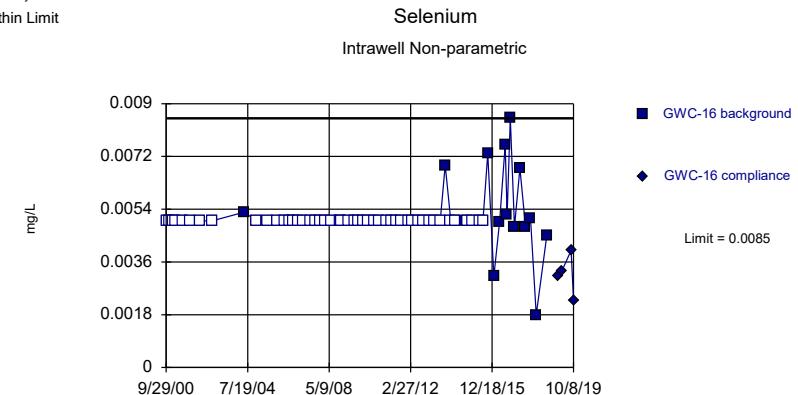
Exceeds Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



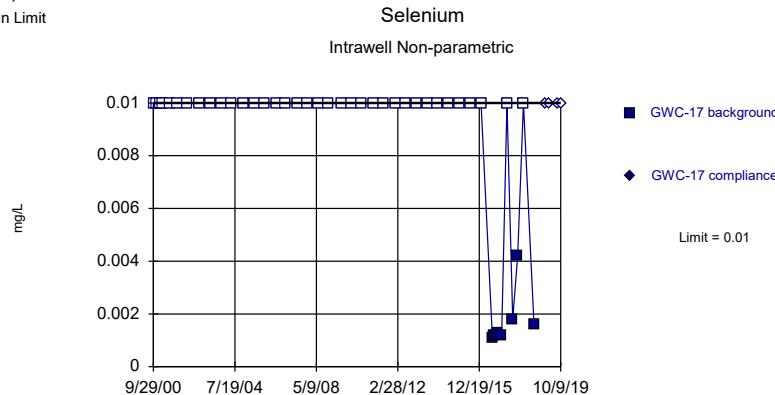
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 62 background values. 75.81% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

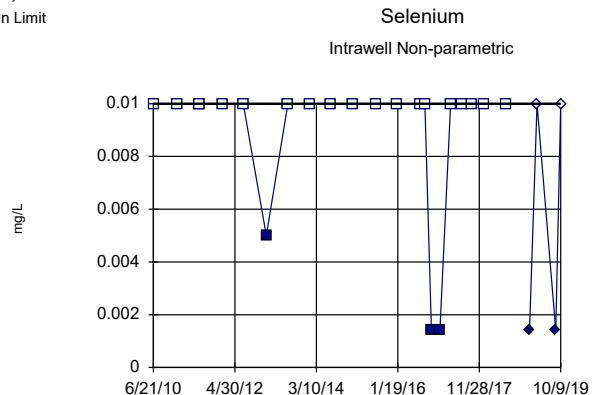
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 83.72% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

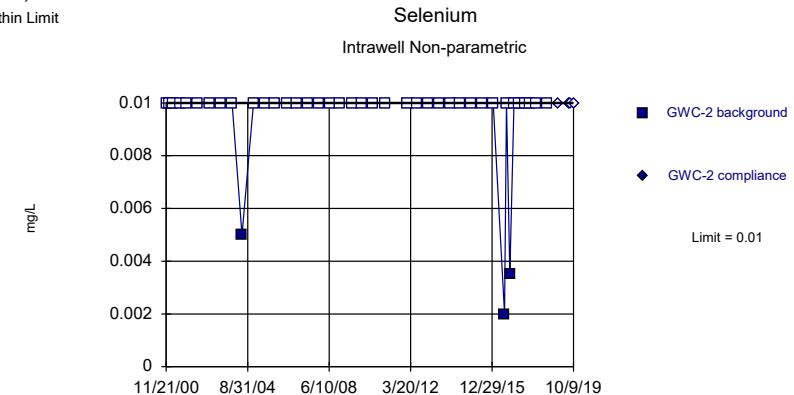


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 86.36% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

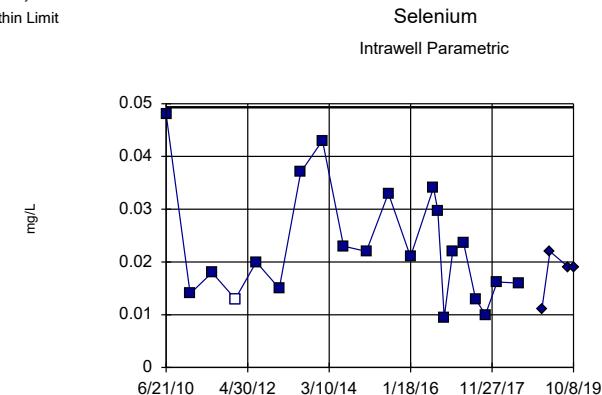


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 92.68% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

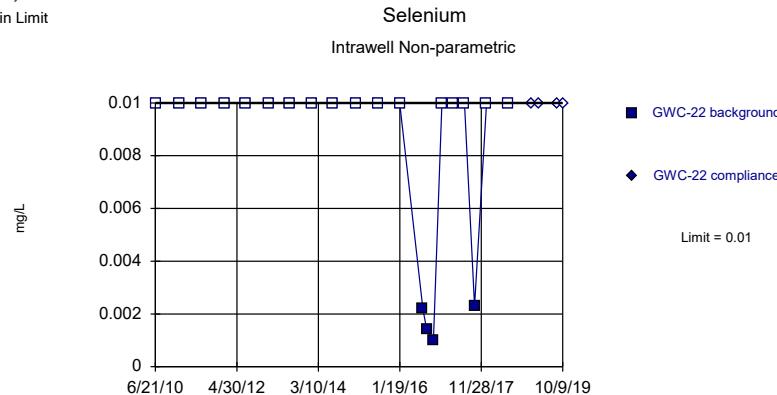


Background Data Summary: Mean=0.02291, Std. Dev.=0.01077, n=21, 4.762% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9134, critical = 0.873. Kappa = 2.452 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

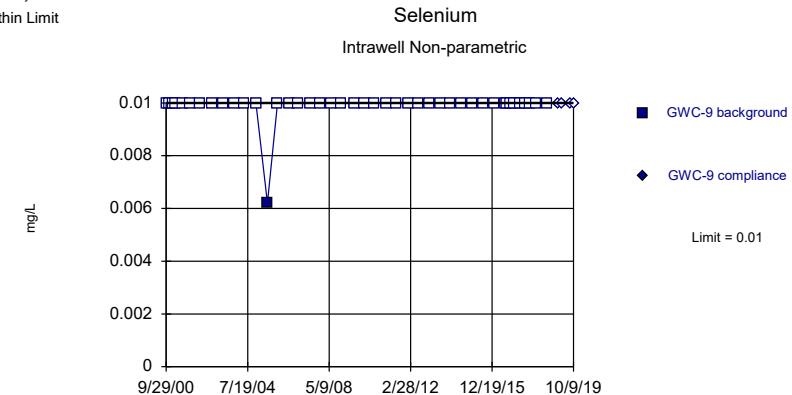
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 80.95% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



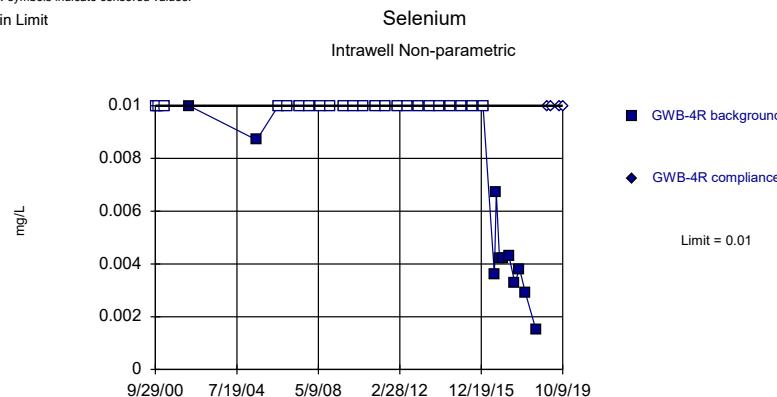
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 97.67% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

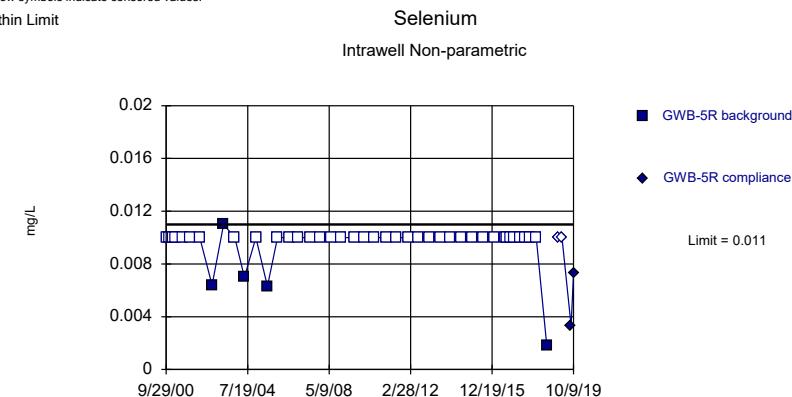
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 67.65% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



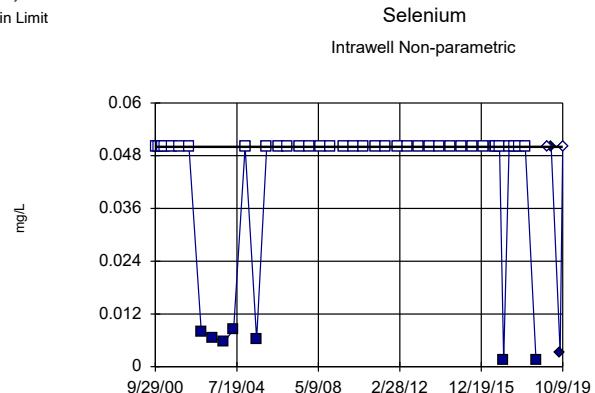
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 88.37% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

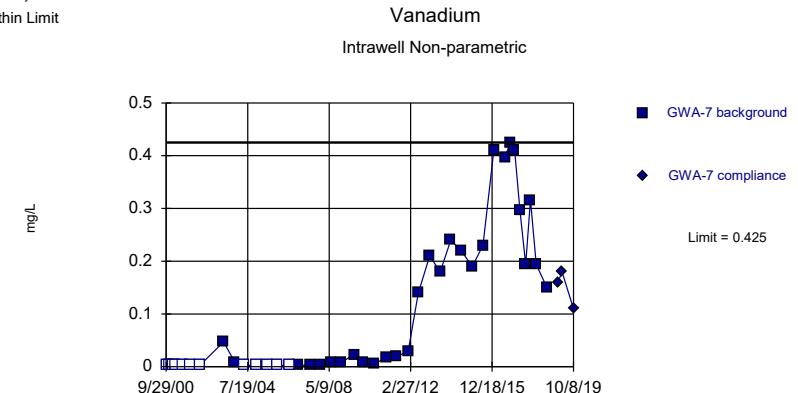
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 83.72% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



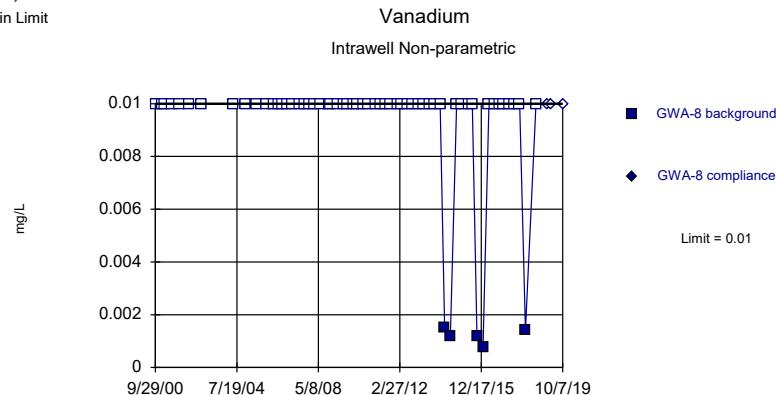
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 41 background values. 29.27% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:48 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

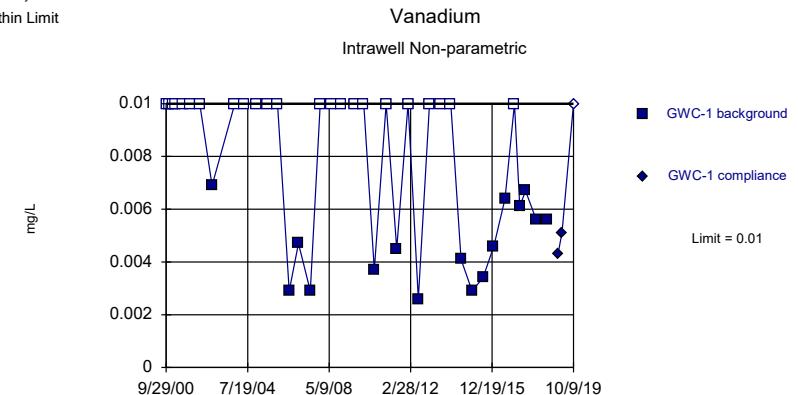
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 60 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.001056. Individual comparison alpha = 0.0005281 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 58.97% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

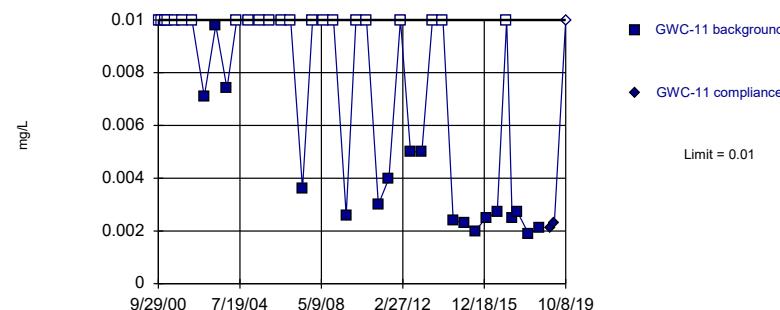
Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Vanadium  
Intrawell Non-parametric

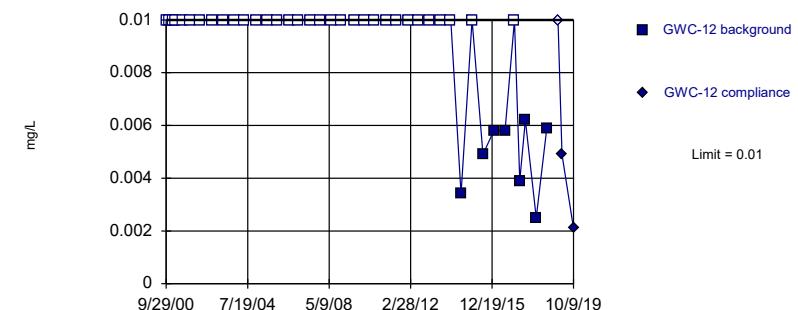


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 55% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Vanadium  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 80% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

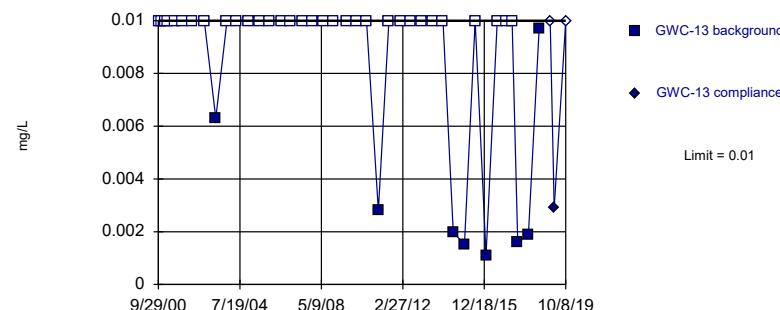
Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Vanadium  
Intrawell Non-parametric

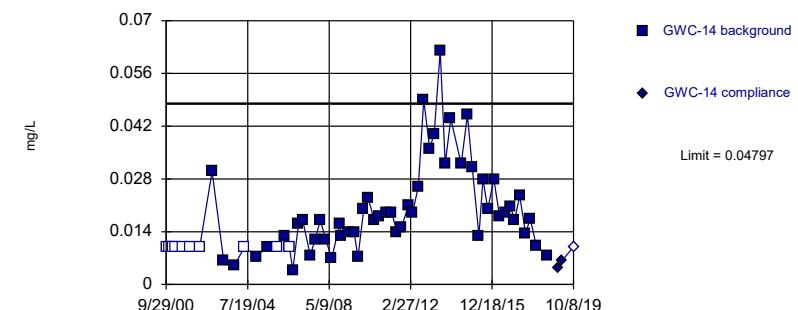


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 80% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Vanadium  
Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.2392, Std. Dev.=0.05743, n=62, 16.13% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9619, critical = 0.947. Kappa = 2.162 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

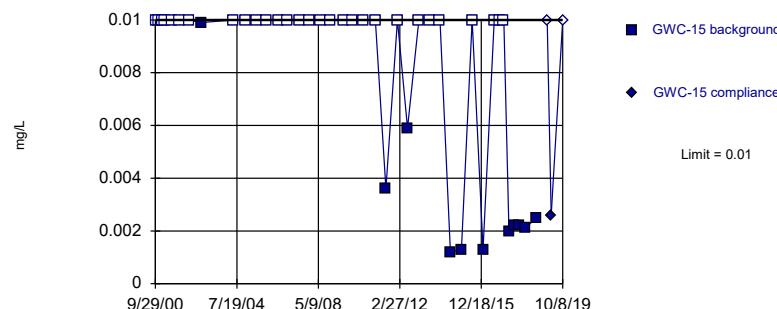
Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Vanadium  
Intrawell Non-parametric

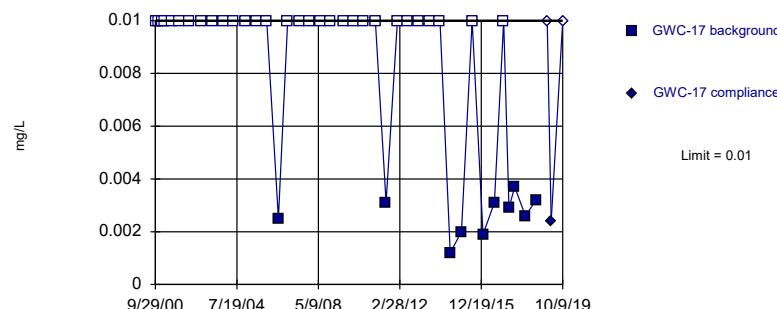


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 72.5% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Vanadium  
Intrawell Non-parametric



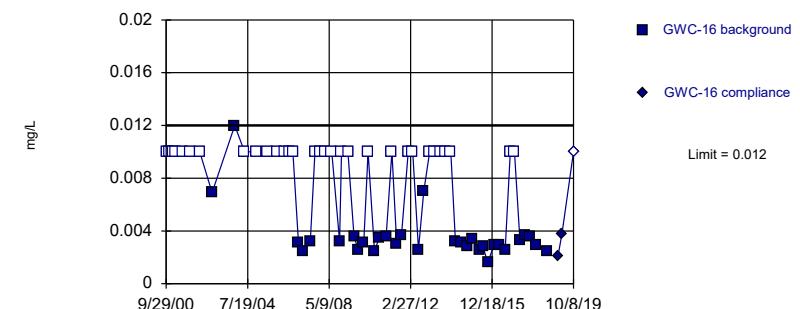
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 75% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Vanadium  
Intrawell Non-parametric



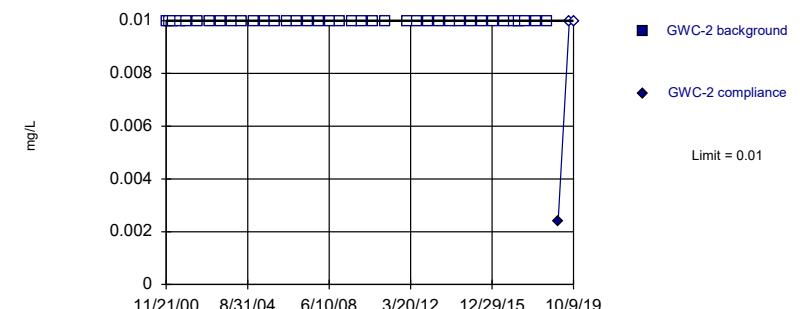
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 62 background values. 50% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Vanadium  
Intrawell Non-parametric

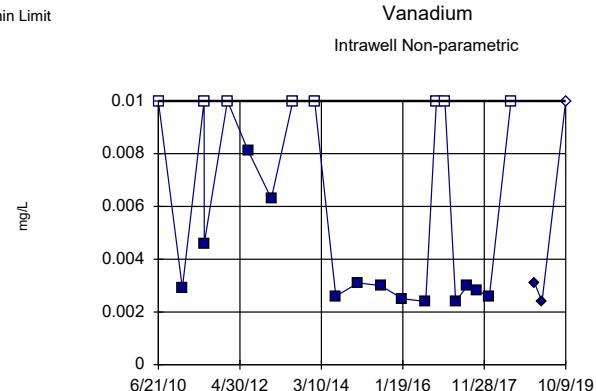


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 38 background values. 100% NDs. Well-constituent pair annual alpha = 0.002586. Individual comparison alpha = 0.001294 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

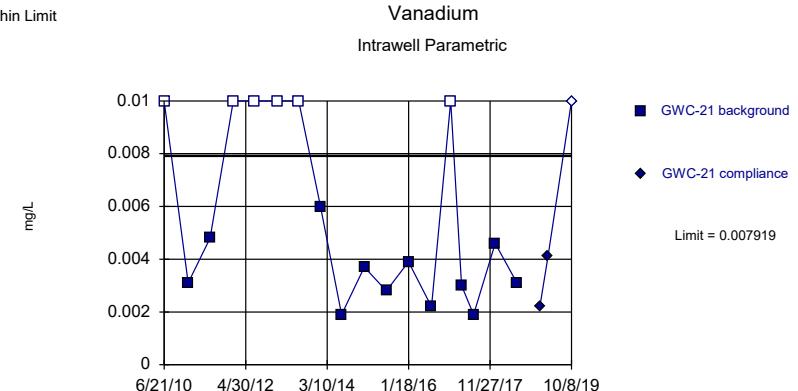
Within Limit



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 38.1% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



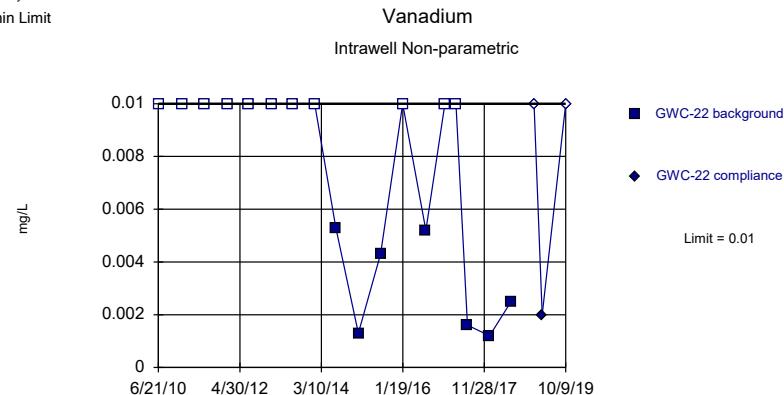
Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-5.764, Std. Dev.=0.3646, n=18, 33.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8708, critical = 0.858. Kappa = 2.538 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

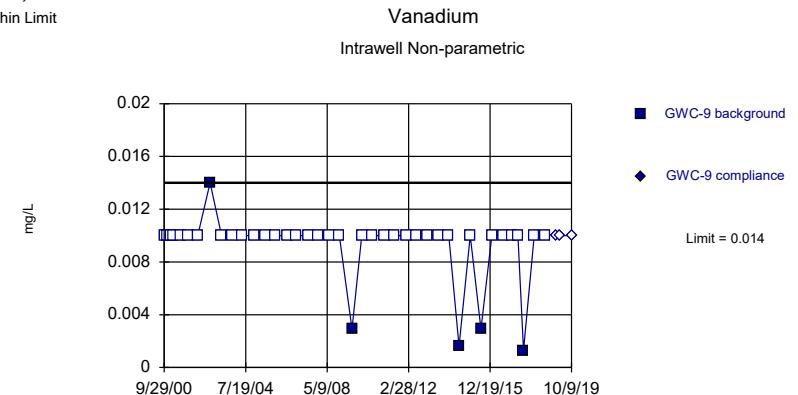


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 61.11% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit



Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Vanadium Intrawell Parametric

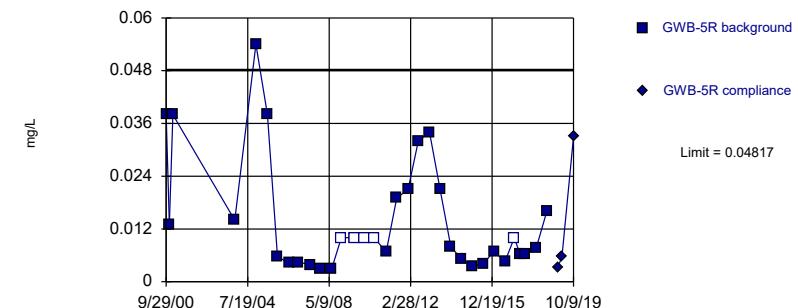


Background Data Summary (based on square root transformation): Mean=0.2522, Std. Dev.=0.05587, n=40.  
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9631, critical = 0.919. Kappa = 2.238 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Vanadium Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-4.848, Std. Dev.=0.7947, n=33, 15.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9378, critical = 0.906. Kappa = 2.284 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

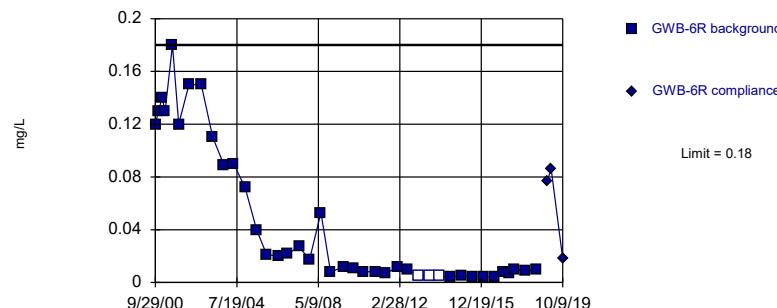
Prediction Limit Analysis Run 2/17/2020 3:49 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Vanadium Intrawell Non-parametric

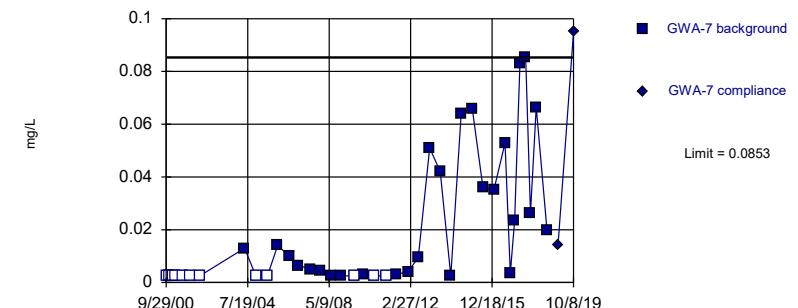


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 7.5% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Exceeds Limit

### Zinc Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 39 background values. 30.77% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

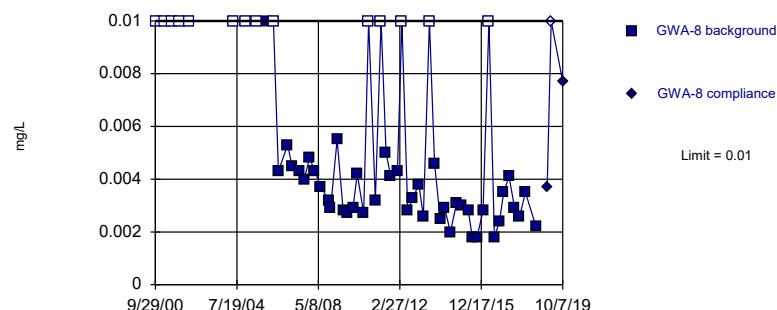
Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Zinc

#### Intrawell Non-parametric



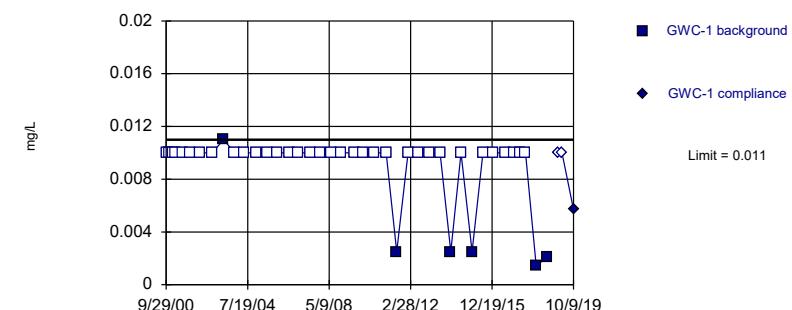
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 57 background values. 24.56% NDs. Well-constituent pair annual alpha = 0.001191. Individual comparison alpha = 0.0005955 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Zinc

#### Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 85% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

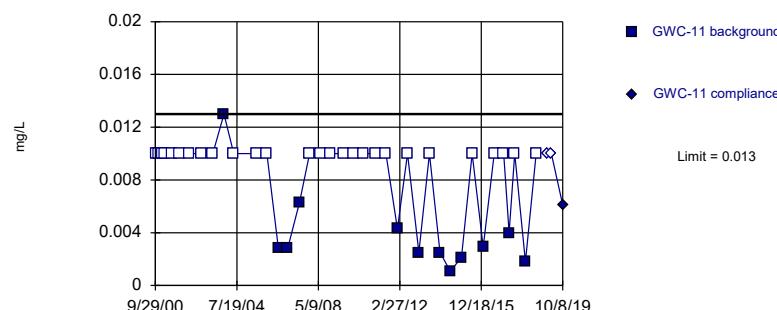
Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Zinc

#### Intrawell Non-parametric



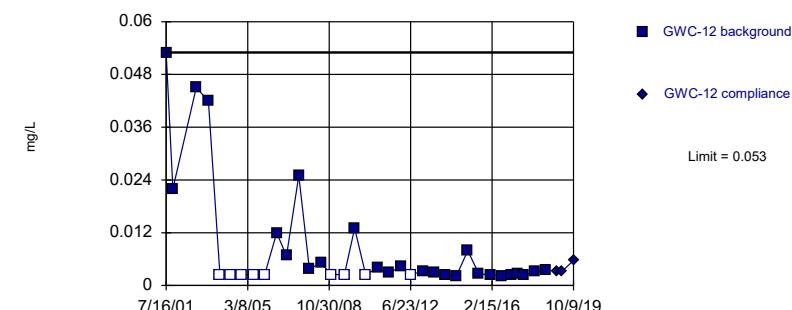
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

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Hollow symbols indicate censored values.

Within Limit

### Zinc

#### Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 35 background values. 25.71% NDs. Well-constituent pair annual alpha = 0.002991. Individual comparison alpha = 0.001497 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

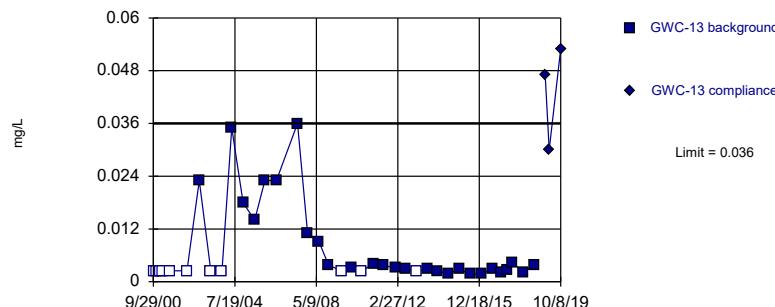
Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Exceeds Limit

### Zinc

#### Intrawell Non-parametric



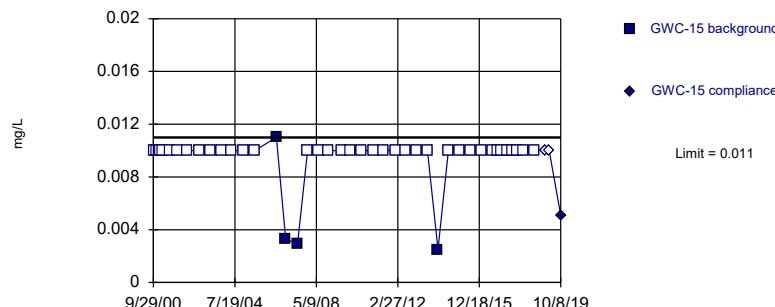
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 38 background values. 28.95% NDs. Well-constituent pair annual alpha = 0.002586. Individual comparison alpha = 0.001294 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Zinc

#### Intrawell Non-parametric



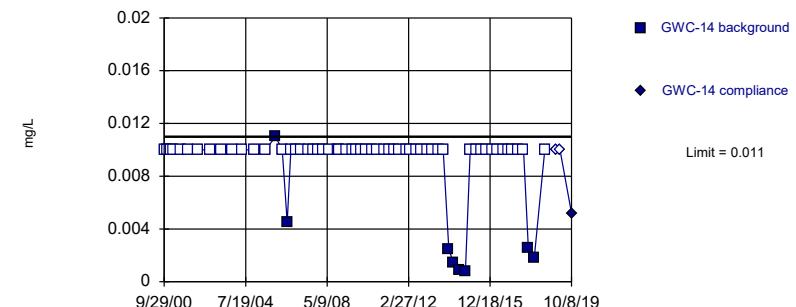
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 63 background values. 87.3% NDs. Well-constituent pair annual alpha = 0.0009737. Individual comparison alpha = 0.000487 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Zinc

#### Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 63 background values. 87.3% NDs. Well-constituent pair annual alpha = 0.0009737. Individual comparison alpha = 0.000487 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

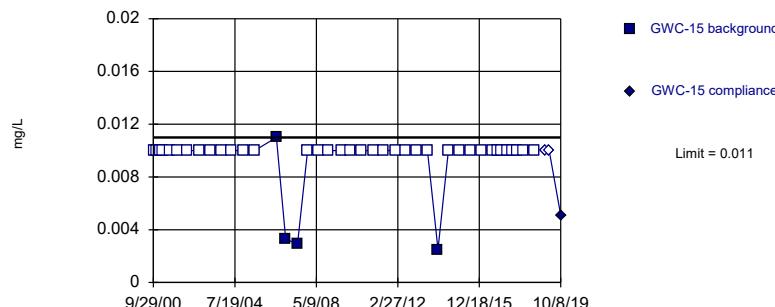
Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Zinc

#### Intrawell Non-parametric



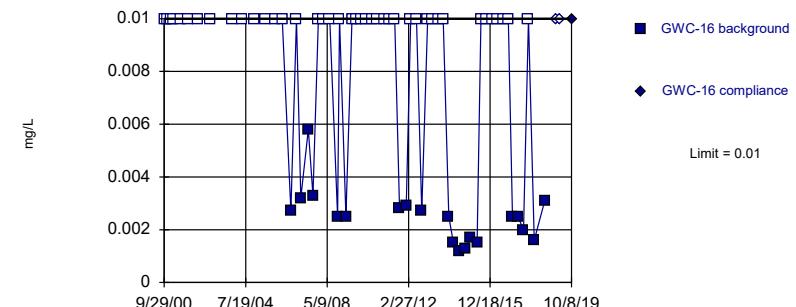
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 90.24% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

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Hollow symbols indicate censored values.

Within Limit

### Zinc

#### Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 61 background values. 67.21% NDs. Well-constituent pair annual alpha = 0.001029. Individual comparison alpha = 0.0005144 (1 of 2).

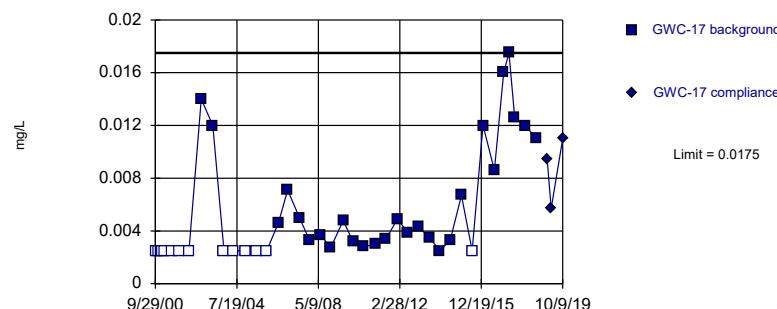
Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Zinc  
Intrawell Non-parametric

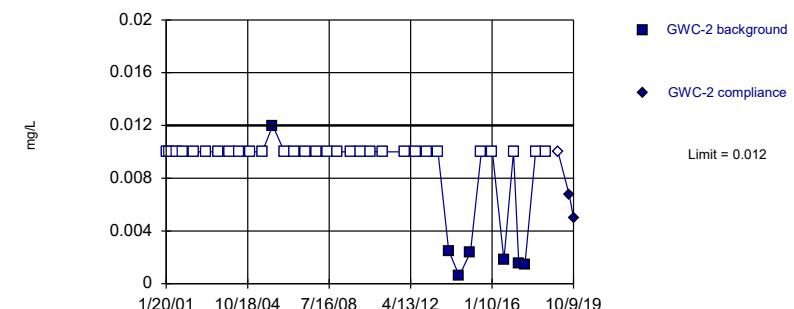


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 32.5% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Zinc  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 37 background values. 81.08% NDs. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha = 0.001361 (1 of 2).

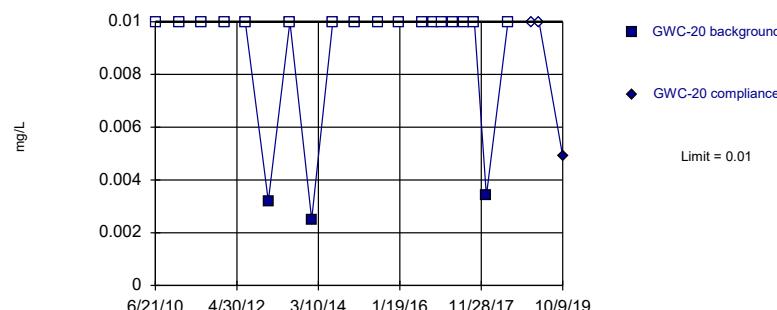
Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Zinc  
Intrawell Non-parametric

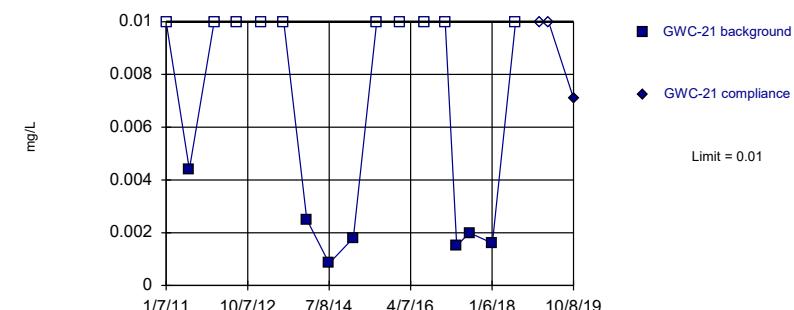


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

Zinc  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 58.82% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

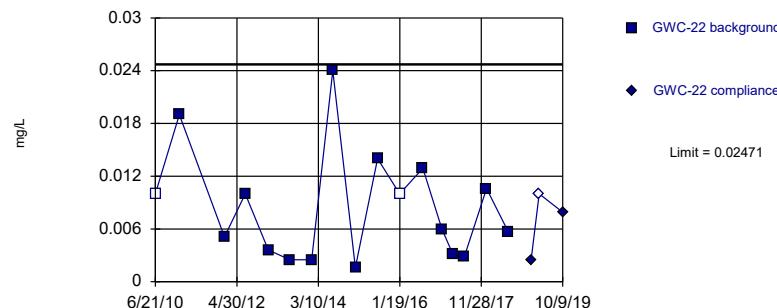
Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Zinc Intrawell Parametric

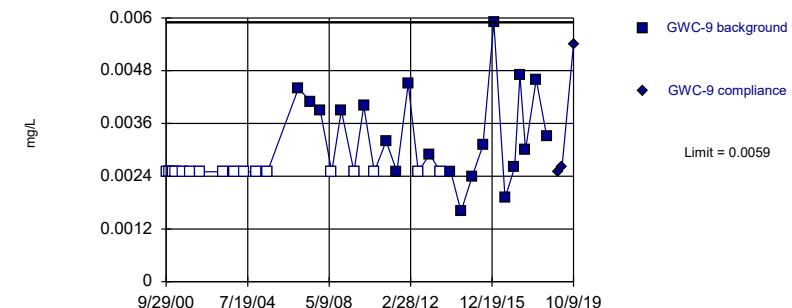


Background Data Summary: Mean=0.008441, Std. Dev.=0.00633, n=17, 11.76% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8837, critical = 0.851. Kappa = 2.571 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Zinc Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 37 background values. 45.95% NDs. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha = 0.001361 (1 of 2).

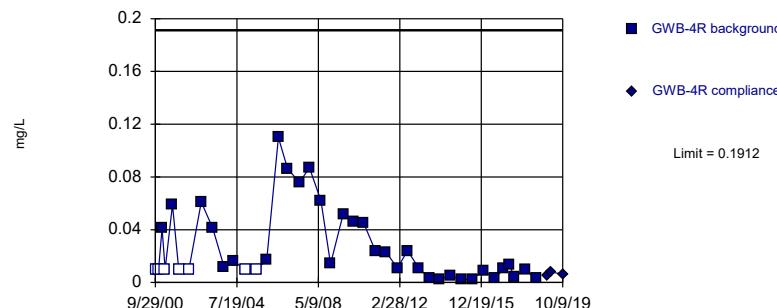
Prediction Limit Analysis Run 2/17/2020 3:50 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:51 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Zinc Intrawell Parametric

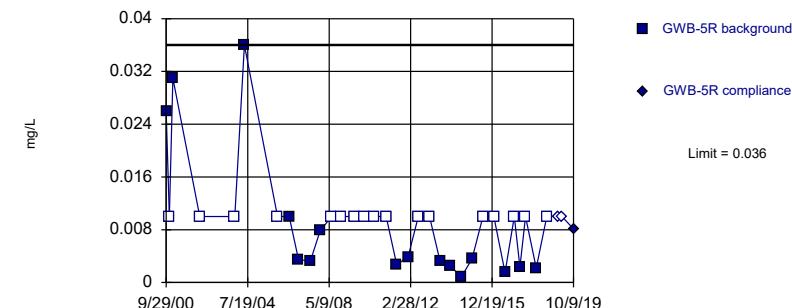


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-4.471, Std. Dev.=1.259, n=40, 17.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.936, critical = 0.919. Kappa = 2.238 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Within Limit

### Zinc Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 33 background values. 51.52% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2).

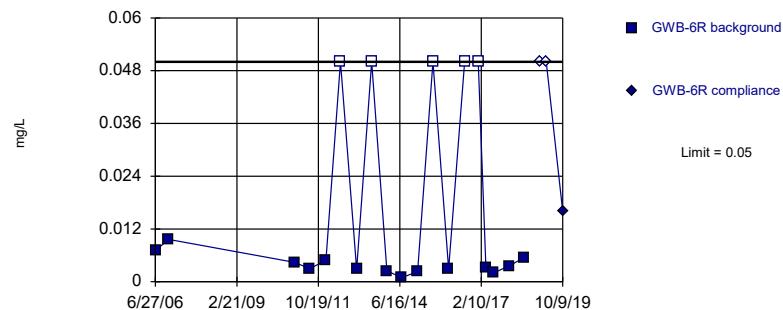
Prediction Limit Analysis Run 2/17/2020 3:51 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 2/17/2020 3:51 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

### Zinc

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 19 background values. 26.32% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Prediction Limit Analysis Run 2/17/2020 3:51 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Prediction Limit

Constituent: Antimony Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7	GWA-7	GWC-11	GWC-11	GWC-13	GWC-13	GWC-14	GWC-14
9/29/2000	<0.015		<0.003		<0.003		<0.003	
11/21/2000	<0.015		<0.003		<0.003		<0.003	
1/20/2001	<0.015		<0.003		<0.003		<0.003	
3/14/2001	<0.015		<0.003		<0.003		<0.003	
7/16/2001	<0.015		<0.003		<0.003		<0.003	
11/1/2001	<0.015		<0.003		<0.003		<0.003	
4/25/2002	<0.015		<0.003		<0.003		<0.003	
11/20/2002			<0.003		<0.003		<0.003	
6/6/2003	<0.015		<0.003		<0.003		<0.003	
12/12/2003	<0.015		<0.003		<0.003		<0.003	
5/26/2004	<0.015		<0.003		<0.003		<0.003	
12/7/2004	<0.015		<0.003		<0.003		<0.003	
6/21/2005	<0.015		<0.003		<0.003		<0.003	
12/12/2005	<0.015		<0.003		<0.003		<0.003	
4/4/2006							<0.003	
6/27/2006	<0.015		<0.003		<0.003		<0.003	
8/30/2006							<0.003	
12/4/2006	<0.015		<0.003		<0.003		<0.003	
2/15/2007							<0.003	
6/23/2007	<0.015		<0.003		<0.003		<0.003	
9/11/2007							<0.003	
12/11/2007	<0.015		<0.003		<0.003		<0.003	
3/11/2008							<0.003	
6/23/2008	<0.015		<0.003		<0.003			
6/24/2008							<0.003	
11/3/2008							<0.003	
12/4/2008	<0.015		<0.003		<0.003		<0.003	
3/25/2009							<0.003	
7/7/2009	<0.015							
7/8/2009			<0.003		<0.003		<0.003	
9/14/2009							<0.003	
12/20/2009	<0.015						<0.003	
12/21/2009			<0.003		<0.003			
3/4/2010							<0.003	
6/20/2010	<0.015		<0.003		<0.003		<0.003	
9/14/2010							<0.003	
1/6/2011			<0.003		<0.003			
1/7/2011	<0.015						<0.003	
4/15/2011							<0.003	
7/7/2011	<0.015		<0.003		<0.003		<0.003	
9/25/2011							<0.003	
1/17/2012	<0.015		<0.003		<0.003		<0.003	
4/4/2012							<0.003	
7/9/2012	<0.015		<0.003		<0.003		<0.003	
10/9/2012							<0.003	
1/17/2013			<0.003		<0.003			
1/18/2013	<0.015						<0.003	
4/5/2013							<0.003	
7/16/2013			<0.003		<0.003			
7/17/2013	<0.015						<0.003	
10/11/2013							0.005	
1/13/2014	<0.015		<0.003		<0.003			

# Prediction Limit

Page 2

Constituent: Antimony   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWA-7	GWA-7	GWC-11	GWC-11	GWC-13	GWC-13	GWC-14	GWC-14
1/14/2014							<0.003	
4/3/2014							<0.003	
7/8/2014			<0.003		<0.003			
7/9/2014	0.0022 (J)						<0.003	
10/24/2014							<0.003	
1/13/2015	<0.015		<0.003		<0.003			
1/14/2015							<0.003	
5/10/2015							<0.003	
7/16/2015	0.0028 (J)		<0.003		<0.003			
7/17/2015							<0.003	
10/6/2015							<0.003	
1/17/2016							<0.003	
1/18/2016	<0.015				<0.003			
1/19/2016			<0.003					
4/26/2016							<0.003	
7/26/2016			0.0005 (J)		0.0006 (J)			
7/27/2016	<0.015						<0.003	
8/31/2016			<0.003		<0.003			
9/1/2016	0.0017 (J)						<0.003	
10/25/2016	<0.015						<0.003	
10/26/2016			<0.003		<0.003			
1/4/2017			<0.003					
1/5/2017					<0.003		<0.003	
1/6/2017	0.0009 (J)							
4/4/2017							<0.003	
4/6/2017	<0.015		0.0006 (J)		<0.003			
7/11/2017			0.0009 (J)				<0.003	
7/12/2017					<0.003			
7/13/2017	0.0013 (J)							
10/2/2017							<0.003	
10/3/2017			<0.003					
10/4/2017	0.0008 (J)				<0.003			
1/9/2018	<0.015						<0.003	
1/10/2018					<0.003			
1/11/2018			0.0007 (J)					
7/9/2018							<0.003	
7/11/2018			<0.003		<0.003			
1/16/2019						<0.003		<0.003
1/17/2019				<0.003				
3/26/2019						<0.003		<0.003
3/27/2019				<0.003				
8/27/2019				0.00033 (J)		<0.003		<0.003
10/8/2019		<0.015		0.00046 (J)		<0.003		<0.003

## Prediction Limit

Constituent: Antimony Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-16	GWC-20	GWC-20	GWC-22	GWC-22	GWC-9	GWC-9
9/29/2000	<0.003						<0.003	
11/21/2000	<0.003						<0.003	
1/20/2001	<0.003						<0.003	
3/14/2001	<0.003						<0.003	
7/16/2001	<0.003						<0.003	
11/1/2001	<0.003						<0.003	
4/25/2002	<0.003						<0.003	
11/20/2002	<0.003						<0.003	
6/6/2003	<0.003						<0.003	
12/12/2003	<0.003						<0.003	
5/26/2004	<0.003						<0.003	
12/7/2004	<0.003						<0.003	
6/21/2005	<0.003						<0.003	
12/12/2005	<0.003						<0.003	
4/4/2006	<0.003							
6/27/2006	<0.003						<0.003	
8/30/2006	<0.003							
12/4/2006	0.006						<0.003	
2/15/2007	<0.003							
6/23/2007	<0.003						<0.003	
9/11/2007	<0.003							
12/11/2007	<0.003						<0.003	
3/11/2008	<0.003							
6/23/2008							<0.003	
6/24/2008	<0.003							
11/3/2008	<0.003							
12/4/2008							<0.003	
12/5/2008	<0.003							
3/25/2009	<0.003							
7/8/2009	<0.003						<0.003	
9/14/2009	<0.003							
12/20/2009	<0.003							
12/21/2009							<0.003	
3/4/2010	<0.003							
6/20/2010							<0.003	
6/21/2010	<0.003	<0.003			<0.003			
9/14/2010	<0.003							
1/7/2011	<0.003	<0.003			<0.003		<0.003	
4/15/2011	<0.003							
7/7/2011	<0.003	<0.003						
7/8/2011		<0.003			<0.003		<0.003	
9/25/2011	<0.003							
1/18/2012	<0.003	<0.003			<0.003		<0.003	
4/4/2012	<0.003							
7/10/2012	<0.003	<0.003			<0.003		<0.003	
10/9/2012	<0.003							
1/18/2013	<0.003	<0.003			<0.003		<0.003	
4/5/2013	<0.003							
7/17/2013	<0.003	<0.003			<0.003		<0.003	
10/11/2013	<0.003							
1/14/2014	<0.003	<0.003			<0.003		<0.003	
4/3/2014	<0.003							

# Prediction Limit

Page 2

Constituent: Antimony   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-16	GWC-16	GWC-20	GWC-20	GWC-22	GWC-22	GWC-9	GWC-9
7/9/2014	<0.003						<0.003	
7/10/2014			<0.003		<0.003			
10/24/2014	<0.003							
1/12/2015			<0.003					
1/14/2015	<0.003				<0.003		<0.003	
5/11/2015	<0.003							
7/16/2015	<0.003							
7/17/2015							<0.003	
7/18/2015			<0.003		<0.003			
10/6/2015	<0.003							
1/17/2016	<0.003		<0.003					
1/18/2016					<0.003		<0.003	
4/26/2016	<0.003							
7/28/2016	<0.003		0.0019 (J)				<0.003	
7/29/2016					<0.003			
8/31/2016					<0.003		<0.003	
9/1/2016	<0.003		<0.003					
10/25/2016	<0.003		<0.003					
10/26/2016					<0.003			
10/27/2016							0.0016 (J)	
1/4/2017	<0.003		<0.003		<0.003			
1/6/2017							<0.003	
4/4/2017			<0.003					
4/5/2017	<0.003							
4/6/2017					<0.003		<0.003	
7/11/2017			<0.003		<0.003			
7/12/2017	<0.003						<0.003	
10/2/2017			<0.003					
10/3/2017	<0.003							
10/4/2017					<0.003		<0.003	
1/10/2018	<0.003		<0.003					
1/11/2018					<0.003		<0.003	
7/9/2018			<0.003					
7/10/2018	<0.003							
7/11/2018					<0.003		<0.003	
1/17/2019		<0.003				<0.003		<0.003
1/18/2019								
1/21/2019			<0.003					
3/25/2019			<0.003					
3/26/2019		<0.003						
3/27/2019						<0.003		<0.003
8/27/2019						0.00045 (J)		
8/28/2019	<0.003			<0.003				<0.003
10/8/2019	<0.003							
10/9/2019				<0.003		<0.003		<0.003

## Prediction Limit

Constituent: Antimony, Arsenic Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-4R	GWB-4R	GWB-5R	GWB-5R	GWA-7	GWA-7	GWA-8	GWA-8
9/29/2000	<0.003		<0.015		<0.005		<0.005	
11/21/2000	<0.003		<0.015		<0.005		<0.005	
1/20/2001	<0.003		<0.015		<0.005		<0.005	
3/14/2001	<0.003		<0.015		<0.005		<0.005	
7/16/2001	<0.003		<0.015		<0.005		<0.005	
11/1/2001	<0.003		<0.015		<0.005		<0.005	
4/25/2002	<0.003		<0.015		<0.005		<0.005	
11/20/2002	<0.003		<0.015				<0.005	
6/6/2003	<0.003		<0.015		0.02		<0.005	
12/12/2003	<0.003		<0.015		<0.005		<0.005	
5/26/2004	<0.003		<0.015		<0.005		<0.005	
12/7/2004	<0.003		<0.015		<0.005		<0.005	
6/21/2005	<0.003		<0.015		<0.005		<0.005	
12/12/2005	<0.003		<0.015		<0.005		<0.005	
4/4/2006							<0.005	
6/27/2006	<0.003		<0.015		<0.005		<0.005	
8/30/2006							<0.005	
12/4/2006	<0.003		<0.015		<0.005		<0.005	
2/15/2007							<0.005	
6/23/2007	<0.003		<0.015		<0.005		<0.005	
9/11/2007							<0.005	
12/11/2007	<0.003		<0.015		<0.005		<0.005	
3/11/2008							<0.005	
6/23/2008					<0.005		<0.005	
6/24/2008	<0.003		<0.015				<0.005	
11/3/2008							<0.005	
12/4/2008					<0.005		<0.005	
12/5/2008	<0.003		<0.015				<0.005	
3/25/2009							<0.005	
7/7/2009	<0.003		<0.015		<0.005		<0.005	
9/14/2009							<0.005	
12/20/2009					<0.005		<0.005	
12/21/2009	<0.003		<0.015				<0.005	
3/4/2010							<0.005	
6/20/2010			<0.015		<0.005		<0.005	
6/21/2010	<0.003						<0.005	
9/14/2010							<0.005	
1/6/2011			<0.015				<0.005	
1/7/2011	<0.003				<0.005		<0.005	
4/15/2011							<0.005	
7/7/2011			<0.015		<0.005		<0.005	
7/8/2011	<0.003						<0.005	
9/25/2011							<0.005	
1/17/2012			<0.015		<0.005		<0.005	
1/18/2012	<0.003						<0.005	
4/4/2012							<0.005	
7/9/2012			<0.015		0.0052		<0.005	
7/10/2012	<0.003						<0.005	
10/9/2012							<0.005	
1/17/2013			<0.015				<0.005	
1/18/2013	<0.003				0.0087		<0.005	
4/5/2013							<0.005	

# Prediction Limit

Page 2

Constituent: Antimony, Arsenic Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-4R	GWB-4R	GWB-5R	GWB-5R	GWA-7	GWA-7	GWA-8	GWA-8
7/16/2013			<0.015					
7/17/2013	<0.003				0.0084		<0.005	
10/11/2013							<0.005	
1/13/2014			<0.015		0.009			
1/14/2014	<0.003						<0.005	
4/3/2014							<0.005	
7/9/2014	0.002 (J)		<0.015		0.008		<0.005	
10/24/2014							<0.005	
1/12/2015	<0.003							
1/13/2015			<0.015		0.0077			
1/14/2015							<0.005	
5/10/2015							<0.005	
7/16/2015	0.0021 (J)		<0.015		0.0077			
7/17/2015							<0.005	
10/6/2015							<0.005	
1/18/2016	<0.003		<0.015		0.014		<0.005	
4/26/2016							0.0011 (J)	
7/27/2016			<0.015		0.0111			
7/28/2016							<0.005	
7/29/2016	0.0003 (J)							
8/30/2016			<0.015				<0.005	
9/1/2016	<0.003				0.0287			
10/24/2016							<0.005	
10/25/2016					0.0069			
10/26/2016	<0.003		<0.015					
1/3/2017			<0.015				<0.005	
1/6/2017	<0.003				0.0097			
4/3/2017							0.0006 (J)	
4/4/2017	<0.003							
4/6/2017			<0.015		0.0104			
7/11/2017			<0.015				0.0006 (J)	
7/12/2017	<0.003		<0.015					
7/13/2017					0.0064			
10/2/2017							0.0006 (J)	
10/3/2017			<0.015					
10/4/2017	<0.003				0.0078			
1/9/2018					0.0091 (J)		0.0009 (J)	
1/10/2018			<0.015					
1/11/2018	<0.003							
7/9/2018							<0.005	
7/10/2018			<0.015					
7/11/2018	<0.003							
1/16/2019		<0.003		<0.015			<0.005	
3/25/2019		<0.003				0.0029 (J)		<0.005
3/26/2019				<0.015				
8/26/2019						0.0041 (J)		<0.005
8/27/2019		<0.003						
8/28/2019				0.00054 (J)				
10/7/2019							<0.005	
10/8/2019					0.003 (J)			
10/9/2019		<0.003		<0.015				

## Prediction Limit

Constituent: Arsenic Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

# Prediction Limit

Page 2

Constituent: Arsenic   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-1	GWC-1	GWC-12	GWC-12	GWC-13	GWC-13	GWC-14	GWC-14
1/13/2014	<0.005		<0.005		<0.005			
1/14/2014							<0.005	
4/3/2014							<0.005	
7/8/2014			<0.005		<0.005			
7/9/2014	0.0022 (J)						<0.005	
10/24/2014							<0.005	
1/13/2015	<0.005		<0.005		<0.005			
1/14/2015							<0.005	
5/10/2015							<0.005	
7/16/2015	0.0037 (J)		<0.005		<0.005			
7/17/2015							<0.005	
10/6/2015							<0.005	
1/17/2016							0.002 (J)	
1/18/2016			<0.005		<0.005			
4/26/2016							0.00183 (J)	
7/26/2016					<0.005			
7/27/2016	0.0046 (J)		<0.005				0.0021 (J)	
8/30/2016	0.0023 (J)							
8/31/2016			<0.005		<0.005			
9/1/2016							0.0024 (J)	
10/25/2016	0.0035 (J)						<0.005	
10/26/2016			<0.005		<0.005			
1/4/2017	0.0018 (J)		<0.005					
1/5/2017					<0.005		0.0024 (J)	
4/4/2017	0.0015 (J)						0.003 (J)	
4/5/2017			0.0006 (J)					
4/6/2017					<0.005			
7/10/2017			0.0008 (J)					
7/11/2017							0.0019 (J)	
7/12/2017	0.0015 (J)				<0.005			
10/2/2017							0.0026 (J)	
10/3/2017	0.0013 (J)							
10/4/2017			0.0009 (J)		<0.005			
1/9/2018							0.0021 (J)	
1/10/2018	0.0023 (J)				0.0006 (J)			
1/11/2018			<0.005					
7/9/2018							0.0019 (J)	
7/10/2018	0.0031 (J)							
7/11/2018			<0.005		<0.005			
1/16/2019		0.0023 (J)				<0.005		0.0016 (J)
1/17/2019				<0.005				
3/26/2019	0.0032 (J)					0.00058 (J)		0.0023 (J)
3/27/2019				<0.005				
8/27/2019	0.0022 (J)			<0.005		<0.005		0.0017 (J)
10/8/2019						<0.005		0.0017 (J)
10/9/2019	0.0042 (J)			<0.005				

## Prediction Limit

Constituent: Arsenic Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-15	GWC-15	GWC-16	GWC-16	GWC-17	GWC-17	GWC-2	GWC-2
9/29/2000	<0.005		0.094		<0.005			
11/21/2000	<0.005		0.059		<0.005		<0.005	
1/20/2001	<0.005		0.087		<0.005		<0.005	
3/14/2001	<0.005		0.075		<0.005		<0.005	
7/16/2001	<0.005		0.11		<0.005		<0.005	
11/1/2001	<0.005		0.098		<0.005		<0.005	
4/25/2002	<0.005		0.071		<0.005		<0.005	
11/20/2002	<0.005		0.15		<0.005		<0.005	
6/6/2003	<0.005				<0.005		<0.005	
12/12/2003	<0.005				<0.005		<0.005	
5/26/2004	<0.005		0.12		<0.005		<0.005	
12/7/2004	<0.005		0.098		<0.005		<0.005	
6/21/2005	<0.005		0.065		<0.005		<0.005	
12/12/2005	<0.005		0.081		<0.005		<0.005	
4/4/2006			0.077					
6/27/2006	<0.005		0.071		<0.005		<0.005	
8/30/2006			0.08					
12/4/2006	<0.005		0.085		<0.005		<0.005	
2/15/2007			0.09					
6/23/2007	<0.005		0.12		<0.005		<0.005	
9/11/2007			0.088					
12/11/2007	<0.005		0.088		<0.005		<0.005	
3/11/2008			0.071					
6/24/2008	<0.005		0.097		<0.005		<0.005	
11/3/2008			0.089					
12/4/2008							<0.005	
12/5/2008	<0.005		0.092		<0.005			
3/25/2009			0.095					
7/8/2009	0.0052		0.11		<0.005		<0.005	
9/14/2009			0.099					
12/20/2009	<0.005		0.1				<0.005	
12/21/2009					<0.005			
3/4/2010			0.074					
6/20/2010	0.0068						<0.005	
6/21/2010			0.056		<0.005			
9/14/2010			0.067					
1/6/2011							<0.005	
1/7/2011	<0.005		0.066		<0.005			
4/15/2011			0.08					
7/7/2011	<0.005		0.054					
7/8/2011					<0.005			
9/25/2011			0.085					
1/17/2012	<0.005						<0.005	
1/18/2012			0.089		<0.005			
4/4/2012			0.0473					
7/9/2012	<0.005						<0.005	
7/10/2012			0.07		<0.005			
10/9/2012			0.088					
1/17/2013							<0.005	
1/18/2013	0.0089		0.063		<0.005			
4/5/2013			0.06					
7/17/2013	0.011		0.063		<0.005		<0.005	

# Prediction Limit

Page 2

Constituent: Arsenic   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-15	GWC-15	GWC-16	GWC-16	GWC-17	GWC-17	GWC-2	GWC-2
10/11/2013			0.059					
1/13/2014	0.017						<0.005	
1/14/2014			0.077		<0.005			
4/3/2014			0.091					
7/9/2014	0.014		0.08		<0.005		<0.005	
10/24/2014			0.073					
1/13/2015	0.011						<0.005	
1/14/2015			0.079		<0.005			
5/11/2015			0.058					
7/16/2015	0.02		0.068				<0.005	
7/18/2015					<0.005			
10/6/2015			0.078					
1/17/2016	0.014		0.089				<0.005	
1/18/2016					<0.005			
4/26/2016			0.0731					
7/27/2016	0.0303						<0.005	
7/28/2016			0.0627					
7/29/2016					0.0009 (J)			
8/31/2016							<0.005	
9/1/2016	0.0533		0.0551		<0.005			
10/25/2016	0.0551		0.0466					
10/26/2016					<0.005		<0.005	
1/4/2017			0.0444					
1/5/2017	0.0437				<0.005		<0.005	
4/3/2017	0.0713							
4/4/2017							<0.005	
4/5/2017			0.0591		0.0011 (J)			
7/11/2017	0.0745			0.0776				
7/12/2017					0.0016 (J)		<0.005	
7/13/2017								
10/2/2017	0.0723			0.0813			<0.005	
10/3/2017								
10/4/2017					0.0019 (J)			
1/9/2018	0.0731							
1/10/2018			0.085				0.0006 (J)	
1/11/2018					0.0015 (J)			
7/10/2018	0.09		0.067				<0.005	
7/11/2018					0.00082 (J)			
1/16/2019						<0.005		
1/17/2019		0.13		0.079				<0.005
1/21/2019								
3/26/2019		0.1		0.089		0.0015 (J)		
7/30/2019							0.00039 (J)	
8/27/2019		0.17					<0.005	
8/28/2019				0.091		0.0011 (J)		
10/8/2019		0.13		0.088				
10/9/2019						0.0011 (J)		<0.005

# Prediction Limit

Constituent: Arsenic Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20	GWC-20	GWC-21	GWC-21	GWC-22	GWC-22	GWB-4R	GWB-4R
9/29/2000							<0.005	
11/21/2000							<0.005	
3/14/2001							<0.005	
7/16/2001							<0.005	
11/1/2001							<0.005	
4/25/2002							<0.005	
12/12/2003							0.0058	
5/26/2004							0.0068	
12/7/2004							0.0066	
6/21/2005							<0.005	
12/12/2005							<0.005	
6/27/2006							<0.005	
12/4/2006							<0.005	
6/23/2007							<0.005	
12/11/2007							<0.005	
6/24/2008							0.005	
12/5/2008							<0.005	
7/7/2009							<0.005	
12/21/2009							<0.005	
6/21/2010	0.29				<0.005			
1/7/2011	0.2		<0.005		<0.005		<0.005	
7/7/2011	<0.005							
7/8/2011	0.19		<0.005		<0.005		<0.005	
1/18/2012	0.058		<0.005		<0.005		<0.005	
7/10/2012	0.18		<0.005		<0.005		0.0052	
1/18/2013	0.22				<0.005		<0.005	
7/17/2013	0.45		<0.005		<0.005		<0.005	
1/14/2014	0.52				<0.005		<0.005	
7/9/2014		<0.005					0.0023 (J)	
7/10/2014	0.4				0.0027 (J)			
1/12/2015	0.43						0.0028 (J)	
1/14/2015		<0.005			<0.005			
7/16/2015							<0.005	
7/17/2015		<0.005						
7/18/2015	0.26				<0.005			
1/17/2016	0.34							
1/18/2016					<0.005		<0.005	
7/28/2016	0.209		<0.005					
7/29/2016					0.002 (J)		0.0014 (J)	
8/31/2016					0.0017 (J)			
9/1/2016	0.215		0.0039 (J)				0.0033 (J)	
10/25/2016	0.307		<0.005					
10/26/2016					<0.005		0.0016 (J)	
1/4/2017	0.311		<0.005		<0.005			
1/6/2017							<0.005	
4/4/2017	0.317		0.0031 (J)				0.0021 (J)	
4/6/2017					0.0006 (J)			
7/11/2017	0.299				0.0012 (J)			
7/12/2017							0.0015 (J)	
7/13/2017			<0.005					
10/2/2017	0.216							
10/3/2017			<0.005					

# Prediction Limit

Page 2

Constituent: Arsenic   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-20	GWC-20	GWC-21	GWC-21	GWC-22	GWC-22	GWB-4R	GWB-4R
10/4/2017					0.0025 (J)		0.0018 (J)	
1/9/2018			0.0033 (J)					
1/10/2018	0.347				0.0006 (J)		0.0015 (J)	
1/11/2018					0.0011 (J)		0.00095 (J)	
7/9/2018	0.37		0.0027 (J)				0.0024 (J)	
7/10/2018					<0.005			
7/11/2018							0.0029 (J)	
1/16/2019								0.0023 (J)
1/17/2019			0.0022 (J)					
1/18/2019		0.44						
3/25/2019		0.41						
3/26/2019			0.0045 (J)					
3/27/2019				<0.005				
8/27/2019					0.00044 (J)		0.0028 (J)	
8/28/2019	0.43		0.002 (J)					
10/8/2019			0.0028 (J)					
10/9/2019	0.35				<0.005		0.0024 (J)	

## Prediction Limit

Constituent: Arsenic, Barium   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWB-5R	GWB-5R	GWB-6R	GWB-6R	GWA-7	GWA-7	GWA-8	GWA-8
9/29/2000	<0.005		<0.025		0.11			
11/21/2000	<0.005		<0.025		0.12			
1/20/2001	<0.005		0.014		0.11			
3/14/2001	<0.005		<0.025		0.11		0.14	
7/16/2001	0.014		<0.025		0.11		0.14	
11/1/2001	0.023		<0.025		0.11		0.14	
4/25/2002	<0.005		<0.025		0.058		0.088	
11/20/2002	0.022		0.014					
6/6/2003			0.014		0.19		0.14	
12/12/2003	<0.005		<0.025		0.1		0.13	
5/26/2004	0.0074		0.0082		0.084		0.09	
12/7/2004	0.017		0.0062		0.094		0.11	
6/21/2005	0.013		<0.025		0.089		0.084	
12/12/2005	<0.005		<0.025		0.089		0.1	
4/4/2006							0.089	
6/27/2006	<0.005		<0.025		0.096		0.1	
8/30/2006							0.12	
12/4/2006	<0.005		<0.025		0.092		0.086	
2/15/2007							0.088	
6/23/2007	<0.005		0.0053		0.08		0.089	
9/11/2007							0.092	
12/11/2007	<0.005		0.0057		0.067		0.077	
3/11/2008							0.082	
6/23/2008					0.056		0.086	
6/24/2008	<0.005		0.012					
11/3/2008							0.088	
12/4/2008					0.054		0.081	
12/5/2008	<0.005		0.0064					
3/25/2009							0.069	
7/7/2009	<0.005		<0.025		0.034		0.078	
9/14/2009							0.079	
12/20/2009					0.034		0.081	
12/21/2009	<0.005		<0.025					
3/4/2010							0.065	
6/20/2010	<0.005		0.017		0.062		0.078	
9/14/2010							0.076	
1/6/2011	<0.005							
1/7/2011			<0.025		0.039		0.074	
4/15/2011							0.065	
7/7/2011	<0.005		<0.025		0.036		0.081	
9/25/2011							0.078	
1/17/2012	<0.005				0.041		0.082	
1/18/2012			<0.025					
4/4/2012							0.0861	
7/9/2012	<0.005				0.15			
7/10/2012				<0.025			0.082	
10/9/2012							0.09	
1/17/2013	<0.005							
1/18/2013				<0.025		0.15		0.083
4/5/2013								0.078
7/16/2013	<0.005							
7/17/2013				<0.025		0.13		0.083

# Prediction Limit

Page 2

Constituent: Arsenic, Barium   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWB-5R	GWB-5R	GWB-6R	GWB-6R	GWA-7	GWA-7	GWA-8	GWA-8
10/11/2013							0.078	
1/13/2014	<0.005				0.16			
1/14/2014			<0.025				0.081	
4/3/2014							0.077	
7/9/2014	<0.005		<0.025		0.11		0.073	
10/24/2014							0.087	
1/13/2015	<0.005				0.083			
1/14/2015			<0.025				0.079	
5/10/2015							0.076	
7/16/2015	<0.005				0.094			
7/17/2015			<0.025				0.061	
10/6/2015							0.067	
1/18/2016	<0.005		<0.025		0.22		0.068	
4/26/2016							0.0596	
7/27/2016	0.0008 (J)				0.192			
7/28/2016			0.0009 (J)				0.0701	
8/30/2016	<0.005		<0.025				0.0687	
10/24/2016							0.07	
10/25/2016					0.173			
10/26/2016	<0.005		<0.025					
1/3/2017	<0.005						0.061	
1/5/2017			0.0021 (J)					
1/6/2017					0.167			
4/3/2017							0.0612	
4/6/2017	0.0006 (J)		0.0011 (J)		0.136			
7/11/2017							0.0624	
7/12/2017	0.0009 (J)		0.0014 (J)					
7/13/2017					0.0891			
10/2/2017							0.0618	
10/3/2017	0.001 (J)		0.0014 (J)					
10/4/2017					0.113			
1/9/2018			0.0017 (J)		0.0901		0.0574	
1/10/2018	0.0012 (J)							
7/9/2018							0.056	
7/10/2018	0.0016 (J)		0.00063 (J)					
7/11/2018					0.065			
1/16/2019		0.0011 (J)		<0.025		0.062		0.062
3/25/2019						0.054		0.064
3/26/2019		0.0014 (J)		0.0029 (J)				
8/26/2019						0.11		0.065
8/27/2019				0.0035 (J)				
8/28/2019		0.0023 (J)						
10/7/2019							0.069	
10/8/2019						0.1		
10/9/2019		0.0053 (J)		0.0018 (J)				

## Prediction Limit

Constituent: Barium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-1	GWC-11	GWC-11	GWC-12	GWC-12	GWC-13	GWC-13
9/29/2000	0.044		0.1		0.075		<0.005	
11/21/2000	0.047		0.082		0.072		0.01	
1/20/2001	0.051		0.083		0.086		<0.005	
3/14/2001	0.048		0.075		0.088		0.01	
7/16/2001	0.054		0.091		0.084		<0.005	
11/1/2001	0.063		0.068		0.13		<0.005	
4/25/2002	0.032		0.066		0.24		<0.005	
6/6/2003	0.046		0.085				0.028	
12/12/2003	0.034		0.072				0.019	
5/26/2004	0.035		0.055				<0.005	
12/7/2004	0.024		0.066				0.009	
6/21/2005	0.039		0.033		0.053		0.0089	
12/12/2005	0.042		0.034		0.1		0.026	
6/27/2006	0.033		0.029		0.098		0.029	
12/4/2006	0.04		0.02		0.068		0.017	
6/23/2007	0.044		0.017		0.042		0.014	
12/11/2007	0.049		0.013		0.04		0.011	
6/23/2008			0.012		0.041		0.018	
6/24/2008	0.038							
12/4/2008			0.011		0.035		0.019	
12/5/2008	0.06							
7/7/2009	0.043							
7/8/2009			0.012		0.036		0.011	
12/20/2009	0.065							
12/21/2009			0.011		0.028		0.01	
6/20/2010	0.095		0.0089		0.025		0.0081	
1/6/2011	0.093		0.014				0.012	
1/7/2011					0.037			
7/7/2011	0.095		0.018		0.039		0.015	
1/17/2012	0.1		0.23		0.045		0.0086	
7/9/2012	0.11		0.17		0.032		0.01	
1/17/2013	0.12		0.2		0.033		0.014	
7/16/2013	0.081		0.11		0.027		0.012	
1/13/2014	0.096		0.083		0.027		0.015	
7/8/2014			0.066		0.037		0.017	
7/9/2014	0.066							
1/13/2015	0.068		0.053		0.023		0.019	
7/16/2015	0.07		0.052		0.03		0.022	
1/17/2016	0.062							
1/18/2016					0.032		0.026	
1/19/2016			0.048					
7/26/2016			0.051				0.0236	
7/27/2016	0.0417				0.0191			
8/30/2016	0.0545							
8/31/2016			0.0565		0.019		0.0273	
10/25/2016	0.0504							
10/26/2016			0.0591		0.0197		0.0238	
1/4/2017	0.0534		0.0598		0.0174			
1/5/2017							0.0218	
4/4/2017	0.0549				0.0174			
4/5/2017								
4/6/2017			0.0813				0.0204	

# Prediction Limit

Page 2

Constituent: Barium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-1	GWC-11	GWC-11	GWC-12	GWC-12	GWC-13	GWC-13
7/10/2017					0.0172			
7/11/2017			0.0302					
7/12/2017	0.0614						0.0161	
10/3/2017	0.0436		0.103					
10/4/2017					0.0162		0.0185	
1/10/2018	0.053						0.0166	
1/11/2018			0.166		0.018			
7/10/2018	0.059							
7/11/2018			0.12		0.014		0.019	
1/16/2019		0.054						0.019
1/17/2019				0.039		0.017		
3/26/2019		0.055						0.026
3/27/2019				0.053		0.017		
8/27/2019		0.054		0.12		0.017		0.024
10/8/2019				0.13				0.024
10/9/2019		0.058				0.019		

## Prediction Limit

Constituent: Barium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-14	GWC-14	GWC-15	GWC-15	GWC-16	GWC-16	GWC-17	GWC-17
9/29/2000	0.11		0.028		0.076		0.16	
11/21/2000	0.15		0.035		0.075		0.17	
1/20/2001	0.1		0.032		0.053		0.16	
3/14/2001	0.095		0.036		0.055		0.17	
7/16/2001			0.036		0.041		0.19	
11/1/2001	0.16		0.036		0.045		0.18	
4/25/2002	0.054		0.045		0.055		0.15	
6/6/2003	0.063						0.13	
12/12/2003	0.041						0.18	
5/26/2004	0.059		0.034		0.055		0.17	
12/7/2004	0.076		0.042		0.072		0.19	
6/21/2005	0.042		0.039		0.061		0.18	
12/12/2005	0.048		0.043		0.047		0.17	
4/4/2006	0.05				0.042			
6/27/2006	0.036		0.031		0.042		0.17	
8/30/2006	0.059				0.05			
12/4/2006	0.062		0.043		0.044		0.21	
2/15/2007	0.079				0.041			
6/23/2007	0.03		0.031		0.044		0.17	
9/11/2007	0.053				0.04			
12/11/2007	0.075		0.044		0.0035		0.18	
3/11/2008	0.052				0.034			
6/24/2008	0.039		0.057		0.042		0.14	
11/3/2008	0.082				0.049			
12/4/2008	0.079							
12/5/2008			0.041		0.05		0.19	
3/25/2009	0.093				0.052			
7/8/2009	0.039		0.058		0.046		0.2	
9/14/2009	0.061				0.048			
12/20/2009	0.088		0.062		0.062			
12/21/2009							0.23	
3/4/2010	0.077				0.058			
6/20/2010	0.075		0.03					
6/21/2010					0.041		0.25	
9/14/2010	0.093				0.036			
1/7/2011	0.13		0.049		0.054		0.21	
4/15/2011	0.086				0.049			
7/7/2011	0.051		0.05		0.063			
7/8/2011							0.13	
9/25/2011	0.056				0.037			
1/17/2012	0.052		0.044					
1/18/2012					0.034		0.26	
4/4/2012	0.0519				0.0446			
7/9/2012	0.048		0.045					
7/10/2012					0.033		0.19	
10/9/2012	0.065				0.041			
1/18/2013	0.045		0.049		0.036		0.17	
4/5/2013	0.047				0.036			
7/17/2013	0.032		0.039		0.054		0.18	
10/11/2013	0.028				0.052			
1/13/2014			0.038					
1/14/2014	0.036				0.051		0.18	

## Prediction Limit

Constituent: Barium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Prediction Limit

Constituent: Barium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

# Prediction Limit

Page 2

Constituent: Barium   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-2	GWC-2	GWC-20	GWC-20	GWC-21	GWC-21	GWC-22	GWC-22
1/4/2017				0.0999		0.0617		0.0975
1/5/2017	0.0526							
4/4/2017	0.0503		0.136		0.0761			0.064
4/6/2017								
7/11/2017			0.145					0.0778
7/13/2017	0.0529				0.0428			
10/2/2017			0.148					
10/3/2017	0.057				0.0376			0.156
10/4/2017								
1/9/2018					0.0704			
1/10/2018	0.0527		0.0788					
1/11/2018							0.0702	
7/9/2018			0.087					
7/10/2018	0.054				0.061			0.12
7/11/2018								
1/17/2019					0.061			
1/18/2019								0.052
1/21/2019	0.05		0.069					
3/25/2019			0.085					
3/26/2019					0.084			
3/27/2019								0.057
7/30/2019	0.052							
8/27/2019	0.053							0.097
8/28/2019			0.078		0.063			
10/8/2019					0.079			
10/9/2019	0.05		0.078					0.065

## Prediction Limit

Constituent: Barium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWC-9	GWB-4R	GWB-4R	GWB-5R	GWB-5R	GWB-6R	GWB-6R
9/29/2000	0.093		0.16		0.22		0.16	
11/21/2000	0.095		0.16		0.13		0.21	
1/20/2001	0.089		0.21		0.19		0.23	
3/14/2001	0.088		0.18		0.27		0.22	
7/16/2001	0.096		0.18		0.37		0.22	
11/1/2001	0.094		0.15				0.23	
4/25/2002	0.085		0.16		0.19		0.15	
6/6/2003	0.09		0.29				0.13	
12/12/2003	0.084		0.18		0.054		0.034	
5/26/2004	0.08		0.16		0.18		0.13	
12/7/2004	0.098		0.16		0.24		0.13	
6/21/2005	0.084		0.15		0.2		0.07	
12/12/2005	0.07		0.15		0.074		0.04	
6/27/2006	0.083		0.19		0.075		0.041	
12/4/2006	0.072		0.26		0.092		0.048	
6/23/2007	0.087		0.24		0.089		0.12	
12/11/2007	0.082		0.21		0.072		0.12	
6/23/2008	0.1							
6/24/2008			0.13		0.049		0.17	
12/4/2008	0.12							
12/5/2008			0.12		0.067		0.093	
7/7/2009			0.17		0.04		0.06	
7/8/2009	0.14							
12/21/2009	0.15		0.2		0.044		0.11	
6/20/2010	0.21				0.036		0.11	
6/21/2010			0.22					
1/6/2011					0.075			
1/7/2011	0.2		0.12				0.025	
7/7/2011					0.13		0.025	
7/8/2011	0.18		0.15					
1/17/2012					0.21			
1/18/2012	0.18		0.15				0.03	
7/9/2012					0.2			
7/10/2012	0.16		0.14				0.028	
1/17/2013					0.19			
1/18/2013	0.19		0.15				0.058	
7/16/2013					0.076			
7/17/2013	0.17		0.14				0.086	
1/13/2014					0.14			
1/14/2014	0.2		0.16				0.1	
7/9/2014	0.16		0.12		0.12		0.082	
1/12/2015			0.13					
1/13/2015					0.13			
1/14/2015	0.17						0.094	
7/16/2015			0.11		0.12			
7/17/2015	0.18						0.11	
1/18/2016	0.2		0.095		0.12		0.11	
7/27/2016					0.112			
7/28/2016	0.234						0.105	
7/29/2016			0.0883					
8/30/2016					0.135		0.106	
8/31/2016	0.284							

## Prediction Limit

Constituent: Barium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWC-9	GWB-4R	GWB-4R	GWB-5R	GWB-5R	GWB-6R	GWB-6R
9/1/2016			0.123					
10/26/2016			0.0863		0.103		0.107	
10/27/2016	0.244							
1/3/2017				0.118				
1/5/2017						0.107		
1/6/2017	0.305		0.0758					
4/4/2017			0.091					
4/6/2017	0.249				0.162		0.111	
7/12/2017	0.256		0.0941		0.157		0.106	
10/3/2017					0.127		0.105	
10/4/2017	0.356		0.0994					
1/9/2018						0.0969		
1/10/2018				0.158				
1/11/2018	0.226		0.088					
7/10/2018					0.31		0.087	
7/11/2018	0.29		0.071					
1/16/2019				0.083		0.054		0.013 (J)
1/18/2019	0.21							
3/25/2019			0.077					
3/26/2019						0.057		0.012 (J)
3/27/2019	0.19							
8/27/2019			0.076					0.013
8/28/2019	0.17					0.1		
10/9/2019	0.18		0.076		0.13			0.014 (J)

## Prediction Limit

Constituent: Chromium   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWA-7	GWA-7	GWA-8	GWA-8	GWC-1	GWC-1	GWC-11	GWC-11
9/29/2000	<0.0013			<0.01	<0.0013		<0.01	
11/21/2000	<0.0013				<0.0013		<0.01	
1/20/2001	<0.0013			<0.01	<0.0013		<0.01	
3/14/2001	<0.0013			<0.01	<0.0013		<0.01	
7/16/2001	<0.0013			<0.01	<0.0013		<0.01	
11/1/2001	<0.0013			<0.01	<0.0013		<0.01	
4/25/2002	<0.0013			<0.01	<0.0013		<0.01	
11/20/2002					<0.0013		0.006	
6/6/2003	0.037			0.014			0.0082	
12/12/2003	0.0044			0.011	<0.0013		0.0023	
5/26/2004	<0.0013			<0.01	<0.0013		<0.01	
12/7/2004	<0.0013			<0.01	<0.0013		<0.01	
6/21/2005	<0.0013			<0.01	<0.0013		<0.01	
12/12/2005	<0.0013			<0.01			<0.01	
4/4/2006				<0.01				
6/27/2006	<0.0013			<0.01	<0.0013		<0.01	
8/30/2006				<0.01				
12/4/2006	0.0015			<0.01	<0.0013		0.0021	
2/15/2007				<0.01				
6/23/2007	<0.0013			<0.01	<0.0013		0.0017	
9/11/2007				<0.01				
12/11/2007	0.0016			<0.01	<0.0013		<0.01	
3/11/2008				<0.01				
6/23/2008	0.0019			<0.01			<0.01	
6/24/2008					<0.0013			
11/3/2008				<0.01				
12/4/2008	<0.0013			<0.01			<0.01	
12/5/2008					<0.0013			
3/25/2009				<0.01				
7/7/2009	0.0037			<0.01	0.0013			
7/8/2009							<0.01	
9/14/2009				<0.01				
12/20/2009	0.0016			<0.01	<0.0013			
12/21/2009							<0.01	
3/4/2010				<0.01				
6/20/2010	<0.0013			<0.01	<0.0013		<0.01	
9/14/2010				<0.01				
1/6/2011					<0.0013		<0.01	
1/7/2011	0.0033			<0.01				
4/15/2011				<0.01				
7/7/2011	0.0044			<0.01	<0.0013		0.0023	
1/17/2012	0.0038			<0.01	<0.0013		<0.01	
4/4/2012				<0.01				
7/9/2012	0.022				<0.0013		0.0017	
7/10/2012				<0.01				
10/9/2012				<0.01				
1/17/2013					<0.0013		<0.01	
1/18/2013	0.034			<0.01				
4/5/2013				<0.01				
7/16/2013					<0.0013		<0.01	
7/17/2013	0.032			<0.01				
10/11/2013				<0.01				

# Prediction Limit

Page 2

Constituent: Chromium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7	GWA-7	GWA-8	GWA-8	GWC-1	GWC-1	GWC-11	GWC-11
1/13/2014	0.04				<0.0013		<0.01	
1/14/2014			<0.01					
4/3/2014			<0.01					
7/8/2014							<0.01	
7/9/2014	0.036		<0.01		0.0011 (J)			
10/24/2014			<0.01					
1/13/2015	0.03				<0.0013		<0.01	
1/14/2015			<0.01					
5/10/2015			<0.01					
7/16/2015	0.039				0.0011 (J)		<0.01	
7/17/2015			<0.01					
10/6/2015			<0.01					
1/17/2016					<0.0013			
1/18/2016	0.068		<0.01					
1/19/2016							<0.01	
4/26/2016			<0.01					
7/26/2016							0.0005 (J)	
7/27/2016	0.05				0.0016 (J)			
7/28/2016			<0.01					
8/30/2016			<0.01		0.0015 (J)			
8/31/2016							0.001 (J)	
10/24/2016			<0.01					
10/25/2016	0.0519				0.0018 (J)			
10/26/2016							<0.01	
1/3/2017			<0.01					
1/4/2017					0.0021 (J)		<0.01	
1/6/2017	0.0536							
4/3/2017			0.0004 (J)					
4/4/2017					0.002 (J)			
4/6/2017	0.0447 (J)						0.0007 (J)	
7/11/2017			0.0006 (J)				0.0006 (J)	
7/12/2017					0.0021 (J)			
7/13/2017	0.0269							
10/2/2017			<0.01					
10/3/2017					0.0014 (J)		0.0007 (J)	
10/4/2017	0.0378							
1/9/2018	0.0283 (J)		<0.01					
1/10/2018					0.0017 (J)			
1/11/2018							0.0098 (J)	
7/9/2018			<0.01					
7/10/2018					0.0021 (J)			
7/11/2018	0.018 (J)						<0.01	
1/16/2019		0.018 (J)		<0.01		0.0021 (J)		
1/17/2019							<0.01	
3/25/2019		0.017 (J)		<0.01				
3/26/2019						0.0018 (J)		
3/27/2019							<0.01	
8/26/2019		0.024 (J)		0.001 (J)				
8/27/2019						0.0062 (J)		0.00092 (J)
10/7/2019				0.00052 (J)				
10/8/2019		0.021 (J)						0.00091 (J)
10/9/2019						0.0019 (J)		

# Prediction Limit

Constituent: Chromium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-12	GWC-12	GWC-13	GWC-13	GWC-14	GWC-14	GWC-15	GWC-15
9/29/2000	<0.01		<0.01		<0.01		<0.01	
11/21/2000	<0.01		<0.01		<0.01		<0.01	
1/20/2001	<0.01		<0.01		<0.01		<0.01	
3/14/2001	<0.01		<0.01		<0.01		<0.01	
7/16/2001	<0.01		<0.01		<0.01		<0.01	
11/1/2001	<0.01		<0.01		<0.01		<0.01	
4/25/2002	<0.01		<0.01		<0.01		<0.01	
11/20/2002	0.002		<0.01		0.014		0.0058	
6/6/2003	<0.01		0.003		<0.01		0.0068	
12/12/2003	<0.01		<0.01		<0.01		0.0041	
5/26/2004	<0.01		<0.01		<0.01		<0.01	
12/7/2004	<0.01		<0.01		<0.01		0.0026	
6/21/2005	<0.01		<0.01		<0.01		<0.01	
12/12/2005	<0.01		<0.01		<0.01		<0.01	
4/4/2006					<0.01			
6/27/2006	<0.01		<0.01		<0.01		0.0013	
8/30/2006					<0.01			
12/4/2006	0.0032		0.0017				<0.01	
2/15/2007					<0.01			
6/23/2007	<0.01		<0.01		<0.01		<0.01	
9/11/2007					<0.01			
12/11/2007	<0.01		<0.01		<0.01		<0.01	
3/11/2008					<0.01			
6/23/2008	0.0016		<0.01				0.0014	
6/24/2008					<0.01			
11/3/2008					<0.01			
12/4/2008	<0.01		<0.01		<0.01			
12/5/2008							<0.01	
3/25/2009					<0.01			
7/8/2009	<0.01		<0.01		<0.01		<0.01	
9/14/2009					<0.01			
12/20/2009					<0.01		<0.01	
12/21/2009	<0.01		<0.01					
3/4/2010					<0.01			
6/20/2010	<0.01		<0.01		<0.01		<0.01	
9/14/2010					<0.01			
1/6/2011			<0.01					
1/7/2011	<0.01				0.0016		<0.01	
7/7/2011	<0.01		0.0019		<0.01		<0.01	
9/25/2011					0.0013			
1/17/2012	<0.01		<0.01		<0.01		<0.01	
4/4/2012					<0.01			
7/9/2012	<0.01		<0.01		<0.01		<0.01	
10/9/2012					0.0019			
1/17/2013	<0.01		<0.01					
1/18/2013					0.0017		<0.01	
4/5/2013					0.0019			
7/16/2013	<0.01		<0.01					
7/17/2013					0.0017		<0.01	
10/11/2013					0.0013			
1/13/2014	<0.01		<0.01				<0.01	
1/14/2014					0.001			

# Prediction Limit

Page 2

Constituent: Chromium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-12	GWC-12	GWC-13	GWC-13	GWC-14	GWC-14	GWC-15	GWC-15
7/8/2014	<0.01		<0.01					
7/9/2014					0.0012 (J)		<0.01	
10/24/2014					<0.01			
1/13/2015	<0.01		<0.01				<0.01	
1/14/2015					0.0013			
5/10/2015					<0.01			
7/16/2015	0.001 (J)		<0.01				<0.01	
7/17/2015					0.001 (J)			
10/6/2015					<0.01			
1/17/2016					0.0012 (J)		<0.01	
1/18/2016	<0.01		<0.01					
4/26/2016					<0.01			
7/26/2016			<0.01					
7/27/2016	0.0014 (J)				0.0008 (J)		0.0007 (J)	
8/31/2016	0.0012 (J)		0.0011 (J)					
9/1/2016					0.0015 (J)		0.0011 (J)	
10/25/2016					<0.01		<0.01	
10/26/2016	0.0012 (J)		<0.01					
1/4/2017	0.0012 (J)							
1/5/2017			<0.01		0.001 (J)		<0.01	
4/3/2017							0.0015 (J)	
4/4/2017					0.001 (J)			
4/5/2017	0.0013 (J)							
4/6/2017			0.0011 (J)					
7/10/2017	0.0014 (J)							
7/11/2017					0.0008 (J)		0.0013 (J)	
7/12/2017			0.0007 (J)					
10/2/2017					0.0009 (J)		0.0013 (J)	
10/4/2017	0.0011 (J)		0.0008 (J)					
1/9/2018					0.0006 (J)		0.0012 (J)	
1/10/2018			0.0007 (J)					
1/11/2018	0.001 (J)							
7/9/2018					<0.01			
7/10/2018							<0.01	
7/11/2018	<0.01		0.0019 (J)					
1/16/2019				<0.01		<0.01		
1/17/2019		0.0028 (J)					<0.01	
3/26/2019				<0.01		<0.01		<0.01
3/27/2019	<0.01							
8/27/2019	0.00085 (J)		<0.01			0.001 (J)		0.0016 (J)
10/8/2019				<0.01		0.00053 (J)		0.0017 (J)
10/9/2019	0.00081 (J)							

## Prediction Limit

Constituent: Chromium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-16	GWC-17	GWC-17	GWC-2	GWC-2	GWC-20	GWC-20
9/29/2000	<0.01		<0.01		<0.01			
11/21/2000	<0.01		<0.01		<0.01			
1/20/2001	<0.01		<0.01		<0.01			
3/14/2001	<0.01		<0.01		<0.01			
7/16/2001	<0.01		<0.01		<0.01			
11/1/2001	<0.01		<0.01		<0.01			
4/25/2002	<0.01		<0.01		<0.01			
11/20/2002	0.0041		<0.01		<0.01			
6/6/2003			<0.01		<0.01			
12/12/2003	0.0059				<0.01			
5/26/2004	<0.01		<0.01		<0.01			
12/7/2004	<0.01		0.0021		<0.01			
6/21/2005	<0.01		<0.01		<0.01			
12/12/2005	<0.01		<0.01		<0.01			
4/4/2006	<0.01							
6/27/2006	<0.01		<0.01		<0.01			
8/30/2006	<0.01							
12/4/2006			<0.01		<0.01			
2/15/2007	<0.01							
6/23/2007	0.0016		<0.01		<0.01			
9/11/2007	<0.01							
12/11/2007	<0.01		<0.01		<0.01			
3/11/2008	<0.01							
6/24/2008	<0.01		<0.01		<0.01			
11/3/2008	0.0025							
12/4/2008					<0.01			
12/5/2008	<0.01		<0.01					
3/25/2009	<0.01							
7/8/2009	<0.01		<0.01		<0.01			
9/14/2009	<0.01							
12/20/2009	<0.01				<0.01			
12/21/2009			<0.01					
3/4/2010	<0.01							
6/20/2010					<0.01			
6/21/2010	<0.01		<0.01				<0.01	
9/14/2010	<0.01							
1/6/2011					<0.01			
1/7/2011	0.0018		<0.01				0.0018	
4/15/2011	<0.01							
7/7/2011	<0.01						<0.01	
7/8/2011			0.0013				0.0019	
9/25/2011	<0.01							
1/17/2012					<0.01			
1/18/2012	<0.01		<0.01				<0.01	
4/4/2012	<0.01							
7/9/2012					<0.01			
7/10/2012	<0.01		<0.01				0.0013	
10/9/2012	0.0018							
1/17/2013					<0.01			
1/18/2013	<0.01		<0.01				0.0015	
4/5/2013	<0.01							
7/17/2013	<0.01		<0.01		<0.01		<0.01	

# Prediction Limit

Page 2

Constituent: Chromium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-16	GWC-17	GWC-17	GWC-2	GWC-2	GWC-20	GWC-20
10/11/2013	<0.01							
1/13/2014					<0.01			
1/14/2014	<0.01		<0.01				0	
4/3/2014	<0.01							
7/9/2014	<0.01		<0.01		<0.01			
7/10/2014							<0.01	
10/24/2014	<0.01							
1/12/2015							<0.01	
1/13/2015					<0.01			
1/14/2015	<0.01		<0.01					
5/11/2015	<0.01							
7/16/2015	<0.01				<0.01			
7/18/2015			<0.01				<0.01	
10/6/2015	<0.01							
1/17/2016	<0.01				<0.01		<0.01	
1/18/2016			<0.01					
4/26/2016	<0.01							
7/27/2016					0.0008 (J)			
7/28/2016	0.0006 (J)						0.0007 (J)	
7/29/2016			0.0009 (J)					
8/31/2016					<0.01			
9/1/2016	0.0011 (J)		0.0011 (J)				<0.01	
10/25/2016	<0.01						<0.01	
10/26/2016			<0.01		0.001 (J)			
1/4/2017	<0.01						<0.01	
1/5/2017			0.0012 (J)		<0.01			
4/4/2017					0.0008 (J)		0.0011 (J)	
4/5/2017	0.001 (J)		0.0015 (J)					
7/11/2017							0.0009 (J)	
7/12/2017	0.0011 (J)							
7/13/2017			0.0012 (J)		0.0006 (J)			
10/2/2017							0.0009 (J)	
10/3/2017	0.0009 (J)				<0.01			
10/4/2017			0.0055 (J)					
1/10/2018	0.0007 (J)				<0.01		0.0008 (J)	
1/11/2018			0.0009 (J)					
7/9/2018							<0.01	
7/10/2018	<0.01				<0.01			
7/11/2018			<0.01					
1/16/2019			<0.01					
1/17/2019	0.01 (J)							
1/21/2019					<0.01		<0.01	
3/25/2019							<0.01	
3/26/2019	<0.01		<0.01					
7/30/2019					0.00065 (J)			
8/27/2019					<0.01			
8/28/2019		0.0011 (J)		0.0013 (J)			0.00089 (J)	
10/8/2019		0.00099 (J)						
10/9/2019			0.00081 (J)		0.00049 (J)		0.0011 (J)	

# Prediction Limit

Constituent: Chromium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-21	GWC-21	GWC-22	GWC-22	GWC-9	GWC-9	GWB-4R	GWB-4R
9/29/2000					<0.01		0.021	
11/21/2000					<0.01		0.017	
1/20/2001					<0.01		0.03	
3/14/2001					<0.01		0.019	
7/16/2001					<0.01		0.029	
11/1/2001					<0.01		0.021	
4/25/2002					<0.01		0.03	
11/20/2002					0.014		0.038	
6/6/2003					<0.01		0.028	
12/12/2003					<0.01		0.027	
5/26/2004					<0.01		0.021	
12/7/2004					0.0039		0.016	
6/21/2005					0.002		0.015	
12/12/2005					<0.01		0.022	
6/27/2006					<0.01		0.027	
12/4/2006					0.0019		0.025	
6/23/2007					0.0015		0.023	
12/11/2007					<0.01		0.018	
6/23/2008					0.0015			
6/24/2008							0.022	
12/4/2008					<0.01			
12/5/2008							0.023	
7/7/2009							0.012	
7/8/2009					<0.01			
12/21/2009					<0.01		0.019	
6/20/2010					0.0015			
6/21/2010	0.0019		<0.01				0.01	
1/7/2011	0.0017		<0.01		<0.01		0.023	
7/8/2011	0.0023		<0.01		<0.01		0.017	
1/18/2012	<0.01		<0.01		<0.01		0.0114	
7/10/2012	<0.01		<0.01		<0.01		0.014	
1/18/2013	<0.01		<0.01		<0.01		0.015	
7/17/2013	0.0019		<0.01		<0.01		0.011	
1/14/2014	<0.01		<0.01		<0.01		0.019	
7/9/2014	<0.01				0.0011 (J)		0.012	
7/10/2014			<0.01					
1/12/2015							0.016	
1/14/2015	<0.01		<0.01		<0.01			
7/16/2015							0.0084	
7/17/2015	<0.01				0.0013			
7/18/2015			<0.01					
1/17/2016	<0.01							
1/18/2016			<0.01		<0.01		0.014	
7/28/2016	0.0005 (J)				0.0011 (J)			
7/29/2016			0.0007 (J)				0.0077 (J)	
8/31/2016			<0.01		0.0024 (J)			
9/1/2016	<0.01						0.015	
10/25/2016	<0.01							
10/26/2016			<0.01				0.0106	
10/27/2016					<0.01			
1/4/2017	<0.01		<0.01					
1/6/2017					<0.01		0.0098 (J)	

# Prediction Limit

Page 2

Constituent: Chromium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-21	GWC-21	GWC-22	GWC-22	GWC-9	GWC-9	GWB-4R	GWB-4R
4/4/2017		0.0008 (J)					0.0101	
4/6/2017				0.0006 (J)		0.0019 (J)		
7/11/2017				0.0005 (J)				
7/12/2017						0.0011 (J)		0.0096 (J)
7/13/2017	0.0006 (J)							
10/3/2017	0.0005 (J)							
10/4/2017			0.0006 (J)		0.0011 (J)		0.0097 (J)	
1/9/2018	0.0007 (J)							
1/11/2018			<0.01		0.001 (J)		0.0109	
7/10/2018	<0.01							
7/11/2018			<0.01		<0.01		0.0055 (J)	
1/16/2019							0.0024 (J)	
1/17/2019		0.01						
1/18/2019				<0.01		<0.01		0.002 (J)
3/25/2019								
3/26/2019		<0.01						
3/27/2019				<0.01		<0.01		
8/27/2019				0.00057 (J)			0.0027 (J)	
8/28/2019	0.00087 (J)					0.00089 (J)		
10/8/2019	0.00065 (J)							
10/9/2019				0.00072 (J)		0.0009 (J)		0.002 (J)

## Prediction Limit

Constituent: Chromium, Lead Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R	GWB-5R	GWB-6R	GWB-6R	GWA-7	GWA-7	GWA-8	GWA-8
9/29/2000	0.03		0.016		<0.013		<0.005	
11/21/2000	<0.01		0.023		<0.013			
1/20/2001	0.028		0.025		<0.013		<0.005	
3/14/2001			0.021		<0.013		<0.005	
7/16/2001			0.019		<0.013		<0.005	
11/1/2001			0.022		<0.013		<0.005	
4/25/2002	0.021		0.019		<0.013		<0.005	
11/20/2002			0.024				<0.005	
6/6/2003			0.021					
12/12/2003	<0.01		0.0066		0.008		0.0095	
5/26/2004	0.012		0.013		<0.013		<0.005	
12/7/2004	0.019		0.013		<0.013		<0.005	
6/21/2005	0.02		0.0067		<0.013		<0.005	
12/12/2005	<0.01		0.0033		<0.013		<0.005	
4/4/2006							<0.005	
6/27/2006	0.0015		0.0047		<0.013		<0.005	
8/30/2006							<0.005	
12/4/2006	0.0034		0.0084		<0.013		<0.005	
2/15/2007							<0.005	
6/23/2007	<0.01		0.01		<0.013		<0.005	
9/11/2007							<0.005	
12/11/2007	<0.01		0.0049		<0.013		<0.005	
3/11/2008							<0.005	
6/23/2008					<0.013		<0.005	
6/24/2008	<0.01							
11/3/2008							<0.005	
12/4/2008					<0.013		<0.005	
12/5/2008	0.0016		0.009					
3/25/2009							<0.005	
7/7/2009	<0.01		0.0044		<0.013		<0.005	
9/14/2009							<0.005	
12/20/2009					<0.013		<0.005	
12/21/2009	<0.01		0.0055					
3/4/2010							<0.005	
6/20/2010	<0.01		0.002		<0.013		<0.005	
9/14/2010							<0.005	
1/6/2011	0.0017							
1/7/2011			0.0039		<0.013		<0.005	
4/15/2011							<0.005	
7/7/2011	0.008		0.0031		<0.013		<0.005	
9/25/2011							<0.005	
1/17/2012	0.0082				<0.013		<0.005	
1/18/2012			0.0023					
4/4/2012							<0.005	
7/9/2012	0.01				<0.013			
7/10/2012			0.0022				<0.005	
10/9/2012							<0.005	
1/17/2013	0.01							
1/18/2013			<0.0013		<0.013		<0.005	
4/5/2013							<0.005	
7/16/2013	0.0061							
7/17/2013			<0.0013		<0.013		<0.005	

# Prediction Limit

Page 2

Constituent: Chromium, Lead   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWB-5R	GWB-5R	GWB-6R	GWB-6R	GWA-7	GWA-7	GWA-8	GWA-8
10/11/2013							<0.005	
1/13/2014	0.002				0.013		<0.005	
1/14/2014			0.0013				<0.005	
4/3/2014							<0.005	
7/9/2014	<0.01		<0.0013		0.0076 (J)		<0.005	
10/24/2014							<0.005	
1/13/2015	<0.01				0.0057 (J)		<0.005	
1/14/2015			0.0015				<0.005	
5/10/2015							<0.005	
7/16/2015	<0.01				0.009 (J)			
7/17/2015			0.0011 (J)				<0.005	
10/6/2015							<0.005	
1/18/2016	<0.01		0.0011 (J)		0.0094 (J)		<0.005	
4/26/2016							<0.005	
7/27/2016	0.0006 (J)				0.0058			
7/28/2016			0.001 (J)				<0.005	
8/30/2016	<0.01		0.0013 (J)				<0.005	
10/24/2016							<0.005	
10/25/2016					0.0003 (J)			
10/26/2016	<0.01		0.0014 (J)					
1/3/2017	0.001 (J)						0.0001 (J)	
1/5/2017			0.002 (J)					
1/6/2017					0.006			
4/3/2017							0.0002 (J)	
4/6/2017	0.0013 (J)		0.0034 (J)		0.0109			
7/11/2017							0.0001 (J)	
7/12/2017	0.0011 (J)		0.0024 (J)					
7/13/2017					0.007			
10/2/2017							0.0001 (J)	
10/3/2017	0.0012 (J)		0.0022 (J)					
10/4/2017					0.0042 (J)			
1/9/2018			0.0019 (J)		0.0098		0.0001 (J)	
1/10/2018	0.0016 (J)							
7/9/2018							<0.005	
7/10/2018	0.0055 (J)		0.0023 (J)					
7/11/2018					0.0028 (J)			
1/16/2019	<0.01			0.018 (J)			<0.005	
3/25/2019						0.0019 (J)		<0.005
3/26/2019	0.072			0.017 (J)				
8/26/2019						0.013 (J)		<0.005
8/27/2019				0.0097 (J)				
8/28/2019		0.0071 (J)						
10/7/2019							<0.005	
10/8/2019						0.0098 (J)		
10/9/2019	0.012 (J)			0.011 (J)				

# Prediction Limit

Constituent: Lead Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-1	GWC-11	GWC-11	GWC-12	GWC-12	GWC-13	GWC-13
9/29/2000	<0.005		<0.013		<0.005		<0.005	
11/21/2000	<0.005		<0.013		<0.005		<0.005	
1/20/2001	<0.005		<0.013		<0.005		<0.005	
3/14/2001	<0.005		<0.013		<0.005		<0.005	
7/16/2001	<0.005		<0.013		<0.005		<0.005	
11/1/2001	<0.005		<0.013		<0.005		<0.005	
4/25/2002	<0.005		<0.013		<0.005		<0.005	
11/20/2002	<0.005		<0.013		<0.005		<0.005	
6/6/2003	<0.005		0.0068		<0.005		0.0078	
12/12/2003	<0.005		<0.013		<0.005		0.0055	
5/26/2004	<0.005		<0.013		<0.005		<0.005	
12/7/2004	<0.005		<0.013		<0.005		<0.005	
6/21/2005	<0.005		<0.013		<0.005		<0.005	
12/12/2005	<0.005		<0.013		<0.005		<0.005	
6/27/2006	<0.005		<0.013		<0.005		<0.005	
12/4/2006	<0.005		<0.013		<0.005		<0.005	
6/23/2007	<0.005		<0.013		<0.005		<0.005	
12/11/2007	<0.005		<0.013		<0.005		<0.005	
6/23/2008			<0.013		<0.005		<0.005	
6/24/2008	<0.005							
12/4/2008			<0.013		<0.005		<0.005	
12/5/2008	<0.005							
7/7/2009	<0.005							
7/8/2009			<0.013		<0.005		<0.005	
12/20/2009	<0.005							
12/21/2009			<0.013		<0.005		<0.005	
6/20/2010	<0.005		<0.013		<0.005		<0.005	
1/6/2011	<0.005		<0.013				<0.005	
1/7/2011					<0.005			
7/7/2011	<0.005		<0.013		<0.005		<0.005	
1/17/2012	<0.005		<0.013		<0.005		<0.005	
7/9/2012	<0.005		<0.013		<0.005		<0.005	
1/17/2013	<0.005		<0.013		<0.005		<0.005	
7/16/2013	<0.005		<0.013		<0.005		<0.005	
1/13/2014	<0.005		<0.013		0.004		<0.005	
7/8/2014			<0.013		<0.005		<0.005	
7/9/2014	<0.005							
1/13/2015	<0.005		<0.013		<0.005		<0.005	
7/16/2015	<0.005		<0.013		0.0044 (J)		<0.005	
1/17/2016	<0.005							
1/18/2016					0.0034 (J)		<0.005	
1/19/2016			<0.013					
7/26/2016			0.0001 (J)				<0.005	
7/27/2016	<0.005				0.0001 (J)			
8/30/2016	<0.005							
8/31/2016			0.0002 (J)		0.0001 (J)		<0.005	
10/25/2016	<0.005							
10/26/2016			0.0001 (J)		0.0001 (J)		<0.005	
1/4/2017	<0.005		0.0002 (J)		<0.005			
1/5/2017							0.0002 (J)	
4/4/2017	<0.005							
4/5/2017					0.0003 (J)			

# Prediction Limit

Page 2

Constituent: Lead Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-1	GWC-11	GWC-11	GWC-12	GWC-12	GWC-13	GWC-13
4/6/2017				0.0003 (J)			0.0005 (J)	
7/10/2017					0.0003 (J)			
7/11/2017				0.0002 (J)				
7/12/2017	<0.005						0.0005 (J)	
10/3/2017	<0.005			0.0003 (J)				
10/4/2017					0.0001 (J)		0.0007 (J)	
1/10/2018	0.0001 (J)						0.0009 (J)	
1/11/2018				0.0003 (J)		0.0002 (J)		
7/10/2018	<0.005				<0.005		0.0015 (J)	
7/11/2018								0.00061 (J)
1/16/2019		<0.005						
1/17/2019				0.00028 (J)		<0.005		
3/26/2019		<0.005						<0.005
3/27/2019				0.00029 (J)		<0.005		
8/27/2019		<0.005		0.00021 (J)		<0.005		0.0001 (J)
10/8/2019				0.00028 (J)				0.00013 (J)
10/9/2019		<0.005				6.6E-05 (J)		

# Prediction Limit

Constituent: Lead Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-14	GWC-14	GWC-15	GWC-15	GWC-16	GWC-16	GWC-17	GWC-17
9/29/2000	<0.005		<0.005		<0.005		<0.005	
11/21/2000	<0.005		<0.005		<0.005		<0.005	
1/20/2001	<0.005		<0.005		<0.005		<0.005	
3/14/2001	<0.005		<0.005		<0.005		<0.005	
7/16/2001	<0.005		<0.005		<0.005		<0.005	
11/1/2001	<0.005		<0.005		<0.005		<0.005	
4/25/2002	<0.005		<0.005		<0.005		<0.005	
11/20/2002			<0.005		<0.005		<0.005	
6/6/2003	<0.005		<0.005				<0.005	
12/12/2003	<0.005		0.0065		0.017		<0.005	
5/26/2004	<0.005		<0.005		<0.005		<0.005	
12/7/2004	<0.005		<0.005		<0.005		<0.005	
6/21/2005	<0.005		<0.005		<0.005		<0.005	
12/12/2005	<0.005		<0.005		<0.005		<0.005	
4/4/2006	<0.005				<0.005			
6/27/2006	<0.005		<0.005		<0.005		<0.005	
8/30/2006	<0.005				<0.005			
12/4/2006	<0.005		<0.005		<0.005		<0.005	
2/15/2007	<0.005				<0.005			
6/23/2007	<0.005		<0.005		<0.005		<0.005	
9/11/2007	<0.005				<0.005			
12/11/2007	<0.005		<0.005		<0.005		<0.005	
3/11/2008	<0.005				<0.005			
6/24/2008	<0.005		<0.005		<0.005		<0.005	
11/3/2008	<0.005				<0.005			
12/4/2008	<0.005							
12/5/2008			<0.005		<0.005		<0.005	
3/25/2009	<0.005				<0.005			
7/8/2009	<0.005		<0.005		<0.005		<0.005	
9/14/2009	<0.005				<0.005			
12/20/2009	<0.005		<0.005		<0.005			
12/21/2009							<0.005	
3/4/2010	<0.005				<0.005			
6/20/2010	<0.005		<0.005					
6/21/2010					<0.005		<0.005	
9/14/2010	<0.005				<0.005			
1/7/2011	<0.005		<0.005		<0.005		<0.005	
4/15/2011	<0.005				<0.005			
7/7/2011	<0.005		<0.005		<0.005			
7/8/2011							<0.005	
9/25/2011	<0.005				<0.005			
1/17/2012	<0.005		<0.005					
1/18/2012					<0.005		<0.005	
4/4/2012	<0.005				<0.005			
7/9/2012	<0.005		<0.005					
7/10/2012					<0.005		<0.005	
10/9/2012	<0.005				<0.005			
1/18/2013	<0.005		<0.005		<0.005		<0.005	
4/5/2013	<0.005				<0.005			
7/17/2013	<0.005		<0.005		<0.005		<0.005	
10/11/2013	<0.005				<0.005			
1/13/2014			<0.005					

## Prediction Limit

Constituent: Lead Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

# Prediction Limit

Constituent: Lead Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-2	GWC-2	GWC-20	GWC-20	GWC-21	GWC-21	GWC-22	GWC-22
11/21/2000	0.0069							
1/20/2001	<0.005							
3/14/2001	<0.005							
7/16/2001	<0.005							
11/1/2001	<0.005							
4/25/2002	<0.005							
11/20/2002	<0.005							
6/6/2003	<0.005							
12/12/2003	<0.005							
5/26/2004	<0.005							
12/7/2004	<0.005							
6/21/2005	<0.005							
12/12/2005	<0.005							
6/27/2006	<0.005							
12/4/2006	<0.005							
6/23/2007	<0.005							
12/11/2007	<0.005							
6/24/2008	<0.005							
12/4/2008	<0.005							
7/8/2009	<0.005							
12/20/2009	<0.005							
6/20/2010	<0.005							
6/21/2010		<0.005		<0.005			<0.013	
1/6/2011	<0.005							
1/7/2011		<0.005		<0.005			<0.013	
7/7/2011		<0.005						
7/8/2011		<0.005		<0.005			<0.013	
1/17/2012	<0.005							
1/18/2012		<0.005		<0.005			<0.013	
7/9/2012	<0.005							
7/10/2012		<0.005		<0.005			<0.013	
1/17/2013	<0.005							
1/18/2013		<0.005		<0.005			<0.013	
7/17/2013	<0.005		<0.005		<0.005		<0.013	
1/13/2014	<0.005							
1/14/2014		<0.005		<0.005			<0.013	
7/9/2014	<0.005				<0.005			
7/10/2014		<0.005					<0.013	
1/12/2015		<0.005						
1/13/2015	<0.005							
1/14/2015					<0.005		<0.013	
7/16/2015	<0.005							
7/17/2015					<0.005			
7/18/2015		<0.005					<0.013	
1/17/2016	<0.005		<0.005		<0.005			
1/18/2016							<0.013	
7/27/2016	<0.005							
7/28/2016		<0.005		<0.005				
7/29/2016							0.0004 (J)	
8/31/2016	<0.005		<0.005		<0.005		0.0003 (J)	
9/1/2016								
10/25/2016		0.0001 (J)			<0.005			

# Prediction Limit

Page 2

Constituent: Lead Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-2	GWC-2	GWC-20	GWC-20	GWC-21	GWC-21	GWC-22	GWC-22
10/26/2016	<0.005						0.0003 (J)	
1/4/2017			<0.005		<0.005		0.0003 (J)	
1/5/2017	<0.005							
4/4/2017	0.0002 (J)		7E-05 (J)		9E-05 (J)			
4/6/2017							0.0003 (J)	
7/11/2017			<0.005				0.0002 (J)	
7/13/2017	0.0003 (J)				7E-05 (J)			
10/2/2017			<0.005			0.0001 (J)		
10/3/2017	<0.005						0.0008 (J)	
10/4/2017								
1/9/2018					9E-05 (J)			
1/10/2018	8E-05 (J)		0.0002 (J)				0.0009 (J)	
1/11/2018								
7/9/2018			<0.005					
7/10/2018	<0.005				<0.005			
7/11/2018							0.001 (J)	
1/17/2019						<0.005		
1/18/2019							0.0012 (J)	
1/21/2019		<0.005		<0.005				
3/25/2019				<0.005				
3/26/2019						<0.005		
3/27/2019							0.00047 (J)	
7/30/2019		0.0002 (J)						
8/27/2019		<0.005					0.003 (J)	
8/28/2019				6.5E-05 (J)		0.00018 (J)		
10/8/2019						0.00016 (J)		
10/9/2019		6.4E-05 (J)		0.00018 (J)			0.00032 (J)	

## Prediction Limit

Constituent: Lead Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWC-9	GWB-4R	GWB-4R	GWB-5R	GWB-5R	GWB-6R	GWB-6R
9/29/2000	<0.005		0.0083		0.017		<0.025	
11/21/2000	<0.005		0.0052		<0.005		<0.025	
1/20/2001	<0.005		<0.005		0.011		<0.025	
3/14/2001	<0.005		<0.005		0.026		<0.025	
7/16/2001	<0.005		0.011		0.043		<0.025	
11/1/2001	<0.005		<0.005		0.075		<0.025	
4/25/2002	<0.005		<0.005		<0.005		<0.025	
11/20/2002					0.057		0.0057 (J)	
6/6/2003	<0.005						0.013	
12/12/2003	<0.005		0.0072		<0.005		<0.025	
5/26/2004	<0.005		0.0055		0.011		<0.025	
12/7/2004	0.0051		<0.005		0.038		<0.025	
6/21/2005	<0.005		<0.005		0.036		<0.025	
12/12/2005	<0.005		<0.005		<0.005		<0.025	
6/27/2006	<0.005				<0.005		<0.025	
12/4/2006	<0.005				<0.005		<0.025	
6/23/2007	<0.005		<0.005		<0.005		<0.025	
12/11/2007	<0.005		<0.005		<0.005		<0.025	
6/23/2008	<0.005							
6/24/2008					<0.005		0.02	
12/4/2008	<0.005							
12/5/2008			<0.005		<0.005		<0.025	
7/7/2009			<0.005		<0.005		<0.025	
7/8/2009	<0.005							
12/21/2009	<0.005		<0.005		<0.005		<0.025	
6/20/2010	<0.005				<0.005		<0.025	
6/21/2010			<0.005					
1/6/2011					<0.005			
1/7/2011	<0.005		<0.005				<0.025	
7/7/2011					<0.005		<0.025	
7/8/2011	<0.005		<0.005					
1/17/2012					<0.005			
1/18/2012	<0.005		<0.005				<0.025	
7/9/2012					<0.005			
7/10/2012	<0.005		<0.005				<0.025	
1/17/2013					<0.005			
1/18/2013	<0.005		<0.005				<0.025	
7/16/2013					<0.005			
7/17/2013	<0.005		<0.005				<0.025	
1/13/2014					<0.005			
1/14/2014	<0.005		0.005				<0.025	
7/9/2014	<0.005		<0.005		<0.005		<0.025	
1/12/2015			<0.005					
1/13/2015					<0.005			
1/14/2015	<0.005						<0.025	
7/16/2015			<0.005		<0.005			
7/17/2015	<0.005						<0.025	
1/18/2016	<0.005		0.0055 (J)		<0.005		<0.025	
7/27/2016					<0.005			
7/28/2016	<0.005						<0.025	
7/29/2016			0.003 (J)		<0.005			
8/30/2016							<0.025	

# Prediction Limit

Page 2

Constituent: Lead   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-9	GWC-9	GWB-4R	GWB-4R	GWB-5R	GWB-5R	GWB-6R	GWB-6R
8/31/2016	0.0007 (J)							
10/26/2016			0.0057		0.0002 (J)		<0.025	
10/27/2016	<0.005							
1/3/2017					0.0001 (J)			
1/5/2017							0.0003 (J)	
1/6/2017	<0.005		0.0053					
4/4/2017			0.0092					
4/6/2017	0.0001 (J)				0.0003 (J)		0.0002 (J)	
7/12/2017	<0.005		0.006		0.0002 (J)		0.0002 (J)	
10/3/2017					0.0002 (J)		0.0001 (J)	
10/4/2017	9E-05 (J)		0.0057					
1/9/2018							0.0003 (J)	
1/10/2018					0.0003 (J)			
1/11/2018	0.0002 (J)		0.0085					
7/10/2018					<0.005		<0.025	
7/11/2018	<0.005		0.0029 (J)					
1/16/2019				<0.005		<0.005		<0.025
1/18/2019		<0.005						
3/25/2019				<0.005				
3/26/2019						<0.005		<0.025
3/27/2019		<0.005						
8/27/2019				0.001 (J)				0.0011 (J)
8/28/2019		6.1E-05 (J)				0.0011 (J)		
10/9/2019		<0.005		0.00041 (J)		0.0025 (J)		0.00033 (J)

## Prediction Limit

Constituent: Selenium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7	GWA-7	GWA-8	GWA-8	GWC-1	GWC-1	GWC-11	GWC-11
9/29/2000	<0.013			<0.01	<0.01		<0.01	
11/21/2000	<0.013				<0.01		<0.01	
1/20/2001	<0.013		<0.01		0.017		<0.01	
3/14/2001	<0.013		<0.01		<0.01		<0.01	
7/16/2001	<0.013		<0.01		<0.01		<0.01	
11/1/2001	<0.013		<0.01		<0.01		<0.01	
4/25/2002	<0.013		<0.01		0.012		<0.01	
11/20/2002			<0.01				<0.01	
6/6/2003	<0.013		<0.01				<0.01	
12/12/2003	<0.013		<0.01		0.013		<0.01	
5/26/2004	<0.013		<0.01		0.017		<0.01	
12/7/2004	<0.013		<0.01		0.011		<0.01	
6/21/2005	<0.013		<0.01		0.0088		<0.01	
12/12/2005	<0.013		<0.01		0.011		<0.01	
4/4/2006			<0.01					
6/27/2006	<0.013		<0.01		<0.01		<0.01	
8/30/2006			<0.01					
12/4/2006	<0.013		<0.01		<0.01		<0.01	
2/15/2007			<0.01					
6/23/2007	<0.013		<0.01		<0.01		<0.01	
9/11/2007			<0.01					
12/11/2007	<0.013		<0.01		<0.01		<0.01	
3/11/2008			<0.01					
6/23/2008	<0.013		<0.01				<0.01	
6/24/2008					<0.01			
11/3/2008			<0.01					
12/4/2008	<0.013		<0.01				<0.01	
12/5/2008					<0.01			
3/25/2009			<0.01					
7/7/2009	<0.013		<0.01		<0.01			
7/8/2009							<0.01	
9/14/2009			<0.01					
12/20/2009	<0.013		<0.01		<0.01			
12/21/2009							<0.01	
3/4/2010			<0.01					
6/20/2010	<0.013		<0.01		<0.01		<0.01	
9/14/2010			<0.01					
1/6/2011					<0.01		<0.01	
1/7/2011	<0.013		<0.01					
4/15/2011			<0.01					
7/7/2011	<0.013		<0.01		<0.01		<0.01	
9/25/2011			<0.01					
1/17/2012	<0.013		<0.01		<0.01		0.023	
7/9/2012	<0.013				<0.01		0.016	
7/10/2012			<0.01					
10/9/2012			<0.01					
1/17/2013					<0.01		0.033	
1/18/2013	0.009		<0.01					
4/5/2013			<0.01					
7/16/2013					0.012		0.0068	
7/17/2013	0.011		<0.01					
10/11/2013			<0.01					

## Prediction Limit

Constituent: Selenium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7	GWA-7	GWA-8	GWA-8	GWC-1	GWC-1	GWC-11	GWC-11
1/13/2014	0.012				<0.01		0.036	
1/14/2014			<0.01					
4/3/2014			<0.01					
7/8/2014							0.017	
7/9/2014	0.011		<0.01		<0.01			
10/24/2014			<0.01					
1/13/2015	0.0092				<0.01		0.027	
1/14/2015			<0.01					
5/10/2015			<0.01					
7/16/2015	0.014				<0.01		<0.01	
7/17/2015			<0.01					
10/6/2015			<0.01					
1/17/2016					0.023			
1/18/2016	0.023		<0.01					
1/19/2016							0.023	
4/26/2016			<0.01					
7/26/2016							0.0056 (J)	
7/27/2016	0.0323				0.002 (J)			
7/28/2016			0.001 (J)					
8/30/2016			<0.01		0.002 (J)			
8/31/2016							0.0084 (J)	
9/1/2016	0.0438							
10/24/2016			0.0013 (J)					
10/25/2016	0.031				0.0022 (J)			
10/26/2016							0.0052 (J)	
1/3/2017			<0.01					
1/4/2017					0.0016 (J)		0.0062 (J)	
1/6/2017	0.0324							
4/3/2017			<0.01					
4/4/2017					0.0052 (J)			
4/6/2017	0.0188 (J)						0.0195	
7/11/2017			<0.01				<0.01	
7/12/2017					0.0024 (J)			
7/13/2017	0.0118							
10/2/2017			<0.01					
10/3/2017					<0.01		0.0079 (J)	
10/4/2017	0.0195							
1/9/2018			<0.01					
1/10/2018					0.0018 (J)			
1/11/2018							0.0054 (J)	
7/9/2018			<0.01					
7/10/2018					0.0026 (J)			
7/11/2018							0.0022 (J)	
1/16/2019		0.0071 (J)		<0.01		0.0018 (J)		
1/17/2019								<0.01
3/25/2019				<0.01				
3/26/2019						0.0023 (J)		
3/27/2019								0.01 (J)
8/26/2019				<0.01				
8/27/2019						0.0016 (J)		<0.01
10/7/2019				<0.01				
10/8/2019		0.0072 (J)						<0.01

# Prediction Limit

Page 3

Constituent: Selenium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-7	GWA-7	GWA-8	GWA-8	GWC-1	GWC-1	GWC-11	GWC-11
10/9/2019					0.0024 (J)		

## Prediction Limit

Constituent: Selenium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-12	GWC-12	GWC-14	GWC-14	GWC-15	GWC-15	GWC-16	GWC-16
9/29/2000	<0.01		<0.005		<0.01		<0.005	
11/21/2000	<0.01		0.052		<0.01		<0.005	
1/20/2001	<0.01		0.053		<0.01		<0.005	
3/14/2001	<0.01		0.049		<0.01		<0.005	
7/16/2001	<0.01		0.038		<0.01		<0.005	
11/1/2001	<0.01		0.022		<0.01		<0.005	
4/25/2002	<0.01				<0.01		<0.005	
11/20/2002	<0.01		0.018		0.0094		<0.005	
6/6/2003	<0.01		<0.005					
12/12/2003	<0.01		<0.005					
5/26/2004	<0.01		0.023		<0.01		0.0053	
12/7/2004	<0.01		0.019		<0.01		<0.005	
6/21/2005	<0.01		0.019		<0.01		<0.005	
12/12/2005	<0.01		0.0095		<0.01		<0.005	
4/4/2006			0.033				<0.005	
6/27/2006	<0.01		<0.005		<0.01		<0.005	
8/30/2006			<0.005				<0.005	
12/4/2006	<0.01		0.032		<0.01		<0.005	
2/15/2007			0.034				<0.005	
6/23/2007	<0.01		<0.005		<0.01		<0.005	
9/11/2007			0.022				<0.005	
12/11/2007	<0.01		0.045		<0.01		<0.005	
3/11/2008			0.02				<0.005	
6/23/2008	<0.01							
6/24/2008			<0.005		<0.01		<0.005	
11/3/2008			0.052				<0.005	
12/4/2008	<0.01		0.054					
12/5/2008					<0.01		<0.005	
3/25/2009			0.072				<0.005	
7/8/2009	<0.01		0.021		<0.01		<0.005	
9/14/2009			0.015				<0.005	
12/20/2009			0.072		<0.01		<0.005	
12/21/2009	<0.01							
3/4/2010			0.083				<0.005	
6/20/2010	<0.01		0.1		<0.01			
6/21/2010							<0.005	
9/14/2010			0.085				<0.005	
1/7/2011	<0.01		0.028		<0.01		<0.005	
4/15/2011			<0.005				<0.005	
7/7/2011	<0.01		<0.005		<0.01		<0.005	
9/25/2011			0.02				<0.005	
1/17/2012	<0.01		0.016		<0.01			
1/18/2012							<0.005	
4/4/2012			0.0156				<0.005	
7/9/2012	<0.01		<0.005					
7/10/2012							<0.005	
10/9/2012			0.0094				<0.005	
1/17/2013	<0.01							
1/18/2013			0.0067				<0.005	
4/5/2013			0.0077				<0.005	
7/16/2013	<0.01							
7/17/2013			0.01		<0.01		<0.005	

# Prediction Limit

Page 2

Constituent: Selenium   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-12	GWC-12	GWC-14	GWC-14	GWC-15	GWC-15	GWC-16	GWC-16
10/11/2013				0.0087			0.0069	
1/13/2014	<0.01				<0.01			<0.005
1/14/2014			0.012				<0.005	
4/3/2014			0.022				<0.005	
7/8/2014	<0.01							
7/9/2014			0.0089		<0.01		0.005	
10/24/2014			0.017				<0.005	
1/13/2015	<0.01				<0.01			
1/14/2015			<0.005				<0.005	
5/10/2015			<0.005					
5/11/2015							<0.005	
7/16/2015	<0.01				<0.01		<0.005	
7/17/2015			<0.005					
10/6/2015			<0.005				0.0073	
1/17/2016			<0.005		<0.01		0.0031 (J)	
1/18/2016	<0.01							
4/26/2016			0.00428 (J)				0.00497 (J)	
7/27/2016	0.0025 (J)		0.0038 (J)		<0.01			
7/28/2016							0.0076 (J)	
8/31/2016	0.0019 (J)							
9/1/2016			0.0056 (J)		<0.01		0.0052 (J)	
10/25/2016			0.0023 (J)		<0.01		0.0085 (J)	
10/26/2016	0.002 (J)							
1/4/2017	<0.01						0.0048 (J)	
1/5/2017			0.0038 (J)		<0.01			
4/3/2017					<0.01			
4/4/2017			0.0064 (J)					
4/5/2017	<0.01						0.0068 (J)	
7/10/2017	<0.01							
7/11/2017			0.0044 (J)		<0.01			
7/12/2017							0.0048 (J)	
10/2/2017			0.004 (J)		<0.01			
10/3/2017							0.0051 (J)	
10/4/2017	<0.01							
1/9/2018			0.0019 (J)		0.0019 (J)			
1/10/2018							0.0018 (J)	
1/11/2018	<0.01							
7/9/2018			0.0029 (J)					
7/10/2018					0.0086 (J)		0.0045 (J)	
7/11/2018	<0.01							
1/16/2019			0.0016 (J)					
1/17/2019	<0.01					0.0029 (J)		0.0031 (J)
3/26/2019				0.0022 (J)		0.0074 (J)		0.0033 (J)
3/27/2019	<0.01							
8/27/2019	<0.01			0.0035 (J)		0.0092 (J)		
8/28/2019								0.004 (J)
10/8/2019			0.0026 (J)			0.014		0.0023 (J)
10/9/2019	<0.01							

## Prediction Limit

Constituent: Selenium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-17	GWC-2	GWC-2	GWC-20	GWC-20	GWC-21	GWC-21
9/29/2000	<0.01							
11/21/2000	<0.01		<0.01					
1/20/2001	<0.01		<0.01					
3/14/2001	<0.01		<0.01					
7/16/2001	<0.01		<0.01					
11/1/2001	<0.01		<0.01					
4/25/2002	<0.01		<0.01					
11/20/2002	<0.01		<0.01					
6/6/2003	<0.01		<0.01					
12/12/2003	<0.01		<0.01					
5/26/2004	<0.01		0.005					
12/7/2004	<0.01		<0.01					
6/21/2005	<0.01		<0.01					
12/12/2005	<0.01		<0.01					
6/27/2006	<0.01		<0.01					
12/4/2006	<0.01		<0.01					
6/23/2007	<0.01		<0.01					
12/11/2007	<0.01		<0.01					
6/24/2008	<0.01		<0.01					
12/4/2008			<0.01					
12/5/2008	<0.01							
7/8/2009	<0.01		<0.01					
12/20/2009			<0.01					
12/21/2009	<0.01							
6/20/2010			<0.01					
6/21/2010	<0.01			<0.01		0.048		
1/6/2011			<0.01					
1/7/2011	<0.01				<0.01		0.014	
7/7/2011					<0.01			
7/8/2011	<0.01				<0.01		0.018	
1/17/2012			<0.01					
1/18/2012	<0.01				<0.01		<0.013	
7/9/2012			<0.01					
7/10/2012	<0.01				<0.01		0.02	
1/17/2013			<0.01					
1/18/2013	<0.01				0.005		0.015	
7/17/2013	<0.01		<0.01		<0.01		0.037	
1/13/2014			<0.01					
1/14/2014	<0.01				<0.01		0.043	
7/9/2014	<0.01		<0.01				0.023	
7/10/2014					<0.01			
1/12/2015					<0.01			
1/13/2015			<0.01					
1/14/2015	<0.01					0.022		
7/16/2015			<0.01					
7/17/2015						0.033		
7/18/2015	<0.01			<0.01				
1/17/2016			<0.01		<0.01		0.021	
1/18/2016	<0.01							
7/27/2016			0.002 (J)					
7/28/2016					<0.01		0.0341	
7/29/2016	0.0011 (J)							

# Prediction Limit

Page 2

Constituent: Selenium   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-17	GWC-17	GWC-2	GWC-2	GWC-20	GWC-20	GWC-21	GWC-21
8/31/2016			<0.01					
9/1/2016	0.0012 (J)				<0.01		0.0297	
10/25/2016					0.0014 (J)		0.0095 (J)	
10/26/2016	0.0013 (J)		0.0035 (J)					
1/4/2017					0.0014 (J)		0.022	
1/5/2017	0.0012 (J)		<0.01					
4/4/2017			<0.01		<0.01		0.0236	
4/5/2017	<0.01							
7/11/2017					<0.01			
7/13/2017	0.0018 (J)		<0.01				0.013	
10/2/2017					<0.01			
10/3/2017			<0.01				0.01 (J)	
10/4/2017	0.0042 (J)							0.0162
1/9/2018								
1/10/2018			<0.01		<0.01			
1/11/2018	<0.01							
7/9/2018					<0.01			
7/10/2018			<0.01				0.016	
7/11/2018	0.0016 (J)							
1/16/2019		<0.01						
1/17/2019							0.011	
1/21/2019			<0.01		0.0014 (J)			
3/25/2019					<0.01			
3/26/2019		<0.01					0.022	
7/30/2019			<0.01					
8/27/2019			<0.01					
8/28/2019		<0.01			0.0014 (J)		0.019	
10/8/2019							0.019	
10/9/2019		<0.01		<0.01		<0.01		

## Prediction Limit

Constituent: Selenium   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-22	GWC-22	GWC-9	GWC-9	GWB-4R	GWB-4R	GWB-5R	GWB-5R
9/29/2000			<0.01		<0.01		<0.01	
11/21/2000			<0.01		<0.01		<0.01	
1/20/2001			<0.01				<0.01	
3/14/2001			<0.01		<0.01		<0.01	
7/16/2001			<0.01				<0.01	
11/1/2001			<0.01				<0.01	
4/25/2002			<0.01		0.01		<0.01	
11/20/2002			<0.01				0.0064	
6/6/2003			<0.01				0.011	
12/12/2003			<0.01				<0.01	
5/26/2004			<0.01				0.007	
12/7/2004			<0.01				<0.01	
6/21/2005			0.0062		0.0087		0.0063	
12/12/2005			<0.01				<0.01	
6/27/2006			<0.01		<0.01		<0.01	
12/4/2006			<0.01		<0.01		<0.01	
6/23/2007			<0.01		<0.01		<0.01	
12/11/2007			<0.01		<0.01		<0.01	
6/23/2008			<0.01					
6/24/2008					<0.01		<0.01	
12/4/2008			<0.01					
12/5/2008					<0.01		<0.01	
7/7/2009					<0.01		<0.01	
7/8/2009			<0.01					
12/21/2009			<0.01		<0.01		<0.01	
6/20/2010			<0.01				<0.01	
6/21/2010	<0.01				<0.01			
1/6/2011							<0.01	
1/7/2011	<0.01		<0.01		<0.01			
7/7/2011							<0.01	
7/8/2011	<0.01		<0.01		<0.01			
1/17/2012							<0.01	
1/18/2012	<0.01		<0.01		<0.01			
7/9/2012							<0.01	
7/10/2012	<0.01		<0.01		<0.01			
1/17/2013							<0.01	
1/18/2013	<0.01		<0.01		<0.01			
7/16/2013							<0.01	
7/17/2013	<0.01		<0.01		<0.01			
1/13/2014							<0.01	
1/14/2014	<0.01		<0.01		<0.01			
7/9/2014				<0.01		<0.01		<0.01
7/10/2014	<0.01							
1/12/2015					<0.01			
1/13/2015							<0.01	
1/14/2015	<0.01		<0.01					
7/16/2015					<0.01		<0.01	
7/17/2015			<0.01					
7/18/2015	<0.01							
1/18/2016	<0.01		<0.01		<0.01		<0.01	
7/27/2016							<0.01	
7/28/2016			<0.01					

# Prediction Limit

Page 2

Constituent: Selenium   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-22	GWC-22	GWC-9	GWC-9	GWB-4R	GWB-4R	GWB-5R	GWB-5R
7/29/2016	0.0022 (J)				0.0036 (J)			
8/30/2016							<0.01	
8/31/2016	0.0014 (J)		<0.01					
9/1/2016					0.0067 (J)			
10/26/2016	0.001 (J)				0.0042 (J)		<0.01	
10/27/2016			<0.01					
1/3/2017							<0.01	
1/4/2017	<0.01							
1/6/2017			<0.01		0.0042 (J)			
4/4/2017					0.0043 (J)			
4/6/2017	<0.01		<0.01				<0.01	
7/11/2017	<0.01							
7/12/2017			<0.01		0.0033 (J)		<0.01	
10/3/2017							<0.01	
10/4/2017	0.0023 (J)		<0.01		0.0038 (J)			
1/10/2018							<0.01	
1/11/2018	<0.01		<0.01		0.0029 (J)			
7/10/2018							0.0018 (J)	
7/11/2018	<0.01		<0.01		0.0015 (J)			
1/16/2019						<0.01		<0.01
1/18/2019		<0.01		<0.01				
3/25/2019						<0.01		
3/26/2019								<0.01
3/27/2019		<0.01		<0.01				
8/27/2019		<0.01				<0.01		
8/28/2019				<0.01				0.0033 (J)
10/9/2019		<0.01		<0.01		<0.01		0.0073 (J)

# Prediction Limit

Constituent: Selenium, Vanadium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-6R	GWA-7	GWA-7	GWA-8	GWA-8	GWC-1	GWC-1
9/29/2000	<0.05		<0.0025		<0.01		<0.01	
11/21/2000	<0.05		<0.0025				<0.01	
1/20/2001	<0.05		<0.0025		<0.01		<0.01	
3/14/2001	<0.05		<0.0025		<0.01		<0.01	
7/16/2001	<0.05		<0.0025		<0.01		<0.01	
11/1/2001	<0.05		<0.0025		<0.01		<0.01	
4/25/2002	<0.05		<0.0025		<0.01		<0.01	
11/20/2002	0.008				<0.01		0.0069	
6/6/2003	0.0066		0.047					
12/12/2003	0.0056		0.0086				<0.01	
5/26/2004	0.0084		<0.0025		<0.01		<0.01	
12/7/2004	<0.05		<0.0025		<0.01		<0.01	
6/21/2005	0.0062		<0.0025		<0.01		<0.01	
12/12/2005	<0.05		<0.0025		<0.01		<0.01	
4/4/2006					<0.01			
6/27/2006	<0.05		<0.0025		<0.01		0.0029	
8/30/2006					<0.01			
12/4/2006	<0.05		0.0027		<0.01		0.0047	
2/15/2007					<0.01			
6/23/2007	<0.05		0.0027		<0.01		0.0029	
9/11/2007					<0.01			
12/11/2007	<0.05		0.0033		<0.01		<0.01	
3/11/2008					<0.01			
6/23/2008			0.0074		<0.01			
6/24/2008	<0.05						<0.01	
11/3/2008					<0.01			
12/4/2008			0.0084		<0.01			
12/5/2008	<0.05						<0.01	
3/25/2009					<0.01			
7/7/2009	<0.05		0.023		<0.01		<0.01	
9/14/2009					<0.01			
12/20/2009			0.007		<0.01		<0.01	
12/21/2009	<0.05						<0.01	
3/4/2010					<0.01			
6/20/2010	<0.05		0.0047		<0.01		0.0037	
9/14/2010					<0.01			
1/6/2011							<0.01	
1/7/2011	<0.05		0.018		<0.01			
4/15/2011					<0.01			
7/7/2011	<0.05		0.019		<0.01		0.0045	
9/25/2011					<0.01			
1/17/2012			0.0298		<0.01		<0.01	
1/18/2012	<0.05							
4/4/2012					<0.01			
7/9/2012			0.14				0.0026	
7/10/2012	<0.05				<0.01			
10/9/2012					<0.01			
1/17/2013							<0.01	
1/18/2013	<0.05		0.21		<0.01			
4/5/2013					<0.01			
7/16/2013							<0.01	
7/17/2013	<0.05		0.18		<0.01			

# Prediction Limit

Page 2

Constituent: Selenium, Vanadium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-6R	GWA-7	GWA-7	GWA-8	GWA-8	GWC-1	GWC-1
10/11/2013					<0.01			
1/13/2014			0.24				<0.01	
1/14/2014	<0.05				<0.01			
4/3/2014					0.0015 (J)			
7/9/2014	<0.05		0.22		0.0012 (J)		0.0041 (J)	
10/24/2014					<0.01			
1/13/2015			0.19				0.0029 (J)	
1/14/2015	<0.05				<0.01			
5/10/2015					<0.01			
7/16/2015			0.23				0.0034 (J)	
7/17/2015	<0.05				<0.01			
10/6/2015					0.0012 (J)			
1/17/2016							0.0046 (J)	
1/18/2016	<0.05		0.41		0.00079 (J)			
4/26/2016					<0.01			
7/27/2016			0.397				0.0064 (J)	
7/28/2016	<0.05				<0.01			
8/30/2016	<0.05							
10/24/2016					<0.01			
10/25/2016			0.425					
10/26/2016	<0.05							
1/3/2017					<0.01			
1/4/2017							<0.01	
1/5/2017	0.0014 (J)							
1/6/2017			0.41					
4/3/2017					<0.01			
4/4/2017							0.0061 (J)	
4/6/2017	<0.05		0.297					
7/11/2017					<0.01			
7/12/2017	<0.05						0.0067 (J)	
7/13/2017			0.194					
10/2/2017					<0.01			
10/3/2017	<0.05							
10/4/2017			0.316					
1/9/2018	<0.05		0.194		0.0014 (J)			
1/10/2018							0.0056 (J)	
7/9/2018					<0.01			
7/10/2018	0.0016 (J)						0.0056 (J)	
7/11/2018		0.15						
1/16/2019		<0.05		0.16		<0.01		0.0043 (J)
3/25/2019				0.18		<0.01		
3/26/2019		0.05 (J)						0.0051 (J)
8/27/2019		0.0033 (J)						
10/7/2019						<0.01		
10/8/2019			0.11					
10/9/2019		<0.05					<0.01	

## Prediction Limit

Constituent: Vanadium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

# Prediction Limit

Page 2

Constituent: Vanadium   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-11	GWC-11	GWC-12	GWC-12	GWC-13	GWC-13	GWC-14	GWC-14
7/8/2014	0.0024 (J)		0.0034 (J)		0.002 (J)			
7/9/2014							0.032	
10/24/2014							0.045	
1/13/2015	0.0023 (J)		<0.01		0.0015 (J)			
1/14/2015							0.031	
5/10/2015							0.013	
7/16/2015	0.002 (J)		0.0049 (J)		<0.01			
7/17/2015							0.028	
10/6/2015							0.02	
1/17/2016							0.028	
1/18/2016		0.0058			0.0011 (J)			
1/19/2016	0.0025 (J)							
4/26/2016							0.0181	
7/26/2016	0.0027 (J)				<0.01			
7/27/2016			0.0058 (J)				0.0189	
10/25/2016							0.0206	
1/4/2017	<0.01		<0.01					
1/5/2017					<0.01		0.0172	
4/4/2017							0.0235	
4/5/2017		0.0039 (J)						
4/6/2017	0.0025 (J)				<0.01			
7/10/2017			0.0062 (J)					
7/11/2017	0.0027 (J)						0.0136	
7/12/2017				0.0016 (J)				
10/2/2017							0.0175	
1/9/2018							0.0103	
1/10/2018				0.0019 (J)				
1/11/2018	0.0019 (J)		0.0025 (J)					
7/9/2018							0.0078 (J)	
7/11/2018	0.0021 (J)		0.0059 (J)		0.0097 (J)			
1/16/2019						<0.01		0.0043 (J)
1/17/2019		0.0021 (J)		<0.01				
3/26/2019						0.0029 (J)		0.0063 (J)
3/27/2019		0.0023 (J)		0.0049 (J)				
10/8/2019		<0.01				<0.01		<0.01
10/9/2019				0.0021 (J)				

# Prediction Limit

Constituent: Vanadium   Analysis Run 2/17/2020 3:57 PM   View: Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-15	GWC-15	GWC-16	GWC-16	GWC-17	GWC-17	GWC-2	GWC-2
9/29/2000	<0.01		<0.01		<0.01			
11/21/2000	<0.01		<0.01		<0.01		<0.01	
1/20/2001	<0.01		<0.01		<0.01		<0.01	
3/14/2001	<0.01		<0.01		<0.01		<0.01	
7/16/2001	<0.01		<0.01		<0.01		<0.01	
11/1/2001	<0.01		<0.01		<0.01		<0.01	
4/25/2002	<0.01		<0.01		<0.01		<0.01	
11/20/2002	0.0099		0.0069		<0.01		<0.01	
6/6/2003					<0.01		<0.01	
12/12/2003			0.012		<0.01		<0.01	
5/26/2004	<0.01		<0.01		<0.01		<0.01	
12/7/2004	<0.01		<0.01		<0.01		<0.01	
6/21/2005	<0.01		<0.01		<0.01		<0.01	
12/12/2005	<0.01		<0.01		<0.01		<0.01	
4/4/2006			<0.01					
6/27/2006	<0.01		<0.01		0.0025		<0.01	
8/30/2006			<0.01					
12/4/2006	<0.01		0.0031		<0.01		<0.01	
2/15/2007			0.0025					
6/23/2007	<0.01		0.0032		<0.01		<0.01	
9/11/2007			<0.01					
12/11/2007	<0.01		<0.01		<0.01		<0.01	
3/11/2008			<0.01					
6/24/2008	<0.01		<0.01		<0.01		<0.01	
11/3/2008			0.0032					
12/4/2008							<0.01	
12/5/2008	<0.01		<0.01		<0.01			
3/25/2009			<0.01					
7/8/2009	<0.01		0.0036		<0.01		<0.01	
9/14/2009			0.0026					
12/20/2009	<0.01		0.0031				<0.01	
12/21/2009					<0.01			
3/4/2010			<0.01					
6/20/2010	<0.01						<0.01	
6/21/2010			0.0025		<0.01			
9/14/2010			0.0035					
1/6/2011							<0.01	
1/7/2011	<0.01		0.0036		<0.01			
4/15/2011			<0.01					
7/7/2011	0.0036		0.003					
7/8/2011					0.0031			
9/25/2011			0.0037					
1/17/2012	<0.01						<0.01	
1/18/2012			<0.01		<0.01			
4/4/2012			<0.01					
7/9/2012	0.0059						<0.01	
7/10/2012			0.0026		<0.01			
10/9/2012			0.007					
1/17/2013							<0.01	
1/18/2013	<0.01		<0.01		<0.01			
4/5/2013			<0.01					
7/17/2013	<0.01		<0.01		<0.01		<0.01	

# Prediction Limit

Page 2

Constituent: Vanadium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-15	GWC-15	GWC-16	GWC-16	GWC-17	GWC-17	GWC-2	GWC-2
10/11/2013			<0.01					
1/13/2014	<0.01						<0.01	
1/14/2014			<0.01		<0.01			
4/3/2014			0.0032 (J)					
7/9/2014	0.0012 (J)		0.0031 (J)		0.0012 (J)		<0.01	
10/24/2014			0.0028 (J)					
1/13/2015	0.0013 (J)						<0.01	
1/14/2015			0.0034 (J)		0.002 (J)			
5/11/2015			0.0026 (J)					
7/16/2015	<0.01		0.0028 (J)				<0.01	
7/18/2015					<0.01			
10/6/2015			0.0016 (J)					
1/17/2016	0.0013 (J)		0.0029 (J)				<0.01	
1/18/2016					0.0019 (J)			
4/26/2016			0.00296 (J)					
7/27/2016	<0.01						<0.01	
7/28/2016			0.0026 (J)					
7/29/2016					0.0031 (J)			
10/25/2016	<0.01		<0.01					
1/4/2017			<0.01					
1/5/2017	<0.01				<0.01		<0.01	
4/3/2017	0.002 (J)							
4/4/2017							<0.01	
4/5/2017			0.0033 (J)		0.0029 (J)			
7/11/2017	0.0022 (J)		0.0037 (J)					
7/12/2017								
7/13/2017					0.0037 (J)		<0.01	
10/2/2017	0.0022 (J)							
10/3/2017			0.0036 (J)					
1/9/2018	0.0021 (J)							
1/10/2018			0.0029 (J)				<0.01	
1/11/2018					0.0026 (J)			
7/10/2018	0.0025 (J)		0.0025 (J)				<0.01	
7/11/2018					0.0032 (J)			
1/16/2019						<0.01		
1/17/2019		<0.01		0.0021 (J)				0.0024 (J)
1/21/2019								
3/26/2019		0.0026 (J)		0.0038 (J)		0.0024 (J)		
7/30/2019							<0.01	
10/8/2019		<0.01		<0.01				
10/9/2019						<0.01		

# Prediction Limit

Constituent: Vanadium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20	GWC-20	GWC-21	GWC-21	GWC-22	GWC-22	GWC-9	GWC-9
9/29/2000							<0.01	
11/21/2000							<0.01	
1/20/2001							<0.01	
3/14/2001							<0.01	
7/16/2001							<0.01	
11/1/2001							<0.01	
4/25/2002							<0.01	
11/20/2002							0.014	
6/6/2003							<0.01	
12/12/2003							<0.01	
5/26/2004							<0.01	
12/7/2004							<0.01	
6/21/2005							<0.01	
12/12/2005							<0.01	
6/27/2006							<0.01	
12/4/2006							<0.01	
6/23/2007							<0.01	
12/11/2007							<0.01	
6/23/2008							<0.01	
12/4/2008							<0.01	
7/8/2009							0.0029	
12/21/2009							<0.01	
6/20/2010							<0.01	
6/21/2010	<0.01		<0.01		<0.01			
1/7/2011	0.0029		0.0031		<0.01		<0.01	
7/7/2011	<0.01							
7/8/2011	0.0046		0.0048		<0.01		<0.01	
1/18/2012	<0.01		<0.01		<0.01		<0.01	
7/10/2012	0.0081		<0.01		<0.01		<0.01	
1/18/2013	0.0063		<0.01		<0.01		<0.01	
7/17/2013	<0.01		<0.01		<0.01		<0.01	
1/14/2014	<0.01		0.006		<0.01		<0.01	
7/9/2014			0.0019 (J)				0.0016 (J)	
7/10/2014	0.0026 (J)				0.0053			
1/12/2015	0.0031 (J)							
1/14/2015			0.0037 (J)		0.0013 (J)		<0.01	
7/17/2015			0.0028 (J)				0.0029 (J)	
7/18/2015	0.003 (J)				0.0043 (J)			
1/17/2016	0.0025 (J)		0.0039 (J)					
1/18/2016					<0.01		<0.01	
7/28/2016	0.0024 (J)		0.0022 (J)				<0.01	
7/29/2016					0.0052 (J)			
10/25/2016	<0.01							
1/4/2017	<0.01		<0.01		<0.01			
1/6/2017							<0.01	
4/4/2017	0.0024 (J)		0.003 (J)					
4/6/2017					<0.01		<0.01	
7/11/2017	0.003 (J)				0.0016 (J)			
7/12/2017							0.0013 (J)	
7/13/2017			0.0019 (J)					
10/2/2017	0.0028 (J)							
1/9/2018			0.0046 (J)					

# Prediction Limit

Page 2

Constituent: Vanadium Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20	GWC-20	GWC-21	GWC-21	GWC-22	GWC-22	GWC-9	GWC-9
1/10/2018		0.0026 (J)						
1/11/2018					0.0012 (J)		<0.01	
7/9/2018	<0.01							
7/10/2018			0.0031 (J)					
7/11/2018					0.0025 (J)		<0.01	
1/17/2019				0.0022 (J)				
1/18/2019						<0.01		<0.01
1/21/2019		0.0031 (J)						
3/25/2019		0.0024 (J)						
3/26/2019			0.0041 (J)					
3/27/2019					0.002 (J)		<0.01	
10/8/2019			<0.01					
10/9/2019	<0.01				<0.01		<0.01	

## Prediction Limit

Constituent: Vanadium, Zinc Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-4R	GWB-4R	GWB-5R	GWB-5R	GWB-6R	GWB-6R	GWA-7	GWA-7
9/29/2000	0.06		0.038		0.12		<0.0025	
11/21/2000	0.068		0.013		0.13		<0.0025	
1/20/2001	0.12		0.038		0.14		<0.0025	
3/14/2001	0.08				0.13		<0.0025	
7/16/2001	0.11				0.18		<0.0025	
11/1/2001	0.079				0.12		<0.0025	
4/25/2002	0.11				0.15		<0.0025	
11/20/2002	0.15				0.15			
6/6/2003	0.12				0.11			
12/12/2003	0.13		0.014		0.089			
5/26/2004	0.095				0.09		0.013	
12/7/2004	0.067		0.054		0.072		<0.0025	
6/21/2005	0.062		0.038		0.04		<0.0025	
12/12/2005	0.09		0.0056		0.021		0.014	
6/27/2006	0.083		0.0043		0.02		0.01	
12/4/2006	0.084		0.0044		0.022		0.0065	
6/23/2007	0.081		0.0039		0.027		0.0049	
12/11/2007	0.067		0.0029		0.017		0.0043	
6/23/2008							0.0025	
6/24/2008	0.059		0.003		0.053			
12/4/2008							0.0025	
12/5/2008	0.054		<0.01		0.0078			
7/7/2009	0.038		<0.01		0.012		<0.0025	
12/20/2009							0.0031	
12/21/2009	0.06		<0.01		0.011			
6/20/2010			<0.01		0.0083		<0.0025	
6/21/2010	0.036							
1/6/2011			0.0067					
1/7/2011	0.043				0.0079		<0.0025	
7/7/2011			0.019		0.007		0.0031	
7/8/2011	0.044							
1/17/2012			0.021				0.004	
1/18/2012	0.045				0.0116			
7/9/2012			0.032				0.0096	
7/10/2012	0.048				0.0096			
1/17/2013			0.034					
1/18/2013	0.049				<0.005		0.051	
7/16/2013			0.021					
7/17/2013	0.05				<0.005		0.042	
1/13/2014			0.008				0.0025	
1/14/2014	0.067				<0.005			
7/9/2014	0.055		0.0052		0.0039 (J)		0.064	
1/12/2015	0.066							
1/13/2015			0.0036 (J)				0.066	
1/14/2015					0.005			
7/16/2015	0.045		0.004 (J)				0.036	
7/17/2015					0.0045 (J)			
1/18/2016	0.049		0.0069		0.0044 (J)		0.035	
7/27/2016			0.0046 (J)				0.0529	
7/28/2016					0.0038 (J)			
7/29/2016	0.0388							
10/25/2016							0.0035 (J)	

# Prediction Limit

Page 2

Constituent: Vanadium, Zinc Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-4R	GWB-4R	GWB-5R	GWB-5R	GWB-6R	GWB-6R	GWA-7	GWA-7
1/3/2017			<0.01					
1/5/2017					0.0077 (J)			
1/6/2017	0.0341						0.0235	
4/4/2017	0.0371							
4/6/2017			0.0063 (J)		0.0069 (J)		0.0829	
7/12/2017	0.0399		0.0064 (J)		0.0098 (J)			
7/13/2017							0.0853	
10/4/2017							0.0263	
1/9/2018					0.0086 (J)		0.0665	
1/10/2018			0.0077 (J)					
1/11/2018	0.0327							
7/10/2018			0.016		0.0098 (J)			
7/11/2018	0.02						0.02 (J)	
1/16/2019		0.0022 (J)		0.0033 (J)		0.077		0.014 (J)
3/25/2019		0.004 (J)						
3/26/2019				0.0058 (J)		0.086		
10/8/2019							0.095	
10/9/2019	<0.01			0.033 (J)		0.018 (J)		

## Prediction Limit

Constituent: Zinc Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-8	GWA-8	GWC-1	GWC-1	GWC-11	GWC-11	GWC-12	GWC-12
9/29/2000	<0.01		<0.01		<0.01			
11/21/2000			<0.01		<0.01			
1/20/2001			<0.01		<0.01			
3/14/2001	<0.01		<0.01		<0.01			
7/16/2001	<0.01		<0.01		<0.01		0.053	
11/1/2001	<0.01		<0.01		<0.01		0.022	
4/25/2002	<0.01		<0.01		<0.01			
11/20/2002			<0.01		<0.01		0.045	
6/6/2003			0.011		<0.01		0.042	
12/12/2003			<0.01		0.013		<0.0025	
5/26/2004	<0.01		<0.01		<0.01		<0.0025	
12/7/2004	<0.01		<0.01				<0.0025	
6/21/2005	<0.01		<0.01		<0.01		<0.0025	
12/12/2005	0.01		<0.01		<0.01		<0.0025	
4/4/2006	<0.01							
6/27/2006	0.0043		<0.01		0.0028		0.012	
12/4/2006	0.0053		<0.01		0.0028		0.0067	
2/15/2007	0.0045							
6/23/2007	0.0043		<0.01		0.0063		0.025	
9/11/2007	0.004							
12/11/2007	0.0048		<0.01		<0.01		0.0038	
3/11/2008	0.0043							
6/23/2008	0.0037				<0.01		0.0051	
6/24/2008			<0.01					
11/3/2008	0.0032							
12/4/2008	0.0029				<0.01		<0.0025	
12/5/2008			<0.01					
3/25/2009	0.0055							
7/7/2009	0.0028		<0.01					
7/8/2009					<0.01		<0.0025	
9/14/2009	0.0027							
12/20/2009	0.0029		<0.01					
12/21/2009					<0.01		0.013	
3/4/2010	0.0042							
6/20/2010	0.0027		<0.01		<0.01		<0.0025	
9/14/2010	<0.01							
1/6/2011			<0.01		<0.01			
1/7/2011	0.0032						0.004	
4/15/2011	<0.01							
7/7/2011	0.005		0.0025		<0.01		0.0028	
9/25/2011	0.0041							
1/17/2012	0.0043		<0.01		0.0043		0.0043	
4/4/2012	<0.01							
7/9/2012			<0.01		<0.01		<0.0025	
7/10/2012	0.0028							
10/9/2012	0.0033							
1/17/2013			<0.01		0.0025		0.0033	
1/18/2013	0.0038							
4/5/2013	0.0026							
7/16/2013			<0.01		<0.01		0.0028	
7/17/2013	<0.01							
10/11/2013	0.0046							

# Prediction Limit

Page 2

Constituent: Zinc Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-8	GWA-8	GWC-1	GWC-1	GWC-11	GWC-11	GWC-12	GWC-12
1/13/2014			0.0025		0.0025		0.0025	
1/14/2014	0.0025							
4/3/2014	0.0029							
7/8/2014					0.0011 (J)		0.002 (J)	
7/9/2014	0.002 (J)		<0.01					
10/24/2014	0.0031							
1/13/2015			0.0025		0.0021 (J)		0.0079	
1/14/2015	0.003							
5/10/2015	0.0028							
7/16/2015			<0.01		<0.01		0.0026	
7/17/2015	0.0018 (J)							
10/6/2015	0.0018 (J)							
1/17/2016			<0.01					
1/18/2016	0.0028					0.0025		
1/19/2016					0.0029			
4/26/2016	<0.01							
7/26/2016					<0.01			
7/27/2016			<0.01				0.0021 (J)	
7/28/2016	0.0018 (J)							
10/24/2016	0.0024 (J)							
1/3/2017	0.0035 (J)							
1/4/2017			<0.01		<0.01		0.0025 (J)	
4/3/2017	0.0041 (J)							
4/4/2017			<0.01					
4/5/2017						0.0026 (J)		
4/6/2017					0.004 (J)			
7/10/2017							0.0023 (J)	
7/11/2017	0.0029 (J)				<0.01			
7/12/2017			<0.01					
10/2/2017	0.0026 (J)							
1/9/2018	0.0035 (J)							
1/10/2018			0.0014 (J)					
1/11/2018					0.0018 (J)		0.0031 (J)	
7/9/2018	0.0022 (J)							
7/10/2018			0.0021 (J)					
7/11/2018					<0.01		0.0036 (J)	
1/16/2019	0.0037 (J)		<0.01					
1/17/2019						<0.01	0.0032 (J)	
3/25/2019	<0.01							
3/26/2019			<0.01					
3/27/2019						<0.01	0.0031 (J)	
10/7/2019	0.0077 (J)					<0.01	0.0031 (J)	
10/8/2019						0.0061 (J)		
10/9/2019			0.0057 (J)				0.0057 (J)	

# Prediction Limit

Constituent: Zinc Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-13	GWC-13	GWC-14	GWC-14	GWC-15	GWC-15	GWC-16	GWC-16
9/29/2000	<0.0025		<0.01		<0.01		<0.01	
11/21/2000	<0.0025		<0.01		<0.01		<0.01	
1/20/2001	<0.0025		<0.01		<0.01		<0.01	
3/14/2001	<0.0025		<0.01		<0.01		<0.01	
7/16/2001	<0.0025		<0.01		<0.01		<0.01	
11/1/2001			<0.01		<0.01		<0.01	
4/25/2002	<0.0025		<0.01		<0.01		<0.01	
11/20/2002	0.023		<0.01		<0.01		<0.01	
6/6/2003	<0.0025		<0.01		<0.01		<0.01	
12/12/2003	<0.0025		<0.01		<0.01		<0.01	
5/26/2004	0.035		<0.01		<0.01		<0.01	
12/7/2004	0.018		<0.01		<0.01		<0.01	
6/21/2005	0.014		<0.01		<0.01		<0.01	
12/12/2005	0.023		0.011				<0.01	
4/4/2006			<0.01				<0.01	
6/27/2006	0.023		0.0045		0.011			
8/30/2006			<0.01				0.0027	
12/4/2006			<0.01		0.0033		<0.01	
2/15/2007			<0.01				0.0032	
6/23/2007	0.036		<0.01		0.0029		0.0058	
9/11/2007			<0.01				0.0033	
12/11/2007	0.011		<0.01		<0.01		<0.01	
3/11/2008			<0.01				<0.01	
6/23/2008	0.0091							
6/24/2008			<0.01		<0.01		<0.01	
11/3/2008			<0.01				0.0025	
12/4/2008	0.0038		<0.01					
12/5/2008					<0.01		<0.01	
3/25/2009			<0.01				0.0025	
7/8/2009	<0.0025		<0.01		<0.01		<0.01	
9/14/2009			<0.01				<0.01	
12/20/2009			<0.01		<0.01		<0.01	
12/21/2009	0.0032							
3/4/2010			<0.01				<0.01	
6/20/2010	<0.0025		<0.01		<0.01			
6/21/2010							<0.01	
9/14/2010			<0.01				<0.01	
1/6/2011	0.004							
1/7/2011			<0.01		<0.01		<0.01	
4/15/2011			<0.01				<0.01	
7/7/2011	0.0037		<0.01		<0.01		<0.01	
9/25/2011			<0.01				0.0028	
1/17/2012	0.0031		<0.01		<0.01			
1/18/2012							0.0029	
4/4/2012			<0.01				<0.01	
7/9/2012	0.003		<0.01		<0.01			
7/10/2012							<0.01	
10/9/2012			<0.01				0.0027	
1/17/2013	<0.0025							
1/18/2013					<0.01		<0.01	
4/5/2013			<0.01				<0.01	
7/16/2013	0.0029							

# Prediction Limit

Page 2

Constituent: Zinc Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-13	GWC-13	GWC-14	GWC-14	GWC-15	GWC-15	GWC-16	GWC-16
7/17/2013			<0.01		<0.01		<0.01	
10/11/2013			<0.01				<0.01	
1/13/2014	0.0025				0.0025			
1/14/2014			0.0025				0.0025	
4/3/2014			0.0014 (J)				0.0015 (J)	
7/8/2014	0.0018 (J)							
7/9/2014			0.00086 (J)		<0.01		0.0012 (J)	
10/24/2014			0.00083 (J)				0.0013 (J)	
1/13/2015	0.0028				<0.01			
1/14/2015			<0.01				0.0017 (J)	
5/10/2015			<0.01					
5/11/2015							0.0015 (J)	
7/16/2015	0.0018 (J)				<0.01		<0.01	
7/17/2015			<0.01					
10/6/2015			<0.01				<0.01	
1/17/2016			<0.01		<0.01		<0.01	
1/18/2016	0.0017 (J)							
4/26/2016			<0.01				<0.01	
7/26/2016	0.0028 (J)							
7/27/2016			<0.01		<0.01			
7/28/2016							<0.01	
10/25/2016			<0.01		<0.01		<0.01	
1/4/2017							0.0025 (J)	
1/5/2017	0.0021 (J)		<0.01		<0.01			
4/3/2017					<0.01			
4/4/2017			<0.01					
4/5/2017							0.0025 (J)	
4/6/2017	0.0027 (J)							
7/11/2017			<0.01		<0.01			
7/12/2017	0.0043 (J)						0.002 (J)	
10/2/2017			0.0026 (J)		<0.01			
10/3/2017							<0.01	
1/9/2018			0.0018 (J)		<0.01			
1/10/2018	0.0021 (J)						0.0016 (J)	
7/9/2018			<0.01					
7/10/2018					<0.01		0.0031 (J)	
7/11/2018	0.0039 (J)							
1/16/2019		0.047		<0.01				
1/17/2019						<0.01		<0.01
3/26/2019		0.03		<0.01		<0.01		<0.01
10/8/2019		0.053		0.0052 (J)		0.0051 (J)		0.01

# Prediction Limit

Constituent: Zinc Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-17	GWC-2	GWC-2	GWC-20	GWC-20	GWC-21	GWC-21
9/29/2000	<0.0025							
11/21/2000	<0.0025							
1/20/2001	<0.0025		<0.01					
3/14/2001	<0.0025		<0.01					
7/16/2001	<0.0025		<0.01					
11/1/2001	<0.0025		<0.01					
4/25/2002	<0.0025		<0.01					
11/20/2002	0.014		<0.01					
6/6/2003	0.012		<0.01					
12/12/2003	<0.0025		<0.01					
5/26/2004	<0.0025		<0.01					
12/7/2004	<0.0025		<0.01					
6/21/2005	<0.0025		<0.01					
12/12/2005	<0.0025		0.012					
6/27/2006	0.0046		<0.01					
12/4/2006	0.0071		<0.01					
6/23/2007	0.005		<0.01					
12/11/2007	0.0033		<0.01					
6/24/2008	0.0037		<0.01					
12/4/2008			<0.01					
12/5/2008	0.0027							
7/8/2009	0.0048		<0.01					
12/20/2009			<0.01					
12/21/2009	0.0032							
6/20/2010			<0.01					
6/21/2010	0.0028			<0.01				
1/6/2011			<0.01					
1/7/2011	0.003			<0.01		<0.01		
7/7/2011				<0.01				
7/8/2011	0.0034					0.0044		
1/17/2012			<0.01					
1/18/2012	0.0049				<0.01		<0.01	
7/9/2012			<0.01					
7/10/2012	0.0039				<0.01		<0.01	
1/17/2013			<0.01					
1/18/2013	0.0043				0.0032		<0.01	
7/17/2013	0.0035		<0.01		<0.01		<0.01	
1/13/2014			0.0025					
1/14/2014	0.0025				0.0025		0.0025	
7/9/2014	0.0033		0.00058 (J)				0.00084 (J)	
7/10/2014					<0.01			
1/12/2015					<0.01			
1/13/2015			0.0024 (J)					
1/14/2015	0.0067					0.0018 (J)		
7/16/2015			<0.01					
7/17/2015						<0.01		
7/18/2015	<0.0025			<0.01				
1/17/2016			<0.01		<0.01		<0.01	
1/18/2016	0.012							
7/27/2016			0.0018 (J)					
7/28/2016					<0.01		<0.01	
7/29/2016	0.0086 (J)							

# Prediction Limit

Page 2

Constituent: Zinc Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-17	GWC-2	GWC-2	GWC-20	GWC-20	GWC-21	GWC-21
10/25/2016					<0.01			
1/4/2017					<0.01		<0.01	
1/5/2017	0.016		<0.01					
4/4/2017			0.0015 (J)		<0.01		0.0015 (J)	
4/5/2017	0.0175							
7/11/2017					<0.01			
7/13/2017	0.0126		0.0014 (J)				0.002 (J)	
10/2/2017					<0.01			
1/9/2018							0.0016 (J)	
1/10/2018			<0.01		0.0034 (J)			
1/11/2018	0.012							
7/9/2018					<0.01			
7/10/2018			<0.01				<0.01	
7/11/2018	0.011							
1/16/2019		0.0094 (J)						<0.01
1/17/2019								
1/21/2019			<0.01		<0.01			
3/25/2019						<0.01		
3/26/2019		0.0057 (J)						<0.01
7/30/2019				0.0067 (J)				
10/8/2019							0.0071 (J)	
10/9/2019	0.011			0.005 (J)		0.0049 (J)		

# Prediction Limit

Constituent: Zinc Analysis Run 2/17/2020 3:57 PM View: Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22	GWC-22	GWC-9	GWC-9	GWB-4R	GWB-4R	GWB-5R	GWB-5R
9/29/2000			<0.0025		<0.01		0.026	
11/21/2000			<0.0025		<0.01		<0.01	
1/20/2001			<0.0025		0.041		0.031	
3/14/2001			<0.0025		<0.01			
7/16/2001			<0.0025		0.059			
11/1/2001			<0.0025		<0.01			
4/25/2002			<0.0025		<0.01		<0.01	
11/20/2002					0.061			
6/6/2003			<0.0025		0.041			
12/12/2003			<0.0025		0.012		<0.01	
5/26/2004			<0.0025		0.016		0.036	
12/7/2004			<0.0025		<0.01			
6/21/2005			<0.0025		<0.01			
12/12/2005					0.017		<0.01	
6/27/2006					0.11		0.01	
12/4/2006			0.0044		0.086		0.0035	
6/23/2007			0.0041		0.076		0.0032	
12/11/2007			0.0039		0.087		0.0079	
6/23/2008			<0.0025					
6/24/2008					0.062		<0.01	
12/4/2008			0.0039					
12/5/2008					0.014		<0.01	
7/7/2009					0.052		<0.01	
7/8/2009			<0.0025					
12/21/2009			0.004		0.046		<0.01	
6/20/2010			<0.0025				<0.01	
6/21/2010	<0.01				0.045			
1/6/2011							<0.01	
1/7/2011	0.019		0.0032		0.024			
7/7/2011			0.0025		0.023		0.0027	
7/8/2011								
1/17/2012							0.0039	
1/18/2012	0.0051		0.0045		0.011			
7/9/2012							<0.01	
7/10/2012	0.01		<0.0025		0.024			
1/17/2013							<0.01	
1/18/2013	0.0036		0.0029		0.011			
7/16/2013							0.0032	
7/17/2013	0.0025		<0.0025		0.0029			
1/13/2014							0.0025	
1/14/2014	0.0025		0.0025		0.0025			
7/9/2014			0.0016 (J)		0.0051		0.00076 (J)	
7/10/2014	0.024							
1/12/2015					0.0023 (J)			
1/13/2015							0.0036	
1/14/2015	0.0016 (J)		0.0024 (J)					
7/16/2015					0.0021 (J)		<0.01	
7/17/2015			0.0031					
7/18/2015	0.014							
1/18/2016	<0.01		0.0059		0.0092		<0.01	
7/27/2016							0.0015 (J)	
7/28/2016			0.0019 (J)					

# Prediction Limit

Page 2

Constituent: Zinc Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22	GWC-22	GWC-9	GWC-9	GWB-4R	GWB-4R	GWB-5R	GWB-5R
7/29/2016	0.0129				0.003 (J)			
1/3/2017						<0.01		
1/4/2017	0.006 (J)							
1/6/2017		0.0026 (J)			0.0104			
4/4/2017					0.0132			
4/6/2017	0.0031 (J)		0.0047 (J)				0.0023 (J)	
7/11/2017	0.0029 (J)							
7/12/2017		0.003 (J)			0.0046 (J)		<0.01	
1/10/2018							0.0022 (J)	
1/11/2018	0.0106		0.0046 (J)		0.0095 (J)			
7/10/2018						<0.01		
7/11/2018	0.0057 (J)		0.0033 (J)		0.0028 (J)			
1/16/2019						0.0052 (J)		<0.01
1/18/2019		0.0024 (J)		0.0025 (J)				
3/25/2019						0.0078 (J)		
3/26/2019								<0.01
3/27/2019	<0.01			0.0026 (J)				
10/9/2019		0.0079 (J)		0.0054 (J)		0.0064 (J)		0.0081 (J)

## Prediction Limit

Constituent: Zinc Analysis Run 2/17/2020 3:57 PM View: Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-6R
6/27/2006	0.0071	
12/4/2006	0.0096	
1/7/2011	0.0044	
7/7/2011	0.003	
1/18/2012	0.0048	
7/10/2012	<0.05	
1/18/2013	0.0028	
7/17/2013	<0.05	
1/14/2014	0.0025	
7/9/2014	0.00093 (J)	
1/14/2015	0.0023 (J)	
7/17/2015	<0.05	
1/18/2016	0.0029	
7/28/2016	<0.05	
1/5/2017	<0.05	
4/6/2017	0.0032 (J)	
7/12/2017	0.002 (J)	
1/9/2018	0.0036 (J)	
7/10/2018	0.0055 (J)	
1/16/2019		<0.05
3/26/2019		<0.05
10/9/2019		0.016 (J)

## Trend Test Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 2/17/2020, 4:20 PM

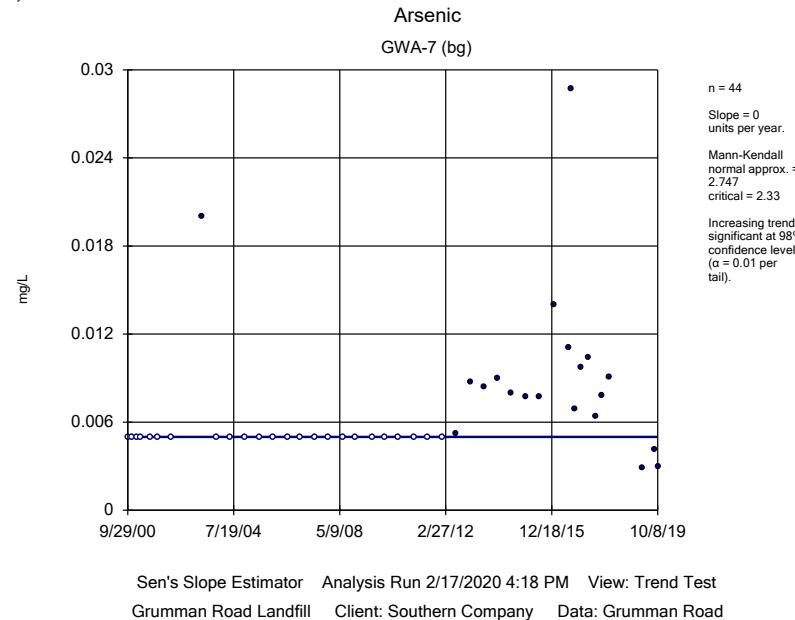
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWA-7 (bg)	0	2.747	2.33	Yes	44	54.55	n/a	0.02	NP
Arsenic (mg/L)	GWA-8 (bg)	0	-3.004	-2.33	Yes	67	92.54	n/a	0.02	NP
Arsenic (mg/L)	GWC-15	0.002248	7.35	2.33	Yes	47	53.19	n/a	0.02	NP
Arsenic (mg/L)	GWC-16	-0.001133	-2.647	-2.33	Yes	66	0	n/a	0.02	NP
Arsenic (mg/L)	GWC-20	0.02308	122	106	Yes	26	3.846	n/a	0.02	NP
Barium (mg/L)	GWA-8 (bg)	-0.002602	-7.539	-2.33	Yes	64	0	n/a	0.02	NP
Barium (mg/L)	GWC-9	0.009158	5.724	2.33	Yes	46	0	n/a	0.02	NP
Zinc (mg/L)	GWA-7 (bg)	0.00143	4.729	2.33	Yes	41	29.27	n/a	0.02	NP
Zinc (mg/L)	GWA-8 (bg)	-0.0002312	-4.488	-2.33	Yes	60	25	n/a	0.02	NP

## Trend Test All Results

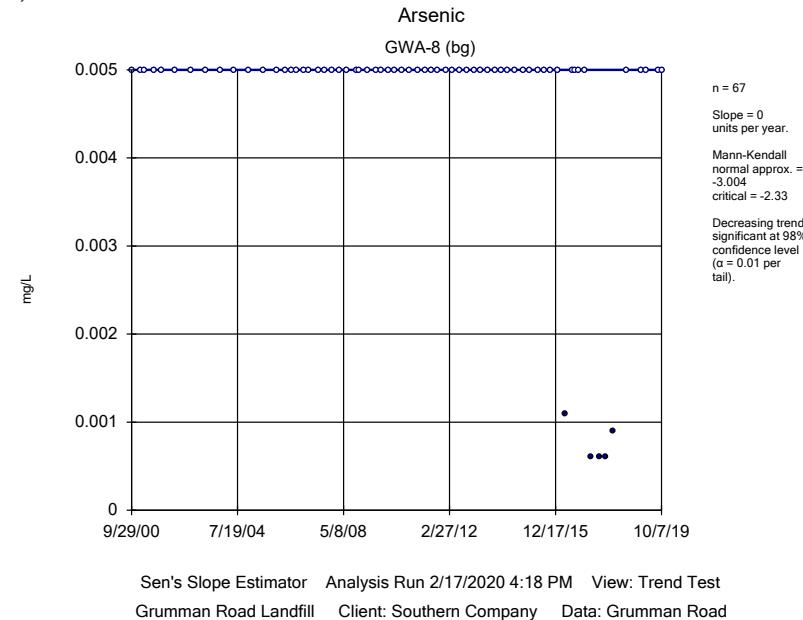
Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 2/17/2020, 4:20 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWA-7 (bg)	0	<b>2.747</b>	<b>2.33</b>	Yes	<b>44</b>	<b>54.55</b>	n/a	<b>0.02</b>	NP
Arsenic (mg/L)	GWA-8 (bg)	0	<b>-3.004</b>	<b>-2.33</b>	Yes	<b>67</b>	<b>92.54</b>	n/a	<b>0.02</b>	NP
Arsenic (mg/L)	GWC-15	<b>0.002248</b>	<b>7.35</b>	<b>2.33</b>	Yes	<b>47</b>	<b>53.19</b>	n/a	<b>0.02</b>	NP
Arsenic (mg/L)	GWC-16	<b>-0.001133</b>	<b>-2.647</b>	<b>-2.33</b>	Yes	<b>66</b>	<b>0</b>	n/a	<b>0.02</b>	NP
Arsenic (mg/L)	GWC-20	<b>0.02308</b>	<b>122</b>	<b>106</b>	Yes	<b>26</b>	<b>3.846</b>	n/a	<b>0.02</b>	NP
Barium (mg/L)	GWA-7 (bg)	-0.00004699	-0.2648	-2.33	No	45	0	n/a	0.02	NP
Barium (mg/L)	GWA-8 (bg)	<b>-0.002602</b>	<b>-7.539</b>	<b>-2.33</b>	Yes	<b>64</b>	<b>0</b>	n/a	<b>0.02</b>	NP
Barium (mg/L)	GWC-16	0.0007044	1.887	2.33	No	63	0	n/a	0.02	NP
Barium (mg/L)	GWC-9	<b>0.009158</b>	<b>5.724</b>	<b>2.33</b>	Yes	<b>46</b>	<b>0</b>	n/a	<b>0.02</b>	NP
Selenium (mg/L)	GWA-7 (bg)	0	0.1494	2.33	No	42	61.9	n/a	0.02	NP
Selenium (mg/L)	GWA-8 (bg)	0	-1.571	-2.33	No	66	96.97	n/a	0.02	NP
Selenium (mg/L)	GWC-15	0	-1.864	-2.33	No	43	83.72	n/a	0.02	NP
Zinc (mg/L)	GWA-7 (bg)	<b>0.00143</b>	<b>4.729</b>	<b>2.33</b>	Yes	<b>41</b>	<b>29.27</b>	n/a	<b>0.02</b>	NP
Zinc (mg/L)	GWA-8 (bg)	<b>-0.0002312</b>	<b>-4.488</b>	<b>-2.33</b>	Yes	<b>60</b>	<b>25</b>	n/a	<b>0.02</b>	NP
Zinc (mg/L)	GWC-13	0	-0.1253	-2.33	No	41	26.83	n/a	0.02	NP

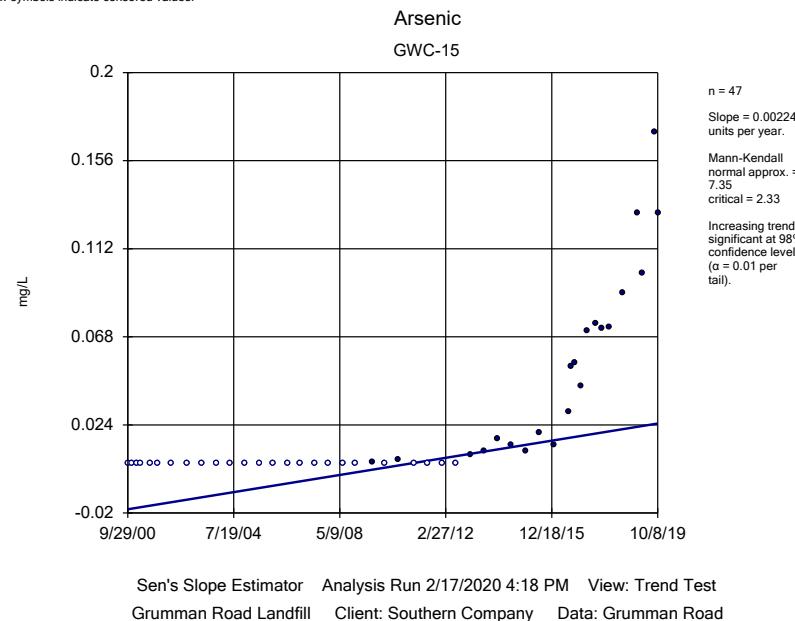
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.



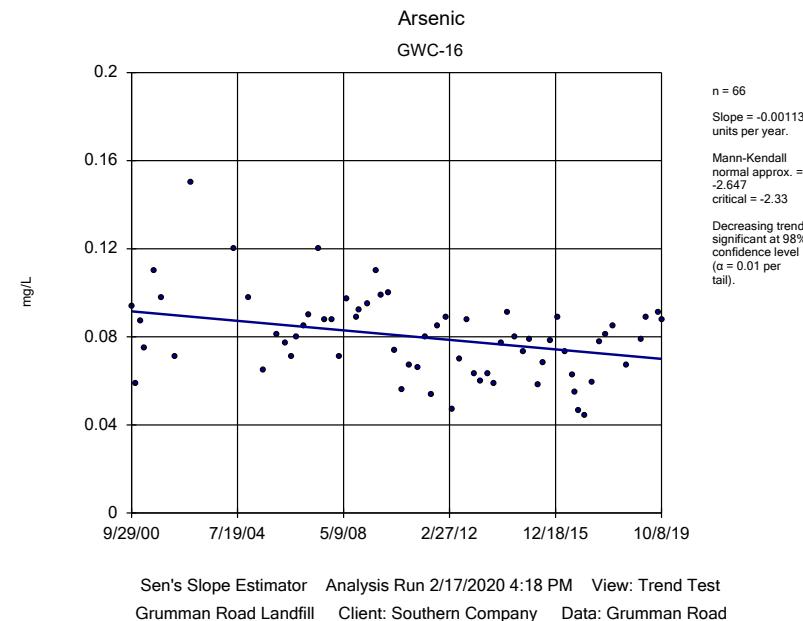
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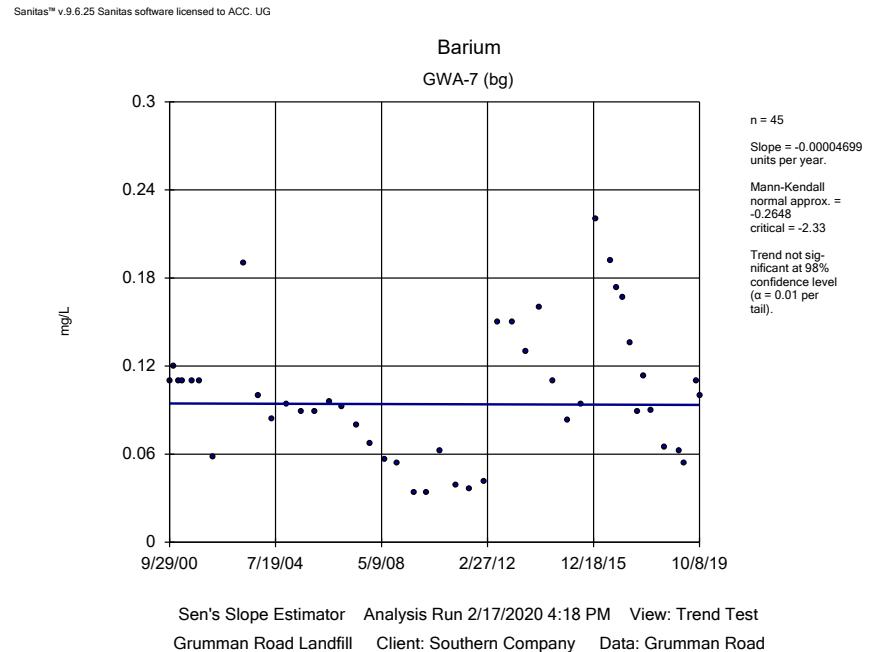
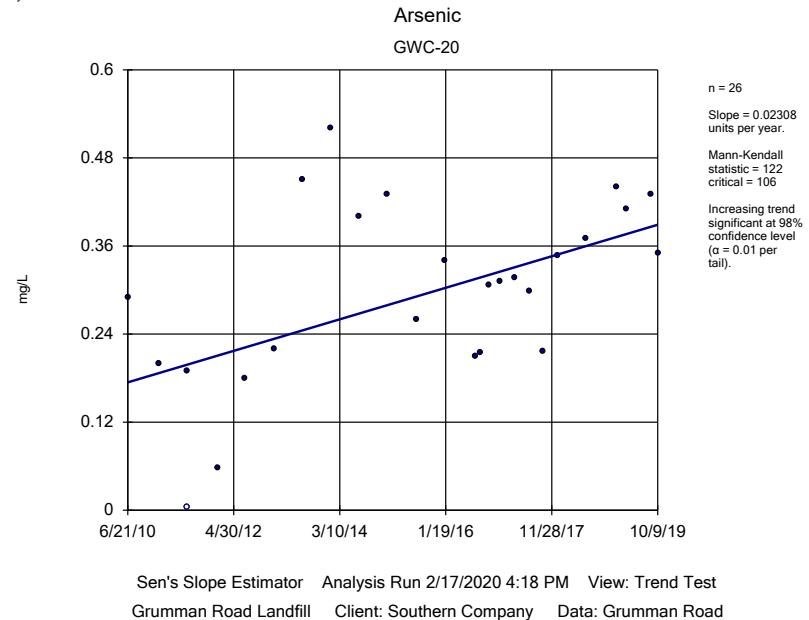
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Hollow symbols indicate censored values.



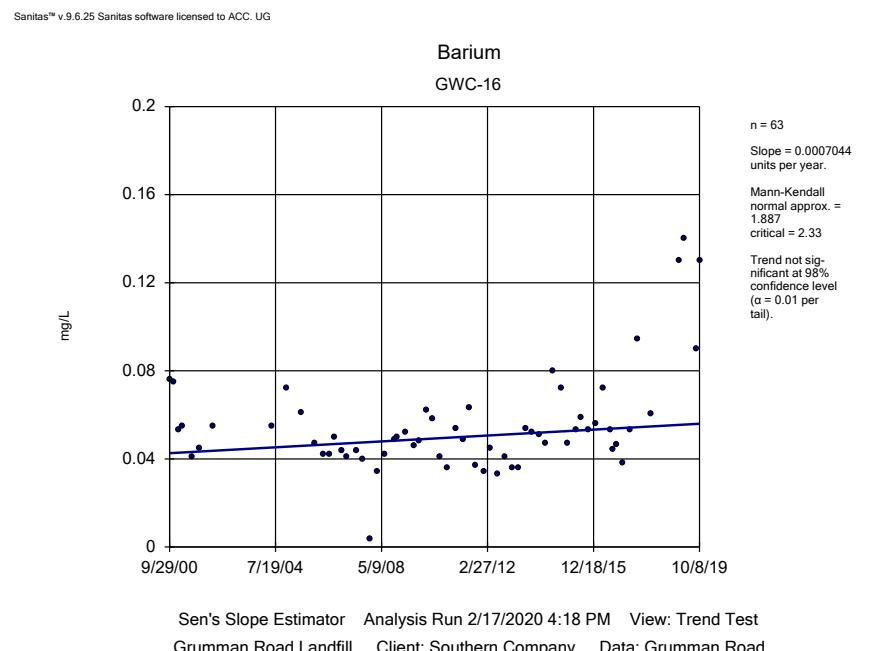
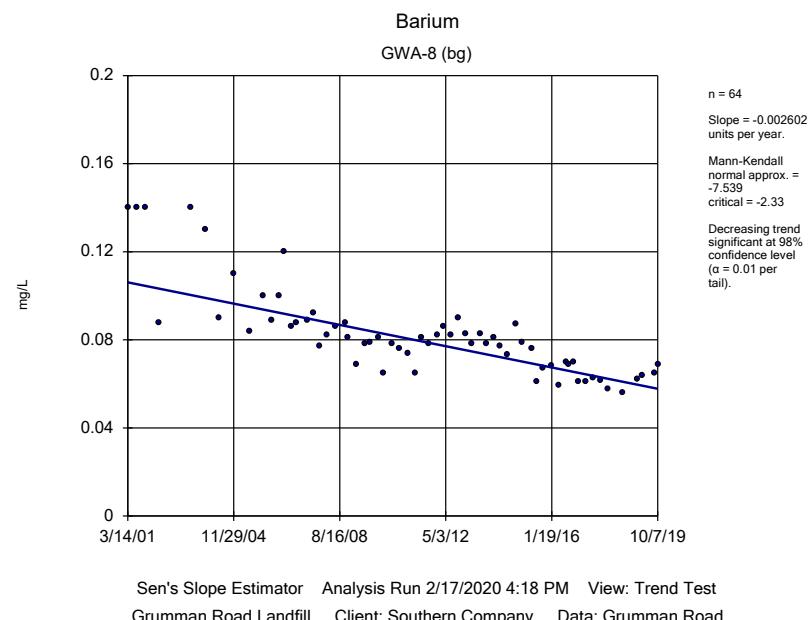
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

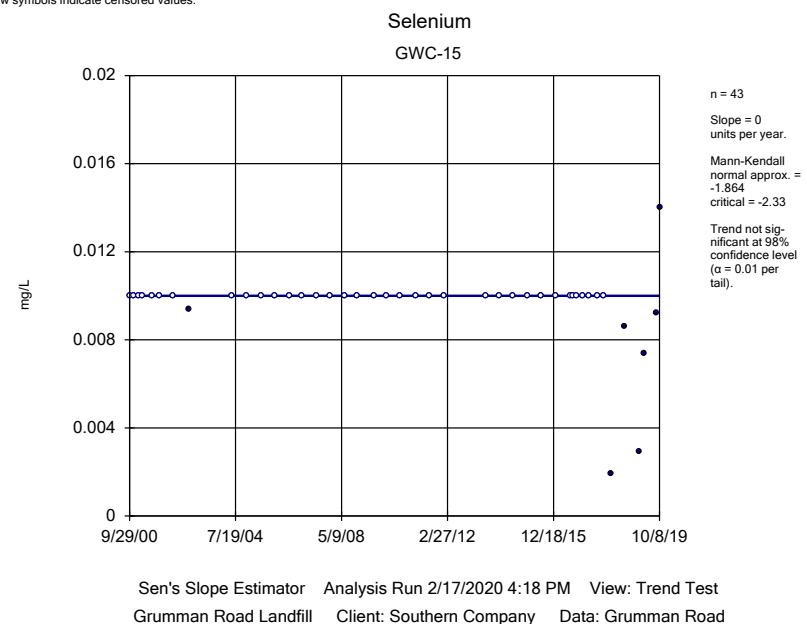
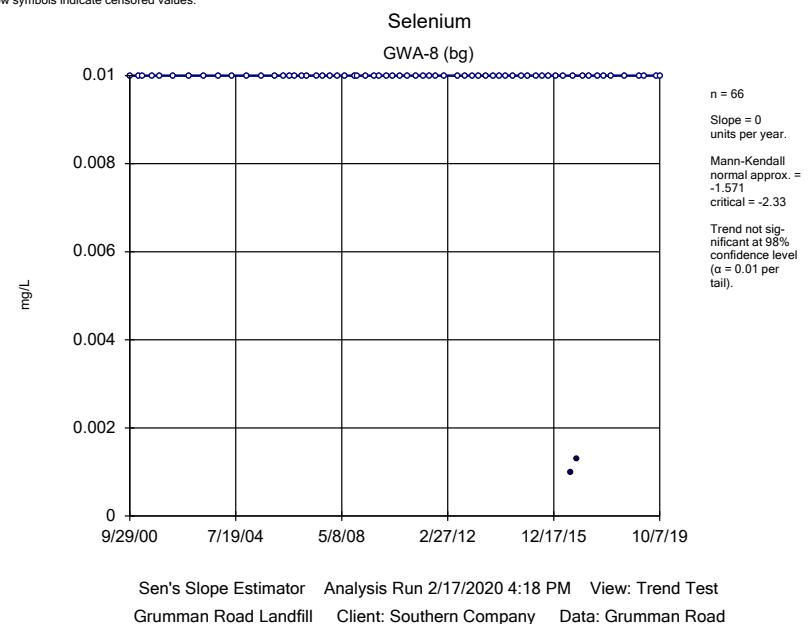
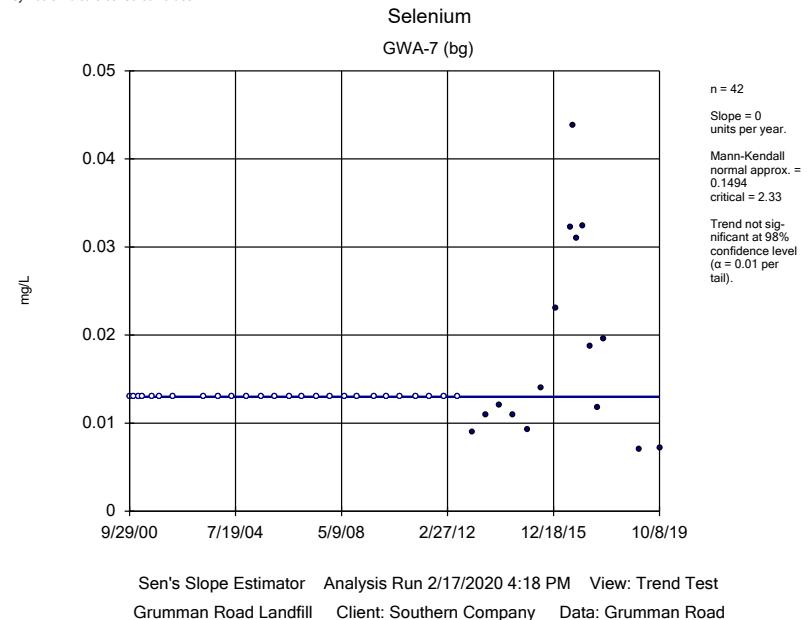
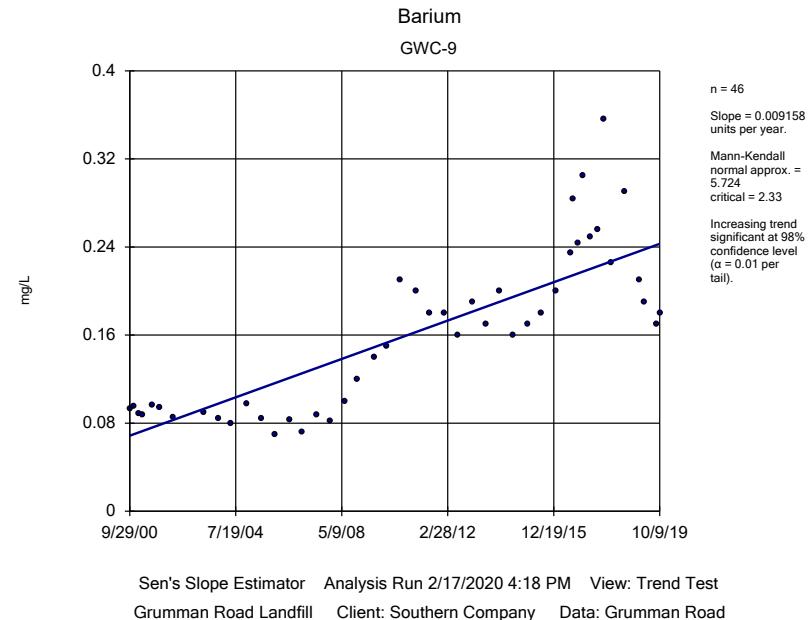


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Hollow symbols indicate censored values.

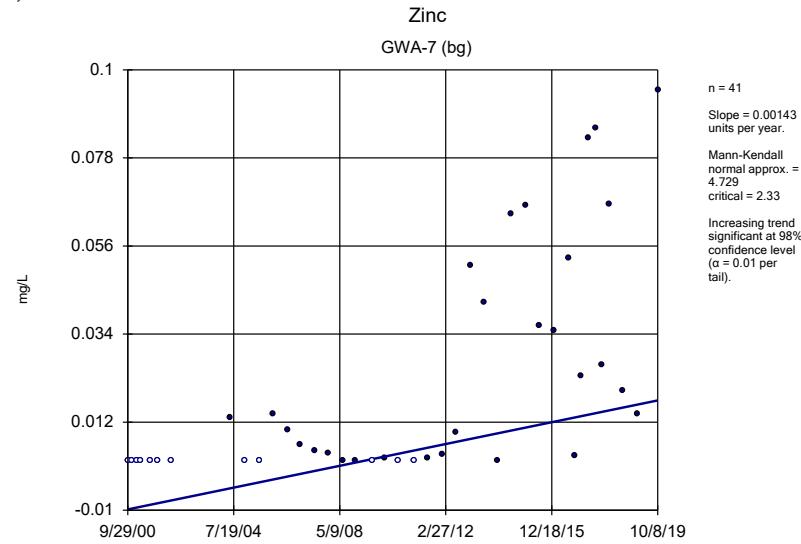


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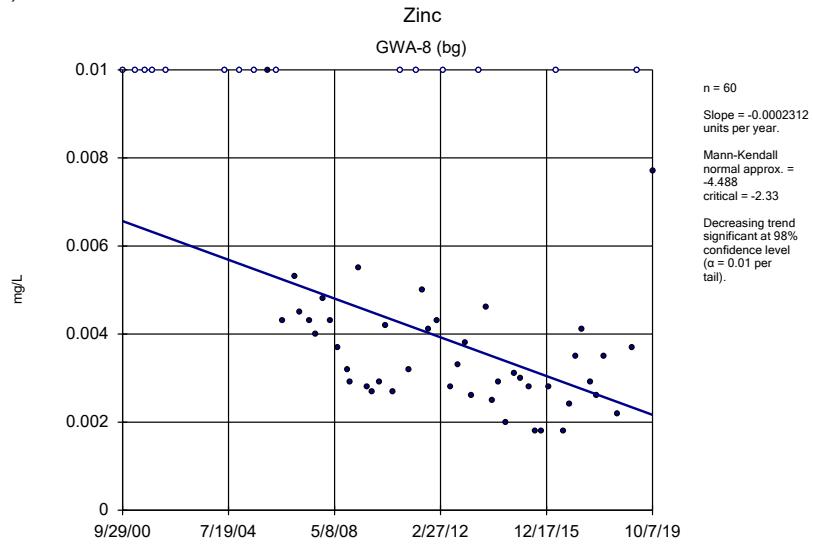


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Hollow symbols indicate censored values.



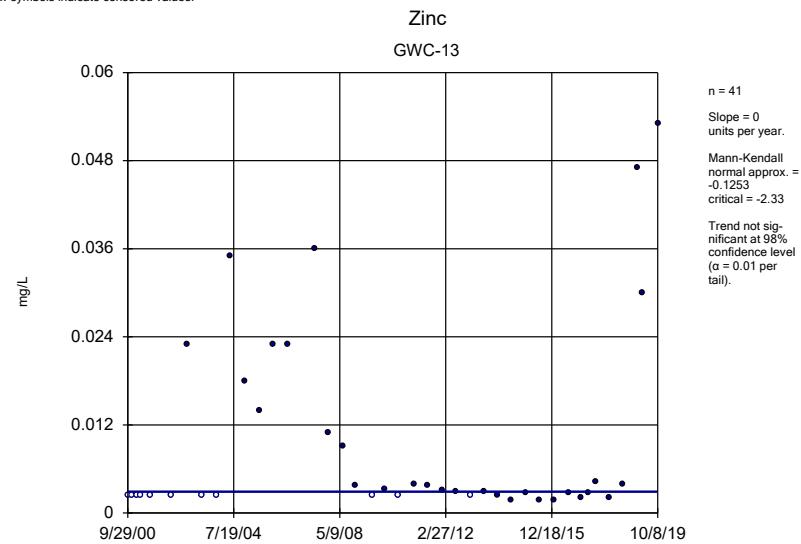
Sen's Slope Estimator Analysis Run 2/17/2020 4:18 PM View: Trend Test  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

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Sen's Slope Estimator Analysis Run 2/17/2020 4:18 PM View: Trend Test  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

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Hollow symbols indicate censored values.



Sen's Slope Estimator Analysis Run 2/17/2020 4:18 PM View: Trend Test  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Sen's Slope Estimator

Constituent: Arsenic Analysis Run 2/17/2020 4:20 PM View: Trend Test

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-15	GWC-16
9/29/2000	<0.005	<0.005	<0.005	0.094
11/21/2000	<0.005		<0.005	0.059
1/20/2001	<0.005	<0.005	<0.005	0.087
3/14/2001	<0.005	<0.005	<0.005	0.075
7/16/2001	<0.005	<0.005	<0.005	0.11
11/1/2001	<0.005	<0.005	<0.005	0.098
4/25/2002	<0.005	<0.005	<0.005	0.071
11/20/2002		<0.005	<0.005	0.15
6/6/2003	0.02	<0.005	<0.005	
12/12/2003	<0.005	<0.005	<0.005	
5/26/2004	<0.005	<0.005	<0.005	0.12
12/7/2004	<0.005	<0.005	<0.005	0.098
6/21/2005	<0.005	<0.005	<0.005	0.065
12/12/2005	<0.005	<0.005	<0.005	0.081
4/4/2006		<0.005		0.077
6/27/2006	<0.005	<0.005	<0.005	0.071
8/30/2006		<0.005		0.08
12/4/2006	<0.005	<0.005	<0.005	0.085
2/15/2007		<0.005		0.09
6/23/2007	<0.005	<0.005	<0.005	0.12
9/11/2007		<0.005		0.088
12/11/2007	<0.005	<0.005	<0.005	0.088
3/11/2008		<0.005		0.071
6/23/2008	<0.005	<0.005		
6/24/2008			<0.005	0.097
11/3/2008		<0.005		0.089
12/4/2008	<0.005	<0.005		
12/5/2008			<0.005	0.092
3/25/2009		<0.005		0.095
7/7/2009	<0.005	<0.005		
7/8/2009			0.0052	0.11
9/14/2009		<0.005		0.099
12/20/2009	<0.005	<0.005	<0.005	0.1
3/4/2010		<0.005		0.074
6/20/2010	<0.005	<0.005	0.0068	
6/21/2010				0.056
9/14/2010		<0.005		0.067
1/7/2011	<0.005	<0.005	<0.005	0.066
4/15/2011		<0.005		0.08
7/7/2011	<0.005	<0.005	<0.005	0.054
9/25/2011		<0.005		0.085
1/17/2012	<0.005	<0.005	<0.005	
1/18/2012				0.089
4/4/2012		<0.005		0.0473
7/9/2012	0.0052		<0.005	
7/10/2012		<0.005		0.07
10/9/2012		<0.005		0.088
1/18/2013	0.0087	<0.005	0.0089	0.063
4/5/2013		<0.005		0.06
7/17/2013	0.0084	<0.005	0.011	0.063
10/11/2013		<0.005		0.059
1/13/2014	0.009		0.017	

# Sen's Slope Estimator

Page 2

Constituent: Arsenic   Analysis Run 2/17/2020 4:20 PM   View: Trend Test  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-15	GWC-16
1/14/2014		<0.005		0.077
4/3/2014		<0.005		0.091
7/9/2014	0.008	<0.005	0.014	0.08
10/24/2014		<0.005		0.073
1/13/2015	0.0077		0.011	
1/14/2015		<0.005		0.079
5/10/2015		<0.005		
5/11/2015				0.058
7/16/2015	0.0077		0.02	0.068
7/17/2015		<0.005		
10/6/2015		<0.005		0.078
1/17/2016			0.014	0.089
1/18/2016	0.014	<0.005		
4/26/2016		0.0011 (J)		0.0731
7/27/2016	0.0111		0.0303	
7/28/2016		<0.005		0.0627
8/30/2016		<0.005		
9/1/2016	0.0287		0.0533	0.0551
10/24/2016		<0.005		
10/25/2016	0.0069		0.0551	0.0466
1/3/2017		<0.005		
1/4/2017				0.0444
1/5/2017			0.0437	
1/6/2017	0.0097			
4/3/2017		0.0006 (J)	0.0713	
4/5/2017				0.0591
4/6/2017	0.0104			
7/11/2017		0.0006 (J)	0.0745	
7/12/2017				0.0776
7/13/2017	0.0064			
10/2/2017		0.0006 (J)	0.0723	
10/3/2017				0.0813
10/4/2017	0.0078			
1/9/2018	0.0091 (J)	0.0009 (J)	0.0731	
1/10/2018				0.085
7/9/2018		<0.005		
7/10/2018			0.09	0.067
1/16/2019		<0.005		
1/17/2019			0.13	0.079
3/25/2019	0.0029 (J)	<0.005		
3/26/2019			0.1	0.089
8/26/2019	0.0041 (J)	<0.005		
8/27/2019			0.17	
8/28/2019				0.091
10/7/2019		<0.005		
10/8/2019	0.003 (J)		0.13	0.088

## Sen's Slope Estimator

Constituent: Arsenic, Barium Analysis Run 2/17/2020 4:20 PM View: Trend Test

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20	GWA-7 (bg)	GWA-8 (bg)	GWC-16
9/29/2000		0.11		0.076
11/21/2000		0.12		0.075
1/20/2001		0.11		0.053
3/14/2001		0.11	0.14	0.055
7/16/2001		0.11	0.14	0.041
11/1/2001		0.11	0.14	0.045
4/25/2002		0.058	0.088	0.055
6/6/2003		0.19	0.14	
12/12/2003		0.1	0.13	
5/26/2004		0.084	0.09	0.055
12/7/2004		0.094	0.11	0.072
6/21/2005		0.089	0.084	0.061
12/12/2005		0.089	0.1	0.047
4/4/2006			0.089	0.042
6/27/2006		0.096	0.1	0.042
8/30/2006			0.12	0.05
12/4/2006		0.092	0.086	0.044
2/15/2007			0.088	0.041
6/23/2007		0.08	0.089	0.044
9/11/2007			0.092	0.04
12/11/2007		0.067	0.077	0.0035
3/11/2008			0.082	0.034
6/23/2008		0.056	0.086	
6/24/2008				0.042
11/3/2008			0.088	0.049
12/4/2008		0.054	0.081	
12/5/2008				0.05
3/25/2009			0.069	0.052
7/7/2009		0.034	0.078	
7/8/2009				0.046
9/14/2009			0.079	0.048
12/20/2009		0.034	0.081	0.062
3/4/2010			0.065	0.058
6/20/2010		0.062	0.078	
6/21/2010	0.29			0.041
9/14/2010			0.076	0.036
1/7/2011	0.2	0.039	0.074	0.054
4/15/2011			0.065	0.049
7/7/2011	<0.005	0.036	0.081	0.063
7/8/2011	0.19			
9/25/2011			0.078	0.037
1/17/2012		0.041	0.082	
1/18/2012	0.058			0.034
4/4/2012			0.0861	0.0446
7/9/2012		0.15		
7/10/2012	0.18		0.082	0.033
10/9/2012			0.09	0.041
1/18/2013	0.22	0.15	0.083	0.036
4/5/2013			0.078	0.036
7/17/2013	0.45	0.13	0.083	0.054
10/11/2013			0.078	0.052
1/13/2014		0.16		

# Sen's Slope Estimator

Page 2

Constituent: Arsenic, Barium   Analysis Run 2/17/2020 4:20 PM   View: Trend Test  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-20	GWA-7 (bg)	GWA-8 (bg)	GWC-16
1/14/2014	0.52		0.081	0.051
4/3/2014			0.077	0.047
7/9/2014		0.11	0.073	0.08
7/10/2014	0.4			
10/24/2014			0.087	0.072
1/12/2015	0.43			
1/13/2015		0.083		
1/14/2015			0.079	0.047
5/10/2015			0.076	
5/11/2015				0.053
7/16/2015		0.094		0.059
7/17/2015			0.061	
7/18/2015	0.26			
10/6/2015			0.067	0.053
1/17/2016	0.34			0.056
1/18/2016		0.22	0.068	
4/26/2016			0.0596	0.0721
7/27/2016		0.192		
7/28/2016	0.209		0.0701	0.0534
8/30/2016			0.0687	
9/1/2016	0.215			0.0445
10/24/2016			0.07	
10/25/2016	0.307	0.173		0.0464
1/3/2017			0.061	
1/4/2017	0.311			0.0379
1/6/2017		0.167		
4/3/2017			0.0612	
4/4/2017	0.317			
4/5/2017			0.0534	
4/6/2017		0.136		
7/11/2017	0.299		0.0624	
7/12/2017				0.0944
7/13/2017		0.0891		
10/2/2017	0.216		0.0618	
10/4/2017		0.113		
1/9/2018		0.0901	0.0574	
1/10/2018	0.347			0.0603
7/9/2018	0.37		0.056	
7/11/2018		0.065		
1/16/2019		0.062	0.062	
1/17/2019				0.13
1/21/2019	0.44			
3/25/2019	0.41	0.054	0.064	
3/26/2019				0.14
8/26/2019		0.11	0.065	
8/28/2019	0.43			0.09
10/7/2019			0.069	
10/8/2019		0.1		0.13
10/9/2019	0.35			

## Sen's Slope Estimator

Constituent: Barium, Selenium Analysis Run 2/17/2020 4:20 PM View: Trend Test

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWA-7 (bg)	GWA-8 (bg)	GWC-15
9/29/2000	0.093	<0.013	<0.01	<0.01
11/21/2000	0.095	<0.013		<0.01
1/20/2001	0.089	<0.013	<0.01	<0.01
3/14/2001	0.088	<0.013	<0.01	<0.01
7/16/2001	0.096	<0.013	<0.01	<0.01
11/1/2001	0.094	<0.013	<0.01	<0.01
4/25/2002	0.085	<0.013	<0.01	<0.01
11/20/2002			<0.01	0.0094
6/6/2003	0.09	<0.013	<0.01	
12/12/2003	0.084	<0.013	<0.01	
5/26/2004	0.08	<0.013	<0.01	<0.01
12/7/2004	0.098	<0.013	<0.01	<0.01
6/21/2005	0.084	<0.013	<0.01	<0.01
12/12/2005	0.07	<0.013	<0.01	<0.01
4/4/2006			<0.01	
6/27/2006	0.083	<0.013	<0.01	<0.01
8/30/2006			<0.01	
12/4/2006	0.072	<0.013	<0.01	<0.01
2/15/2007			<0.01	
6/23/2007	0.087	<0.013	<0.01	<0.01
9/11/2007			<0.01	
12/11/2007	0.082	<0.013	<0.01	<0.01
3/11/2008			<0.01	
6/23/2008	0.1	<0.013	<0.01	
6/24/2008				<0.01
11/3/2008			<0.01	
12/4/2008	0.12	<0.013	<0.01	
12/5/2008				<0.01
3/25/2009			<0.01	
7/7/2009		<0.013	<0.01	
7/8/2009	0.14			<0.01
9/14/2009			<0.01	
12/20/2009		<0.013	<0.01	<0.01
12/21/2009	0.15			
3/4/2010			<0.01	
6/20/2010	0.21	<0.013	<0.01	<0.01
9/14/2010			<0.01	
1/7/2011	0.2	<0.013	<0.01	<0.01
4/15/2011			<0.01	
7/7/2011		<0.013	<0.01	<0.01
7/8/2011	0.18			
9/25/2011			<0.01	
1/17/2012		<0.013	<0.01	<0.01
1/18/2012	0.18			
7/9/2012		<0.013		
7/10/2012	0.16		<0.01	
10/9/2012			<0.01	
1/18/2013	0.19	0.009	<0.01	
4/5/2013			<0.01	
7/17/2013	0.17	0.011	<0.01	<0.01
10/11/2013			<0.01	
1/13/2014		0.012		<0.01

# Sen's Slope Estimator

Page 2

Constituent: Barium, Selenium   Analysis Run 2/17/2020 4:20 PM   View: Trend Test  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWC-9	GWA-7 (bg)	GWA-8 (bg)	GWC-15
1/14/2014	0.2		<0.01	
4/3/2014			<0.01	
7/9/2014	0.16	0.011	<0.01	<0.01
10/24/2014			<0.01	
1/13/2015		0.0092		<0.01
1/14/2015	0.17		<0.01	
5/10/2015			<0.01	
7/16/2015		0.014		<0.01
7/17/2015	0.18		<0.01	
10/6/2015			<0.01	
1/17/2016				<0.01
1/18/2016	0.2	0.023	<0.01	
4/26/2016			<0.01	
7/27/2016		0.0323		<0.01
7/28/2016	0.234		0.001 (J)	
8/30/2016			<0.01	
8/31/2016	0.284			
9/1/2016		0.0438		<0.01
10/24/2016			0.0013 (J)	
10/25/2016		0.031		<0.01
10/27/2016	0.244			
1/3/2017			<0.01	
1/5/2017				<0.01
1/6/2017	0.305	0.0324		
4/3/2017			<0.01	<0.01
4/6/2017	0.249	0.0188 (J)		
7/11/2017			<0.01	<0.01
7/12/2017	0.256			
7/13/2017		0.0118		
10/2/2017			<0.01	<0.01
10/4/2017	0.356	0.0195		
1/9/2018			<0.01	0.0019 (J)
1/11/2018	0.226			
7/9/2018			<0.01	
7/10/2018				0.0086 (J)
7/11/2018	0.29			
1/16/2019		0.0071 (J)	<0.01	
1/17/2019				0.0029 (J)
1/18/2019	0.21			
3/25/2019			<0.01	
3/26/2019				0.0074 (J)
3/27/2019	0.19			
8/26/2019			<0.01	
8/27/2019				0.0092 (J)
8/28/2019	0.17			
10/7/2019			<0.01	
10/8/2019		0.0072 (J)		0.014
10/9/2019	0.18			

## Sen's Slope Estimator

Constituent: Zinc Analysis Run 2/17/2020 4:20 PM View: Trend Test

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-13
9/29/2000	<0.0025	<0.01	<0.0025
11/21/2000	<0.0025		<0.0025
1/20/2001	<0.0025		<0.0025
3/14/2001	<0.0025	<0.01	<0.0025
7/16/2001	<0.0025	<0.01	<0.0025
11/1/2001	<0.0025	<0.01	
4/25/2002	<0.0025	<0.01	<0.0025
11/20/2002			0.023
6/6/2003			<0.0025
12/12/2003			<0.0025
5/26/2004	0.013	<0.01	0.035
12/7/2004	<0.0025	<0.01	0.018
6/21/2005	<0.0025	<0.01	0.014
12/12/2005	0.014	0.01	0.023
4/4/2006		<0.01	
6/27/2006	0.01	0.0043	0.023
12/4/2006	0.0065	0.0053	
2/15/2007		0.0045	
6/23/2007	0.0049	0.0043	0.036
9/11/2007		0.004	
12/11/2007	0.0043	0.0048	0.011
3/11/2008		0.0043	
6/23/2008	0.0025	0.0037	0.0091
11/3/2008		0.0032	
12/4/2008	0.0025	0.0029	0.0038
3/25/2009		0.0055	
7/7/2009	<0.0025	0.0028	
7/8/2009			<0.0025
9/14/2009		0.0027	
12/20/2009	0.0031	0.0029	
12/21/2009			0.0032
3/4/2010		0.0042	
6/20/2010	<0.0025	0.0027	<0.0025
9/14/2010		<0.01	
1/6/2011			0.004
1/7/2011	<0.0025	0.0032	
4/15/2011		<0.01	
7/7/2011	0.0031	0.005	0.0037
9/25/2011		0.0041	
1/17/2012	0.004	0.0043	0.0031
4/4/2012		<0.01	
7/9/2012	0.0096		0.003
7/10/2012		0.0028	
10/9/2012		0.0033	
1/17/2013			<0.0025
1/18/2013	0.051	0.0038	
4/5/2013		0.0026	
7/16/2013			0.0029
7/17/2013	0.042	<0.01	
10/11/2013		0.0046	
1/13/2014	0.0025		0.0025
1/14/2014		0.0025	

# Sen's Slope Estimator

Page 2

Constituent: Zinc Analysis Run 2/17/2020 4:20 PM View: Trend Test  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-13
4/3/2014		0.0029	
7/8/2014			0.0018 (J)
7/9/2014	0.064	0.002 (J)	
10/24/2014		0.0031	
1/13/2015	0.066		0.0028
1/14/2015		0.003	
5/10/2015		0.0028	
7/16/2015	0.036		0.0018 (J)
7/17/2015		0.0018 (J)	
10/6/2015		0.0018 (J)	
1/18/2016	0.035	0.0028	0.0017 (J)
4/26/2016		<0.01	
7/26/2016			0.0028 (J)
7/27/2016	0.0529		
7/28/2016		0.0018 (J)	
10/24/2016		0.0024 (J)	
10/25/2016	0.0035 (J)		
1/3/2017		0.0035 (J)	
1/5/2017	0.0235		0.0021 (J)
4/3/2017		0.0041 (J)	
4/6/2017	0.0829		0.0027 (J)
7/11/2017		0.0029 (J)	
7/12/2017			0.0043 (J)
7/13/2017	0.0853		
10/2/2017		0.0026 (J)	
10/4/2017	0.0263		
1/9/2018	0.0665	0.0035 (J)	
1/10/2018			0.0021 (J)
7/9/2018		0.0022 (J)	
7/11/2018	0.02 (J)		0.0039 (J)
1/16/2019	0.014 (J)	0.0037 (J)	0.047
3/25/2019		<0.01	
3/26/2019			0.03
10/7/2019		0.0077 (J)	
10/8/2019	0.095		0.053



**Appendix III Statistics (from 2019 Semiannual Groundwater Monitoring and  
Corrective Action Report)**

## Interwell Prediction Limit Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 12/10/2019, 11:08 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Calcium (mg/L)	GWC-1	31.7	n/a	10/9/2019	51.2	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-11	31.7	n/a	10/8/2019	69.2	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-12	31.7	n/a	10/9/2019	54.2	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-14	31.7	n/a	10/8/2019	146	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-15	31.7	n/a	10/8/2019	129	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-16	31.7	n/a	10/8/2019	205	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-17	31.7	n/a	10/9/2019	56.6	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-20	31.7	n/a	10/9/2019	80.1	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-21	31.7	n/a	10/8/2019	49.5	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWB-4R	31.7	n/a	10/9/2019	46.7	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-17	260	n/a	10/9/2019	330	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
pH (SU)	GWC-15	6.43	4.24	10/8/2019	6.65	Yes	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
pH (SU)	GWC-20	6.43	4.24	10/9/2019	6.5	Yes	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-11	160	n/a	10/8/2019	310	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-12	160	n/a	10/9/2019	392	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-14	160	n/a	10/8/2019	428	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-16	160	n/a	10/8/2019	872	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-17	160	n/a	10/9/2019	346	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWB-6R	160	n/a	10/9/2019	255	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2

# Interwell Prediction Limit All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 12/10/2019, 11:08 AM

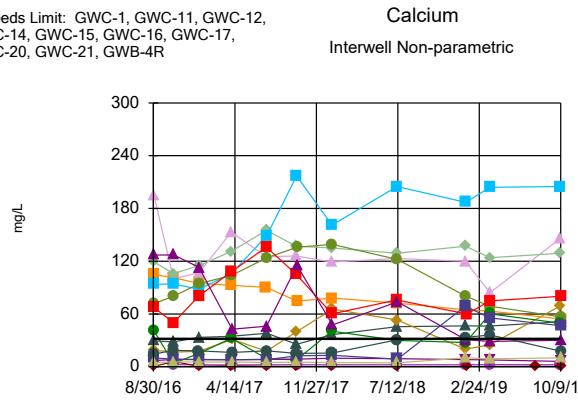
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Calcium (mg/L)	GWC-1	31.7	n/a	10/9/2019	51.2	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-11	31.7	n/a	10/8/2019	69.2	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-12	31.7	n/a	10/9/2019	54.2	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-13	31.7	n/a	10/8/2019	2.3	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-14	31.7	n/a	10/8/2019	146	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-15	31.7	n/a	10/8/2019	129	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-16	31.7	n/a	10/8/2019	205	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-17	31.7	n/a	10/9/2019	56.6	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-2	31.7	n/a	10/9/2019	0.18	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-20	31.7	n/a	10/9/2019	80.1	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-21	31.7	n/a	10/8/2019	49.5	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-22	31.7	n/a	10/9/2019	30.1	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-9	31.7	n/a	10/9/2019	6	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWB-4R	31.7	n/a	10/9/2019	46.7	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWB-5R	31.7	n/a	10/9/2019	17.7	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWB-6R	31.7	n/a	10/9/2019	10.1	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-1	260	n/a	10/9/2019	7.2	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-11	260	n/a	10/8/2019	89	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-12	260	n/a	10/9/2019	44.1	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-13	260	n/a	10/8/2019	4	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-14	260	n/a	10/8/2019	40.2	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-15	260	n/a	10/8/2019	2.9	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-16	260	n/a	10/8/2019	46.4	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-17	260	n/a	10/9/2019	330	Yes	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-2	260	n/a	10/9/2019	7	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-20	260	n/a	10/9/2019	5.4	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-21	260	n/a	10/8/2019	7.8	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-22	260	n/a	10/9/2019	25.3	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-9	260	n/a	10/9/2019	19	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWB-4R	260	n/a	10/9/2019	32.1	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWB-5R	260	n/a	10/9/2019	239	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWB-6R	260	n/a	10/9/2019	49.7	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GWC-1	0.4774	n/a	10/9/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-11	0.4774	n/a	10/8/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-12	0.4774	n/a	10/9/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-13	0.4774	n/a	10/8/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-14	0.4774	n/a	10/8/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-15	0.4774	n/a	10/8/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-16	0.4774	n/a	10/8/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-17	0.4774	n/a	10/9/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-2	0.4774	n/a	10/9/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-20	0.4774	n/a	10/9/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-21	0.4774	n/a	10/8/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-22	0.4774	n/a	10/9/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-9	0.4774	n/a	10/9/2019	0.068	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWB-4R	0.4774	n/a	10/9/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWB-5R	0.4774	n/a	10/9/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWB-6R	0.4774	n/a	10/9/2019	0.3ND	No	24	25	No	0.0004702	Param Inter 1 of 2
pH (SU)	GWC-1	6.43	4.24	10/9/2019	5.82	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
pH (SU)	GWC-11	6.43	4.24	10/8/2019	4.93	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2

# Interwell Prediction Limit All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 12/10/2019, 11:08 AM

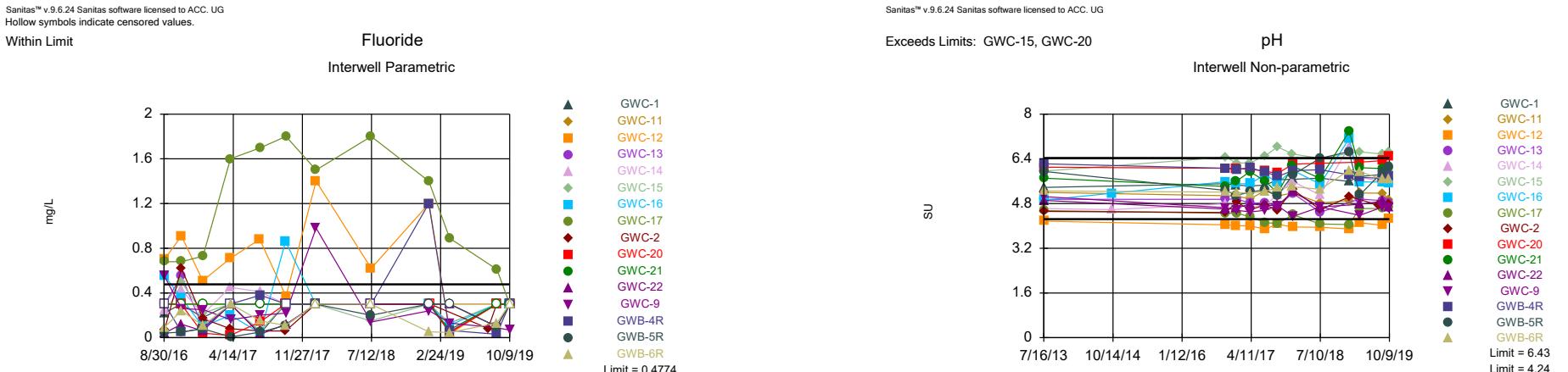
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
pH (SU)	GWC-12	6.43	4.24	10/9/2019	4.25	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
pH (SU)	GWC-13	6.43	4.24	10/8/2019	4.81	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
pH (SU)	GWC-14	6.43	4.24	10/8/2019	5.68	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
<b>pH (SU)</b>	<b>GWC-15</b>	<b>6.43</b>	<b>4.24</b>	<b>10/8/2019</b>	<b>6.65</b>	<b>Yes</b>	<b>22</b>	<b>0</b>	<b>n/a</b>	<b>0.006133</b>	<b>NP Inter (normality) 1 of 2</b>
pH (SU)	GWC-16	6.43	4.24	10/8/2019	5.54	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
pH (SU)	GWC-17	6.43	4.24	10/9/2019	4.66	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
pH (SU)	GWC-2	6.43	4.24	10/9/2019	4.79	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
<b>pH (SU)</b>	<b>GWC-20</b>	<b>6.43</b>	<b>4.24</b>	<b>10/9/2019</b>	<b>6.5</b>	<b>Yes</b>	<b>22</b>	<b>0</b>	<b>n/a</b>	<b>0.006133</b>	<b>NP Inter (normality) 1 of 2</b>
pH (SU)	GWC-21	6.43	4.24	10/8/2019	6.09	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
pH (SU)	GWC-22	6.43	4.24	10/9/2019	4.68	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
pH (SU)	GWC-9	6.43	4.24	10/9/2019	4.62	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
pH (SU)	GWB-4R	6.43	4.24	10/9/2019	5.79	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
pH (SU)	GWB-5R	6.43	4.24	10/9/2019	6.11	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
pH (SU)	GWB-6R	6.43	4.24	10/9/2019	5.66	No	22	0	n/a	0.006133	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-1	160	n/a	10/9/2019	76.3	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
<b>Sulfate (mg/L)</b>	<b>GWC-11</b>	<b>160</b>	<b>n/a</b>	<b>10/8/2019</b>	<b>310</b>	<b>Yes</b>	<b>22</b>	<b>0</b>	<b>n/a</b>	<b>0.003067</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>GWC-12</b>	<b>160</b>	<b>n/a</b>	<b>10/9/2019</b>	<b>392</b>	<b>Yes</b>	<b>22</b>	<b>0</b>	<b>n/a</b>	<b>0.003067</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-13	160	n/a	10/8/2019	22	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
<b>Sulfate (mg/L)</b>	<b>GWC-14</b>	<b>160</b>	<b>n/a</b>	<b>10/8/2019</b>	<b>428</b>	<b>Yes</b>	<b>22</b>	<b>0</b>	<b>n/a</b>	<b>0.003067</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-15	160	n/a	10/8/2019	45.8	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
<b>Sulfate (mg/L)</b>	<b>GWC-16</b>	<b>160</b>	<b>n/a</b>	<b>10/8/2019</b>	<b>872</b>	<b>Yes</b>	<b>22</b>	<b>0</b>	<b>n/a</b>	<b>0.003067</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>GWC-17</b>	<b>160</b>	<b>n/a</b>	<b>10/9/2019</b>	<b>346</b>	<b>Yes</b>	<b>22</b>	<b>0</b>	<b>n/a</b>	<b>0.003067</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-2	160	n/a	10/9/2019	10.1	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-20	160	n/a	10/9/2019	58.5	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-21	160	n/a	10/8/2019	85.6	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-22	160	n/a	10/9/2019	80.2	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-9	160	n/a	10/9/2019	41.1	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWB-4R	160	n/a	10/9/2019	38.5	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWB-5R	160	n/a	10/9/2019	90.8	No	22	0	n/a	0.003067	NP Inter (normality) 1 of 2
<b>Sulfate (mg/L)</b>	<b>GWB-6R</b>	<b>160</b>	<b>n/a</b>	<b>10/9/2019</b>	<b>255</b>	<b>Yes</b>	<b>22</b>	<b>0</b>	<b>n/a</b>	<b>0.003067</b>	<b>NP Inter (normality) 1 of 2</b>

Exceeds Limit: GWC-1, GWC-11, GWC-12, GWC-14, GWC-15, GWC-16, GWC-17, GWC-20, GWC-21, GBW-4R



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. Annual per-constituent alpha = 0.09361. Individual comparison alpha = 0.003067 (1 of 2). Comparing 16 points to limit.

Prediction Limit Analysis Run 12/10/2019 11:05 AM View: Appendix III Interwell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Prediction Limit Analysis Run 12/10/2019 11:05 AM View: Appendix III Interwell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Exceeds Limit: GWC-17



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. Annual per-constituent alpha = 0.09361. Individual comparison alpha = 0.003067 (1 of 2). Comparing 16 points to limit.

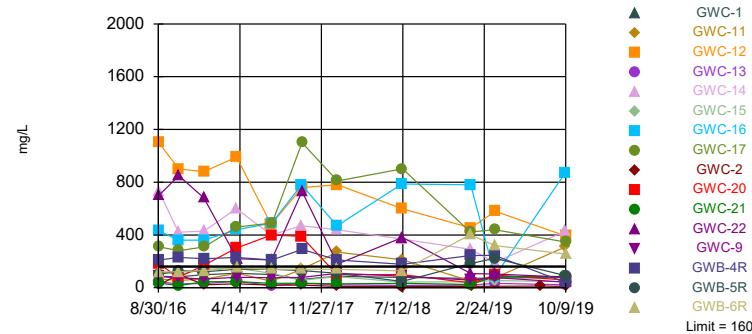
Prediction Limit Analysis Run 12/10/2019 11:05 AM View: Appendix III Interwell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Prediction Limit Analysis Run 12/10/2019 11:05 AM View: Appendix III Interwell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Exceeds Limit: GWC-11, GWC-12, GWC-14, GWC-16, GWC-17, GWB-6R

### Sulfate Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. Annual per-constituent alpha = 0.09361. Individual comparison alpha = 0.003067 (1 of 2). Comparing 16 points to limit.

Prediction Limit Analysis Run 12/10/2019 11:05 AM View: Appendix III Interwell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/10/2019 11:08 AM View: Appendix III Interwell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-5R	GWA-8 (bg)	GWC-1	GWC-9	GWC-22	GWC-2	GWC-12	GWC-11
8/30/2016	4.68	14.3	23.8	29.4					
8/31/2016					6.9	127	0.371 (J)	105	18.8
9/1/2016									
10/24/2016			22.5						
10/25/2016				28.3					
10/26/2016	5.45	18.6				127	5.84	101	16.6
10/27/2016					8.2				
1/3/2017		18.1	22.1						
1/4/2017				33.4		113		94.9	17.6
1/5/2017	5.35						0.379 (J)		
1/6/2017					7.97				
4/3/2017			24.6 (J)						
4/4/2017				34.6			0.993		
4/5/2017								92.5	
4/6/2017	5.41	16.2			7.95	42.7			30.9
7/10/2017								90.3	
7/11/2017			23.5			46			17.7
7/12/2017	4.81	18.1		38	8.37				
7/13/2017							0.388 (J)		
10/2/2017			22.7						
10/3/2017	5.17	15.2		25.5			0.251 (J)		39.8
10/4/2017					8.57	115		74.6	
1/9/2018	4.73		23.2				0.177 (J)		
1/10/2018		15.5		36.5				78.1	65.6
1/11/2018					9.78	47.6			
7/9/2018			24.6 (J)						
7/10/2018	4.5	30.6		45.5			0.17 (J)		
7/11/2018					9.2	73.7		72.2	53
1/16/2019	10.1	33.3	27.7	46.5					
1/17/2019								64.7	19.8 (J)
1/18/2019					8.1	30.6			
1/21/2019							0.19 (J)		
3/25/2019			31.7						
3/26/2019	9	36.1		46.3				63.1	25.1
3/27/2019					7.7	28.8			
7/30/2019							0.43		
10/7/2019			31.6						
10/8/2019									69.2
10/9/2019	10.1	17.7		51.2	6	30.1	0.18	54.2	

# Prediction Limit

Page 2

Constituent: Calcium (mg/L) Analysis Run 12/10/2019 11:08 AM View: Appendix III Interwell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWB-4R	GWC-21	GWC-20	GWC-16	GWC-15	GWC-14	GWC-17	GWC-13
8/30/2016									
8/31/2016									
9/1/2016	5.59	9.91	40.5	67.2	93.8	119	194	71.9	
10/24/2016									
10/25/2016	6.43		3.91	50.1	94.1	106	100		
10/26/2016		8.56						80.3	2.25
10/27/2016									
1/3/2017									
1/4/2017			15.2	80.4	88.2				
1/5/2017						115	107	94.4	2.27
1/6/2017	8.13	8.18							
4/3/2017						131			
4/4/2017		8.12	32.3	108			153		
4/5/2017					106			104	
4/6/2017	7.72								2.04
7/10/2017									
7/11/2017				136		155	125		
7/12/2017		8			149				2.25
7/13/2017	4.57		8.92					124	
10/2/2017				105		137	126		
10/3/2017			7.88		217				
10/4/2017	6.41	12.5						136	2.19
1/9/2018	4.68		40.5			135	119		
1/10/2018				60.1	161				2.28
1/11/2018		12.9						139	
7/9/2018				75.9			123		
7/10/2018			29.8		205	129			
7/11/2018	3.9	8.6						122	2.3
1/16/2019	4.3	68.8					120	80.5	2.3
1/17/2019				27.6		187	137		
1/18/2019									
1/21/2019				60					
3/25/2019	3.9	55.6			74.8				
3/26/2019				60.1		204	124	84.2	68.8
3/27/2019									2.4
7/30/2019									
10/7/2019									
10/8/2019	3.5			49.5		205	129	146	
10/9/2019		46.7			80.1				56.6

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/10/2019 11:08 AM View: Appendix III Interwell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R	GWC-1	GWA-8 (bg)	GWB-6R	GWC-12	GWC-13	GWC-11	GWC-9	GWC-2
8/30/2016	31	5.5	15	60					
8/31/2016					210	4.3	3.5	17	7.8
9/1/2016									
10/24/2016			13						
10/25/2016		5.1							
10/26/2016	24			67	200	4.9	2.5		12
10/27/2016								17	
1/3/2017	29		13						
1/4/2017		6.9			160		3.8		
1/5/2017				70		4.1			7.4
1/6/2017								16	
4/3/2017			14						
4/4/2017		6.5			140				8.7
4/5/2017									
4/6/2017	27			76		3.7	7.1	17	
7/10/2017					88				
7/11/2017			13				3.1		
7/12/2017	31	6.5		64		2.6		18	
7/13/2017									8.3
10/2/2017			15						
10/3/2017	27	4.5		73			46		9
10/4/2017					100	3		18	
1/9/2018			13	61					
1/10/2018	59	6.9				3.4			8.2
1/11/2018					78		100	16	
7/9/2018			15.4						
7/10/2018	172	6.2		60.2					7.3
7/11/2018					66.9	3.2	53.7	16.2	
1/16/2019	49.7	6.6	16	54.1		3.8			
1/17/2019					52		6.6		
1/18/2019								17.5	
1/21/2019									6.9
3/25/2019			17.7						
3/26/2019	47.9	7		51.8		3.2			
3/27/2019					45.6			11.9	18.9
7/30/2019									7.1
10/7/2019			18						
10/8/2019						4	89		
10/9/2019	239	7.2		49.7	44.1			19	7

# Prediction Limit

Page 2

Constituent: Chloride (mg/L) Analysis Run 12/10/2019 11:08 AM View: Appendix III Interwell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22	GWC-14	GWC-15	GWC-16	GWC-17	GWC-21	GWC-20	GWA-7 (bg)	GWB-4R
8/30/2016									
8/31/2016	320								
9/1/2016		60	10	43	610	5.9	16	190	160
10/24/2016									
10/25/2016		36	6.5	34		4.4	8.1	175 (D)	
10/26/2016	450				570				110
10/27/2016									
1/3/2017									
1/4/2017	330			29		7.7	13		
1/5/2017		37	10		710			180	67
1/6/2017									
4/3/2017			7.3						
4/4/2017		47				8	23		80
4/5/2017				36	860				
4/6/2017	50							200	
7/10/2017									
7/11/2017	70	34	5.7				31		
7/12/2017				44					120
7/13/2017					860	5.4		200	
10/2/2017		34	4.4				30		
10/3/2017				58		4.4			
10/4/2017	360				1000			260	130
1/9/2018		24	5.7			4.4		210	
1/10/2018				36			9.7		
1/11/2018	74				940				60
7/9/2018		25.9					10.8		
7/10/2018			3.1	57		6.3			
7/11/2018	164				864			177	75.9
1/16/2019		29.2			469			165	20.2
1/17/2019			3.2	48.9		5.4			
1/18/2019	11								
1/21/2019							5.1		
3/25/2019							9.4	147	19.7
3/26/2019		21.1	3	5.1	439	11.9			
3/27/2019	11.5								
7/30/2019									
10/7/2019									
10/8/2019		40.2	2.9	46.4		7.8		125	
10/9/2019	25.3				330		5.4		32.1

## Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/10/2019 11:08 AM View: Appendix III Interwell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-5R	GWA-8 (bg)	GWC-1	GWC-13	GWC-22	GWC-9	GWC-11	GWC-12
8/30/2016	0.09 (J)	0.04 (J)	0.1 (J)	0.22 (J)					
8/31/2016				<0.3		0.04 (J)	0.55	<0.3	0.7
9/1/2016									
10/24/2016			0.18 (J)						
10/25/2016				<0.3					
10/26/2016	0.24 (J)	0.05 (J)			0.55	0.12 (J)		<0.3	0.91
10/27/2016							0.26 (J)		
1/3/2017		0.08 (J)	0.18 (J)						
1/4/2017				0.18 (J)		0.06 (J)		<0.3	0.51
1/5/2017	0.11 (J)				0.09 (J)				
1/6/2017						0.25 (J)			
4/3/2017			0.12 (J)						
4/4/2017				<0.3					
4/5/2017									0.71
4/6/2017	0.3	0.006 (J)			<0.3	<0.3	0.16 (J)	<0.3	
7/10/2017									0.88
7/11/2017			0.39			0.03 (J)		<0.3	
7/12/2017	0.15 (J)	0.05 (J)		0.04 (J)	<0.3		0.2 (J)		
7/13/2017									
10/2/2017			0.12 (J)						
10/3/2017	0.11 (J)	0.11 (J)		<0.3				<0.3	
10/4/2017					<0.3	0.12 (J)	0.22 (J)		0.37
1/9/2018	<0.3		0.21 (J)						
1/10/2018		<0.3		<0.3	<0.3				
1/11/2018						<0.3	0.98	<0.3	1.4
7/9/2018			0.04 (J)						
7/10/2018	<0.3	0.2 (J)		<0.3					
7/11/2018					<0.3	<0.3	0.14 (J)	<0.3	0.62
1/16/2019	0.053 (J)	<0.3	<0.3	<0.3	<0.3				
1/17/2019								<0.3	1.2
1/18/2019						<0.3	0.24 (J)		
1/21/2019									
3/25/2019			0.082 (J)						
3/26/2019	0.046 (J)	<0.3		0.051 (J)	0.052 (J)				
3/27/2019						<0.3	0.13 (J)	<0.3	0.036 (J)
7/30/2019									
8/26/2019			0.13						
8/27/2019	0.13 (J)			<0.3	<0.3	0.1		<0.3	0.3
8/28/2019		0.097 (J)					0.088 (J)		
10/7/2019			<0.3						
10/8/2019					<0.3			<0.3	
10/9/2019	<0.3	<0.3		<0.3		<0.3	0.068 (J)		<0.3

# Prediction Limit

Page 2

Constituent: Fluoride (mg/L) Analysis Run 12/10/2019 11:08 AM View: Appendix III Interwell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-2	GWA-7 (bg)	GWC-20	GWC-17	GWB-4R	GWC-16	GWC-15	GWC-14	GWC-21
8/30/2016									
8/31/2016	0.07 (J)								
9/1/2016		<0.3	<0.3	0.68	<0.3	0.55	<0.3	0.25 (J)	<0.3
10/24/2016									
10/25/2016		0.07 (J)	<0.3			0.36	0.5	0.43	<0.3
10/26/2016	0.62			0.68	0.05 (J)				
10/27/2016									
1/3/2017									
1/4/2017			0.04 (J)			0.1 (J)			<0.3
1/5/2017	0.17 (J)			0.73			0.22 (J)	0.21 (J)	
1/6/2017		0.2 (J)			0.08 (J)				
4/3/2017							<0.3		
4/4/2017	0.08 (J)		0.02 (J)		<0.3			0.45	<0.3
4/5/2017				1.6		0.2 (J)			
4/6/2017		0.05 (J)							
7/10/2017									
7/11/2017			0.14 (J)				0.06 (J)	0.41	
7/12/2017					0.38	0.04 (J)			
7/13/2017	0.06 (J)	0.41		1.7					<0.3
10/2/2017			<0.3				<0.3	<0.3	
10/3/2017	0.06 (J)					0.86			<0.3
10/4/2017		0.04 (J)		1.8	<0.3				
1/9/2018		0.46					<0.3	<0.3	<0.3
1/10/2018	<0.3		<0.3			<0.3			
1/11/2018				1.5	<0.3				<0.3
7/9/2018			<0.3						
7/10/2018	<0.3					<0.3	0.15 (J)		<0.3
7/11/2018		<0.3		1.8	<0.3				
1/16/2019		0.49		1.4	1.2			0.13 (J)	<0.3
1/17/2019						<0.3	<0.3		<0.3
1/18/2019									
1/21/2019	<0.3		<0.3						
3/25/2019		0.21 (J)	0.043 (J)		0.064 (J)				
3/26/2019				0.89		0.11 (J)	0.13 (J)	0.13 (J)	0.071 (J)
3/27/2019									
7/30/2019	0.083 (J)								
8/26/2019		<0.3							
8/27/2019	<0.3				0.031 (J)		<0.3	<0.3	
8/28/2019			<0.3	0.61		<0.3			<0.3
10/7/2019									
10/8/2019		<0.3				<0.3	<0.3	<0.3	<0.3
10/9/2019	<0.3		<0.3	<0.3	<0.3				

## Prediction Limit

Constituent: pH (SU) Analysis Run 12/10/2019 11:08 AM View: Appendix III Interwell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-12	GWC-20	GWC-17	GWB-6R	GWC-21	GWC-16	GWC-2	GWC-22	GWC-15
7/16/2013	4.17	6.1	4.55	5.25	5.71	4.92	4.52	4.91	5.96
10/11/2014						5.17			
10/24/2016									
10/25/2016		6.06			5.41	5.58			6.46
10/26/2016	4.04		4.45	5.21			4.48	4.6	
10/27/2016									
1/3/2017									
1/4/2017	4.01	6.05			5.6	5.51		4.63	
1/5/2017			4.45	5.2			4.85		6.25
1/6/2017									
4/3/2017									6.25
4/4/2017		6.03			5.94		4.58		
4/5/2017	4		4.33			5.51			
4/6/2017				5.17				4.79	
7/10/2017	3.89		5.96					4.73	6.5
7/11/2017									
7/12/2017				5.24		5.84			
7/13/2017			4.11		5.6		4.74		
10/2/2017		5.88		5.36	5.18	5.55	4.57		6.83
10/3/2017									
10/4/2017	4.06		4.09					4.74	
1/9/2018				5.4	6.14				6.57
1/10/2018		6.21				5.99	5.31		
1/11/2018	3.96		4.4					5.22	
7/9/2018		6.24			5.31	5.7	5.5		6.42
7/10/2018							4.58		
7/11/2018	3.95		4.07					4.68	
1/16/2019			4.05	5.99					
1/17/2019	3.89				7.39	7.13			
1/21/2019							5.05		
3/25/2019		6.28							
3/26/2019			4.62	5.94	6.08	5.57			6.65
3/27/2019	4.11							4.77	
7/30/2019							4.74		
8/26/2019									
8/27/2019	4.02			5.67			4.77	4.89	6.57
8/28/2019		6.34	4.62		6.05	5.57			
10/7/2019									
10/8/2019					6.09	5.54			6.65
10/9/2019	4.25	6.5	4.66	5.66			4.79	4.68	

# Prediction Limit

Page 2

Constituent: pH (SU) Analysis Run 12/10/2019 11:08 AM View: Appendix III Interwell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-9	GWC-11	GWB-4R	GWB-5R	GWC-14	GWC-13	GWA-8 (bg)	GWA-7 (bg)
7/16/2013	5.38	5.05	5.2	6.22	5.95	4.62	4.95		
10/11/2014						4.58		4.42	
10/24/2016								4.36	
10/25/2016	5.51					4.79			6.17
10/26/2016			5.08	6.06	5.27		4.95		
10/27/2016		4.65				5.09			
1/3/2017						5.09		4.28	
1/4/2017	5.46		5.06						
1/5/2017						4.73	4.97		
1/6/2017		4.56		6.02					6.16
4/3/2017								4.29	
4/4/2017	5.43			6.08		4.68			
4/5/2017							4.81		
4/6/2017		4.5	4.97		5.22				6.26
7/10/2017									
7/11/2017			5.26			4.72		4.35	
7/12/2017	5.46	4.56		5.93	5.29		4.83		
7/13/2017									5.99
10/2/2017						5.13		4.32	
10/3/2017	5.65		5.07		5.08				
10/4/2017		4.72		5.77			4.71		6.16
1/9/2018						5.59		4.44	6.43
1/10/2018	5.67				5.83		5.17		
1/11/2018		4.34	5.18	5.98				4.4	
7/9/2018						5.11			
7/10/2018	5.71				6.42				
7/11/2018		4.68	4.82	6.01			4.49		6.1
1/16/2019	5.59			5.83	6.66	6.82			6.05
1/17/2019			4.91						
1/21/2019									
3/25/2019				5.74				4.4	6.06
3/26/2019	5.77				5.1	5.74	4.96		
3/27/2019		4.38	5.18						
7/30/2019									
8/26/2019								4.26	5.91
8/27/2019	5.84		5.17	5.7		5.58	4.9		
8/28/2019		4.68			5.95				
10/7/2019								4.24	
10/8/2019			4.93			5.68	4.81		5.74
10/9/2019	5.82	4.62		5.79	6.11				

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/10/2019 11:08 AM View: Appendix III Interwell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R	GWC-1	GWA-8 (bg)	GWB-6R	GWC-12	GWC-13	GWC-11	GWC-9	GWC-2
8/30/2016	100	87	140	120					
8/31/2016					1100	43	64	84	21
9/1/2016									
10/24/2016			160						
10/25/2016		83							
10/26/2016	130			120	900	29	56		100
10/27/2016								76	
1/3/2017	120		140						
1/4/2017		99			880		65		
1/5/2017				130		32			22
1/6/2017								66	
4/3/2017			140						
4/4/2017		110							29
4/5/2017					990				
4/6/2017	140			150		49	110	79	
7/10/2017					480				
7/11/2017			130				49		
7/12/2017	140	100		140		16		75	
7/13/2017			150						20
10/2/2017									
10/3/2017	130	63		140			140		20
10/4/2017					760	33		78	
1/9/2018			120	140					
1/10/2018	110	86				22			9.5
1/11/2018					780		270	110	
7/9/2018			123						
7/10/2018	48.1	77.7		128					8.5
7/11/2018					598	17.8	211	87.4	
1/16/2019	184	71.2	129	402		20.2			
1/17/2019					454		50.3		
1/18/2019								56.9	
1/21/2019									10.2
3/25/2019			152						
3/26/2019	222	73.8		319		33.6			
3/27/2019					579		76.8	76.2	
7/30/2019									12.3
10/7/2019			156						
10/8/2019						22	310		
10/9/2019	90.8	76.3		255	392			41.1	10.1

# Prediction Limit

Page 2

Constituent: Sulfate (mg/L) Analysis Run 12/10/2019 11:08 AM View: Appendix III Interwell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22	GWC-14	GWC-15	GWC-16	GWC-17	GWC-21	GWC-20	GWA-7 (bg)	GWB-4R
8/30/2016									
8/31/2016	700								
9/1/2016		730	120	430	310	36	180	73	210
10/24/2016									
10/25/2016		420	100	360		16	79	26	
10/26/2016	850				280				230
10/27/2016									
1/3/2017									
1/4/2017	680			360		45	170		
1/5/2017		430	140		310			23	220
1/6/2017				150					
4/3/2017									
4/4/2017		600				46	300		230
4/5/2017				440	460				
4/6/2017	220							25	
7/10/2017									
7/11/2017	210	400	110				400		
7/12/2017				490					210
7/13/2017					490	33		65	
10/2/2017		470	56				390		
10/3/2017				780		34			
10/4/2017	730				1100			13	290
1/9/2018		440	84			29		45	
1/10/2018				470			99		
1/11/2018	180				810				210
7/9/2018		369					99.2		
7/10/2018			43	787		33.2			
7/11/2018	381				902			37.7	177
1/16/2019		291			422			24.5	244
1/17/2019			45.2	780		24.1			
1/18/2019	107								
1/21/2019							35.5		
3/25/2019							95.6	14.7	245
3/26/2019		192	54	87.9	439	83.9			
3/27/2019	103								
7/30/2019									
10/7/2019									
10/8/2019		428	45.8	872		85.6		32.8	
10/9/2019	80.2				346		58.5		38.5

## Intrawell Prediction Limit Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 12/10/2019, 12:33 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWC-16	6.286	10/8/2019	8.4	Yes	8	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWB-6R	4.2	10/9/2019	6.3	Yes	8	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWC-16	1386	10/8/2019	1500	Yes	8	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWB-5R	559.8	10/9/2019	2010	Yes	7	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWB-6R	569	10/9/2019	903	Yes	8	0	No	0.0004702	Param Intra 1 of 3

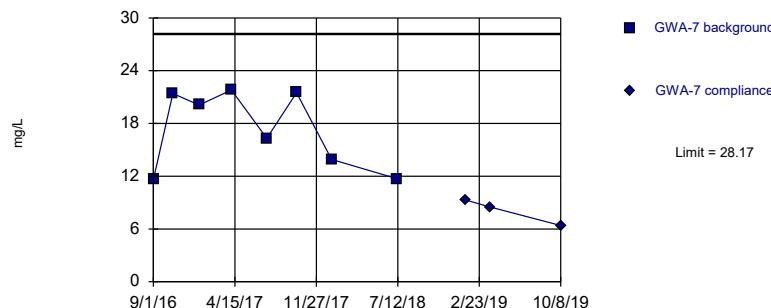
## Intrawell Prediction Limit All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 12/10/2019, 12:33 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	GWA-7	28.17	10/8/2019	6.4	No	8	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWA-8	0.1446	10/7/2019	0.12	No	8	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWC-1	1.625	10/9/2019	0.93	No	8	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWC-11	0.3714	10/8/2019	0.22	No	8	0	In(x)	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWC-12	9.63	10/9/2019	8.2	No	8	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWC-13	0.3009	10/8/2019	0.18	No	8	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWC-14	0.08961	10/8/2019	0.048	No	8	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWC-15	1.943	10/8/2019	1.1	No	7	0	No	0.0004702	Param Intra 1 of 3
<b>Boron (mg/L)</b>	<b>GWC-16</b>	<b>6.286</b>	<b>10/8/2019</b>	<b>8.4</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>No</b>	<b>0.0004702</b>	<b>Param Intra 1 of 3</b>
Boron (mg/L)	GWC-17	1.869	10/9/2019	1.3	No	8	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWC-2	0.05241	10/9/2019	0.024	No	8	0	sqrt(x)	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWC-20	5.558	10/9/2019	0.79	No	8	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWC-21	1.031	10/8/2019	1	No	8	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWC-22	16.9	10/9/2019	0.39	No	8	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWC-9	0.03214	10/9/2019	0.019	No	7	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWB-4R	9.727	10/9/2019	5.7	No	8	0	No	0.0004702	Param Intra 1 of 3
Boron (mg/L)	GWB-5R	7.397	10/9/2019	6.8	No	8	0	No	0.0004702	Param Intra 1 of 3
<b>Boron (mg/L)</b>	<b>GWB-6R</b>	<b>4.2</b>	<b>10/9/2019</b>	<b>6.3</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>No</b>	<b>0.0004702</b>	<b>Param Intra 1 of 3</b>
Total Dissolved Solids (mg/L)	GWA-7	4478	10/8/2019	1840	No	8	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWA-8	384.6	10/7/2019	275	No	8	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWC-1	460.5	10/9/2019	338	No	8	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWC-11	760	10/8/2019	613	No	8	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWC-12	1845	10/9/2019	647	No	8	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWC-13	150.3	10/8/2019	51	No	8	25	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWC-14	1226	10/8/2019	841	No	8	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWC-15	672	10/8/2019	526	No	8	0	No	0.0004702	Param Intra 1 of 3
<b>Total Dissolved Solids (mg/L)</b>	<b>GWC-16</b>	<b>1386</b>	<b>10/8/2019</b>	<b>1500</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>No</b>	<b>0.0004702</b>	<b>Param Intra 1 of 3</b>
Total Dissolved Solids (mg/L)	GWC-17	2945	10/9/2019	1100	No	8	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWC-2	157.3	10/9/2019	46	No	8	12.5	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWC-20	1016	10/9/2019	434	No	8	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWC-21	328.6	10/8/2019	278	No	8	12.5	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWC-22	2575	10/9/2019	211	No	8	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWC-9	272.4	10/9/2019	128	No	8	0	No	0.0004702	Param Intra 1 of 3
Total Dissolved Solids (mg/L)	GWB-4R	1282	10/9/2019	502	No	8	0	No	0.0004702	Param Intra 1 of 3
<b>Total Dissolved Solids (mg/L)</b>	<b>GWB-5R</b>	<b>559.8</b>	<b>10/9/2019</b>	<b>2010</b>	<b>Yes</b>	<b>7</b>	<b>0</b>	<b>No</b>	<b>0.0004702</b>	<b>Param Intra 1 of 3</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>GWB-6R</b>	<b>569</b>	<b>10/9/2019</b>	<b>903</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>No</b>	<b>0.0004702</b>	<b>Param Intra 1 of 3</b>

Within Limit

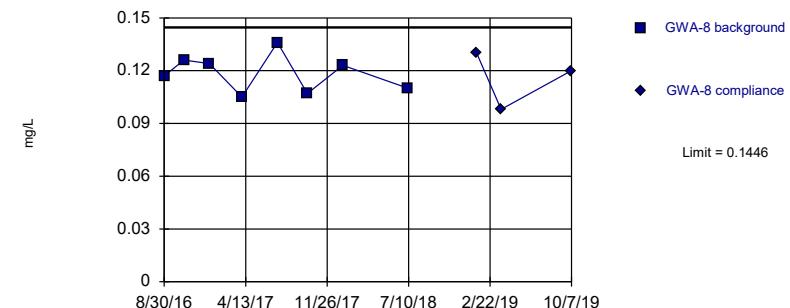
**Boron**  
Intrawell Parametric



Background Data Summary: Mean=17.29, Std. Dev.=4.455, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8385, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

**Boron**  
Intrawell Parametric



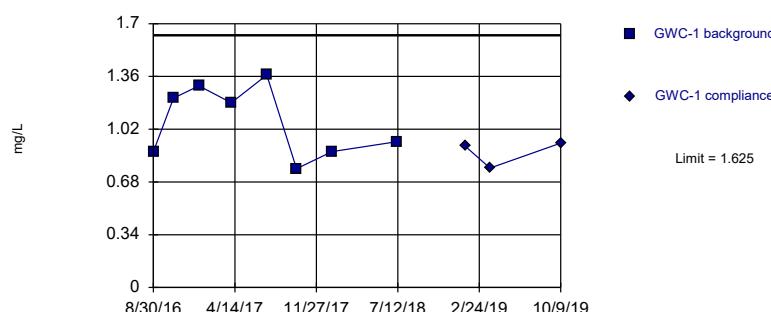
Background Data Summary: Mean=0.1185, Std. Dev.=0.0107, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9464, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

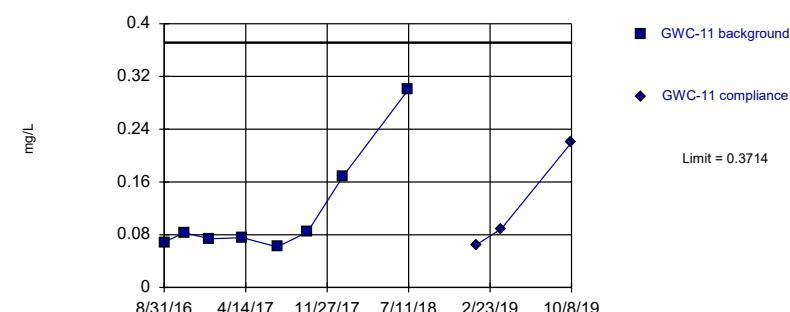
**Boron**  
Intrawell Parametric



Background Data Summary: Mean=1.067, Std. Dev.=0.2284, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9038, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

**Boron**  
Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-2.326, Std. Dev.=0.5469, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7728, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

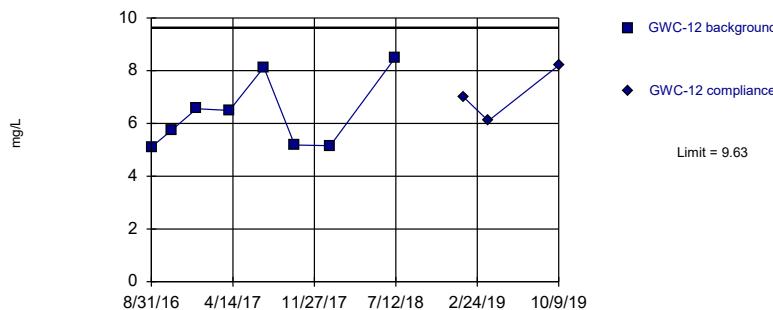
Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

### Boron

Intrawell Parametric

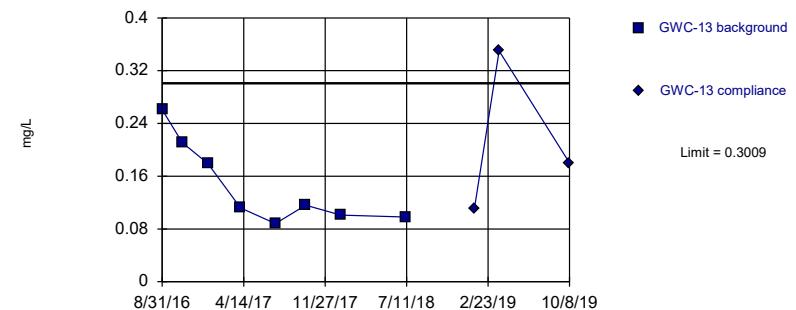


Background Data Summary: Mean=6.358, Std. Dev.=1.34, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8556, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

### Boron

Intrawell Parametric



Background Data Summary: Mean=0.1458, Std. Dev.=0.06354, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8407, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

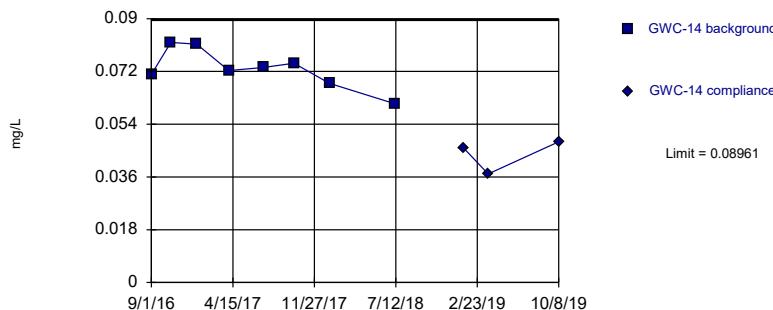
Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

### Boron

Intrawell Parametric

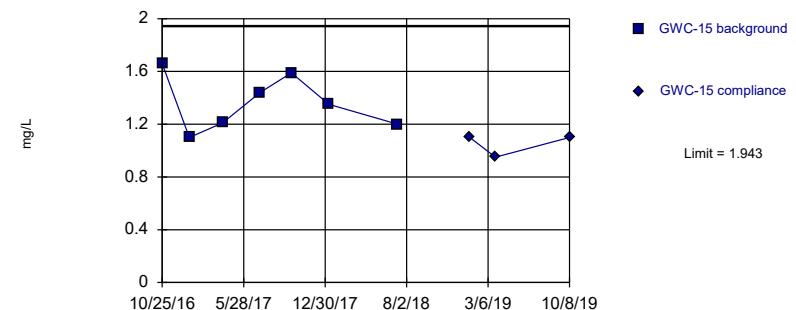


Background Data Summary: Mean=0.07295, Std. Dev.=0.006824, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9516, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

### Boron

Intrawell Parametric



Background Data Summary: Mean=1.364, Std. Dev.=0.2101, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9415, critical = 0.73. Kappa = 2.756 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

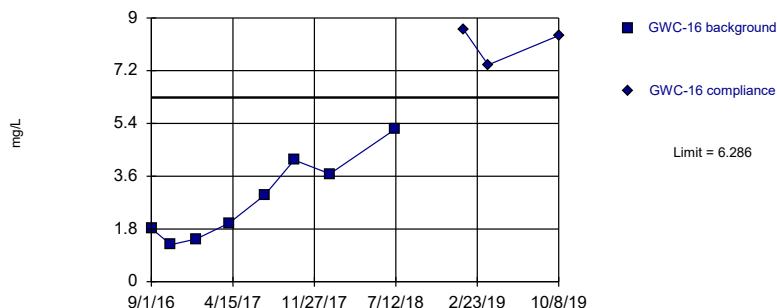
Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Exceeds Limit

### Boron

Intrawell Parametric

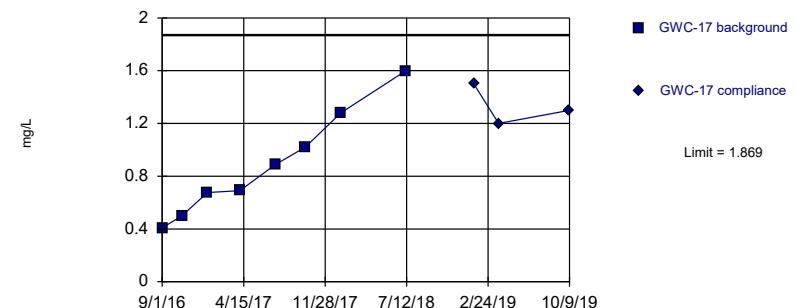


Background Data Summary: Mean=2.815, Std. Dev.=1.422, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9229, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

### Boron

Intrawell Parametric



Background Data Summary: Mean=0.8828, Std. Dev.=0.4041, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.945, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

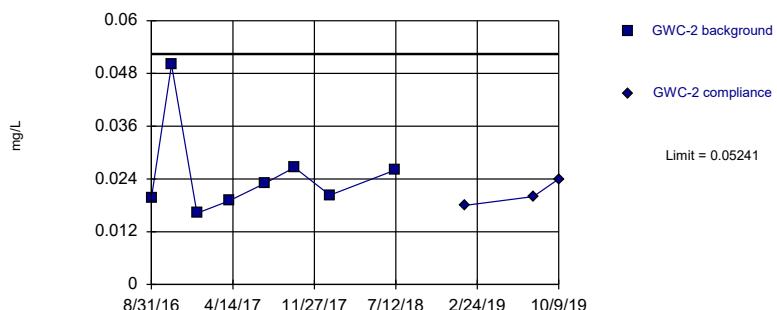
Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

### Boron

Intrawell Parametric

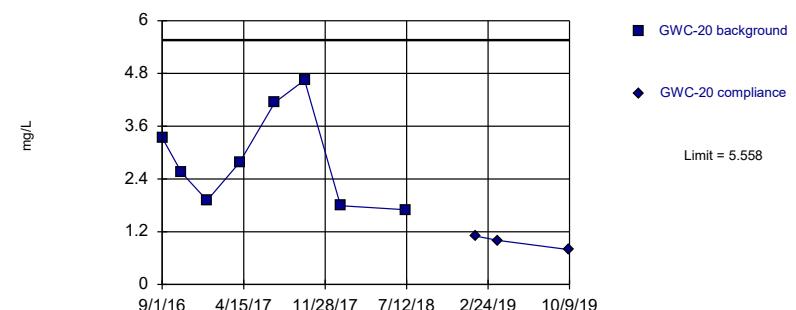


Background Data Summary (based on square root transformation): Mean=0.1559, Std. Dev.=0.02991, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.794, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

### Boron

Intrawell Parametric



Background Data Summary: Mean=2.855, Std. Dev.=1.107, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9083, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

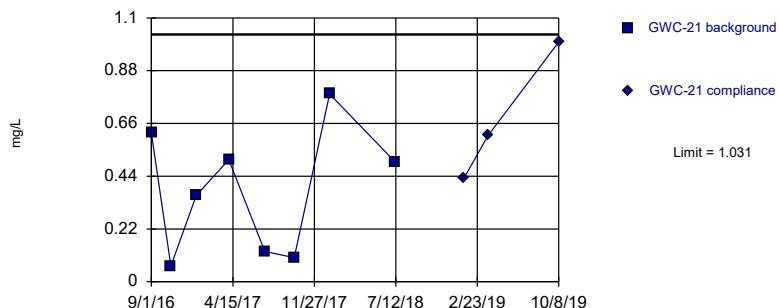
Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

### Boron

Intrawell Parametric

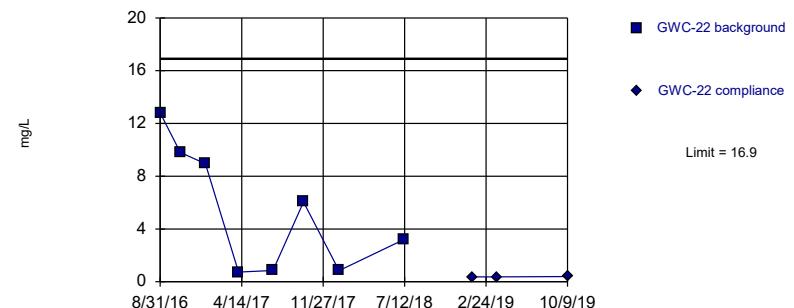


Background Data Summary: Mean=0.383, Std. Dev.=0.2654, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9192, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

### Boron

Intrawell Parametric



Background Data Summary: Mean=5.403, Std. Dev.=4.71, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8833, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

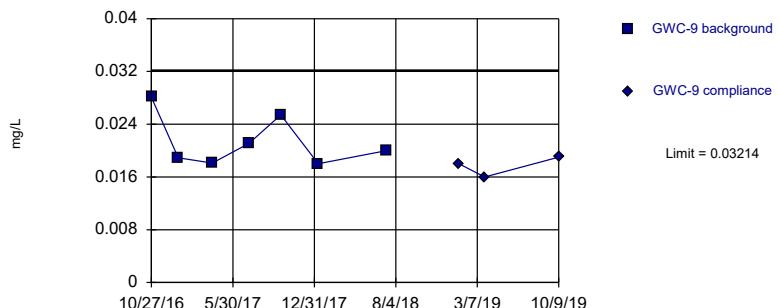
Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

### Boron

Intrawell Parametric

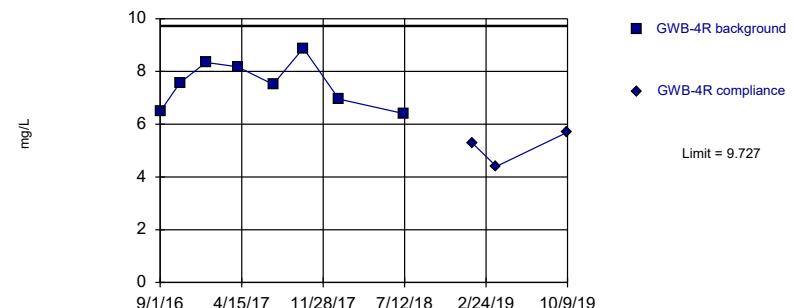


Background Data Summary: Mean=0.02137, Std. Dev.=0.003908, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8482, critical = 0.73. Kappa = 2.756 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

### Boron

Intrawell Parametric



Background Data Summary: Mean=7.539, Std. Dev.=0.8959, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9474, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

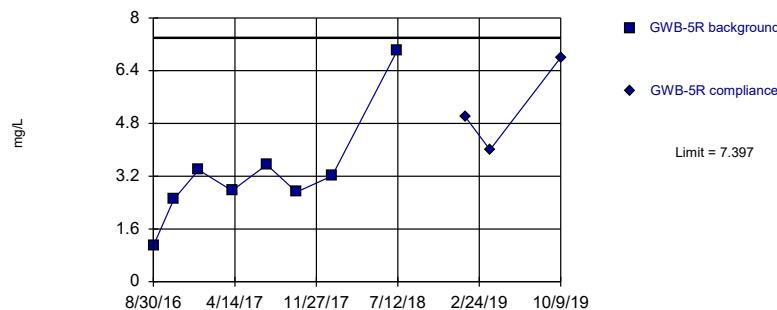
Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

### Boron

Intrawell Parametric

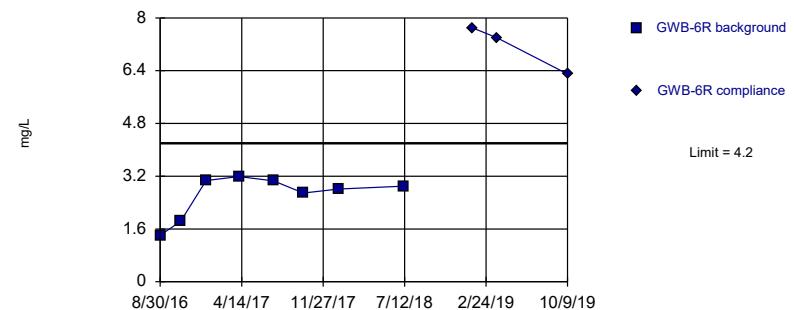


Background Data Summary: Mean=3.278, Std. Dev.=1.687, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.824, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Exceeds Limit

### Boron

Intrawell Parametric

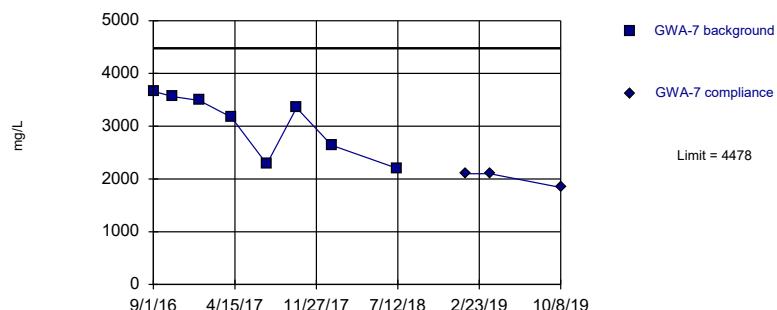


Background Data Summary: Mean=2.62, Std. Dev.=0.6468, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8089, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

### Total Dissolved Solids

Intrawell Parametric

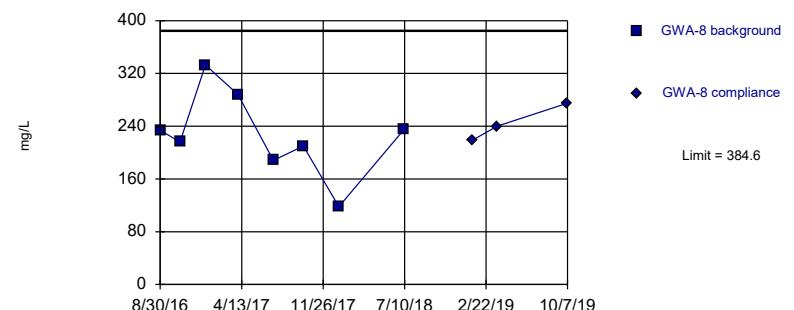


Background Data Summary: Mean=3044, Std. Dev.=587.2, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8674, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

### Total Dissolved Solids

Intrawell Parametric



Background Data Summary: Mean=227.8, Std. Dev.=64.23, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9672, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

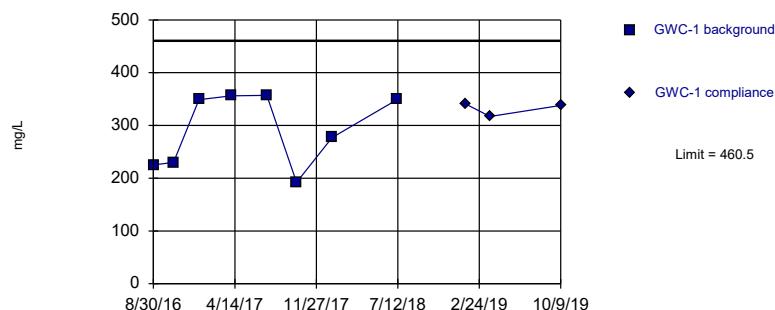
Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

## Total Dissolved Solids

Intrawell Parametric

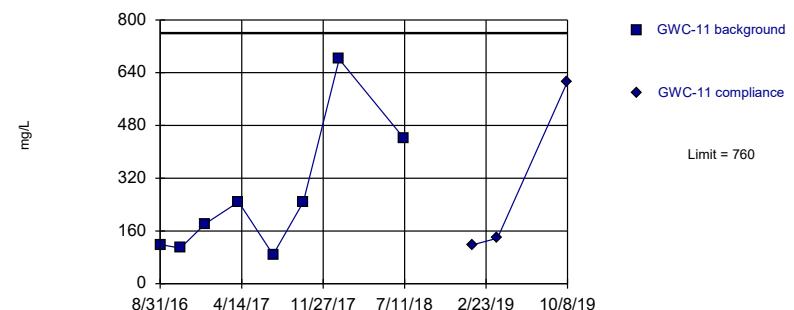


Background Data Summary: Mean=291.9, Std. Dev.=69.05, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8265, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

## Total Dissolved Solids

Intrawell Parametric



Background Data Summary: Mean=264.3, Std. Dev.=203, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8328, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

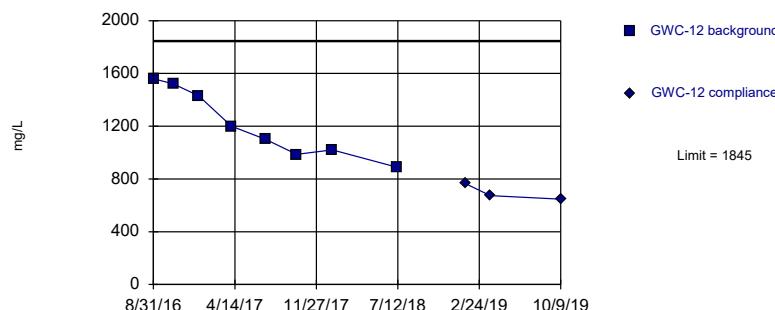
Prediction Limit Analysis Run 12/10/2019 11:09 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:10 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

## Total Dissolved Solids

Intrawell Parametric

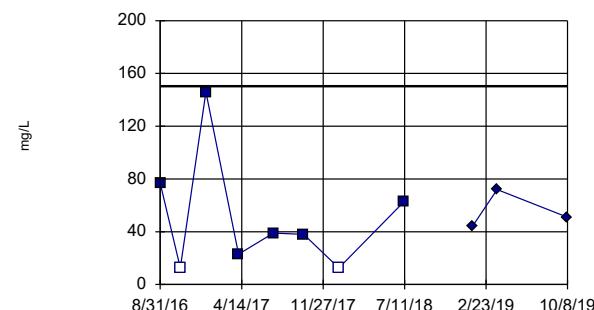


Background Data Summary: Mean=1213, Std. Dev.=258.9, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9083, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

## Total Dissolved Solids

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=54, Std. Dev.=39.43, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8424, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

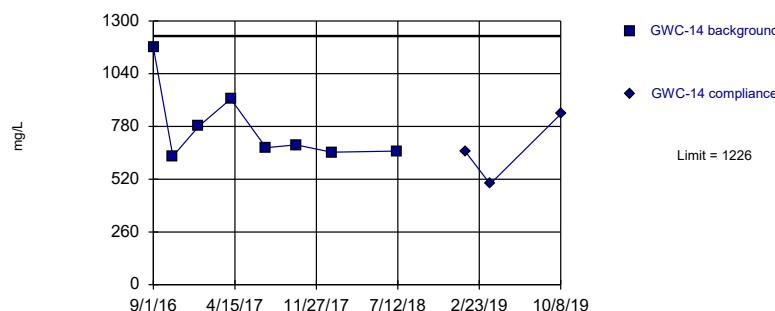
Prediction Limit Analysis Run 12/10/2019 11:10 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:10 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

## Total Dissolved Solids

Intrawell Parametric

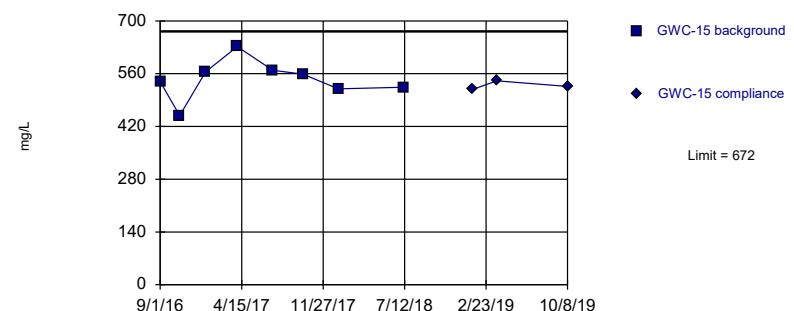


Background Data Summary: Mean=772, Std. Dev.=185.8, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7657, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

## Total Dissolved Solids

Intrawell Parametric



Background Data Summary: Mean=544.6, Std. Dev.=52.18, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9496, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

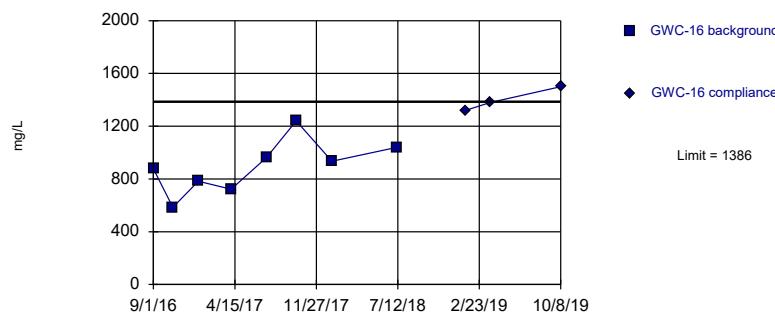
Prediction Limit Analysis Run 12/10/2019 11:10 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:10 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Exceeds Limit

## Total Dissolved Solids

Intrawell Parametric

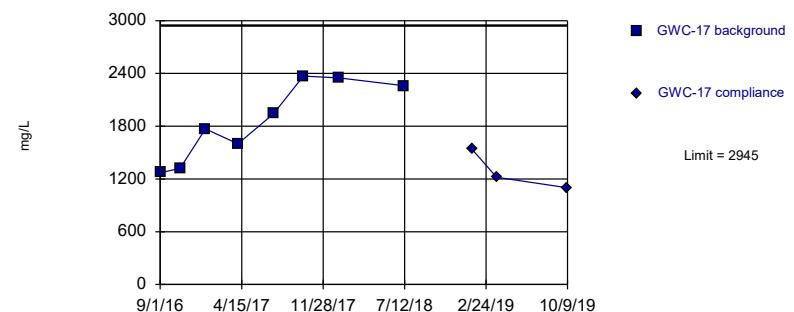


Background Data Summary: Mean=893.1, Std. Dev.=201.8, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.991, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

## Total Dissolved Solids

Intrawell Parametric



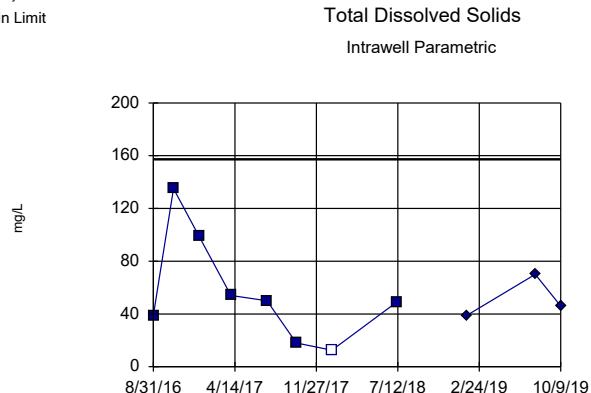
Background Data Summary: Mean=1860, Std. Dev.=444.3, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9015, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Prediction Limit Analysis Run 12/10/2019 11:10 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:10 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

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Hollow symbols indicate censored values.

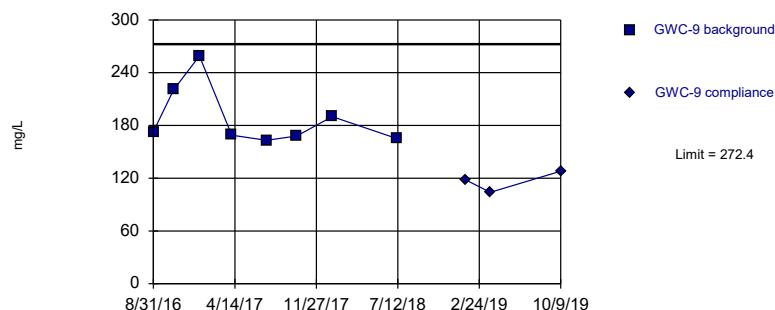
Within Limit



Within Limit

## Total Dissolved Solids

Intrawell Parametric

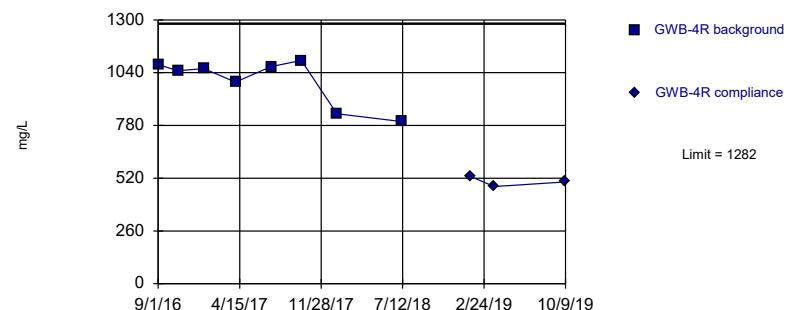


Background Data Summary: Mean=188.5, Std. Dev.=34.38, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7713, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

## Total Dissolved Solids

Intrawell Parametric



Background Data Summary: Mean=998.9, Std. Dev.=115.9, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7896, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

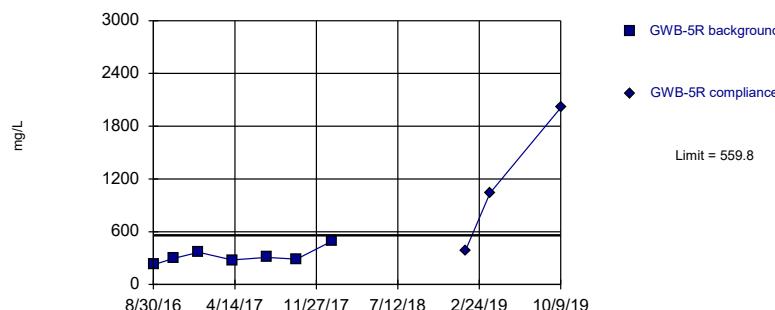
Prediction Limit Analysis Run 12/10/2019 11:10 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:10 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Exceeds Limit

## Total Dissolved Solids

Intrawell Parametric

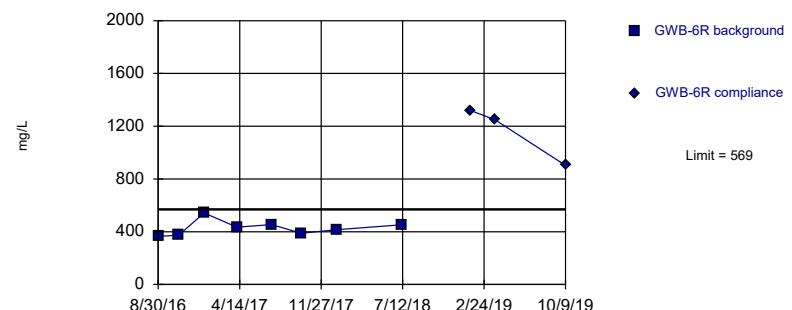


Background Data Summary: Mean=322.1, Std. Dev.=86.22, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8686, critical = 0.73. Kappa = 2.756 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Exceeds Limit

## Total Dissolved Solids

Intrawell Parametric



Background Data Summary: Mean=428.3, Std. Dev.=57.63, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9117, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Prediction Limit Analysis Run 12/10/2019 11:10 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Prediction Limit Analysis Run 12/10/2019 11:10 AM View: Appendix III Intrawell PL  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Prediction Limit

Constituent: Boron Analysis Run 12/10/2019 12:33 PM View: Appendix III Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7	GWA-7	GWA-8	GWA-8	GWC-1	GWC-1	GWC-11	GWC-11
8/30/2016				0.117		0.875		
8/31/2016							0.0688 (J)	
9/1/2016	11.6							
10/24/2016			0.126					
10/25/2016	21.4				1.22			
10/26/2016							0.083 (J)	
1/3/2017			0.124			1.3		
1/4/2017						1.3		0.0738
1/6/2017	20.1							
4/3/2017			0.105			1.19		
4/4/2017								
4/6/2017	21.8						0.0754	
7/11/2017			0.136				0.0614	
7/12/2017					1.37			
7/13/2017	16.3							
10/2/2017			0.107					
10/3/2017					0.765		0.0838	
10/4/2017	21.5							
1/9/2018	13.9		0.123					
1/10/2018					0.876			
1/11/2018							0.169	
7/9/2018			0.11					
7/10/2018					0.94			
7/11/2018	11.7						0.3	
1/16/2019		9.3		0.13		0.91		
1/17/2019							0.065	
3/25/2019		8.5		0.098				
3/26/2019						0.77		
3/27/2019							0.089	
10/7/2019			0.12					
10/8/2019		6.4					0.22	
10/9/2019						0.93		

## Prediction Limit

Constituent: Boron Analysis Run 12/10/2019 12:33 PM View: Appendix III Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-12	GWC-12	GWC-13	GWC-13	GWC-14	GWC-14	GWC-15	GWC-15
8/31/2016	5.1		0.261		0.071 (J)			
9/1/2016					0.0819 (J)		1.66	
10/25/2016								
10/26/2016	5.74		0.211					
1/4/2017	6.56							
1/5/2017			0.179		0.0813		1.1	
4/3/2017							1.21	
4/4/2017					0.0723			
4/5/2017	6.49							
4/6/2017			0.112					
7/10/2017	8.13							
7/11/2017					0.0734		1.44	
7/12/2017			0.0882					
10/2/2017					0.0748		1.59	
10/4/2017	5.18		0.116					
1/9/2018					0.0679		1.35	
1/10/2018			0.101					
1/11/2018	5.16							
7/9/2018					0.061			
7/10/2018							1.2	
7/11/2018	8.5		0.098					
1/16/2019				0.11		0.046		
1/17/2019		7						1.1
3/26/2019				0.35		0.037 (J)		0.95
3/27/2019		6.1						
10/8/2019				0.18		0.048		1.1
10/9/2019		8.2						

## Prediction Limit

Constituent: Boron Analysis Run 12/10/2019 12:33 PM View: Appendix III Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-16	GWC-17	GWC-17	GWC-2 0.0196 (J)	GWC-2	GWC-20	GWC-20
8/31/2016								
9/1/2016	1.82			0.408			3.34	
10/25/2016	1.26						2.54	
10/26/2016			0.5		0.05 (J)			
1/4/2017	1.46						1.91	
1/5/2017			0.676		0.0162 (J)			
4/4/2017					0.019 (J)		2.77	
4/5/2017	2		0.69					
7/11/2017							4.14	
7/12/2017	2.95							
7/13/2017			0.888		0.023 (J)			
10/2/2017							4.65	
10/3/2017	4.15				0.0266 (J)			
10/4/2017			1.02					
1/10/2018	3.68				0.0203 (J)		1.79	
1/11/2018			1.28					
7/9/2018							1.7	
7/10/2018	5.2				0.026 (J)			
7/11/2018			1.6					
1/16/2019				1.5				
1/17/2019		8.6						
1/21/2019					0.018 (J)		1.1	
3/25/2019							1	
3/26/2019		7.4		1.2				
7/30/2019					0.02 (J)			
10/8/2019		8.4						
10/9/2019			1.3		0.024 (J)		0.79	

## Prediction Limit

Constituent: Boron Analysis Run 12/10/2019 12:33 PM View: Appendix III Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-21	GWC-21	GWC-22	GWC-22	GWC-9	GWC-9	GWB-4R	GWB-4R
8/31/2016				12.8				
9/1/2016	0.62						6.48	
10/25/2016	0.0658 (J)							
10/26/2016			9.81				7.57	
10/27/2016					0.0281 (J)			
1/4/2017	0.36		8.94					
1/6/2017					0.0189 (J)		8.34	
4/4/2017	0.509						8.18	
4/6/2017			0.733		0.0181 (J)			
7/11/2017			0.852					
7/12/2017					0.0211 (J)		7.51	
7/13/2017	0.126							
10/3/2017	0.1							
10/4/2017			6.05		0.0254 (J)		8.88	
1/9/2018	0.783							
1/11/2018			0.838		0.018 (J)		6.95	
7/10/2018	0.5							
7/11/2018			3.2		0.02 (J)		6.4	
1/16/2019							5.3	
1/17/2019		0.43						
1/18/2019				0.37		0.018 (J)		
3/25/2019							4.4	
3/26/2019		0.61						
3/27/2019				0.37		0.016 (J)		
10/8/2019		1						
10/9/2019				0.39		0.019 (J)		5.7

## Prediction Limit

Constituent: Boron, Total Dissolved Solids   Analysis Run 12/10/2019 12:33 PM   View: Appendix III Intrawell PL  
 Grumman Road Landfill   Client: Southern Company   Data: Grumman Road

	GWB-5R	GWB-5R	GWB-6R	GWB-6R	GWA-7	GWA-7	GWA-8	GWA-8
8/30/2016	1.09			1.41			234	
9/1/2016					3660			
10/24/2016							216	
10/25/2016					3560			
10/26/2016	2.5		1.83					
1/3/2017	3.39						333	
1/5/2017			3.07					
1/6/2017					3490			
4/3/2017							288	
4/6/2017	2.76		3.19		3170			
7/11/2017							188	
7/12/2017	3.55		3.06					
7/13/2017					2280			
10/2/2017							210	
10/3/2017	2.72		2.69					
10/4/2017					3350			
1/9/2018			2.81		2640		118	
1/10/2018	3.21							
7/9/2018							235	
7/10/2018	7		2.9					
7/11/2018					2200			
1/16/2019		5		7.7		2100		219
3/25/2019						2100		240
3/26/2019		4		7.4				
10/7/2019							275	
10/8/2019						1840		
10/9/2019		6.8		6.3				

## Prediction Limit

Constituent: Total Dissolved Solids Analysis Run 12/10/2019 12:33 PM View: Appendix III Intrawell PL  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-1	GWC-11	GWC-11	GWC-12	GWC-12	GWC-13	GWC-13
8/30/2016	225							
8/31/2016			119		1560		77	
10/25/2016	230							
10/26/2016			108		1520		<25	
1/4/2017	349			182		1430		
1/5/2017							146	
4/4/2017	356				1200			
4/5/2017								
4/6/2017		248					23 (J)	
7/10/2017					1100			
7/11/2017		88						
7/12/2017	357						39	
10/3/2017	192		248					
10/4/2017					986		38	
1/10/2018	277						<25	
1/11/2018			681		1020			
7/10/2018	349							
7/11/2018		440			888		63	
1/16/2019		341						44
1/17/2019				118		765		
3/26/2019		317						72
3/27/2019				138		673		
10/8/2019				613				51
10/9/2019		338				647		

## Prediction Limit

Constituent: Total Dissolved Solids Analysis Run 12/10/2019 12:33 PM View: Appendix III Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Prediction Limit

Constituent: Total Dissolved Solids Analysis Run 12/10/2019 12:33 PM View: Appendix III Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-2	GWC-2	GWC-20	GWC-20	GWC-21	GWC-21	GWC-22	GWC-22
8/31/2016	39						1570	
9/1/2016			470		184			
10/25/2016			289		<25			
10/26/2016	135						1840	
1/4/2017			639		242		1560	
1/5/2017	99							
4/4/2017	54		660		187			
4/6/2017							368	
7/11/2017			836				383	
7/13/2017	50				86			
10/2/2017			698					
10/3/2017	18 (J)				66			
10/4/2017							1500	
1/9/2018					167			
1/10/2018	<25		322				438	
1/11/2018								
7/9/2018			461					
7/10/2018	49				180			
7/11/2018							876	
1/17/2019						178		
1/18/2019							154	
1/21/2019		39		307				
3/25/2019				449				
3/26/2019						292		
3/27/2019							158	
7/30/2019		70						
10/8/2019						278		
10/9/2019		46		434				211

## Prediction Limit

Constituent: Total Dissolved Solids Analysis Run 12/10/2019 12:33 PM View: Appendix III Intrawell PL

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWC-9	GWB-4R	GWB-4R	GWB-5R	GWB-5R	GWB-6R	GWB-6R
8/30/2016					224			365
8/31/2016	173							
9/1/2016			1080					
10/26/2016			1050		297		373	
10/27/2016	221							
1/3/2017					366			
1/5/2017							543	
1/6/2017	259		1060					
4/4/2017			994					
4/6/2017	169				279		434	
7/12/2017	163		1070		308		454	
10/3/2017					288		389	
10/4/2017	168		1100					
1/9/2018							415	
1/10/2018					493			
1/11/2018	190		838					
7/10/2018							453	
7/11/2018	165		799					
1/16/2019				530		382		1320
1/18/2019		118						
3/25/2019				479				
3/26/2019						1040		1250
3/27/2019		104						
10/9/2019		128		502		2010		903

## CCR Trend Test Significant Results

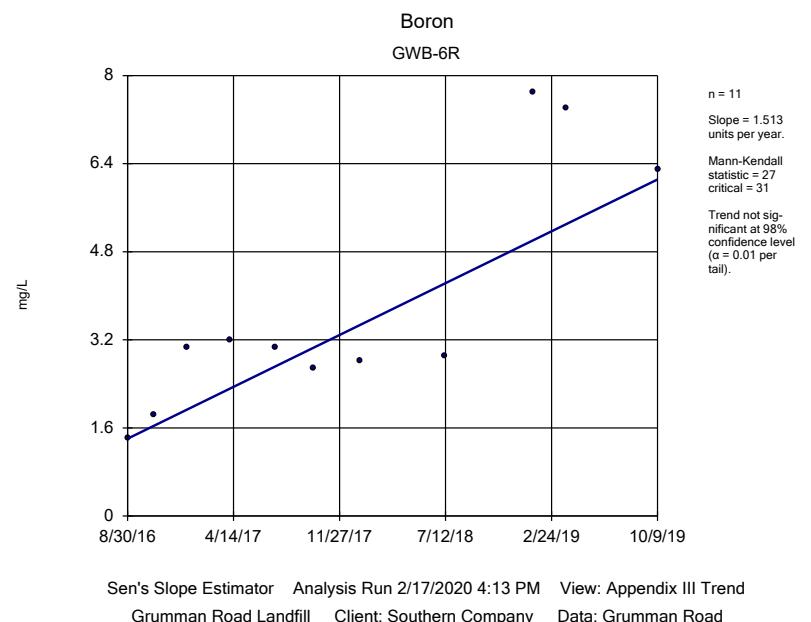
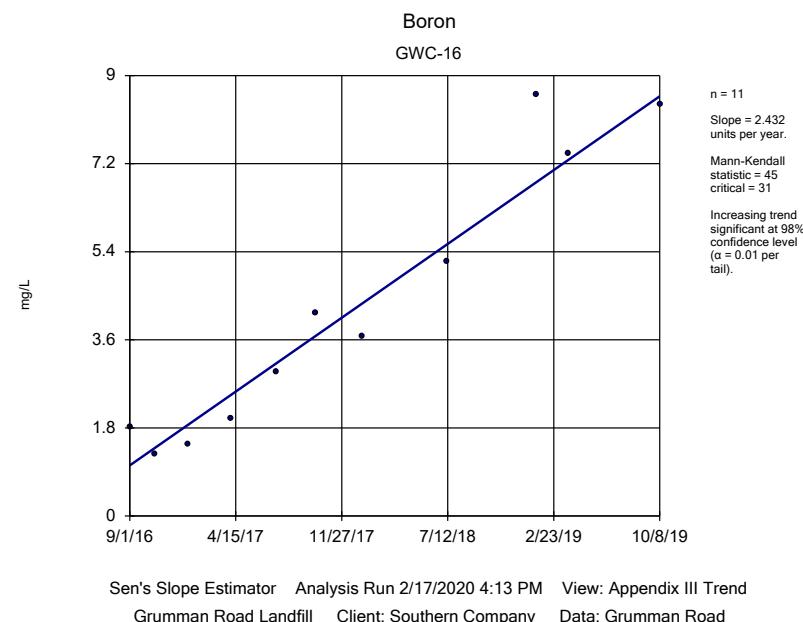
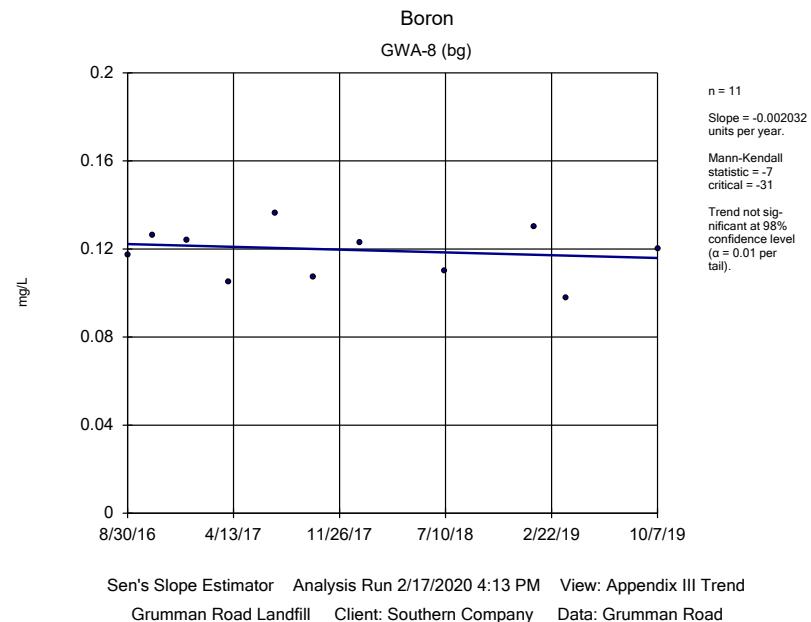
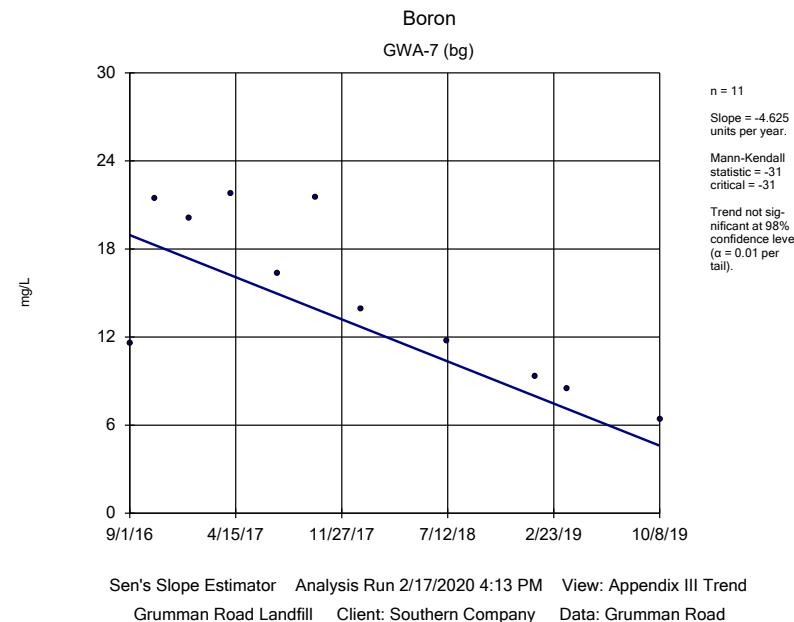
Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 2/17/2020, 4:15 PM

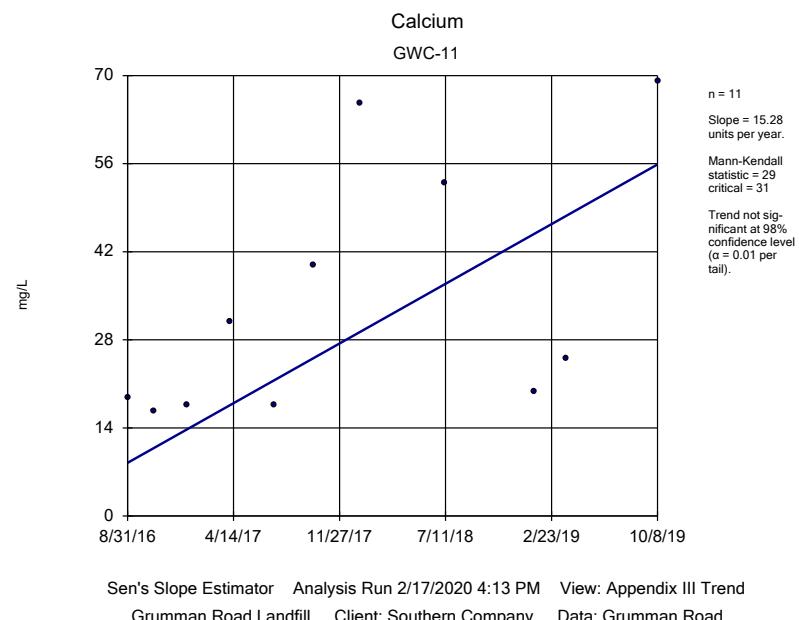
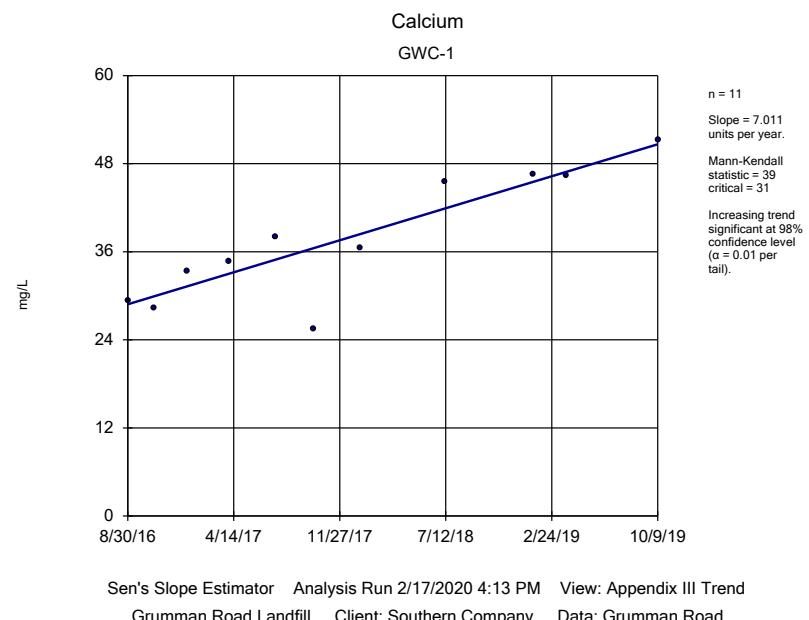
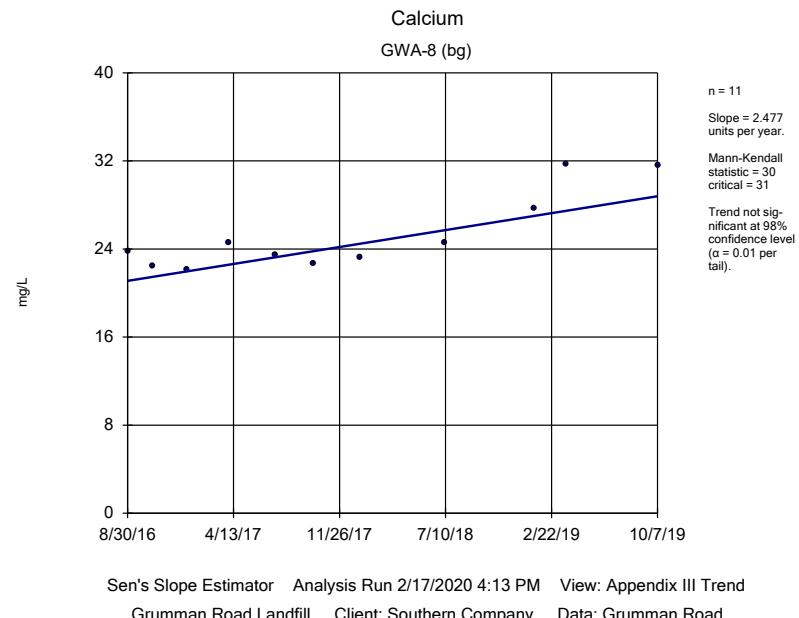
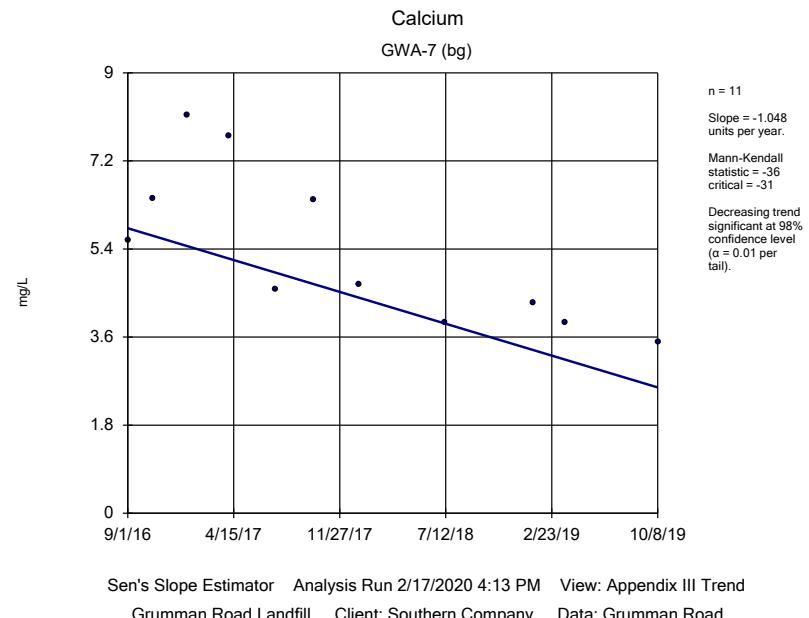
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWC-16	2.432	45	31	Yes	11	0	n/a	0.02	NP
Calcium (mg/L)	GWA-7 (bg)	-1.048	-36	-31	Yes	11	0	n/a	0.02	NP
Calcium (mg/L)	GWC-1	7.011	39	31	Yes	11	0	n/a	0.02	NP
Calcium (mg/L)	GWC-12	-15.88	-53	-31	Yes	11	0	n/a	0.02	NP
Calcium (mg/L)	GWC-16	42.34	36	31	Yes	11	0	n/a	0.02	NP
Chloride (mg/L)	GWA-8 (bg)	1.474	32	31	Yes	11	0	n/a	0.02	NP
Sulfate (mg/L)	GWC-12	-186.1	-39	-31	Yes	11	0	n/a	0.02	NP
Total Dissolved Solids (mg/L)	GWA-7 (bg)	-604.9	-48	-31	Yes	11	0	n/a	0.02	NP
Total Dissolved Solids (mg/L)	GWC-16	263.8	41	31	Yes	11	0	n/a	0.02	NP
Total Dissolved Solids (mg/L)	GWB-5R	280	31	27	Yes	10	0	n/a	0.02	NP

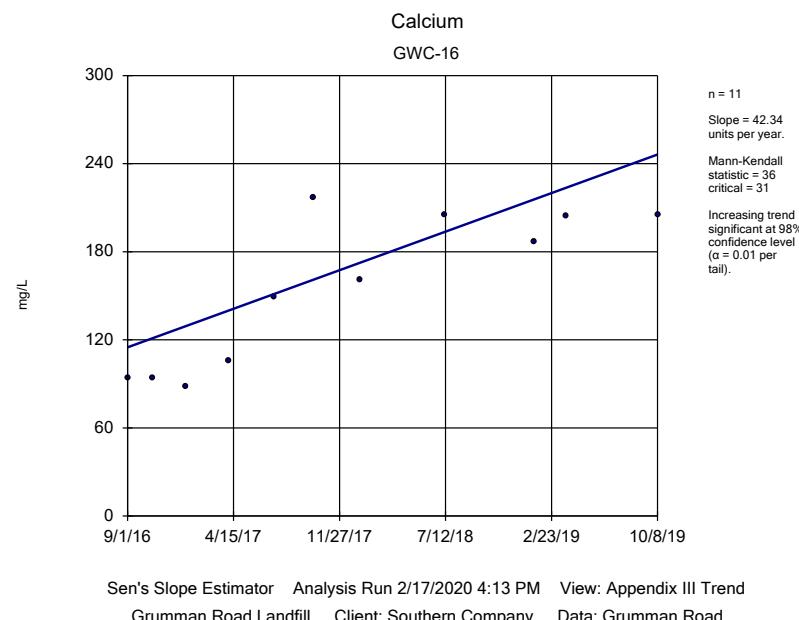
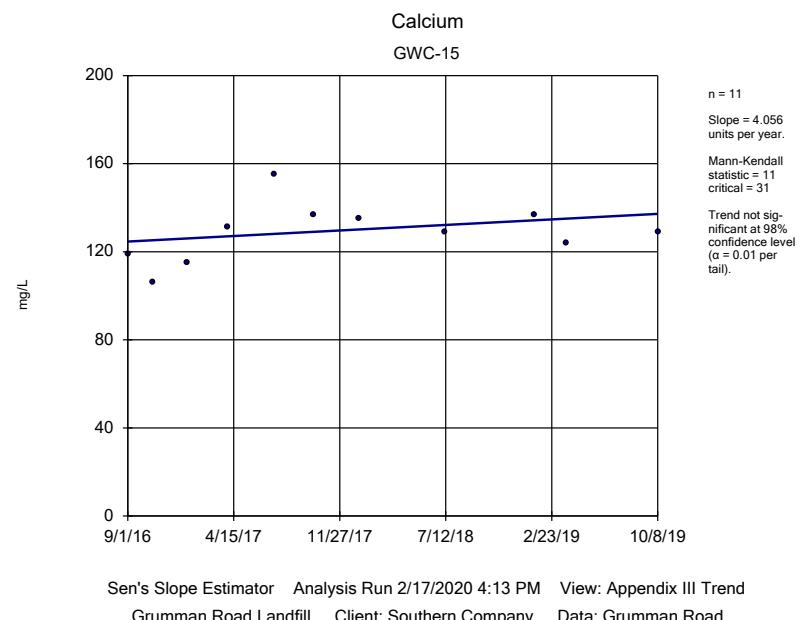
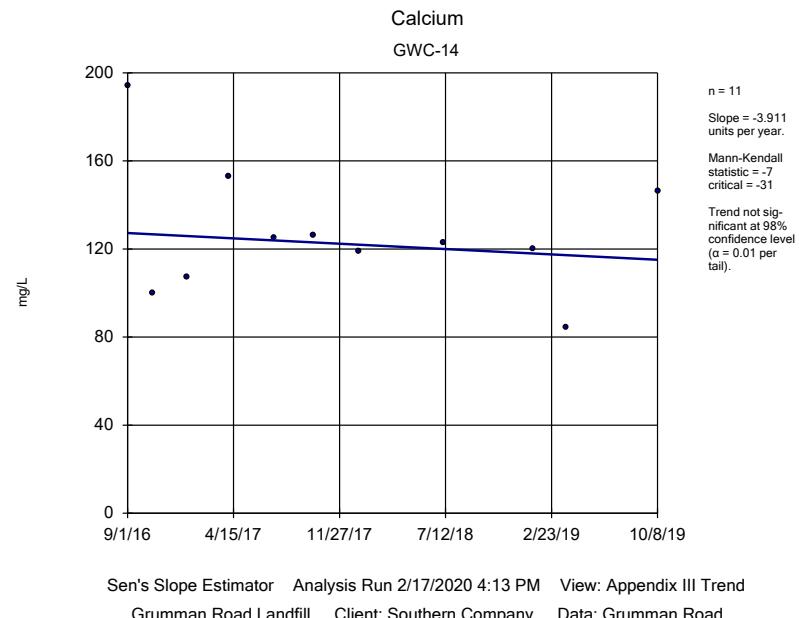
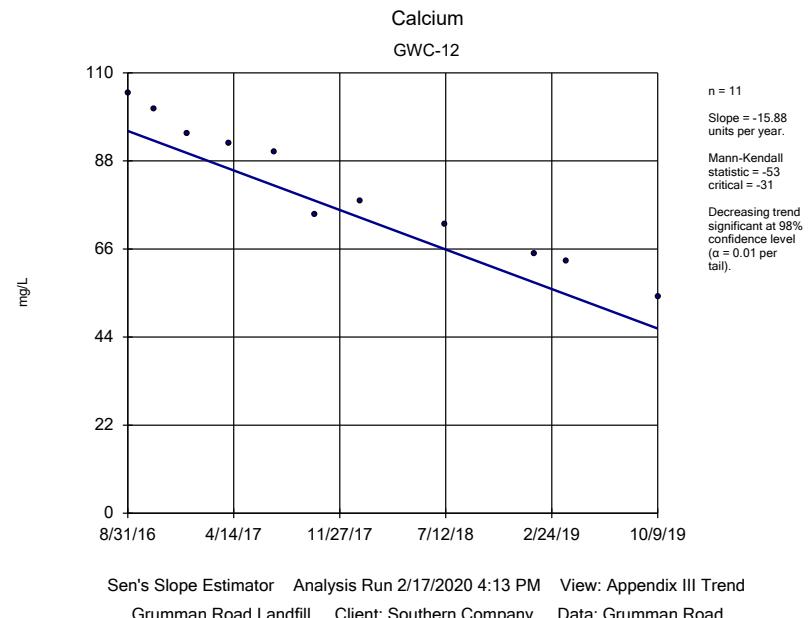
## CCR Trend Test All Results

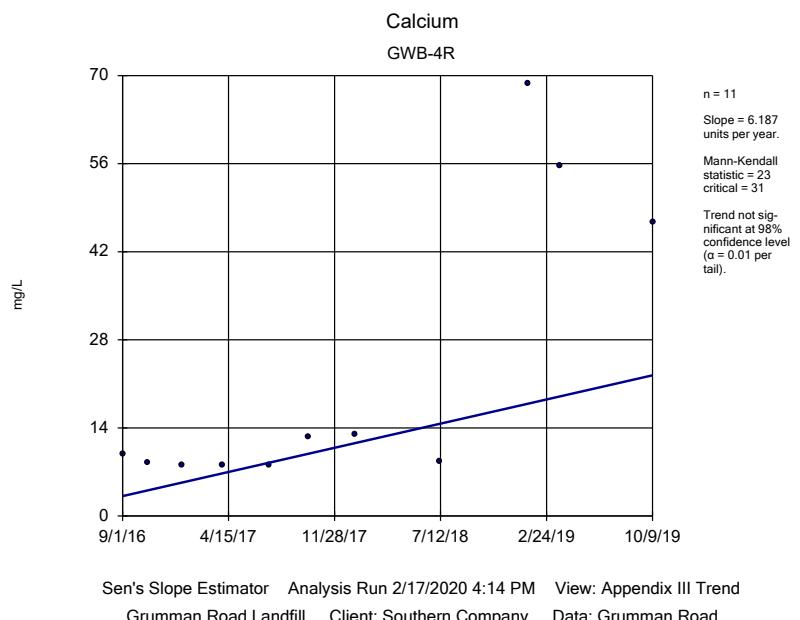
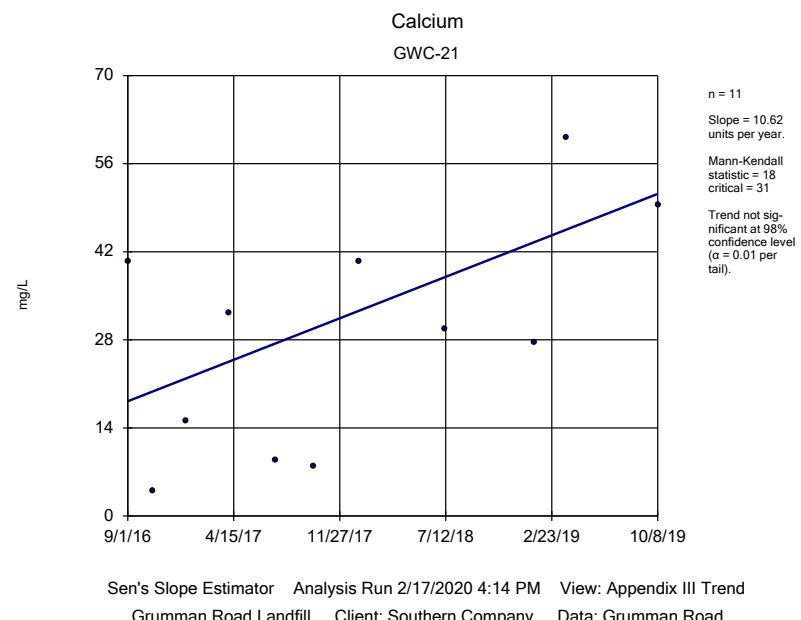
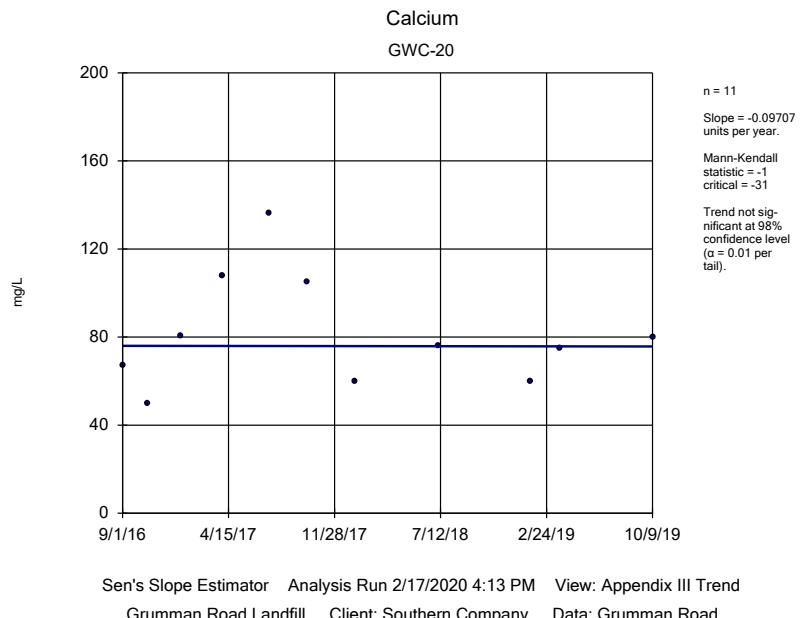
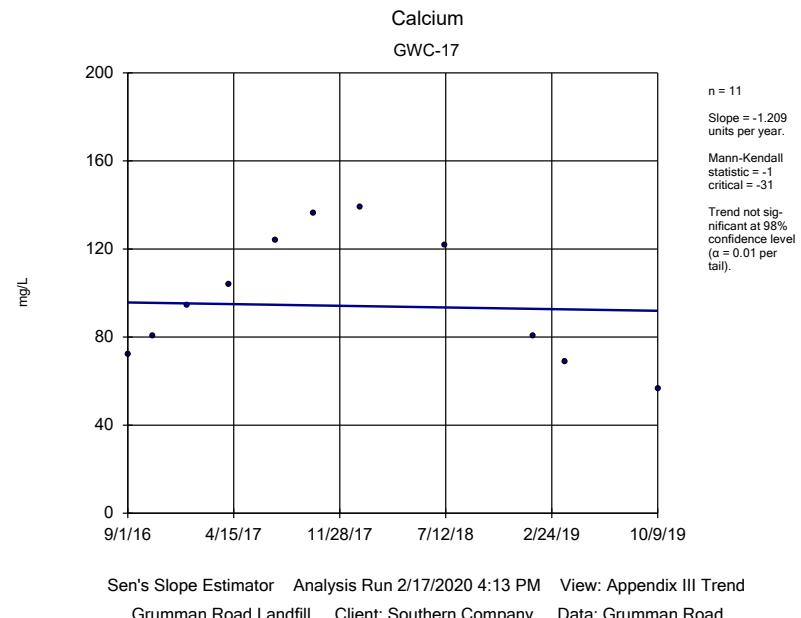
Grumman Road Landfill   Client: Southern Company   Data: Grumman Road   Printed 2/17/2020, 4:15 PM

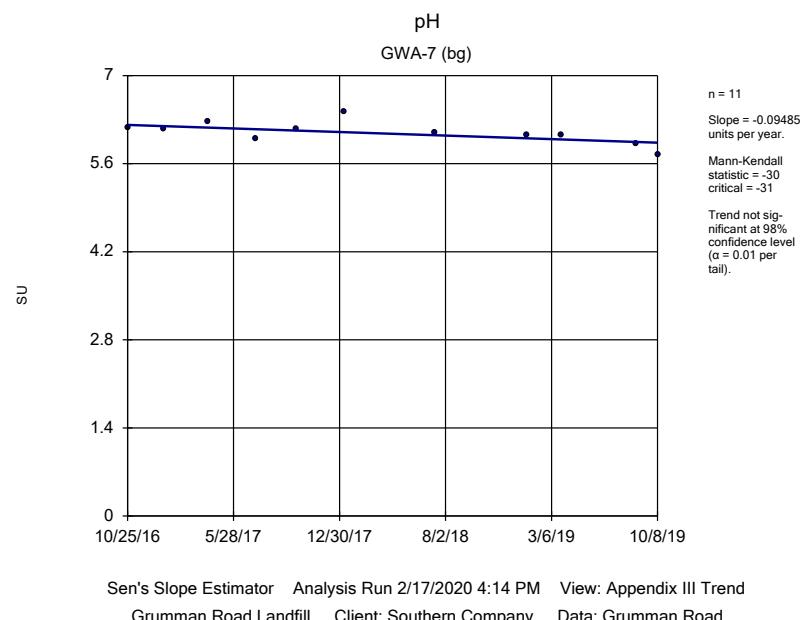
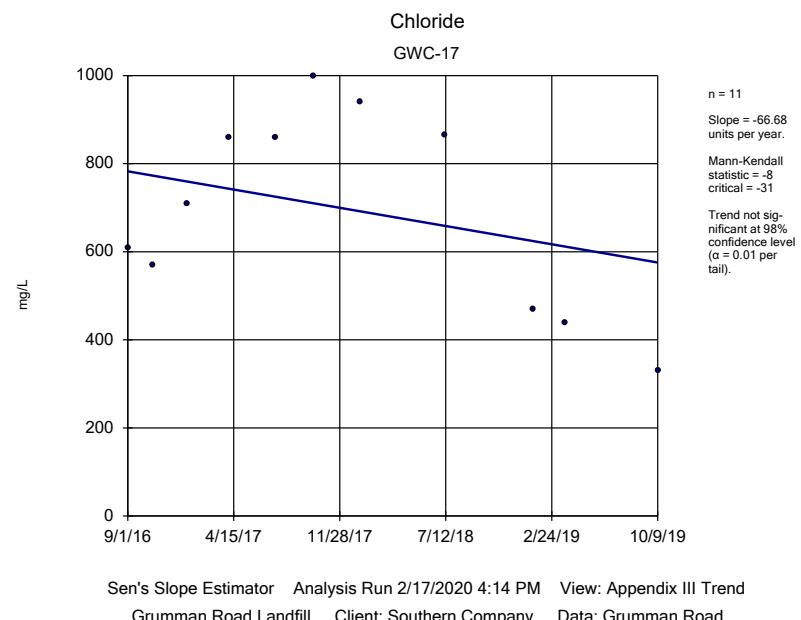
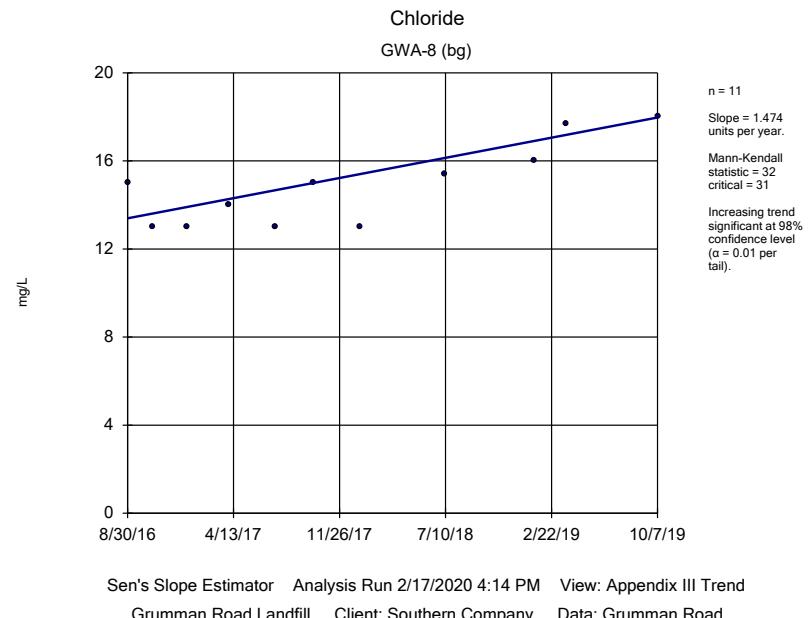
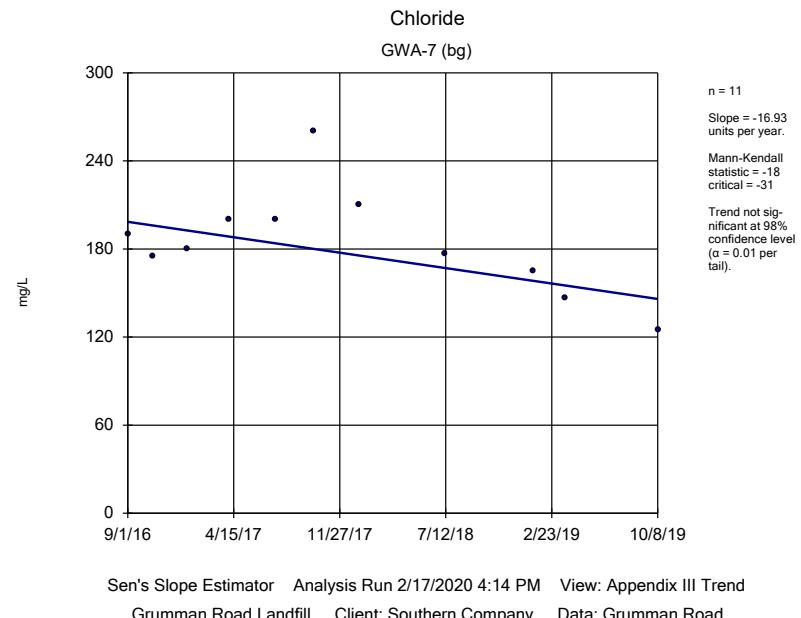
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWA-7 (bg)	-4.625	-31	-31	No	11	0	n/a	0.02	NP
Boron (mg/L)	GWA-8 (bg)	-0.002032	-7	-31	No	11	0	n/a	0.02	NP
<b>Boron (mg/L)</b>	<b>GWC-16</b>	<b>2.432</b>	<b>45</b>	<b>31</b>	<b>Yes</b>	<b>11</b>	<b>0</b>	<b>n/a</b>	<b>0.02</b>	<b>NP</b>
Boron (mg/L)	GWB-6R	1.513	27	31	No	11	0	n/a	0.02	NP
<b>Calcium (mg/L)</b>	<b>GWA-7 (bg)</b>	<b>-1.048</b>	<b>-36</b>	<b>-31</b>	<b>Yes</b>	<b>11</b>	<b>0</b>	<b>n/a</b>	<b>0.02</b>	<b>NP</b>
Calcium (mg/L)	GWA-8 (bg)	2.477	30	31	No	11	0	n/a	0.02	NP
<b>Calcium (mg/L)</b>	<b>GWC-1</b>	<b>7.011</b>	<b>39</b>	<b>31</b>	<b>Yes</b>	<b>11</b>	<b>0</b>	<b>n/a</b>	<b>0.02</b>	<b>NP</b>
Calcium (mg/L)	GWC-11	15.28	29	31	No	11	0	n/a	0.02	NP
<b>Calcium (mg/L)</b>	<b>GWC-12</b>	<b>-15.88</b>	<b>-53</b>	<b>-31</b>	<b>Yes</b>	<b>11</b>	<b>0</b>	<b>n/a</b>	<b>0.02</b>	<b>NP</b>
Calcium (mg/L)	GWC-14	-3.911	-7	-31	No	11	0	n/a	0.02	NP
Calcium (mg/L)	GWC-15	4.056	11	31	No	11	0	n/a	0.02	NP
<b>Calcium (mg/L)</b>	<b>GWC-16</b>	<b>42.34</b>	<b>36</b>	<b>31</b>	<b>Yes</b>	<b>11</b>	<b>0</b>	<b>n/a</b>	<b>0.02</b>	<b>NP</b>
Calcium (mg/L)	GWC-17	-1.209	-1	-31	No	11	0	n/a	0.02	NP
Calcium (mg/L)	GWC-20	-0.09707	-1	-31	No	11	0	n/a	0.02	NP
Calcium (mg/L)	GWC-21	10.62	18	31	No	11	0	n/a	0.02	NP
Calcium (mg/L)	GWB-4R	6.187	23	31	No	11	0	n/a	0.02	NP
Chloride (mg/L)	GWA-7 (bg)	-16.93	-18	-31	No	11	0	n/a	0.02	NP
<b>Chloride (mg/L)</b>	<b>GWA-8 (bg)</b>	<b>1.474</b>	<b>32</b>	<b>31</b>	<b>Yes</b>	<b>11</b>	<b>0</b>	<b>n/a</b>	<b>0.02</b>	<b>NP</b>
Chloride (mg/L)	GWC-17	-66.68	-8	-31	No	11	0	n/a	0.02	NP
pH (SU)	GWA-7 (bg)	-0.09485	-30	-31	No	11	0	n/a	0.02	NP
pH (SU)	GWA-8 (bg)	-0.0145	-12	-31	No	11	0	n/a	0.02	NP
pH (SU)	GWC-15	0.09971	30	31	No	11	0	n/a	0.02	NP
pH (SU)	GWC-20	0.1036	25	31	No	11	0	n/a	0.02	NP
Sulfate (mg/L)	GWA-7 (bg)	-5.236	-13	-31	No	11	0	n/a	0.02	NP
Sulfate (mg/L)	GWA-8 (bg)	0	-2	-31	No	11	0	n/a	0.02	NP
Sulfate (mg/L)	GWC-11	77.02	21	31	No	11	0	n/a	0.02	NP
<b>Sulfate (mg/L)</b>	<b>GWC-12</b>	<b>-186.1</b>	<b>-39</b>	<b>-31</b>	<b>Yes</b>	<b>11</b>	<b>0</b>	<b>n/a</b>	<b>0.02</b>	<b>NP</b>
Sulfate (mg/L)	GWC-14	-97.38	-27	-31	No	11	0	n/a	0.02	NP
Sulfate (mg/L)	GWC-16	147.2	25	31	No	11	0	n/a	0.02	NP
Sulfate (mg/L)	GWC-17	58.13	14	31	No	11	0	n/a	0.02	NP
Sulfate (mg/L)	GWB-6R	41.84	29	31	No	11	0	n/a	0.02	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>GWA-7 (bg)</b>	<b>-604.9</b>	<b>-48</b>	<b>-31</b>	<b>Yes</b>	<b>11</b>	<b>0</b>	<b>n/a</b>	<b>0.02</b>	<b>NP</b>
Total Dissolved Solids (mg/L)	GWA-8 (bg)	1.345	3	31	No	11	0	n/a	0.02	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>GWC-16</b>	<b>263.8</b>	<b>41</b>	<b>31</b>	<b>Yes</b>	<b>11</b>	<b>0</b>	<b>n/a</b>	<b>0.02</b>	<b>NP</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>GWB-5R</b>	<b>280</b>	<b>31</b>	<b>27</b>	<b>Yes</b>	<b>10</b>	<b>0</b>	<b>n/a</b>	<b>0.02</b>	<b>NP</b>
Total Dissolved Solids (mg/L)	GWB-6R	115	29	31	No	11	0	n/a	0.02	NP

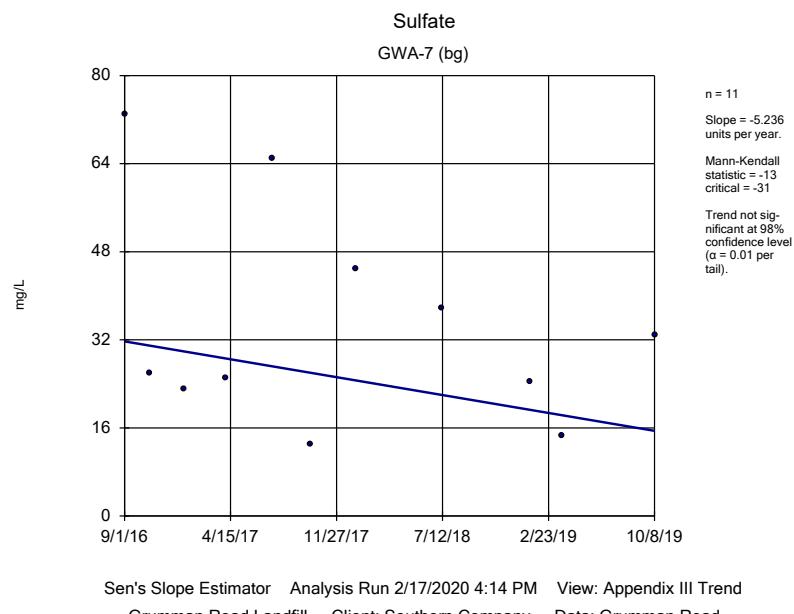
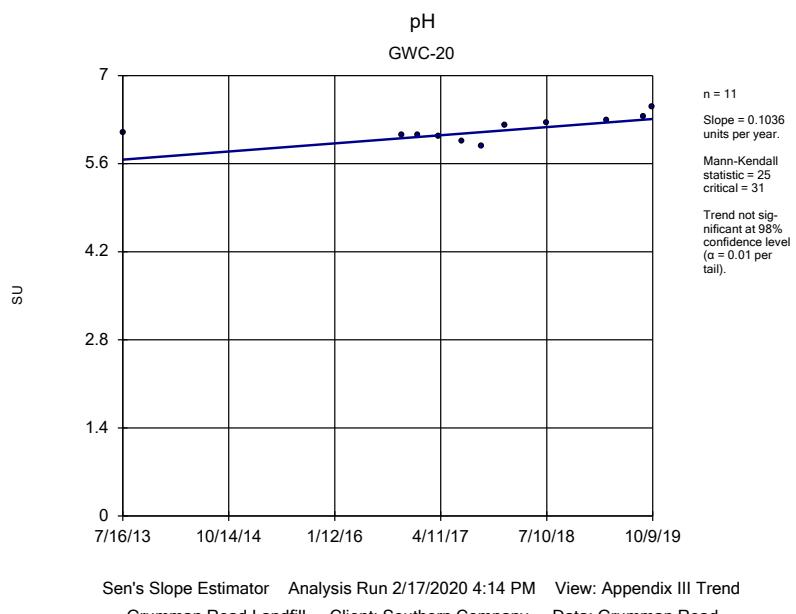
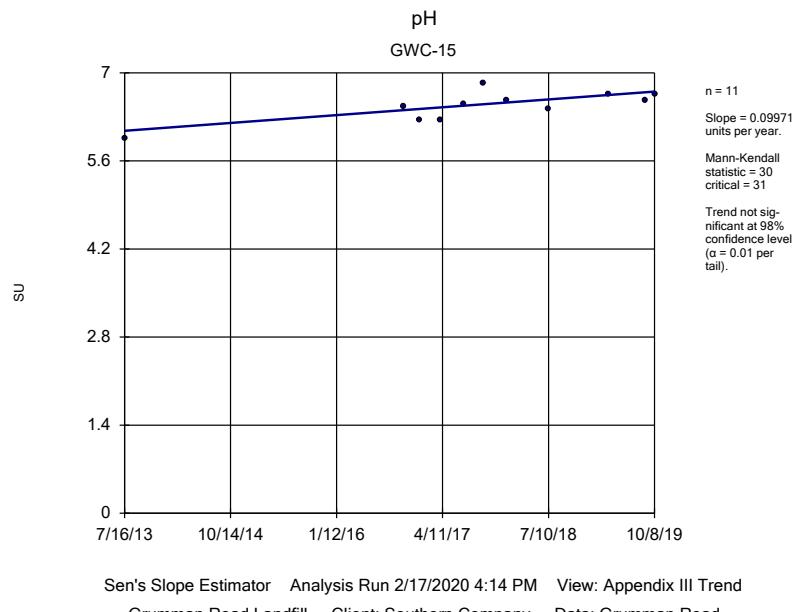
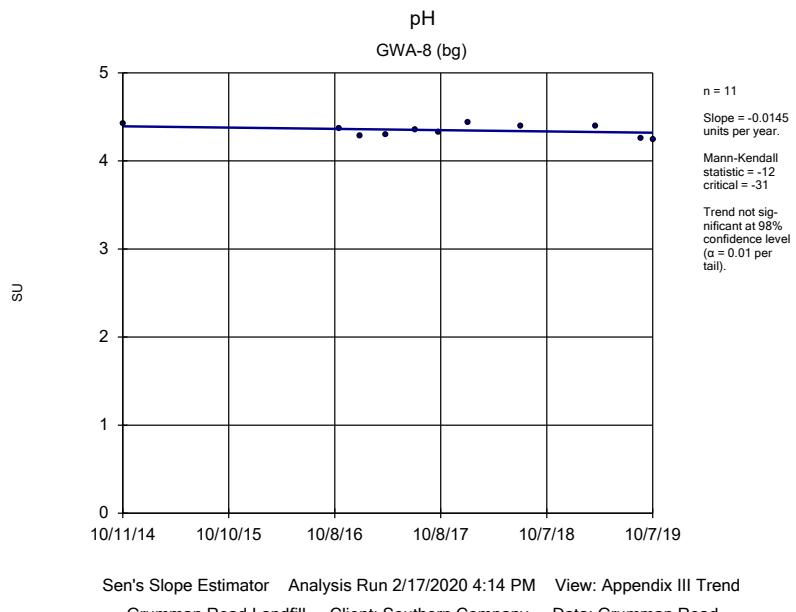


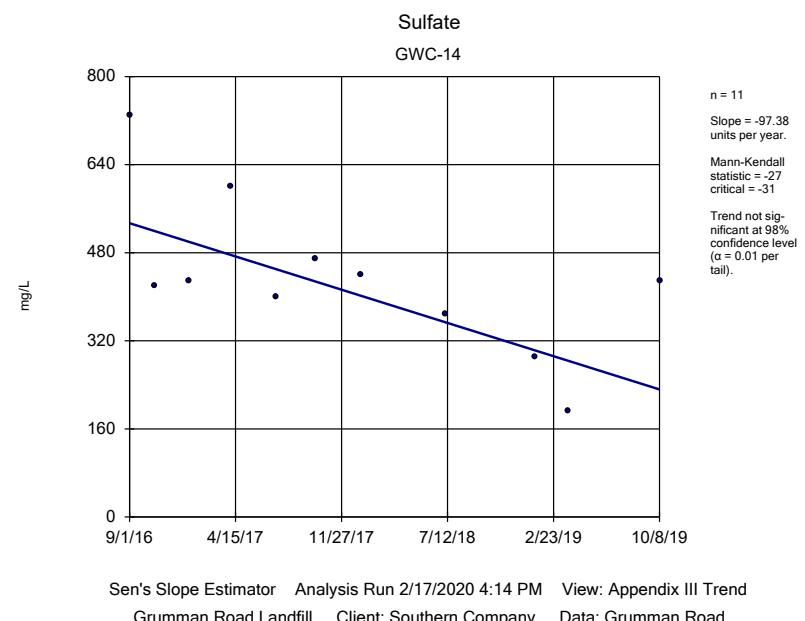
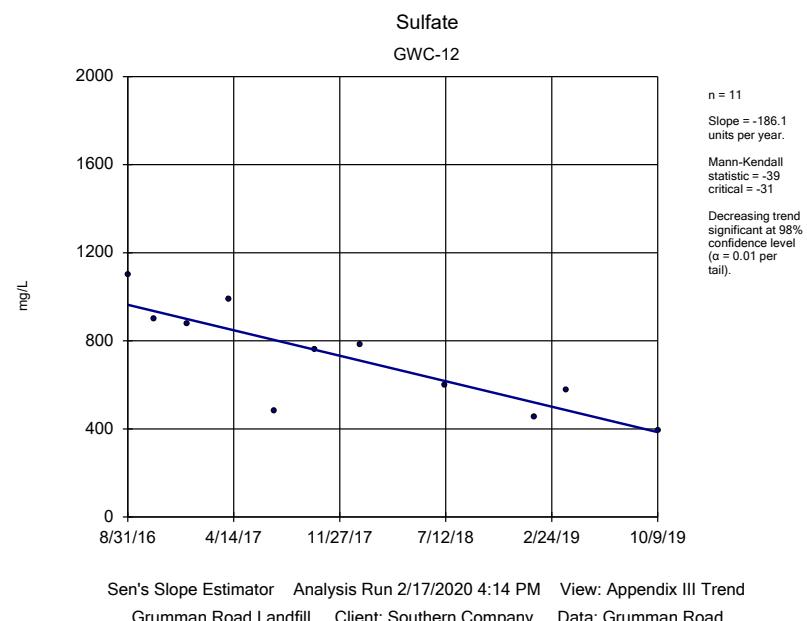
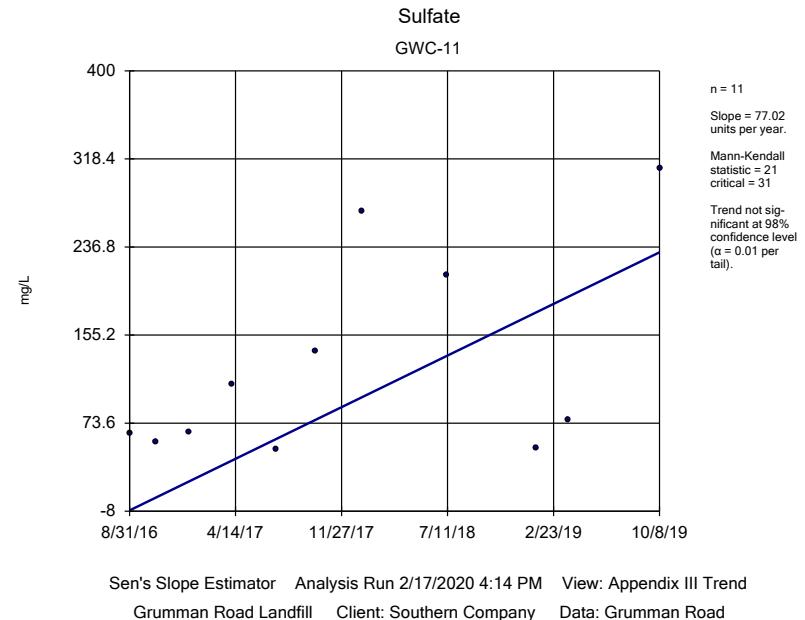
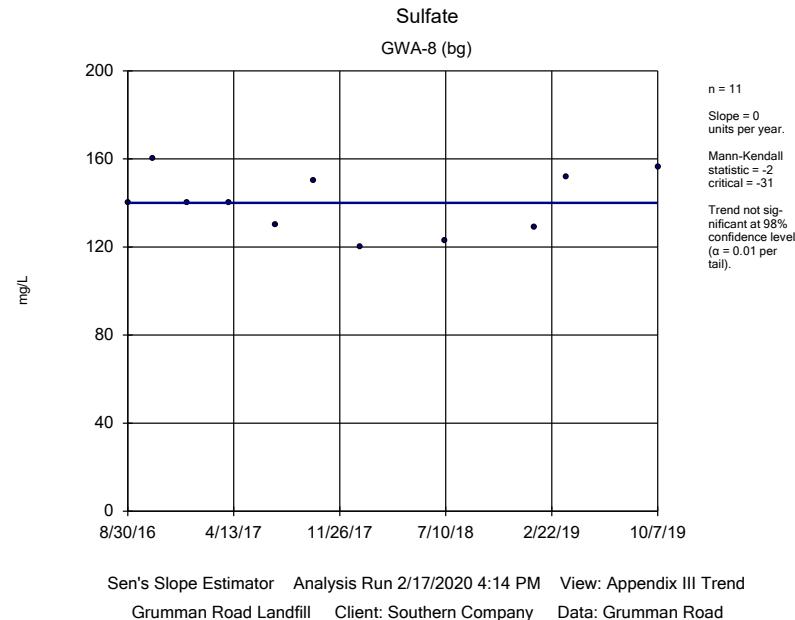


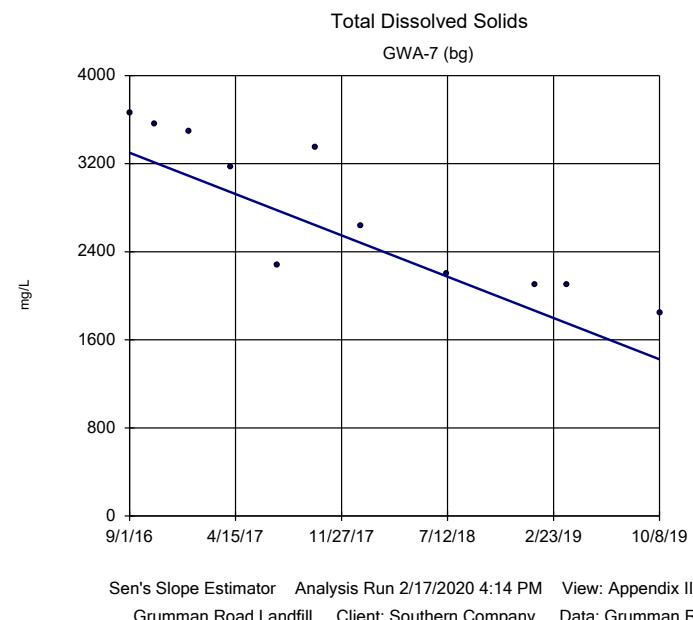
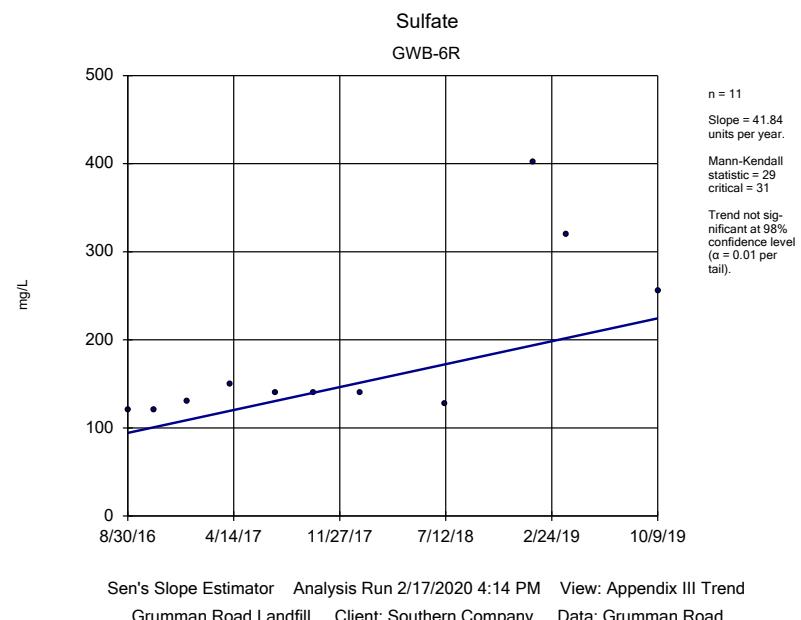
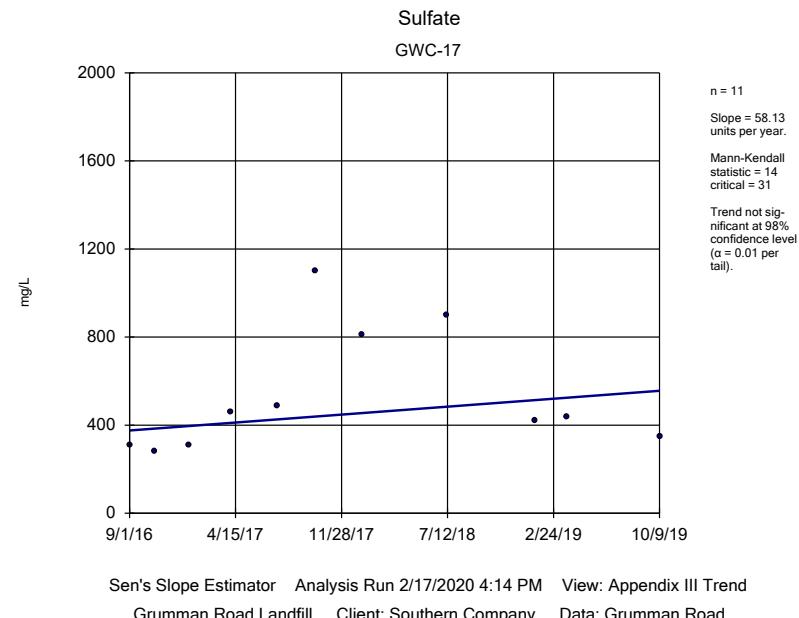
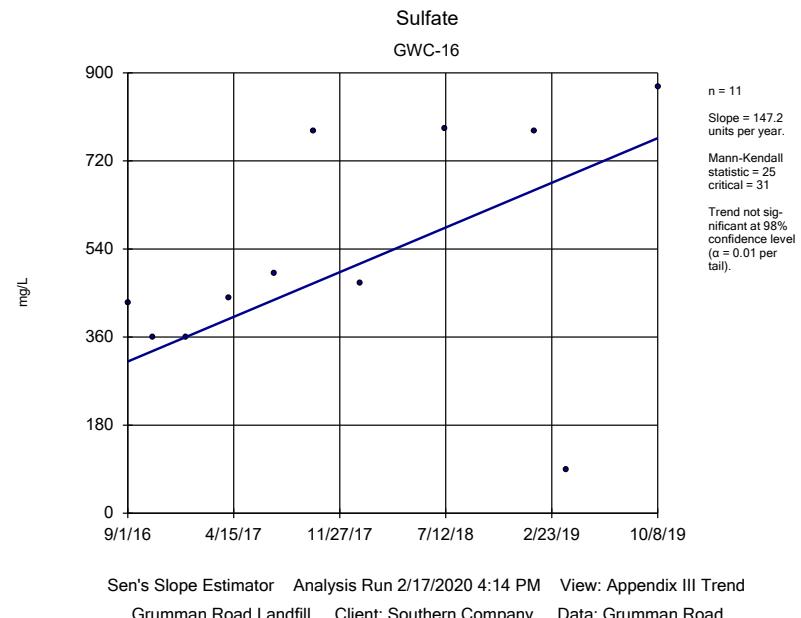


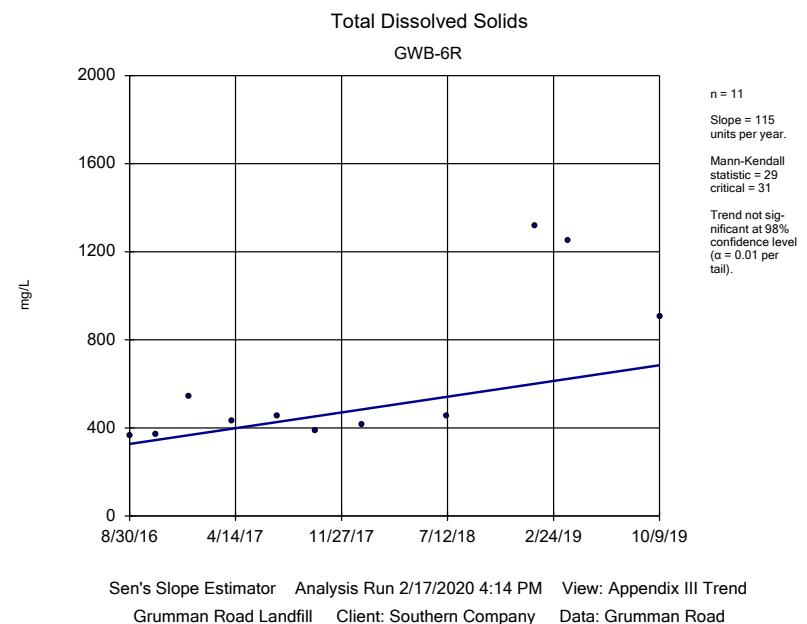
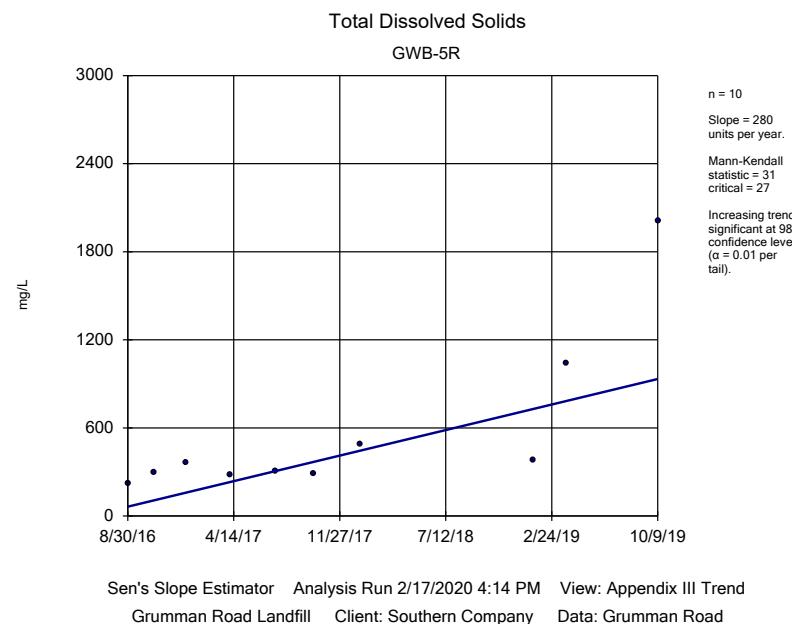
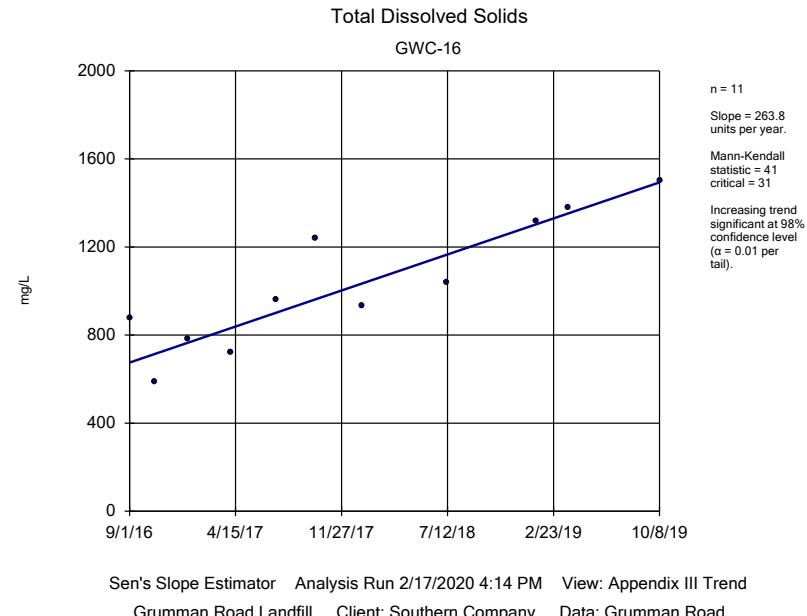
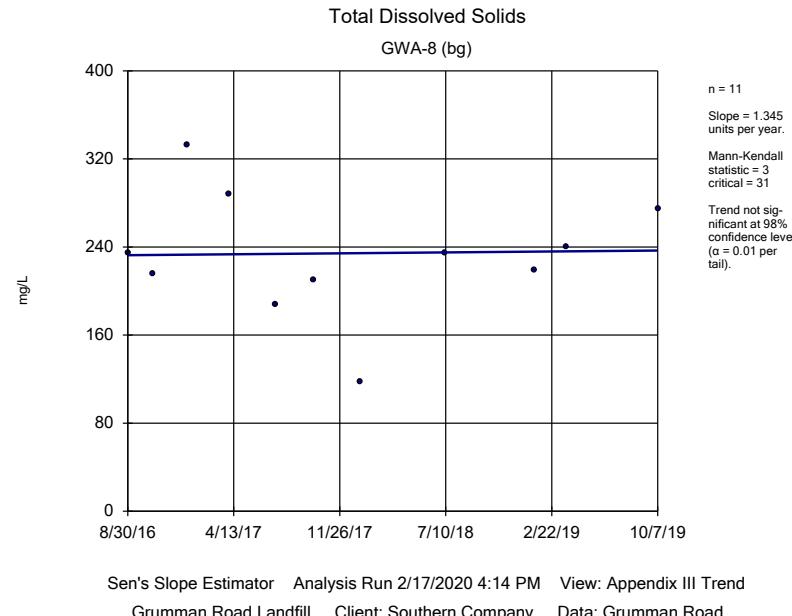












## Sen's Slope Estimator

Constituent: Boron Analysis Run 2/17/2020 4:15 PM View: Appendix III Trend  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-16	GWB-6R
8/30/2016		0.117		1.41
9/1/2016	11.6		1.82	
10/24/2016		0.126		
10/25/2016	21.4		1.26	
10/26/2016				1.83
1/3/2017		0.124		
1/4/2017			1.46	
1/5/2017				3.07
1/6/2017	20.1			
4/3/2017		0.105		
4/5/2017			2	
4/6/2017	21.8			3.19
7/11/2017		0.136		
7/12/2017			2.95	3.06
7/13/2017	16.3			
10/2/2017		0.107		
10/3/2017			4.15	2.69
10/4/2017	21.5			
1/9/2018	13.9	0.123		2.81
1/10/2018			3.68	
7/9/2018		0.11		
7/10/2018			5.2	2.9
7/11/2018	11.7			
1/16/2019	9.3	0.13		7.7
1/17/2019			8.6	
3/25/2019	8.5	0.098		
3/26/2019			7.4	7.4
10/7/2019		0.12		
10/8/2019	6.4		8.4	
10/9/2019				6.3

## Sen's Slope Estimator

Constituent: Calcium Analysis Run 2/17/2020 4:15 PM View: Appendix III Trend

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11
8/30/2016		23.8	29.4	
8/31/2016				18.8
9/1/2016	5.59			
10/24/2016		22.5		
10/25/2016	6.43		28.3	
10/26/2016				16.6
1/3/2017		22.1		
1/4/2017			33.4	17.6
1/6/2017	8.13			
4/3/2017		24.6 (J)		
4/4/2017			34.6	
4/6/2017	7.72			30.9
7/11/2017		23.5		17.7
7/12/2017			38	
7/13/2017	4.57			
10/2/2017		22.7		
10/3/2017			25.5	39.8
10/4/2017	6.41			
1/9/2018	4.68	23.2		
1/10/2018			36.5	
1/11/2018				65.6
7/9/2018		24.6 (J)		
7/10/2018			45.5	
7/11/2018	3.9			53
1/16/2019	4.3	27.7	46.5	
1/17/2019				19.8 (J)
3/25/2019	3.9	31.7		
3/26/2019			46.3	
3/27/2019				25.1
10/7/2019		31.6		
10/8/2019	3.5			69.2
10/9/2019			51.2	

## Sen's Slope Estimator

Constituent: Calcium Analysis Run 2/17/2020 4:15 PM View: Appendix III Trend  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-12	GWC-14	GWC-15	GWC-16
8/31/2016	105			
9/1/2016		194	119	93.8
10/25/2016		100	106	94.1
10/26/2016	101			
1/4/2017	94.9			88.2
1/5/2017		107	115	
4/3/2017			131	
4/4/2017		153		
4/5/2017	92.5			106
7/10/2017	90.3			
7/11/2017		125	155	
7/12/2017				149
10/2/2017		126	137	
10/3/2017				217
10/4/2017	74.6			
1/9/2018		119	135	
1/10/2018				161
1/11/2018	78.1			
7/9/2018		123		
7/10/2018			129	205
7/11/2018	72.2			
1/16/2019		120		
1/17/2019	64.7		137	187
3/26/2019		84.2	124	204
3/27/2019	63.1			
10/8/2019		146	129	205
10/9/2019	54.2			

## Sen's Slope Estimator

Constituent: Calcium Analysis Run 2/17/2020 4:15 PM View: Appendix III Trend

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-20	GWC-21	GWB-4R
9/1/2016	71.9	67.2	40.5	9.91
10/25/2016		50.1	3.91	
10/26/2016	80.3			8.56
1/4/2017		80.4	15.2	
1/5/2017	94.4			
1/6/2017				8.18
4/4/2017		108	32.3	8.12
4/5/2017	104			
7/11/2017		136		
7/12/2017				8
7/13/2017	124		8.92	
10/2/2017		105		
10/3/2017				7.88
10/4/2017	136			12.5
1/9/2018			40.5	
1/10/2018		60.1		
1/11/2018	139			12.9
7/9/2018		75.9		
7/10/2018			29.8	
7/11/2018	122			8.6
1/16/2019	80.5			68.8
1/17/2019			27.6	
1/21/2019		60		
3/25/2019		74.8		55.6
3/26/2019	68.8		60.1	
10/8/2019			49.5	
10/9/2019	56.6	80.1		46.7

## Sen's Slope Estimator

Constituent: Chloride, pH Analysis Run 2/17/2020 4:15 PM View: Appendix III Trend

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-17	GWA-7 (bg)
8/30/2016		15		
9/1/2016	190		610	
10/24/2016		13		
10/25/2016	175 (D)			6.17
10/26/2016			570	
1/3/2017		13		
1/5/2017			710	
1/6/2017	180			6.16
4/3/2017		14		
4/5/2017			860	
4/6/2017	200			6.26
7/11/2017		13		
7/13/2017	200		860	5.99
10/2/2017		15		
10/4/2017	260		1000	6.16
1/9/2018	210	13		6.43
1/11/2018			940	
7/9/2018		15.4		
7/11/2018	177		864	6.1
1/16/2019	165	16	469	6.05
3/25/2019	147	17.7		6.06
3/26/2019			439	
8/26/2019				5.91
10/7/2019		18		
10/8/2019	125			5.74
10/9/2019			330	

## Sen's Slope Estimator

Constituent: pH, Sulfate Analysis Run 2/17/2020 4:15 PM View: Appendix III Trend

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-8 (bg)	GWC-15	GWC-20	GWA-7 (bg)
7/16/2013		5.96	6.1	
10/11/2014	4.42			
9/1/2016			73	
10/24/2016	4.36			
10/25/2016		6.46	6.06	26
1/3/2017	4.28			
1/4/2017			6.05	
1/5/2017		6.25		
1/6/2017			23	
4/3/2017	4.29	6.25		
4/4/2017			6.03	
4/6/2017			25	
7/11/2017	4.35	6.5	5.96	
7/13/2017				65
10/2/2017	4.32	6.83	5.88	
10/4/2017				13
1/9/2018	4.44	6.57		45
1/10/2018			6.21	
7/9/2018	4.4		6.24	
7/10/2018		6.42		
7/11/2018				37.7
1/16/2019				24.5
3/25/2019	4.4		6.28	14.7
3/26/2019		6.65		
8/26/2019	4.26			
8/27/2019		6.57		
8/28/2019			6.34	
10/7/2019	4.24			
10/8/2019		6.65		32.8
10/9/2019		6.5		

## Sen's Slope Estimator

Constituent: Sulfate Analysis Run 2/17/2020 4:15 PM View: Appendix III Trend  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-8 (bg)	GWC-11	GWC-12	GWC-14
8/30/2016	140			
8/31/2016		64	1100	
9/1/2016			730	
10/24/2016	160			
10/25/2016				420
10/26/2016		56	900	
1/3/2017	140			
1/4/2017		65	880	
1/5/2017				430
4/3/2017	140			
4/4/2017				600
4/5/2017			990	
4/6/2017		110		
7/10/2017			480	
7/11/2017	130	49		400
10/2/2017	150			470
10/3/2017		140		
10/4/2017			760	
1/9/2018	120			440
1/11/2018		270	780	
7/9/2018	123			369
7/11/2018		211	598	
1/16/2019	129			291
1/17/2019		50.3	454	
3/25/2019	152			
3/26/2019				192
3/27/2019		76.8	579	
10/7/2019	156			
10/8/2019		310		428
10/9/2019			392	

## Sen's Slope Estimator

Constituent: Sulfate, Total Dissolved Solids Analysis Run 2/17/2020 4:15 PM View: Appendix III Trend

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWB-6R	GWA-7 (bg)
8/30/2016			120	
9/1/2016	430	310		3660
10/25/2016	360			3560
10/26/2016		280	120	
1/4/2017	360			
1/5/2017		310	130	
1/6/2017				3490
4/5/2017	440	460		
4/6/2017			150	3170
7/12/2017	490		140	
7/13/2017		490		2280
10/3/2017	780		140	
10/4/2017		1100		3350
1/9/2018			140	2640
1/10/2018	470			
1/11/2018		810		
7/10/2018	787		128	
7/11/2018		902		2200
1/16/2019		422	402	2100
1/17/2019	780			
3/25/2019				2100
3/26/2019	87.9	439	319	
10/8/2019	872			1840
10/9/2019		346	255	

## Sen's Slope Estimator

Constituent: Total Dissolved Solids Analysis Run 2/17/2020 4:15 PM View: Appendix III Trend

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-8 (bg)	GWC-16	GWB-5R	GWB-6R
8/30/2016	234		224	365
9/1/2016		878		
10/24/2016	216			
10/25/2016		585		
10/26/2016			297	373
1/3/2017	333		366	
1/4/2017		783		
1/5/2017			543	
4/3/2017	288			
4/5/2017		722		
4/6/2017			279	434
7/11/2017	188			
7/12/2017		962	308	454
10/2/2017	210			
10/3/2017		1240	288	389
1/9/2018	118			415
1/10/2018		935	493	
7/9/2018	235			
7/10/2018		1040		453
1/16/2019	219		382	1320
1/17/2019		1320		
3/25/2019	240			
3/26/2019		1380	1040	1250
10/7/2019	275			
10/8/2019		1500		
10/9/2019			2010	903



## Appendix I, II, and IV Confidence Intervals (October 2019)

## Upper Tolerance Limit

Grumman Road Landfill    Client: Southern Company    Data: Grumman Road    Printed 3/19/2020, 1:59 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	104	94.23	n/a	0.004822	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0287	n/a	n/a	n/a	104	78.85	n/a	0.004822	NP Inter(NDs)
Barium (mg/L)	n/a	0.22	n/a	n/a	n/a	101	0	n/a	0.005625	NP Inter(normal...)
Beryllium (mg/L)	n/a	0.003	n/a	n/a	n/a	28	53.57	n/a	0.2378	NP Inter(normal...)
Cadmium (mg/L)	n/a	0.005	n/a	n/a	n/a	27	92.59	n/a	0.2503	NP Inter(NDs)
Chromium (mg/L)	n/a	0.068	n/a	n/a	n/a	102	70.59	n/a	0.005343	NP Inter(normal...)
Cobalt (mg/L)	n/a	0.0102	n/a	n/a	n/a	28	60.71	n/a	0.2378	NP Inter(normal...)
Combined Radium 226 + 228 (pCi/L)	n/a	13.22	n/a	n/a	n/a	16	0	No	0.05	Inter
Fluoride (mg/L)	n/a	0.5117	n/a	n/a	n/a	16	12.5	No	0.05	Inter
Lead (mg/L)	n/a	0.013	n/a	n/a	n/a	102	80.39	n/a	0.005343	NP Inter(NDs)
Lithium (mg/L)	n/a	0.05	n/a	n/a	n/a	13	92.31	n/a	0.5133	NP Inter(NDs)
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	16	81.25	n/a	0.4401	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	15	80	n/a	0.4633	NP Inter(NDs)
Selenium (mg/L)	n/a	0.0438	n/a	n/a	n/a	102	84.31	n/a	0.005343	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	47	93.62	n/a	0.08974	NP Inter(NDs)
Vanadium (mg/L)	n/a	0.425	n/a	n/a	n/a	101	66.34	n/a	0.005625	NP Inter(normal...)
Zinc (mg/L)	n/a	0.0853	n/a	n/a	n/a	96	27.08	n/a	0.007269	NP Inter(normal...)

## Tolerance Limit

Constituent: Antimony (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
9/29/2000	<0.003	<0.003
11/21/2000	<0.003	
1/20/2001	<0.003	<0.003
3/14/2001	<0.003	<0.003
7/16/2001	<0.003	<0.003
11/1/2001	<0.003	<0.003
4/25/2002	<0.003	<0.003
11/20/2002		<0.003
6/6/2003	<0.003	<0.003
12/12/2003	<0.003	<0.003
5/26/2004	<0.003	<0.003
12/7/2004	<0.003	<0.003
6/21/2005	<0.003	<0.003
12/12/2005	<0.003	<0.003
4/4/2006		<0.003
6/27/2006	<0.003	<0.003
8/30/2006		<0.003
12/4/2006	<0.003	<0.003
2/15/2007		<0.003
6/23/2007	<0.003	<0.003
9/11/2007		<0.003
12/11/2007	<0.003	<0.003
3/11/2008		<0.003
6/23/2008	<0.003	<0.003
11/3/2008		<0.003
12/4/2008	<0.003	<0.003
3/25/2009		<0.003
7/7/2009	<0.003	<0.003
9/14/2009		<0.003
12/20/2009	<0.003	<0.003
3/4/2010		<0.003
6/20/2010	<0.003	<0.003
9/14/2010		<0.003
1/7/2011	<0.003	<0.003
4/15/2011		<0.003
7/7/2011	<0.003	<0.003
9/25/2011		<0.003
1/17/2012	<0.003	<0.003
4/4/2012		<0.003
7/9/2012	<0.003	
7/10/2012		<0.003
10/9/2012		<0.003
1/18/2013	<0.003	<0.003
4/5/2013		<0.003
7/17/2013	<0.003	<0.003
10/11/2013		<0.003
1/13/2014	<0.003	
1/14/2014		<0.003
4/3/2014		<0.003
7/9/2014	0.0022 (J)	<0.003
10/24/2014		<0.003
1/13/2015	<0.003	

## Tolerance Limit

Page 2

Constituent: Antimony (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
1/14/2015		<0.003
5/10/2015		<0.003
7/16/2015	0.0028 (J)	
7/17/2015		<0.003
10/6/2015		<0.003
1/18/2016	<0.003	<0.003
4/26/2016		<0.003
7/27/2016	<0.003	
7/28/2016		<0.003
8/30/2016		<0.003
9/1/2016	0.0017 (J)	
10/24/2016		<0.003
10/25/2016	<0.003	
1/3/2017		<0.003
1/6/2017	0.0009 (J)	
4/3/2017		<0.003
4/6/2017	<0.003	
7/11/2017		<0.003
7/13/2017	0.0013 (J)	
10/2/2017		<0.003
10/4/2017	0.0008 (J)	
1/9/2018	<0.003	<0.003
7/9/2018		<0.003

## Tolerance Limit

Constituent: Arsenic (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
9/29/2000	<0.005	<0.005
11/21/2000	<0.005	
1/20/2001	<0.005	<0.005
3/14/2001	<0.005	<0.005
7/16/2001	<0.005	<0.005
11/1/2001	<0.005	<0.005
4/25/2002	<0.005	<0.005
11/20/2002		<0.005
6/6/2003	0.02	<0.005
12/12/2003	<0.005	<0.005
5/26/2004	<0.005	<0.005
12/7/2004	<0.005	<0.005
6/21/2005	<0.005	<0.005
12/12/2005	<0.005	<0.005
4/4/2006		<0.005
6/27/2006	<0.005	<0.005
8/30/2006		<0.005
12/4/2006	<0.005	<0.005
2/15/2007		<0.005
6/23/2007	<0.005	<0.005
9/11/2007		<0.005
12/11/2007	<0.005	<0.005
3/11/2008		<0.005
6/23/2008	<0.005	<0.005
11/3/2008		<0.005
12/4/2008	<0.005	<0.005
3/25/2009		<0.005
7/7/2009	<0.005	<0.005
9/14/2009		<0.005
12/20/2009	<0.005	<0.005
3/4/2010		<0.005
6/20/2010	<0.005	<0.005
9/14/2010		<0.005
1/7/2011	<0.005	<0.005
4/15/2011		<0.005
7/7/2011	<0.005	<0.005
9/25/2011		<0.005
1/17/2012	<0.005	<0.005
4/4/2012		<0.005
7/9/2012	0.0052	
7/10/2012		<0.005
10/9/2012		<0.005
1/18/2013	0.0087	<0.005
4/5/2013		<0.005
7/17/2013	0.0084	<0.005
10/11/2013		<0.005
1/13/2014	0.009	
1/14/2014		<0.005
4/3/2014		<0.005
7/9/2014	0.008	<0.005
10/24/2014		<0.005
1/13/2015	0.0077	

# Tolerance Limit

Page 2

Constituent: Arsenic (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
1/14/2015		<0.005
5/10/2015		<0.005
7/16/2015	0.0077	
7/17/2015		<0.005
10/6/2015		<0.005
1/18/2016	0.014	<0.005
4/26/2016		0.0011 (J)
7/27/2016	0.0111	
7/28/2016		<0.005
8/30/2016		<0.005
9/1/2016	0.0287	
10/24/2016		<0.005
10/25/2016	0.0069	
1/3/2017		<0.005
1/6/2017	0.0097	
4/3/2017		0.0006 (J)
4/6/2017	0.0104	
7/11/2017		0.0006 (J)
7/13/2017	0.0064	
10/2/2017		0.0006 (J)
10/4/2017	0.0078	
1/9/2018	0.0091 (J)	0.0009 (J)
7/9/2018		<0.005

## Tolerance Limit

Constituent: Barium (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
9/29/2000	0.11	
11/21/2000	0.12	
1/20/2001	0.11	
3/14/2001	0.11	0.14
7/16/2001	0.11	0.14
11/1/2001	0.11	0.14
4/25/2002	0.058	0.088
6/6/2003	0.19	0.14
12/12/2003	0.1	0.13
5/26/2004	0.084	0.09
12/7/2004	0.094	0.11
6/21/2005	0.089	0.084
12/12/2005	0.089	0.1
4/4/2006		0.089
6/27/2006	0.096	0.1
8/30/2006		0.12
12/4/2006	0.092	0.086
2/15/2007		0.088
6/23/2007	0.08	0.089
9/11/2007		0.092
12/11/2007	0.067	0.077
3/11/2008		0.082
6/23/2008	0.056	0.086
11/3/2008		0.088
12/4/2008	0.054	0.081
3/25/2009		0.069
7/7/2009	0.034	0.078
9/14/2009		0.079
12/20/2009	0.034	0.081
3/4/2010		0.065
6/20/2010	0.062	0.078
9/14/2010		0.076
1/7/2011	0.039	0.074
4/15/2011		0.065
7/7/2011	0.036	0.081
9/25/2011		0.078
1/17/2012	0.041	0.082
4/4/2012		0.0861
7/9/2012	0.15	
7/10/2012		0.082
10/9/2012		0.09
1/18/2013	0.15	0.083
4/5/2013		0.078
7/17/2013	0.13	0.083
10/11/2013		0.078
1/13/2014	0.16	
1/14/2014		0.081
4/3/2014		0.077
7/9/2014	0.11	0.073
10/24/2014		0.087
1/13/2015	0.083	
1/14/2015		0.079

## Tolerance Limit

Page 2

Constituent: Barium (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
5/10/2015		0.076
7/16/2015	0.094	
7/17/2015		0.061
10/6/2015		0.067
1/18/2016	0.22	0.068
4/26/2016		0.0596
7/27/2016	0.192	
7/28/2016		0.0701
8/30/2016		0.0687
10/24/2016		0.07
10/25/2016	0.173	
1/3/2017		0.061
1/6/2017	0.167	
4/3/2017		0.0612
4/6/2017	0.136	
7/11/2017		0.0624
7/13/2017	0.0891	
10/2/2017		0.0618
10/4/2017	0.113	
1/9/2018	0.0901	0.0574
7/9/2018		0.056
7/11/2018	0.065	

## Tolerance Limit

Constituent: Beryllium (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
9/29/2000	<0.003	<0.003
11/21/2000	<0.003	
1/20/2001	<0.003	<0.003
3/14/2001	<0.003	<0.003
7/16/2001	<0.003	<0.003
11/1/2001	<0.003	<0.003
4/25/2002	<0.003	<0.003
8/30/2016		0.0002 (J)
9/1/2016	0.0017 (J)	
10/24/2016		<0.003
10/25/2016	0.0002 (J)	
1/3/2017		0.0002 (J)
1/6/2017	0.0003 (J)	
4/3/2017		0.0002 (J)
4/6/2017	0.0004 (J)	
7/11/2017		0.0002 (J)
7/13/2017	0.001 (J)	
10/2/2017		0.0002 (J)
10/4/2017	0.0002 (J)	
1/9/2018	<0.003	0.0002 (J)
7/9/2018		0.0002 (J)

## Tolerance Limit

Constituent: Cadmium (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
11/21/2000	<0.005	
1/20/2001	<0.005	<0.005
3/14/2001	<0.005	<0.005
7/16/2001	<0.005	<0.005
11/1/2001	<0.005	<0.005
4/25/2002	<0.005	<0.005
8/30/2016		<0.005
9/1/2016	0.0007 (J)	
10/24/2016		<0.005
10/25/2016	<0.005	
1/3/2017		<0.005
1/6/2017	0.0001 (J)	
4/3/2017		<0.005
4/6/2017	<0.005	
7/11/2017		<0.005
7/13/2017	<0.005	
10/2/2017		<0.005
10/4/2017	<0.005	
1/9/2018	<0.005	<0.005
7/9/2018		<0.005
7/11/2018	<0.005	

## Tolerance Limit

Constituent: Chromium (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
9/29/2000	<0.01	<0.01
11/21/2000	<0.01	
1/20/2001	<0.01	<0.01
3/14/2001	<0.01	<0.01
7/16/2001	<0.01	<0.01
11/1/2001	<0.01	<0.01
4/25/2002	<0.01	<0.01
6/6/2003	0.037	0.014
12/12/2003	0.0044	0.011
5/26/2004	<0.01	<0.01
12/7/2004	<0.01	<0.01
6/21/2005	<0.01	<0.01
12/12/2005	<0.01	<0.01
4/4/2006		<0.01
6/27/2006	<0.01	<0.01
8/30/2006		<0.01
12/4/2006	0.0015	<0.01
2/15/2007		<0.01
6/23/2007	<0.01	<0.01
9/11/2007		<0.01
12/11/2007	0.0016	<0.01
3/11/2008		<0.01
6/23/2008	0.0019	<0.01
11/3/2008		<0.01
12/4/2008	<0.01	<0.01
3/25/2009		<0.01
7/7/2009	0.0037	<0.01
9/14/2009		<0.01
12/20/2009	0.0016	<0.01
3/4/2010		<0.01
6/20/2010	<0.01	<0.01
9/14/2010		<0.01
1/7/2011	0.0033	<0.01
4/15/2011		<0.01
7/7/2011	0.0044	<0.01
1/17/2012	0.0038	<0.01
4/4/2012		<0.01
7/9/2012	0.022	
7/10/2012		<0.01
10/9/2012		<0.01
1/18/2013	0.034	<0.01
4/5/2013		<0.01
7/17/2013	0.032	<0.01
10/11/2013		<0.01
1/13/2014	0.04	
1/14/2014		<0.01
4/3/2014		<0.01
7/9/2014	0.036	<0.01
10/24/2014		<0.01
1/13/2015	0.03	
1/14/2015		<0.01
5/10/2015		<0.01

## Tolerance Limit

Page 2

Constituent: Chromium (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
7/16/2015	0.039	
7/17/2015		<0.01
10/6/2015		<0.01
1/18/2016	0.068	<0.01
4/26/2016		<0.01
7/27/2016	0.05	
7/28/2016		<0.01
8/30/2016		<0.01
10/24/2016		<0.01
10/25/2016	0.0519	
1/3/2017		<0.01
1/6/2017	0.0536	
4/3/2017		0.0004 (J)
4/6/2017	0.0447 (J)	
7/11/2017		0.0006 (J)
7/13/2017	0.0269	
10/2/2017		<0.01
10/4/2017	0.0378	
1/9/2018	0.0283 (J)	<0.01
7/9/2018		<0.01
7/11/2018	0.018 (J)	

## Tolerance Limit

Constituent: Cobalt (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
9/29/2000	<0.01	<0.01
11/21/2000	<0.01	
1/20/2001	<0.01	<0.01
3/14/2001	<0.01	<0.01
7/16/2001	<0.01	<0.01
11/1/2001	<0.01	<0.01
4/25/2002	<0.01	<0.01
8/30/2016		<0.01
9/1/2016	0.0102	
10/24/2016		<0.01
10/25/2016	0.0037 (J)	
1/3/2017		<0.01
1/6/2017	0.0039 (J)	
4/3/2017		0.0005 (J)
4/6/2017	0.006 (J)	
7/11/2017		0.0005 (J)
7/13/2017	0.0037 (J)	
10/2/2017		0.0004 (J)
10/4/2017	0.0058 (J)	
1/9/2018	0.0053 (J)	0.0004 (J)
7/9/2018		<0.01

## Tolerance Limit

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-8 (bg)	GWA-7 (bg)
8/30/2016	2.72	
9/1/2016		11
10/24/2016	2.96	
10/25/2016		10.5
1/3/2017	2.76	
1/6/2017		6.81
4/3/2017	1.36	
4/6/2017		8.93
7/11/2017	1.85	
7/13/2017		8.51
10/2/2017	1.9	
10/4/2017		3.85
1/9/2018	2.39	4.28
7/9/2018	1.49	
7/11/2018		5.99

## Tolerance Limit

Constituent: Fluoride (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-8 (bg)	GWA-7 (bg)
8/30/2016	0.1 (J)	
9/1/2016		<0.3
10/24/2016	0.18 (J)	
10/25/2016		0.07 (J)
1/3/2017	0.18 (J)	
1/6/2017		0.2 (J)
4/3/2017	0.12 (J)	
4/6/2017		0.05 (J)
7/11/2017	0.39	
7/13/2017		0.41
10/2/2017	0.12 (J)	
10/4/2017		0.04 (J)
1/9/2018	0.21 (J)	0.46
7/9/2018	0.04 (J)	
7/11/2018		<0.3

## Tolerance Limit

Constituent: Lead (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
9/29/2000	<0.005	<0.005
11/21/2000	<0.005	
1/20/2001	<0.005	<0.005
3/14/2001	<0.005	<0.005
7/16/2001	<0.005	<0.005
11/1/2001	<0.005	<0.005
4/25/2002	<0.005	<0.005
11/20/2002		<0.005
12/12/2003	0.008	0.0095
5/26/2004	<0.005	<0.005
12/7/2004	<0.005	<0.005
6/21/2005	<0.005	<0.005
12/12/2005	<0.005	<0.005
4/4/2006		<0.005
6/27/2006	<0.005	<0.005
8/30/2006		<0.005
12/4/2006	<0.005	<0.005
2/15/2007		<0.005
6/23/2007	<0.005	<0.005
9/11/2007		<0.005
12/11/2007	<0.005	<0.005
3/11/2008		<0.005
6/23/2008	<0.005	<0.005
11/3/2008		<0.005
12/4/2008	<0.005	<0.005
3/25/2009		<0.005
7/7/2009	<0.005	<0.005
9/14/2009		<0.005
12/20/2009	<0.005	<0.005
3/4/2010		<0.005
6/20/2010	<0.005	<0.005
9/14/2010		<0.005
1/7/2011	<0.005	<0.005
4/15/2011		<0.005
7/7/2011	<0.005	<0.005
9/25/2011		<0.005
1/17/2012	<0.005	<0.005
4/4/2012		<0.005
7/9/2012	<0.005	
7/10/2012		<0.005
10/9/2012		<0.005
1/18/2013	<0.005	<0.005
4/5/2013		<0.005
7/17/2013	<0.005	<0.005
10/11/2013		<0.005
1/13/2014	0.013	
1/14/2014		<0.005
4/3/2014		<0.005
7/9/2014	0.0076 (J)	<0.005
10/24/2014		<0.005
1/13/2015	0.0057 (J)	
1/14/2015		<0.005

# Tolerance Limit

Page 2

Constituent: Lead (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
5/10/2015		<0.005
7/16/2015	0.009 (J)	
7/17/2015		<0.005
10/6/2015		<0.005
1/18/2016	0.0094 (J)	<0.005
4/26/2016		<0.005
7/27/2016	0.0058	
7/28/2016		<0.005
8/30/2016		<0.005
10/24/2016		<0.005
10/25/2016	0.0003 (J)	
1/3/2017		0.0001 (J)
1/6/2017	0.006	
4/3/2017		0.0002 (J)
4/6/2017	0.0109	
7/11/2017		0.0001 (J)
7/13/2017	0.007	
10/2/2017		0.0001 (J)
10/4/2017	0.0042 (J)	
1/9/2018	0.0098	0.0001 (J)
7/9/2018		<0.005
7/11/2018	0.0028 (J)	

## Tolerance Limit

Constituent: Lithium (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-8 (bg)	GWA-7 (bg)
8/30/2016	<0.05	
9/1/2016		<0.05
10/24/2016	<0.05	
10/25/2016		<0.05
1/3/2017	<0.05	
1/6/2017		<0.05
4/3/2017	<0.05	
7/11/2017	<0.05	
7/13/2017		<0.05
10/2/2017	<0.05	
10/4/2017		<0.05
1/9/2018	<0.05	
7/9/2018	0.001 (J)	

## Tolerance Limit

Constituent: Mercury (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-8 (bg)	GWA-7 (bg)
8/30/2016	<0.0005	
9/1/2016		0.00017 (J)
10/24/2016	<0.0005	
10/25/2016		<0.0005
1/3/2017	<0.0005	
1/6/2017		<0.0005
4/3/2017	<0.0005	
4/6/2017		4E-05 (J)
7/11/2017	<0.0005	
7/13/2017		<0.0005
10/2/2017	<0.0005	
10/4/2017		0.0001 (J)
1/9/2018	<0.0005	<0.0005
7/9/2018	<0.0005	
7/11/2018		<0.0005

## Tolerance Limit

Constituent: Molybdenum (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-8 (bg)	GWA-7 (bg)
8/30/2016	<0.01	
9/1/2016		0.0098 (J)
10/24/2016	<0.01	
10/25/2016		<0.01
1/3/2017	<0.01	
1/6/2017		<0.01
4/3/2017	<0.01	
4/6/2017		<0.01
7/11/2017	<0.01	
7/13/2017		0.0013 (J)
10/2/2017	<0.01	
10/4/2017		0.0013 (J)
1/9/2018	<0.01	<0.01
7/9/2018	<0.01	

## Tolerance Limit

Constituent: Selenium (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
9/29/2000	<0.01	<0.01
11/21/2000	<0.01	
1/20/2001	<0.01	<0.01
3/14/2001	<0.01	<0.01
7/16/2001	<0.01	<0.01
11/1/2001	<0.01	<0.01
4/25/2002	<0.01	<0.01
11/20/2002		<0.01
6/6/2003	<0.01	<0.01
12/12/2003	<0.01	<0.01
5/26/2004	<0.01	<0.01
12/7/2004	<0.01	<0.01
6/21/2005	<0.01	<0.01
12/12/2005	<0.01	<0.01
4/4/2006		<0.01
6/27/2006	<0.01	<0.01
8/30/2006		<0.01
12/4/2006	<0.01	<0.01
2/15/2007		<0.01
6/23/2007	<0.01	<0.01
9/11/2007		<0.01
12/11/2007	<0.01	<0.01
3/11/2008		<0.01
6/23/2008	<0.01	<0.01
11/3/2008		<0.01
12/4/2008	<0.01	<0.01
3/25/2009		<0.01
7/7/2009	<0.01	<0.01
9/14/2009		<0.01
12/20/2009	<0.01	<0.01
3/4/2010		<0.01
6/20/2010	<0.01	<0.01
9/14/2010		<0.01
1/7/2011	<0.01	<0.01
4/15/2011		<0.01
7/7/2011	<0.01	<0.01
9/25/2011		<0.01
1/17/2012	<0.01	<0.01
7/9/2012	<0.01	
7/10/2012		<0.01
10/9/2012		<0.01
1/18/2013	0.009	<0.01
4/5/2013		<0.01
7/17/2013	0.011	<0.01
10/11/2013		<0.01
1/13/2014	0.012	
1/14/2014		<0.01
4/3/2014		<0.01
7/9/2014	0.011	<0.01
10/24/2014		<0.01
1/13/2015	0.0092	
1/14/2015		<0.01

# Tolerance Limit

Page 2

Constituent: Selenium (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
5/10/2015		<0.01
7/16/2015	0.014	
7/17/2015		<0.01
10/6/2015		<0.01
1/18/2016	0.023	<0.01
4/26/2016		<0.01
7/27/2016	0.0323	
7/28/2016		0.001 (J)
8/30/2016		<0.01
9/1/2016	0.0438	
10/24/2016		0.0013 (J)
10/25/2016	0.031	
1/3/2017		<0.01
1/6/2017	0.0324	
4/3/2017		<0.01
4/6/2017	0.0188 (J)	
7/11/2017		<0.01
7/13/2017	0.0118	
10/2/2017		<0.01
10/4/2017	0.0195	
1/9/2018		<0.01
7/9/2018		<0.01

## Tolerance Limit

Constituent: Thallium (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
9/29/2000	<0.001	<0.001
11/21/2000	<0.001	
1/20/2001	<0.001	<0.001
3/14/2001	<0.001	<0.001
7/16/2001	<0.001	<0.001
11/1/2001	<0.001	<0.001
4/25/2002	<0.001	<0.001
12/12/2003	<0.001	<0.001
5/26/2004	<0.001	<0.001
12/7/2004	<0.001	<0.001
6/21/2005	<0.001	<0.001
12/12/2005	<0.001	<0.001
4/4/2006		<0.001
6/27/2006	<0.001	<0.001
8/30/2006		<0.001
12/4/2006	<0.001	<0.001
2/15/2007		<0.001
6/23/2007	<0.001	<0.001
8/30/2016		<0.001
9/1/2016	0.0005 (J)	
10/24/2016		<0.001
10/25/2016	<0.001	
1/3/2017		<0.001
1/6/2017	<0.001	
4/3/2017		<0.001
4/6/2017	<0.001	
7/11/2017		5E-05 (J)
7/13/2017	<0.001	
10/2/2017		6E-05 (J)
10/4/2017	<0.001	
1/9/2018	<0.001	<0.001
7/9/2018		<0.001

## Tolerance Limit

Constituent: Vanadium (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
9/29/2000	<0.01	<0.01
11/21/2000	<0.01	
1/20/2001	<0.01	<0.01
3/14/2001	<0.01	<0.01
7/16/2001	<0.01	<0.01
11/1/2001	<0.01	<0.01
4/25/2002	<0.01	<0.01
11/20/2002		<0.01
6/6/2003	0.047	
12/12/2003	0.0086	
5/26/2004	<0.01	<0.01
12/7/2004	<0.01	<0.01
6/21/2005	<0.01	<0.01
12/12/2005	<0.01	<0.01
4/4/2006		<0.01
6/27/2006	<0.01	<0.01
8/30/2006		<0.01
12/4/2006	0.0027	<0.01
2/15/2007		<0.01
6/23/2007	0.0027	<0.01
9/11/2007		<0.01
12/11/2007	0.0033	<0.01
3/11/2008		<0.01
6/23/2008	0.0074	<0.01
11/3/2008		<0.01
12/4/2008	0.0084	<0.01
3/25/2009		<0.01
7/7/2009	0.023	<0.01
9/14/2009		<0.01
12/20/2009	0.007	<0.01
3/4/2010		<0.01
6/20/2010	0.0047	<0.01
9/14/2010		<0.01
1/7/2011	0.018	<0.01
4/15/2011		<0.01
7/7/2011	0.019	<0.01
9/25/2011		<0.01
1/17/2012	0.0298	<0.01
4/4/2012		<0.01
7/9/2012	0.14	
7/10/2012		<0.01
10/9/2012		<0.01
1/18/2013	0.21	<0.01
4/5/2013		<0.01
7/17/2013	0.18	<0.01
10/11/2013		<0.01
1/13/2014	0.24	
1/14/2014		<0.01
4/3/2014		0.0015 (J)
7/9/2014	0.22	0.0012 (J)
10/24/2014		<0.01
1/13/2015	0.19	

## Tolerance Limit

Page 2

Constituent: Vanadium (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
1/14/2015		<0.01
5/10/2015		<0.01
7/16/2015	0.23	
7/17/2015		<0.01
10/6/2015		0.0012 (J)
1/18/2016	0.41	0.00079 (J)
4/26/2016		<0.01
7/27/2016	0.397	
7/28/2016		<0.01
10/24/2016		<0.01
10/25/2016	0.425	
1/3/2017		<0.01
1/6/2017	0.41	
4/3/2017		<0.01
4/6/2017	0.297	
7/11/2017		<0.01
7/13/2017	0.194	
10/2/2017		<0.01
10/4/2017	0.316	
1/9/2018	0.194	0.0014 (J)
7/9/2018		<0.01
7/11/2018	0.15	

## Tolerance Limit

Constituent: Zinc (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
9/29/2000	<0.01	<0.01
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	<0.01
7/16/2001	<0.01	<0.01
11/1/2001	<0.01	<0.01
4/25/2002	<0.01	<0.01
5/26/2004	0.013	<0.01
12/7/2004	<0.01	<0.01
6/21/2005	<0.01	<0.01
12/12/2005	0.014	0.01
4/4/2006		<0.01
6/27/2006	0.01	0.0043
12/4/2006	0.0065	0.0053
2/15/2007		0.0045
6/23/2007	0.0049	0.0043
9/11/2007		0.004
12/11/2007	0.0043	0.0048
3/11/2008		0.0043
6/23/2008	0.0025	0.0037
11/3/2008		0.0032
12/4/2008	0.0025	0.0029
3/25/2009		0.0055
7/7/2009	<0.01	0.0028
9/14/2009		0.0027
12/20/2009	0.0031	0.0029
3/4/2010		0.0042
6/20/2010	<0.01	0.0027
9/14/2010		<0.01
1/7/2011	<0.01	0.0032
4/15/2011		<0.01
7/7/2011	0.0031	0.005
9/25/2011		0.0041
1/17/2012	0.004	0.0043
4/4/2012		<0.01
7/9/2012	0.0096	
7/10/2012		0.0028
10/9/2012		0.0033
1/18/2013	0.051	0.0038
4/5/2013		0.0026
7/17/2013	0.042	<0.01
10/11/2013		0.0046
1/13/2014	0.0025	
1/14/2014		0.0025
4/3/2014		0.0029
7/9/2014	0.064	0.002 (J)
10/24/2014		0.0031
1/13/2015	0.066	
1/14/2015		0.003
5/10/2015		0.0028
7/16/2015	0.036	
7/17/2015		0.0018 (J)

## Tolerance Limit

Page 2

Constituent: Zinc (mg/L) Analysis Run 3/19/2020 1:59 PM View: Upper Tolerance Limit  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)
10/6/2015		0.0018 (J)
1/18/2016	0.035	0.0028
4/26/2016		<0.01
7/27/2016	0.0529	
7/28/2016		0.0018 (J)
10/24/2016		0.0024 (J)
10/25/2016	0.0035 (J)	
1/3/2017		0.0035 (J)
1/6/2017	0.0235	
4/3/2017		0.0041 (J)
4/6/2017	0.0829	
7/11/2017		0.0029 (J)
7/13/2017	0.0853	
10/2/2017		0.0026 (J)
10/4/2017	0.0263	
1/9/2018	0.0665	0.0035 (J)
7/9/2018		0.0022 (J)
7/11/2018	0.02 (J)	

## Confidence Interval Significant Results

Grumman Road Landfill    Client: Southern Company    Data: Grumman Road    Printed 3/27/2020, 6:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	GWC-15	0.1181	0.05908	0.0287	Yes	12	0	No	0.01	Param.
Arsenic (mg/L)	GWC-16	0.08515	0.0587	0.0287	Yes	12	0	No	0.01	Param.
Arsenic (mg/L)	GWC-20	0.3917	0.277	0.0287	Yes	12	0	No	0.01	Param.
Molybdenum (mg/L)	GWC-1	0.1959	0.0935	0.01	Yes	10	0	No	0.01	Param.
Molybdenum (mg/L)	GWC-15	0.1154	0.09148	0.01	Yes	10	0	No	0.01	Param.
Molybdenum (mg/L)	GWC-16	0.1941	0.09626	0.01	Yes	10	0	No	0.01	Param.
Molybdenum (mg/L)	GWC-20	0.2759	0.0987	0.01	Yes	10	0	No	0.01	Param.
Molybdenum (mg/L)	GWC-21	0.07306	0.0147	0.01	Yes	10	0	No	0.01	Param.
Molybdenum (mg/L)	GWB-4R	0.1	0.0209	0.01	Yes	10	0	No	0.011	NP (normality)

## Confidence Interval All Results

Grumman Road Landfill    Client: Southern Company    Data: Grumman Road    Printed 3/27/2020, 6:17 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWC-1	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-11	0.003	0.00046	0.006	No	12	58.33	No	0.01	NP (normality)
Antimony (mg/L)	GWC-12	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-13	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-14	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-15	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-16	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-17	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-2	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-20	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-21	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-22	0.003	0.00045	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-9	0.003	0.0016	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-4R	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-5R	0.003	0.003	0.006	No	11	90.91	No	0.006	NP (NDs)
Antimony (mg/L)	GWB-6R	0.003	0.003	0.006	No	9	100	No	0.002	NP (NDs)
Arsenic (mg/L)	GWC-1	0.003136	0.00173	0.0287	No	12	0	No	0.01	Param.
Arsenic (mg/L)	GWC-11	0.005	0.005	0.0287	No	12	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-12	0.005	0.0008	0.0287	No	12	75	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-13	0.005	0.0006	0.0287	No	12	83.33	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-14	0.002896	0.001769	0.0287	No	12	8.333	In(x)	0.01	Param.
<b>Arsenic (mg/L)</b>	<b>GWC-15</b>	<b>0.1181</b>	<b>0.05908</b>	<b>0.0287</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Arsenic (mg/L)</b>	<b>GWC-16</b>	<b>0.08515</b>	<b>0.0587</b>	<b>0.0287</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GWC-17	0.005	0.00082	0.0287	No	12	33.33	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-2	0.005	0.0006	0.0287	No	12	83.33	No	0.01	NP (NDs)
<b>Arsenic (mg/L)</b>	<b>GWC-20</b>	<b>0.3917</b>	<b>0.277</b>	<b>0.0287</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GWC-21	0.005305	0.002777	0.0287	No	12	33.33	No	0.01	Param.
Arsenic (mg/L)	GWC-22	0.005	0.0006	0.0287	No	12	41.67	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-9	0.005	0.005	0.0287	No	12	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GWB-4R	0.003151	0.001474	0.0287	No	12	8.333	No	0.01	Param.
Arsenic (mg/L)	GWB-5R	0.0053	0.0009	0.0287	No	12	25	No	0.01	NP (Cohens/xfrm)
Arsenic (mg/L)	GWB-6R	0.004022	0.001096	0.0287	No	11	18.18	No	0.01	Param.
Barium (mg/L)	GWC-1	0.05777	0.05076	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-11	0.118	0.05167	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-12	0.01857	0.01624	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-13	0.02425	0.0185	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-14	0.067	0.0245	2	No	12	0	No	0.01	NP (normality)
Barium (mg/L)	GWC-15	0.04982	0.04008	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-16	0.118	0.04738	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GWC-17	0.1222	0.037	2	No	12	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-2	0.05451	0.04865	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GWC-20	0.1169	0.07591	2	No	12	0	In(x)	0.01	Param.
Barium (mg/L)	GWC-21	0.07596	0.04659	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-22	0.1088	0.06162	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-9	0.2903	0.203	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWB-4R	0.09795	0.07548	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWB-5R	0.1793	0.0849	2	No	12	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GWB-6R	0.107	0.013	2	No	12	0	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-1	0.003	0.003	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GWC-11	0.003	0.003	0.004	No	10	100	No	0.011	NP (NDs)

# Confidence Interval All Results

Grumman Road Landfill    Client: Southern Company    Data: Grumman Road    Printed 3/27/2020, 6:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Beryllium (mg/L)	GWC-12	0.0009541	0.0005339	0.004	No	10	0	No	0.01	Param.
Beryllium (mg/L)	GWC-13	0.003	0.003	0.004	No	10	90	No	0.011	NP (NDs)
Beryllium (mg/L)	GWC-14	0.003	0.00009	0.004	No	10	70	No	0.011	NP (normality)
Beryllium (mg/L)	GWC-15	0.003	0.003	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GWC-16	0.003	0.00008	0.004	No	10	30	No	0.011	NP (normality)
Beryllium (mg/L)	GWC-17	0.003346	0.001654	0.004	No	10	0	No	0.01	Param.
Beryllium (mg/L)	GWC-2	0.003	0.0003	0.004	No	11	81.82	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-20	0.003	0.003	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GWC-21	0.003	0.003	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GWC-22	0.003	0.00009	0.004	No	10	40	No	0.011	NP (normality)
Beryllium (mg/L)	GWC-9	0.0003	0.0002	0.004	No	10	0	No	0.011	NP (normality)
Beryllium (mg/L)	GWB-4R	0.003	0.0001	0.004	No	10	40	No	0.011	NP (normality)
Beryllium (mg/L)	GWB-5R	0.0002798	0.0001104	0.004	No	9	0	No	0.01	Param.
Beryllium (mg/L)	GWB-6R	0.003	0.003	0.004	No	9	100	No	0.002	NP (NDs)
Cadmium (mg/L)	GWC-1	0.0025	0.0001	0.005	No	10	80	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-11	0.0007567	0.0001406	0.005	No	10	10	In(x)	0.01	Param.
Cadmium (mg/L)	GWC-12	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-13	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-14	0.0025	0.00017	0.005	No	10	40	No	0.011	NP (normality)
Cadmium (mg/L)	GWC-15	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-16	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-17	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-2	0.0025	0.0025	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-20	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-21	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-22	0.0025	0.0001	0.005	No	10	30	No	0.011	NP (normality)
Cadmium (mg/L)	GWC-9	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWB-4R	0.0025	0.00009	0.005	No	10	60	No	0.011	NP (normality)
Cadmium (mg/L)	GWB-5R	0.0025	0.0025	0.005	No	9	100	No	0.002	NP (NDs)
Cadmium (mg/L)	GWB-6R	0.0025	0.0025	0.005	No	9	100	No	0.002	NP (NDs)
Chromium (mg/L)	GWC-1	0.0062	0.0015	0.1	No	12	0	No	0.01	NP (normality)
Chromium (mg/L)	GWC-11	0.01	0.0007	0.1	No	12	41.67	No	0.01	NP (normality)
Chromium (mg/L)	GWC-12	0.01	0.00085	0.1	No	12	16.67	No	0.01	NP (normality)
Chromium (mg/L)	GWC-13	0.01	0.0007	0.1	No	12	50	No	0.01	NP (normality)
Chromium (mg/L)	GWC-14	0.01	0.0006	0.1	No	12	33.33	No	0.01	NP (normality)
Chromium (mg/L)	GWC-15	0.01	0.0012	0.1	No	12	41.67	No	0.01	NP (normality)
Chromium (mg/L)	GWC-16	0.01	0.0009	0.1	No	12	33.33	No	0.01	NP (normality)
Chromium (mg/L)	GWC-17	0.01	0.0009	0.1	No	12	33.33	No	0.01	NP (normality)
Chromium (mg/L)	GWC-2	0.01	0.0006	0.1	No	12	58.33	No	0.01	NP (normality)
Chromium (mg/L)	GWC-20	0.01	0.00089	0.1	No	12	50	No	0.01	NP (normality)
Chromium (mg/L)	GWC-21	0.01	0.0006	0.1	No	12	41.67	No	0.01	NP (normality)
Chromium (mg/L)	GWC-22	0.01	0.00057	0.1	No	12	58.33	No	0.01	NP (normality)
Chromium (mg/L)	GWC-9	0.01	0.0009	0.1	No	12	41.67	No	0.01	NP (normality)
Chromium (mg/L)	GWB-4R	0.01097	0.004078	0.1	No	12	0	No	0.01	Param.
Chromium (mg/L)	GWB-5R	0.012	0.0011	0.1	No	12	25	No	0.01	NP (Cohens/xfrm)
Chromium (mg/L)	GWB-6R	0.017	0.0014	0.1	No	12	0	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-1	0.005	0.005	0.0102	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-11	0.005	0.005	0.0102	No	10	90	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-12	0.001506	0.0009741	0.0102	No	10	0	No	0.01	Param.
Cobalt (mg/L)	GWC-13	0.005	0.005	0.0102	No	10	100	No	0.011	NP (NDs)

# Confidence Interval All Results

Grumman Road Landfill    Client: Southern Company    Data: Grumman Road    Printed 3/27/2020, 6:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Cobalt (mg/L)	GWC-14	0.005	0.005	0.0102	No	10	90	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-15	0.005	0.005	0.0102	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-16	0.005	0.005	0.0102	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-17	0.00718	0.00374	0.0102	No	10	0	No	0.01	Param.
Cobalt (mg/L)	GWC-2	0.005	0.0003	0.0102	No	11	63.64	No	0.006	NP (normality)
Cobalt (mg/L)	GWC-20	0.005	0.005	0.0102	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-21	0.005	0.005	0.0102	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-22	0.005	0.0007	0.0102	No	10	50	No	0.011	NP (normality)
Cobalt (mg/L)	GWC-9	0.0017	0.00099	0.0102	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	GWB-4R	0.0024	0.0008	0.0102	No	10	10	No	0.011	NP (normality)
Cobalt (mg/L)	GWB-5R	0.005	0.002	0.0102	No	10	60	No	0.011	NP (normality)
Cobalt (mg/L)	GWB-6R	0.005	0.00038	0.0102	No	9	88.89	No	0.002	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GWC-1	2.51	1.546	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-11	5.92	1.761	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-12	3.306	1.956	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-13	1.412	0.6307	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-14	1.337	0.7614	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-15	1.808	0.8966	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-16	2.064	1.607	13.22	No	10	0	x^2	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-17	4.574	2.696	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-2	0.9782	0.5158	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-20	2.946	1.342	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-21	1.867	0.9642	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-22	7.157	3.977	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-9	4.601	2.267	13.22	No	10	0	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWB-4R	4.885	2.573	13.22	No	10	0	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWB-5R	3.74	1.85	13.22	No	10	0	No	0.011	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GWB-6R	4.168	1.814	13.22	No	10	0	No	0.01	Param.
Fluoride (mg/L)	GWC-1	0.3	0.051	4	No	12	66.67	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-11	0.3	0.3	4	No	12	100	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-12	0.9708	0.3519	4	No	12	8.333	No	0.01	Param.
Fluoride (mg/L)	GWC-13	0.55	0.09	4	No	12	75	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-14	0.3778	0.2355	4	No	12	50	No	0.01	Param.
Fluoride (mg/L)	GWC-15	0.5	0.13	4	No	12	58.33	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-16	0.55	0.1	4	No	12	41.67	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GWC-17	1.566	0.7154	4	No	12	8.333	No	0.01	Param.
Fluoride (mg/L)	GWC-2	0.62	0.06	4	No	12	41.67	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-20	0.3	0.04	4	No	12	66.67	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-21	0.3	0.071	4	No	12	91.67	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-22	0.3	0.04	4	No	12	50	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-9	0.3979	0.1129	4	No	12	0	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GWB-4R	0.38	0.05	4	No	12	50	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GWB-5R	0.3	0.04	4	No	12	33.33	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GWB-6R	0.3	0.053	4	No	12	25	No	0.01	NP (Cohens/xfrm)
Lead (mg/L)	GWC-1	0.005	0.0001	0.013	No	12	91.67	No	0.01	NP (NDs)
Lead (mg/L)	GWC-11	0.0003	0.0002	0.013	No	11	0	No	0.006	NP (normality)
Lead (mg/L)	GWC-12	0.005	0.000066	0.013	No	12	41.67	No	0.01	NP (normality)
Lead (mg/L)	GWC-13	0.005	0.00013	0.013	No	12	25	No	0.01	NP (Cohens/xfrm)
Lead (mg/L)	GWC-14	0.005	0.0001	0.013	No	12	66.67	No	0.01	NP (normality)
Lead (mg/L)	GWC-15	0.005	0.00012	0.013	No	12	50	No	0.01	NP (normality)

# Confidence Interval All Results

Grumman Road Landfill    Client: Southern Company    Data: Grumman Road    Printed 3/27/2020, 6:17 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lead (mg/L)	GWC-16	0.005	0.0001	0.013	No	12	33.33	No	0.01	NP (normality)
Lead (mg/L)	GWC-17	0.005	0.0001	0.013	No	12	66.67	No	0.01	NP (normality)
Lead (mg/L)	GWC-2	0.005	0.00008	0.013	No	12	58.33	No	0.01	NP (normality)
Lead (mg/L)	GWC-20	0.005	0.00007	0.013	No	12	58.33	No	0.01	NP (normality)
Lead (mg/L)	GWC-21	0.005	0.00009	0.013	No	12	50	No	0.01	NP (normality)
Lead (mg/L)	GWC-22	0.001014	0.000289	0.013	No	12	0	In(x)	0.01	Param.
Lead (mg/L)	GWC-9	0.005	0.00009	0.013	No	12	58.33	No	0.01	NP (normality)
Lead (mg/L)	GWB-4R	0.007232	0.002716	0.013	No	11	18.18	No	0.01	Param.
Lead (mg/L)	GWB-5R	0.005	0.0001	0.013	No	12	33.33	No	0.01	NP (normality)
Lead (mg/L)	GWB-6R	0.005	0.0002	0.013	No	11	36.36	No	0.006	NP (normality)
Lithium (mg/L)	GWC-1	0.03	0.03	0.03	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-11	0.03	0.03	0.03	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-12	0.03	0.00098	0.03	No	10	60	No	0.011	NP (normality)
Lithium (mg/L)	GWC-13	0.03	0.03	0.03	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-14	0.03	0.03	0.03	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-15	0.03	0.03	0.03	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-16	0.03	0.03	0.03	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-17	0.007473	0.005267	0.03	No	10	0	No	0.01	Param.
Lithium (mg/L)	GWC-2	0.03	0.03	0.03	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-20	0.03	0.03	0.03	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-21	0.03	0.03	0.03	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-22	0.03	0.03	0.03	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-9	0.002199	0.001801	0.03	No	9	0	No	0.01	Param.
Lithium (mg/L)	GWB-4R	0.013	0.0039	0.03	No	10	0	No	0.011	NP (normality)
Lithium (mg/L)	GWB-5R	0.03	0.0024	0.03	No	9	22.22	No	0.002	NP (normality)
Lithium (mg/L)	GWB-6R	0.03	0.03	0.03	No	9	100	No	0.002	NP (NDs)
Mercury (mg/L)	GWC-1	0.0005	0.0005	0.002	No	10	90	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-11	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-12	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-13	0.0005	0.0005	0.002	No	10	90	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-14	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-15	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-16	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-17	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-2	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GWC-20	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-21	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-22	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-9	0.0005	0.0005	0.002	No	10	90	No	0.011	NP (NDs)
Mercury (mg/L)	GWB-4R	0.0005	0.0005	0.002	No	10	90	No	0.011	NP (NDs)
Mercury (mg/L)	GWB-5R	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GWB-6R	0.0005	0.0005	0.002	No	10	90	No	0.011	NP (NDs)
<b>Molybdenum (mg/L)</b>	<b>GWC-1</b>	<b>0.1959</b>	<b>0.0935</b>	<b>0.01</b>	<b>Yes</b>	<b>10</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GWC-11	0.01	0.01	0.01	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWC-12	0.01	0.01	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWC-13	0.01	0.01	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWC-14	0.034	0.0022	0.01	No	9	0	No	0.002	NP (normality)
<b>Molybdenum (mg/L)</b>	<b>GWC-15</b>	<b>0.1154</b>	<b>0.09148</b>	<b>0.01</b>	<b>Yes</b>	<b>10</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Molybdenum (mg/L)</b>	<b>GWC-16</b>	<b>0.1941</b>	<b>0.09626</b>	<b>0.01</b>	<b>Yes</b>	<b>10</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GWC-17	0.01	0.004	0.01	No	10	80	No	0.011	NP (NDs)

# Confidence Interval All Results

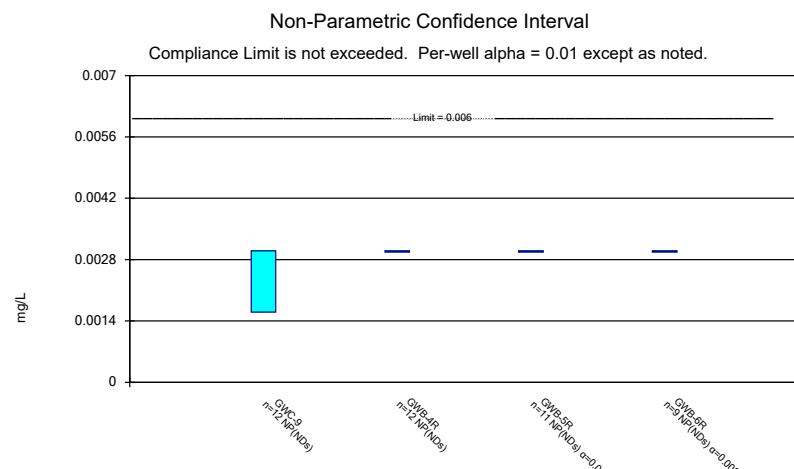
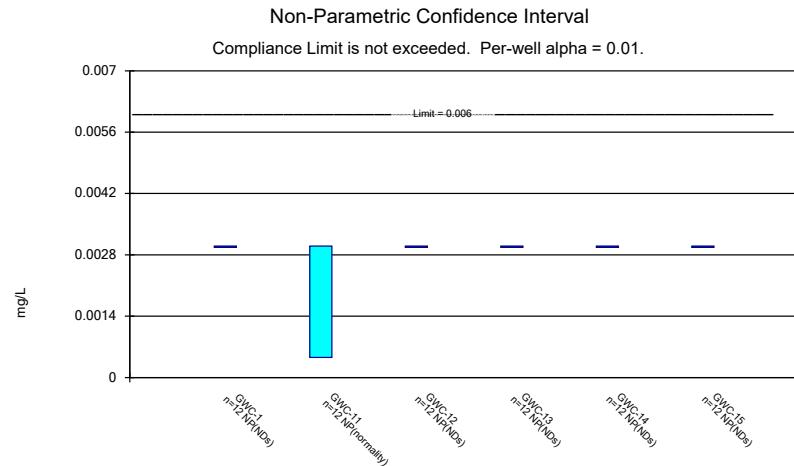
Grumman Road Landfill    Client: Southern Company    Data: Grumman Road    Printed 3/27/2020, 6:17 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	GWC-2	0.01	0.01	0.01	No	11	100	No	0.006	NP (NDs)
<b>Molybdenum (mg/L)</b>	<b>GWC-20</b>	<b>0.2759</b>	<b>0.0987</b>	<b>0.01</b>	<b>Yes</b>	<b>10</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Molybdenum (mg/L)</b>	<b>GWC-21</b>	<b>0.07306</b>	<b>0.0147</b>	<b>0.01</b>	<b>Yes</b>	<b>10</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GWC-22	0.01	0.01	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWC-9	0.01	0.01	0.01	No	10	100	No	0.011	NP (NDs)
<b>Molybdenum (mg/L)</b>	<b>GWB-4R</b>	<b>0.1</b>	<b>0.0209</b>	<b>0.01</b>	<b>Yes</b>	<b>10</b>	<b>0</b>	<b>No</b>	<b>0.011</b>	<b>NP (normality)</b>
Molybdenum (mg/L)	GWB-5R	0.01	0.0012	0.01	No	9	88.89	No	0.002	NP (NDs)
Molybdenum (mg/L)	GWB-6R	0.01	0.0026	0.01	No	9	88.89	No	0.002	NP (NDs)
Selenium (mg/L)	GWC-1	0.0052	0.0016	0.05	No	12	8.333	No	0.01	NP (normality)
Selenium (mg/L)	GWC-11	0.01	0.0052	0.05	No	12	33.33	No	0.01	NP (Cohens/xfrm)
Selenium (mg/L)	GWC-12	0.01	0.002	0.05	No	12	83.33	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-13	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-14	0.004602	0.002265	0.05	No	12	0	No	0.01	Param.
Selenium (mg/L)	GWC-15	0.014	0.0029	0.05	No	12	50	No	0.01	NP (normality)
Selenium (mg/L)	GWC-16	0.005977	0.003056	0.05	No	12	0	No	0.01	Param.
Selenium (mg/L)	GWC-17	0.01	0.0012	0.05	No	12	50	No	0.01	NP (normality)
Selenium (mg/L)	GWC-2	0.01	0.0035	0.05	No	12	91.67	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-20	0.01	0.0014	0.05	No	12	66.67	No	0.01	NP (normality)
Selenium (mg/L)	GWC-21	0.02242	0.01275	0.05	No	12	0	No	0.01	Param.
Selenium (mg/L)	GWC-22	0.01	0.0014	0.05	No	12	75	No	0.01	NP (normality)
Selenium (mg/L)	GWC-9	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GWB-4R	0.01	0.0029	0.05	No	12	33.33	No	0.01	NP (Cohens/xfrm)
Selenium (mg/L)	GWB-5R	0.01	0.0033	0.05	No	12	75	No	0.01	NP (normality)
Selenium (mg/L)	GWB-6R	0.01	0.0016	0.05	No	10	60	No	0.011	NP (normality)
Thallium (mg/L)	GWC-1	0.001	0.000054	0.002	No	10	80	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-11	0.001	0.00007	0.002	No	10	60	No	0.011	NP (normality)
Thallium (mg/L)	GWC-12	0.001	0.00014	0.002	No	10	30	No	0.011	NP (normality)
Thallium (mg/L)	GWC-13	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-14	0.001	0.00007	0.002	No	10	80	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-15	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-16	0.001	0.00006	0.002	No	10	80	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-17	0.001	0.000076	0.002	No	10	50	No	0.011	NP (normality)
Thallium (mg/L)	GWC-2	0.001	0.001	0.002	No	11	90.91	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-20	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-21	0.001	0.001	0.002	No	10	90	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-22	0.001	0.000086	0.002	No	10	70	No	0.011	NP (normality)
Thallium (mg/L)	GWC-9	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GWB-4R	0.001	0.00007	0.002	No	10	80	No	0.011	NP (NDs)
Thallium (mg/L)	GWB-5R	0.001	0.00031	0.002	No	10	80	No	0.011	NP (NDs)
Thallium (mg/L)	GWB-6R	0.001	0.001	0.002	No	9	100	No	0.002	NP (NDs)
Vanadium (mg/L)	GWC-1	0.01	0.0043	0.425	No	8	25	No	0.004	NP (Cohens/xfrm)
Vanadium (mg/L)	GWC-11	0.01	0.0019	0.425	No	8	25	No	0.004	NP (normality)
Vanadium (mg/L)	GWC-12	0.01014	0.002206	0.425	No	8	25	No	0.01	Param.
Vanadium (mg/L)	GWC-13	0.01	0.0016	0.425	No	8	50	No	0.004	NP (normality)
Vanadium (mg/L)	GWC-14	0.01883	0.007389	0.425	No	10	10	No	0.01	Param.
Vanadium (mg/L)	GWC-15	0.01	0.0021	0.425	No	10	40	No	0.011	NP (normality)
Vanadium (mg/L)	GWC-16	0.01	0.0025	0.425	No	10	30	No	0.011	NP (normality)
Vanadium (mg/L)	GWC-17	0.01	0.0024	0.425	No	8	37.5	No	0.004	NP (normality)
Vanadium (mg/L)	GWC-2	0.01	0.0024	0.425	No	8	87.5	No	0.004	NP (NDs)
Vanadium (mg/L)	GWC-20	0.01	0.0024	0.425	No	10	40	No	0.011	NP (normality)

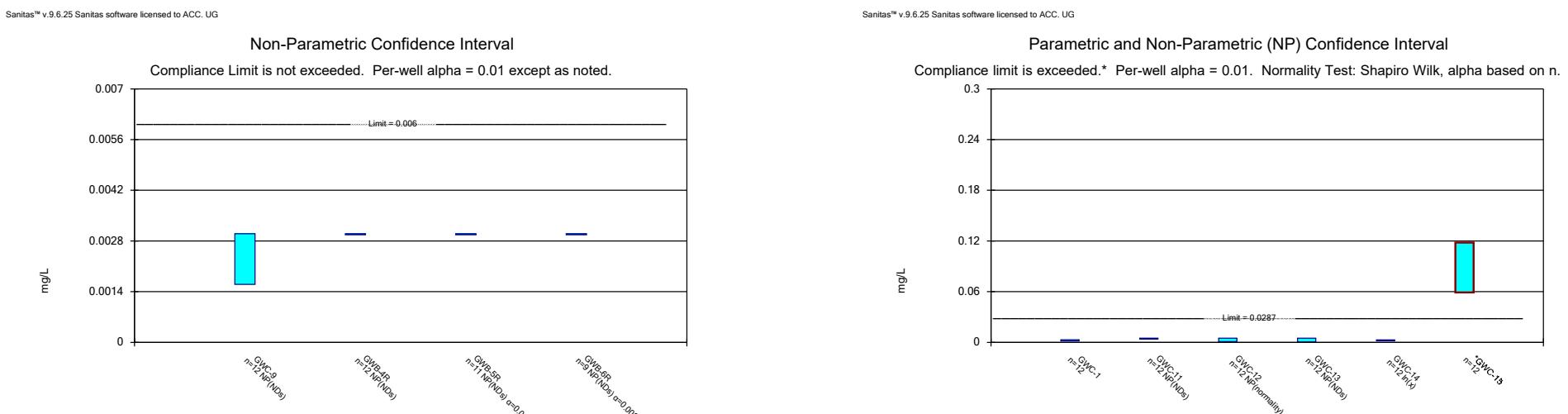
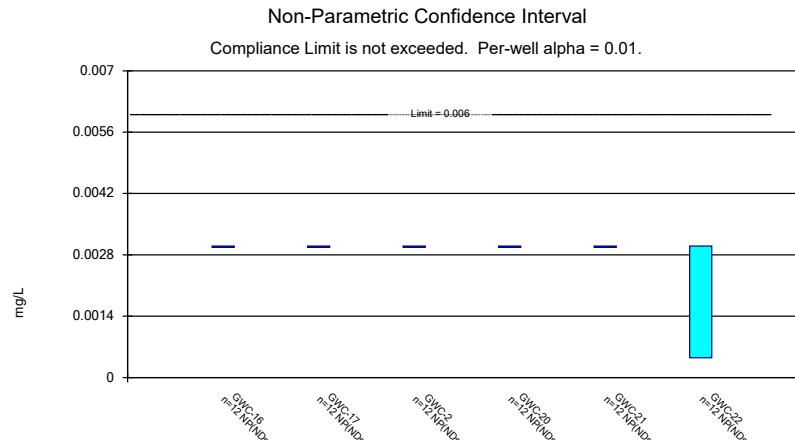
# Confidence Interval All Results

Grumman Road Landfill    Client: Southern Company    Data: Grumman Road    Printed 3/27/2020, 6:17 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Vanadium (mg/L)	GWC-21	0.01	0.0019	0.425	No	8	25	No	0.004	NP (Cohens/xfrm)
Vanadium (mg/L)	GWC-22	0.01	0.0012	0.425	No	8	50	No	0.004	NP (normality)
Vanadium (mg/L)	GWC-9	0.01	0.0013	0.425	No	8	87.5	No	0.004	NP (NDs)
Vanadium (mg/L)	GWB-4R	0.03888	0.006122	0.425	No	8	12.5	No	0.01	Param.
Vanadium (mg/L)	GWB-5R	0.01911	0.003636	0.425	No	8	12.5	$x^{(1/3)}$	0.01	Param.
Vanadium (mg/L)	GWB-6R	0.086	0.0069	0.425	No	8	0	No	0.004	NP (normality)
Zinc (mg/L)	GWC-1	0.01	0.0014	0.0853	No	8	62.5	No	0.004	NP (normality)
Zinc (mg/L)	GWC-11	0.01	0.0018	0.0853	No	8	62.5	No	0.004	NP (normality)
Zinc (mg/L)	GWC-12	0.004236	0.002327	0.0853	No	8	0	$\ln(x)$	0.01	Param.
Zinc (mg/L)	GWC-13	0.053	0.0021	0.0853	No	8	0	No	0.004	NP (normality)
Zinc (mg/L)	GWC-14	0.01	0.0026	0.0853	No	10	70	No	0.011	NP (normality)
Zinc (mg/L)	GWC-15	0.01	0.01	0.0853	No	10	90	No	0.011	NP (NDs)
Zinc (mg/L)	GWC-16	0.01	0.002	0.0853	No	10	40	No	0.011	NP (normality)
Zinc (mg/L)	GWC-17	0.0158	0.007996	0.0853	No	8	0	No	0.01	Param.
Zinc (mg/L)	GWC-2	0.01	0.0014	0.0853	No	8	50	No	0.004	NP (normality)
Zinc (mg/L)	GWC-20	0.01	0.0049	0.0853	No	10	80	No	0.011	NP (NDs)
Zinc (mg/L)	GWC-21	0.01	0.0015	0.0853	No	8	50	No	0.004	NP (normality)
Zinc (mg/L)	GWC-22	0.00947	0.00268	0.0853	No	8	12.5	No	0.01	Param.
Zinc (mg/L)	GWC-9	0.004797	0.002378	0.0853	No	8	0	No	0.01	Param.
Zinc (mg/L)	GWB-4R	0.01112	0.00386	0.0853	No	8	0	No	0.01	Param.
Zinc (mg/L)	GWB-5R	0.01	0.0022	0.0853	No	8	62.5	No	0.004	NP (normality)
Zinc (mg/L)	GWB-6R	0.01583	-0.001041	0.0853	No	6	16.67	No	0.01	Param.



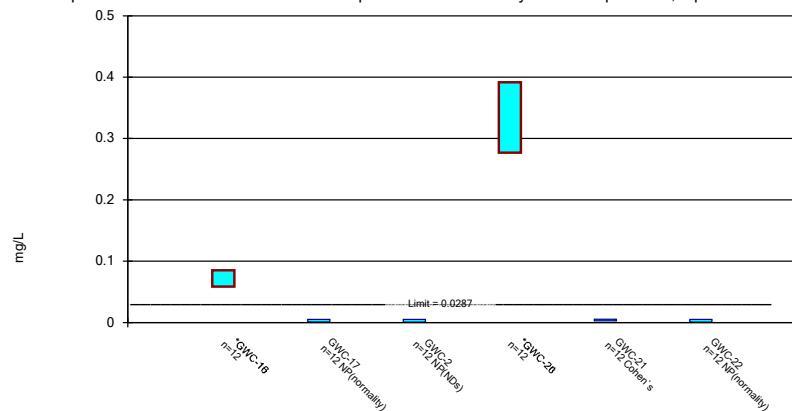
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Arsenic Analysis Run 3/27/2020 6:13 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

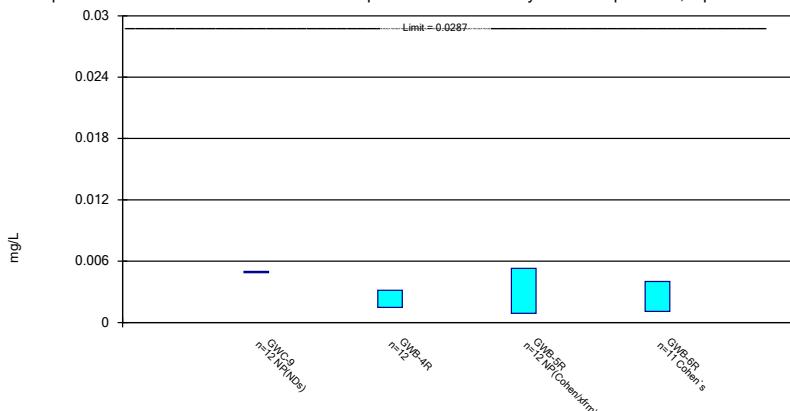
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Constituent: Arsenic Analysis Run 3/27/2020 6:13 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

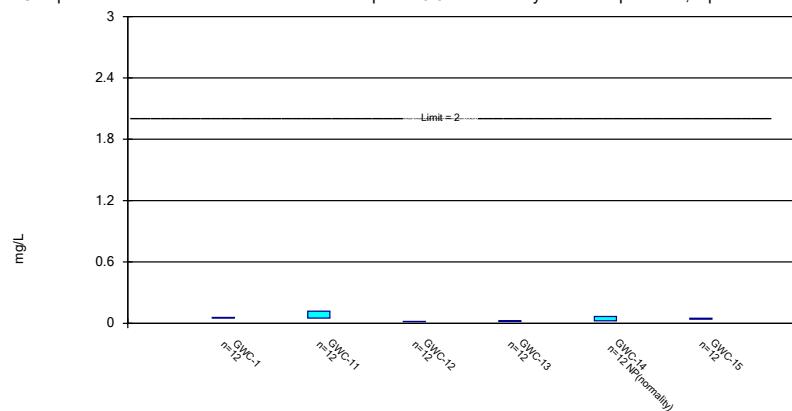
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Constituent: Arsenic Analysis Run 3/27/2020 6:13 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

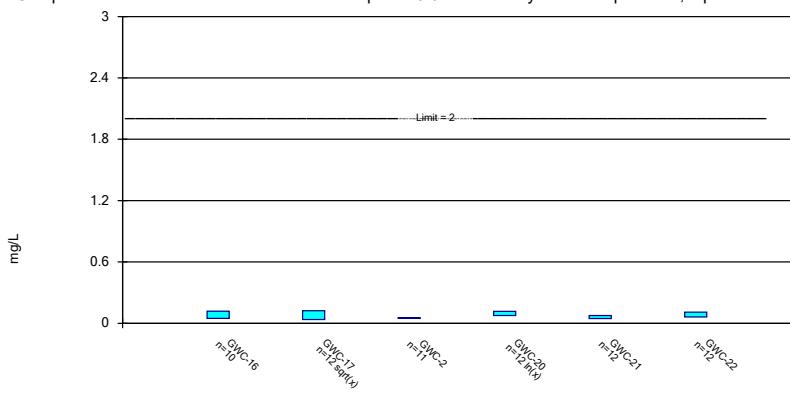
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Constituent: Barium Analysis Run 3/27/2020 6:13 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric Confidence Interval

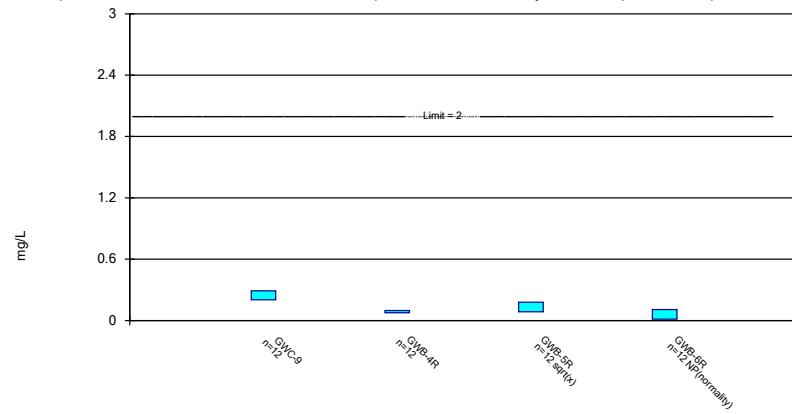
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Constituent: Barium Analysis Run 3/27/2020 6:13 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

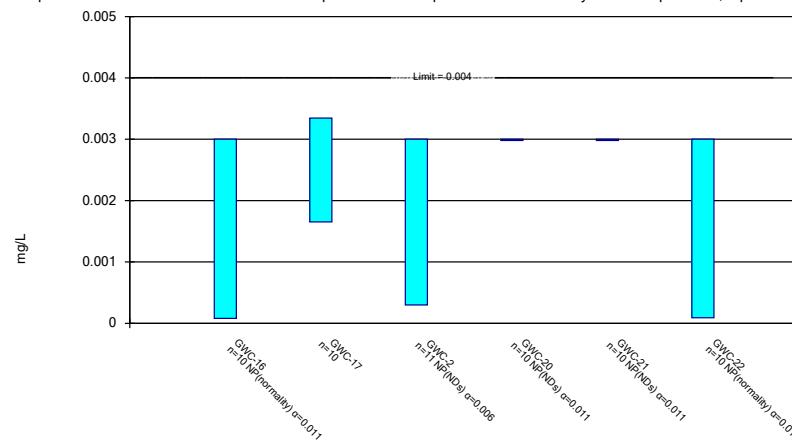
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Constituent: Barium Analysis Run 3/27/2020 6:13 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

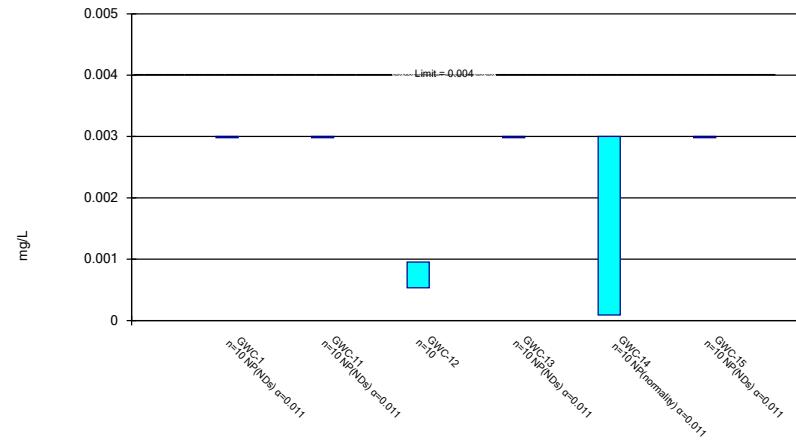
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Constituent: Beryllium Analysis Run 3/27/2020 6:13 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

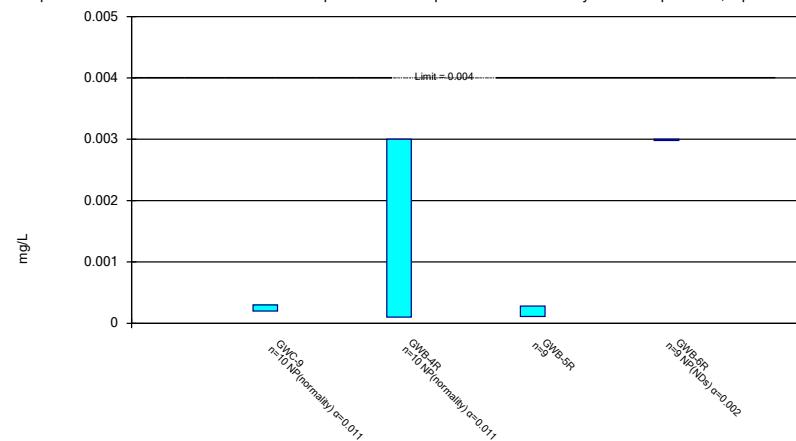
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Constituent: Beryllium Analysis Run 3/27/2020 6:13 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

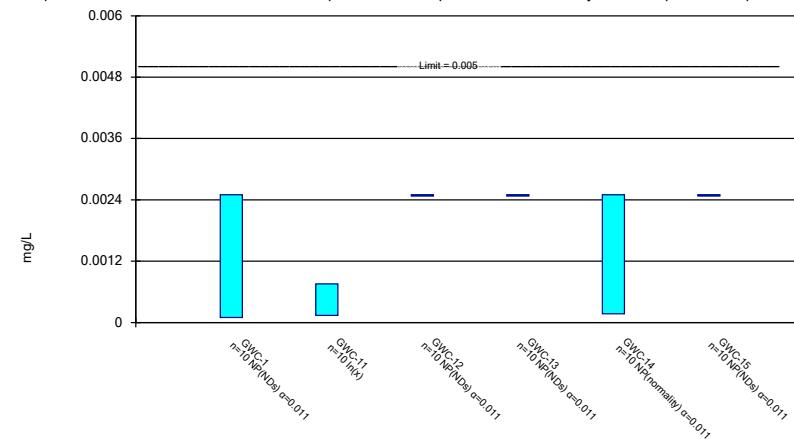
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Constituent: Beryllium Analysis Run 3/27/2020 6:13 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

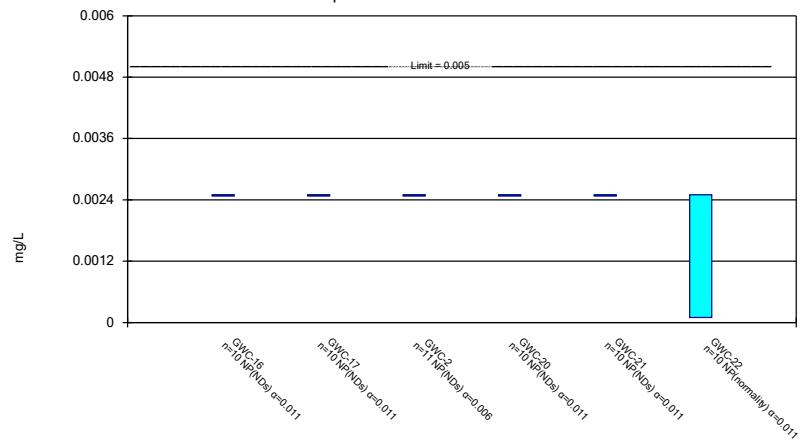
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Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

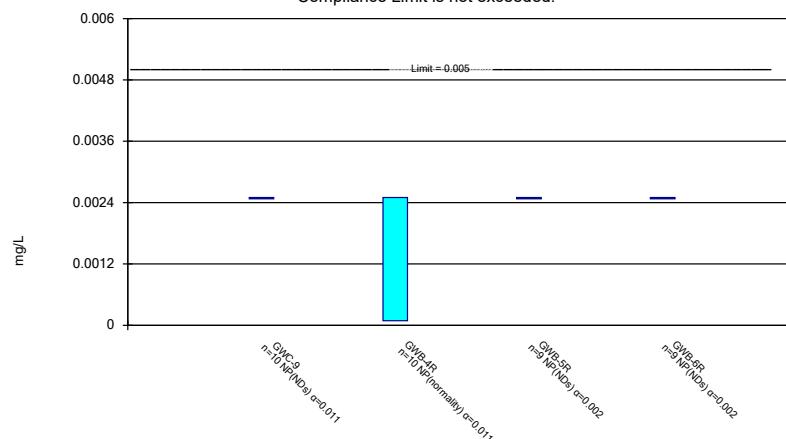
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Constituent: Cadmium Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

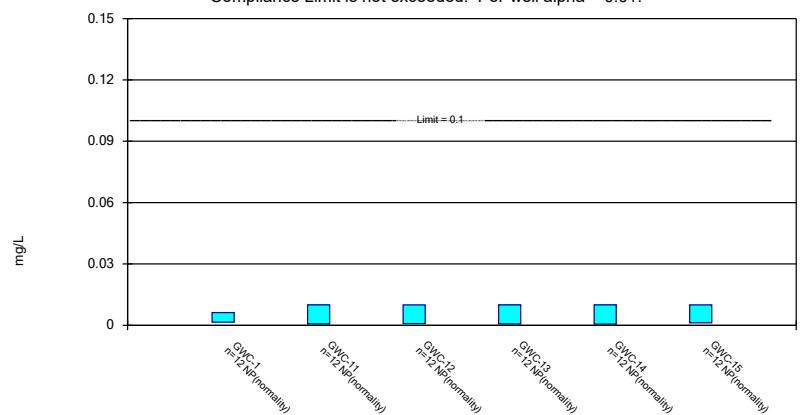
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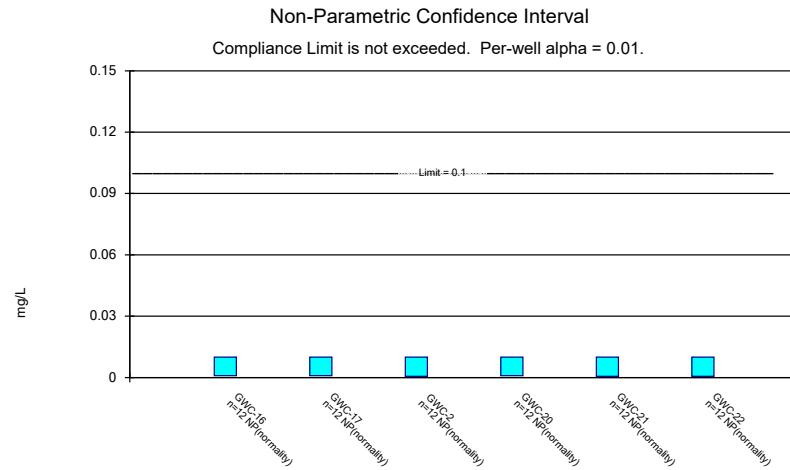
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Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

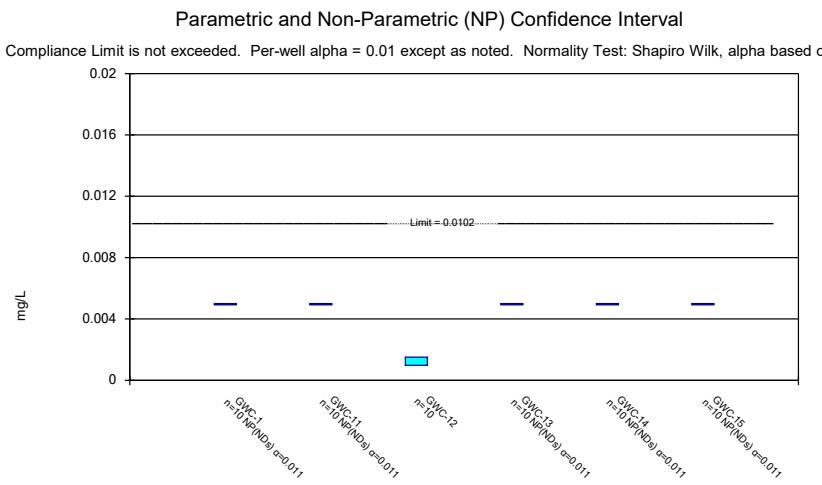
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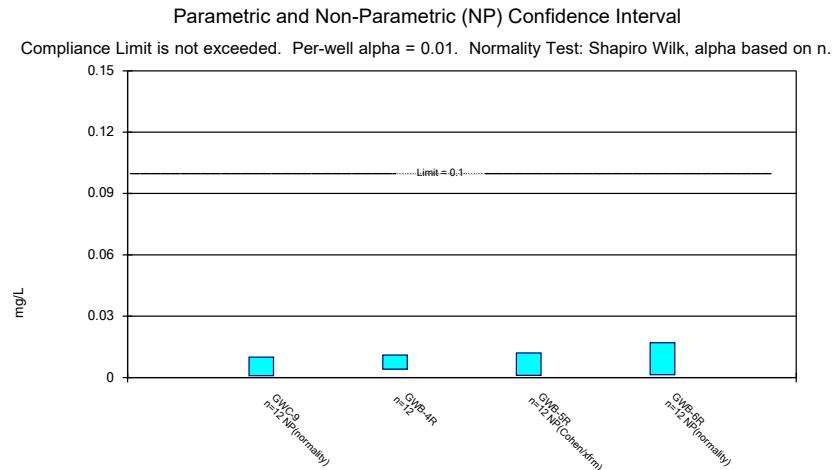
Constituent: Chromium Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



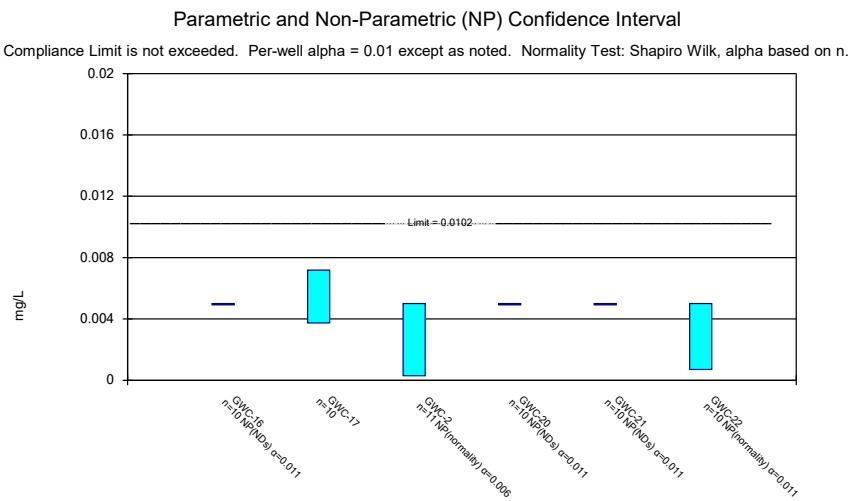
Constituent: Chromium Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



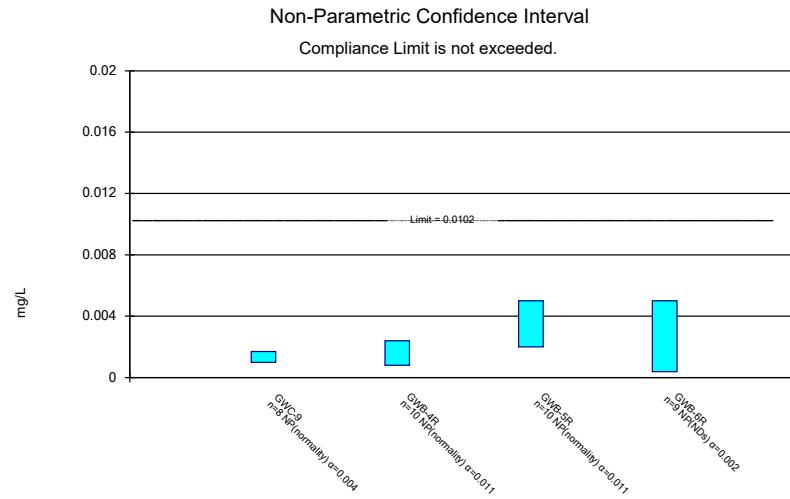
Constituent: Cobalt Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



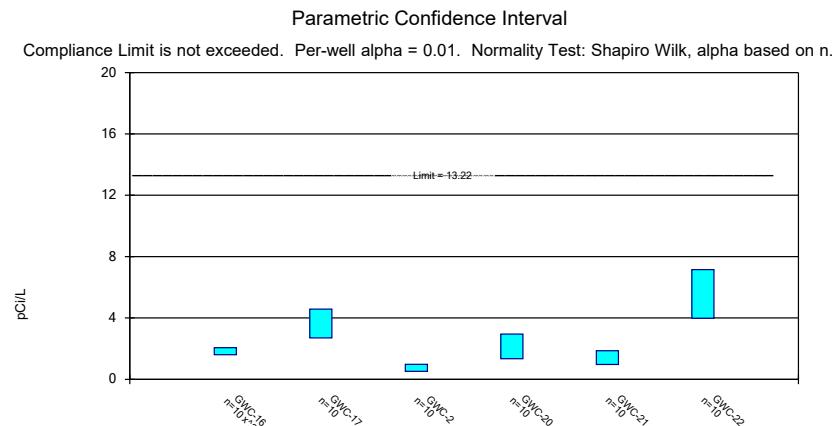
Constituent: Chromium Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



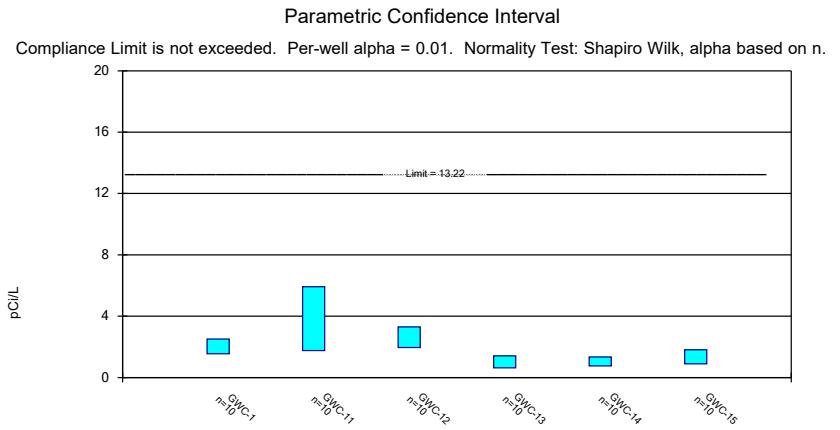
Constituent: Cobalt Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



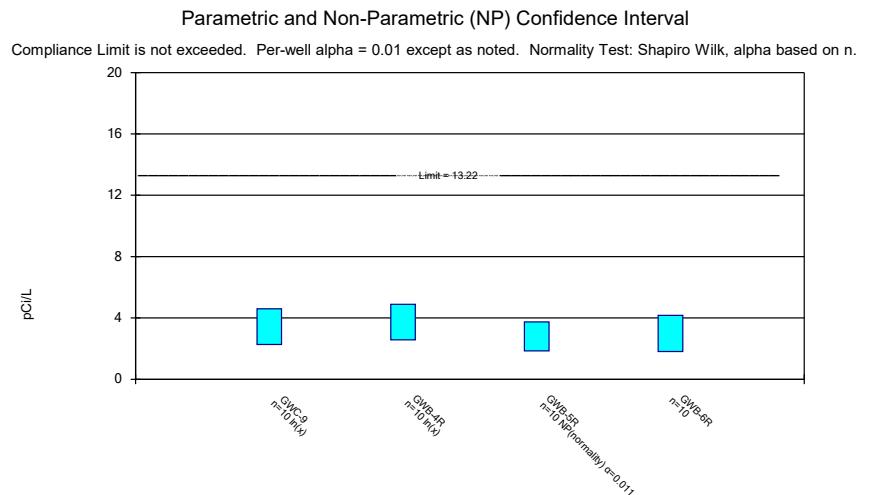
Constituent: Cobalt Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Combined Radium 226 + 228 Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



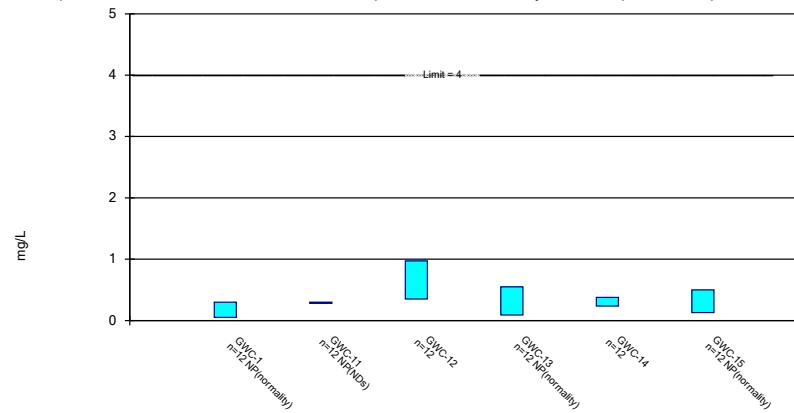
Constituent: Combined Radium 226 + 228 Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Combined Radium 226 + 228 Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

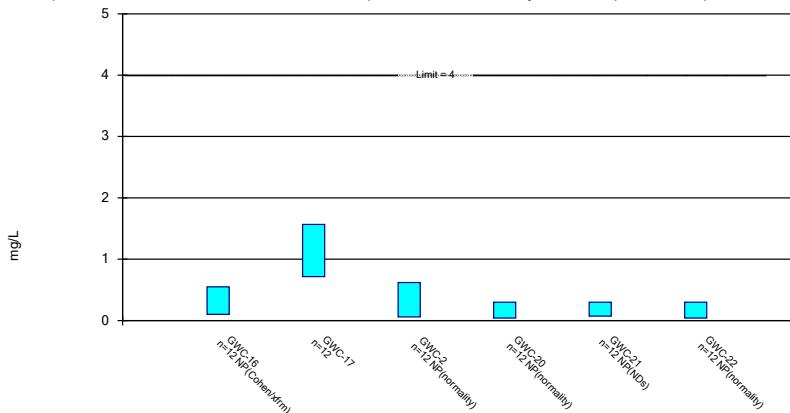
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

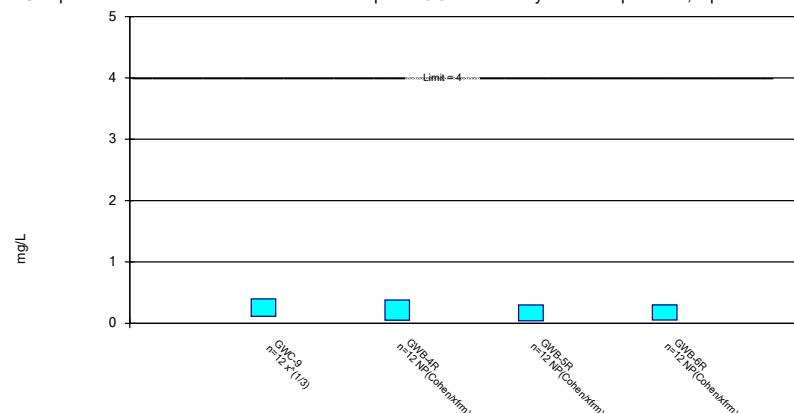
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

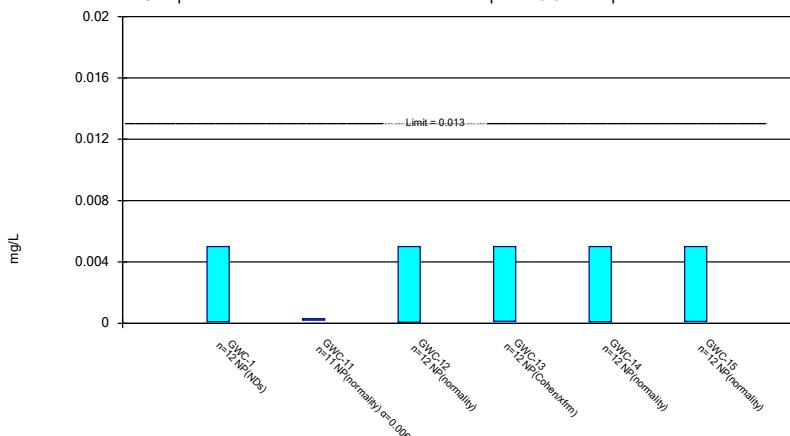
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

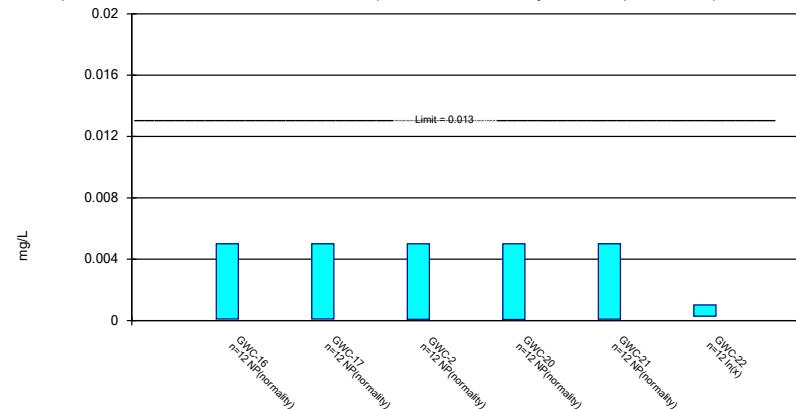
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

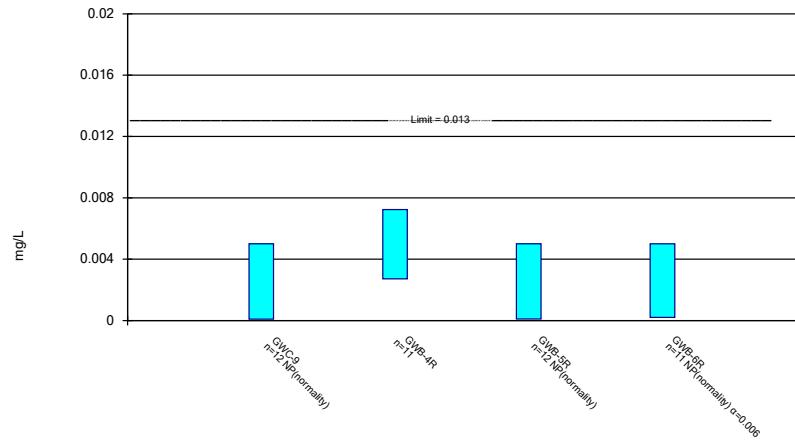
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

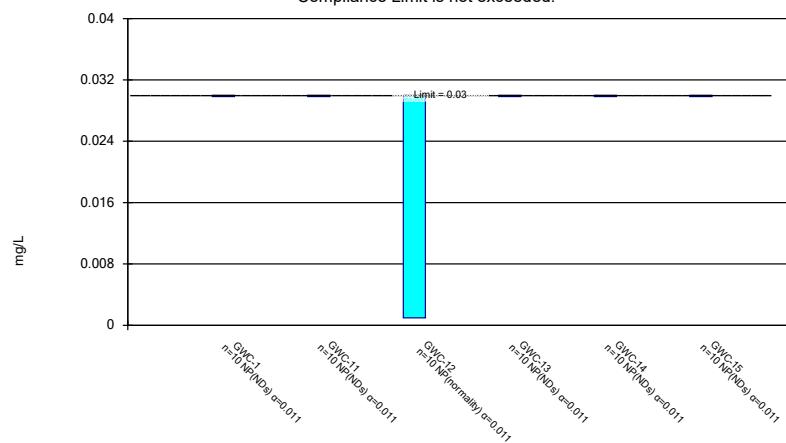
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Non-Parametric Confidence Interval**

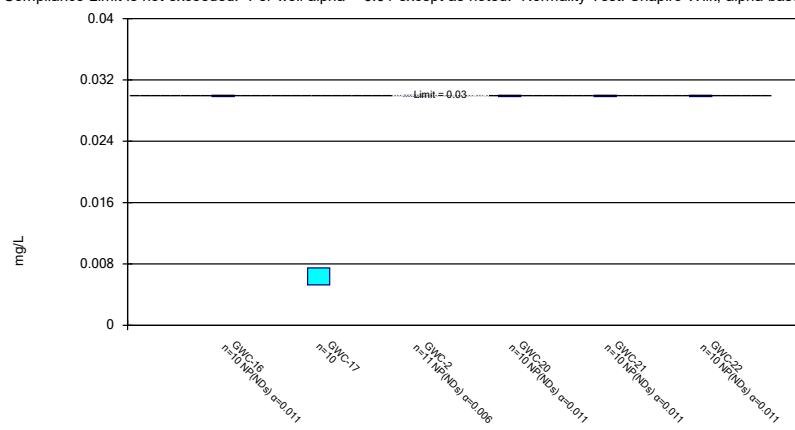
Compliance Limit is not exceeded.



Constituent: Lithium Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

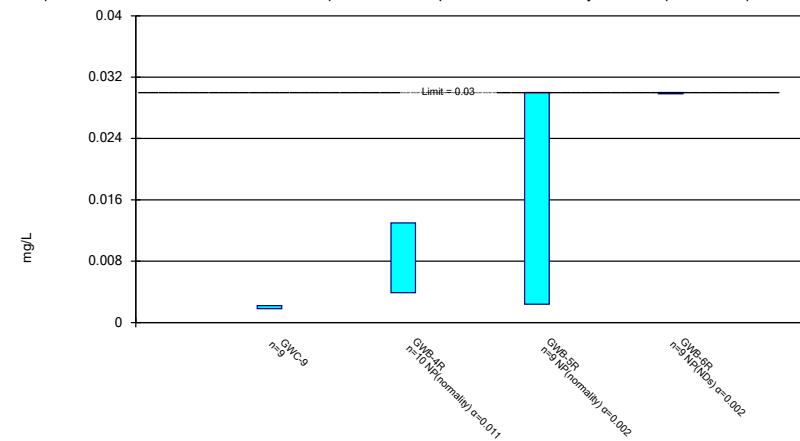
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

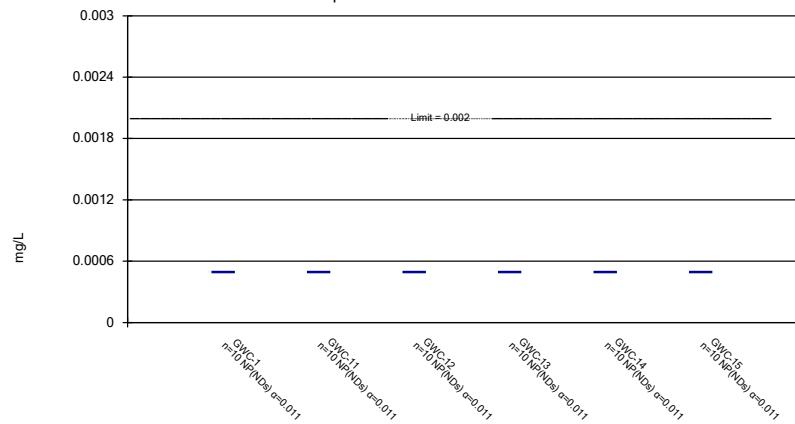
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

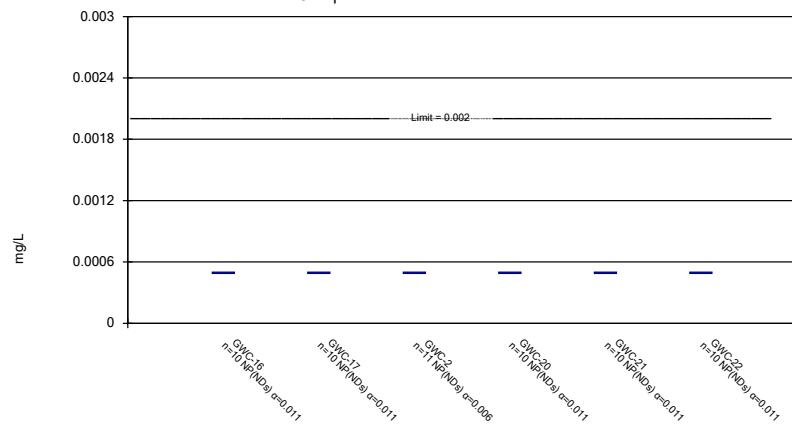
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

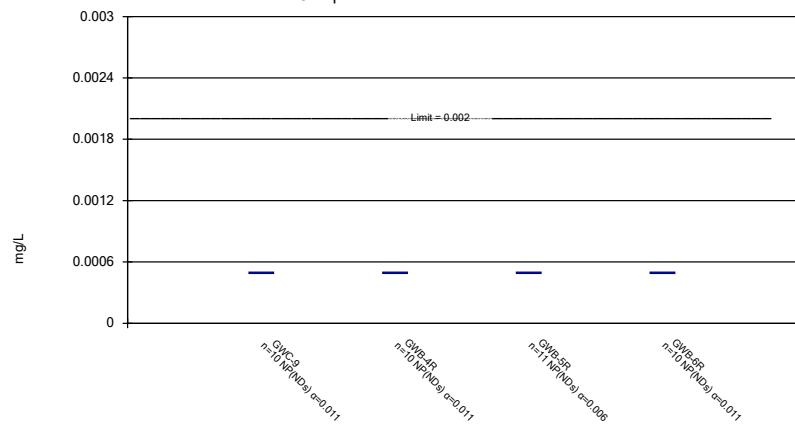
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

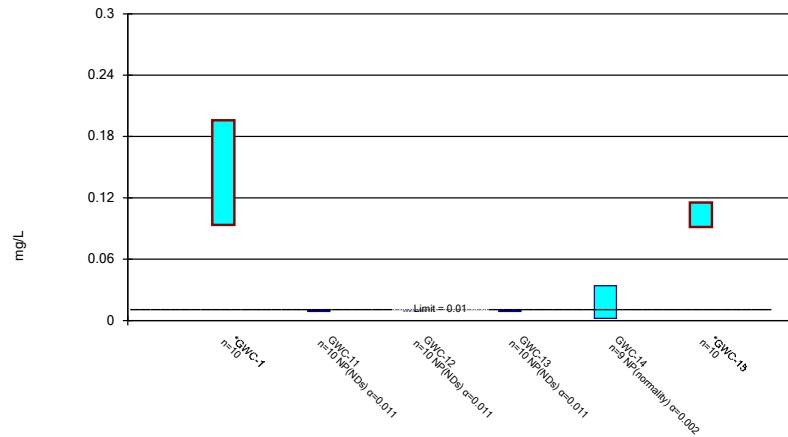
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

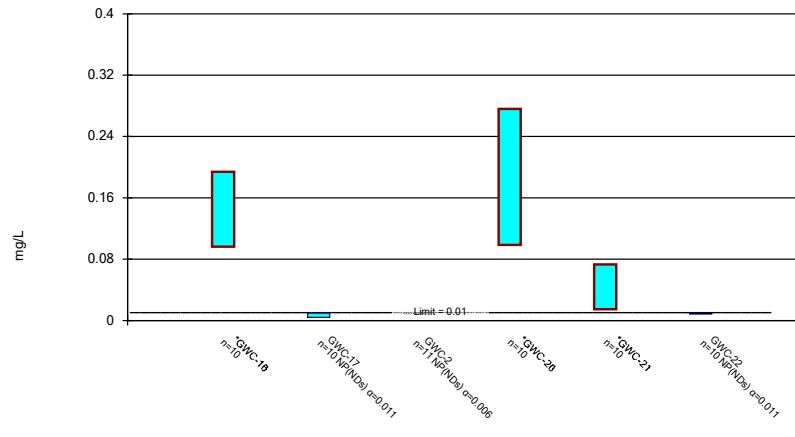
Compliance limit is exceeded.\* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

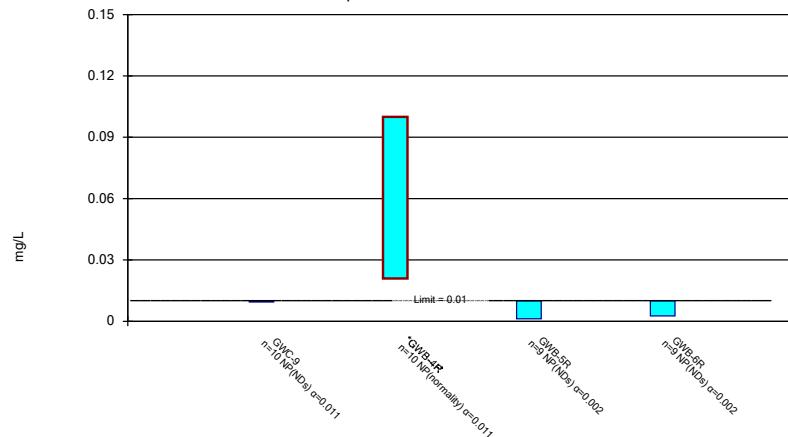
Compliance limit is exceeded.\* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

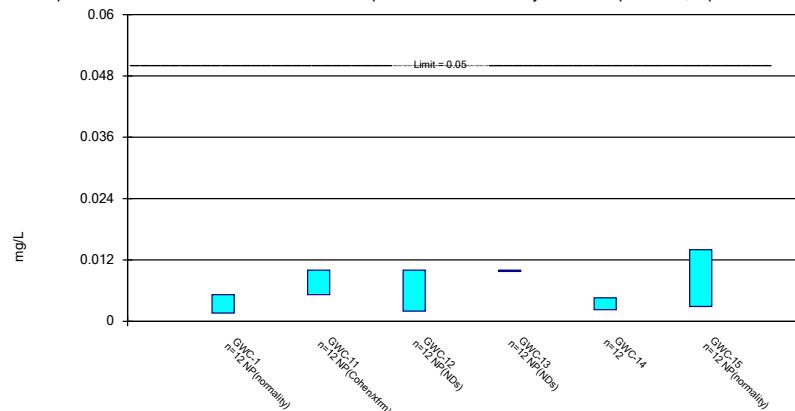
Compliance limit is exceeded.\*



Constituent: Molybdenum Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

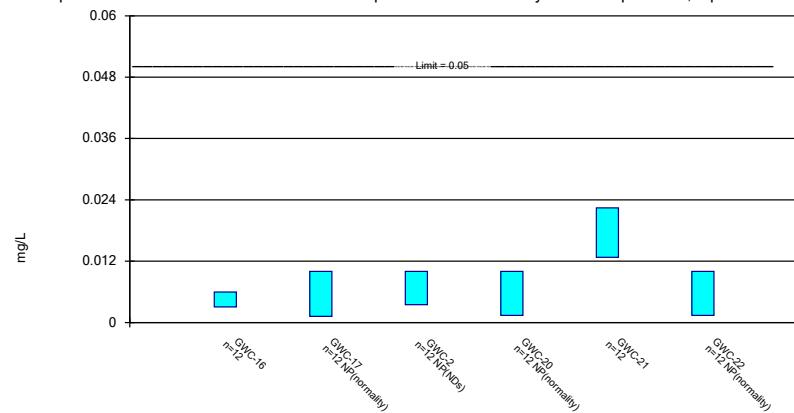
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 3/27/2020 6:14 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

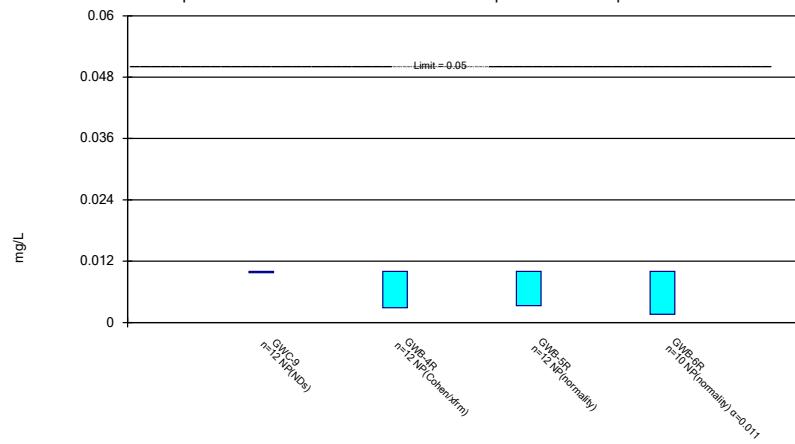
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 3/27/2020 6:15 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

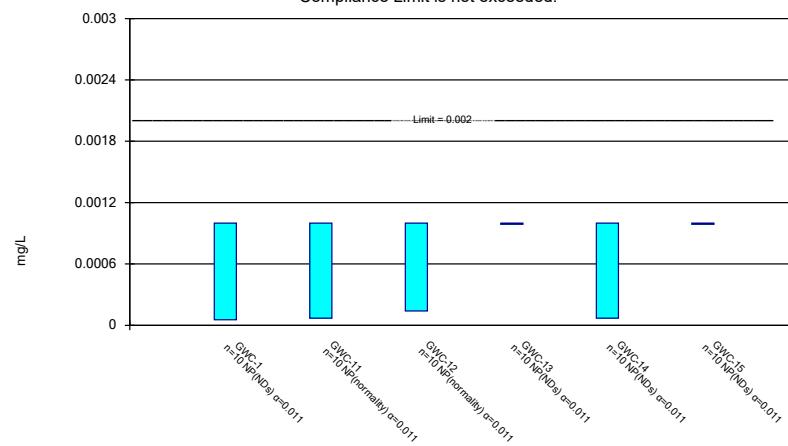
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Selenium Analysis Run 3/27/2020 6:15 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

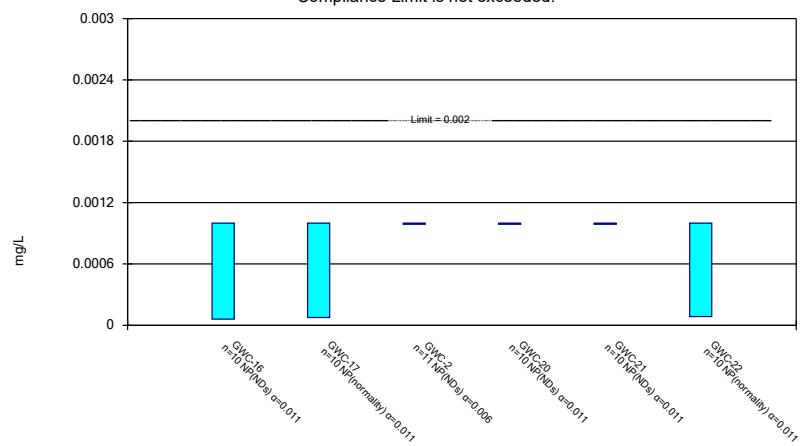
Compliance Limit is not exceeded.



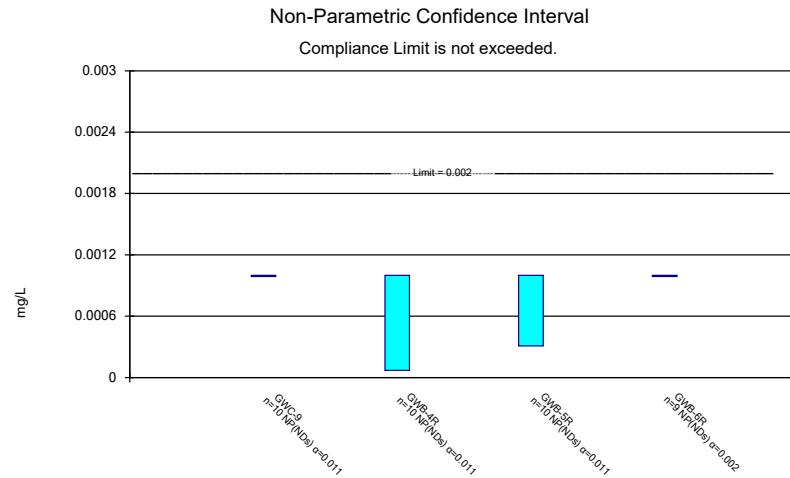
Constituent: Thallium Analysis Run 3/27/2020 6:15 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

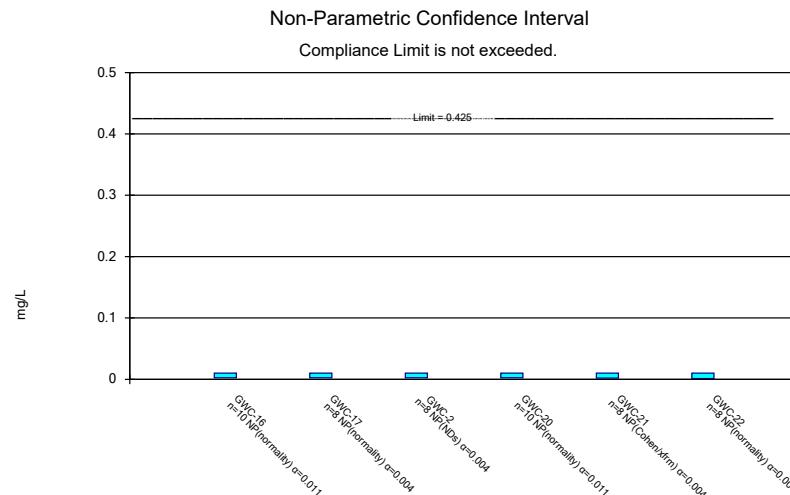
Compliance Limit is not exceeded.



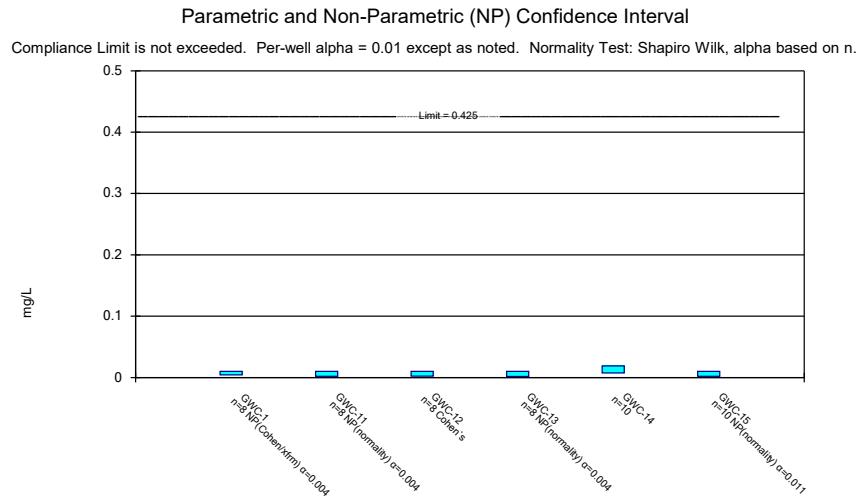
Constituent: Thallium Analysis Run 3/27/2020 6:15 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



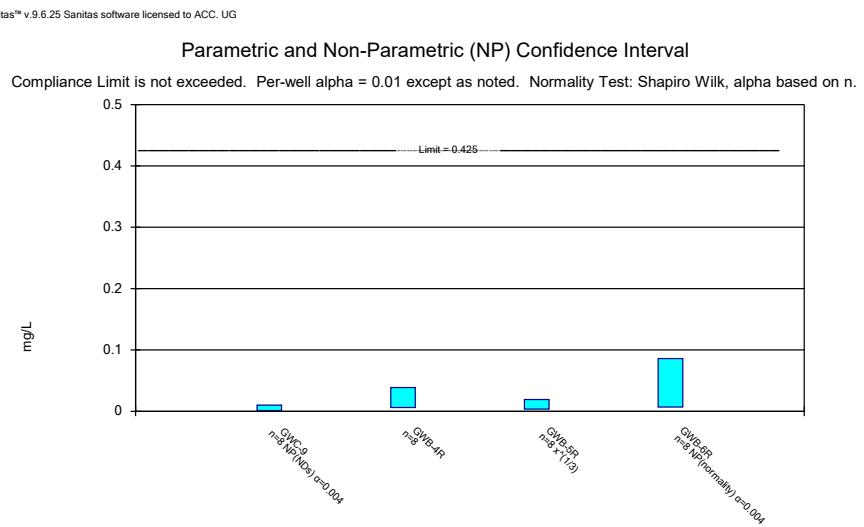
Constituent: Thallium Analysis Run 3/27/2020 6:15 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Vanadium Analysis Run 3/27/2020 6:15 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



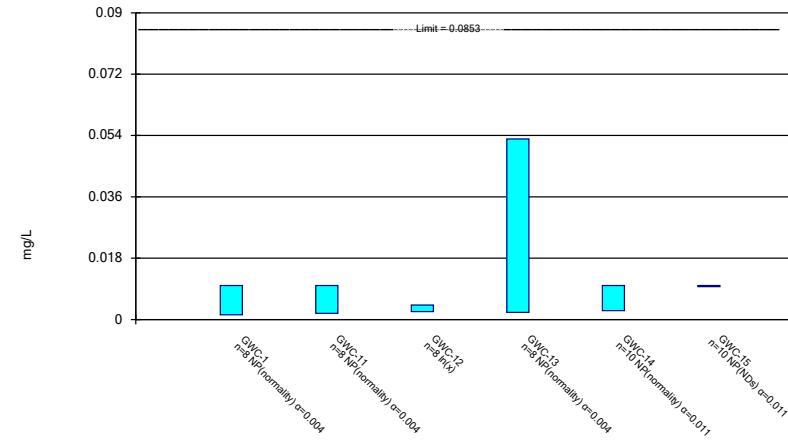
Constituent: Vanadium Analysis Run 3/27/2020 6:15 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Vanadium Analysis Run 3/27/2020 6:15 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

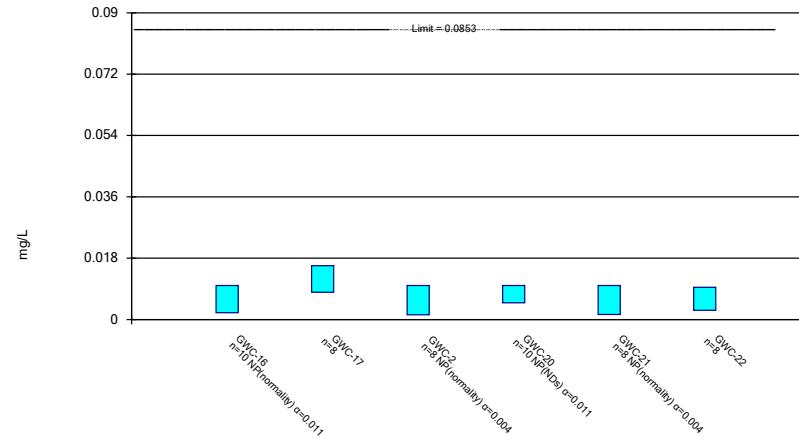
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Zinc Analysis Run 3/27/2020 6:15 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

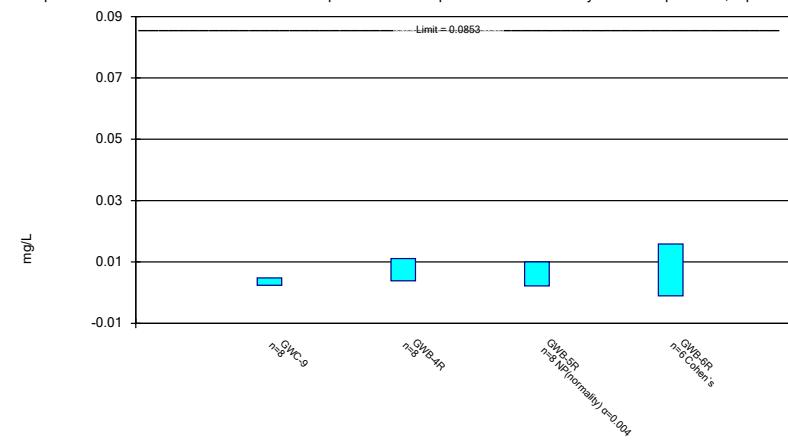
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Zinc Analysis Run 3/27/2020 6:15 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Zinc Analysis Run 3/27/2020 6:15 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.003					
8/31/2016		<0.003	<0.003	<0.003		
9/1/2016					<0.003	<0.003
10/25/2016	<0.003				<0.003	<0.003
10/26/2016		<0.003	<0.003	<0.003		
1/4/2017	<0.003	<0.003	<0.003			
1/5/2017				<0.003	<0.003	<0.003
4/3/2017						<0.003
4/4/2017	<0.003				<0.003	
4/5/2017			<0.003			
4/6/2017		0.0006 (J)		<0.003		
7/10/2017			<0.003			
7/11/2017		0.0009 (J)			<0.003	<0.003
7/12/2017	<0.003			<0.003		
10/2/2017					<0.003	<0.003
10/3/2017	<0.003	<0.003				
10/4/2017			<0.003	<0.003		
1/9/2018					<0.003	<0.003
1/10/2018	<0.003			<0.003		
1/11/2018		0.0007 (J)	<0.003			
7/9/2018					<0.003	
7/10/2018	<0.003					<0.003
7/11/2018		<0.003	<0.003	<0.003		
1/16/2019	<0.003			<0.003	<0.003	
1/17/2019		<0.003	<0.003			<0.003
3/26/2019	<0.003			<0.003	<0.003	<0.003
3/27/2019		<0.003	<0.003			
8/27/2019	<0.003	0.00033 (J)	<0.003	<0.003	<0.003	<0.003
10/8/2019		0.00046 (J)		<0.003	<0.003	<0.003
10/9/2019	<0.003		<0.003			
Mean	0.003	0.001999	0.003	0.003	0.003	0.003
Std. Dev.	0	0.001244	0	0	0	0
Upper Lim.	0.003	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.003	0.00046	0.003	0.003	0.003	0.003

## Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.003	<0.003
8/31/2016	<0.003			
9/1/2016		<0.003		
10/26/2016		<0.003	<0.003	<0.003
10/27/2016	0.0016 (J)			
1/3/2017			<0.003	
1/5/2017				<0.003
1/6/2017	<0.003	<0.003		
4/4/2017		<0.003		
4/6/2017	<0.003		<0.003	<0.003
7/12/2017	<0.003	<0.003	<0.003	<0.003
10/3/2017			<0.003	<0.003
10/4/2017	<0.003	<0.003		
1/9/2018				<0.003
1/10/2018			<0.003	
1/11/2018	<0.003	<0.003		
7/10/2018			<0.003	<0.003
7/11/2018	<0.003	<0.003		
1/16/2019		<0.003	<0.003	
1/18/2019	<0.003			
3/25/2019		<0.003		
3/26/2019			<0.003	
3/27/2019	<0.003			
8/27/2019		<0.003		<0.003
8/28/2019	<0.003		0.00054 (J)	
10/9/2019	<0.003	<0.003		
Mean	0.002883	0.003	0.002776	0.003
Std. Dev.	0.0004041	0	0.0007417	0
Upper Lim.	0.003	0.003	0.003	0.003
Lower Lim.	0.0016	0.003	0.003	0.003

## Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	0.0023 (J)					
8/31/2016		<0.005	<0.005	<0.005		
9/1/2016					0.0024 (J)	0.0533
10/25/2016	0.0035 (J)				<0.005	0.0551
10/26/2016		<0.005	<0.005	<0.005		
1/4/2017	0.0018 (J)	<0.005	<0.005			
1/5/2017				<0.005	0.0024 (J)	0.0437
4/3/2017						0.0713
4/4/2017	0.0015 (J)				0.003 (J)	
4/5/2017			0.0006 (J)			
4/6/2017		<0.005		<0.005		
7/10/2017			0.0008 (J)			
7/11/2017		<0.005			0.0019 (J)	0.0745
7/12/2017	0.0015 (J)			<0.005		
10/2/2017					0.0026 (J)	0.0723
10/3/2017	0.0013 (J)	<0.005				
10/4/2017			0.0009 (J)	<0.005		
1/9/2018					0.0021 (J)	0.0731
1/10/2018	0.0023 (J)			0.0006 (J)		
1/11/2018		<0.005	<0.005			
7/9/2018					0.0019 (J)	
7/10/2018	0.0031 (J)					0.09
7/11/2018		<0.005	<0.005	<0.005		
1/16/2019	0.0023 (J)			<0.005	0.0016 (J)	
1/17/2019		<0.005	<0.005			0.13
3/26/2019	0.0032 (J)			0.00058 (J)	0.0023 (J)	0.1
3/27/2019		<0.005	<0.005			
8/27/2019	0.0022 (J)	<0.005	<0.005	<0.005	0.0017 (J)	0.17
10/8/2019		<0.005		<0.005	0.0017 (J)	0.13
10/9/2019	0.0042 (J)		<0.005			
Mean	0.002433	0.005	0.003942	0.004265	0.002383	0.08861
Std. Dev.	0.0008958	0	0.001916	0.001717	0.0009233	0.03763
Upper Lim.	0.003136	0.005	0.005	0.005	0.002896	0.1181
Lower Lim.	0.00173	0.005	0.0008	0.0006	0.001769	0.05908

## Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.005			0.0017 (J)
9/1/2016	0.0551	<0.005		0.215	0.0039 (J)	
10/25/2016	0.0466			0.307	<0.005	
10/26/2016		<0.005	<0.005			<0.005
1/4/2017	0.0444			0.311	<0.005	<0.005
1/5/2017		<0.005	<0.005			
4/4/2017			<0.005	0.317	0.0031 (J)	
4/5/2017	0.0591	0.0011 (J)				0.0006 (J)
4/6/2017						0.0006 (J)
7/11/2017				0.299		0.0012 (J)
7/12/2017	0.0776					
7/13/2017		0.0016 (J)	<0.005		<0.005	
10/2/2017				0.216		
10/3/2017	0.0813		<0.005		<0.005	
10/4/2017		0.0019 (J)				0.0025 (J)
1/9/2018					0.0033 (J)	
1/10/2018	0.085		0.0006 (J)	0.347		
1/11/2018		0.0015 (J)				0.0006 (J)
7/9/2018				0.37		
7/10/2018	0.067		<0.005		0.0027 (J)	
7/11/2018		0.00082 (J)				0.0011 (J)
1/16/2019		<0.005				
1/17/2019	0.079				0.0022 (J)	
1/18/2019						<0.005
1/21/2019			<0.005	0.44		
3/25/2019				0.41		
3/26/2019	0.089	0.0015 (J)			0.0045 (J)	
3/27/2019						<0.005
7/30/2019		0.00039 (J)				
8/27/2019		<0.005				0.00044 (J)
8/28/2019	0.091	0.0011 (J)		0.43	0.002 (J)	
10/8/2019	0.088				0.0028 (J)	
10/9/2019		0.0011 (J)	<0.005	0.35		<0.005
Mean	0.07193	0.002552	0.004249	0.3343	0.003708	0.002762
Std. Dev.	0.01686	0.00183	0.001754	0.07312	0.001164	0.002049
Upper Lim.	0.08515	0.005	0.005	0.3917	0.005305	0.005
Lower Lim.	0.0587	0.00082	0.0006	0.277	0.002777	0.0006

## Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.005	<0.005
8/31/2016	<0.005			
9/1/2016		0.0033 (J)		
10/26/2016		0.0016 (J)	<0.005	<0.005
10/27/2016	<0.005			
1/3/2017			<0.005	
1/5/2017				0.0021 (J)
1/6/2017	<0.005	<0.005		
4/4/2017		0.0021 (J)		
4/6/2017	<0.005		0.0006 (J)	0.0011 (J)
7/12/2017	<0.005	0.0015 (J)	0.0009 (J)	0.0014 (J)
10/3/2017			0.001 (J)	0.0014 (J)
10/4/2017	<0.005	0.0018 (J)		
1/9/2018				0.0017 (J)
1/10/2018			0.0012 (J)	
1/11/2018	<0.005	0.0015 (J)		
7/10/2018			0.0016 (J)	0.00063 (J)
7/11/2018	<0.005	0.00095 (J)		
1/16/2019		0.0024 (J)	0.0011 (J)	
1/18/2019	<0.005			
3/25/2019		0.0029 (J)		
3/26/2019			0.0014 (J)	0.0029 (J)
3/27/2019	<0.005			
8/27/2019		0.0023 (J)		0.0035 (J)
8/28/2019	<0.005		0.0023 (J)	
10/9/2019	<0.005	0.0024 (J)	0.0053 (J)	0.0018 (J)
Mean	0.005	0.002312	0.002533	0.002412
Std. Dev.	0	0.001068	0.001924	0.001508
Upper Lim.	0.005	0.003151	0.0053	0.004022
Lower Lim.	0.005	0.001474	0.0009	0.001096

## Confidence Interval

Constituent: Barium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	0.0545					
8/31/2016		0.0565	0.019	0.0273		
9/1/2016					0.0346	0.0403
10/25/2016	0.0504				0.0248	0.0329
10/26/2016		0.0591	0.0197	0.0238		
1/4/2017	0.0534	0.0598	0.0174			
1/5/2017				0.0218	0.0245	0.0392
4/3/2017						0.0439
4/4/2017	0.0549				0.0342	
4/5/2017			0.0174			
4/6/2017		0.0813		0.0204		
7/10/2017			0.0172			
7/11/2017		0.0302			0.0276	0.051
7/12/2017	0.0614			0.0161		
10/2/2017					0.0274	0.047
10/3/2017	0.0436	0.103				
10/4/2017			0.0162	0.0185		
1/9/2018					0.0222	0.0431
1/10/2018	0.053			0.0166		
1/11/2018		0.166	0.018			
7/9/2018					0.026	
7/10/2018	0.059					0.047
7/11/2018		0.12	0.014	0.019		
1/16/2019	0.054			0.019	0.028	
1/17/2019		0.039	0.017			0.042
3/26/2019	0.055			0.026	0.034	0.047
3/27/2019		0.053	0.017			
8/27/2019	0.054	0.12	0.017	0.024	0.067	0.049
10/8/2019		0.13		0.024	0.085	0.057
10/9/2019	0.058		0.019			
Mean	0.05427	0.08483	0.01741	0.02138	0.03628	0.04495
Std. Dev.	0.004467	0.04225	0.001486	0.003661	0.01937	0.006208
Upper Lim.	0.05777	0.118	0.01857	0.02425	0.067	0.04982
Lower Lim.	0.05076	0.05167	0.01624	0.0185	0.0245	0.04008

## Confidence Interval

Constituent: Barium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			0.0429			0.0693
9/1/2016	0.0445	0.203		0.0976	0.077	
10/25/2016	0.0464			0.0702	0.0217	
10/26/2016		0.177				0.0966
1/4/2017	0.0379			0.0999	0.0617	0.0975
1/5/2017		0.142	0.0526			
4/4/2017			0.0503	0.136	0.0761	
4/5/2017	0.0534	0.106				0.064
4/6/2017						
7/11/2017				0.145		0.0778
7/12/2017	0.0944					
7/13/2017		0.0686	0.0529		0.0428	
10/2/2017				0.148		
10/3/2017			0.057		0.0376	
10/4/2017		0.0589				0.156
1/9/2018					0.0704	
1/10/2018	0.0603		0.0527	0.0788		
1/11/2018		0.0412				0.0702
7/9/2018				0.087		
7/10/2018			0.054		0.061	
7/11/2018		0.049				0.12
1/16/2019		0.063				
1/17/2019	0.13				0.061	
1/18/2019						0.052
1/21/2019			0.05	0.069		
3/25/2019				0.085		
3/26/2019	0.14	0.025			0.084	
3/27/2019						0.057
7/30/2019			0.052			
8/27/2019			0.053			0.097
8/28/2019	0.09	0.026		0.078	0.063	
10/8/2019	0.13				0.079	
10/9/2019		0.032	0.05	0.078		0.065
Mean	0.08269	0.08264	0.05158	0.09771	0.06128	0.0852
Std. Dev.	0.03957	0.06072	0.003513	0.02896	0.01871	0.03005
Upper Lim.	0.118	0.1222	0.05451	0.1169	0.07596	0.1088
Lower Lim.	0.04738	0.037	0.04865	0.07591	0.04659	0.06162

## Confidence Interval

Constituent: Barium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			0.135	0.106
8/31/2016	0.284			
9/1/2016		0.123		
10/26/2016		0.0863	0.103	0.107
10/27/2016	0.244			
1/3/2017			0.118	
1/5/2017				0.107
1/6/2017	0.305	0.0758		
4/4/2017		0.091		
4/6/2017	0.249		0.162	0.111
7/12/2017	0.256	0.0941	0.157	0.106
10/3/2017			0.127	0.105
10/4/2017	0.356	0.0994		
1/9/2018				0.0969
1/10/2018			0.158	
1/11/2018	0.226	0.088		
7/10/2018			0.31	0.087
7/11/2018	0.29	0.071		
1/16/2019		0.083	0.054	0.013 (J)
1/18/2019	0.21			
3/25/2019		0.077		
3/26/2019			0.057	0.012 (J)
3/27/2019	0.19			
8/27/2019		0.076		0.013
8/28/2019	0.17		0.1	
10/9/2019	0.18	0.076	0.13	0.014 (J)
Mean	0.2467	0.08672	0.1343	0.07316
Std. Dev.	0.05562	0.01432	0.0658	0.04485
Upper Lim.	0.2903	0.09795	0.1793	0.107
Lower Lim.	0.203	0.07548	0.0849	0.013

## Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.003					
8/31/2016		<0.003		0.0011 (J)	<0.003	
9/1/2016					0.0001 (J)	<0.003
10/25/2016	<0.003				<0.003	<0.003
10/26/2016		<0.003		0.0011 (J)	<0.003	
1/4/2017	<0.003	<0.003		0.0009 (J)		
1/5/2017					<0.003	<0.003
4/3/2017						<0.003
4/4/2017	<0.003				9E-05 (J)	
4/5/2017				0.0008 (J)		
4/6/2017		<0.003			<0.003	
7/10/2017				0.0008 (J)		
7/11/2017		<0.003			<0.003	<0.003
7/12/2017	<0.003			<0.003		
10/2/2017					<0.003	<0.003
10/3/2017	<0.003	<0.003				
10/4/2017				0.0006 (J)	<0.003	
1/9/2018					<0.003	<0.003
1/10/2018	<0.003				<0.003	
1/11/2018		<0.003		0.0006 (J)		
7/9/2018					6.2E-05 (J)	
7/10/2018	<0.003					<0.003
7/11/2018		<0.003		0.00061 (J)	5.8E-05 (J)	
8/27/2019	<0.003	<0.003		0.00047 (J)	<0.003	<0.003
10/8/2019		<0.003			<0.003	<0.003
10/9/2019	<0.003			0.00046 (J)		
Mean	0.003	0.003		0.000744	0.002706	0.002125
Std. Dev.	0	0		0.0002355	0.0009303	0.001409
Upper Lim.	0.003	0.003		0.0009541	0.003	0.003
Lower Lim.	0.003	0.003		0.0005339	0.003	9E-05

## Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.003			0.0002 (J)
9/1/2016	0.0001 (J)	0.0014 (J)		<0.003	<0.003	
10/25/2016	<0.003			<0.003	<0.003	
10/26/2016		0.0016 (J)	0.0003 (J)			0.0002 (J)
1/4/2017	9E-05 (J)			<0.003	<0.003	0.0001 (J)
1/5/2017		0.0019 (J)	<0.003			
4/4/2017			9E-05 (J)	<0.003	<0.003	
4/5/2017	9E-05 (J)	0.0024 (J)				<0.003
4/6/2017						<0.003
7/11/2017				<0.003		<0.003
7/12/2017	<0.003					
7/13/2017		0.0034	<0.003		<0.003	
10/2/2017				<0.003		
10/3/2017	<0.003		<0.003		<0.003	
10/4/2017		0.0037				0.0001 (J)
1/9/2018					<0.003	
1/10/2018	0.0001 (J)		<0.003	<0.003		
1/11/2018		0.0033				<0.003
7/9/2018				<0.003		
7/10/2018	6E-05 (J)		<0.003		<0.003	
7/11/2018		0.0038				7E-05 (J)
7/30/2019			<0.003			
8/27/2019			<0.003			9E-05 (J)
8/28/2019	8E-05 (J)	0.0017 (J)		<0.003	<0.003	
10/8/2019	9.8E-05 (J)				<0.003	
10/9/2019		0.0018 (J)	<0.003	<0.003		<0.003
Mean	0.0009618	0.0025	0.00249	0.003	0.003	0.001276
Std. Dev.	0.001407	0.0009487	0.001136	0	0	0.001484
Upper Lim.	0.003	0.003346	0.003	0.003	0.003	0.003
Lower Lim.	8E-05	0.001654	0.0003	0.003	0.003	9E-05

## Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			0.0002 (J)	<0.003
8/31/2016	0.0003 (J)		0.0004 (J)	
9/1/2016			0.0001 (J)	
10/26/2016		0.0003 (J)	0.0001 (J)	<0.003
10/27/2016	0.0003 (J)			
1/3/2017			0.0001 (J)	
1/5/2017				<0.003
1/6/2017	0.0002 (J)	0.0001 (J)		
4/4/2017		0.0001 (J)		
4/6/2017	0.0003 (J)		0.0003 (J)	<0.003
7/12/2017	0.0003 (J)	<0.003	0.0002 (J)	<0.003
10/3/2017			0.0002 (J)	<0.003
10/4/2017	0.0002 (J)	0.0001 (J)		
1/9/2018				<0.003
1/10/2018			0.0003 (J)	
1/11/2018	0.0003 (J)	0.0001 (J)		
7/10/2018			0.00028 (J)	<0.003
7/11/2018	0.0003 (J)	<0.003		
8/27/2019		<0.003		<0.003
8/28/2019	0.00022 (J)		7.6E-05 (J)	
10/9/2019	0.00023 (J)	<0.003		
Mean	0.000265	0.00129	0.0001951	0.003
Std. Dev.	4.601E-05	0.001475	8.772E-05	0
Upper Lim.	0.0003	0.003	0.0002798	0.003
Lower Lim.	0.0002	0.0001	0.0001104	0.003

## Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.0025					
8/31/2016		0.0002 (J)	<0.0025	<0.0025		
9/1/2016					0.0001 (J)	<0.0025
10/25/2016	<0.0025				0.0002 (J)	<0.0025
10/26/2016		0.0001 (J)	<0.0025	<0.0025		
1/4/2017	0.0001 (J)	0.0001 (J)	<0.0025			
1/5/2017				<0.0025	0.0002 (J)	<0.0025
4/3/2017						<0.0025
4/4/2017	7E-05 (J)				0.0002 (J)	
4/5/2017			<0.0025			
4/6/2017		0.0002 (J)		<0.0025		
7/10/2017			<0.0025			
7/11/2017		<0.0025			0.0002 (J)	<0.0025
7/12/2017	<0.0025			<0.0025		
10/2/2017					<0.0025	<0.0025
10/3/2017	<0.0025	0.0003 (J)				
10/4/2017			<0.0025	<0.0025		
1/9/2018					<0.0025	<0.0025
1/10/2018	<0.0025			<0.0025		
1/11/2018		0.0006 (J)	<0.0025			
7/9/2018					0.00017 (J)	
7/10/2018	<0.0025					<0.0025
7/11/2018		0.0004 (J)	<0.0025	<0.0025		
8/27/2019	<0.0025	0.00044 (J)	<0.0025	<0.0025	<0.0025	<0.0025
10/8/2019		0.00043 (J)		<0.0025	<0.0025	<0.0025
10/9/2019	<0.0025		<0.0025			
Mean	0.002017	0.000527	0.0025	0.0025	0.001107	0.0025
Std. Dev.	0.001018	0.0007119	0	0	0.001199	0
Upper Lim.	0.0025	0.0007567	0.0025	0.0025	0.0025	0.0025
Lower Lim.	0.0001	0.0001406	0.0025	0.0025	0.00017	0.0025

## Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.0025	<0.0025
8/31/2016	<0.0025			
9/1/2016		0.0002 (J)		
10/26/2016		<0.0025	<0.0025	<0.0025
10/27/2016	<0.0025			
1/3/2017			<0.0025	
1/5/2017				<0.0025
1/6/2017	<0.0025	9E-05 (J)		
4/4/2017		9E-05 (J)		
4/6/2017	<0.0025		<0.0025	<0.0025
7/12/2017	<0.0025	<0.0025	<0.0025	<0.0025
10/3/2017			<0.0025	<0.0025
10/4/2017	<0.0025	<0.0025		
1/9/2018				<0.0025
1/10/2018			<0.0025	
1/11/2018	<0.0025	0.0002 (J)		
7/10/2018			<0.0025	<0.0025
7/11/2018	<0.0025	<0.0025		
8/27/2019		<0.0025		<0.0025
8/28/2019	<0.0025		<0.0025	
10/9/2019	<0.0025	<0.0025		
Mean	0.0025	0.001558	0.0025	0.0025
Std. Dev.	0	0.001217	0	0
Upper Lim.	0.0025	0.0025	0.0025	0.0025
Lower Lim.	0.0025	9E-05	0.0025	0.0025

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	0.0015 (J)					
8/31/2016		0.001 (J)	0.0012 (J)	0.0011 (J)		
9/1/2016					0.0015 (J)	0.0011 (J)
10/25/2016	0.0018 (J)				<0.01	<0.01
10/26/2016		<0.01	0.0012 (J)	<0.01		
1/4/2017	0.0021 (J)	<0.01	0.0012 (J)			
1/5/2017				<0.01	0.001 (J)	<0.01
4/3/2017						0.0015 (J)
4/4/2017	0.002 (J)				0.001 (J)	
4/5/2017			0.0013 (J)			
4/6/2017		0.0007 (J)		0.0011 (J)		
7/10/2017			0.0014 (J)			
7/11/2017		0.0006 (J)			0.0008 (J)	0.0013 (J)
7/12/2017	0.0021 (J)			0.0007 (J)		
10/2/2017					0.0009 (J)	0.0013 (J)
10/3/2017	0.0014 (J)	0.0007 (J)				
10/4/2017			0.0011 (J)	0.0008 (J)		
1/9/2018					0.0006 (J)	0.0012 (J)
1/10/2018	0.0017 (J)			0.0007 (J)		
1/11/2018		0.0098 (J)	0.001 (J)			
7/9/2018					<0.01	
7/10/2018	0.0021 (J)					<0.01
7/11/2018		<0.01	<0.01	0.0019 (J)		
1/16/2019	0.0021 (J)			<0.01	<0.01	
1/17/2019		<0.01	0.0028 (J)			<0.01
3/26/2019	0.0018 (J)			<0.01	<0.01	<0.01
3/27/2019		<0.01	<0.01			
8/27/2019	0.0062 (J)	0.00092 (J)	0.00085 (J)	<0.01	0.001 (J)	0.0016 (J)
10/8/2019		0.00091 (J)		<0.01	0.00053 (J)	0.0017 (J)
10/9/2019	0.0019 (J)		0.00081 (J)			
Mean	0.002225	0.005386	0.002738	0.005525	0.003944	0.004975
Std. Dev.	0.001274	0.004786	0.00343	0.004684	0.004479	0.004439
Upper Lim.	0.0062	0.01	0.01	0.01	0.01	0.01
Lower Lim.	0.0015	0.0007	0.00085	0.0007	0.0006	0.0012

## Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.01			<0.01
9/1/2016	0.0011 (J)	0.0011 (J)		<0.01	<0.01	
10/25/2016	<0.01			<0.01	<0.01	
10/26/2016		<0.01	0.001 (J)			<0.01
1/4/2017	<0.01			<0.01	<0.01	<0.01
1/5/2017		0.0012 (J)	<0.01			
4/4/2017			0.0008 (J)	0.0011 (J)	0.0008 (J)	
4/5/2017	0.001 (J)	0.0015 (J)				0.0006 (J)
4/6/2017						0.0006 (J)
7/11/2017				0.0009 (J)		0.0005 (J)
7/12/2017	0.0011 (J)					
7/13/2017		0.0012 (J)	0.0006 (J)		0.0006 (J)	
10/2/2017				0.0009 (J)		
10/3/2017	0.0009 (J)		<0.01		0.0005 (J)	
10/4/2017		0.0055 (J)				0.0006 (J)
1/9/2018					0.0007 (J)	
1/10/2018	0.0007 (J)		<0.01	0.0008 (J)		
1/11/2018		0.0009 (J)				<0.01
7/9/2018				<0.01		
7/10/2018	<0.01		<0.01		<0.01	
7/11/2018		<0.01				<0.01
1/16/2019		<0.01				
1/17/2019	0.01 (J)				0.01	
1/18/2019						<0.01
1/21/2019			<0.01	<0.01		
3/25/2019				<0.01		
3/26/2019	<0.01	<0.01			<0.01	
3/27/2019						<0.01
7/30/2019			0.00065 (J)			
8/27/2019			<0.01			0.00057 (J)
8/28/2019	0.0011 (J)	0.0013 (J)		0.00089 (J)	0.00087 (J)	
10/8/2019	0.00099 (J)				0.00065 (J)	
10/9/2019		0.00081 (J)	0.00049 (J)	0.0011 (J)		0.00072 (J)
Mean	0.004741	0.004459	0.006128	0.005474	0.005343	0.006082
Std. Dev.	0.004644	0.004276	0.004786	0.004728	0.004865	0.004842
Upper Lim.	0.01	0.01	0.01	0.01	0.01	0.01
Lower Lim.	0.0009	0.0009	0.0006	0.00089	0.0006	0.00057

## Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.01	0.0013 (J)
8/31/2016	0.0024 (J)			
9/1/2016		0.015		
10/26/2016		0.0106	<0.01	0.0014 (J)
10/27/2016	<0.01			
1/3/2017			0.001 (J)	
1/5/2017				0.002 (J)
1/6/2017	<0.01	0.0098 (J)		
4/4/2017		0.0101		
4/6/2017	0.0019 (J)		0.0013 (J)	0.0034 (J)
7/12/2017	0.0011 (J)	0.0096 (J)	0.0011 (J)	0.0024 (J)
10/3/2017			0.0012 (J)	0.0022 (J)
10/4/2017	0.0011 (J)	0.0097 (J)		
1/9/2018				0.0019 (J)
1/10/2018			0.0016 (J)	
1/11/2018	0.001 (J)	0.0109		
7/10/2018			0.0055 (J)	0.0023 (J)
7/11/2018	<0.01	0.0055 (J)		
1/16/2019		0.0024 (J)	<0.01	0.018 (J)
1/18/2019	<0.01			
3/25/2019		0.002 (J)		
3/26/2019			0.072	0.017 (J)
3/27/2019	<0.01			
8/27/2019		0.0027 (J)		0.0097 (J)
8/28/2019	0.00089 (J)		0.0071 (J)	
10/9/2019	0.0009 (J)	0.002 (J)	0.012 (J)	0.011 (J)
Mean	0.004941	0.007525	0.01107	0.00605
Std. Dev.	0.004487	0.004393	0.01965	0.006235
Upper Lim.	0.01	0.01097	0.012	0.017
Lower Lim.	0.0009	0.004078	0.0011	0.0014

## Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.005					
8/31/2016		<0.005	0.0018 (J)	<0.005		
9/1/2016					<0.005	<0.005
10/25/2016	<0.005				<0.005	<0.005
10/26/2016		<0.005	0.0016 (J)	<0.005		
1/4/2017	<0.005	<0.005	0.0014 (J)			
1/5/2017				<0.005	<0.005	<0.005
4/3/2017						<0.005
4/4/2017	<0.005				<0.005	
4/5/2017			0.0013 (J)			
4/6/2017		<0.005		<0.005		
7/10/2017			0.0013 (J)			
7/11/2017		<0.005			0.0003 (J)	<0.005
7/12/2017	<0.005			<0.005		
10/2/2017					<0.005	<0.005
10/3/2017	<0.005	<0.005				
10/4/2017			0.0011 (J)	<0.005		
1/9/2018					<0.005	<0.005
1/10/2018	<0.005			<0.005		
1/11/2018		0.0003 (J)	0.0011 (J)			
7/9/2018					<0.005	
7/10/2018	<0.005					<0.005
7/11/2018		<0.005	0.00096 (J)	<0.005		
8/27/2019	<0.005	<0.005	0.0009 (J)	<0.005	<0.005	<0.005
10/8/2019		<0.005		<0.005	<0.005	<0.005
10/9/2019	<0.005		0.00094 (J)			
Mean	0.005	0.00453	0.00124	0.005	0.00453	0.005
Std. Dev.	0	0.001486	0.000298	0	0.001486	0
Upper Lim.	0.005	0.005	0.001506	0.005	0.005	0.005
Lower Lim.	0.005	0.005	0.0009741	0.005	0.005	0.005

## Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.005			0.001 (J)
9/1/2016	<0.005	0.0046 (J)		<0.005	<0.005	
10/25/2016	<0.005			<0.005	<0.005	
10/26/2016		0.0046 (J)	0.0011 (J)			0.0009 (J)
1/4/2017	<0.005			<0.005	<0.005	0.0007 (J)
1/5/2017		0.0062 (J)	<0.005			
4/4/2017			<0.005	<0.005	<0.005	
4/5/2017	<0.005	0.007 (J)				<0.005
4/6/2017						<0.005
7/11/2017				<0.005		<0.005
7/12/2017	<0.005					
7/13/2017		0.0077 (J)	0.0003 (J)		<0.005	
10/2/2017				<0.005		
10/3/2017	<0.005		0.0003 (J)		<0.005	
10/4/2017		0.0073 (J)				0.0007 (J)
1/9/2018					<0.005	
1/10/2018	<0.005		<0.005	<0.005		
1/11/2018		0.0061 (J)				<0.005
7/9/2018				<0.005		
7/10/2018	<0.005		<0.005		<0.005	
7/11/2018		0.0064 (J)				<0.005
7/30/2019			0.00032 (J)			
8/27/2019			<0.005			0.00077 (J)
8/28/2019	<0.005	0.0023 (J)		<0.005	<0.005	
10/8/2019	<0.005				<0.005	
10/9/2019		0.0024 (J)	<0.005	<0.005		<0.005
Mean	0.005	0.00546	0.003365	0.005	0.005	0.002907
Std. Dev.	0	0.001928	0.002278	0	0	0.002208
Upper Lim.	0.005	0.00718	0.005	0.005	0.005	0.005
Lower Lim.	0.005	0.00374	0.0003	0.005	0.005	0.0007

## Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.005	<0.005
9/1/2016		0.0024 (J)		
10/26/2016		0.0011 (J)	<0.005	<0.005
10/27/2016	0.0017 (J)			
1/3/2017			<0.005	
1/5/2017				<0.005
1/6/2017	0.0017 (J)	0.001 (J)		
4/4/2017		0.001 (J)		
4/6/2017	0.0017 (J)		<0.005	<0.005
7/12/2017	0.0016 (J)	0.0008 (J)	<0.005	<0.005
10/3/2017			<0.005	<0.005
10/4/2017		0.001 (J)		
1/9/2018				<0.005
1/10/2018			0.0004 (J)	
1/11/2018	0.0017 (J)	0.0008 (J)		
7/10/2018			0.002 (J)	<0.005
7/11/2018	0.0017 (J)	<0.005		
8/27/2019		0.0011 (J)		0.00038 (J)
8/28/2019	0.00099 (J)		0.0024 (J)	
10/9/2019	0.00099 (J)	0.0015 (J)	0.0037 (J)	
Mean	0.00151	0.00157	0.00385	0.004487
Std. Dev.	0.0003228	0.001294	0.001679	0.00154
Upper Lim.	0.0017	0.0024	0.005	0.005
Lower Lim.	0.00099	0.0008	0.002	0.00038

## Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	2.36					
8/31/2016		2.2	2.61	1.23		
9/1/2016					1.28	2.45
10/25/2016	2.02				1.54	1.04 (U)
10/26/2016		1.96	3.28	0.641 (U)		
1/4/2017	2.1	1.88	3.77			
1/5/2017				0.657 (U)	0.715 (U)	1.36
4/3/2017						0.697 (U)
4/4/2017	1.39 (U)				0.699 (U)	
4/5/2017			3.25			
4/6/2017				0.439 (U)		
4/8/2017		0.893 (U)				
7/10/2017			1.55			
7/11/2017		1.89			1.12	0.754 (U)
7/12/2017	1.63			0.414 (U)		
10/2/2017					0.855 (U)	1.52
10/3/2017	1.84	4.73				
10/4/2017			1.68	1.33		
1/9/2018					0.861 (U)	1.17
1/10/2018	2.11			1.21		
1/11/2018		7.49	2.94			
7/9/2018				0.693 (U)		
7/10/2018	1.29				1.26	
7/11/2018		5.88	2.03	1.4 (U)		
8/27/2019	2.41	5.09	2.09	1.27	1.32	1.75
10/8/2019		6.39		1.62	1.41	1.52
10/9/2019	3.13		3.11			
Mean	2.028	3.84	2.631	1.021	1.049	1.352
Std. Dev.	0.5404	2.331	0.7567	0.4376	0.3227	0.5106
Upper Lim.	2.51	5.92	3.306	1.412	1.337	1.808
Lower Lim.	1.546	1.761	1.956	0.6307	0.7614	0.8966

## Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			1.01			5.96
9/1/2016	1.99	5.19		2.21	1.05	
10/25/2016	1.98			1.51 (U)	1.2	
10/26/2016		4.25	0.725 (U)			7.42
1/4/2017	1.72			2.56	2.11	6.07
1/5/2017		3.55	0.735 (U)			
4/4/2017			0.87 (U)	1.77	2.02	
4/5/2017	1.72	4.39				3
4/6/2017						
7/11/2017				2.76		4.2
7/12/2017	1.11					
7/13/2017		2.44	0.42 (U)		0.576 (U)	
10/2/2017				4.15		
10/3/2017	2.13		0.995 (U)		0.86	
10/4/2017		4.95				7.16
1/9/2018					1.43	
1/10/2018	1.74		0.698 (U)	1.96		
1/11/2018		3.53				3.57
7/9/2018				1.11		
7/10/2018	1.97		1.01		1.63	
7/11/2018		3.13				7.57
8/27/2019			0.787 (U)			7.04
8/28/2019	2.04	2.01		1.13 (U)	1.4 (U)	
10/8/2019	1.89				1.88	
10/9/2019		2.91	0.22 (U)	2.28		3.68
Mean	1.829	3.635	0.747	2.144	1.416	5.567
Std. Dev.	0.2898	1.052	0.2591	0.8989	0.5059	1.782
Upper Lim.	2.064	4.574	0.9782	2.946	1.867	7.157
Lower Lim.	1.607	2.696	0.5158	1.342	0.9642	3.977

## Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			1.81	2.19
8/31/2016	3.3			
9/1/2016		5.27		
10/26/2016		2.32	2.03	2.67
10/27/2016	2.7			
1/3/2017			1.85	
1/5/2017				3.74
1/6/2017	4.45	5.1		
4/4/2017		5		
4/6/2017	3.1		2.66	2.36
7/12/2017	2.73	2.69	2.1	1.54
10/3/2017			2	3.63
10/4/2017	8.16	4.82		
1/9/2018				2.07
1/10/2018			2.55	
1/11/2018	2.31	4.48		
7/10/2018			3.14	1.63
7/11/2018	3.31	2.69		
8/27/2019		2.97		4.63
8/28/2019	1.91		3.74	
10/9/2019	3.09	2.17	7.23	5.45
Mean	3.506	3.751	2.911	2.991
Std. Dev.	1.77	1.281	1.639	1.319
Upper Lim.	4.601	4.885	3.74	4.168
Lower Lim.	2.267	2.573	1.85	1.814

## Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	0.22 (J)					
8/31/2016		<0.3	0.7	<0.3		
9/1/2016					0.25 (J)	<0.3
10/25/2016	<0.3				0.43	0.5
10/26/2016		<0.3	0.91	0.55		
1/4/2017	0.18 (J)	<0.3	0.51			
1/5/2017				0.09 (J)	0.21 (J)	0.22 (J)
4/3/2017						<0.3
4/4/2017	<0.3				0.45	
4/5/2017			0.71			
4/6/2017		<0.3		<0.3		
7/10/2017			0.88			
7/11/2017		<0.3			0.41	0.06 (J)
7/12/2017	0.04 (J)			<0.3		
10/2/2017					<0.3	<0.3
10/3/2017	<0.3	<0.3				
10/4/2017			0.37	<0.3		
1/9/2018					<0.3	<0.3
1/10/2018	<0.3			<0.3		
1/11/2018		<0.3	1.4			
7/9/2018					<0.3	
7/10/2018	<0.3					0.15 (J)
7/11/2018		<0.3	0.62	<0.3		
1/16/2019	<0.3			<0.3	<0.3	
1/17/2019		<0.3	1.2			<0.3
3/26/2019	0.051 (J)			0.052 (J)	0.13 (J)	0.13 (J)
3/27/2019		<0.3	0.036 (J)			
8/27/2019	<0.3	<0.3	0.3	<0.3	<0.3	<0.3
10/8/2019		<0.3		<0.3	<0.3	<0.3
10/9/2019	<0.3		<0.3			
Mean	0.2409	0.3	0.6613	0.2827	0.3067	0.2633
Std. Dev.	0.09932	0	0.3944	0.1223	0.09069	0.1125
Upper Lim.	0.3	0.3	0.9708	0.55	0.3778	0.5
Lower Lim.	0.051	0.3	0.3519	0.09	0.2355	0.13

## Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			0.07 (J)			0.04 (J)
9/1/2016	0.55	0.68		<0.3	<0.3	
10/25/2016	0.36			<0.3	<0.3	
10/26/2016		0.68	0.62			0.12 (J)
1/4/2017	0.1 (J)			0.04 (J)	<0.3	0.06 (J)
1/5/2017		0.73	0.17 (J)			
4/4/2017			0.08 (J)	0.02 (J)	<0.3	
4/5/2017	0.2 (J)	1.6				<0.3
4/6/2017						<0.3
7/11/2017				0.14 (J)		0.03 (J)
7/12/2017	0.04 (J)					
7/13/2017		1.7	0.06 (J)		<0.3	
10/2/2017				<0.3		
10/3/2017	0.86		0.06 (J)		<0.3	
10/4/2017		1.8				0.12 (J)
1/9/2018					<0.3	
1/10/2018	<0.3		<0.3	<0.3		
1/11/2018		1.5				<0.3
7/9/2018				<0.3		
7/10/2018	<0.3		<0.3		<0.3	
7/11/2018		1.8				<0.3
1/16/2019		1.4				
1/17/2019	<0.3				<0.3	
1/18/2019						<0.3
1/21/2019			<0.3	<0.3		
3/25/2019				0.043 (J)		
3/26/2019	0.11 (J)	0.89			0.071 (J)	
3/27/2019						<0.3
7/30/2019			0.083 (J)			
8/27/2019			<0.3			0.1
8/28/2019	<0.3	0.61		<0.3	<0.3	
10/8/2019	<0.3				<0.3	
10/9/2019		<0.3	<0.3	<0.3		<0.3
Mean	0.31	1.141	0.2203	0.2203	0.2809	0.1892
Std. Dev.	0.22	0.5422	0.1669	0.1211	0.06611	0.1189
Upper Lim.	0.55	1.566	0.62	0.3	0.3	0.3
Lower Lim.	0.1	0.7154	0.06	0.04	0.071	0.04

## Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			0.04 (J)	0.09 (J)
8/31/2016	0.55			
9/1/2016		<0.3		
10/26/2016		0.05 (J)	0.05 (J)	0.24 (J)
10/27/2016	0.26 (J)			
1/3/2017			0.08 (J)	
1/5/2017				0.11 (J)
1/6/2017	0.25 (J)	0.08 (J)		
4/4/2017		<0.3		
4/6/2017	0.16 (J)		0.006 (J)	0.3
7/12/2017	0.2 (J)	0.38	0.05 (J)	0.15 (J)
10/3/2017			0.11 (J)	0.11 (J)
10/4/2017	0.22 (J)	<0.3		
1/9/2018				<0.3
1/10/2018			<0.3	
1/11/2018	0.98	<0.3		
7/10/2018			0.2 (J)	<0.3
7/11/2018	0.14 (J)	<0.3		
1/16/2019		1.2	<0.3	0.053 (J)
1/18/2019	0.24 (J)			
3/25/2019		0.064 (J)		
3/26/2019			<0.3	0.046 (J)
3/27/2019	0.13 (J)			
8/27/2019		0.031 (J)		0.13 (J)
8/28/2019	0.088 (J)		0.097 (J)	
10/9/2019	0.068 (J)	<0.3	<0.3	<0.3
Mean	0.2738	0.3004	0.1528	0.1774
Std. Dev.	0.2547	0.3097	0.1185	0.1029
Upper Lim.	0.3979	0.38	0.3	0.3
Lower Lim.	0.1129	0.05	0.04	0.053

## Confidence Interval

Constituent: Lead (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.005					
8/31/2016		0.0002 (J)	0.0001 (J)	<0.005		
9/1/2016					<0.005	<0.005
10/25/2016	<0.005				<0.005	<0.005
10/26/2016		0.0001 (J)	0.0001 (J)	<0.005		
1/4/2017	<0.005	0.0002 (J)	<0.005			
1/5/2017				0.0002 (J)	<0.005	<0.005
4/3/2017						0.0003 (J)
4/4/2017	<0.005				0.0001 (J)	
4/5/2017			0.0003 (J)			
4/6/2017		0.0003 (J)		0.0005 (J)		
7/10/2017			0.0003 (J)			
7/11/2017		0.0002 (J)			8E-05 (J)	0.0001 (J)
7/12/2017	<0.005			0.0005 (J)		
10/2/2017					0.0001 (J)	0.0002 (J)
10/3/2017	<0.005	0.0003 (J)				
10/4/2017			0.0001 (J)	0.0007 (J)		
1/9/2018					<0.005	0.0002 (J)
1/10/2018	0.0001 (J)			0.0009 (J)		
1/11/2018		0.0003 (J)	0.0002 (J)			
7/9/2018					<0.005	
7/10/2018	<0.005					<0.005
7/11/2018			<0.005	0.0015 (J)		
1/16/2019	<0.005			0.00061 (J)	<0.005	
1/17/2019		0.00028 (J)	<0.005			<0.005
3/26/2019	<0.005			<0.005	<0.005	<0.005
3/27/2019		0.00029 (J)	<0.005			
8/27/2019	<0.005	0.00021 (J)	<0.005	0.0001 (J)	0.00051 (J)	0.00033 (J)
10/8/2019		0.00028 (J)		0.00013 (J)	<0.005	0.00012 (J)
10/9/2019	<0.005		6.6E-05 (J)			
Mean	0.004592	0.0002418	0.00218	0.001678	0.003399	0.002604
Std. Dev.	0.001415	6.462E-05	0.00249	0.002038	0.002367	0.002503
Upper Lim.	0.005	0.0003	0.005	0.005	0.005	0.005
Lower Lim.	0.0001	0.0002	6.6E-05	0.00013	0.0001	0.00012

## Confidence Interval

Constituent: Lead (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.005			0.0003 (J)
9/1/2016	<0.005	<0.005		<0.005	<0.005	
10/25/2016	0.0002 (J)			0.0001 (J)	<0.005	
10/26/2016		<0.005	<0.005			0.0003 (J)
1/4/2017	0.0001 (J)			<0.005	<0.005	0.0003 (J)
1/5/2017		<0.005	<0.005			
4/4/2017			0.0002 (J)	7E-05 (J)	9E-05 (J)	
4/5/2017	0.0002 (J)	0.0009 (J)				0.0003 (J)
4/6/2017						
7/11/2017				<0.005		0.0002 (J)
7/12/2017	0.0001 (J)					
7/13/2017		<0.005	0.0003 (J)		7E-05 (J)	
10/2/2017				<0.005		
10/3/2017	0.0001 (J)		<0.005		0.0001 (J)	
10/4/2017		0.0001 (J)				0.0008 (J)
1/9/2018					9E-05 (J)	
1/10/2018	0.0002 (J)		8E-05 (J)	0.0002 (J)		
1/11/2018		0.0001 (J)				0.0009 (J)
7/9/2018				<0.005		
7/10/2018	<0.005		<0.005		<0.005	
7/11/2018		<0.005				0.001 (J)
1/16/2019		<0.005				
1/17/2019	<0.005				<0.005	
1/18/2019						0.0012 (J)
1/21/2019			<0.005	<0.005		
3/25/2019				<0.005		
3/26/2019	<0.005	<0.005			<0.005	
3/27/2019						0.00047 (J)
7/30/2019			0.0002 (J)			
8/27/2019			<0.005			0.003 (J)
8/28/2019	0.0001 (J)	<0.005		6.5E-05 (J)	0.00018 (J)	
10/8/2019	0.0001 (J)				0.00016 (J)	
10/9/2019		0.00015 (J)	6.4E-05 (J)	0.00018 (J)		0.00032 (J)
Mean	0.001758	0.003437	0.002987	0.002968	0.002557	0.0007575
Std. Dev.	0.002394	0.002317	0.002488	0.002512	0.002551	0.0007821
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.001014
Lower Lim.	0.0001	0.0001	8E-05	7E-05	9E-05	0.000289

## Confidence Interval

Constituent: Lead (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.005	<0.005
8/31/2016	0.0007 (J)			
10/26/2016		0.0057	0.0002 (J)	<0.005
10/27/2016	<0.005			
1/3/2017			0.0001 (J)	
1/5/2017				0.0003 (J)
1/6/2017	<0.005	0.0053		
4/4/2017		0.0092		
4/6/2017	0.0001 (J)		0.0003 (J)	0.0002 (J)
7/12/2017	<0.005	0.006	0.0002 (J)	0.0002 (J)
10/3/2017			0.0002 (J)	0.0001 (J)
10/4/2017	9E-05 (J)	0.0057		
1/9/2018				0.0003 (J)
1/10/2018			0.0003 (J)	
1/11/2018	0.0002 (J)	0.0085		
7/10/2018			<0.005	<0.005
7/11/2018	<0.005	0.0029 (J)		
1/16/2019		<0.005	<0.005	<0.005
1/18/2019	<0.005			
3/25/2019		<0.005		
3/26/2019			<0.005	
3/27/2019	<0.005			
8/27/2019		0.001 (J)		0.0011 (J)
8/28/2019	6.1E-05 (J)		0.0011 (J)	
10/9/2019	<0.005	0.00041 (J)	0.0025 (J)	0.00033 (J)
Mean	0.003013	0.004974	0.002075	0.002048
Std. Dev.	0.002461	0.00271	0.002258	0.002355
Upper Lim.	0.005	0.007232	0.005	0.005
Lower Lim.	9E-05	0.002716	0.0001	0.0002

## Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.03					
8/31/2016		<0.03	<0.03	<0.03		
9/1/2016					<0.03	<0.03
10/25/2016	<0.03				<0.03	<0.03
10/26/2016		<0.03	<0.03	<0.03		
1/4/2017	<0.03	<0.03	<0.03			
1/5/2017				<0.03	<0.03	<0.03
4/3/2017						<0.03
4/4/2017	<0.03				<0.03	
4/5/2017			0.0012 (J)			
4/6/2017		<0.03		<0.03		
7/10/2017			<0.03			
7/11/2017		<0.03			<0.03	<0.03
7/12/2017	<0.03			<0.03		
10/2/2017					<0.03	<0.03
10/3/2017	<0.03	<0.03				
10/4/2017			<0.03	<0.03		
1/9/2018					<0.03	<0.03
1/10/2018	<0.03			<0.03		
1/11/2018		<0.03	<0.03			
7/9/2018					<0.03	
7/10/2018	<0.03					<0.03
7/11/2018		<0.03	0.00098 (J)	<0.03		
8/27/2019	<0.03	<0.03	0.00094 (J)	<0.03	<0.03	<0.03
10/8/2019		<0.03		<0.03	<0.03	<0.03
10/9/2019	<0.03		0.0011 (J)			
Mean	0.03	0.03	0.01842	0.03	0.03	0.03
Std. Dev.	0	0	0.01495	0	0	0
Upper Lim.	0.03	0.03	0.03	0.03	0.03	0.03
Lower Lim.	0.03	0.03	0.00098	0.03	0.03	0.03

## Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.03			<0.03
9/1/2016	<0.03	0.0066 (J)		<0.03	<0.03	
10/25/2016	<0.03			<0.03	<0.03	
10/26/2016		0.0065 (J)	<0.03			<0.03
1/4/2017	<0.03			<0.03	<0.03	<0.03
1/5/2017		0.0062 (J)	<0.03			
4/4/2017			<0.03	<0.03	<0.03	
4/5/2017	<0.03	0.007 (J)				<0.03
4/6/2017						<0.03
7/11/2017				<0.03		<0.03
7/12/2017	<0.03					
7/13/2017		0.0069 (J)	<0.03		<0.03	
10/2/2017				<0.03		
10/3/2017	<0.03		<0.03		<0.03	
10/4/2017		0.0082 (J)				<0.03
1/9/2018					<0.03	
1/10/2018	<0.03		<0.03	<0.03		
1/11/2018		0.0061 (J)				<0.03
7/9/2018				<0.03		
7/10/2018	<0.03		<0.03		<0.03	
7/11/2018		0.0075 (J)				<0.03
7/30/2019			<0.03			
8/27/2019			<0.03			<0.03
8/28/2019	<0.03	0.0041 (J)		<0.03	<0.03	
10/8/2019	<0.03				<0.03	
10/9/2019		0.0046 (J)	<0.03	<0.03		<0.03
Mean	0.03	0.00637	0.03	0.03	0.03	0.03
Std. Dev.	0	0.001237	0	0	0	0
Upper Lim.	0.03	0.007473	0.03	0.03	0.03	0.03
Lower Lim.	0.03	0.005267	0.03	0.03	0.03	0.03

## Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			0.0042 (J)	<0.03
9/1/2016		0.0092 (J)		
10/26/2016		0.0046 (J)	<0.03	<0.03
10/27/2016	0.0023 (J)			
1/3/2017			0.0024 (J)	
1/5/2017				<0.03
1/6/2017	0.0021 (J)	0.0042 (J)		
4/4/2017		0.0056 (J)		
4/6/2017	0.0021 (J)		0.0051 (J)	<0.03
7/12/2017	0.0017 (J)	0.0035 (J)	0.0031 (J)	<0.03
10/3/2017			0.0027 (J)	<0.03
10/4/2017	0.0021 (J)	0.0041 (J)		
1/9/2018				<0.03
1/10/2018			0.0041 (J)	
1/11/2018	0.0022 (J)	0.0052 (J)		
7/10/2018			0.005 (J)	<0.03
7/11/2018	0.0019 (J)	0.0039 (J)		
8/27/2019		0.013 (J)		<0.03
8/28/2019	0.0018 (J)			<0.03
10/9/2019	0.0018 (J)	0.013 (J)		
Mean	0.002	0.00663	0.009622	0.03
Std. Dev.	0.0002062	0.00372	0.01159	0
Upper Lim.	0.002199	0.013	0.03	0.03
Lower Lim.	0.001801	0.0039	0.0024	0.03

## Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.0005	<0.0005
8/31/2016	<0.0005			
9/1/2016		<0.0005		
10/26/2016		<0.0005	<0.0005	<0.0005
10/27/2016	<0.0005			
1/3/2017			<0.0005	
1/5/2017				<0.0005
1/6/2017	<0.0005	<0.0005		
4/4/2017		<0.0005		
4/6/2017	<0.0005		<0.0005	<0.0005
7/12/2017	<0.0005	<0.0005	<0.0005	<0.0005
10/3/2017			<0.0005	<0.0005
10/4/2017	5E-05 (J)	<0.0005		
1/9/2018				<0.0005
1/10/2018			<0.0005	
1/11/2018	<0.0005	<0.0005		
7/10/2018			<0.0005	<0.0005
7/11/2018	<0.0005	<0.0005		
1/16/2019		4.9E-05 (J)	<0.0005	4.3E-05 (J)
1/18/2019	<0.0005			
8/27/2019		<0.0005		<0.0005
8/28/2019	<0.0005		<0.0005	
10/9/2019			<0.0005	
Mean	0.000455	0.0004549	0.0005	0.0004543
Std. Dev.	0.0001423	0.0001426	0	0.0001445
Upper Lim.	0.0005	0.0005	0.0005	0.0005
Lower Lim.	0.0005	0.0005	0.0005	0.0005

## Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	0.175					
8/31/2016		<0.01	<0.01	<0.01		
9/1/2016					0.0027 (J)	0.132
10/25/2016	0.242				0.0028 (J)	0.117
10/26/2016		<0.01	<0.01	<0.01		
1/4/2017	0.167	<0.01	<0.01			
1/5/2017				<0.01	0.0022 (J)	0.109
4/3/2017						0.0994
4/4/2017	0.172				0.0022 (J)	
4/5/2017			<0.01			
4/6/2017		<0.01		<0.01		
7/10/2017			<0.01			
7/11/2017		<0.01			0.0024 (J)	0.0938
7/12/2017	0.182			<0.01		
10/2/2017					0.0025 (J)	0.103
10/3/2017	0.162	<0.01				
10/4/2017			<0.01	<0.01		
1/9/2018					0.0038 (J)	0.106
1/10/2018	0.117			<0.01		
1/11/2018		0.0018 (J)	<0.01			
7/10/2018	0.11					0.088
7/11/2018		<0.01	<0.01	<0.01		
8/27/2019	0.06	<0.01	<0.01	<0.01	0.028	0.095
10/8/2019		<0.01		<0.01	0.034	0.091
10/9/2019	0.06		<0.01			
Mean	0.1447	0.00918	0.01	0.01	0.008956	0.1034
Std. Dev.	0.05739	0.002593	0	0	0.0126	0.01338
Upper Lim.	0.1959	0.01	0.01	0.01	0.034	0.1154
Lower Lim.	0.0935	0.01	0.01	0.01	0.0022	0.09148

## Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.01			<0.01
9/1/2016	0.08	<0.01		0.296	0.0686	
10/25/2016	0.08			0.395	0.0018 (J)	
10/26/2016		<0.01	<0.01			<0.01
1/4/2017	0.0786			0.229	0.0222	<0.01
1/5/2017		<0.01	<0.01			
4/4/2017			<0.01	0.147	0.0476	
4/5/2017	0.113	<0.01				<0.01
4/6/2017						<0.01
7/11/2017				0.136		<0.01
7/12/2017	0.178					
7/13/2017		<0.01	<0.01		0.0105	
10/2/2017				0.13		
10/3/2017	0.201		<0.01		0.0031 (J)	
10/4/2017		<0.01				<0.01
1/9/2018					0.09	
1/10/2018	0.161		<0.01	0.229		
1/11/2018		<0.01				<0.01
7/9/2018				0.13		
7/10/2018	0.14		<0.01		0.047	
7/11/2018		<0.01				<0.01
7/30/2019			<0.01			
8/27/2019			<0.01			<0.01
8/28/2019	0.22	0.004 (J)		0.11	0.07	
10/8/2019	0.2				0.078	
10/9/2019		0.0036 (J)	<0.01	0.071		<0.01
Mean	0.1452	0.00876	0.01	0.1873	0.04388	0.01
Std. Dev.	0.05481	0.002616	0	0.09931	0.0327	0
Upper Lim.	0.1941	0.01	0.01	0.2759	0.07306	0.01
Lower Lim.	0.09626	0.004	0.01	0.0987	0.0147	0.01

## Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.01	<0.01
8/31/2016	<0.01			
9/1/2016		0.035		
10/26/2016		0.0267	<0.01	<0.01
10/27/2016	<0.01			
1/3/2017			<0.01	
1/5/2017				<0.01
1/6/2017	<0.01	0.0278		
4/4/2017		0.0265		
4/6/2017	<0.01		<0.01	<0.01
7/12/2017	<0.01	0.0209	<0.01	<0.01
10/3/2017			<0.01	<0.01
10/4/2017	<0.01	0.0181		
1/9/2018				<0.01
1/10/2018			<0.01	
1/11/2018	<0.01	0.0237		
7/10/2018			<0.01	<0.01
7/11/2018	<0.01	0.024		
8/27/2019		0.1		0.0026 (J)
8/28/2019	<0.01		0.0012 (J)	
10/9/2019	<0.01	0.1		
Mean	0.01	0.04027	0.009022	0.009178
Std. Dev.	0	0.0318	0.002933	0.002467
Upper Lim.	0.01	0.1	0.01	0.01
Lower Lim.	0.01	0.0209	0.0012	0.0026

## Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	0.002 (J)					
8/31/2016		0.0084 (J)	0.0019 (J)	<0.01		
9/1/2016					0.0056 (J)	<0.01
10/25/2016	0.0022 (J)				0.0023 (J)	<0.01
10/26/2016		0.0052 (J)	0.002 (J)	<0.01		
1/4/2017	0.0016 (J)	0.0062 (J)	<0.01			
1/5/2017				<0.01	0.0038 (J)	<0.01
4/3/2017						<0.01
4/4/2017	0.0052 (J)				0.0064 (J)	
4/5/2017			<0.01			
4/6/2017		0.0195		<0.01		
7/10/2017			<0.01			
7/11/2017		<0.01			0.0044 (J)	<0.01
7/12/2017	0.0024 (J)			<0.01		
10/2/2017					0.004 (J)	<0.01
10/3/2017	<0.01	0.0079 (J)				
10/4/2017			<0.01	<0.01		
1/9/2018					0.0019 (J)	0.0019 (J)
1/10/2018	0.0018 (J)			<0.01		
1/11/2018		0.0054 (J)	<0.01			
7/9/2018					0.0029 (J)	
7/10/2018	0.0026 (J)					0.0086 (J)
7/11/2018		0.0022 (J)	<0.01	<0.01		
1/16/2019	0.0018 (J)				<0.01	0.0016 (J)
1/17/2019		<0.01	<0.01			0.0029 (J)
3/26/2019	0.0023 (J)			<0.01	0.0022 (J)	0.0074 (J)
3/27/2019		0.01 (J)	<0.01			
8/27/2019	0.0016 (J)	<0.01	<0.01	<0.01	0.0035 (J)	0.0092 (J)
10/8/2019		<0.01		<0.01	0.0026 (J)	0.014
10/9/2019	0.0024 (J)		<0.01			
Mean	0.002992	0.008733	0.008658	0.01	0.003433	0.008667
Std. Dev.	0.002405	0.004237	0.003134	0	0.001489	0.003304
Upper Lim.	0.0052	0.01	0.01	0.01	0.004602	0.014
Lower Lim.	0.0016	0.0052	0.002	0.01	0.002265	0.0029

## Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.01			0.0014 (J)
9/1/2016	0.0052 (J)	0.0012 (J)		<0.01	0.0297	
10/25/2016	0.0085 (J)			0.0014 (J)	0.0095 (J)	
10/26/2016		0.0013 (J)	0.0035 (J)			0.001 (J)
1/4/2017	0.0048 (J)			0.0014 (J)	0.022	<0.01
1/5/2017		0.0012 (J)	<0.01			
4/4/2017			<0.01	<0.01	0.0236	
4/5/2017	0.0068 (J)	<0.01				<0.01
4/6/2017						<0.01
7/11/2017				<0.01		<0.01
7/12/2017	0.0048 (J)					
7/13/2017		0.0018 (J)	<0.01		0.013	
10/2/2017				<0.01		
10/3/2017	0.0051 (J)		<0.01		0.01 (J)	
10/4/2017		0.0042 (J)				0.0023 (J)
1/9/2018					0.0162	
1/10/2018	0.0018 (J)		<0.01	<0.01		
1/11/2018		<0.01				<0.01
7/9/2018				<0.01		
7/10/2018	0.0045 (J)		<0.01		0.016	
7/11/2018		0.0016 (J)				<0.01
1/16/2019		<0.01				
1/17/2019	0.0031 (J)				0.011	
1/18/2019						<0.01
1/21/2019			<0.01	0.0014 (J)		
3/25/2019				<0.01		
3/26/2019	0.0033 (J)	<0.01			0.022	
3/27/2019						<0.01
7/30/2019			<0.01			
8/27/2019			<0.01			<0.01
8/28/2019	0.004 (J)	<0.01		0.0014 (J)	0.019	
10/8/2019	0.0023 (J)				0.019	
10/9/2019		<0.01	<0.01	<0.01		<0.01
Mean	0.004517	0.005942	0.009458	0.007133	0.01758	0.007892
Std. Dev.	0.001861	0.00431	0.001876	0.004234	0.006162	0.003825
Upper Lim.	0.005977	0.01	0.01	0.01	0.02242	0.01
Lower Lim.	0.003056	0.0012	0.0035	0.0014	0.01275	0.0014

## Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.01	<0.01
8/31/2016	<0.01			
9/1/2016		0.0067 (J)		
10/26/2016		0.0042 (J)	<0.01	<0.01
10/27/2016	<0.01			
1/3/2017			<0.01	
1/5/2017				0.0014 (J)
1/6/2017	<0.01	0.0042 (J)		
4/4/2017		0.0043 (J)		
4/6/2017	<0.01		<0.01	<0.01
7/12/2017	<0.01	0.0033 (J)	<0.01	<0.01
10/3/2017			<0.01	<0.01
10/4/2017	<0.01	0.0038 (J)		
1/9/2018				<0.01
1/10/2018			<0.01	
1/11/2018	<0.01	0.0029 (J)		
7/10/2018			0.0018 (J)	0.0016 (J)
7/11/2018	<0.01	0.0015 (J)		
1/16/2019		<0.01	<0.01	
1/18/2019	<0.01			
3/25/2019		<0.01		
3/26/2019			<0.01	0.05 (J)
3/27/2019	<0.01			
8/27/2019		<0.01		0.0033 (J)
8/28/2019	<0.01		0.0033 (J)	
10/9/2019	<0.01	<0.01	0.0073 (J)	
Mean	0.01	0.005908	0.008533	0.01163
Std. Dev.	0	0.003244	0.002917	0.014
Upper Lim.	0.01	0.01	0.01	0.01
Lower Lim.	0.01	0.0029	0.0033	0.0016

## Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.001					
8/31/2016		<0.001	<0.001	<0.001		
9/1/2016					<0.001	<0.001
10/25/2016	<0.001				<0.001	<0.001
10/26/2016		<0.001	0.0003 (J)	<0.001		
1/4/2017	<0.001	<0.001	<0.001			
1/5/2017				<0.001	<0.001	<0.001
4/3/2017					<0.001	
4/4/2017	5E-05 (J)				7E-05 (J)	
4/5/2017			0.0002 (J)			
4/6/2017		6E-05 (J)		<0.001		
7/10/2017			0.0002 (J)			
7/11/2017		<0.001			6E-05 (J)	<0.001
7/12/2017	<0.001			<0.001		
10/2/2017					<0.001	<0.001
10/3/2017	<0.001	7E-05 (J)				
10/4/2017			0.0002 (J)	<0.001		
1/9/2018					<0.001	<0.001
1/10/2018	<0.001			<0.001		
1/11/2018		0.0001 (J)	0.0002 (J)			
7/9/2018					<0.001	
7/10/2018	<0.001					<0.001
7/11/2018		<0.001	<0.001	<0.001		
8/27/2019	<0.001	<0.001	0.00011 (J)	<0.001	<0.001	<0.001
10/8/2019		9.8E-05 (J)		<0.001	<0.001	<0.001
10/9/2019	5.4E-05 (J)		0.00014 (J)			
Mean	0.0008104	0.0006328	0.000435	0.001	0.000813	0.001
Std. Dev.	0.0003997	0.0004742	0.0003929	0	0.0003942	0
Upper Lim.	0.001	0.001	0.001	0.001	0.001	0.001
Lower Lim.	5.4E-05	7E-05	0.00014	0.001	7E-05	0.001

## Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.001			<0.001
9/1/2016	<0.001	<0.001		<0.001	<0.001	
10/25/2016	<0.001			<0.001	<0.001	
10/26/2016		<0.001	<0.001			<0.001
1/4/2017	<0.001			<0.001	<0.001	<0.001
1/5/2017		<0.001	<0.001			
4/4/2017			<0.001	<0.001	5E-05 (J)	
4/5/2017	6E-05 (J)	0.0001 (J)				<0.001
4/6/2017						<0.001
7/11/2017				<0.001		<0.001
7/12/2017	<0.001					
7/13/2017		<0.001	<0.001		<0.001	
10/2/2017				<0.001		
10/3/2017	<0.001		<0.001		<0.001	
10/4/2017		0.0001 (J)				0.0001 (J)
1/9/2018					<0.001	
1/10/2018	5E-05 (J)		<0.001	<0.001		
1/11/2018		0.0001 (J)				6E-05 (J)
7/9/2018				<0.001		
7/10/2018	<0.001		<0.001		<0.001	
7/11/2018		<0.001				<0.001
7/30/2019			0.00011 (J)			
8/27/2019			<0.001			8.6E-05 (J)
8/28/2019	<0.001	6.6E-05 (J)		<0.001	<0.001	
10/8/2019	<0.001				<0.001	
10/9/2019		7.6E-05 (J)	<0.001	<0.001		<0.001
Mean	0.000811	0.0005442	0.0009191	0.001	0.000905	0.0007246
Std. Dev.	0.0003985	0.0004806	0.0002683	0	0.0003004	0.0004435
Upper Lim.	0.001	0.001	0.001	0.001	0.001	0.001
Lower Lim.	6E-05	7.6E-05	0.001	0.001	0.001	8.6E-05

## Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.001	<0.001
8/31/2016	<0.001			
9/1/2016		<0.001		
10/26/2016		<0.001	<0.001	<0.001
10/27/2016	<0.001			
1/3/2017			<0.001	
1/5/2017				<0.001
1/6/2017	<0.001	<0.001		
4/4/2017		7E-05 (J)		
4/6/2017	<0.001		<0.001	<0.001
7/12/2017	<0.001	<0.001	<0.001	<0.001
10/3/2017			<0.001	<0.001
10/4/2017	<0.001	<0.001		
1/9/2018				<0.001
1/10/2018			<0.001	
1/11/2018	<0.001	7E-05 (J)		
7/10/2018			<0.001	<0.001
7/11/2018	<0.001	<0.001		
8/27/2019		<0.001		<0.001
8/28/2019	<0.001		5.7E-05 (J)	
10/9/2019	<0.001	<0.001	0.00031 (J)	
Mean	0.001	0.000814	0.0008367	0.001
Std. Dev.	0	0.0003921	0.0003494	0
Upper Lim.	0.001	0.001	0.001	0.001
Lower Lim.	0.001	7E-05	0.00031	0.001

## Confidence Interval

Constituent: Vanadium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
10/25/2016					0.0206	<0.01
1/4/2017	<0.01	<0.01	<0.01			
1/5/2017				<0.01	0.0172	<0.01
4/3/2017						0.002 (J)
4/4/2017	0.0061 (J)				0.0235	
4/5/2017			0.0039 (J)			
4/6/2017		0.0025 (J)		<0.01		
7/10/2017			0.0062 (J)			
7/11/2017		0.0027 (J)			0.0136	0.0022 (J)
7/12/2017	0.0067 (J)			0.0016 (J)		
10/2/2017					0.0175	0.0022 (J)
1/9/2018					0.0103	0.0021 (J)
1/10/2018	0.0056 (J)			0.0019 (J)		
1/11/2018		0.0019 (J)	0.0025 (J)			0.0078 (J)
7/9/2018						0.0025 (J)
7/10/2018	0.0056 (J)					
7/11/2018		0.0021 (J)	0.0059 (J)	0.0097 (J)		
1/16/2019	0.0043 (J)			<0.01	0.0043 (J)	
1/17/2019		0.0021 (J)	<0.01			<0.01
3/26/2019	0.0051 (J)			0.0029 (J)	0.0063 (J)	0.0026 (J)
3/27/2019		0.0023 (J)	0.0049 (J)			
10/8/2019		<0.01		<0.01	<0.01	<0.01
10/9/2019	<0.01		0.0021 (J)			
Mean	0.006675	0.0042	0.005687	0.007012	0.01311	0.00536
Std. Dev.	0.002167	0.003588	0.003032	0.004058	0.006412	0.003997
Upper Lim.	0.01	0.01	0.01014	0.01	0.01883	0.01
Lower Lim.	0.0043	0.0019	0.002206	0.0016	0.007389	0.0021

## Confidence Interval

Constituent: Vanadium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
10/25/2016	<0.01			<0.01		
1/4/2017	<0.01			<0.01	<0.01	<0.01
1/5/2017		<0.01	<0.01			
4/4/2017			<0.01	0.0024 (J)	0.003 (J)	
4/5/2017	0.0033 (J)	0.0029 (J)				
4/6/2017						<0.01
7/11/2017				0.003 (J)		0.0016 (J)
7/12/2017	0.0037 (J)					
7/13/2017		0.0037 (J)	<0.01		0.0019 (J)	
10/2/2017				0.0028 (J)		
10/3/2017	0.0036 (J)					
1/9/2018					0.0046 (J)	
1/10/2018	0.0029 (J)		<0.01	0.0026 (J)		
1/11/2018		0.0026 (J)				0.0012 (J)
7/9/2018				<0.01		
7/10/2018	0.0025 (J)		<0.01		0.0031 (J)	
7/11/2018		0.0032 (J)				0.0025 (J)
1/16/2019		<0.01				
1/17/2019	0.0021 (J)				0.0022 (J)	
1/18/2019						<0.01
1/21/2019			0.0024 (J)	0.0031 (J)		
3/25/2019				0.0024 (J)		
3/26/2019	0.0038 (J)	0.0024 (J)			0.0041 (J)	
3/27/2019						0.002 (J)
7/30/2019			<0.01			
10/8/2019	<0.01				<0.01	
10/9/2019		<0.01	<0.01	<0.01		<0.01
Mean	0.00519	0.0056	0.00905	0.00563	0.004862	0.005912
Std. Dev.	0.003361	0.003664	0.002687	0.003768	0.003292	0.004385
Upper Lim.	0.01	0.01	0.01	0.01	0.01	0.01
Lower Lim.	0.0025	0.0024	0.0024	0.0024	0.0019	0.0012

## Confidence Interval

Constituent: Vanadium (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
1/3/2017			<0.01	
1/5/2017				0.0077 (J)
1/6/2017	<0.01	0.0341		
4/4/2017		0.0371		
4/6/2017	<0.01		0.0063 (J)	0.0069 (J)
7/12/2017	0.0013 (J)	0.0399	0.0064 (J)	0.0098 (J)
1/9/2018				0.0086 (J)
1/10/2018			0.0077 (J)	
1/11/2018	<0.01	0.0327		
7/10/2018			0.016	0.0098 (J)
7/11/2018	<0.01	0.02		
1/16/2019		0.0022 (J)	0.0033 (J)	0.077
1/18/2019	<0.01			
3/25/2019		0.004 (J)		
3/26/2019			0.0058 (J)	0.086
3/27/2019	<0.01			
10/9/2019	<0.01	<0.01	0.033 (J)	0.018 (J)
<b>Mean</b>	0.008912	0.0225	0.01106	0.02798
<b>Std. Dev.</b>	0.003076	0.01545	0.009639	0.0333
<b>Upper Lim.</b>	0.01	0.03888	0.01911	0.086
<b>Lower Lim.</b>	0.0013	0.006122	0.003636	0.0069

## Confidence Interval

Constituent: Zinc (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
10/25/2016					<0.01	<0.01
1/4/2017	<0.01	<0.01	0.0025 (J)			
1/5/2017				0.0021 (J)	<0.01	<0.01
4/3/2017						<0.01
4/4/2017	<0.01				<0.01	
4/5/2017			0.0026 (J)			
4/6/2017		0.004 (J)		0.0027 (J)		
7/10/2017			0.0023 (J)			
7/11/2017		<0.01			<0.01	<0.01
7/12/2017	<0.01			0.0043 (J)		
10/2/2017					0.0026 (J)	<0.01
1/9/2018					0.0018 (J)	<0.01
1/10/2018	0.0014 (J)			0.0021 (J)		
1/11/2018		0.0018 (J)	0.0031 (J)			
7/9/2018					<0.01	
7/10/2018	0.0021 (J)					<0.01
7/11/2018		<0.01	0.0036 (J)	0.0039 (J)		
1/16/2019	<0.01			0.047	<0.01	
1/17/2019		<0.01	0.0032 (J)			<0.01
3/26/2019	<0.01			0.03	<0.01	<0.01
3/27/2019		<0.01	0.0031 (J)			
10/8/2019		0.0061 (J)		0.053	0.0052 (J)	0.0051 (J)
10/9/2019	0.0057 (J)		0.0057 (J)			
Mean	0.0074	0.007737	0.003263	0.01814	0.00796	0.00951
Std. Dev.	0.003794	0.003327	0.001073	0.02183	0.00339	0.00155
Upper Lim.	0.01	0.01	0.004236	0.053	0.01	0.01
Lower Lim.	0.0014	0.0018	0.002327	0.0021	0.0026	0.01

## Confidence Interval

Constituent: Zinc (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
10/25/2016	<0.01			<0.01		
1/4/2017	0.0025 (J)			<0.01	<0.01	0.006 (J)
1/5/2017		0.016	<0.01			
4/4/2017			0.0015 (J)	<0.01	0.0015 (J)	
4/5/2017	0.0025 (J)	0.0175				0.0031 (J)
4/6/2017						0.0029 (J)
7/11/2017				<0.01		
7/12/2017	0.002 (J)				0.002 (J)	
7/13/2017		0.0126	0.0014 (J)			
10/2/2017				<0.01		
10/3/2017	<0.01				0.0016 (J)	
1/9/2018						
1/10/2018	0.0016 (J)		<0.01	0.0034 (J)		
1/11/2018		0.012				0.0106
7/9/2018				<0.01		
7/10/2018	0.0031 (J)		<0.01		<0.01	
7/11/2018		0.011				0.0057 (J)
1/16/2019		0.0094 (J)				
1/17/2019	<0.01				<0.01	
1/18/2019						0.0024 (J)
1/21/2019			<0.01	<0.01		
3/25/2019				<0.01		
3/26/2019	<0.01	0.0057 (J)			<0.01	
3/27/2019						<0.01
7/30/2019			0.0067 (J)			
10/8/2019	0.01				0.0071 (J)	
10/9/2019		0.011	0.005 (J)	0.0049 (J)		0.0079 (J)
Mean	0.00617	0.0119	0.006825	0.00883	0.006525	0.006075
Std. Dev.	0.004055	0.003684	0.003807	0.002492	0.004116	0.003203
Upper Lim.	0.01	0.0158	0.01	0.01	0.01	0.00947
Lower Lim.	0.002	0.007996	0.0014	0.0049	0.0015	0.00268

## Confidence Interval

Constituent: Zinc (mg/L) Analysis Run 3/27/2020 6:17 PM View: Confidence Interval  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
1/3/2017			<0.01	
1/5/2017				<0.01
1/6/2017	0.0026 (J)	0.0104		
4/4/2017		0.0132		
4/6/2017	0.0047 (J)		0.0023 (J)	0.0032 (J)
7/12/2017	0.003 (J)	0.0046 (J)	<0.01	0.002 (J)
1/9/2018				0.0036 (J)
1/10/2018			0.0022 (J)	
1/11/2018	0.0046 (J)	0.0095 (J)		
7/10/2018			<0.01	0.0055 (J)
7/11/2018	0.0033 (J)	0.0028 (J)		
1/16/2019		0.0052 (J)	<0.01	
1/18/2019	0.0025 (J)			
3/25/2019		0.0078 (J)		
3/26/2019			<0.01	
3/27/2019	0.0026 (J)			
10/9/2019	0.0054 (J)	0.0064 (J)	0.0081 (J)	0.016 (J)
<b>Mean</b>	0.003588	0.007488	0.007825	0.006717
<b>Std. Dev.</b>	0.001141	0.003422	0.003503	0.005344
<b>Upper Lim.</b>	0.004797	0.01112	0.01	0.01583
<b>Lower Lim.</b>	0.002378	0.00386	0.0022	-0.001041

## Confidence Interval Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 3/19/2020, 2:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	GWC-15	0.1181	0.05908	0.0287	Yes	12	0	No	0.01	Param.
Arsenic (mg/L)	GWC-16	0.08515	0.0587	0.0287	Yes	12	0	No	0.01	Param.
Arsenic (mg/L)	GWC-20	0.3917	0.277	0.0287	Yes	12	0	No	0.01	Param.

## Confidence Interval All Results

Grumman Road Landfill    Client: Southern Company    Data: Grumman Road    Printed 3/19/2020, 2:09 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWC-1	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-11	0.003	0.00046	0.006	No	12	58.33	No	0.01	NP (normality)
Antimony (mg/L)	GWC-12	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-13	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-14	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-15	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-16	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-17	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-2	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-20	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-21	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-22	0.003	0.00045	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-9	0.003	0.0016	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-4R	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-5R	0.003	0.003	0.006	No	11	90.91	No	0.006	NP (NDs)
Antimony (mg/L)	GWB-6R	0.003	0.003	0.006	No	9	100	No	0.002	NP (NDs)
Arsenic (mg/L)	GWC-1	0.003136	0.00173	0.0287	No	12	0	No	0.01	Param.
Arsenic (mg/L)	GWC-11	0.005	0.005	0.0287	No	12	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-12	0.005	0.0008	0.0287	No	12	75	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-13	0.005	0.0006	0.0287	No	12	83.33	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-14	0.002896	0.001769	0.0287	No	12	8.333	In(x)	0.01	Param.
<b>Arsenic (mg/L)</b>	<b>GWC-15</b>	<b>0.1181</b>	<b>0.05908</b>	<b>0.0287</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Arsenic (mg/L)</b>	<b>GWC-16</b>	<b>0.08515</b>	<b>0.0587</b>	<b>0.0287</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GWC-17	0.005	0.00082	0.0287	No	12	33.33	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-2	0.005	0.0006	0.0287	No	12	83.33	No	0.01	NP (NDs)
<b>Arsenic (mg/L)</b>	<b>GWC-20</b>	<b>0.3917</b>	<b>0.277</b>	<b>0.0287</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GWC-21	0.005305	0.002777	0.0287	No	12	33.33	No	0.01	Param.
Arsenic (mg/L)	GWC-22	0.005	0.0006	0.0287	No	12	41.67	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-9	0.005	0.005	0.0287	No	12	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GWB-4R	0.003151	0.001474	0.0287	No	12	8.333	No	0.01	Param.
Arsenic (mg/L)	GWB-5R	0.0053	0.0009	0.0287	No	12	25	No	0.01	NP (Cohens/xfrm)
Arsenic (mg/L)	GWB-6R	0.004022	0.001096	0.0287	No	11	18.18	No	0.01	Param.
Barium (mg/L)	GWC-1	0.05777	0.05076	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-11	0.118	0.05167	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-12	0.01857	0.01624	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-13	0.02425	0.0185	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-14	0.067	0.0245	2	No	12	0	No	0.01	NP (normality)
Barium (mg/L)	GWC-15	0.04982	0.04008	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-16	0.118	0.04738	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GWC-17	0.1222	0.037	2	No	12	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-2	0.05451	0.04865	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GWC-20	0.1169	0.07591	2	No	12	0	In(x)	0.01	Param.
Barium (mg/L)	GWC-21	0.07596	0.04659	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-22	0.1088	0.06162	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWC-9	0.2903	0.203	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWB-4R	0.09795	0.07548	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GWB-5R	0.1793	0.0849	2	No	12	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GWB-6R	0.107	0.013	2	No	12	0	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-1	0.003	0.003	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GWC-11	0.003	0.003	0.004	No	10	100	No	0.011	NP (NDs)

# Confidence Interval All Results

Grumman Road Landfill    Client: Southern Company    Data: Grumman Road    Printed 3/19/2020, 2:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Beryllium (mg/L)	GWC-12	0.0009541	0.0005339	0.004	No	10	0	No	0.01	Param.
Beryllium (mg/L)	GWC-13	0.003	0.003	0.004	No	10	90	No	0.011	NP (NDs)
Beryllium (mg/L)	GWC-14	0.003	0.00009	0.004	No	10	70	No	0.011	NP (normality)
Beryllium (mg/L)	GWC-15	0.003	0.003	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GWC-16	0.003	0.00008	0.004	No	10	30	No	0.011	NP (normality)
Beryllium (mg/L)	GWC-17	0.003346	0.001654	0.004	No	10	0	No	0.01	Param.
Beryllium (mg/L)	GWC-2	0.003	0.0003	0.004	No	11	81.82	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-20	0.003	0.003	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GWC-21	0.003	0.003	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GWC-22	0.003	0.00009	0.004	No	10	40	No	0.011	NP (normality)
Beryllium (mg/L)	GWC-9	0.0003	0.0002	0.004	No	10	0	No	0.011	NP (normality)
Beryllium (mg/L)	GWB-4R	0.003	0.0001	0.004	No	10	40	No	0.011	NP (normality)
Beryllium (mg/L)	GWB-5R	0.0002798	0.0001104	0.004	No	9	0	No	0.01	Param.
Beryllium (mg/L)	GWB-6R	0.003	0.003	0.004	No	9	100	No	0.002	NP (NDs)
Cadmium (mg/L)	GWC-1	0.0025	0.0001	0.005	No	10	80	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-11	0.0007567	0.0001406	0.005	No	10	10	In(x)	0.01	Param.
Cadmium (mg/L)	GWC-12	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-13	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-14	0.0025	0.00017	0.005	No	10	40	No	0.011	NP (normality)
Cadmium (mg/L)	GWC-15	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-16	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-17	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-2	0.0025	0.0025	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-20	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-21	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWC-22	0.0025	0.0001	0.005	No	10	30	No	0.011	NP (normality)
Cadmium (mg/L)	GWC-9	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GWB-4R	0.0025	0.00009	0.005	No	10	60	No	0.011	NP (normality)
Cadmium (mg/L)	GWB-5R	0.0025	0.0025	0.005	No	9	100	No	0.002	NP (NDs)
Cadmium (mg/L)	GWB-6R	0.0025	0.0025	0.005	No	9	100	No	0.002	NP (NDs)
Chromium (mg/L)	GWC-1	0.0062	0.0015	0.1	No	12	0	No	0.01	NP (normality)
Chromium (mg/L)	GWC-11	0.01	0.0007	0.1	No	12	41.67	No	0.01	NP (normality)
Chromium (mg/L)	GWC-12	0.01	0.00085	0.1	No	12	16.67	No	0.01	NP (normality)
Chromium (mg/L)	GWC-13	0.01	0.0007	0.1	No	12	50	No	0.01	NP (normality)
Chromium (mg/L)	GWC-14	0.01	0.0006	0.1	No	12	33.33	No	0.01	NP (normality)
Chromium (mg/L)	GWC-15	0.01	0.0012	0.1	No	12	41.67	No	0.01	NP (normality)
Chromium (mg/L)	GWC-16	0.01	0.0009	0.1	No	12	33.33	No	0.01	NP (normality)
Chromium (mg/L)	GWC-17	0.01	0.0009	0.1	No	12	33.33	No	0.01	NP (normality)
Chromium (mg/L)	GWC-2	0.01	0.0006	0.1	No	12	58.33	No	0.01	NP (normality)
Chromium (mg/L)	GWC-20	0.01	0.00089	0.1	No	12	50	No	0.01	NP (normality)
Chromium (mg/L)	GWC-21	0.01	0.0006	0.1	No	12	41.67	No	0.01	NP (normality)
Chromium (mg/L)	GWC-22	0.01	0.00057	0.1	No	12	58.33	No	0.01	NP (normality)
Chromium (mg/L)	GWC-9	0.01	0.0009	0.1	No	12	41.67	No	0.01	NP (normality)
Chromium (mg/L)	GWB-4R	0.01097	0.004078	0.1	No	12	0	No	0.01	Param.
Chromium (mg/L)	GWB-5R	0.012	0.0011	0.1	No	12	25	No	0.01	NP (Cohens/xfrm)
Chromium (mg/L)	GWB-6R	0.017	0.0014	0.1	No	12	0	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-1	0.005	0.005	0.0102	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-11	0.005	0.005	0.0102	No	10	90	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-12	0.001506	0.0009741	0.0102	No	10	0	No	0.01	Param.
Cobalt (mg/L)	GWC-13	0.005	0.005	0.0102	No	10	100	No	0.011	NP (NDs)

# Confidence Interval All Results

Grumman Road Landfill   Client: Southern Company   Data: Grumman Road   Printed 3/19/2020, 2:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Cobalt (mg/L)	GWC-14	0.005	0.005	0.0102	No	10	90	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-15	0.005	0.005	0.0102	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-16	0.005	0.005	0.0102	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-17	0.00718	0.00374	0.0102	No	10	0	No	0.01	Param.
Cobalt (mg/L)	GWC-2	0.005	0.0003	0.0102	No	11	63.64	No	0.006	NP (normality)
Cobalt (mg/L)	GWC-20	0.005	0.005	0.0102	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-21	0.005	0.005	0.0102	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GWC-22	0.005	0.0007	0.0102	No	10	50	No	0.011	NP (normality)
Cobalt (mg/L)	GWC-9	0.0017	0.00099	0.0102	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	GWB-4R	0.0024	0.0008	0.0102	No	10	10	No	0.011	NP (normality)
Cobalt (mg/L)	GWB-5R	0.005	0.002	0.0102	No	10	60	No	0.011	NP (normality)
Cobalt (mg/L)	GWB-6R	0.005	0.00038	0.0102	No	9	88.89	No	0.002	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GWC-1	2.51	1.546	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-11	5.92	1.761	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-12	3.306	1.956	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-13	1.412	0.6307	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-14	1.337	0.7614	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-15	1.808	0.8966	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-16	2.064	1.607	13.22	No	10	0	x^2	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-17	4.574	2.696	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-2	0.9782	0.5158	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-20	2.946	1.342	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-21	1.867	0.9642	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-22	7.157	3.977	13.22	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-9	4.601	2.267	13.22	No	10	0	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWB-4R	4.885	2.573	13.22	No	10	0	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWB-5R	3.74	1.85	13.22	No	10	0	No	0.011	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GWB-6R	4.168	1.814	13.22	No	10	0	No	0.01	Param.
Fluoride (mg/L)	GWC-1	0.3	0.051	4	No	12	66.67	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-11	0.3	0.3	4	No	12	100	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-12	0.9708	0.3519	4	No	12	8.333	No	0.01	Param.
Fluoride (mg/L)	GWC-13	0.55	0.09	4	No	12	75	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-14	0.3778	0.2355	4	No	12	50	No	0.01	Param.
Fluoride (mg/L)	GWC-15	0.5	0.13	4	No	12	58.33	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-16	0.55	0.1	4	No	12	41.67	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GWC-17	1.566	0.7154	4	No	12	8.333	No	0.01	Param.
Fluoride (mg/L)	GWC-2	0.62	0.06	4	No	12	41.67	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-20	0.3	0.04	4	No	12	66.67	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-21	0.3	0.071	4	No	12	91.67	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-22	0.3	0.04	4	No	12	50	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-9	0.3979	0.1129	4	No	12	0	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GWB-4R	0.38	0.05	4	No	12	50	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GWB-5R	0.3	0.04	4	No	12	33.33	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GWB-6R	0.3	0.053	4	No	12	25	No	0.01	NP (Cohens/xfrm)
Lead (mg/L)	GWC-1	0.005	0.0001	0.015	No	12	91.67	No	0.01	NP (NDs)
Lead (mg/L)	GWC-11	0.0003	0.0002	0.015	No	11	0	No	0.006	NP (normality)
Lead (mg/L)	GWC-12	0.005	0.000066	0.015	No	12	41.67	No	0.01	NP (normality)
Lead (mg/L)	GWC-13	0.005	0.00013	0.015	No	12	25	No	0.01	NP (Cohens/xfrm)
Lead (mg/L)	GWC-14	0.005	0.0001	0.015	No	12	66.67	No	0.01	NP (normality)
Lead (mg/L)	GWC-15	0.005	0.00012	0.015	No	12	50	No	0.01	NP (normality)

# Confidence Interval All Results

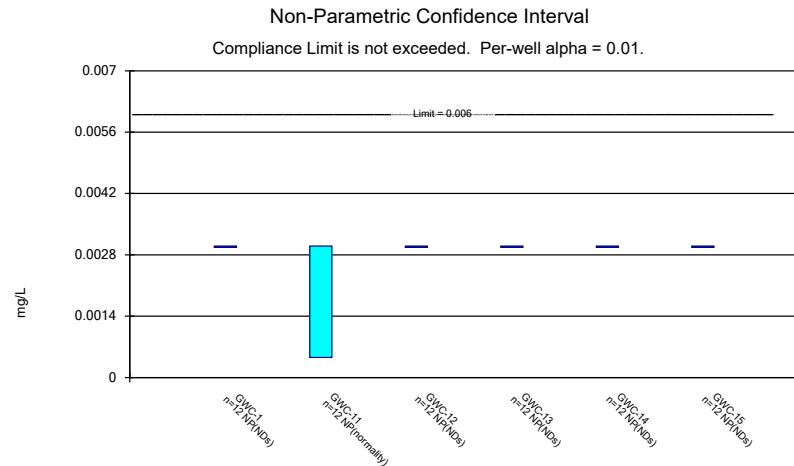
Grumman Road Landfill    Client: Southern Company    Data: Grumman Road    Printed 3/19/2020, 2:09 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lead (mg/L)	GWC-16	0.005	0.0001	0.015	No	12	33.33	No	0.01	NP (normality)
Lead (mg/L)	GWC-17	0.005	0.0001	0.015	No	12	66.67	No	0.01	NP (normality)
Lead (mg/L)	GWC-2	0.005	0.00008	0.015	No	12	58.33	No	0.01	NP (normality)
Lead (mg/L)	GWC-20	0.005	0.00007	0.015	No	12	58.33	No	0.01	NP (normality)
Lead (mg/L)	GWC-21	0.005	0.00009	0.015	No	12	50	No	0.01	NP (normality)
Lead (mg/L)	GWC-22	0.001014	0.000289	0.015	No	12	0	In(x)	0.01	Param.
Lead (mg/L)	GWC-9	0.005	0.00009	0.015	No	12	58.33	No	0.01	NP (normality)
Lead (mg/L)	GWB-4R	0.007232	0.002716	0.015	No	11	18.18	No	0.01	Param.
Lead (mg/L)	GWB-5R	0.005	0.0001	0.015	No	12	33.33	No	0.01	NP (normality)
Lead (mg/L)	GWB-6R	0.005	0.0002	0.015	No	11	36.36	No	0.006	NP (normality)
Lithium (mg/L)	GWC-1	0.03	0.03	0.04	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-11	0.03	0.03	0.04	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-12	0.03	0.00098	0.04	No	10	60	No	0.011	NP (normality)
Lithium (mg/L)	GWC-13	0.03	0.03	0.04	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-14	0.03	0.03	0.04	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-15	0.03	0.03	0.04	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-16	0.03	0.03	0.04	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-17	0.007473	0.005267	0.04	No	10	0	No	0.01	Param.
Lithium (mg/L)	GWC-2	0.03	0.03	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-20	0.03	0.03	0.04	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-21	0.03	0.03	0.04	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-22	0.03	0.03	0.04	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GWC-9	0.002199	0.001801	0.04	No	9	0	No	0.01	Param.
Lithium (mg/L)	GWB-4R	0.013	0.0039	0.04	No	10	0	No	0.011	NP (normality)
Lithium (mg/L)	GWB-5R	0.03	0.0024	0.04	No	9	22.22	No	0.002	NP (normality)
Lithium (mg/L)	GWB-6R	0.03	0.03	0.04	No	9	100	No	0.002	NP (NDs)
Mercury (mg/L)	GWC-1	0.0005	0.0005	0.002	No	10	90	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-11	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-12	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-13	0.0005	0.0005	0.002	No	10	90	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-14	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-15	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-16	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-17	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-2	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GWC-20	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-21	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-22	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-9	0.0005	0.0005	0.002	No	10	90	No	0.011	NP (NDs)
Mercury (mg/L)	GWB-4R	0.0005	0.0005	0.002	No	10	90	No	0.011	NP (NDs)
Mercury (mg/L)	GWB-5R	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GWB-6R	0.0005	0.0005	0.002	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWC-1	0.1959	0.0935	0.1	No	10	0	No	0.01	Param.
Molybdenum (mg/L)	GWC-11	0.01	0.01	0.1	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWC-12	0.01	0.01	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWC-13	0.01	0.01	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWC-14	0.034	0.0022	0.1	No	9	0	No	0.002	NP (normality)
Molybdenum (mg/L)	GWC-15	0.1154	0.09148	0.1	No	10	0	No	0.01	Param.
Molybdenum (mg/L)	GWC-16	0.1941	0.09626	0.1	No	10	0	No	0.01	Param.
Molybdenum (mg/L)	GWC-17	0.01	0.004	0.1	No	10	80	No	0.011	NP (NDs)

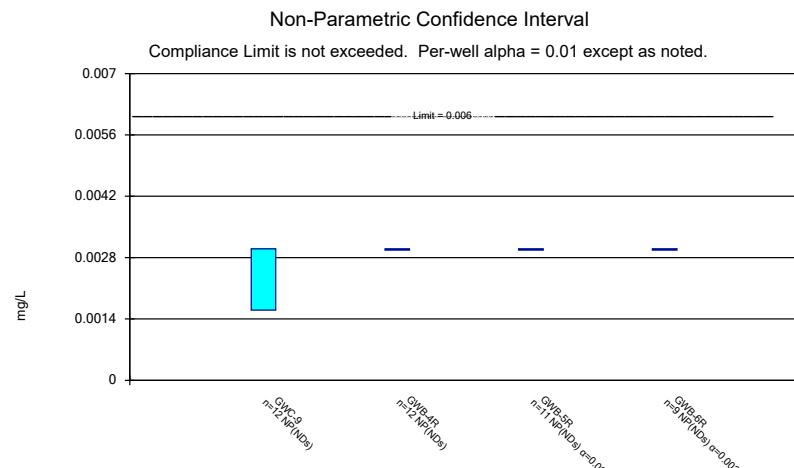
# Confidence Interval All Results

Grumman Road Landfill    Client: Southern Company    Data: Grumman Road    Printed 3/19/2020, 2:09 PM

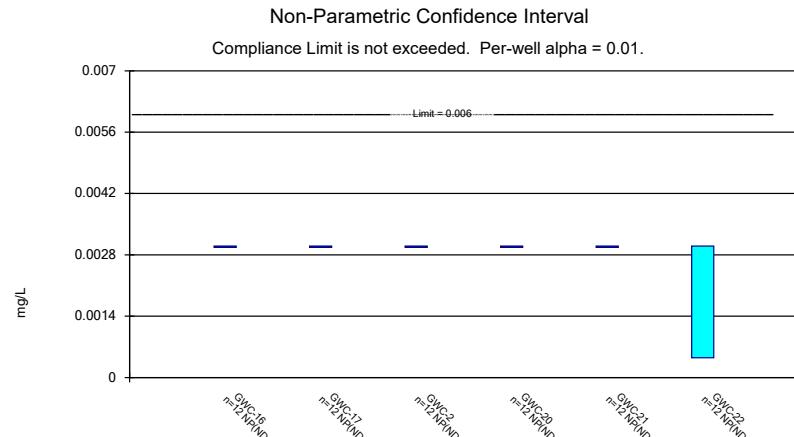
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	GWC-2	0.01	0.01	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-20	0.2759	0.0987	0.1	No	10	0	No	0.01	Param.
Molybdenum (mg/L)	GWC-21	0.07306	0.0147	0.1	No	10	0	No	0.01	Param.
Molybdenum (mg/L)	GWC-22	0.01	0.01	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWC-9	0.01	0.01	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWB-4R	0.1	0.0209	0.1	No	10	0	No	0.011	NP (normality)
Molybdenum (mg/L)	GWB-5R	0.01	0.0012	0.1	No	9	88.89	No	0.002	NP (NDs)
Molybdenum (mg/L)	GWB-6R	0.01	0.0026	0.1	No	9	88.89	No	0.002	NP (NDs)
Selenium (mg/L)	GWC-1	0.0052	0.0016	0.05	No	12	8.333	No	0.01	NP (normality)
Selenium (mg/L)	GWC-11	0.01	0.0052	0.05	No	12	33.33	No	0.01	NP (Cohens/xfrm)
Selenium (mg/L)	GWC-12	0.01	0.002	0.05	No	12	83.33	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-13	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-14	0.004602	0.002265	0.05	No	12	0	No	0.01	Param.
Selenium (mg/L)	GWC-15	0.014	0.0029	0.05	No	12	50	No	0.01	NP (normality)
Selenium (mg/L)	GWC-16	0.005977	0.003056	0.05	No	12	0	No	0.01	Param.
Selenium (mg/L)	GWC-17	0.01	0.0012	0.05	No	12	50	No	0.01	NP (normality)
Selenium (mg/L)	GWC-2	0.01	0.0035	0.05	No	12	91.67	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-20	0.01	0.0014	0.05	No	12	66.67	No	0.01	NP (normality)
Selenium (mg/L)	GWC-21	0.02242	0.01275	0.05	No	12	0	No	0.01	Param.
Selenium (mg/L)	GWC-22	0.01	0.0014	0.05	No	12	75	No	0.01	NP (normality)
Selenium (mg/L)	GWC-9	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GWB-4R	0.01	0.0029	0.05	No	12	33.33	No	0.01	NP (Cohens/xfrm)
Selenium (mg/L)	GWB-5R	0.01	0.0033	0.05	No	12	75	No	0.01	NP (normality)
Selenium (mg/L)	GWB-6R	0.01	0.0016	0.05	No	10	60	No	0.011	NP (normality)
Thallium (mg/L)	GWC-1	0.001	0.000054	0.002	No	10	80	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-11	0.001	0.00007	0.002	No	10	60	No	0.011	NP (normality)
Thallium (mg/L)	GWC-12	0.001	0.00014	0.002	No	10	30	No	0.011	NP (normality)
Thallium (mg/L)	GWC-13	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-14	0.001	0.00007	0.002	No	10	80	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-15	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-16	0.001	0.00006	0.002	No	10	80	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-17	0.001	0.000076	0.002	No	10	50	No	0.011	NP (normality)
Thallium (mg/L)	GWC-2	0.001	0.001	0.002	No	11	90.91	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-20	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-21	0.001	0.001	0.002	No	10	90	No	0.011	NP (NDs)
Thallium (mg/L)	GWC-22	0.001	0.000086	0.002	No	10	70	No	0.011	NP (normality)
Thallium (mg/L)	GWC-9	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GWB-4R	0.001	0.00007	0.002	No	10	80	No	0.011	NP (NDs)
Thallium (mg/L)	GWB-5R	0.001	0.00031	0.002	No	10	80	No	0.011	NP (NDs)
Thallium (mg/L)	GWB-6R	0.001	0.001	0.002	No	9	100	No	0.002	NP (NDs)



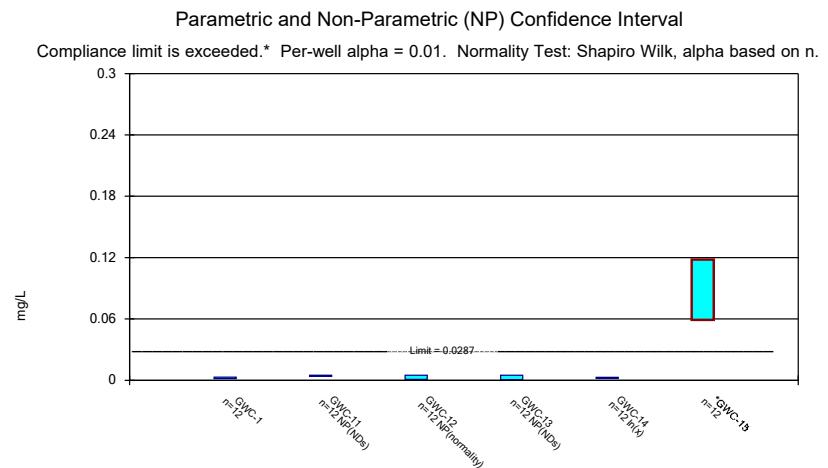
Constituent: Antimony Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Antimony Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



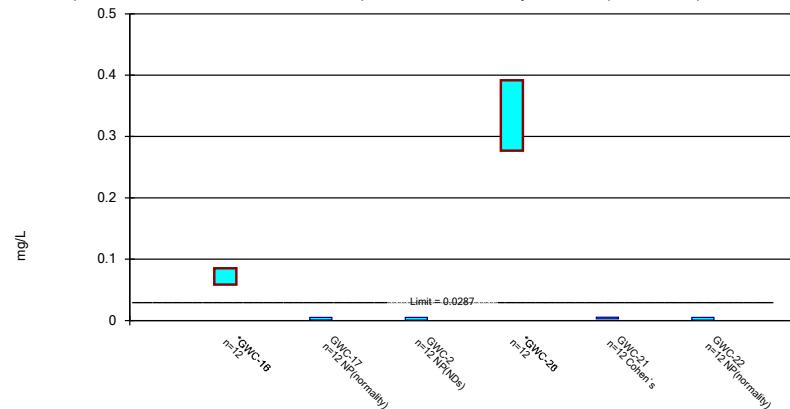
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Arsenic Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

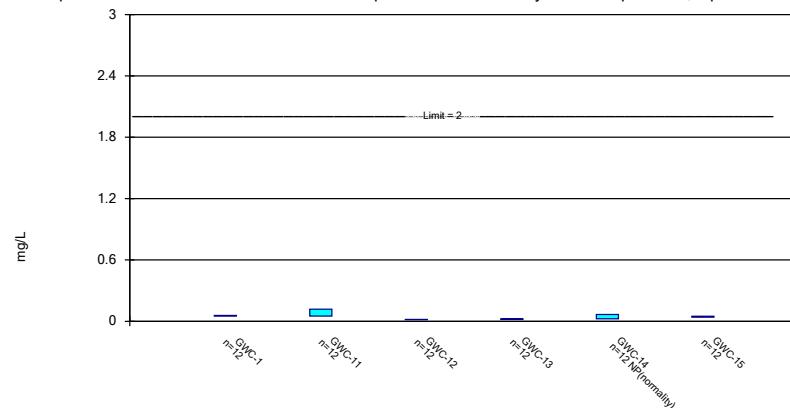
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

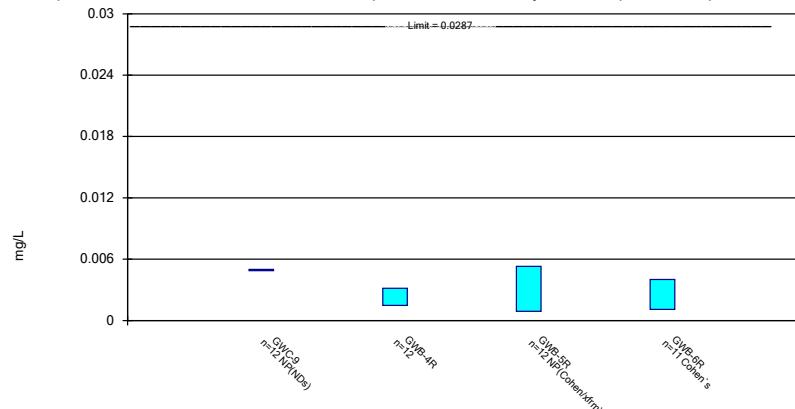
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Constituent: Barium Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

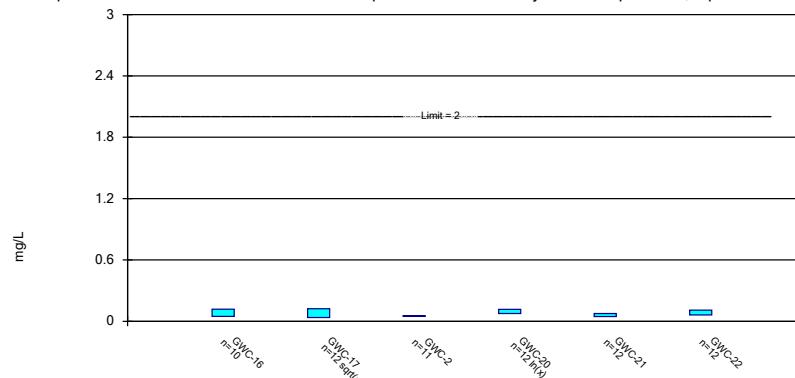
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Constituent: Arsenic Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric Confidence Interval**

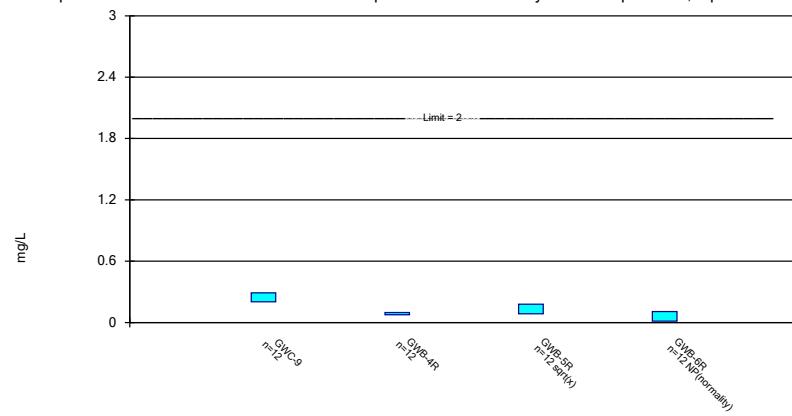
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

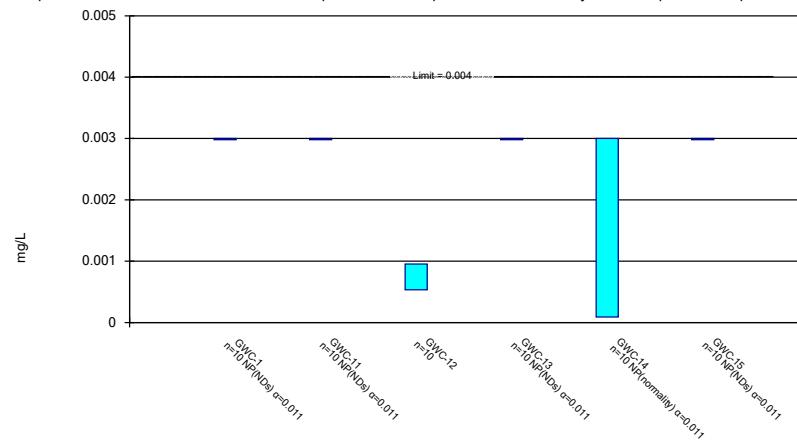
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Constituent: Barium Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

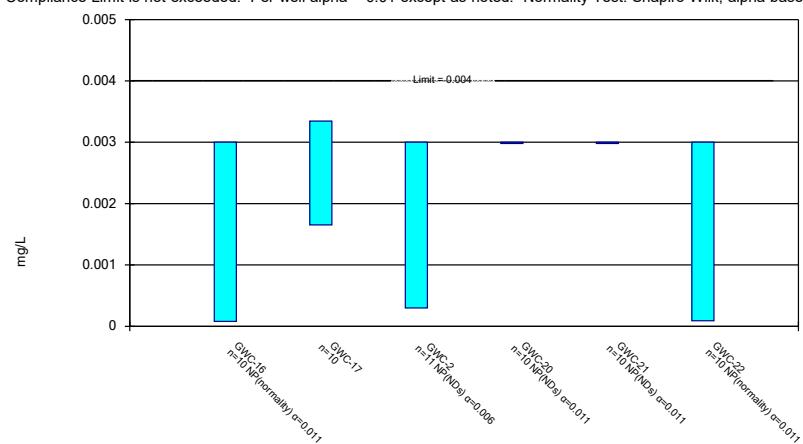
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Constituent: Beryllium Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

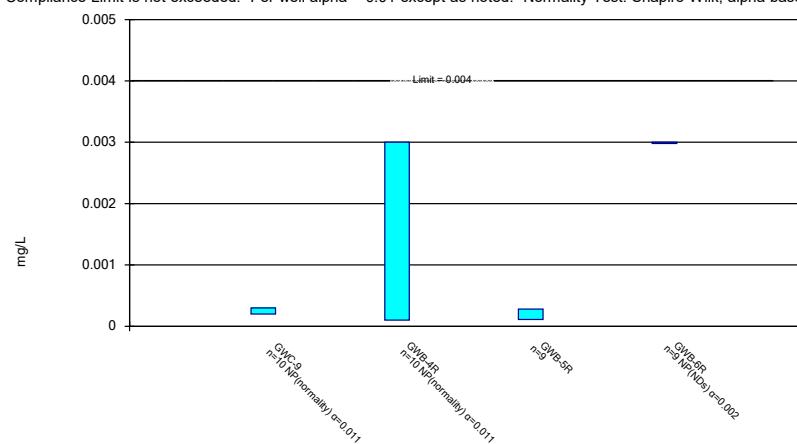
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Constituent: Beryllium Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

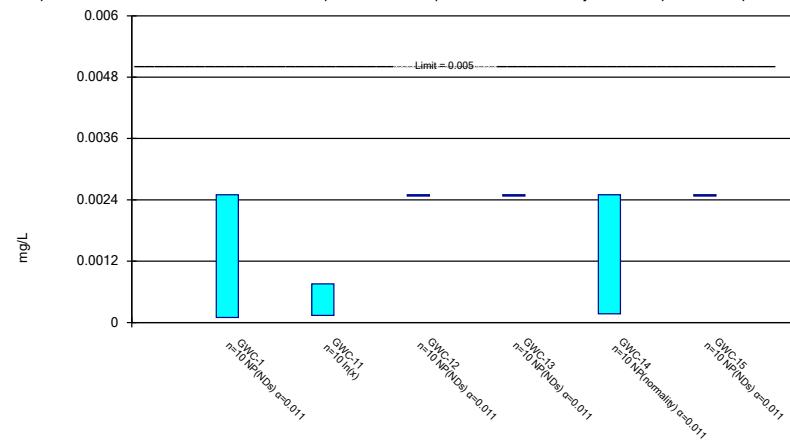
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

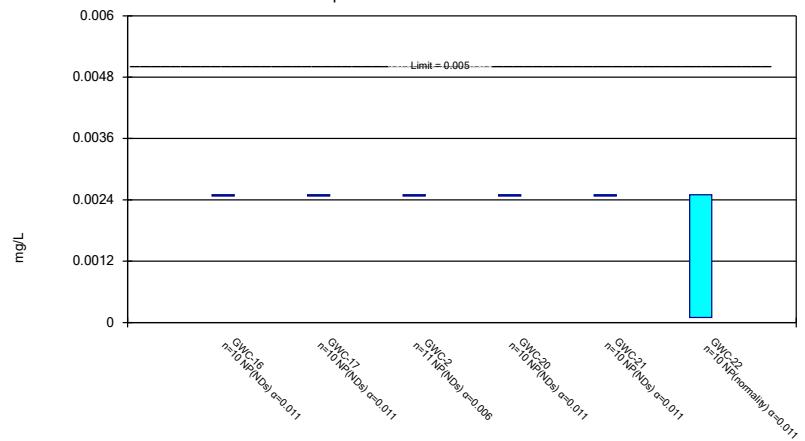
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Constituent: Cadmium Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

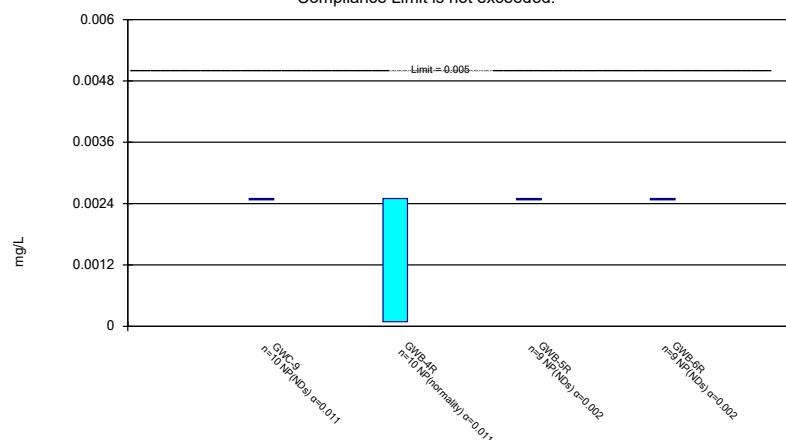
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Constituent: Cadmium Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

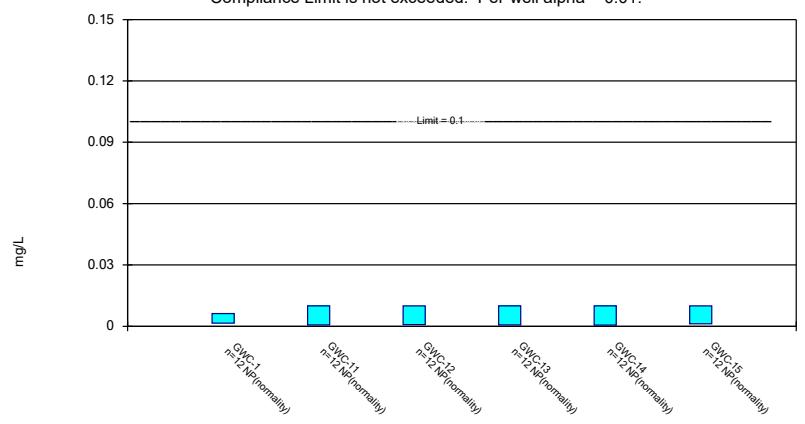
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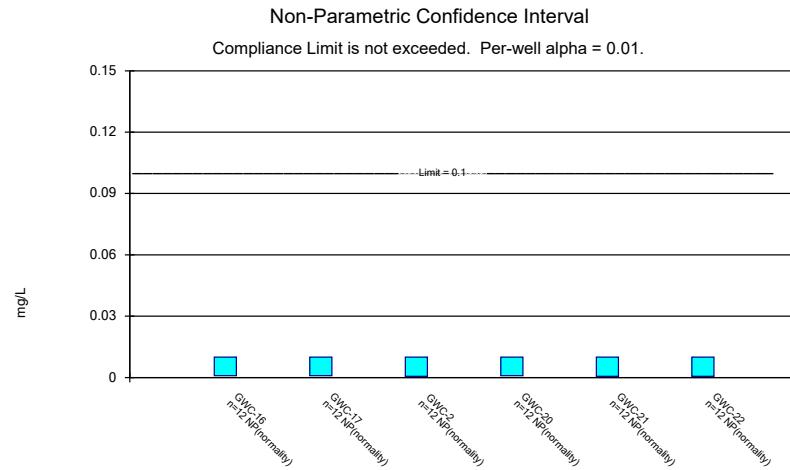
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Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

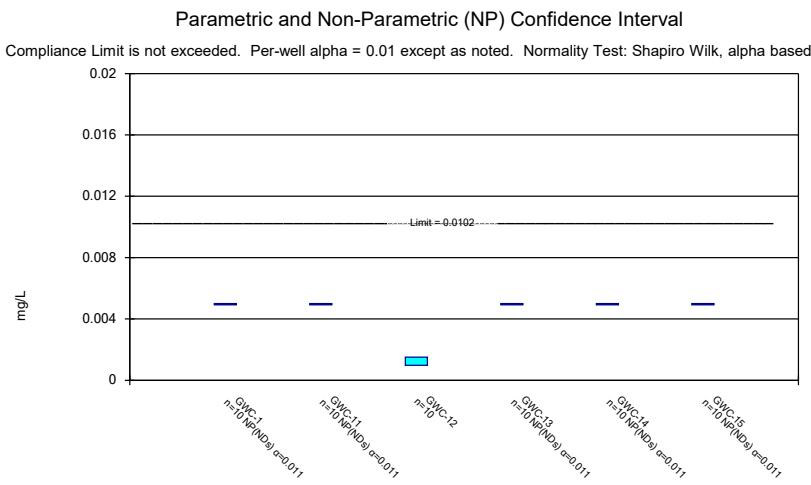
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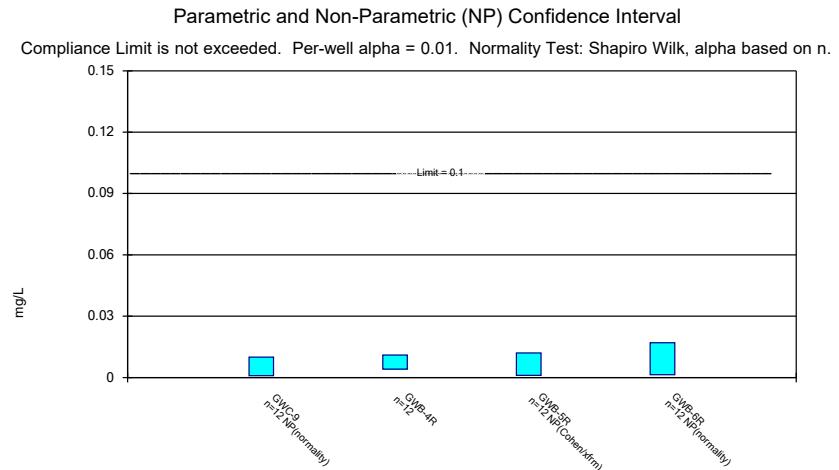
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



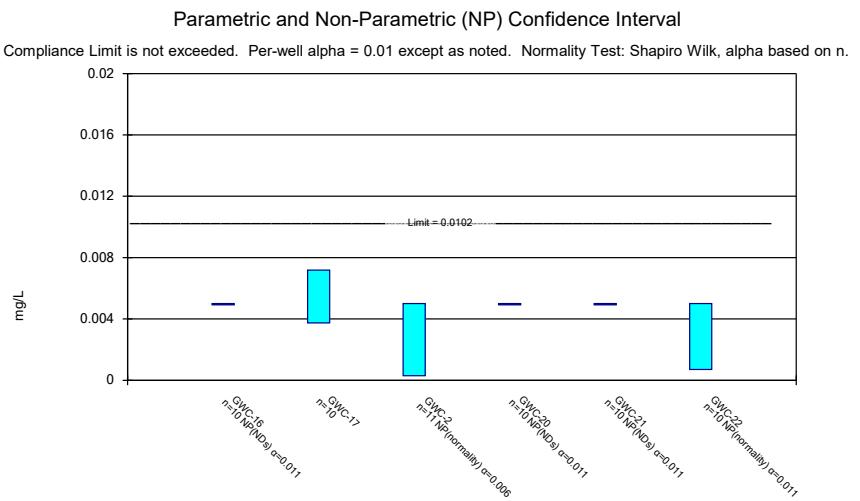
Constituent: Chromium Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



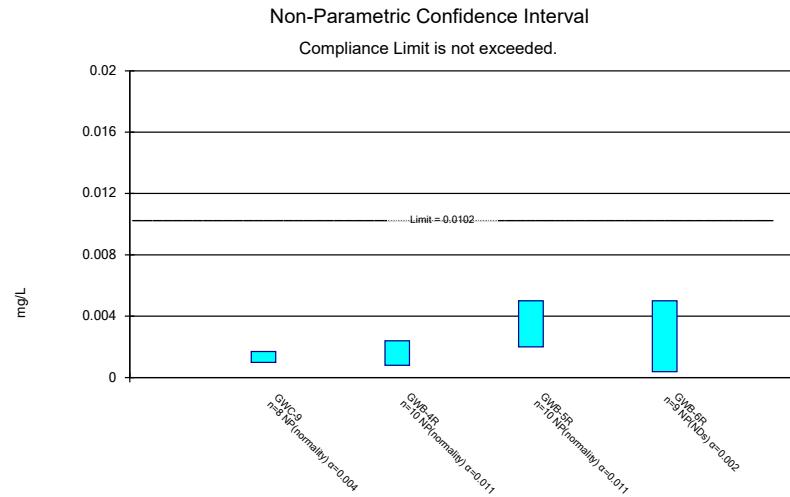
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



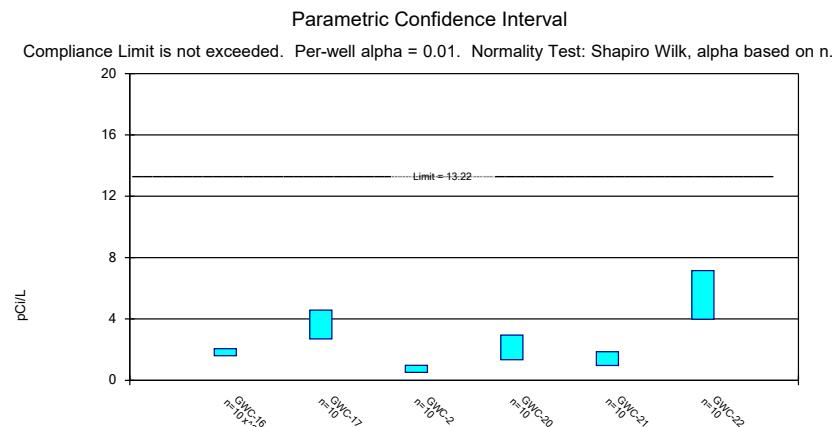
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



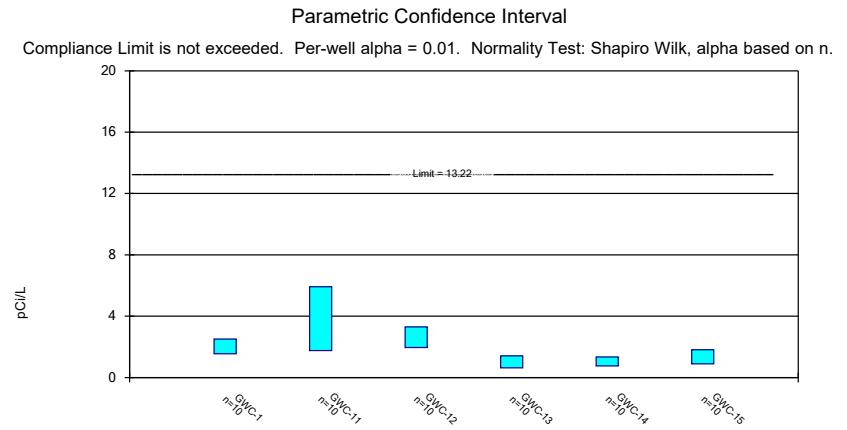
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



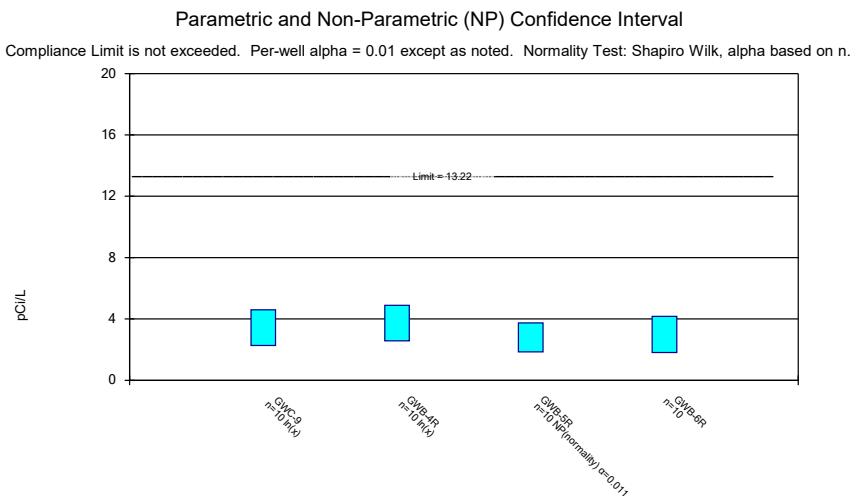
Constituent: Cobalt Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Combined Radium 226 + 228 Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



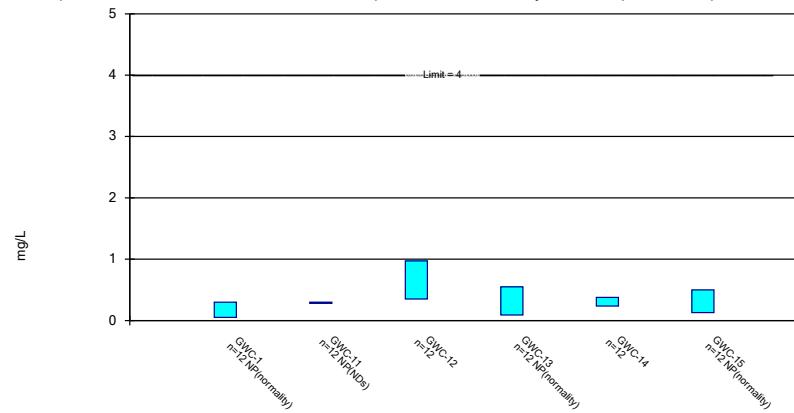
Constituent: Combined Radium 226 + 228 Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Combined Radium 226 + 228 Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

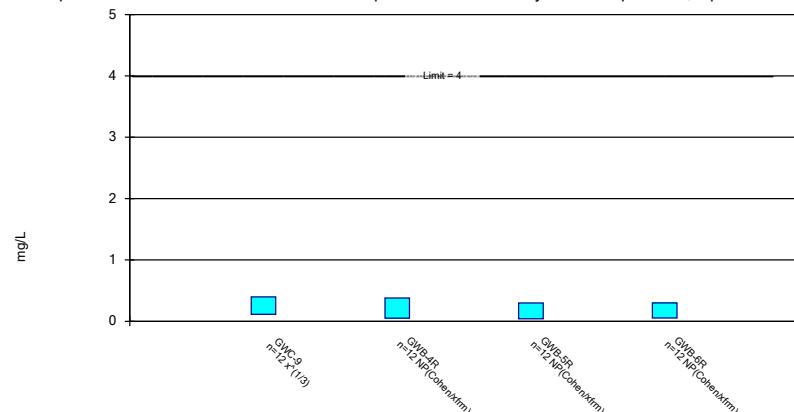
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Constituent: Fluoride Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

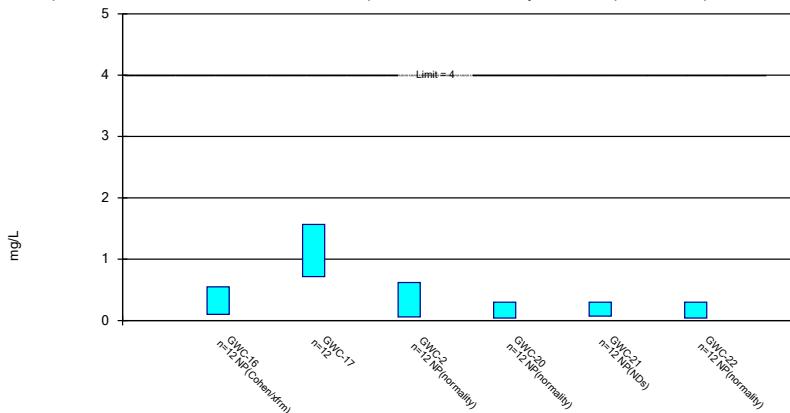
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Constituent: Fluoride Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

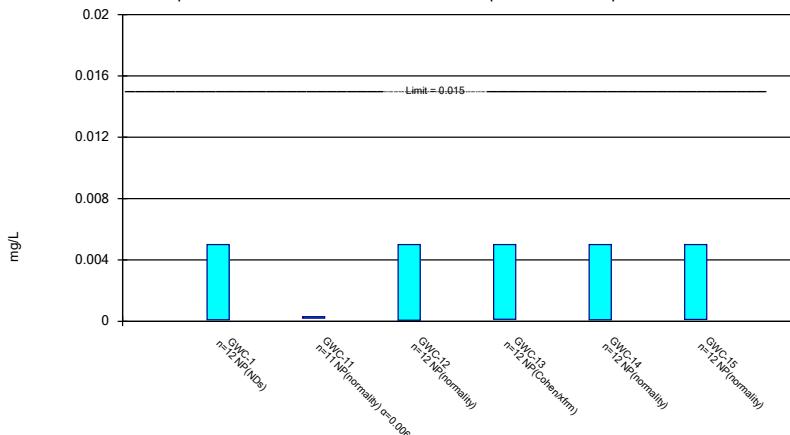
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 3/19/2020 2:06 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Non-Parametric Confidence Interval**

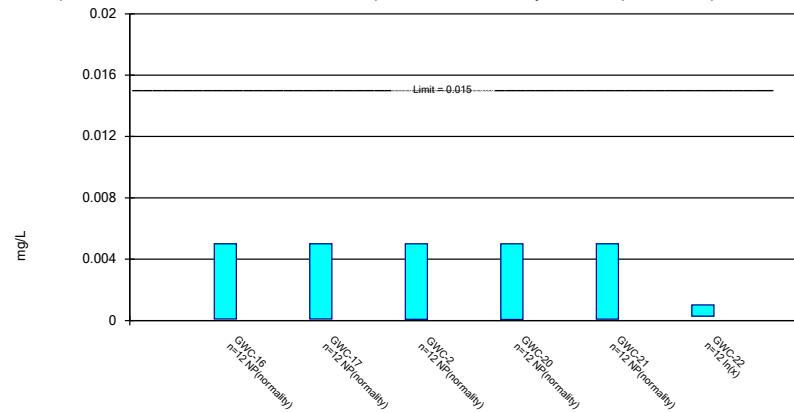
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

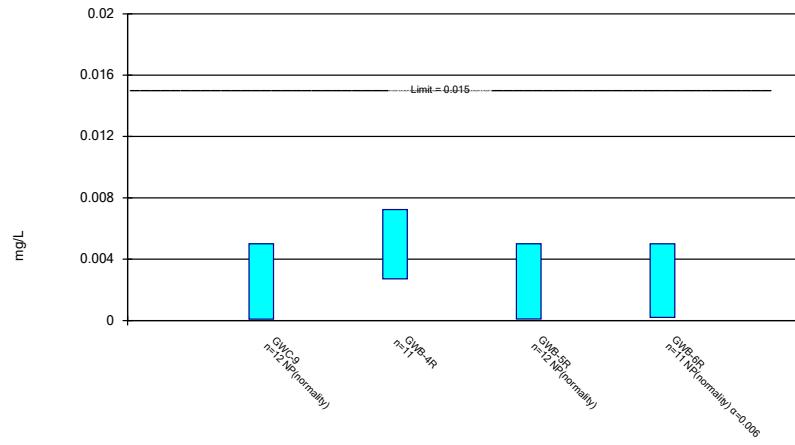
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

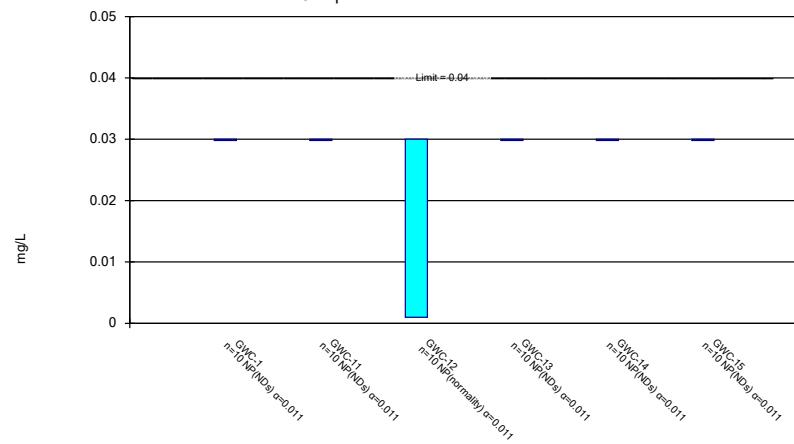
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Non-Parametric Confidence Interval**

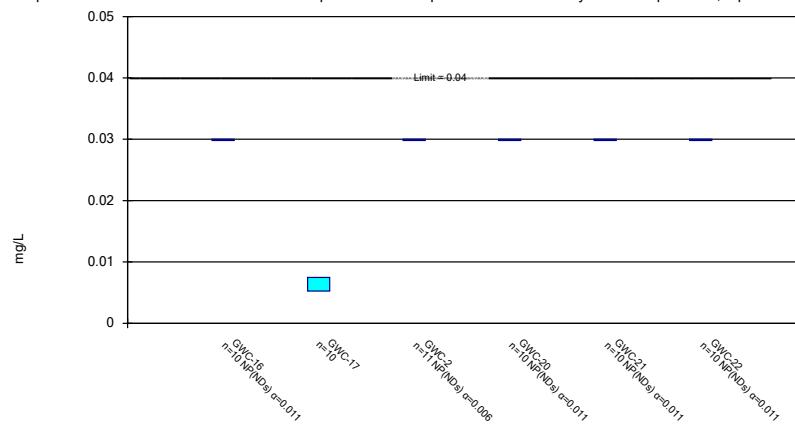
Compliance Limit is not exceeded.



Constituent: Lithium Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Parametric and Non-Parametric (NP) Confidence Interval**

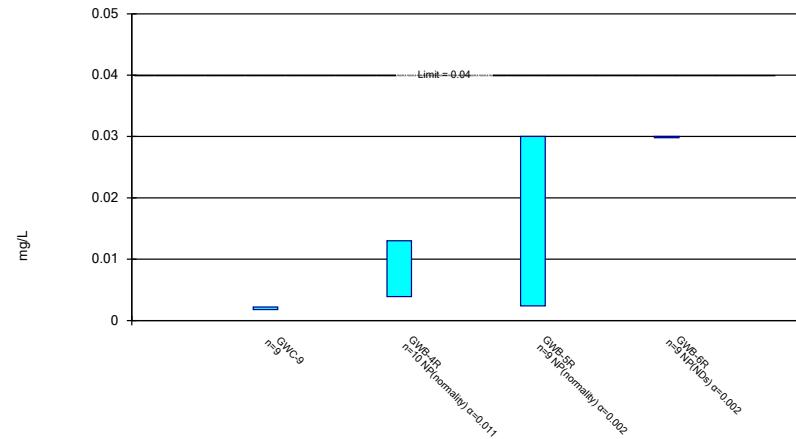
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

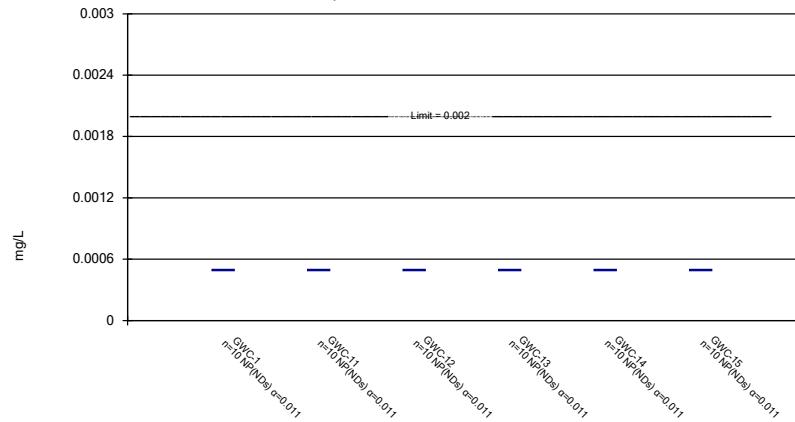
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

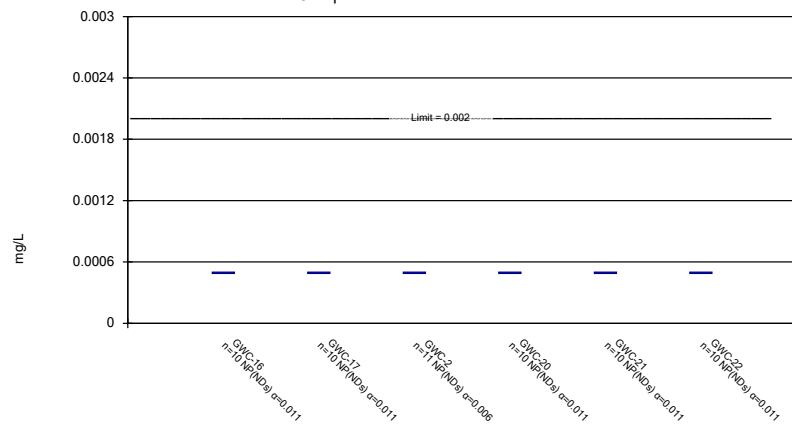
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

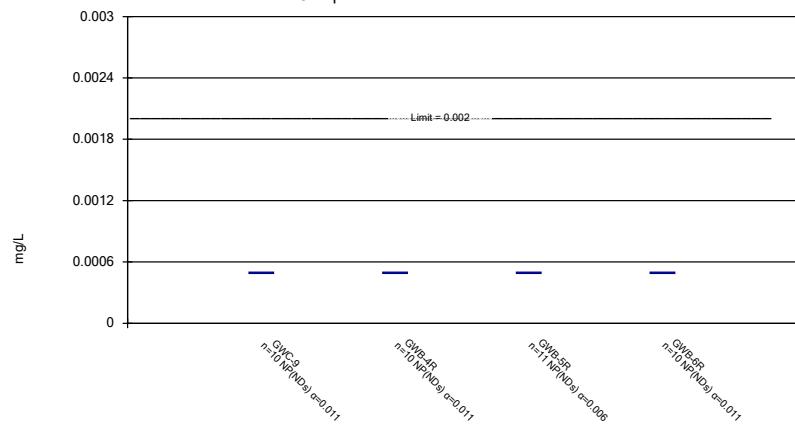
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

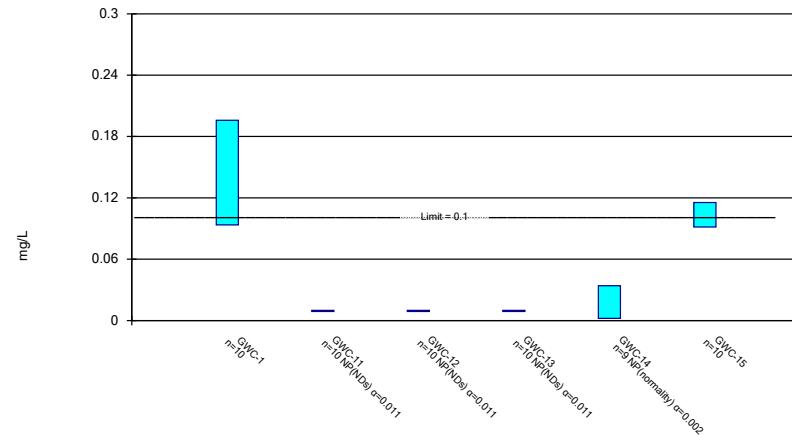
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

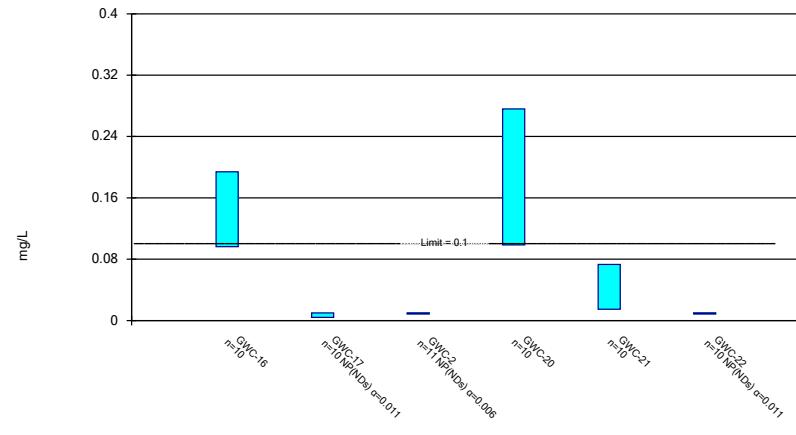
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

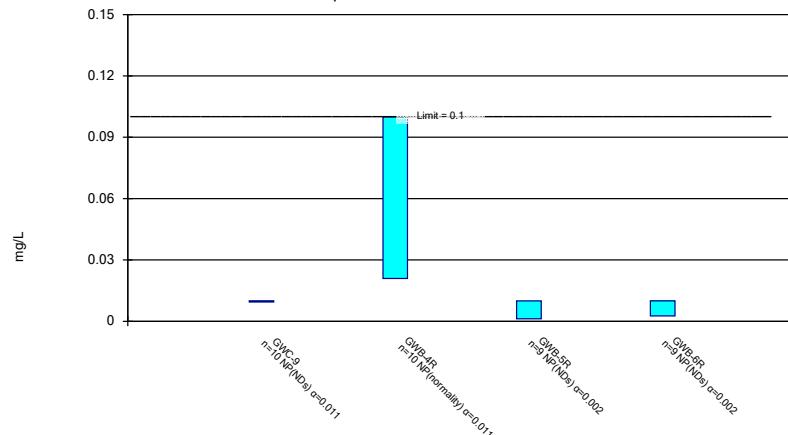
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

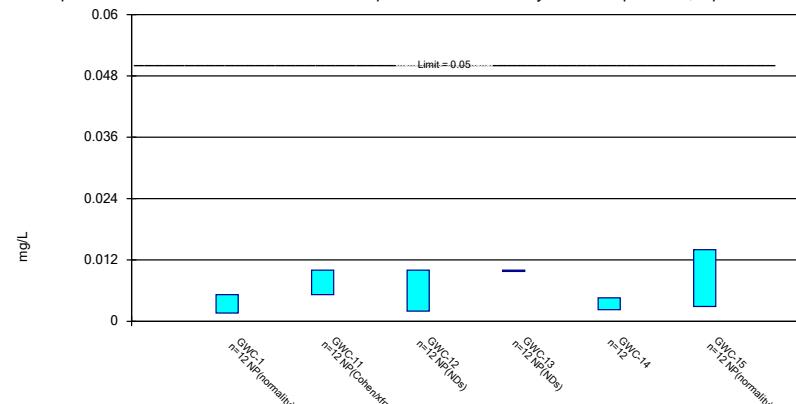
Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

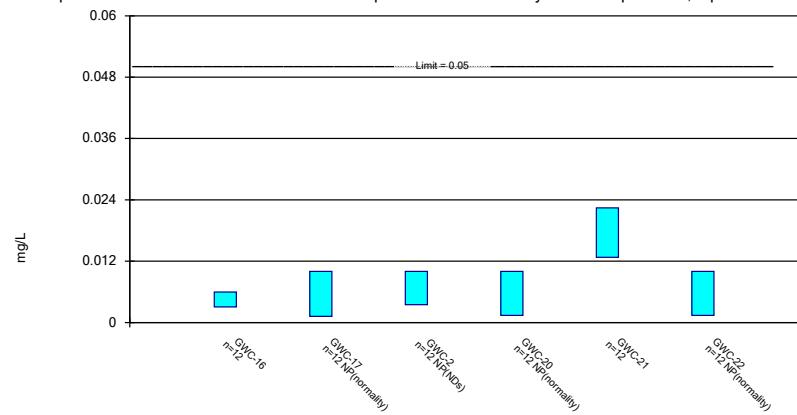
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Parametric and Non-Parametric (NP) Confidence Interval

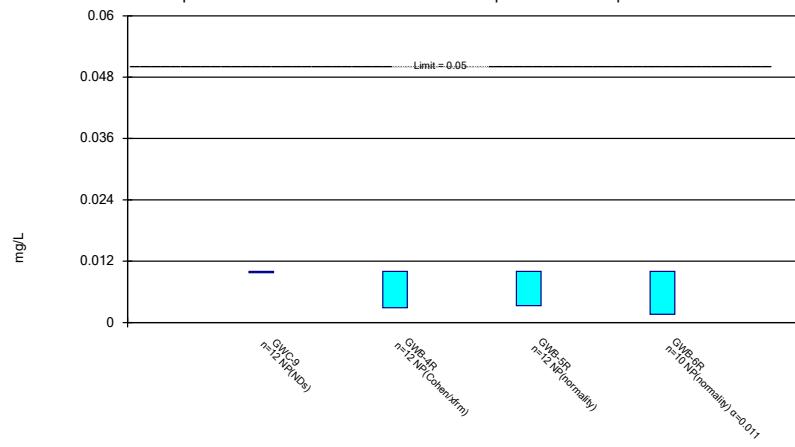
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

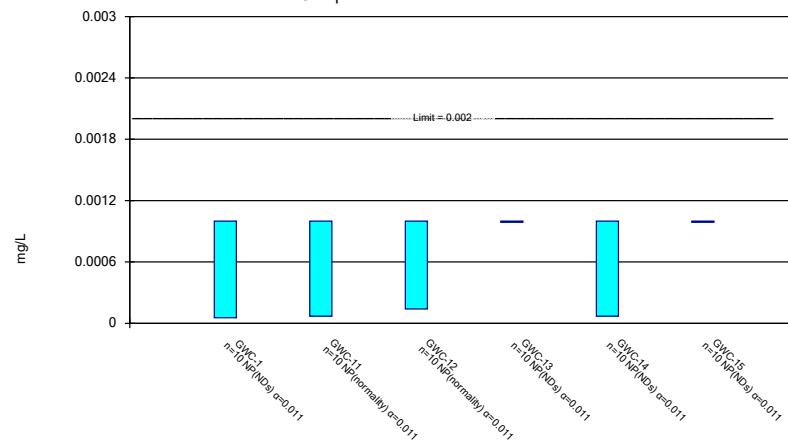
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Selenium Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

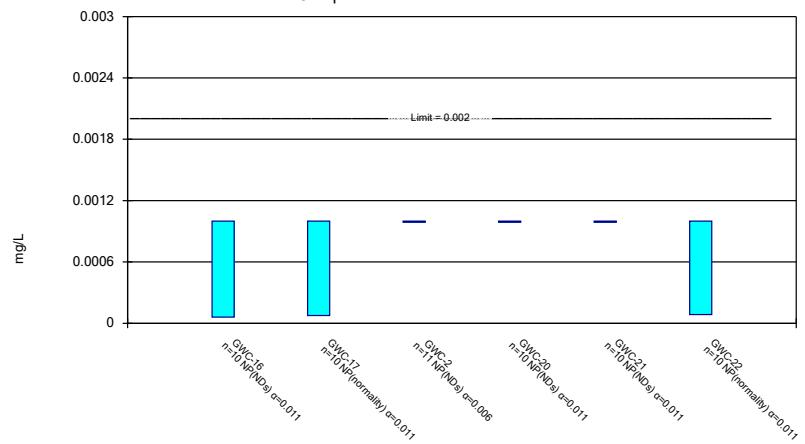
Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

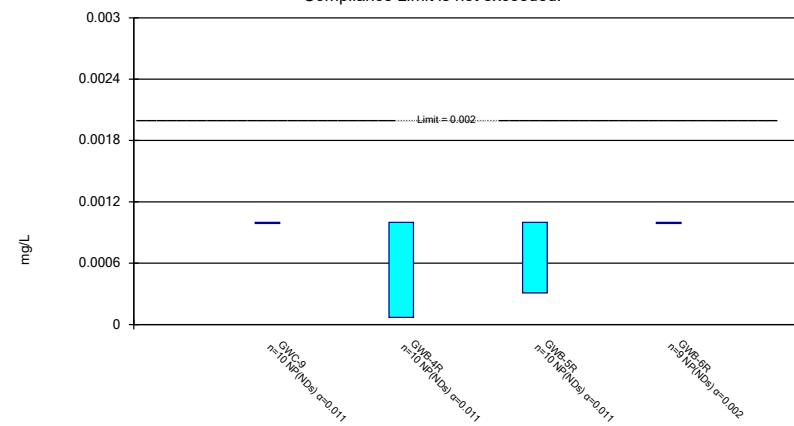
Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 3/19/2020 2:07 PM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 3/19/2020 2:07 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.003					
8/31/2016		<0.003	<0.003	<0.003		
9/1/2016					<0.003	<0.003
10/25/2016	<0.003				<0.003	<0.003
10/26/2016		<0.003	<0.003	<0.003		
1/4/2017	<0.003	<0.003	<0.003			
1/5/2017				<0.003	<0.003	<0.003
4/3/2017						<0.003
4/4/2017	<0.003				<0.003	
4/5/2017			<0.003			
4/6/2017		0.0006 (J)		<0.003		
7/10/2017			<0.003			
7/11/2017		0.0009 (J)			<0.003	<0.003
7/12/2017	<0.003			<0.003		
10/2/2017					<0.003	<0.003
10/3/2017	<0.003	<0.003				
10/4/2017			<0.003	<0.003		
1/9/2018					<0.003	<0.003
1/10/2018	<0.003			<0.003		
1/11/2018		0.0007 (J)	<0.003			
7/9/2018					<0.003	
7/10/2018	<0.003					<0.003
7/11/2018		<0.003	<0.003	<0.003		
1/16/2019	<0.003			<0.003	<0.003	
1/17/2019		<0.003	<0.003			<0.003
3/26/2019	<0.003			<0.003	<0.003	<0.003
3/27/2019		<0.003	<0.003			
8/27/2019	<0.003	0.00033 (J)	<0.003	<0.003	<0.003	<0.003
10/8/2019		0.00046 (J)		<0.003	<0.003	<0.003
10/9/2019	<0.003		<0.003			
Mean	0.003	0.001999	0.003	0.003	0.003	0.003
Std. Dev.	0	0.001244	0	0	0	0
Upper Lim.	0.003	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.003	0.00046	0.003	0.003	0.003	0.003

## Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.003	<0.003
8/31/2016	<0.003			
9/1/2016		<0.003		
10/26/2016		<0.003	<0.003	<0.003
10/27/2016	0.0016 (J)			
1/3/2017			<0.003	
1/5/2017				<0.003
1/6/2017	<0.003	<0.003		
4/4/2017		<0.003		
4/6/2017	<0.003		<0.003	<0.003
7/12/2017	<0.003	<0.003	<0.003	<0.003
10/3/2017			<0.003	<0.003
10/4/2017	<0.003	<0.003		
1/9/2018				<0.003
1/10/2018			<0.003	
1/11/2018	<0.003	<0.003		
7/10/2018			<0.003	<0.003
7/11/2018	<0.003	<0.003		
1/16/2019		<0.003	<0.003	
1/18/2019	<0.003			
3/25/2019		<0.003		
3/26/2019			<0.003	
3/27/2019	<0.003			
8/27/2019		<0.003		<0.003
8/28/2019	<0.003		0.00054 (J)	
10/9/2019	<0.003	<0.003		
Mean	0.002883	0.003	0.002776	0.003
Std. Dev.	0.0004041	0	0.0007417	0
Upper Lim.	0.003	0.003	0.003	0.003
Lower Lim.	0.0016	0.003	0.003	0.003

## Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	0.0023 (J)					
8/31/2016		<0.005	<0.005	<0.005		
9/1/2016					0.0024 (J)	0.0533
10/25/2016	0.0035 (J)				<0.005	0.0551
10/26/2016		<0.005	<0.005	<0.005		
1/4/2017	0.0018 (J)	<0.005	<0.005			
1/5/2017				<0.005	0.0024 (J)	0.0437
4/3/2017						0.0713
4/4/2017	0.0015 (J)				0.003 (J)	
4/5/2017			0.0006 (J)			
4/6/2017		<0.005		<0.005		
7/10/2017			0.0008 (J)			
7/11/2017		<0.005			0.0019 (J)	0.0745
7/12/2017	0.0015 (J)			<0.005		
10/2/2017					0.0026 (J)	0.0723
10/3/2017	0.0013 (J)	<0.005				
10/4/2017			0.0009 (J)	<0.005		
1/9/2018					0.0021 (J)	0.0731
1/10/2018	0.0023 (J)			0.0006 (J)		
1/11/2018		<0.005	<0.005			
7/9/2018					0.0019 (J)	
7/10/2018	0.0031 (J)					0.09
7/11/2018		<0.005	<0.005	<0.005		
1/16/2019	0.0023 (J)			<0.005	0.0016 (J)	
1/17/2019		<0.005	<0.005			0.13
3/26/2019	0.0032 (J)			0.00058 (J)	0.0023 (J)	0.1
3/27/2019		<0.005	<0.005			
8/27/2019	0.0022 (J)	<0.005	<0.005	<0.005	0.0017 (J)	0.17
10/8/2019		<0.005		<0.005	0.0017 (J)	0.13
10/9/2019	0.0042 (J)		<0.005			
Mean	0.002433	0.005	0.003942	0.004265	0.002383	0.08861
Std. Dev.	0.0008958	0	0.001916	0.001717	0.0009233	0.03763
Upper Lim.	0.003136	0.005	0.005	0.005	0.002896	0.1181
Lower Lim.	0.00173	0.005	0.0008	0.0006	0.001769	0.05908

## Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.005			0.0017 (J)
9/1/2016	0.0551	<0.005		0.215	0.0039 (J)	
10/25/2016	0.0466			0.307	<0.005	
10/26/2016		<0.005	<0.005			<0.005
1/4/2017	0.0444			0.311	<0.005	<0.005
1/5/2017		<0.005	<0.005			
4/4/2017			<0.005	0.317	0.0031 (J)	
4/5/2017	0.0591	0.0011 (J)				0.0006 (J)
4/6/2017						0.0006 (J)
7/11/2017				0.299		0.0012 (J)
7/12/2017	0.0776					
7/13/2017		0.0016 (J)	<0.005		<0.005	
10/2/2017				0.216		
10/3/2017	0.0813		<0.005		<0.005	
10/4/2017		0.0019 (J)				0.0025 (J)
1/9/2018					0.0033 (J)	
1/10/2018	0.085		0.0006 (J)	0.347		
1/11/2018		0.0015 (J)				0.0006 (J)
7/9/2018				0.37		
7/10/2018	0.067		<0.005		0.0027 (J)	
7/11/2018		0.00082 (J)				0.0011 (J)
1/16/2019		<0.005				
1/17/2019	0.079				0.0022 (J)	
1/18/2019						<0.005
1/21/2019			<0.005	0.44		
3/25/2019				0.41		
3/26/2019	0.089	0.0015 (J)			0.0045 (J)	
3/27/2019						<0.005
7/30/2019		0.00039 (J)				
8/27/2019		<0.005				0.00044 (J)
8/28/2019	0.091	0.0011 (J)		0.43	0.002 (J)	
10/8/2019	0.088				0.0028 (J)	
10/9/2019		0.0011 (J)	<0.005	0.35		<0.005
Mean	0.07193	0.002552	0.004249	0.3343	0.003708	0.002762
Std. Dev.	0.01686	0.00183	0.001754	0.07312	0.001164	0.002049
Upper Lim.	0.08515	0.005	0.005	0.3917	0.005305	0.005
Lower Lim.	0.0587	0.00082	0.0006	0.277	0.002777	0.0006

## Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.005	<0.005
8/31/2016	<0.005			
9/1/2016		0.0033 (J)		
10/26/2016		0.0016 (J)	<0.005	<0.005
10/27/2016	<0.005			
1/3/2017			<0.005	
1/5/2017				0.0021 (J)
1/6/2017	<0.005	<0.005		
4/4/2017		0.0021 (J)		
4/6/2017	<0.005		0.0006 (J)	0.0011 (J)
7/12/2017	<0.005	0.0015 (J)	0.0009 (J)	0.0014 (J)
10/3/2017			0.001 (J)	0.0014 (J)
10/4/2017	<0.005	0.0018 (J)		
1/9/2018				0.0017 (J)
1/10/2018			0.0012 (J)	
1/11/2018	<0.005	0.0015 (J)		
7/10/2018			0.0016 (J)	0.00063 (J)
7/11/2018	<0.005	0.00095 (J)		
1/16/2019		0.0024 (J)	0.0011 (J)	
1/18/2019	<0.005			
3/25/2019		0.0029 (J)		
3/26/2019			0.0014 (J)	0.0029 (J)
3/27/2019	<0.005			
8/27/2019		0.0023 (J)		0.0035 (J)
8/28/2019	<0.005		0.0023 (J)	
10/9/2019	<0.005	0.0024 (J)	0.0053 (J)	0.0018 (J)
Mean	0.005	0.002312	0.002533	0.002412
Std. Dev.	0	0.001068	0.001924	0.001508
Upper Lim.	0.005	0.003151	0.0053	0.004022
Lower Lim.	0.005	0.001474	0.0009	0.001096

## Confidence Interval

Constituent: Barium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	0.0545					
8/31/2016		0.0565	0.019	0.0273		
9/1/2016					0.0346	0.0403
10/25/2016	0.0504				0.0248	0.0329
10/26/2016		0.0591	0.0197	0.0238		
1/4/2017	0.0534	0.0598	0.0174			
1/5/2017				0.0218	0.0245	0.0392
4/3/2017						0.0439
4/4/2017	0.0549				0.0342	
4/5/2017			0.0174			
4/6/2017		0.0813		0.0204		
7/10/2017			0.0172			
7/11/2017		0.0302			0.0276	0.051
7/12/2017	0.0614			0.0161		
10/2/2017					0.0274	0.047
10/3/2017	0.0436	0.103				
10/4/2017			0.0162	0.0185		
1/9/2018					0.0222	0.0431
1/10/2018	0.053			0.0166		
1/11/2018		0.166	0.018			
7/9/2018					0.026	
7/10/2018	0.059					0.047
7/11/2018		0.12	0.014	0.019		
1/16/2019	0.054			0.019	0.028	
1/17/2019		0.039	0.017			0.042
3/26/2019	0.055			0.026	0.034	0.047
3/27/2019		0.053	0.017			
8/27/2019	0.054	0.12	0.017	0.024	0.067	0.049
10/8/2019		0.13		0.024	0.085	0.057
10/9/2019	0.058		0.019			
Mean	0.05427	0.08483	0.01741	0.02138	0.03628	0.04495
Std. Dev.	0.004467	0.04225	0.001486	0.003661	0.01937	0.006208
Upper Lim.	0.05777	0.118	0.01857	0.02425	0.067	0.04982
Lower Lim.	0.05076	0.05167	0.01624	0.0185	0.0245	0.04008

## Confidence Interval

Constituent: Barium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			0.0429			0.0693
9/1/2016	0.0445	0.203		0.0976	0.077	
10/25/2016	0.0464			0.0702	0.0217	
10/26/2016		0.177				0.0966
1/4/2017	0.0379			0.0999	0.0617	0.0975
1/5/2017		0.142	0.0526			
4/4/2017			0.0503	0.136	0.0761	
4/5/2017	0.0534	0.106				0.064
4/6/2017						
7/11/2017				0.145		0.0778
7/12/2017	0.0944					
7/13/2017		0.0686	0.0529		0.0428	
10/2/2017				0.148		
10/3/2017			0.057		0.0376	
10/4/2017		0.0589				0.156
1/9/2018					0.0704	
1/10/2018	0.0603		0.0527	0.0788		
1/11/2018		0.0412				0.0702
7/9/2018				0.087		
7/10/2018			0.054		0.061	
7/11/2018		0.049				0.12
1/16/2019		0.063				
1/17/2019	0.13				0.061	
1/18/2019						0.052
1/21/2019			0.05	0.069		
3/25/2019				0.085		
3/26/2019	0.14	0.025			0.084	
3/27/2019						0.057
7/30/2019			0.052			
8/27/2019			0.053			0.097
8/28/2019	0.09	0.026		0.078	0.063	
10/8/2019	0.13				0.079	
10/9/2019		0.032	0.05	0.078		0.065
Mean	0.08269	0.08264	0.05158	0.09771	0.06128	0.0852
Std. Dev.	0.03957	0.06072	0.003513	0.02896	0.01871	0.03005
Upper Lim.	0.118	0.1222	0.05451	0.1169	0.07596	0.1088
Lower Lim.	0.04738	0.037	0.04865	0.07591	0.04659	0.06162

## Confidence Interval

Constituent: Barium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			0.135	0.106
8/31/2016	0.284			
9/1/2016		0.123		
10/26/2016		0.0863	0.103	0.107
10/27/2016	0.244			
1/3/2017			0.118	
1/5/2017				0.107
1/6/2017	0.305	0.0758		
4/4/2017		0.091		
4/6/2017	0.249		0.162	0.111
7/12/2017	0.256	0.0941	0.157	0.106
10/3/2017			0.127	0.105
10/4/2017	0.356	0.0994		
1/9/2018				0.0969
1/10/2018			0.158	
1/11/2018	0.226	0.088		
7/10/2018			0.31	0.087
7/11/2018	0.29	0.071		
1/16/2019		0.083	0.054	0.013 (J)
1/18/2019	0.21			
3/25/2019		0.077		
3/26/2019			0.057	0.012 (J)
3/27/2019	0.19			
8/27/2019		0.076		0.013
8/28/2019	0.17		0.1	
10/9/2019	0.18	0.076	0.13	0.014 (J)
Mean	0.2467	0.08672	0.1343	0.07316
Std. Dev.	0.05562	0.01432	0.0658	0.04485
Upper Lim.	0.2903	0.09795	0.1793	0.107
Lower Lim.	0.203	0.07548	0.0849	0.013

## Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.003					
8/31/2016		<0.003		0.0011 (J)	<0.003	
9/1/2016					0.0001 (J)	<0.003
10/25/2016	<0.003				<0.003	<0.003
10/26/2016		<0.003		0.0011 (J)	<0.003	
1/4/2017	<0.003	<0.003		0.0009 (J)		
1/5/2017					<0.003	<0.003
4/3/2017						<0.003
4/4/2017	<0.003				9E-05 (J)	
4/5/2017				0.0008 (J)		
4/6/2017		<0.003			<0.003	
7/10/2017				0.0008 (J)		
7/11/2017		<0.003			<0.003	<0.003
7/12/2017	<0.003			<0.003		
10/2/2017					<0.003	<0.003
10/3/2017	<0.003	<0.003				
10/4/2017				0.0006 (J)	<0.003	
1/9/2018					<0.003	<0.003
1/10/2018	<0.003				<0.003	
1/11/2018		<0.003		0.0006 (J)		
7/9/2018					6.2E-05 (J)	
7/10/2018	<0.003					<0.003
7/11/2018		<0.003		0.00061 (J)	5.8E-05 (J)	
8/27/2019	<0.003	<0.003		0.00047 (J)	<0.003	<0.003
10/8/2019		<0.003			<0.003	<0.003
10/9/2019	<0.003			0.00046 (J)		
Mean	0.003	0.003		0.000744	0.002706	0.002125
Std. Dev.	0	0		0.0002355	0.0009303	0.001409
Upper Lim.	0.003	0.003		0.0009541	0.003	0.003
Lower Lim.	0.003	0.003		0.0005339	0.003	9E-05

## Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.003			0.0002 (J)
9/1/2016	0.0001 (J)	0.0014 (J)		<0.003	<0.003	
10/25/2016	<0.003			<0.003	<0.003	
10/26/2016		0.0016 (J)	0.0003 (J)			0.0002 (J)
1/4/2017	9E-05 (J)			<0.003	<0.003	0.0001 (J)
1/5/2017		0.0019 (J)	<0.003			
4/4/2017			9E-05 (J)	<0.003	<0.003	
4/5/2017	9E-05 (J)	0.0024 (J)				<0.003
4/6/2017						<0.003
7/11/2017				<0.003		<0.003
7/12/2017	<0.003					
7/13/2017		0.0034	<0.003		<0.003	
10/2/2017				<0.003		
10/3/2017	<0.003		<0.003		<0.003	
10/4/2017		0.0037				0.0001 (J)
1/9/2018					<0.003	
1/10/2018	0.0001 (J)		<0.003	<0.003		
1/11/2018		0.0033				<0.003
7/9/2018				<0.003		
7/10/2018	6E-05 (J)		<0.003		<0.003	
7/11/2018		0.0038				7E-05 (J)
7/30/2019			<0.003			
8/27/2019			<0.003			9E-05 (J)
8/28/2019	8E-05 (J)	0.0017 (J)		<0.003	<0.003	
10/8/2019	9.8E-05 (J)				<0.003	
10/9/2019		0.0018 (J)	<0.003	<0.003		<0.003
Mean	0.0009618	0.0025	0.00249	0.003	0.003	0.001276
Std. Dev.	0.001407	0.0009487	0.001136	0	0	0.001484
Upper Lim.	0.003	0.003346	0.003	0.003	0.003	0.003
Lower Lim.	8E-05	0.001654	0.0003	0.003	0.003	9E-05

## Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			0.0002 (J)	<0.003
8/31/2016	0.0003 (J)		0.0004 (J)	
9/1/2016			0.0001 (J)	
10/26/2016		0.0003 (J)	0.0001 (J)	<0.003
10/27/2016	0.0003 (J)			
1/3/2017			0.0001 (J)	
1/5/2017				<0.003
1/6/2017	0.0002 (J)	0.0001 (J)		
4/4/2017		0.0001 (J)		
4/6/2017	0.0003 (J)		0.0003 (J)	<0.003
7/12/2017	0.0003 (J)	<0.003	0.0002 (J)	<0.003
10/3/2017			0.0002 (J)	<0.003
10/4/2017	0.0002 (J)	0.0001 (J)		
1/9/2018				<0.003
1/10/2018			0.0003 (J)	
1/11/2018	0.0003 (J)	0.0001 (J)		
7/10/2018			0.00028 (J)	<0.003
7/11/2018	0.0003 (J)	<0.003		
8/27/2019		<0.003		<0.003
8/28/2019	0.00022 (J)		7.6E-05 (J)	
10/9/2019	0.00023 (J)	<0.003		
Mean	0.000265	0.00129	0.0001951	0.003
Std. Dev.	4.601E-05	0.001475	8.772E-05	0
Upper Lim.	0.0003	0.003	0.0002798	0.003
Lower Lim.	0.0002	0.0001	0.0001104	0.003

## Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.0025					
8/31/2016		0.0002 (J)	<0.0025	<0.0025		
9/1/2016					0.0001 (J)	<0.0025
10/25/2016	<0.0025				0.0002 (J)	<0.0025
10/26/2016		0.0001 (J)	<0.0025	<0.0025		
1/4/2017	0.0001 (J)	0.0001 (J)	<0.0025			
1/5/2017				<0.0025	0.0002 (J)	<0.0025
4/3/2017						<0.0025
4/4/2017	7E-05 (J)				0.0002 (J)	
4/5/2017			<0.0025			
4/6/2017		0.0002 (J)		<0.0025		
7/10/2017			<0.0025			
7/11/2017		<0.0025			0.0002 (J)	<0.0025
7/12/2017	<0.0025			<0.0025		
10/2/2017					<0.0025	<0.0025
10/3/2017	<0.0025	0.0003 (J)				
10/4/2017			<0.0025	<0.0025		
1/9/2018					<0.0025	<0.0025
1/10/2018	<0.0025			<0.0025		
1/11/2018		0.0006 (J)	<0.0025			
7/9/2018					0.00017 (J)	
7/10/2018	<0.0025					<0.0025
7/11/2018		0.0004 (J)	<0.0025	<0.0025		
8/27/2019	<0.0025	0.00044 (J)	<0.0025	<0.0025	<0.0025	<0.0025
10/8/2019		0.00043 (J)		<0.0025	<0.0025	<0.0025
10/9/2019	<0.0025		<0.0025			
Mean	0.002017	0.000527	0.0025	0.0025	0.001107	0.0025
Std. Dev.	0.001018	0.0007119	0	0	0.001199	0
Upper Lim.	0.0025	0.0007567	0.0025	0.0025	0.0025	0.0025
Lower Lim.	0.0001	0.0001406	0.0025	0.0025	0.00017	0.0025

## Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.0025	<0.0025
8/31/2016	<0.0025			
9/1/2016		0.0002 (J)		
10/26/2016		<0.0025	<0.0025	<0.0025
10/27/2016	<0.0025			
1/3/2017			<0.0025	
1/5/2017				<0.0025
1/6/2017	<0.0025	9E-05 (J)		
4/4/2017		9E-05 (J)		
4/6/2017	<0.0025		<0.0025	<0.0025
7/12/2017	<0.0025	<0.0025	<0.0025	<0.0025
10/3/2017			<0.0025	<0.0025
10/4/2017	<0.0025	<0.0025		
1/9/2018				<0.0025
1/10/2018			<0.0025	
1/11/2018	<0.0025	0.0002 (J)		
7/10/2018			<0.0025	<0.0025
7/11/2018	<0.0025	<0.0025		
8/27/2019		<0.0025		<0.0025
8/28/2019	<0.0025		<0.0025	
10/9/2019	<0.0025	<0.0025		
Mean	0.0025	0.001558	0.0025	0.0025
Std. Dev.	0	0.001217	0	0
Upper Lim.	0.0025	0.0025	0.0025	0.0025
Lower Lim.	0.0025	9E-05	0.0025	0.0025

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	0.0015 (J)					
8/31/2016		0.001 (J)	0.0012 (J)	0.0011 (J)		
9/1/2016					0.0015 (J)	0.0011 (J)
10/25/2016	0.0018 (J)				<0.01	<0.01
10/26/2016		<0.01	0.0012 (J)	<0.01		
1/4/2017	0.0021 (J)	<0.01	0.0012 (J)			
1/5/2017				<0.01	0.001 (J)	<0.01
4/3/2017						0.0015 (J)
4/4/2017	0.002 (J)				0.001 (J)	
4/5/2017			0.0013 (J)			
4/6/2017		0.0007 (J)		0.0011 (J)		
7/10/2017			0.0014 (J)			
7/11/2017		0.0006 (J)			0.0008 (J)	0.0013 (J)
7/12/2017	0.0021 (J)			0.0007 (J)		
10/2/2017					0.0009 (J)	0.0013 (J)
10/3/2017	0.0014 (J)	0.0007 (J)				
10/4/2017			0.0011 (J)	0.0008 (J)		
1/9/2018					0.0006 (J)	0.0012 (J)
1/10/2018	0.0017 (J)			0.0007 (J)		
1/11/2018		0.0098 (J)	0.001 (J)			
7/9/2018					<0.01	
7/10/2018	0.0021 (J)					<0.01
7/11/2018		<0.01	<0.01	0.0019 (J)		
1/16/2019	0.0021 (J)			<0.01	<0.01	
1/17/2019		<0.01	0.0028 (J)			<0.01
3/26/2019	0.0018 (J)			<0.01	<0.01	<0.01
3/27/2019		<0.01	<0.01			
8/27/2019	0.0062 (J)	0.00092 (J)	0.00085 (J)	<0.01	0.001 (J)	0.0016 (J)
10/8/2019		0.00091 (J)		<0.01	0.00053 (J)	0.0017 (J)
10/9/2019	0.0019 (J)		0.00081 (J)			
Mean	0.002225	0.005386	0.002738	0.005525	0.003944	0.004975
Std. Dev.	0.001274	0.004786	0.00343	0.004684	0.004479	0.004439
Upper Lim.	0.0062	0.01	0.01	0.01	0.01	0.01
Lower Lim.	0.0015	0.0007	0.00085	0.0007	0.0006	0.0012

## Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.01			<0.01
9/1/2016	0.0011 (J)	0.0011 (J)		<0.01	<0.01	
10/25/2016	<0.01			<0.01	<0.01	
10/26/2016		<0.01	0.001 (J)			<0.01
1/4/2017	<0.01			<0.01	<0.01	<0.01
1/5/2017		0.0012 (J)	<0.01			
4/4/2017			0.0008 (J)	0.0011 (J)	0.0008 (J)	
4/5/2017	0.001 (J)	0.0015 (J)				0.0006 (J)
4/6/2017						0.0006 (J)
7/11/2017				0.0009 (J)		0.0005 (J)
7/12/2017	0.0011 (J)					
7/13/2017		0.0012 (J)	0.0006 (J)		0.0006 (J)	
10/2/2017				0.0009 (J)		
10/3/2017	0.0009 (J)		<0.01		0.0005 (J)	
10/4/2017		0.0055 (J)				0.0006 (J)
1/9/2018					0.0007 (J)	
1/10/2018	0.0007 (J)		<0.01	0.0008 (J)		
1/11/2018		0.0009 (J)				<0.01
7/9/2018				<0.01		
7/10/2018	<0.01		<0.01		<0.01	
7/11/2018		<0.01				<0.01
1/16/2019		<0.01				
1/17/2019	0.01 (J)				0.01	
1/18/2019						<0.01
1/21/2019			<0.01	<0.01		
3/25/2019				<0.01		
3/26/2019	<0.01	<0.01			<0.01	
3/27/2019						<0.01
7/30/2019			0.00065 (J)			
8/27/2019			<0.01			0.00057 (J)
8/28/2019	0.0011 (J)	0.0013 (J)		0.00089 (J)	0.00087 (J)	
10/8/2019	0.00099 (J)				0.00065 (J)	
10/9/2019		0.00081 (J)	0.00049 (J)	0.0011 (J)		0.00072 (J)
Mean	0.004741	0.004459	0.006128	0.005474	0.005343	0.006082
Std. Dev.	0.004644	0.004276	0.004786	0.004728	0.004865	0.004842
Upper Lim.	0.01	0.01	0.01	0.01	0.01	0.01
Lower Lim.	0.0009	0.0009	0.0006	0.00089	0.0006	0.00057

## Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.01	0.0013 (J)
8/31/2016	0.0024 (J)			
9/1/2016		0.015		
10/26/2016		0.0106	<0.01	0.0014 (J)
10/27/2016	<0.01			
1/3/2017			0.001 (J)	
1/5/2017				0.002 (J)
1/6/2017	<0.01	0.0098 (J)		
4/4/2017		0.0101		
4/6/2017	0.0019 (J)		0.0013 (J)	0.0034 (J)
7/12/2017	0.0011 (J)	0.0096 (J)	0.0011 (J)	0.0024 (J)
10/3/2017			0.0012 (J)	0.0022 (J)
10/4/2017	0.0011 (J)	0.0097 (J)		
1/9/2018				0.0019 (J)
1/10/2018			0.0016 (J)	
1/11/2018	0.001 (J)	0.0109		
7/10/2018			0.0055 (J)	0.0023 (J)
7/11/2018	<0.01	0.0055 (J)		
1/16/2019		0.0024 (J)	<0.01	0.018 (J)
1/18/2019	<0.01			
3/25/2019		0.002 (J)		
3/26/2019			0.072	0.017 (J)
3/27/2019	<0.01			
8/27/2019		0.0027 (J)		0.0097 (J)
8/28/2019	0.00089 (J)		0.0071 (J)	
10/9/2019	0.0009 (J)	0.002 (J)	0.012 (J)	0.011 (J)
Mean	0.004941	0.007525	0.01107	0.00605
Std. Dev.	0.004487	0.004393	0.01965	0.006235
Upper Lim.	0.01	0.01097	0.012	0.017
Lower Lim.	0.0009	0.004078	0.0011	0.0014

## Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.005					
8/31/2016		<0.005	0.0018 (J)	<0.005		
9/1/2016					<0.005	<0.005
10/25/2016	<0.005				<0.005	<0.005
10/26/2016		<0.005	0.0016 (J)	<0.005		
1/4/2017	<0.005	<0.005	0.0014 (J)			
1/5/2017				<0.005	<0.005	<0.005
4/3/2017						<0.005
4/4/2017	<0.005				<0.005	
4/5/2017			0.0013 (J)			
4/6/2017		<0.005		<0.005		
7/10/2017			0.0013 (J)			
7/11/2017		<0.005			0.0003 (J)	<0.005
7/12/2017	<0.005			<0.005		
10/2/2017					<0.005	<0.005
10/3/2017	<0.005	<0.005				
10/4/2017			0.0011 (J)	<0.005		
1/9/2018					<0.005	<0.005
1/10/2018	<0.005			<0.005		
1/11/2018		0.0003 (J)	0.0011 (J)			
7/9/2018					<0.005	
7/10/2018	<0.005					<0.005
7/11/2018		<0.005	0.00096 (J)	<0.005		
8/27/2019	<0.005	<0.005	0.0009 (J)	<0.005	<0.005	<0.005
10/8/2019		<0.005		<0.005	<0.005	<0.005
10/9/2019	<0.005		0.00094 (J)			
Mean	0.005	0.00453	0.00124	0.005	0.00453	0.005
Std. Dev.	0	0.001486	0.000298	0	0.001486	0
Upper Lim.	0.005	0.005	0.001506	0.005	0.005	0.005
Lower Lim.	0.005	0.005	0.0009741	0.005	0.005	0.005

## Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.005			0.001 (J)
9/1/2016	<0.005	0.0046 (J)		<0.005	<0.005	
10/25/2016	<0.005			<0.005	<0.005	
10/26/2016		0.0046 (J)	0.0011 (J)			0.0009 (J)
1/4/2017	<0.005			<0.005	<0.005	0.0007 (J)
1/5/2017		0.0062 (J)	<0.005			
4/4/2017			<0.005	<0.005	<0.005	
4/5/2017	<0.005	0.007 (J)				<0.005
4/6/2017						<0.005
7/11/2017				<0.005		<0.005
7/12/2017	<0.005					
7/13/2017		0.0077 (J)	0.0003 (J)		<0.005	
10/2/2017				<0.005		
10/3/2017	<0.005		0.0003 (J)		<0.005	
10/4/2017		0.0073 (J)				0.0007 (J)
1/9/2018					<0.005	
1/10/2018	<0.005		<0.005	<0.005		
1/11/2018		0.0061 (J)				<0.005
7/9/2018				<0.005		
7/10/2018	<0.005		<0.005		<0.005	
7/11/2018		0.0064 (J)				<0.005
7/30/2019			0.00032 (J)			
8/27/2019			<0.005			0.00077 (J)
8/28/2019	<0.005	0.0023 (J)		<0.005	<0.005	
10/8/2019	<0.005				<0.005	
10/9/2019		0.0024 (J)	<0.005	<0.005		<0.005
Mean	0.005	0.00546	0.003365	0.005	0.005	0.002907
Std. Dev.	0	0.001928	0.002278	0	0	0.002208
Upper Lim.	0.005	0.00718	0.005	0.005	0.005	0.005
Lower Lim.	0.005	0.00374	0.0003	0.005	0.005	0.0007

## Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.005	<0.005
9/1/2016		0.0024 (J)		
10/26/2016		0.0011 (J)	<0.005	<0.005
10/27/2016	0.0017 (J)			
1/3/2017			<0.005	
1/5/2017				<0.005
1/6/2017	0.0017 (J)	0.001 (J)		
4/4/2017		0.001 (J)		
4/6/2017	0.0017 (J)		<0.005	<0.005
7/12/2017	0.0016 (J)	0.0008 (J)	<0.005	<0.005
10/3/2017			<0.005	<0.005
10/4/2017		0.001 (J)		
1/9/2018				<0.005
1/10/2018			0.0004 (J)	
1/11/2018	0.0017 (J)	0.0008 (J)		
7/10/2018			0.002 (J)	<0.005
7/11/2018	0.0017 (J)	<0.005		
8/27/2019		0.0011 (J)		0.00038 (J)
8/28/2019	0.00099 (J)		0.0024 (J)	
10/9/2019	0.00099 (J)	0.0015 (J)	0.0037 (J)	
Mean	0.00151	0.00157	0.00385	0.004487
Std. Dev.	0.0003228	0.001294	0.001679	0.00154
Upper Lim.	0.0017	0.0024	0.005	0.005
Lower Lim.	0.00099	0.0008	0.002	0.00038

## Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	2.36					
8/31/2016		2.2	2.61	1.23		
9/1/2016					1.28	2.45
10/25/2016	2.02				1.54	1.04 (U)
10/26/2016		1.96	3.28	0.641 (U)		
1/4/2017	2.1	1.88	3.77			
1/5/2017				0.657 (U)	0.715 (U)	1.36
4/3/2017						0.697 (U)
4/4/2017	1.39 (U)				0.699 (U)	
4/5/2017			3.25			
4/6/2017				0.439 (U)		
4/8/2017		0.893 (U)				
7/10/2017			1.55			
7/11/2017		1.89			1.12	0.754 (U)
7/12/2017	1.63			0.414 (U)		
10/2/2017					0.855 (U)	1.52
10/3/2017	1.84	4.73				
10/4/2017			1.68	1.33		
1/9/2018					0.861 (U)	1.17
1/10/2018	2.11			1.21		
1/11/2018		7.49	2.94			
7/9/2018				0.693 (U)		
7/10/2018	1.29				1.26	
7/11/2018		5.88	2.03	1.4 (U)		
8/27/2019	2.41	5.09	2.09	1.27	1.32	1.75
10/8/2019		6.39		1.62	1.41	1.52
10/9/2019	3.13		3.11			
Mean	2.028	3.84	2.631	1.021	1.049	1.352
Std. Dev.	0.5404	2.331	0.7567	0.4376	0.3227	0.5106
Upper Lim.	2.51	5.92	3.306	1.412	1.337	1.808
Lower Lim.	1.546	1.761	1.956	0.6307	0.7614	0.8966

## Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			1.01			5.96
9/1/2016	1.99	5.19		2.21	1.05	
10/25/2016	1.98			1.51 (U)	1.2	
10/26/2016		4.25	0.725 (U)			7.42
1/4/2017	1.72			2.56	2.11	6.07
1/5/2017		3.55	0.735 (U)			
4/4/2017			0.87 (U)	1.77	2.02	
4/5/2017	1.72	4.39				3
4/6/2017						
7/11/2017				2.76		4.2
7/12/2017	1.11					
7/13/2017		2.44	0.42 (U)		0.576 (U)	
10/2/2017				4.15		
10/3/2017	2.13		0.995 (U)		0.86	
10/4/2017		4.95				7.16
1/9/2018					1.43	
1/10/2018	1.74		0.698 (U)	1.96		
1/11/2018		3.53				3.57
7/9/2018				1.11		
7/10/2018	1.97		1.01		1.63	
7/11/2018		3.13				7.57
8/27/2019			0.787 (U)			7.04
8/28/2019	2.04	2.01		1.13 (U)	1.4 (U)	
10/8/2019	1.89				1.88	
10/9/2019		2.91	0.22 (U)	2.28		3.68
Mean	1.829	3.635	0.747	2.144	1.416	5.567
Std. Dev.	0.2898	1.052	0.2591	0.8989	0.5059	1.782
Upper Lim.	2.064	4.574	0.9782	2.946	1.867	7.157
Lower Lim.	1.607	2.696	0.5158	1.342	0.9642	3.977

## Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			1.81	2.19
8/31/2016	3.3			
9/1/2016		5.27		
10/26/2016		2.32	2.03	2.67
10/27/2016	2.7			
1/3/2017			1.85	
1/5/2017				3.74
1/6/2017	4.45	5.1		
4/4/2017		5		
4/6/2017	3.1		2.66	2.36
7/12/2017	2.73	2.69	2.1	1.54
10/3/2017			2	3.63
10/4/2017	8.16	4.82		
1/9/2018				2.07
1/10/2018			2.55	
1/11/2018	2.31	4.48		
7/10/2018			3.14	1.63
7/11/2018	3.31	2.69		
8/27/2019		2.97		4.63
8/28/2019	1.91		3.74	
10/9/2019	3.09	2.17	7.23	5.45
Mean	3.506	3.751	2.911	2.991
Std. Dev.	1.77	1.281	1.639	1.319
Upper Lim.	4.601	4.885	3.74	4.168
Lower Lim.	2.267	2.573	1.85	1.814

## Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	0.22 (J)					
8/31/2016		<0.3	0.7	<0.3		
9/1/2016					0.25 (J)	<0.3
10/25/2016	<0.3				0.43	0.5
10/26/2016		<0.3	0.91	0.55		
1/4/2017	0.18 (J)	<0.3	0.51			
1/5/2017				0.09 (J)	0.21 (J)	0.22 (J)
4/3/2017						<0.3
4/4/2017	<0.3				0.45	
4/5/2017			0.71			
4/6/2017		<0.3		<0.3		
7/10/2017			0.88			
7/11/2017		<0.3			0.41	0.06 (J)
7/12/2017	0.04 (J)			<0.3		
10/2/2017					<0.3	<0.3
10/3/2017	<0.3	<0.3				
10/4/2017			0.37	<0.3		
1/9/2018					<0.3	<0.3
1/10/2018	<0.3			<0.3		
1/11/2018		<0.3	1.4			
7/9/2018					<0.3	
7/10/2018	<0.3					0.15 (J)
7/11/2018		<0.3	0.62	<0.3		
1/16/2019	<0.3			<0.3	<0.3	
1/17/2019		<0.3	1.2			<0.3
3/26/2019	0.051 (J)			0.052 (J)	0.13 (J)	0.13 (J)
3/27/2019		<0.3	0.036 (J)			
8/27/2019	<0.3	<0.3	0.3	<0.3	<0.3	<0.3
10/8/2019		<0.3		<0.3	<0.3	<0.3
10/9/2019	<0.3		<0.3			
Mean	0.2409	0.3	0.6613	0.2827	0.3067	0.2633
Std. Dev.	0.09932	0	0.3944	0.1223	0.09069	0.1125
Upper Lim.	0.3	0.3	0.9708	0.55	0.3778	0.5
Lower Lim.	0.051	0.3	0.3519	0.09	0.2355	0.13

## Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			0.07 (J)			0.04 (J)
9/1/2016	0.55	0.68		<0.3	<0.3	
10/25/2016	0.36			<0.3	<0.3	
10/26/2016		0.68	0.62			0.12 (J)
1/4/2017	0.1 (J)			0.04 (J)	<0.3	0.06 (J)
1/5/2017		0.73	0.17 (J)			
4/4/2017			0.08 (J)	0.02 (J)	<0.3	
4/5/2017	0.2 (J)	1.6				<0.3
4/6/2017						<0.3
7/11/2017				0.14 (J)		0.03 (J)
7/12/2017	0.04 (J)					
7/13/2017		1.7	0.06 (J)		<0.3	
10/2/2017				<0.3		
10/3/2017	0.86		0.06 (J)		<0.3	
10/4/2017		1.8				0.12 (J)
1/9/2018					<0.3	
1/10/2018	<0.3		<0.3	<0.3		
1/11/2018		1.5				<0.3
7/9/2018				<0.3		
7/10/2018	<0.3		<0.3		<0.3	
7/11/2018		1.8				<0.3
1/16/2019		1.4				
1/17/2019	<0.3				<0.3	
1/18/2019						<0.3
1/21/2019			<0.3	<0.3		
3/25/2019				0.043 (J)		
3/26/2019	0.11 (J)	0.89			0.071 (J)	
3/27/2019						<0.3
7/30/2019			0.083 (J)			
8/27/2019			<0.3			0.1
8/28/2019	<0.3	0.61		<0.3	<0.3	
10/8/2019	<0.3				<0.3	
10/9/2019		<0.3	<0.3	<0.3		<0.3
Mean	0.31	1.141	0.2203	0.2203	0.2809	0.1892
Std. Dev.	0.22	0.5422	0.1669	0.1211	0.06611	0.1189
Upper Lim.	0.55	1.566	0.62	0.3	0.3	0.3
Lower Lim.	0.1	0.7154	0.06	0.04	0.071	0.04

## Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			0.04 (J)	0.09 (J)
8/31/2016	0.55			
9/1/2016		<0.3		
10/26/2016		0.05 (J)	0.05 (J)	0.24 (J)
10/27/2016	0.26 (J)			
1/3/2017			0.08 (J)	
1/5/2017				0.11 (J)
1/6/2017	0.25 (J)	0.08 (J)		
4/4/2017		<0.3		
4/6/2017	0.16 (J)		0.006 (J)	0.3
7/12/2017	0.2 (J)	0.38	0.05 (J)	0.15 (J)
10/3/2017			0.11 (J)	0.11 (J)
10/4/2017	0.22 (J)	<0.3		
1/9/2018				<0.3
1/10/2018			<0.3	
1/11/2018	0.98	<0.3		
7/10/2018			0.2 (J)	<0.3
7/11/2018	0.14 (J)	<0.3		
1/16/2019		1.2	<0.3	0.053 (J)
1/18/2019	0.24 (J)			
3/25/2019		0.064 (J)		
3/26/2019			<0.3	0.046 (J)
3/27/2019	0.13 (J)			
8/27/2019		0.031 (J)		0.13 (J)
8/28/2019	0.088 (J)		0.097 (J)	
10/9/2019	0.068 (J)	<0.3	<0.3	<0.3
Mean	0.2738	0.3004	0.1528	0.1774
Std. Dev.	0.2547	0.3097	0.1185	0.1029
Upper Lim.	0.3979	0.38	0.3	0.3
Lower Lim.	0.1129	0.05	0.04	0.053

## Confidence Interval

Constituent: Lead (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.005					
8/31/2016		0.0002 (J)	0.0001 (J)	<0.005		
9/1/2016					<0.005	<0.005
10/25/2016	<0.005				<0.005	<0.005
10/26/2016		0.0001 (J)	0.0001 (J)	<0.005		
1/4/2017	<0.005	0.0002 (J)	<0.005			
1/5/2017				0.0002 (J)	<0.005	<0.005
4/3/2017						0.0003 (J)
4/4/2017	<0.005				0.0001 (J)	
4/5/2017			0.0003 (J)			
4/6/2017		0.0003 (J)		0.0005 (J)		
7/10/2017			0.0003 (J)			
7/11/2017		0.0002 (J)			8E-05 (J)	0.0001 (J)
7/12/2017	<0.005			0.0005 (J)		
10/2/2017					0.0001 (J)	0.0002 (J)
10/3/2017	<0.005	0.0003 (J)				
10/4/2017			0.0001 (J)	0.0007 (J)		
1/9/2018					<0.005	0.0002 (J)
1/10/2018	0.0001 (J)			0.0009 (J)		
1/11/2018		0.0003 (J)	0.0002 (J)			
7/9/2018					<0.005	
7/10/2018	<0.005					<0.005
7/11/2018			<0.005	0.0015 (J)		
1/16/2019	<0.005			0.00061 (J)	<0.005	
1/17/2019		0.00028 (J)	<0.005			<0.005
3/26/2019	<0.005			<0.005	<0.005	<0.005
3/27/2019		0.00029 (J)	<0.005			
8/27/2019	<0.005	0.00021 (J)	<0.005	0.0001 (J)	0.00051 (J)	0.00033 (J)
10/8/2019		0.00028 (J)		0.00013 (J)	<0.005	0.00012 (J)
10/9/2019	<0.005		6.6E-05 (J)			
Mean	0.004592	0.0002418	0.00218	0.001678	0.003399	0.002604
Std. Dev.	0.001415	6.462E-05	0.00249	0.002038	0.002367	0.002503
Upper Lim.	0.005	0.0003	0.005	0.005	0.005	0.005
Lower Lim.	0.0001	0.0002	6.6E-05	0.00013	0.0001	0.00012

## Confidence Interval

Constituent: Lead (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.005			0.0003 (J)
9/1/2016	<0.005	<0.005		<0.005	<0.005	
10/25/2016	0.0002 (J)			0.0001 (J)	<0.005	
10/26/2016		<0.005	<0.005			0.0003 (J)
1/4/2017	0.0001 (J)			<0.005	<0.005	0.0003 (J)
1/5/2017		<0.005	<0.005			
4/4/2017			0.0002 (J)	7E-05 (J)	9E-05 (J)	
4/5/2017	0.0002 (J)	0.0009 (J)				0.0003 (J)
4/6/2017						
7/11/2017				<0.005		0.0002 (J)
7/12/2017	0.0001 (J)					
7/13/2017		<0.005	0.0003 (J)		7E-05 (J)	
10/2/2017				<0.005		
10/3/2017	0.0001 (J)		<0.005		0.0001 (J)	
10/4/2017		0.0001 (J)				0.0008 (J)
1/9/2018					9E-05 (J)	
1/10/2018	0.0002 (J)		8E-05 (J)	0.0002 (J)		
1/11/2018		0.0001 (J)				0.0009 (J)
7/9/2018				<0.005		
7/10/2018	<0.005		<0.005		<0.005	
7/11/2018		<0.005				0.001 (J)
1/16/2019		<0.005				
1/17/2019	<0.005				<0.005	
1/18/2019						0.0012 (J)
1/21/2019			<0.005	<0.005		
3/25/2019				<0.005		
3/26/2019	<0.005	<0.005			<0.005	
3/27/2019						0.00047 (J)
7/30/2019			0.0002 (J)			
8/27/2019			<0.005			0.003 (J)
8/28/2019	0.0001 (J)	<0.005		6.5E-05 (J)	0.00018 (J)	
10/8/2019	0.0001 (J)				0.00016 (J)	
10/9/2019		0.00015 (J)	6.4E-05 (J)	0.00018 (J)		0.00032 (J)
Mean	0.001758	0.003437	0.002987	0.002968	0.002557	0.0007575
Std. Dev.	0.002394	0.002317	0.002488	0.002512	0.002551	0.0007821
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.001014
Lower Lim.	0.0001	0.0001	8E-05	7E-05	9E-05	0.000289

## Confidence Interval

Constituent: Lead (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.005	<0.005
8/31/2016	0.0007 (J)			
10/26/2016		0.0057	0.0002 (J)	<0.005
10/27/2016	<0.005			
1/3/2017			0.0001 (J)	
1/5/2017				0.0003 (J)
1/6/2017	<0.005	0.0053		
4/4/2017		0.0092		
4/6/2017	0.0001 (J)		0.0003 (J)	0.0002 (J)
7/12/2017	<0.005	0.006	0.0002 (J)	0.0002 (J)
10/3/2017			0.0002 (J)	0.0001 (J)
10/4/2017	9E-05 (J)	0.0057		
1/9/2018				0.0003 (J)
1/10/2018			0.0003 (J)	
1/11/2018	0.0002 (J)	0.0085		
7/10/2018			<0.005	<0.005
7/11/2018	<0.005	0.0029 (J)		
1/16/2019		<0.005	<0.005	<0.005
1/18/2019	<0.005			
3/25/2019		<0.005		
3/26/2019			<0.005	
3/27/2019	<0.005			
8/27/2019		0.001 (J)		0.0011 (J)
8/28/2019	6.1E-05 (J)		0.0011 (J)	
10/9/2019	<0.005	0.00041 (J)	0.0025 (J)	0.00033 (J)
Mean	0.003013	0.004974	0.002075	0.002048
Std. Dev.	0.002461	0.00271	0.002258	0.002355
Upper Lim.	0.005	0.007232	0.005	0.005
Lower Lim.	9E-05	0.002716	0.0001	0.0002

## Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.03					
8/31/2016		<0.03	<0.03	<0.03		
9/1/2016					<0.03	<0.03
10/25/2016	<0.03				<0.03	<0.03
10/26/2016		<0.03	<0.03	<0.03		
1/4/2017	<0.03	<0.03	<0.03			
1/5/2017				<0.03	<0.03	<0.03
4/3/2017						<0.03
4/4/2017	<0.03				<0.03	
4/5/2017			0.0012 (J)			
4/6/2017		<0.03		<0.03		
7/10/2017			<0.03			
7/11/2017		<0.03			<0.03	<0.03
7/12/2017	<0.03			<0.03		
10/2/2017					<0.03	<0.03
10/3/2017	<0.03	<0.03				
10/4/2017			<0.03	<0.03		
1/9/2018					<0.03	<0.03
1/10/2018	<0.03			<0.03		
1/11/2018		<0.03	<0.03			
7/9/2018					<0.03	
7/10/2018	<0.03					<0.03
7/11/2018		<0.03	0.00098 (J)	<0.03		
8/27/2019	<0.03	<0.03	0.00094 (J)	<0.03	<0.03	<0.03
10/8/2019		<0.03		<0.03	<0.03	<0.03
10/9/2019	<0.03		0.0011 (J)			
Mean	0.03	0.03	0.01842	0.03	0.03	0.03
Std. Dev.	0	0	0.01495	0	0	0
Upper Lim.	0.03	0.03	0.03	0.03	0.03	0.03
Lower Lim.	0.03	0.03	0.00098	0.03	0.03	0.03

## Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.03			<0.03
9/1/2016	<0.03	0.0066 (J)		<0.03	<0.03	
10/25/2016	<0.03			<0.03	<0.03	
10/26/2016		0.0065 (J)	<0.03			<0.03
1/4/2017	<0.03			<0.03	<0.03	<0.03
1/5/2017		0.0062 (J)	<0.03			
4/4/2017			<0.03	<0.03	<0.03	
4/5/2017	<0.03	0.007 (J)				<0.03
4/6/2017						<0.03
7/11/2017				<0.03		<0.03
7/12/2017	<0.03					
7/13/2017		0.0069 (J)	<0.03		<0.03	
10/2/2017				<0.03		
10/3/2017	<0.03		<0.03		<0.03	
10/4/2017		0.0082 (J)				<0.03
1/9/2018					<0.03	
1/10/2018	<0.03		<0.03	<0.03		
1/11/2018		0.0061 (J)				<0.03
7/9/2018				<0.03		
7/10/2018	<0.03		<0.03		<0.03	
7/11/2018		0.0075 (J)				<0.03
7/30/2019			<0.03			
8/27/2019			<0.03			<0.03
8/28/2019	<0.03	0.0041 (J)		<0.03	<0.03	
10/8/2019	<0.03				<0.03	
10/9/2019		0.0046 (J)	<0.03	<0.03		<0.03
Mean	0.03	0.00637	0.03	0.03	0.03	0.03
Std. Dev.	0	0.001237	0	0	0	0
Upper Lim.	0.03	0.007473	0.03	0.03	0.03	0.03
Lower Lim.	0.03	0.005267	0.03	0.03	0.03	0.03

## Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			0.0042 (J)	<0.03
9/1/2016		0.0092 (J)		
10/26/2016		0.0046 (J)	<0.03	<0.03
10/27/2016	0.0023 (J)			
1/3/2017			0.0024 (J)	
1/5/2017				<0.03
1/6/2017	0.0021 (J)	0.0042 (J)		
4/4/2017		0.0056 (J)		
4/6/2017	0.0021 (J)		0.0051 (J)	<0.03
7/12/2017	0.0017 (J)	0.0035 (J)	0.0031 (J)	<0.03
10/3/2017			0.0027 (J)	<0.03
10/4/2017	0.0021 (J)	0.0041 (J)		
1/9/2018				<0.03
1/10/2018			0.0041 (J)	
1/11/2018	0.0022 (J)	0.0052 (J)		
7/10/2018			0.005 (J)	<0.03
7/11/2018	0.0019 (J)	0.0039 (J)		
8/27/2019		0.013 (J)		<0.03
8/28/2019	0.0018 (J)			<0.03
10/9/2019	0.0018 (J)	0.013 (J)		
Mean	0.002	0.00663	0.009622	0.03
Std. Dev.	0.0002062	0.00372	0.01159	0
Upper Lim.	0.002199	0.013	0.03	0.03
Lower Lim.	0.001801	0.0039	0.0024	0.03

## Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.0005	<0.0005
8/31/2016	<0.0005			
9/1/2016		<0.0005		
10/26/2016		<0.0005	<0.0005	<0.0005
10/27/2016	<0.0005			
1/3/2017			<0.0005	
1/5/2017				<0.0005
1/6/2017	<0.0005	<0.0005		
4/4/2017		<0.0005		
4/6/2017	<0.0005		<0.0005	<0.0005
7/12/2017	<0.0005	<0.0005	<0.0005	<0.0005
10/3/2017			<0.0005	<0.0005
10/4/2017	5E-05 (J)	<0.0005		
1/9/2018				<0.0005
1/10/2018			<0.0005	
1/11/2018	<0.0005	<0.0005		
7/10/2018			<0.0005	<0.0005
7/11/2018	<0.0005	<0.0005		
1/16/2019		4.9E-05 (J)	<0.0005	4.3E-05 (J)
1/18/2019	<0.0005			
8/27/2019		<0.0005		<0.0005
8/28/2019	<0.0005		<0.0005	
10/9/2019			<0.0005	
Mean	0.000455	0.0004549	0.0005	0.0004543
Std. Dev.	0.0001423	0.0001426	0	0.0001445
Upper Lim.	0.0005	0.0005	0.0005	0.0005
Lower Lim.	0.0005	0.0005	0.0005	0.0005

## Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	0.175					
8/31/2016		<0.01	<0.01	<0.01		
9/1/2016					0.0027 (J)	0.132
10/25/2016	0.242				0.0028 (J)	0.117
10/26/2016		<0.01	<0.01	<0.01		
1/4/2017	0.167	<0.01	<0.01			
1/5/2017				<0.01	0.0022 (J)	0.109
4/3/2017						0.0994
4/4/2017	0.172				0.0022 (J)	
4/5/2017			<0.01			
4/6/2017		<0.01		<0.01		
7/10/2017			<0.01			
7/11/2017		<0.01			0.0024 (J)	0.0938
7/12/2017	0.182			<0.01		
10/2/2017					0.0025 (J)	0.103
10/3/2017	0.162	<0.01				
10/4/2017			<0.01	<0.01		
1/9/2018					0.0038 (J)	0.106
1/10/2018	0.117			<0.01		
1/11/2018		0.0018 (J)	<0.01			
7/10/2018	0.11					0.088
7/11/2018		<0.01	<0.01	<0.01		
8/27/2019	0.06	<0.01	<0.01	<0.01	0.028	0.095
10/8/2019		<0.01		<0.01	0.034	0.091
10/9/2019	0.06		<0.01			
Mean	0.1447	0.00918	0.01	0.01	0.008956	0.1034
Std. Dev.	0.05739	0.002593	0	0	0.0126	0.01338
Upper Lim.	0.1959	0.01	0.01	0.01	0.034	0.1154
Lower Lim.	0.0935	0.01	0.01	0.01	0.0022	0.09148

## Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.01			<0.01
9/1/2016	0.08	<0.01		0.296	0.0686	
10/25/2016	0.08			0.395	0.0018 (J)	
10/26/2016		<0.01	<0.01			<0.01
1/4/2017	0.0786			0.229	0.0222	<0.01
1/5/2017		<0.01	<0.01			
4/4/2017			<0.01	0.147	0.0476	
4/5/2017	0.113	<0.01				<0.01
4/6/2017						<0.01
7/11/2017				0.136		<0.01
7/12/2017	0.178					
7/13/2017		<0.01	<0.01		0.0105	
10/2/2017				0.13		
10/3/2017	0.201		<0.01		0.0031 (J)	
10/4/2017		<0.01				<0.01
1/9/2018					0.09	
1/10/2018	0.161		<0.01	0.229		
1/11/2018		<0.01				<0.01
7/9/2018				0.13		
7/10/2018	0.14		<0.01		0.047	
7/11/2018		<0.01				<0.01
7/30/2019			<0.01			
8/27/2019			<0.01			<0.01
8/28/2019	0.22	0.004 (J)		0.11	0.07	
10/8/2019	0.2				0.078	
10/9/2019		0.0036 (J)	<0.01	0.071		<0.01
Mean	0.1452	0.00876	0.01	0.1873	0.04388	0.01
Std. Dev.	0.05481	0.002616	0	0.09931	0.0327	0
Upper Lim.	0.1941	0.01	0.01	0.2759	0.07306	0.01
Lower Lim.	0.09626	0.004	0.01	0.0987	0.0147	0.01

## Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.01	<0.01
8/31/2016	<0.01			
9/1/2016		0.035		
10/26/2016		0.0267	<0.01	<0.01
10/27/2016	<0.01			
1/3/2017			<0.01	
1/5/2017				<0.01
1/6/2017	<0.01	0.0278		
4/4/2017		0.0265		
4/6/2017	<0.01		<0.01	<0.01
7/12/2017	<0.01	0.0209	<0.01	<0.01
10/3/2017			<0.01	<0.01
10/4/2017	<0.01	0.0181		
1/9/2018				<0.01
1/10/2018			<0.01	
1/11/2018	<0.01	0.0237		
7/10/2018			<0.01	<0.01
7/11/2018	<0.01	0.024		
8/27/2019		0.1		0.0026 (J)
8/28/2019	<0.01		0.0012 (J)	
10/9/2019	<0.01	0.1		
Mean	0.01	0.04027	0.009022	0.009178
Std. Dev.	0	0.0318	0.002933	0.002467
Upper Lim.	0.01	0.1	0.01	0.01
Lower Lim.	0.01	0.0209	0.0012	0.0026

## Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	0.002 (J)					
8/31/2016		0.0084 (J)	0.0019 (J)	<0.01		
9/1/2016					0.0056 (J)	<0.01
10/25/2016	0.0022 (J)				0.0023 (J)	<0.01
10/26/2016		0.0052 (J)	0.002 (J)	<0.01		
1/4/2017	0.0016 (J)	0.0062 (J)	<0.01			
1/5/2017				<0.01	0.0038 (J)	<0.01
4/3/2017						<0.01
4/4/2017	0.0052 (J)				0.0064 (J)	
4/5/2017			<0.01			
4/6/2017		0.0195		<0.01		
7/10/2017			<0.01			
7/11/2017		<0.01			0.0044 (J)	<0.01
7/12/2017	0.0024 (J)			<0.01		
10/2/2017					0.004 (J)	<0.01
10/3/2017	<0.01	0.0079 (J)				
10/4/2017			<0.01	<0.01		
1/9/2018					0.0019 (J)	0.0019 (J)
1/10/2018	0.0018 (J)			<0.01		
1/11/2018		0.0054 (J)	<0.01			
7/9/2018					0.0029 (J)	
7/10/2018	0.0026 (J)					0.0086 (J)
7/11/2018		0.0022 (J)	<0.01	<0.01		
1/16/2019	0.0018 (J)				<0.01	0.0016 (J)
1/17/2019		<0.01	<0.01			0.0029 (J)
3/26/2019	0.0023 (J)			<0.01	0.0022 (J)	0.0074 (J)
3/27/2019		0.01 (J)	<0.01			
8/27/2019	0.0016 (J)	<0.01	<0.01	<0.01	0.0035 (J)	0.0092 (J)
10/8/2019		<0.01		<0.01	0.0026 (J)	0.014
10/9/2019	0.0024 (J)		<0.01			
Mean	0.002992	0.008733	0.008658	0.01	0.003433	0.008667
Std. Dev.	0.002405	0.004237	0.003134	0	0.001489	0.003304
Upper Lim.	0.0052	0.01	0.01	0.01	0.004602	0.014
Lower Lim.	0.0016	0.0052	0.002	0.01	0.002265	0.0029

## Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.01			0.0014 (J)
9/1/2016	0.0052 (J)	0.0012 (J)		<0.01	0.0297	
10/25/2016	0.0085 (J)			0.0014 (J)	0.0095 (J)	
10/26/2016		0.0013 (J)	0.0035 (J)			0.001 (J)
1/4/2017	0.0048 (J)			0.0014 (J)	0.022	<0.01
1/5/2017		0.0012 (J)	<0.01			
4/4/2017			<0.01	<0.01	0.0236	
4/5/2017	0.0068 (J)	<0.01				<0.01
4/6/2017						<0.01
7/11/2017				<0.01		<0.01
7/12/2017	0.0048 (J)					
7/13/2017		0.0018 (J)	<0.01		0.013	
10/2/2017				<0.01		
10/3/2017	0.0051 (J)		<0.01		0.01 (J)	
10/4/2017		0.0042 (J)				0.0023 (J)
1/9/2018					0.0162	
1/10/2018	0.0018 (J)		<0.01	<0.01		
1/11/2018		<0.01				<0.01
7/9/2018				<0.01		
7/10/2018	0.0045 (J)		<0.01		0.016	
7/11/2018		0.0016 (J)				<0.01
1/16/2019		<0.01				
1/17/2019	0.0031 (J)				0.011	
1/18/2019						<0.01
1/21/2019			<0.01	0.0014 (J)		
3/25/2019				<0.01		
3/26/2019	0.0033 (J)	<0.01			0.022	
3/27/2019						<0.01
7/30/2019			<0.01			
8/27/2019			<0.01			<0.01
8/28/2019	0.004 (J)	<0.01		0.0014 (J)	0.019	
10/8/2019	0.0023 (J)				0.019	
10/9/2019		<0.01	<0.01	<0.01		<0.01
Mean	0.004517	0.005942	0.009458	0.007133	0.01758	0.007892
Std. Dev.	0.001861	0.00431	0.001876	0.004234	0.006162	0.003825
Upper Lim.	0.005977	0.01	0.01	0.01	0.02242	0.01
Lower Lim.	0.003056	0.0012	0.0035	0.0014	0.01275	0.0014

## Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.01	<0.01
8/31/2016	<0.01			
9/1/2016		0.0067 (J)		
10/26/2016		0.0042 (J)	<0.01	<0.01
10/27/2016	<0.01			
1/3/2017			<0.01	
1/5/2017				0.0014 (J)
1/6/2017	<0.01	0.0042 (J)		
4/4/2017		0.0043 (J)		
4/6/2017	<0.01		<0.01	<0.01
7/12/2017	<0.01	0.0033 (J)	<0.01	<0.01
10/3/2017			<0.01	<0.01
10/4/2017	<0.01	0.0038 (J)		
1/9/2018				<0.01
1/10/2018			<0.01	
1/11/2018	<0.01	0.0029 (J)		
7/10/2018			0.0018 (J)	0.0016 (J)
7/11/2018	<0.01	0.0015 (J)		
1/16/2019		<0.01	<0.01	
1/18/2019	<0.01			
3/25/2019		<0.01		
3/26/2019			<0.01	0.05 (J)
3/27/2019	<0.01			
8/27/2019		<0.01		0.0033 (J)
8/28/2019	<0.01		0.0033 (J)	
10/9/2019	<0.01	<0.01	0.0073 (J)	
Mean	0.01	0.005908	0.008533	0.01163
Std. Dev.	0	0.003244	0.002917	0.014
Upper Lim.	0.01	0.01	0.01	0.01
Lower Lim.	0.01	0.0029	0.0033	0.0016

## Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15
8/30/2016	<0.001					
8/31/2016		<0.001	<0.001	<0.001		
9/1/2016					<0.001	<0.001
10/25/2016	<0.001				<0.001	<0.001
10/26/2016		<0.001	0.0003 (J)	<0.001		
1/4/2017	<0.001	<0.001	<0.001			
1/5/2017				<0.001	<0.001	<0.001
4/3/2017					<0.001	
4/4/2017	5E-05 (J)				7E-05 (J)	
4/5/2017			0.0002 (J)			
4/6/2017		6E-05 (J)		<0.001		
7/10/2017			0.0002 (J)			
7/11/2017		<0.001			6E-05 (J)	<0.001
7/12/2017	<0.001			<0.001		
10/2/2017					<0.001	<0.001
10/3/2017	<0.001	7E-05 (J)				
10/4/2017			0.0002 (J)	<0.001		
1/9/2018					<0.001	<0.001
1/10/2018	<0.001			<0.001		
1/11/2018		0.0001 (J)	0.0002 (J)			
7/9/2018					<0.001	
7/10/2018	<0.001					<0.001
7/11/2018		<0.001	<0.001	<0.001		
8/27/2019	<0.001	<0.001	0.00011 (J)	<0.001	<0.001	<0.001
10/8/2019		9.8E-05 (J)		<0.001	<0.001	<0.001
10/9/2019	5.4E-05 (J)		0.00014 (J)			
Mean	0.0008104	0.0006328	0.000435	0.001	0.000813	0.001
Std. Dev.	0.0003997	0.0004742	0.0003929	0	0.0003942	0
Upper Lim.	0.001	0.001	0.001	0.001	0.001	0.001
Lower Lim.	5.4E-05	7E-05	0.00014	0.001	7E-05	0.001

## Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22
8/31/2016			<0.001			<0.001
9/1/2016	<0.001	<0.001		<0.001	<0.001	
10/25/2016	<0.001			<0.001	<0.001	
10/26/2016		<0.001	<0.001			<0.001
1/4/2017	<0.001			<0.001	<0.001	<0.001
1/5/2017		<0.001	<0.001			
4/4/2017			<0.001	<0.001	5E-05 (J)	
4/5/2017	6E-05 (J)	0.0001 (J)				<0.001
4/6/2017						<0.001
7/11/2017				<0.001		<0.001
7/12/2017	<0.001					
7/13/2017		<0.001	<0.001		<0.001	
10/2/2017				<0.001		
10/3/2017	<0.001		<0.001		<0.001	
10/4/2017		0.0001 (J)				0.0001 (J)
1/9/2018					<0.001	
1/10/2018	5E-05 (J)		<0.001	<0.001		
1/11/2018		0.0001 (J)				6E-05 (J)
7/9/2018				<0.001		
7/10/2018	<0.001		<0.001		<0.001	
7/11/2018		<0.001				<0.001
7/30/2019			0.00011 (J)			
8/27/2019			<0.001			8.6E-05 (J)
8/28/2019	<0.001	6.6E-05 (J)		<0.001	<0.001	
10/8/2019	<0.001				<0.001	
10/9/2019		7.6E-05 (J)	<0.001	<0.001		<0.001
Mean	0.000811	0.0005442	0.0009191	0.001	0.000905	0.0007246
Std. Dev.	0.0003985	0.0004806	0.0002683	0	0.0003004	0.0004435
Upper Lim.	0.001	0.001	0.001	0.001	0.001	0.001
Lower Lim.	6E-05	7.6E-05	0.001	0.001	0.001	8.6E-05

## Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 3/19/2020 2:09 PM View: Confidence Interval  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

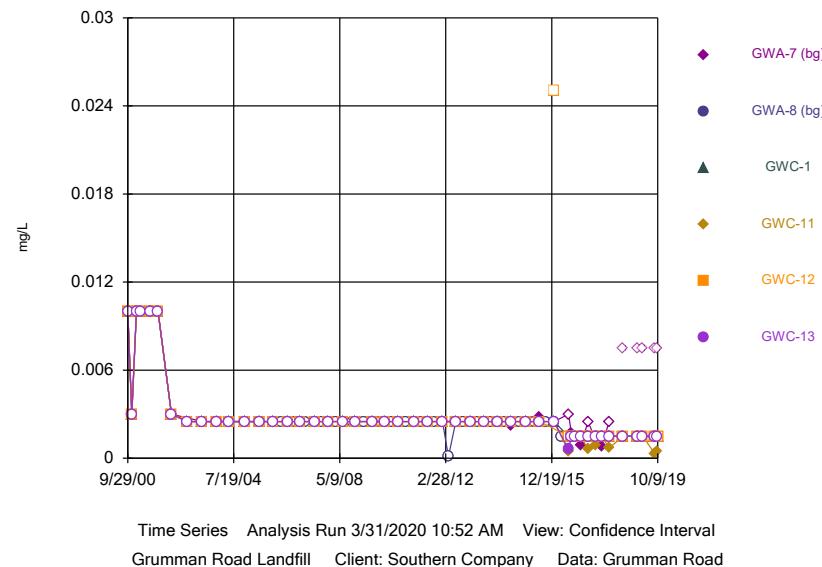
	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016			<0.001	<0.001
8/31/2016	<0.001			
9/1/2016		<0.001		
10/26/2016		<0.001	<0.001	<0.001
10/27/2016	<0.001			
1/3/2017			<0.001	
1/5/2017				<0.001
1/6/2017	<0.001	<0.001		
4/4/2017		7E-05 (J)		
4/6/2017	<0.001		<0.001	<0.001
7/12/2017	<0.001	<0.001	<0.001	<0.001
10/3/2017			<0.001	<0.001
10/4/2017	<0.001	<0.001		
1/9/2018				<0.001
1/10/2018			<0.001	
1/11/2018	<0.001	7E-05 (J)		
7/10/2018			<0.001	<0.001
7/11/2018	<0.001	<0.001		
8/27/2019		<0.001		<0.001
8/28/2019	<0.001		5.7E-05 (J)	
10/9/2019	<0.001	<0.001	0.00031 (J)	
Mean	0.001	0.000814	0.0008367	0.001
Std. Dev.	0	0.0003921	0.0003494	0
Upper Lim.	0.001	0.001	0.001	0.001
Lower Lim.	0.001	7E-05	0.00031	0.001



Time Series Plots (through October 2019)

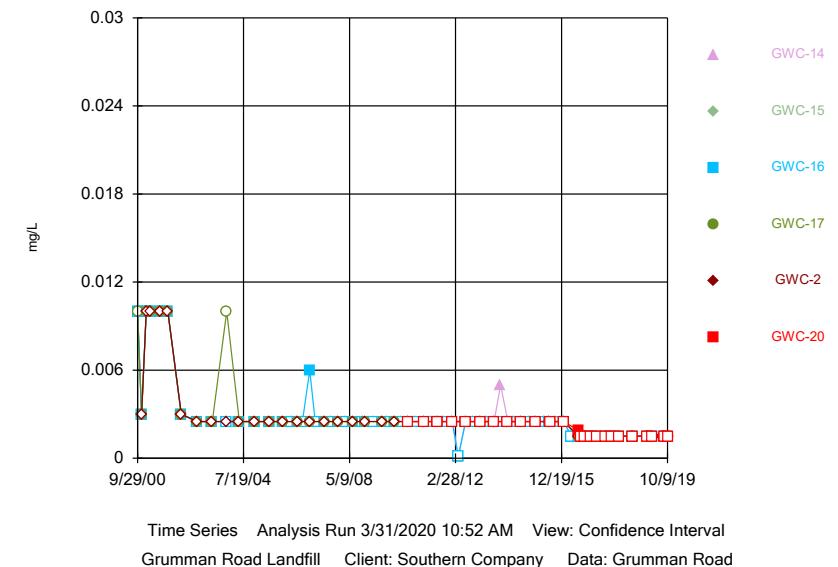
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

### Antimony



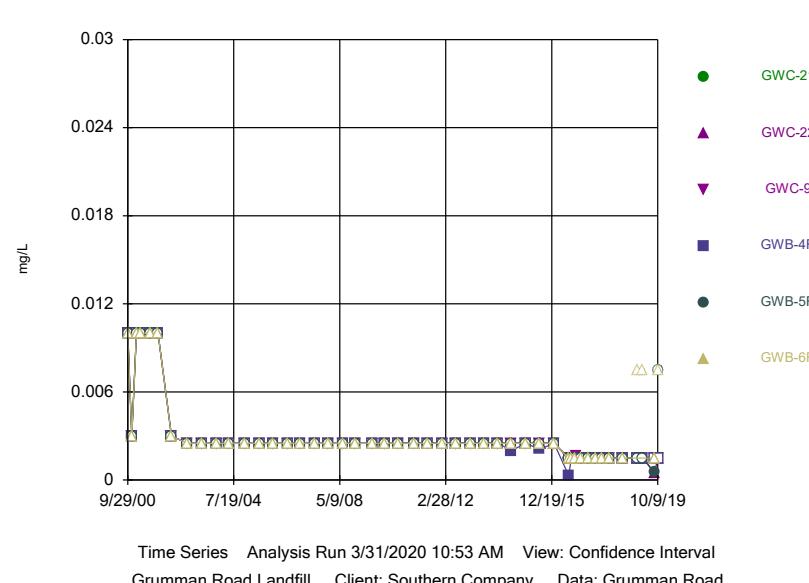
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Hollow symbols indicate censored values.

### Antimony



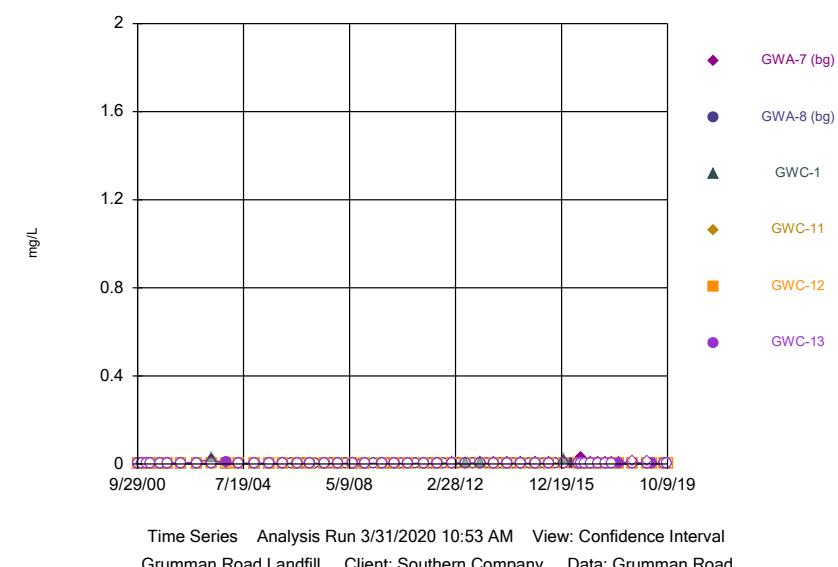
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### Antimony



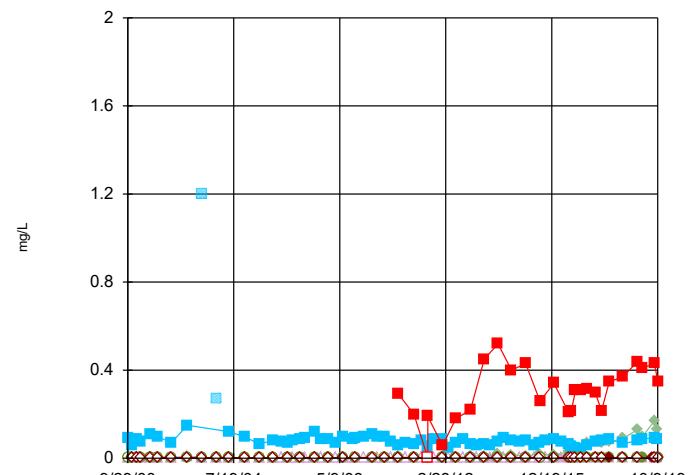
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### Arsenic



Sanitas™ v.9.6.25 Sanitas software licensed to ACC, UG  
Hollow symbols indicate censored values.

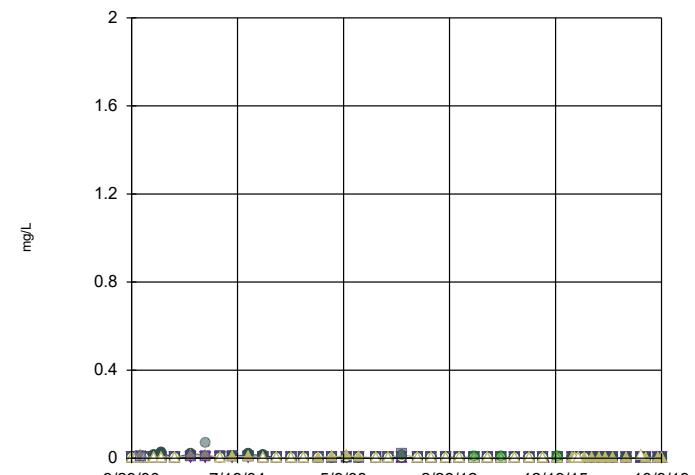
### Arsenic



Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC, UG  
Hollow symbols indicate censored values.

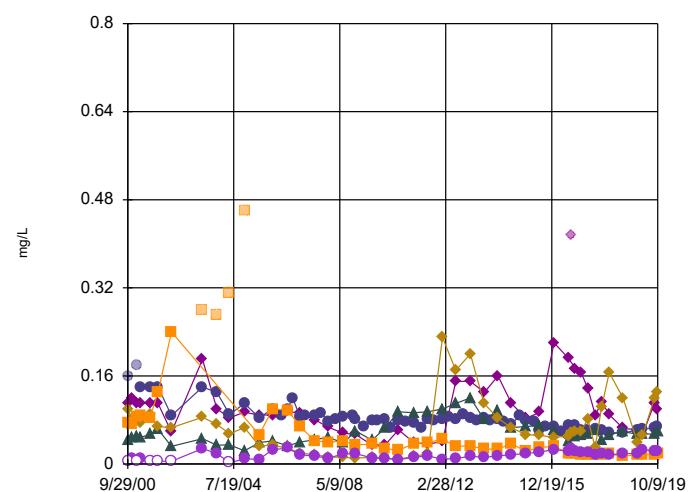
### Arsenic



Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC, UG  
Hollow symbols indicate censored values.

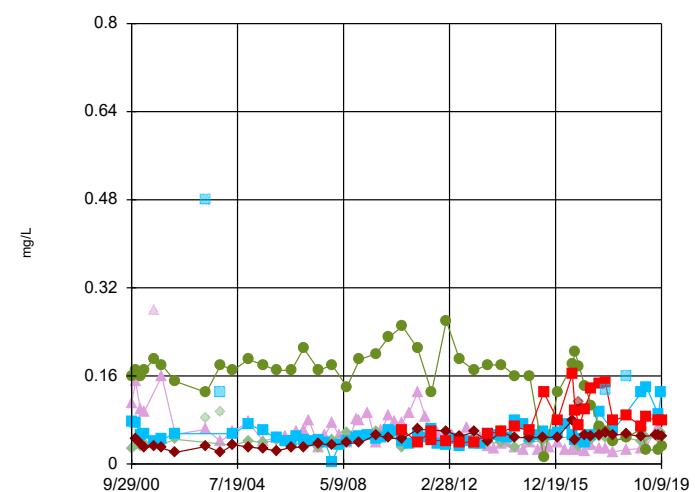
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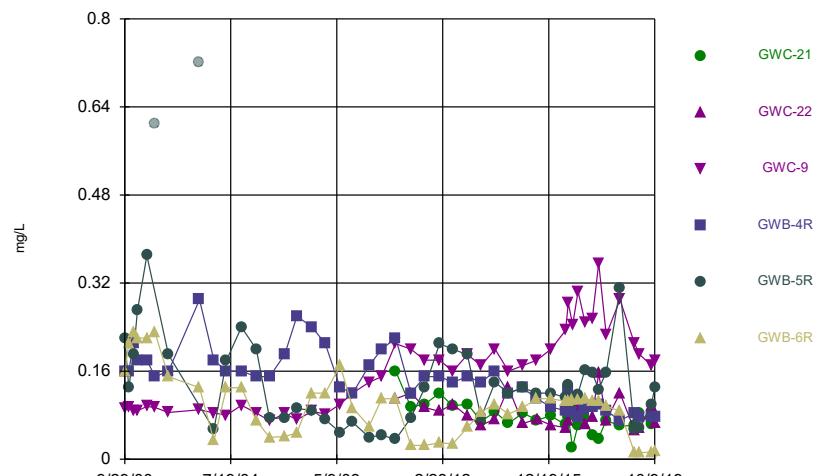
Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC, UG

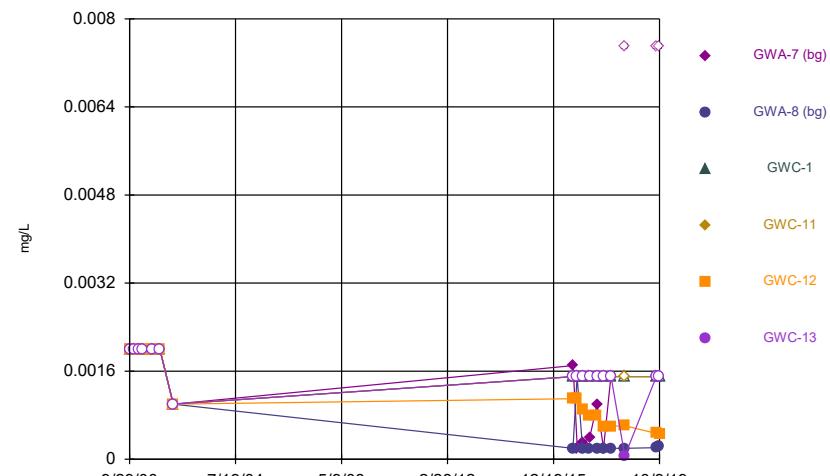
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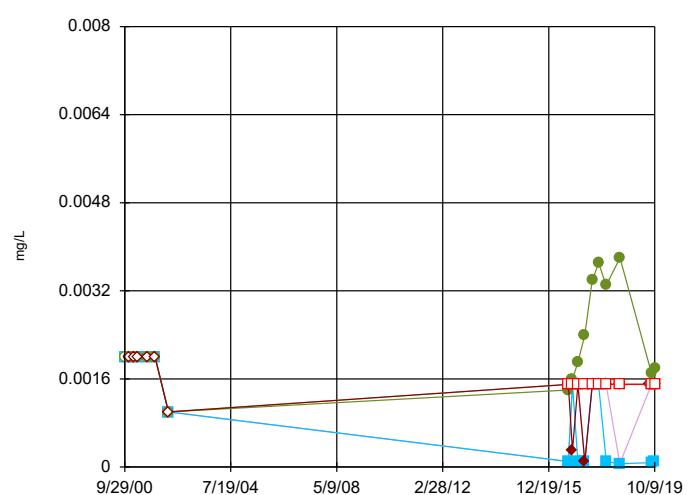
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Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Barium**

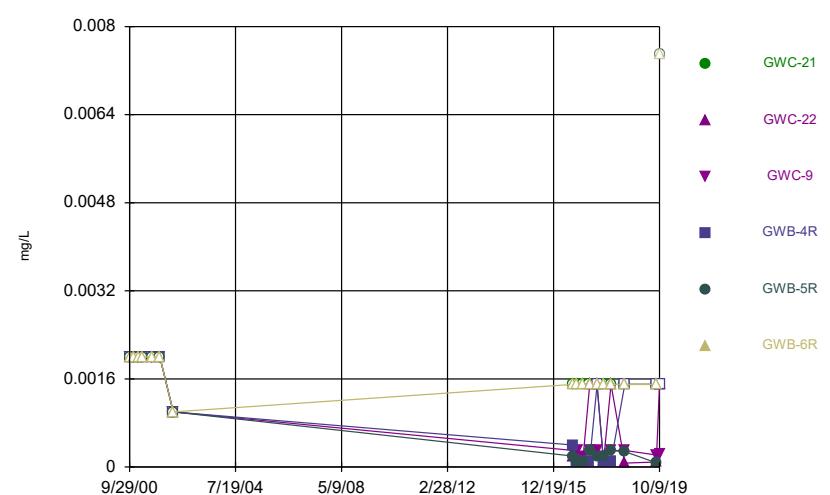
Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Beryllium**

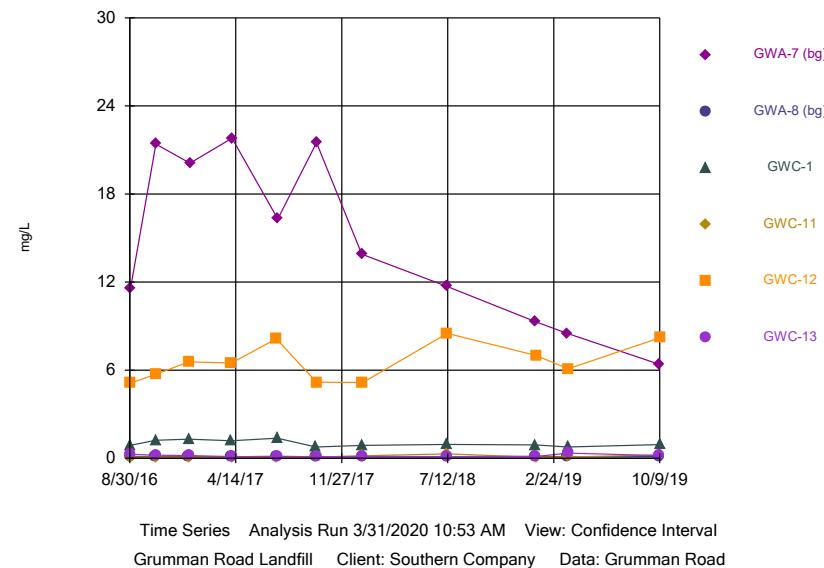
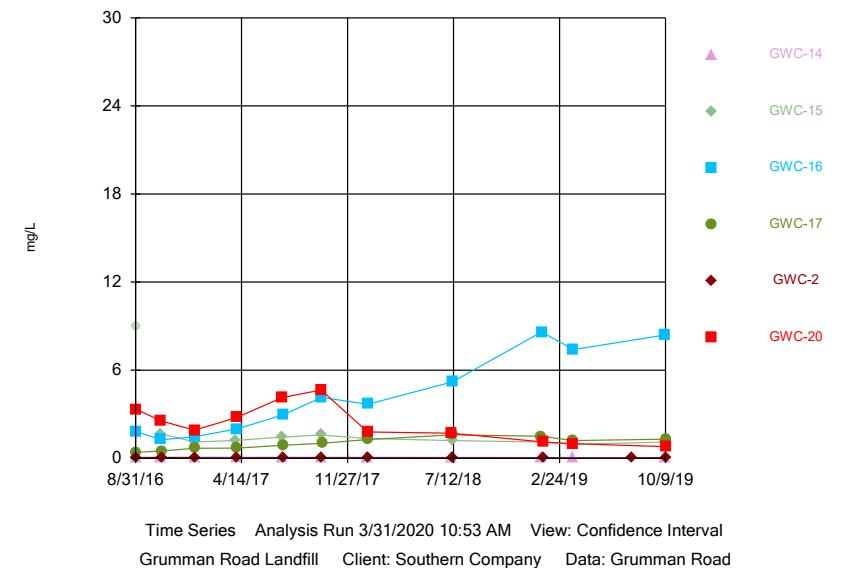
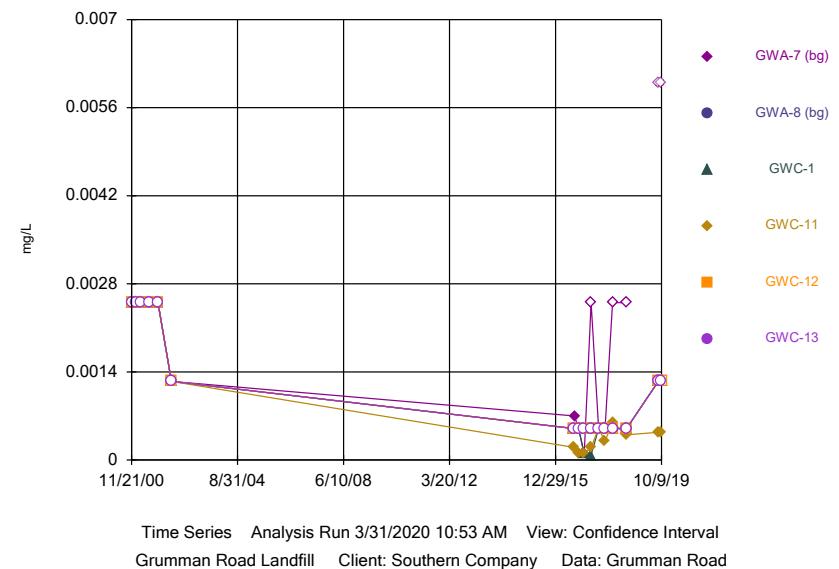
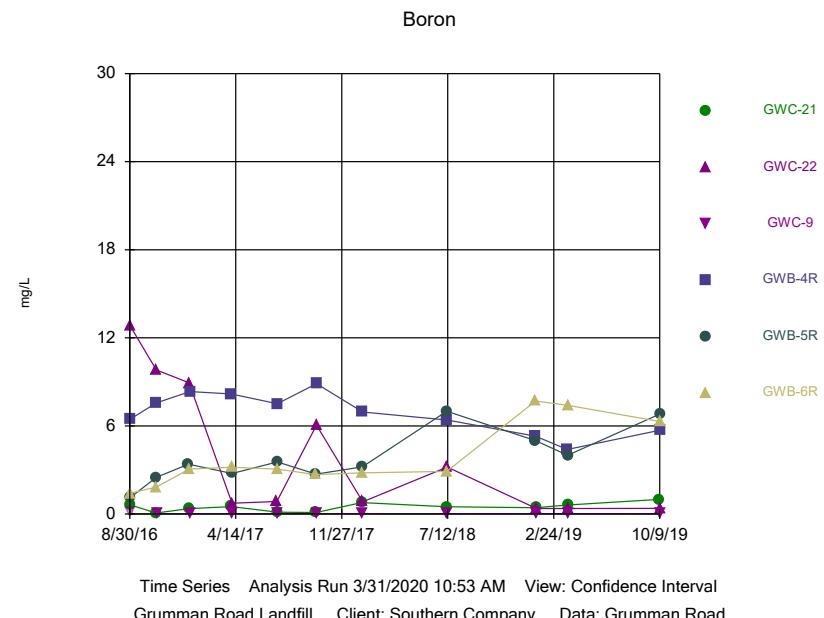
Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Beryllium**

Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

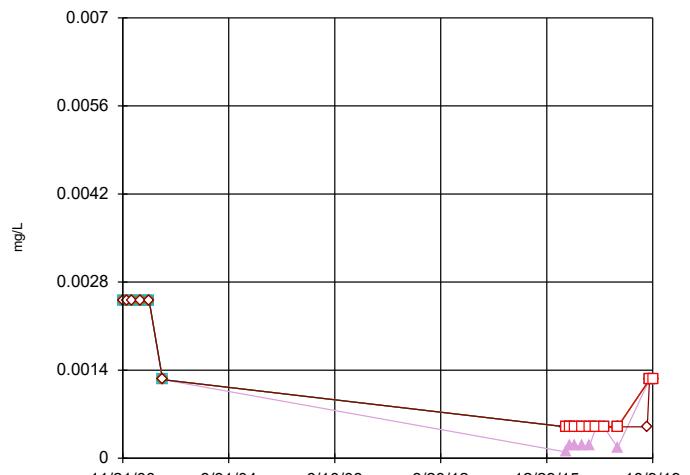
**Beryllium**

Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Boron****Boron****Cadmium****Boron**

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

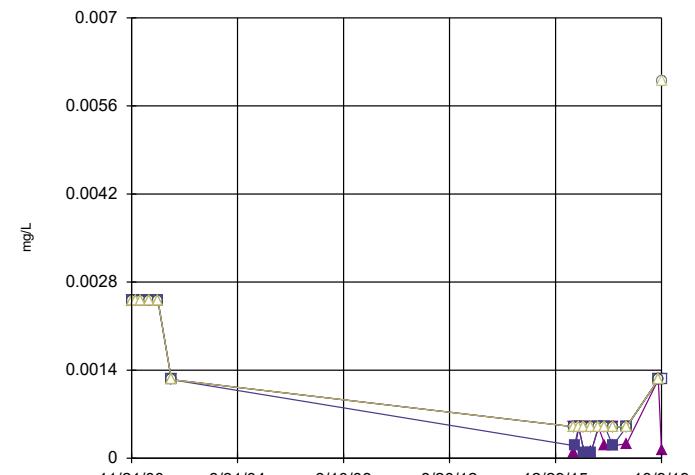
### Cadmium



Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

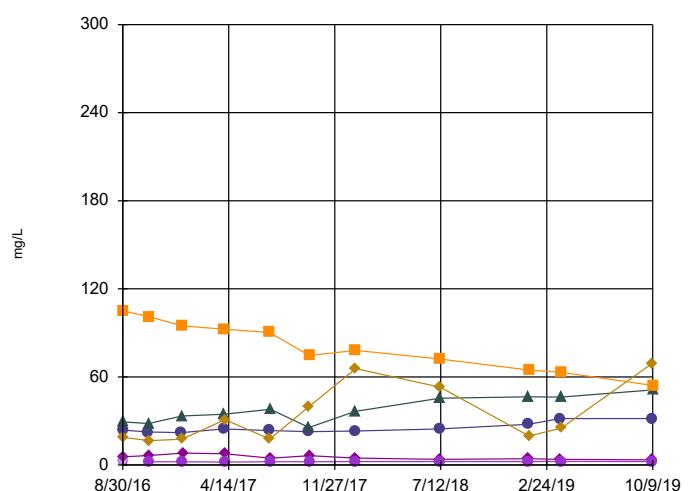
### Cadmium



Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

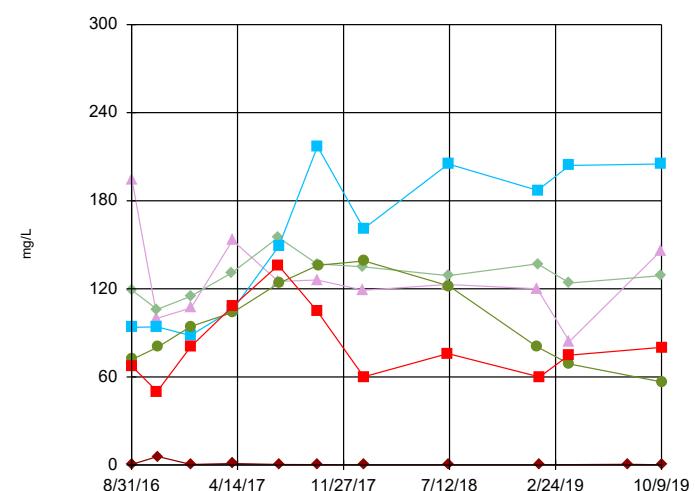
### Calcium



Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

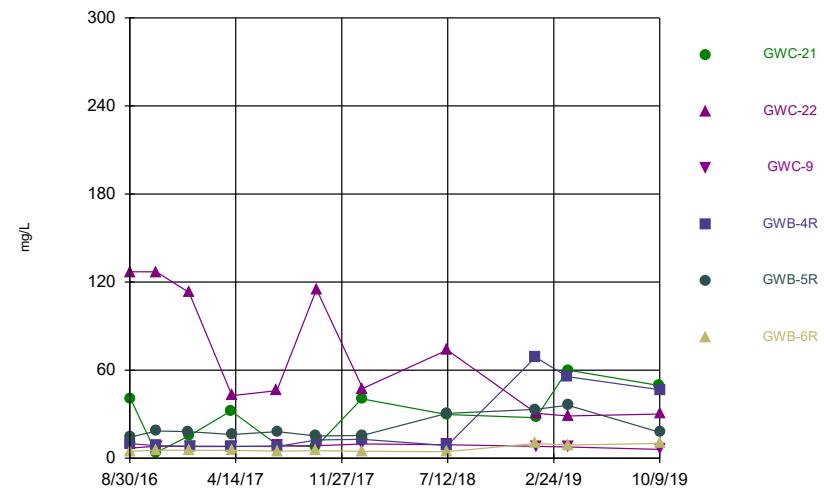
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

### Calcium



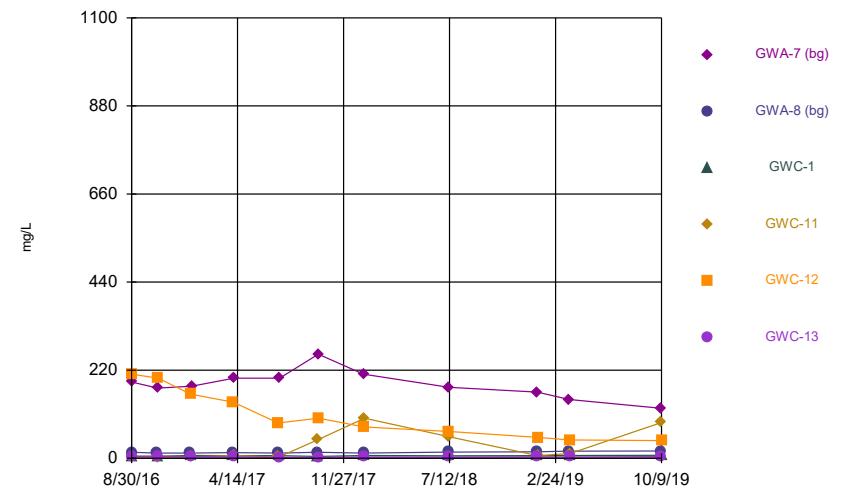
Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Calcium



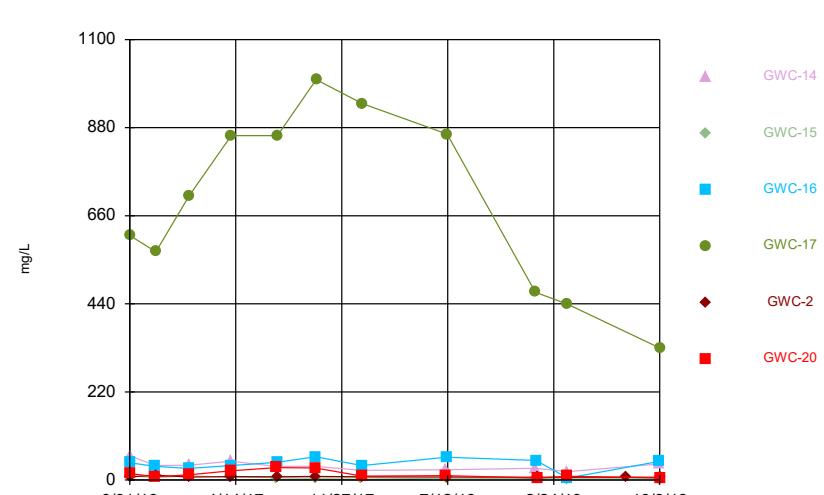
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Grumman Road Landfill Client: Southern Company Data: Grumman Road

Chloride



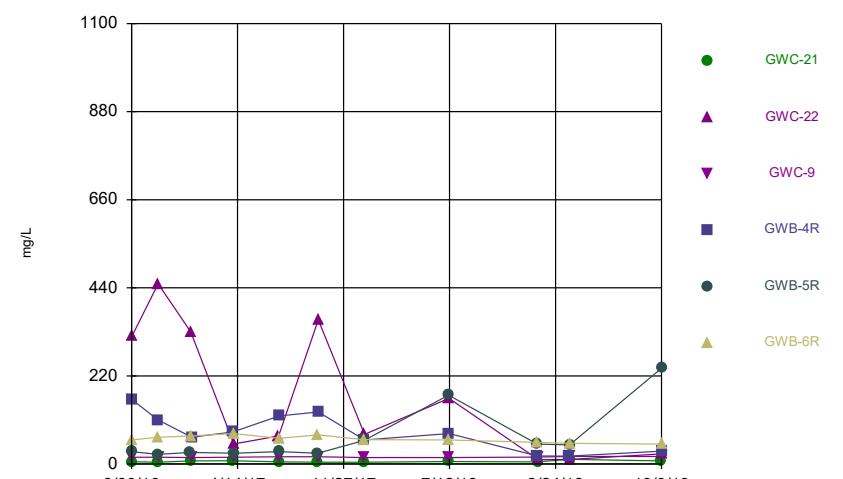
Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Chloride



Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

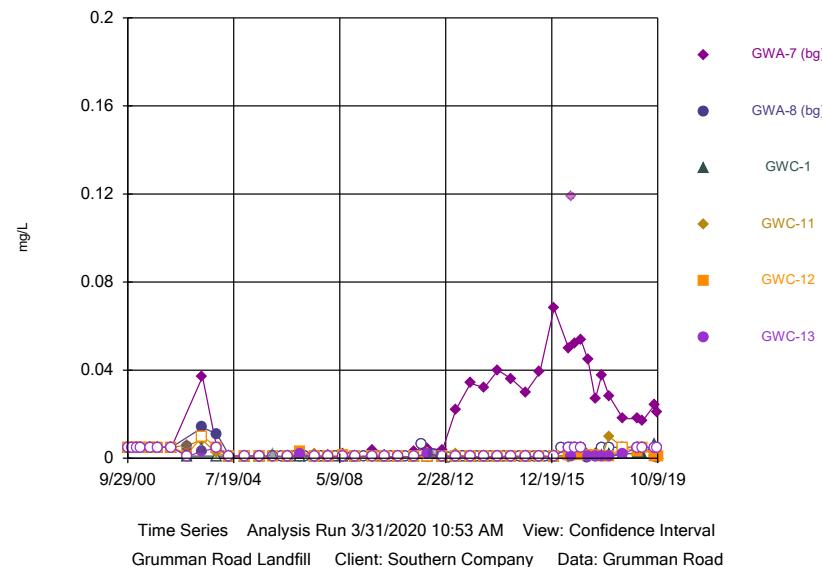
Chloride



Time Series Analysis Run 3/31/2020 10:53 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

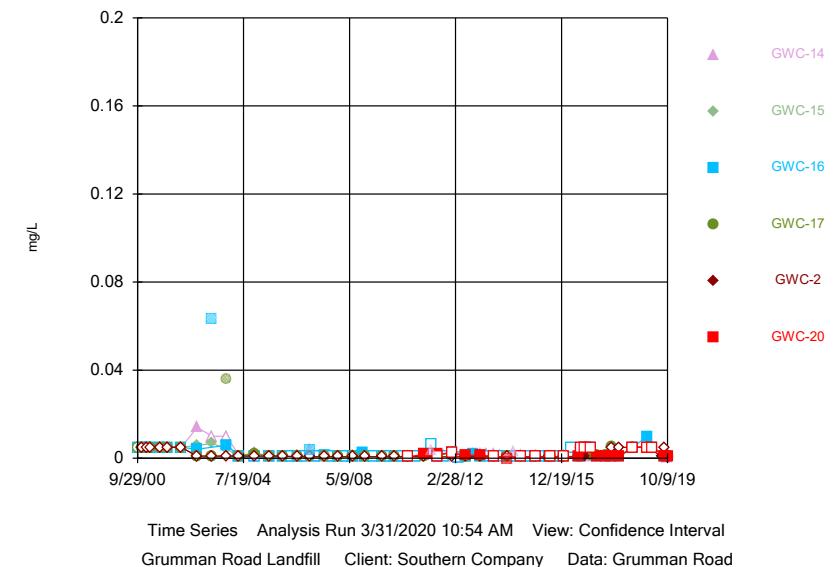
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

### Chromium



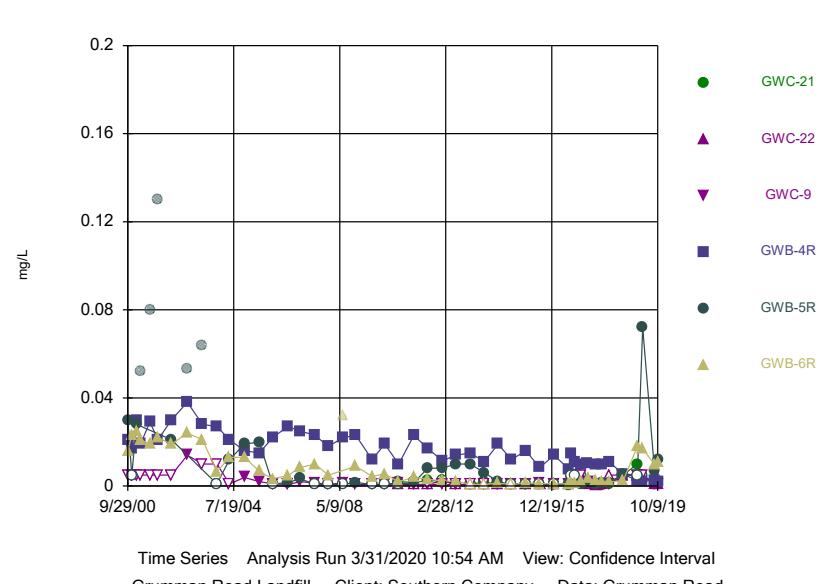
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### Chromium



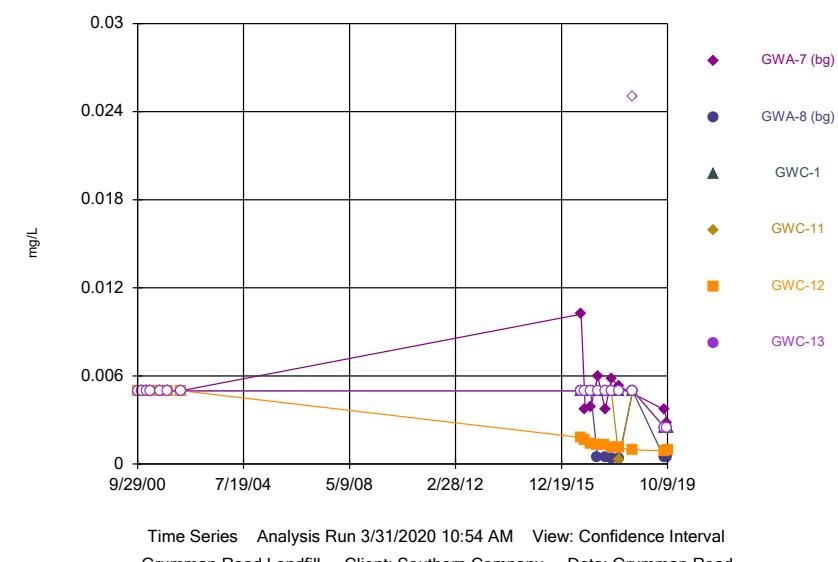
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### Chromium



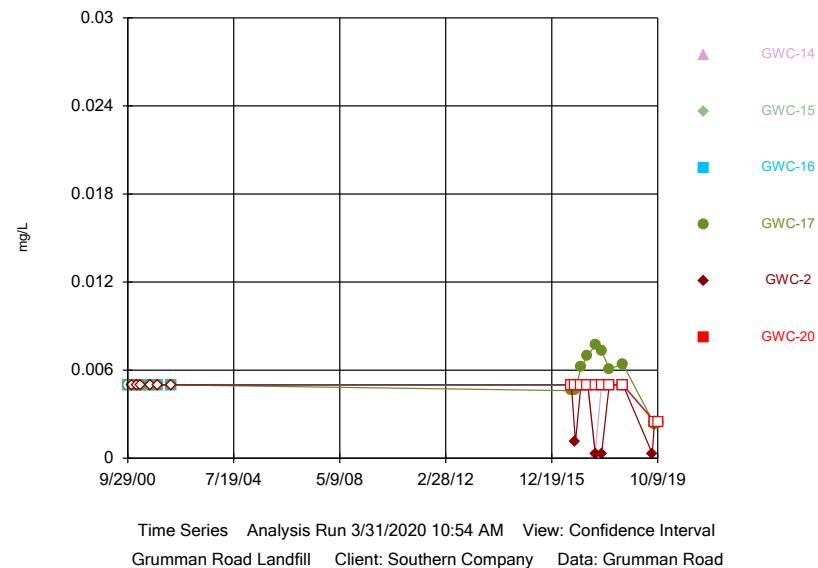
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### Cobalt



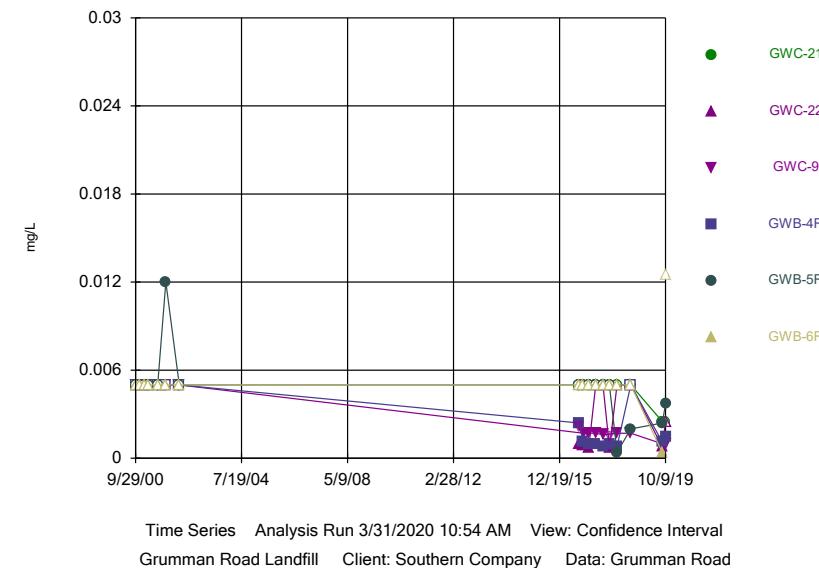
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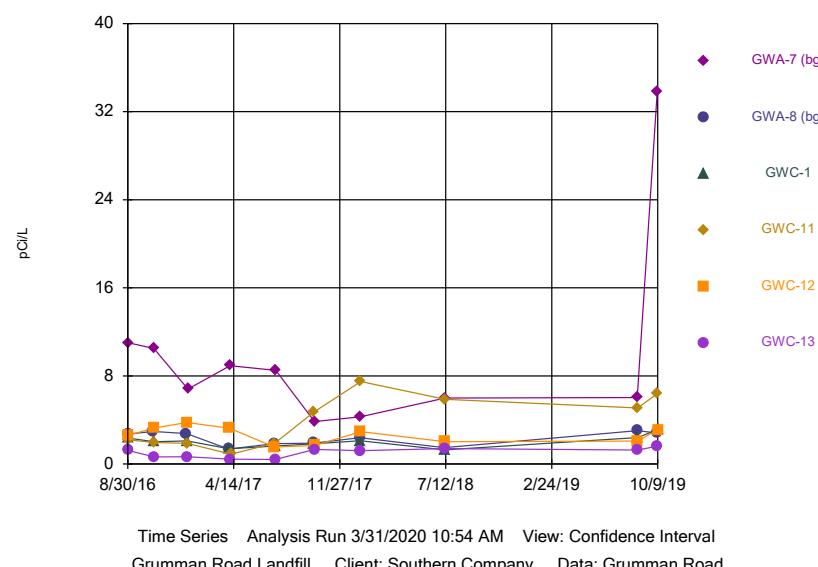
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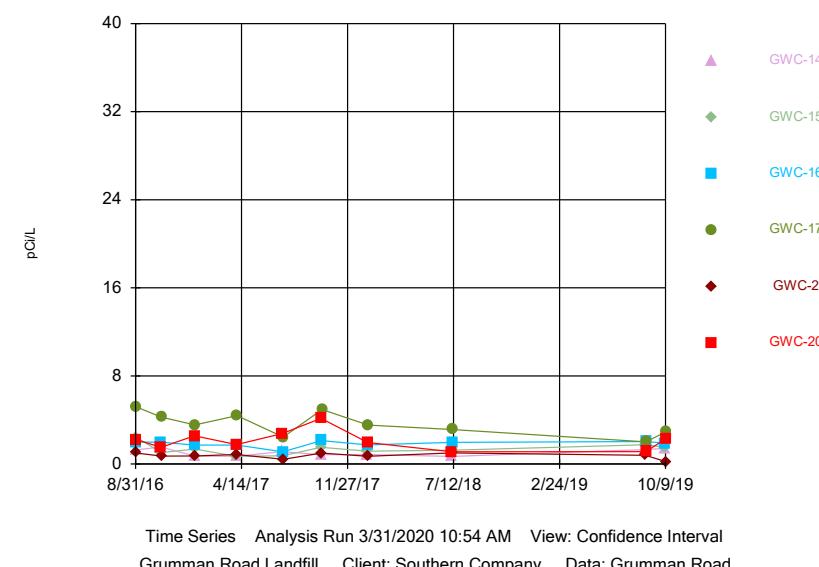
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### Combined Radium 226 + 228

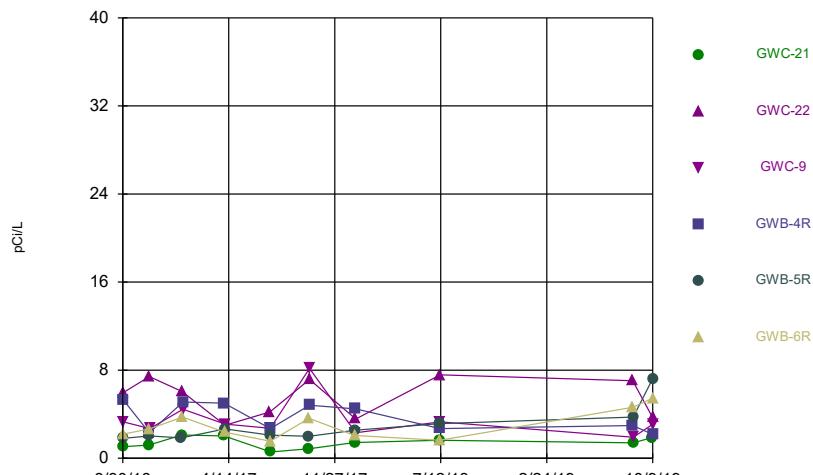


Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

### Combined Radium 226 + 228

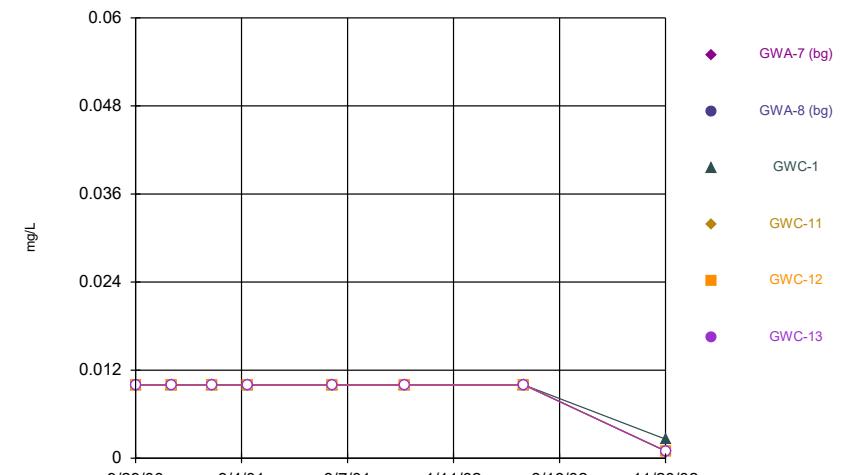


## Combined Radium 226 + 228



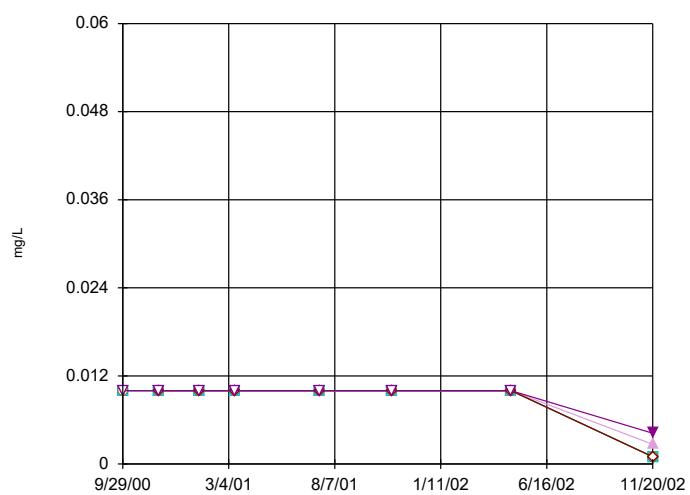
Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Copper



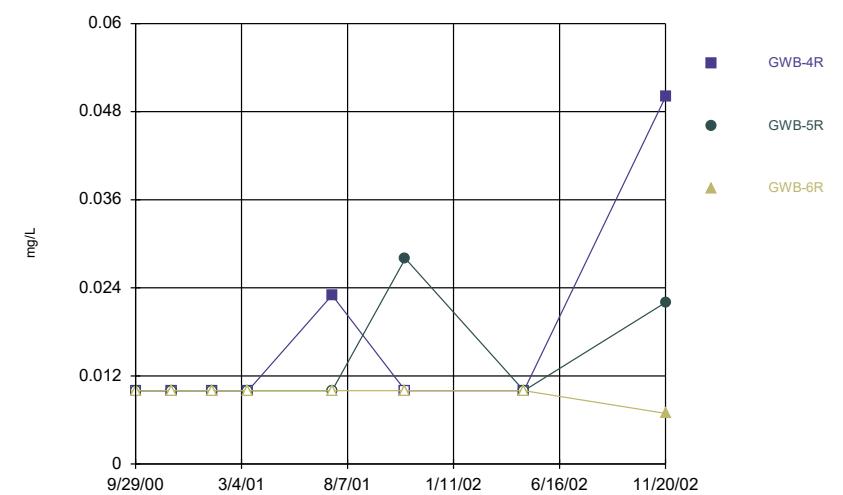
Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Copper



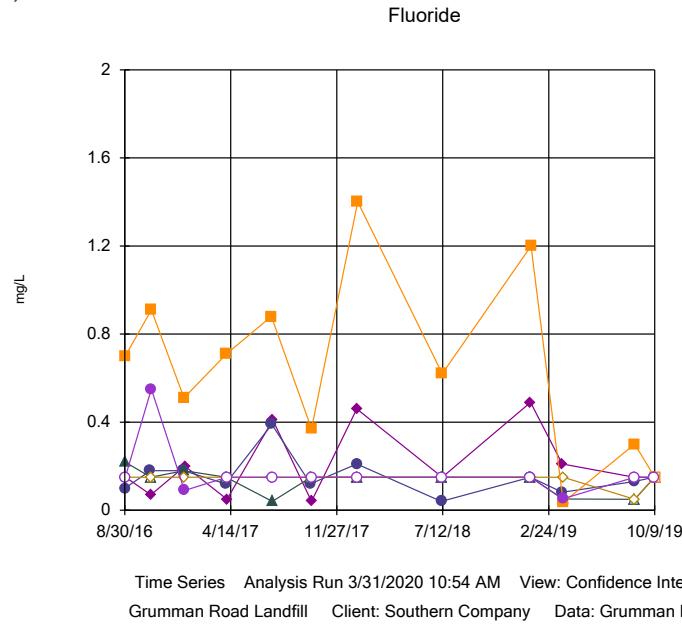
Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Copper

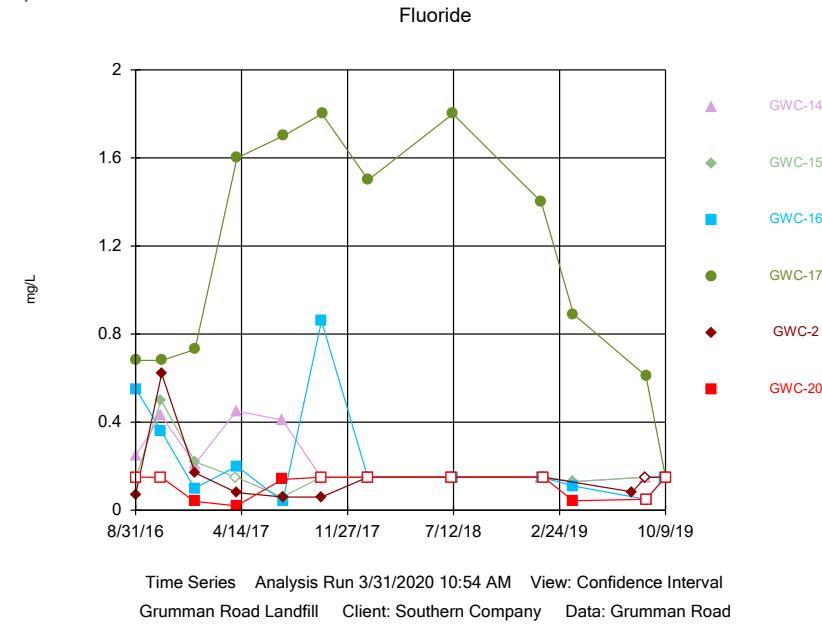


Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

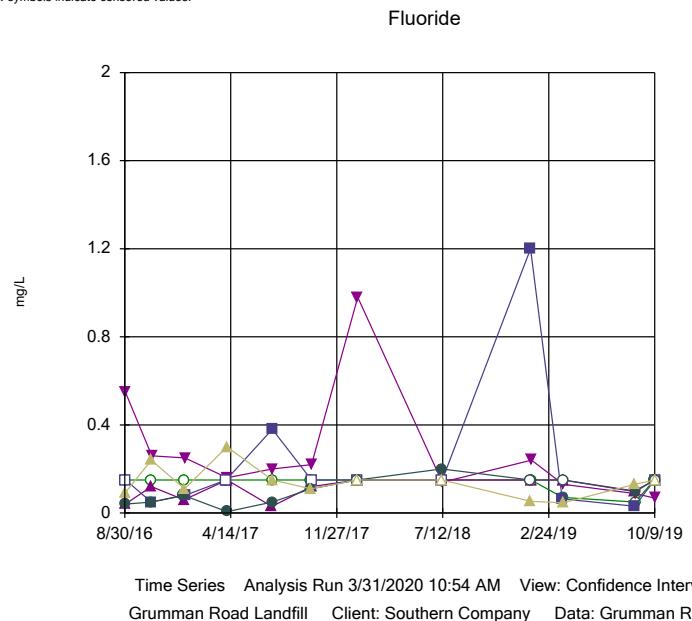
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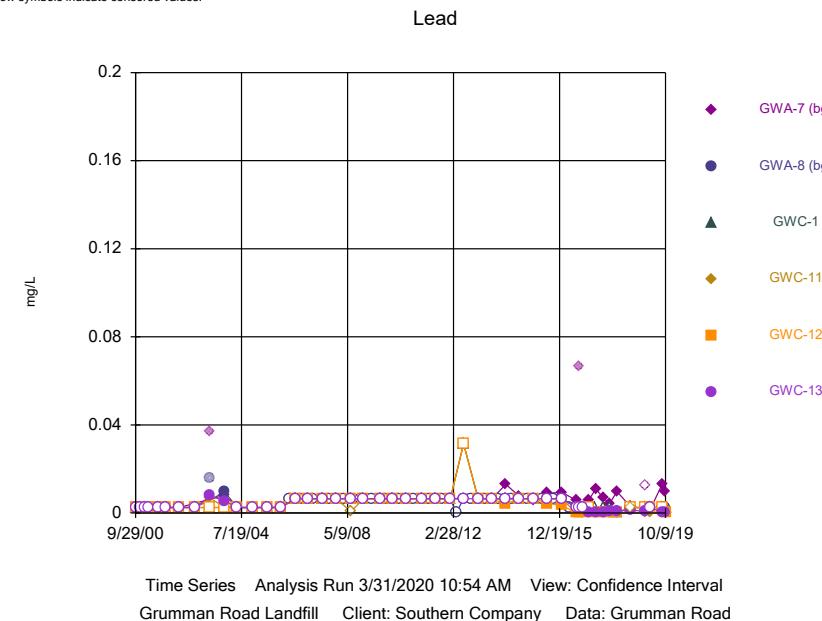
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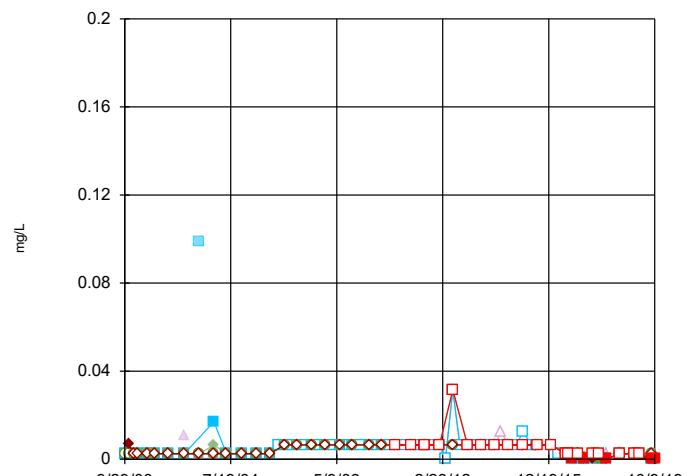


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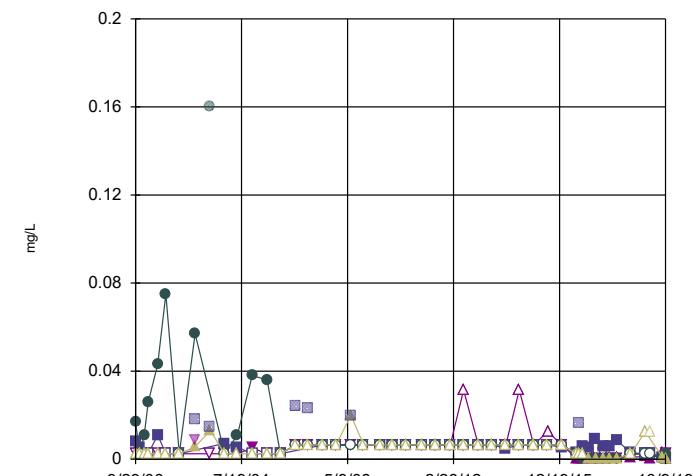
### Lead



Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

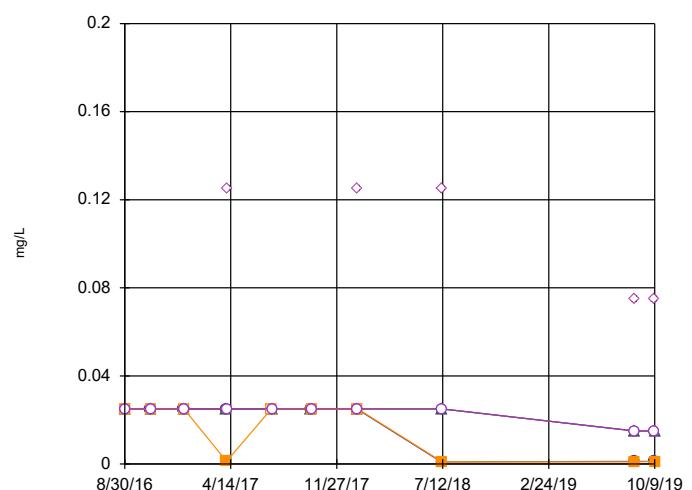
### Lead



Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

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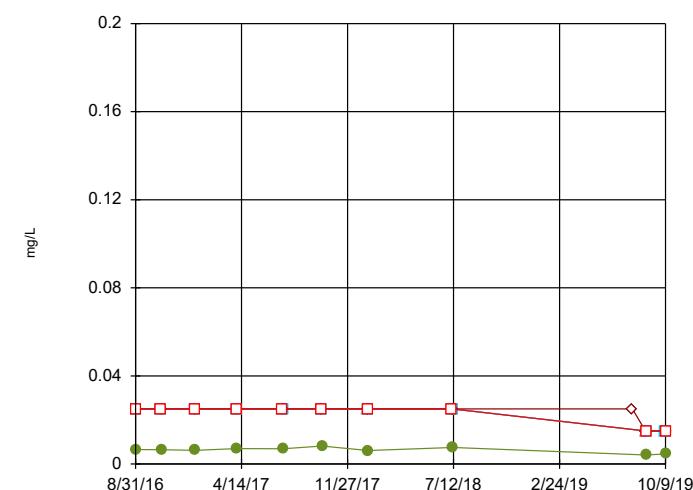
### Lithium



Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

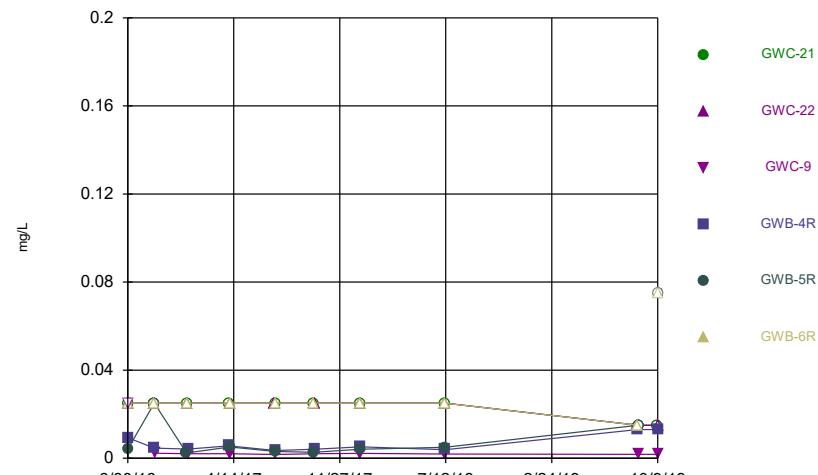
### Lithium



Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

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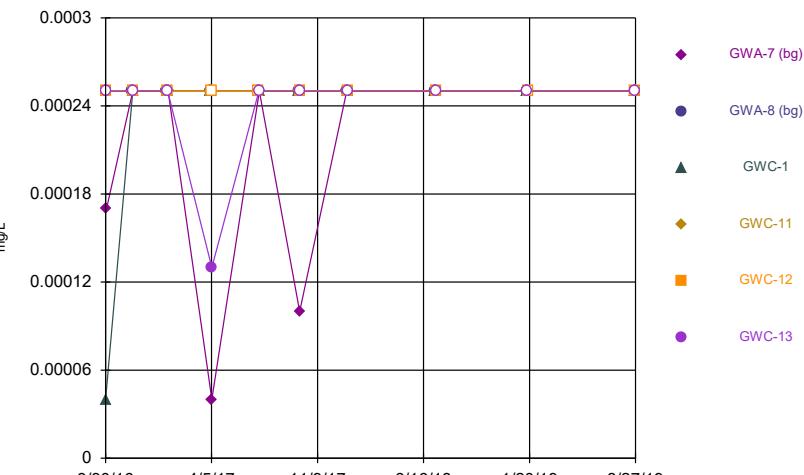
### Lithium



Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
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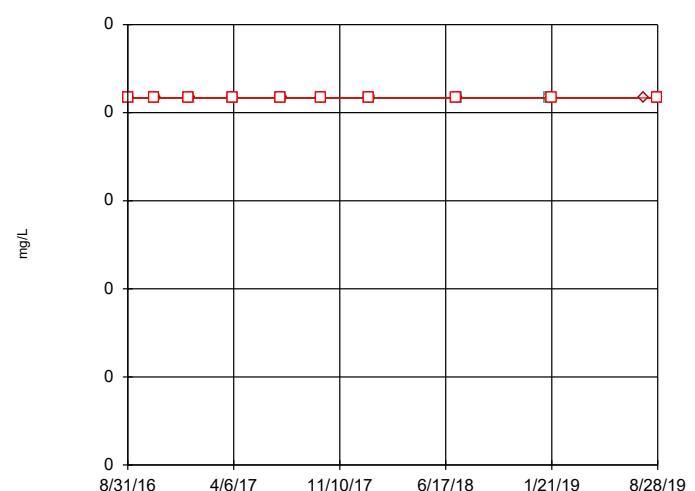
### Mercury



Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

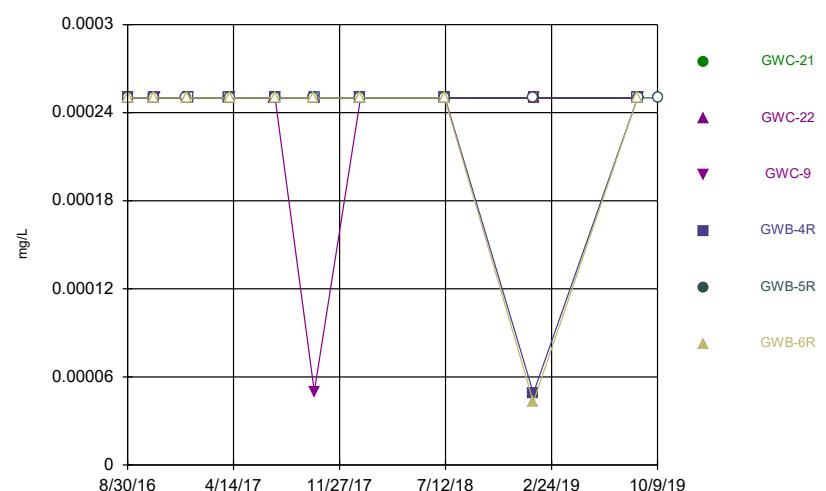
### Mercury



Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

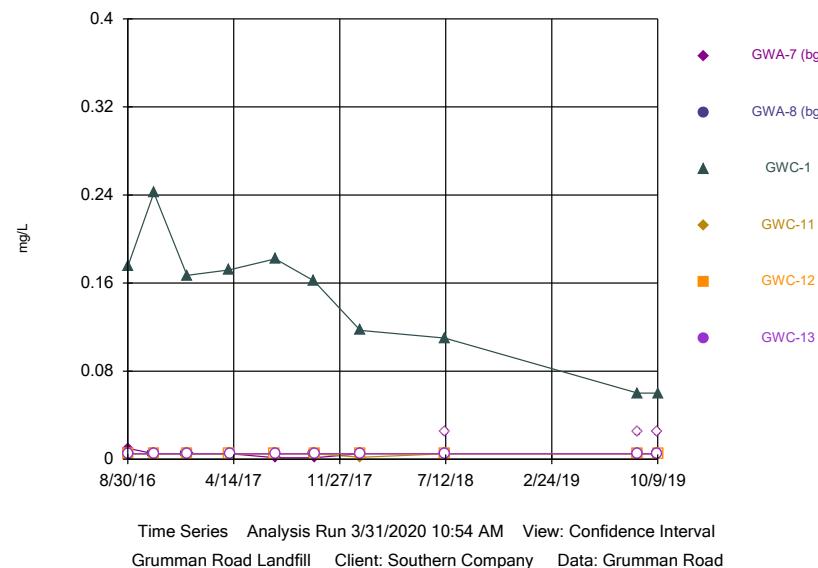
### Mercury



Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

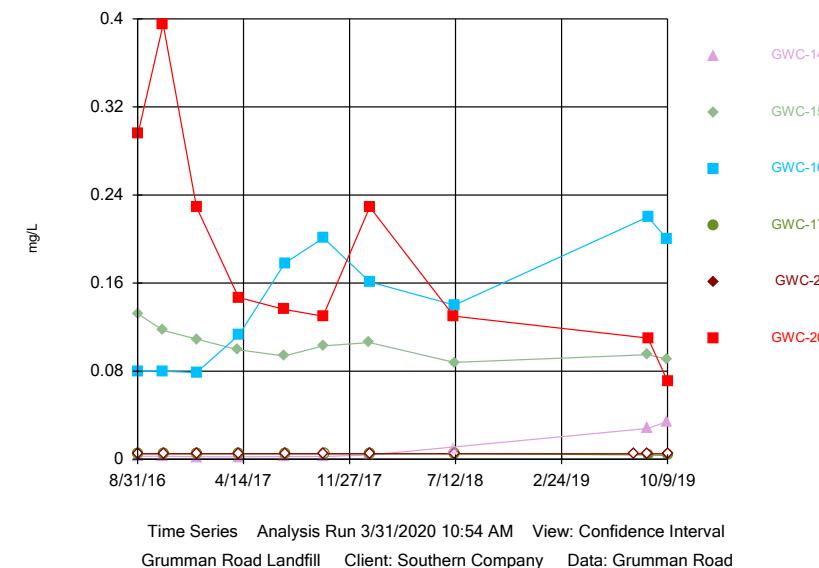
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Hollow symbols indicate censored values.

### Molybdenum



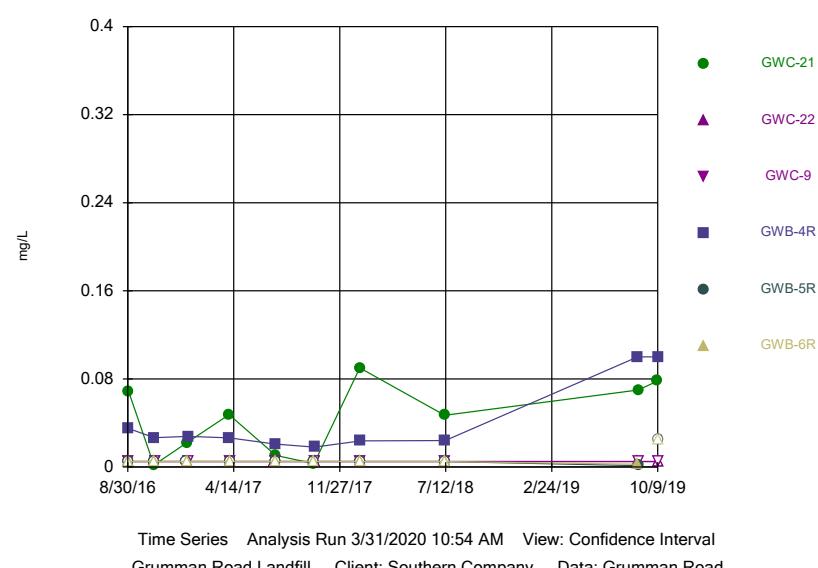
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### Molybdenum



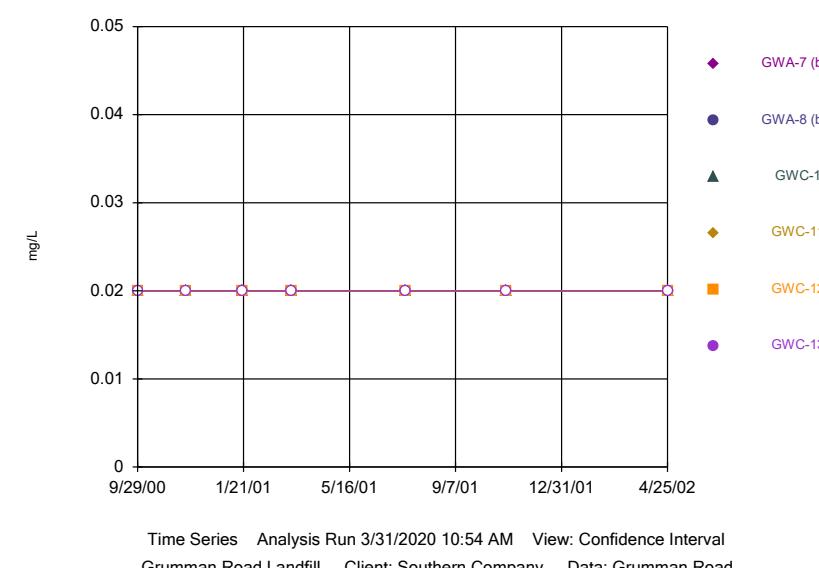
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### Molybdenum



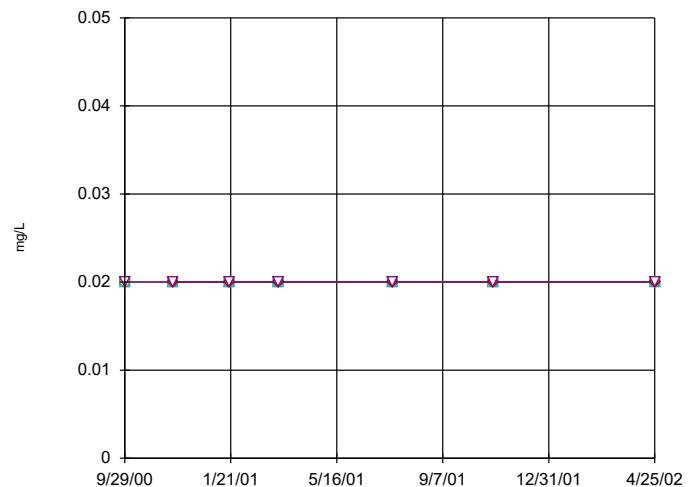
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

### Nickel



Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

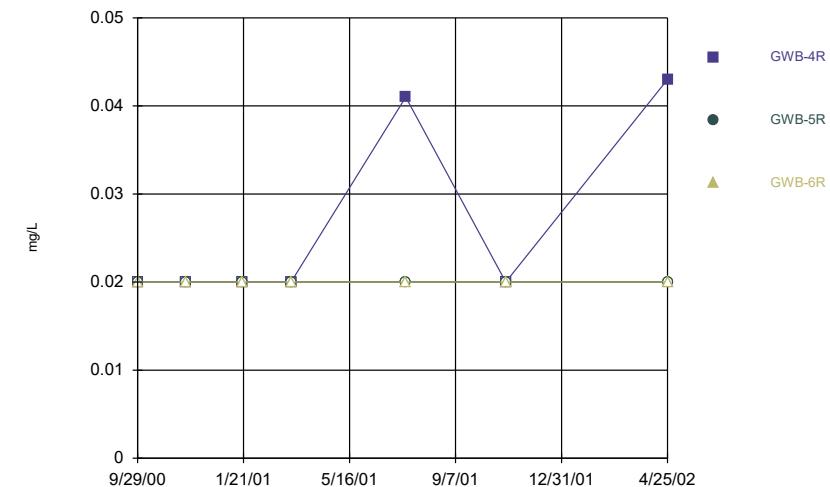
### Nickel



Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

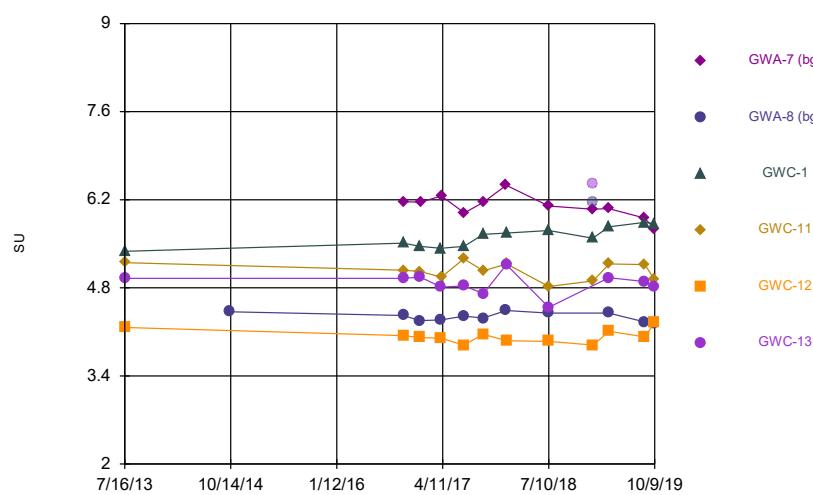
### Nickel



Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

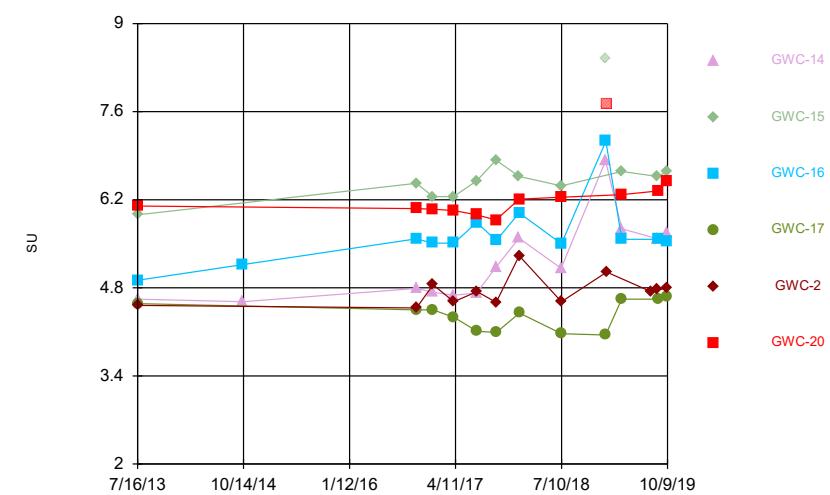
### pH



Time Series Analysis Run 3/31/2020 10:54 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

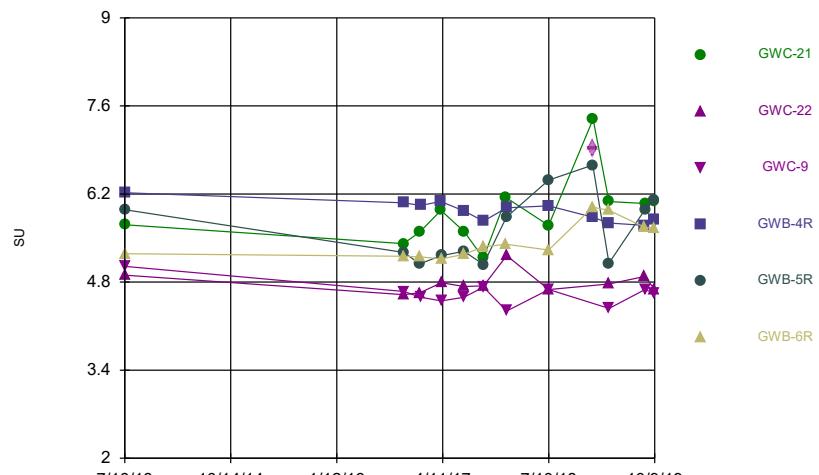
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

### pH

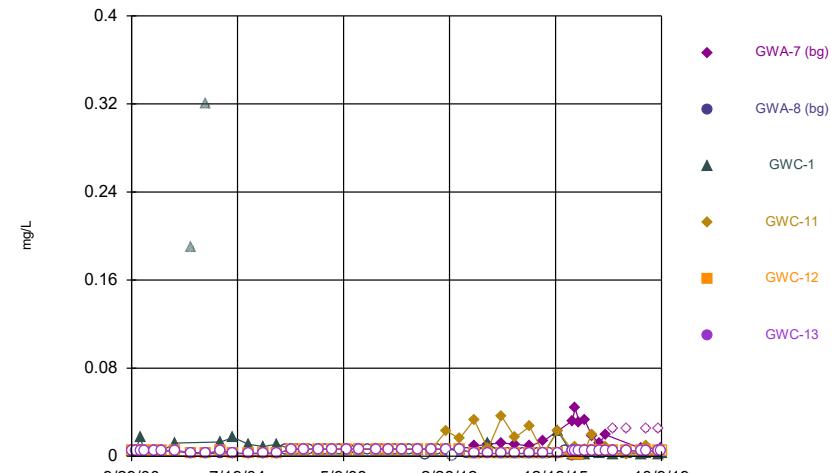


Time Series Analysis Run 3/31/2020 10:55 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

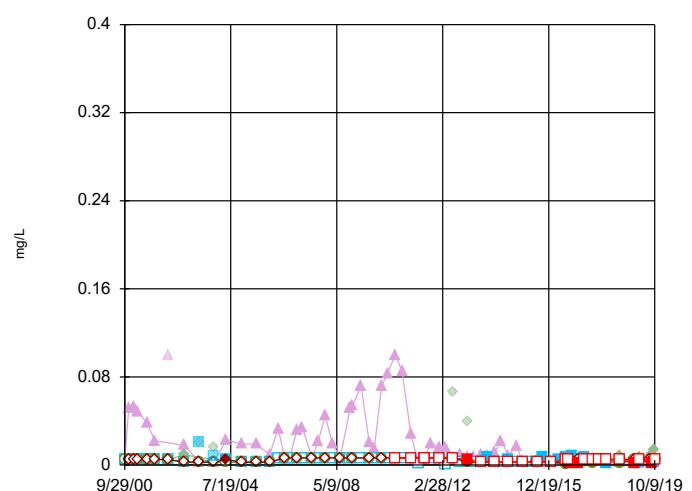
## pH

Time Series Analysis Run 3/31/2020 10:55 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

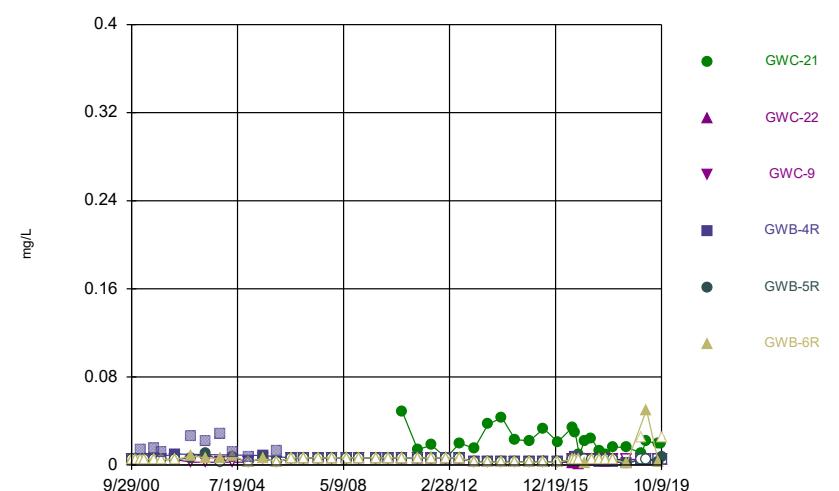
## Selenium

Time Series Analysis Run 3/31/2020 10:55 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Selenium

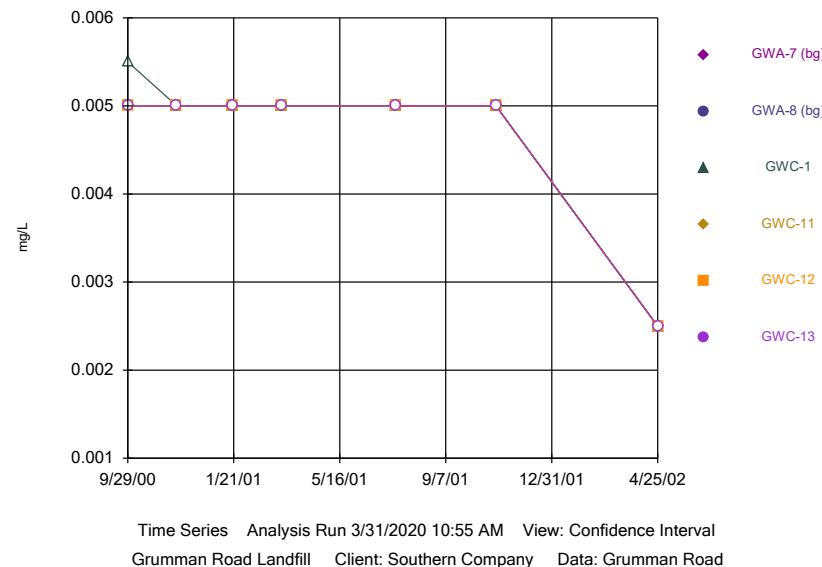
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Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Selenium

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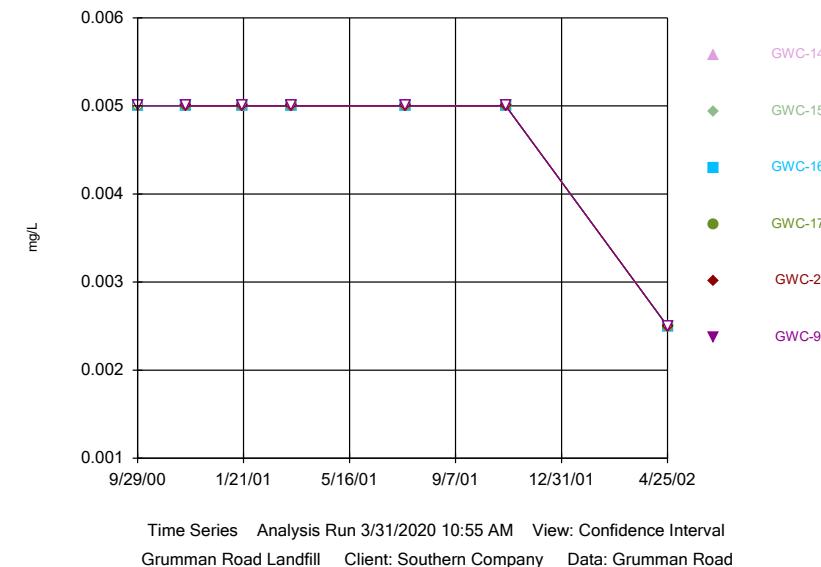
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

### Silver



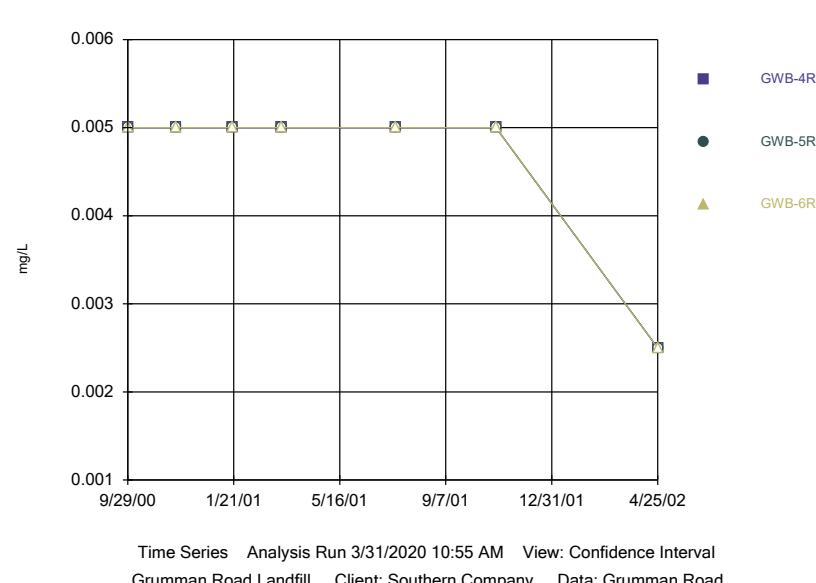
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### Silver



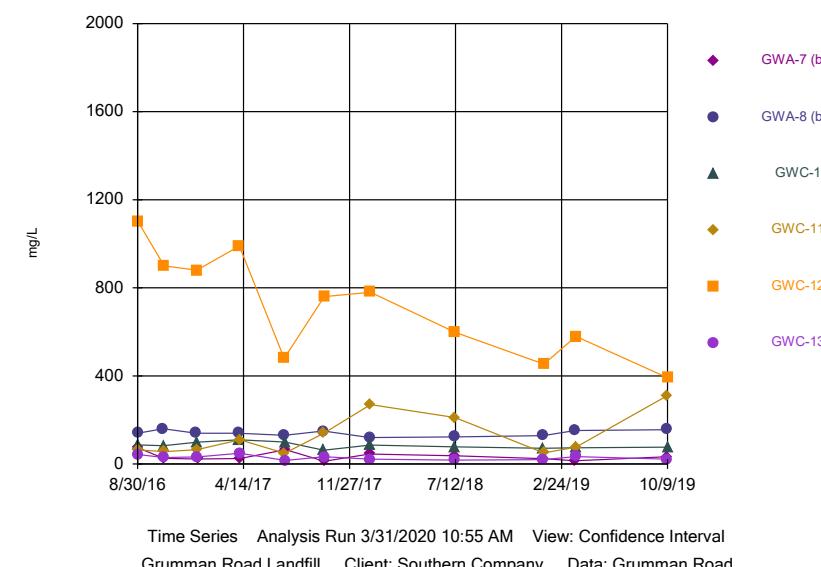
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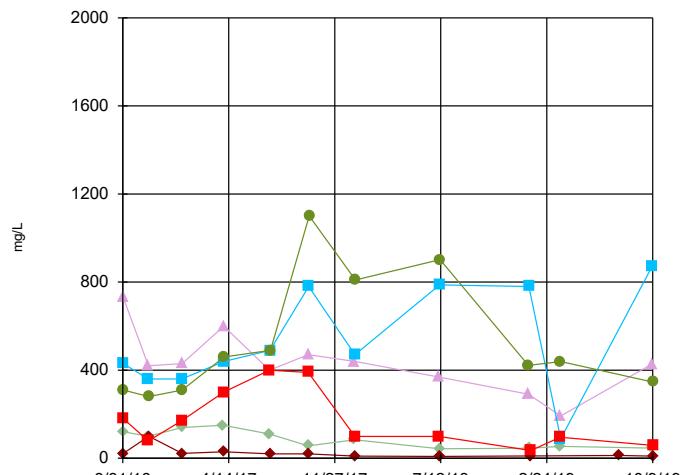
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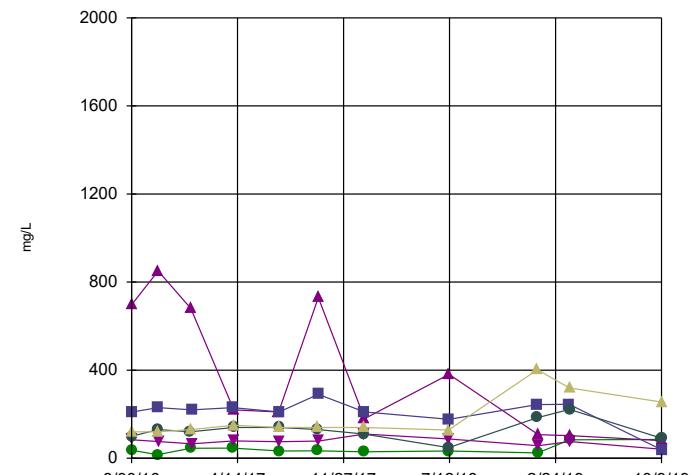
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### Sulfate

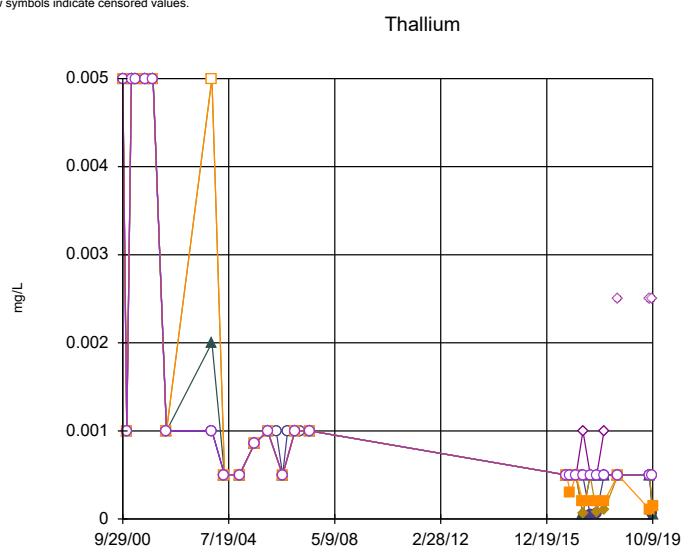


**Sulfate**

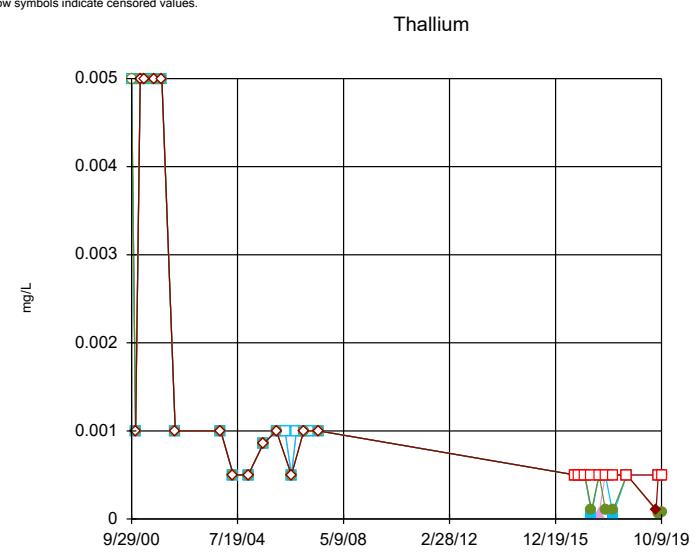
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Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Sulfate**

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Grumman Road Landfill Client: Southern Company Data: Grumman Road

**Thallium**

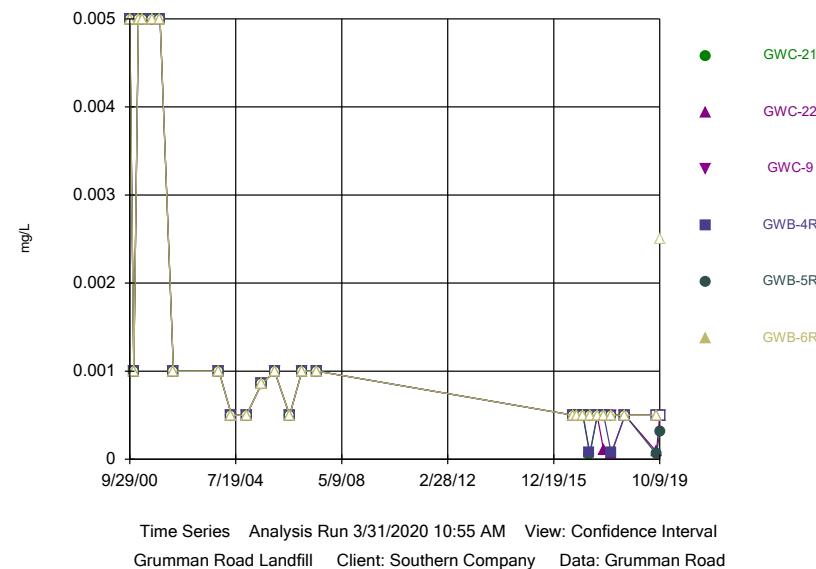
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**Thallium**

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Grumman Road Landfill Client: Southern Company Data: Grumman Road

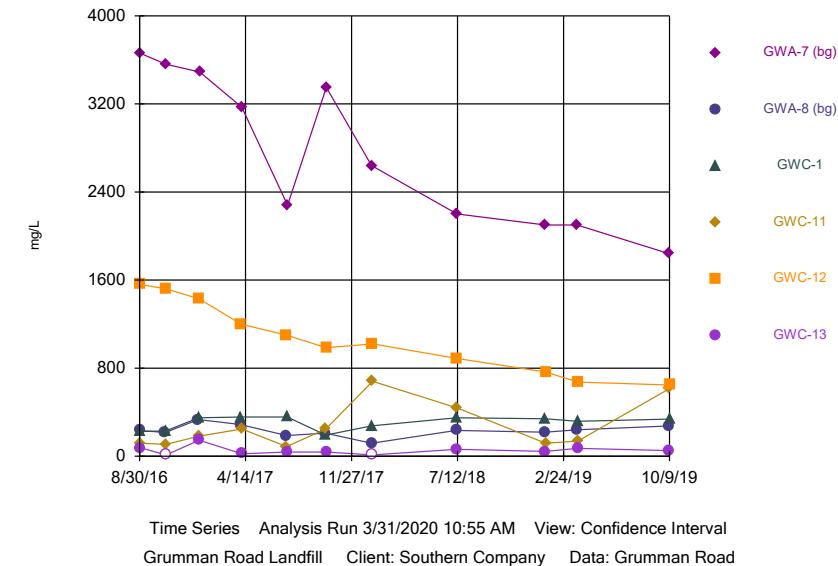
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### Thallium



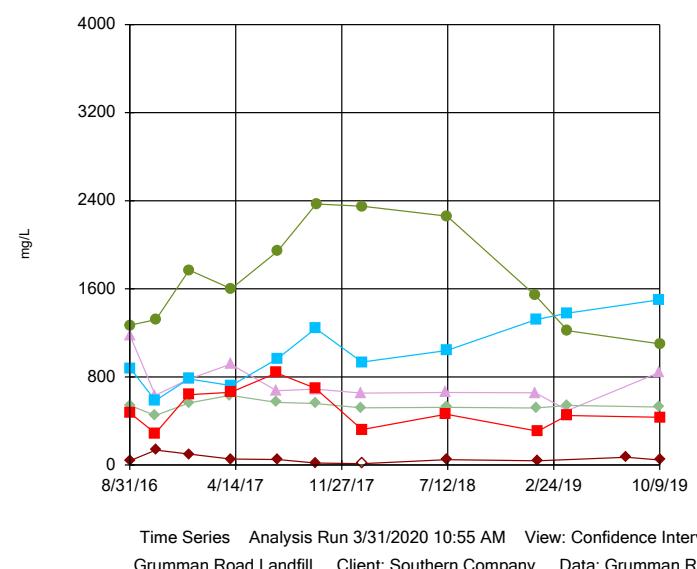
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### Total Dissolved Solids



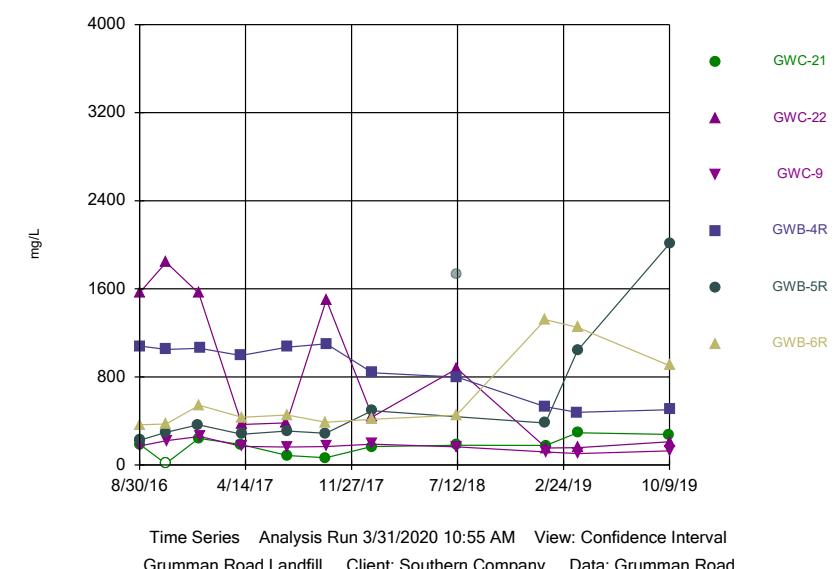
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Hollow symbols indicate censored values.

### Total Dissolved Solids



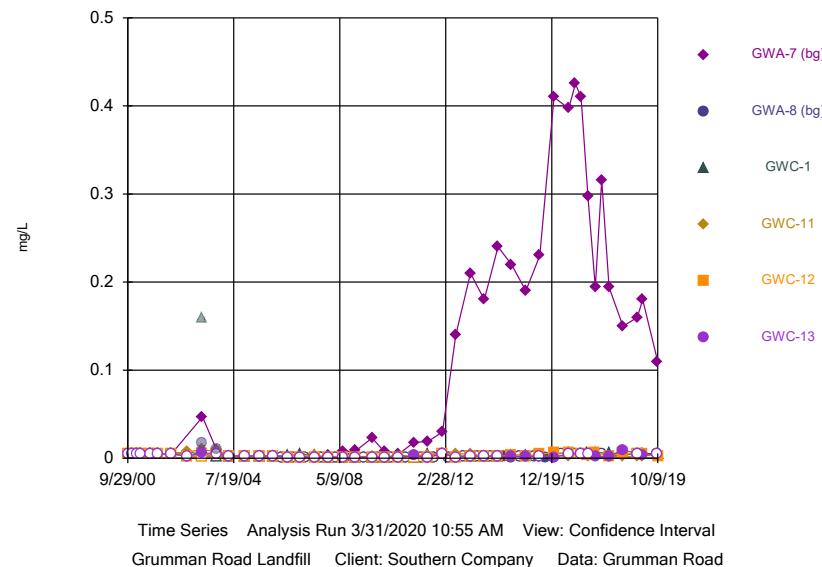
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Hollow symbols indicate censored values.

### Total Dissolved Solids



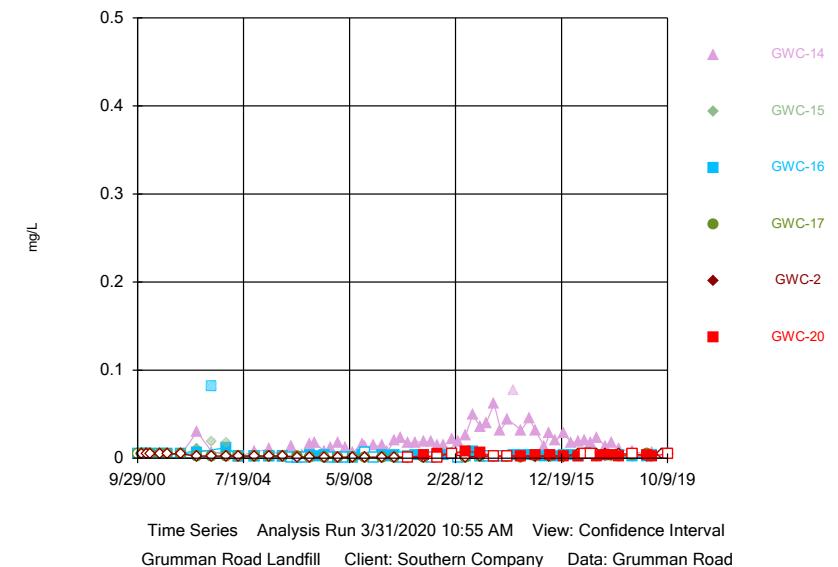
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Hollow symbols indicate censored values.

### Vanadium



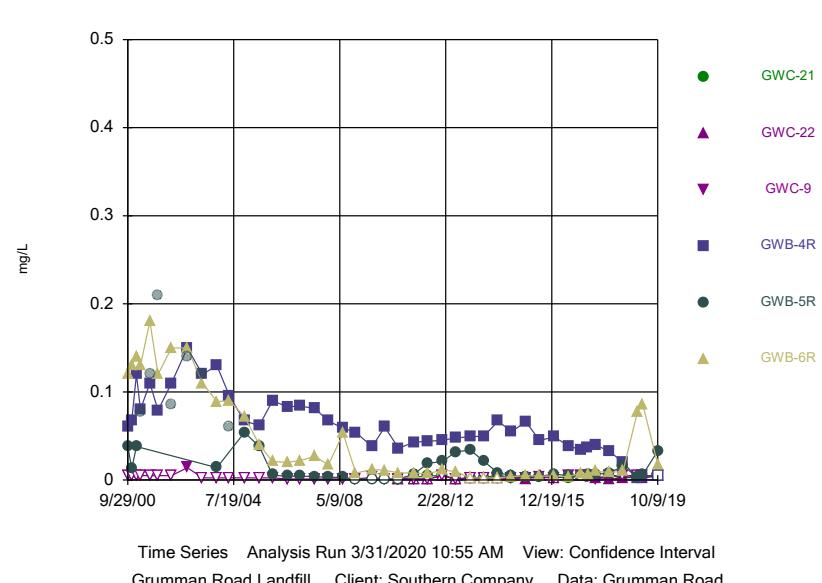
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Hollow symbols indicate censored values.

### Vanadium



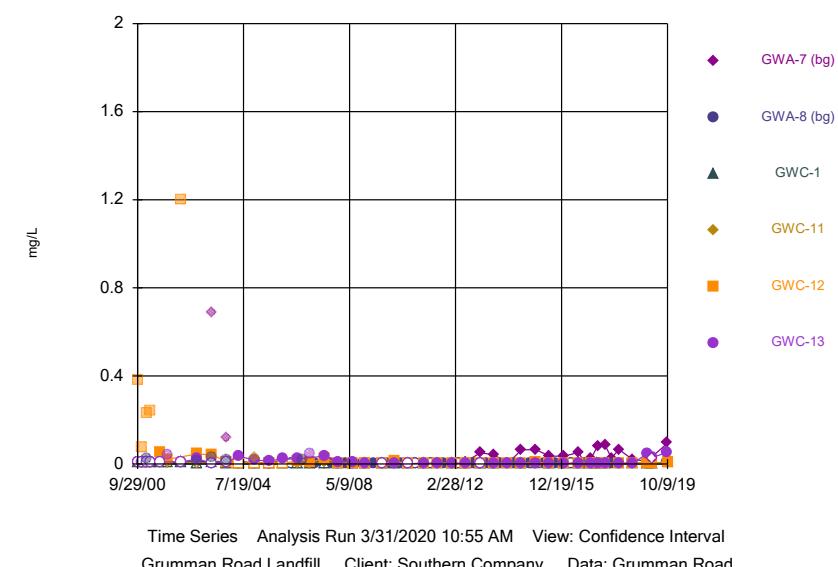
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### Vanadium



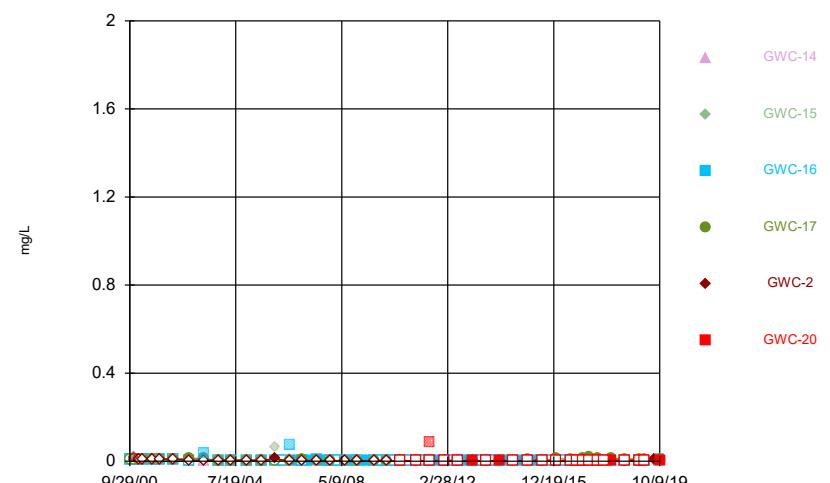
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

### Zinc



Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

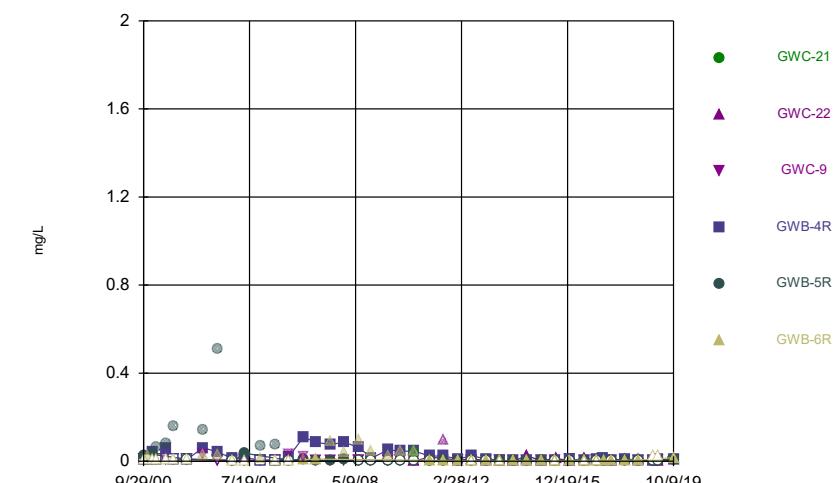
Zinc



Time Series Analysis Run 3/31/2020 10:55 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG  
Hollow symbols indicate censored values.

Zinc



Time Series Analysis Run 3/31/2020 10:56 AM View: Confidence Interval  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



**First 2020 Semiannual  
Statistical Analysis of  
Appendix I, II, III, and IV  
Constituents**

(Completed by Groundwater Stats  
Consulting, LLC)

June 2020

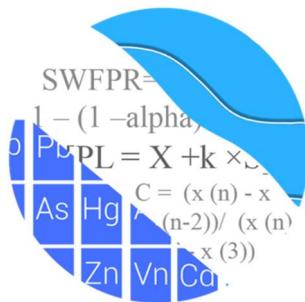
GROUNDWATER  
STATISTICAL  
ANALYSIS

FOR

GRUMMAN ROAD  
LANDFILL

Prepared by:

Groundwater Stats Consulting LLC



## *TABLE OF CONTENTS*

*Narrative* \_\_\_\_\_ **3-17**

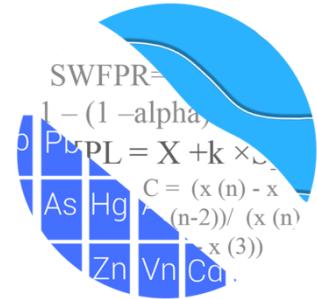
**Summary Tables**

Date Range Report	18
Intrawell Prediction Limits (State)	19-22
Trend Tests (State)	23-24
Intrawell Prediction Limits (Federal)	25-26
Interwell Prediction Limits (Federal)	27-29
Trend Tests (Federal)	30-31
Upper Tolerance Limit (Appendix IV)	32
GWPS Tables (State & Federal)	33-34
Confidence Intervals (State)	35-40
Confidence Intervals (Federal)	41-46
Outlier Summary	47-48

**Reports**

<b>Figure A. Time Series</b>	<b>49-121</b>
<b>Figure B. Box Plots</b>	<b>122-133</b>
<b>Figure C. Outlier Summary</b>	<b>134-136</b>
<b>Figure D. Date Ranges</b>	<b>137-138</b>
<b>Figure E. Intrawell Prediction Limits (State)</b>	<b>139-334</b>
<b>Figure F. Trend Tests (State)</b>	<b>335-340</b>
<b>Figure G. Intrawell Prediction Limits (Federal)</b>	<b>341-388</b>
<b>Figure H. Interwell Prediction Limits (Federal)</b>	<b>389-404</b>
<b>Figure I. Trend Tests (Federal)</b>	<b>405-418</b>
<b>Figure J. Upper Tolerance Limits (Appendix IV)</b>	<b>419-420</b>
<b>Figure K. GWPS Table (State)</b>	<b>421-422</b>
<b>Figure L. GWPS Table (Federal)</b>	<b>423-424</b>
<b>Figure M. Confidence Intervals (State)</b>	<b>425-435</b>
<b>Figure N. Confidence Intervals (Federal)</b>	<b>436-446</b>

GROUNDWATER STATS  
CONSULTING



July 27, 2020

Southern Company Services  
Attn: Ms. Lauren Petty  
3535 Colonnade Parkway  
Birmingham, AL 35243

Re: Plant Kraft's Grumman Road Landfill  
Statistical Analysis – April 2020 Sample Event

Dear Ms. Petty,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of the April 2020 groundwater analysis for Georgia Power Company's Plant Kraft's Grumman Road Landfill. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the CCR program in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. Semi-annual sampling of the majority of Appendix IV constituents has been performed at most wells for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** GWA-7 and GWA-8
- **Downgradient wells:** GWB-4R, GWB-5R, GWB-6R, GWC-1, GWC-2, GWC-9, GWC-11, GWC-12, GWC-13, GWC-14, GWC-15, GWC-16, GWC-17, GWC-20, GWC-21, GWC-22

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Dr. Jim Loftis, Civil & Environmental Engineering professor emeritus at Colorado State University and Senior Advisor to Groundwater Stats Consulting.

The program consists of the following constituents:

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

Data at all wells were evaluated during 2019 for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves were provided at that time to demonstrate that the selected statistical methods comply with the USEPA Unified Guidance. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

## **Summary of Statistical Methods**

### **Georgia EPD Constituents:**

Semi-Annual Sampling

Intrawell Prediction Limits with 1 of 2 resample plan

# Constituents Downgradient: 8

# Downgradient wells: 16

### **CCR Appendix III Constituents:**

Semi-Annual Sampling

Interwell Prediction Limits with 1 of 2 resample plan (calcium, chloride, fluoride, pH and sulfate)

Intrawell Prediction Limits with 1 of 3 resample plan (boron and TDS)

# Constituents Downgradient: 7

# Downgradient wells: 16

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory. Due to varying detection limits, the following substitutions were made for nondetects: 0.003 mg/L for antimony; 0.005 mg/L for arsenic; 0.003 mg/L for beryllium; 0.01 mg/L for chromium; and 0.01 mg/L for selenium.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers.

In the introwell case, data for all wells and constituents may re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, an earlier portion of data is deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

## **Summary of Background Screening – Georgia EPD – Conducted in August 2019**

### Outlier Testing

Time series plots are used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells and parameters are formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, several outliers were identified. A summary of those findings was submitted with that report. As a general rule, when the most recent values are identified as outliers, values are not flagged in the database at this time (except in cases where they would cause background limits to be elevated) as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Additionally, values that are not identified by Tukey's test but that are much higher than the remaining measurements are flagged as appropriate in order to obtain conservative prediction limits that are capable of detecting future changes. A summary of flagged values follows this letter (Figure C). When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

### Seasonality

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

### Trend Testing

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test, which tests for statistically significant increasing or decreasing trends, was used to evaluate data at all upgradient wells and downgradient wells with detections.

In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different from current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits. A summary of the trend analyses was submitted with the screening report.

A large number of statistically significant increasing and decreasing trends were noted in both upgradient and downgradient wells. In most cases, similar patterns existed across the wells, and several records were truncated to remove the variation within a given record and to construct statistical limits that reflect present-day groundwater quality conditions. However, in a few cases, more recent reported measurements had increased to concentrations that were higher than background concentrations within a given record and higher than those observed upgradient of the facility (arsenic in wells GWC-15 and GWC-20; and barium in well GWC-9). More recently, however, the barium concentrations in well GWC-9 have decreased and are similar to historical values as wells as those reported upgradient of the facility. While prediction limits are included in this report for these well/constituent pairs, trend tests are recommended lieu of prediction limits in future analyses for arsenic in wells GWC-15 and GWC-20 until further research provides clearer evidence as to the cause of the increased concentrations. That study is beyond the scope of this analysis prepared by Groundwater Stats Consulting. All well/constituent pairs utilize all available background data through July 2018, except for the special cases

with truncated records. A list of the background periods utilized for the wells with truncated records follows this letter (Figure D).

#### Determination of Spatial Variation

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells for constituents detected in downgradient wells. The ANOVA assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells are not representative of the current background data population; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified significant differences among upgradient well data for all constituents. Therefore, intrawell prediction limits are recommended as the most appropriate statistical method. Additionally, this is a lined landfill with pre-waste data showing that metals occur naturally in low level concentrations. Records that required adjusting of the background time period exhibited similar patterns to those observed in at least one of the upgradient wells. For the records showing increasing concentrations which cannot be explained by causes other than the facility, trend tests are recommended in lieu of prediction limits as discussed previously.

#### **Summary of Background Screening – CCR Parameters – Conducted in March 2019**

##### Outlier and Trend Testing

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, several outliers were identified. A summary of those findings was included with the screening report. When the most recent values are identified as outliers, values were not flagged in the database at this time (except in cases where they would cause background limits to be elevated) as they may represent a possible trend. If future values do not remain at similar concentrations, these values will

be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Of the outliers identified by Tukey's method, several values were flagged in the database, and the remaining values were similar to other measurements within a given well or neighboring wells or were reported nondetects. A summary of all flagged values follows this report (Figure C).

Additionally, when any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data. In cases where the laboratory reported a higher reporting limit for the most recent event, the historical and lower reporting limit was substituted as discussed earlier.

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

The results of the Sen's Slope/Mann Kendall trend analyses showed a number of statistically significant increasing and decreasing trends for the Appendix III parameters. Most of the statistically significant trends were relatively low in magnitude when compared to average concentrations, and the background period is short, making it difficult to determine whether an apparent trend represents normal year-to-year variation; therefore, no adjustments were made to the data sets.

### Appendix III – Determination of Spatial Variation

The ANOVA identified no variation among upgradient well data for fluoride, making interwell analyses the most appropriate statistical method for this constituent. Variation was noted for boron, calcium, chloride, pH, sulfate and TDS. These constituents were further evaluated as described below for the appropriateness of intrawell testing to accommodate the groundwater quality.

### Appendix III – Intrawell Method Eligibility Screening

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. Prior to performing intrawell prediction limits, several steps are required to reasonably demonstrate downgradient water quality does not have existing impacts from the practices of the facility.

Exploratory data analysis was used as a general comparison of concentrations in downgradient wells to concentrations reported in upgradient wells for Appendix III parameters. While all Appendix III parameters are included, this is particularly useful for justifying the appropriateness for parameters where intrawell methods are recommended (based on the ANOVA results).

Upper tolerance limits are used in conjunction with confidence intervals to determine whether the estimated averages in downgradient wells are higher than observed levels upgradient of the facility. The upper tolerance limits were constructed to represent the extreme upper range of possible background levels at the site. Two-sided tolerance limits are included for pH and represent both the upper and lower ranges of possible measurements in background wells.

In cases where downgradient average concentrations are higher than observed concentrations upgradient for a given constituent where intrawell analyses are recommended, an independent study and hydrogeological investigation would be required to identify local geochemical conditions and expected groundwater quality for the region to justify an intrawell approach. Such an assessment is beyond the scope of services provided by Groundwater Stats Consulting. When there is not an obvious explanation for observed concentration differences in downgradient wells relative to reported concentrations in upgradient wells, interwell prediction limits will initially be selected for the statistical method until further evidence shows that concentrations are due to natural variation rather than a result of the facility.

Parametric tolerance limits were constructed with a target of 99% confidence and 95% coverage using pooled upgradient well data for each of the Appendix III parameters. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As more data are collected, the background population is better represented and the confidence and coverage levels increase.

Confidence intervals were constructed on downgradient wells for each of the Appendix III parameters, using the tolerance limits discussed above, to determine introwell eligibility where applicable. Parametric confidence intervals around the population mean are constructed at the 99% confidence level when data follow a normal distribution, and around the geometric mean (or population median) when data follow a transformed-normal distribution.

Non-parametric confidence intervals are constructed when data do not pass a normality test and cannot be normalized via a transformation. The confidence level associated with the non-parametric tests is dependent on the number of values used to construct the interval. Confidence intervals require a minimum of four samples; however, eight samples are recommended. When a well/constituent pair does not have the required minimum sample size, the well/constituent pair will continue to be reported and tracked using time series plots and/or trend tests until such time that enough data are available.

When the entire confidence interval is above a background standard for a given parameter, interwell methods are initially recommended as the statistical method. Note that this screening identifies whether confidence intervals are above a background standard, but does not identify the reason for this occurrence. Therefore, only the wells/parameters with confidence intervals which did not exceed background standards are eligible for introwell prediction limits.

For parameters where introwell analyses are recommended, there was at least one confidence interval exceedance for each parameter except boron and TDS; therefore, interwell methods are initially recommended for calcium, chloride, fluoride, pH and sulfate, while introwell methods are recommended for boron and TDS. If further evaluation confirms natural variation in groundwater, introwell methods will be considered for parameters currently recommended for interwell methods.

### **Statistical Analysis of Georgia EPD Constituents – April 2020**

Introwell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. The most recent sample from the same well is compared to its respective background. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility.

In cases where downgradient average concentrations are higher than observed concentrations upgradient for a given constituent where intrawell analyses are recommended, the current assumption is that this is due to natural spatial variation rather than a result of practices at the landfill, with the exceptions noted above. Validation of this assumption requires a separate analysis or investigation that is beyond the scope of this data screening study. However, for this site, the pre-waste data support the assumption of natural variation rather than impacts of the landfill.

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed using all available data within each well with detections through July 2018 (Figure E). When the April 2020 samples were compared to these limits, the following prediction limit exceedances were noted:

- Arsenic: GWC-1, GWC15
- Barium: GWC-14, GWC-16, GWC-20

As previously discussed, no statistical analyses were included for well/constituent pairs where there are 100% nondetects in the downgradient well.

Data from downgradient well/constituent pairs found to exceed their respective prediction limit were further evaluated using the Sen's Slope/Mann Kendall trend test along with upgradient wells for the same constituents (Figure F). Trend tests for arsenic in wells GWC-15 and GWC-20 were included as discussed previously. Upgradient wells are also included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. Such patterns are an indication of natural variability in groundwater unrelated to practices at the site.

The following statistically significant increasing trends were noted:

- Arsenic: GWA-7 (upgradient), GWC-15, GWC-20
- Barium: GWC-20

The following statistically significant decreasing trends were noted:

- Arsenic: GWA-8 (upgradient), GWC-1
- Barium: GWA-8 (upgradient); GWC-14

When similar significant trends are noted upgradient of the facility, it is an indication that groundwater concentrations are naturally changing over time. A summary of the trend test results follows this letter.

### **Statistical Analysis of Appendix III Parameters – April 2020 Sample Event**

#### Intrawell Prediction Limits

Intrawell prediction limits, combined with a 1-of-3 resample plan, were constructed using all available data within each well through July 2018 for boron and TDS (Figure G). Intrawell prediction limits use screened historical data within a given well to establish limits for parameters at that well. The most recent sample from the same well is compared to its respective background. In the event of an initial exceedance of compliance well data, the 1-of-3 resample plan allows collection of up to 2 additional samples, to determine whether the initial exceedance is confirmed. When all resamples confirm the initial exceedance, a statistically significant increase (SSI) is identified and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no further action is necessary.

The following intrawell prediction limit exceedances were noted:

- Boron:      GWB-6R, GWC-11, GWC-16
- TDS:        GWB-6R, GWC-11, GWC-16

Historical concentrations for boron and TDS in upgradient well GWA-7 are significantly higher than those reported currently, which are similar to those reported in downgradient wells GWB-6R, GWC-11 and GWC-16, which may be an indication of naturally changing groundwater unrelated to practices at the facility. Additionally, the majority of the concentrations of boron in well GWC-11 are similar to those reported in upgradient well GWA-8. Further studies beyond the scope of this analysis would be needed to fully understand the groundwater chemistry downgradient as it relates to the groundwater chemistry observed upgradient of the facility.

#### Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using pooled upgradient well data through April 2020 to develop background limits for calcium, chloride, fluoride, pH and sulfate (Figure H). In the event of an initial exceedance of

compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no further action is necessary. The most recent sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs). Summary tables of the prediction limits follow this letter.

The following interwell prediction limit exceedances were noted:

- Calcium: GWC-11, GWC-12, GWC-14, GWC-15, GWC-16, GWC-17, GWC-20, GWC-22, GWB-4R
- Chloride: GWC-17
- Fluoride: GWC-17
- pH: GWC-12, GWC-15
- Sulfate: GWC-11, GWC-12, GWC-14, GWC-16, GWC-17, GWC-20, GWC-22, GWB-4R, GWB-5R, GWB-6R

### Trend Tests

Data from downgradient well/constituent pairs found to exceed their respective prediction limit were further evaluated using the Sen's Slope/Mann Kendall trend test along with upgradient wells for the same constituents (Figure I). Upgradient wells are also included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. Such patterns are an indication of natural variability in groundwater unrelated to practices at the site.

The following statistically significant increasing trends were noted:

- Boron: GWC-16
- Calcium: GWA-8 (upgradient), GWC-11, GWC-16
- pH: GWC-15
- TDS: GWC-16

The following statistically significant decreasing trends were noted:

- Boron: GWA-7 (upgradient)
- Calcium: GWA-7 (upgradient), GWC-12
- Sulfate: GWC-12
- TDS: GWA-7 (upgradient)

#### **Appendix IV – Assessment Monitoring Program**

Interwell tolerance limits were used to calculate the site-specific background limits from all historical pooled upgradient well data for Appendix IV constituents (Figure J). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for barium and radium. When data contained greater than 50% nondetects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. In the case of combined radium 226 + 228, a nonparametric tolerance limit was selected due to the transformation required for the parametric limit which resulted in an extremely high upper tolerance limit. The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a) (Figure G).

As described in 40 CFR §257.95(h) (1-3), the GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, CCR-rule specified level have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

On July 30, 2018, USEPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

Following the above Georgia EPD Rule requirements, GWPS were established for statistical comparison of Appendix IV constituents for the April 2020 sample event (Figures K and L, respectively).

To complete the statistical comparison to GWPS, confidence intervals were constructed using data from 2016 through the present for each of the Appendix IV constituents in each downgradient well for the State and Federal requirements (Figures M and N, respectively). The Sanitas software was used to calculate the tolerance limits and the confidence intervals. The confidence intervals for the State were compared to the GWPS established using the Georgia EPD Rules 391-3-4-10(6)(a) and the confidence intervals for the Federal were prepared according to the CCR Rule. Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. A summary of the confidence intervals follows this letter.

The following confidence interval exceedances were noted for the State:

- Arsenic: GWC-15, GWC-16, GWC-20
- Molybdenum: GWC-1, GWC-15, GWC-16, GWC-20, GWC-21, GWB-4R

The following confidence interval exceedances were noted for the Federal:

- Arsenic: GWC-15, GWC-16, GWC-20
- Molybdenum: GWC-16

## **SUMMARY**

Based on the statistical analyses described in this letter, the following statistical exceedances were noted:

### **Prediction Limits (Detection Monitoring Parameters):**

#### **State:**

- Arsenic: GWC-1, GWC15
- Barium: GWC-14, GWC-16, GWC-20

**Federal:**

- Boron: GWB-6R, GWC-11, GWC-16
- Calcium: GWC-11, GWC-12, GWC-14, GWC-15, GWC-16, GWC-17, GWC-20, GWC-22, GWB-4R
- Chloride: GWC-17
- Fluoride: GWC-17
- pH: GWC-12, GWC-15
- Sulfate: GWC-11, GWC-12, GWC-14, GWC-16, GWC-17, GWC-20, GWC-22, GWB-4R, GWB-5R, GWB-6R
- TDS: GWB-6R, GWC-11, GWC-16

**Confidence Intervals (Assessment Monitoring Parameters):****State:**

- Arsenic: GWC-15, GWC-16, GWC-20
- Molybdenum: GWC-1, GWC-15, GWC-16, GWC-20, GWC-21, GWB-4R

**Federal:**

- Arsenic: GWC-15, GWC-16, GWC-20
- Molybdenum: GWC-16

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Kraft's Grumman Road Landfill. If you have any questions or comments, please feel free to contact me.

For Groundwater Stats Consulting,



Kristina L. Rayner  
Groundwater Statistician

## Date Ranges

Page 1

Date: 5/23/2020 2:33 PM

Grumman Road Landfill Client: Southern Company Data: Grumman Road

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Arsenic (mg/L)

GWB-5R background:12/12/2005-7/10/2018  
GWB-6R background:1/7/2011-7/10/2018

Barium (mg/L)

GWC-14 background:7/17/2013-7/10/2018

Chromium (mg/L)

GWB-4R background:1/7/2011-7/11/2018  
GWB-6R background:7/7/2009-7/10/2018

Selenium (mg/L)

GWC-14 background:1/17/2012-7/9/2018

Vanadium (mg/L)

GWA-7 background:7/9/2012-7/11/2018  
GWC-14 background:3/25/2009-7/9/2018  
GWB-4R background:6/24/2008-7/11/2018  
GWB-6R background:12/11/2007-7/10/2018

## Intrawell Prediction Limits (State) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/24/2020, 8:58 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWC-1	0.0086	n/a	4/7/2020	0.027	41	n/a	n/a	65.85	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-15	0.09	n/a	4/7/2020	0.24	43	n/a	n/a	58.14	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWC-14	0.04252	n/a	4/7/2020	0.073	21	0.02967	0.00524	0	None	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-16	0.0944	n/a	4/7/2020	0.13	59	n/a	n/a	0	n/a	n/a	0.0005506	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-20	0.1775	n/a	4/8/2020	0.19	22	0.08198	0.03928	0	None	No	0.0004115	Param Intra 1 of 2

# Intrawell Prediction Limits (State) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/24/2020, 8:58 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWA-7	0.003	n/a	4/6/2020	0.003ND	42	n/a	n/a	85.71	n/a	n/a	0.001077	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-11	0.003	n/a	4/7/2020	0.00066	43	n/a	n/a	90.7	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-13	0.003	n/a	4/8/2020	0.003ND	43	n/a	n/a	97.67	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-14	0.005	n/a	4/7/2020	0.003ND	64	n/a	n/a	98.44	n/a	n/a	0.0004732	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-16	0.006	n/a	4/7/2020	0.003ND	64	n/a	n/a	98.44	n/a	n/a	0.0004732	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-2	0.003	n/a	4/8/2020	0.0013	41	n/a	n/a	100	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-20	0.003	n/a	4/8/2020	0.003ND	22	n/a	n/a	95.45	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-22	0.003	n/a	4/7/2020	0.00049	21	n/a	n/a	100	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-9	0.003	n/a	4/8/2020	0.00033	43	n/a	n/a	97.67	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWB-4R	0.003	n/a	4/7/2020	0.003ND	43	n/a	n/a	93.02	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWB-5R	0.003	n/a	4/7/2020	0.003ND	43	n/a	n/a	100	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-7	0.014	n/a	4/6/2020	0.005ND	39	n/a	n/a	61.54	n/a	n/a	0.001226	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-8	0.005	n/a	4/6/2020	0.00045	63	n/a	n/a	92.06	n/a	n/a	0.000487	NP Intra (NDs) 1 of 2
<b>Arsenic (mg/L)</b>	<b>GWC-1</b>	<b>0.0086</b>	n/a	<b>4/7/2020</b>	<b>0.027</b>	<b>41</b>	n/a	n/a	<b>65.85</b>	n/a	n/a	<b>0.001118</b>	<b>NP Intra (NDs) 1 of 2</b>
Arsenic (mg/L)	GWC-12	0.005	n/a	4/7/2020	0.005ND	43	n/a	n/a	93.02	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-13	0.0064	n/a	4/8/2020	0.005ND	43	n/a	n/a	95.35	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-14	0.011	n/a	4/7/2020	0.0018	64	n/a	n/a	81.25	n/a	n/a	0.0004732	NP Intra (NDs) 1 of 2
<b>Arsenic (mg/L)</b>	<b>GWC-15</b>	<b>0.09</b>	n/a	<b>4/7/2020</b>	<b>0.24</b>	<b>43</b>	n/a	n/a	<b>58.14</b>	n/a	n/a	<b>0.001037</b>	<b>NP Intra (NDs) 1 of 2</b>
Arsenic (mg/L)	GWC-16	0.1212	n/a	4/7/2020	0.091	62	0.07945	0.01932	0	None	No	0.0004115	Param Intra 1 of 2
Arsenic (mg/L)	GWC-17	0.005	n/a	4/8/2020	0.0013	43	n/a	n/a	86.05	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-2	0.005	n/a	4/8/2020	0.00094	41	n/a	n/a	97.56	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-20	0.5741	n/a	4/8/2020	0.33	22	0.2788	0.1215	4.545	None	No	0.0004115	Param Intra 1 of 2
Arsenic (mg/L)	GWC-21	0.005	n/a	4/7/2020	0.005ND	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-22	0.005	n/a	4/7/2020	0.00043	21	n/a	n/a	61.9	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-9	0.005	n/a	4/8/2020	0.00084	43	n/a	n/a	100	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWB-4R	0.0076	n/a	4/7/2020	0.0027	40	n/a	n/a	60	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWB-5R	0.005	n/a	4/7/2020	0.0011	30	n/a	n/a	80	n/a	n/a	0.002008	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWB-6R	0.005	n/a	4/7/2020	0.005ND	20	n/a	n/a	65	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWA-7	0.2043	n/a	4/6/2020	0.072	41	0.1021	0.04574	0	None	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWA-8	0.14	n/a	4/6/2020	0.057	60	n/a	n/a	0	n/a	n/a	0.0005281	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-1	0.1141	n/a	4/7/2020	0.05	42	0.2379	0.04483	0	None	sqrt(x)	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-11	0.2074	n/a	4/7/2020	0.14	42	0.2407	0.09636	0	None	sqrt(x)	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-12	0.1228	n/a	4/7/2020	0.017	37	0.3382	0.07041	0	None	x^(1/3)	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-13	0.03175	n/a	4/8/2020	0.027	42	0.01478	0.00762	14.29	None	No	0.0004115	Param Intra 1 of 2
<b>Barium (mg/L)</b>	<b>GWC-14</b>	<b>0.04252</b>	n/a	<b>4/7/2020</b>	<b>0.073</b>	<b>21</b>	<b>0.02967</b>	<b>0.00524</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004115</b>	<b>Param Intra 1 of 2</b>
Barium (mg/L)	GWC-15	0.05948	n/a	4/7/2020	0.033	40	0.04178	0.00791	0	None	No	0.0004115	Param Intra 1 of 2
<b>Barium (mg/L)</b>	<b>GWC-16</b>	<b>0.0944</b>	n/a	<b>4/7/2020</b>	<b>0.13</b>	<b>59</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.0005506</b>	<b>NP Intra (normality) 1 of 2</b>
Barium (mg/L)	GWC-17	0.247	n/a	4/8/2020	0.055	42	0.02849	0.01459	0	None	x^2	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-2	0.07214	n/a	4/8/2020	0.061	39	0.04318	0.0129	0	None	No	0.0004115	Param Intra 1 of 2
<b>Barium (mg/L)</b>	<b>GWC-20</b>	<b>0.1775</b>	n/a	<b>4/8/2020</b>	<b>0.19</b>	<b>22</b>	<b>0.08198</b>	<b>0.03928</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004115</b>	<b>Param Intra 1 of 2</b>
Barium (mg/L)	GWC-21	0.1503	n/a	4/7/2020	0.054	21	0.07795	0.0295	0	None	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-22	0.1535	n/a	4/7/2020	0.1	21	0.08871	0.02642	0	None	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-9	0.356	n/a	4/8/2020	0.15	42	n/a	n/a	0	n/a	n/a	0.001077	NP Intra (normality) 1 of 2
Barium (mg/L)	GWB-4R	0.261	n/a	4/7/2020	0.09	42	0.1503	0.04972	0	None	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWB-5R	0.3072	n/a	4/7/2020	0.098	40	0.1394	0.07497	0	None	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWB-6R	0.2605	n/a	4/7/2020	0.01	42	0.3159	0.0873	0	None	sqrt(x)	0.0004115	Param Intra 1 of 2
Chromium (mg/L)	GWA-7	0.068	n/a	4/6/2020	0.015	41	n/a	n/a	36.59	n/a	n/a	0.001118	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWA-8	0.014	n/a	4/6/2020	0.01ND	61	n/a	n/a	93.44	n/a	n/a	0.0005144	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-1	0.01	n/a	4/7/2020	0.0015	41	n/a	n/a	70.73	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-11	0.01	n/a	4/7/2020	0.00094	43	n/a	n/a	69.77	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2

# Intrawell Prediction Limits (State) - All Results

Page 2

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/24/2020, 8:58 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	GWC-12	0.01	n/a	4/7/2020	0.00082	43	n/a	n/a	72.09	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-13	0.01	n/a	4/8/2020	0.00058	43	n/a	n/a	79.07	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-14	0.014	n/a	4/7/2020	0.00074	61	n/a	n/a	67.21	n/a	n/a	0.0005144	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-15	0.01	n/a	4/7/2020	0.0014	43	n/a	n/a	72.09	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-16	0.01	n/a	4/7/2020	0.01ND	62	n/a	n/a	80.65	n/a	n/a	0.0005007	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-17	0.01	n/a	4/8/2020	0.00073	42	n/a	n/a	78.57	n/a	n/a	0.001077	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-2	0.01	n/a	4/8/2020	0.00069	41	n/a	n/a	90.24	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-20	0.01	n/a	4/8/2020	0.001	22	n/a	n/a	54.55	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-21	0.01	n/a	4/7/2020	0.01ND	21	n/a	n/a	57.14	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-22	0.01	n/a	4/7/2020	0.00049	21	n/a	n/a	80.95	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-9	0.014	n/a	4/8/2020	0.0015	43	n/a	n/a	65.12	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWB-4R	0.02279	n/a	4/7/2020	0.0028	20	0.01249	0.004168	0	None	No	0.0004115	Param Intra 1 of 2
Chromium (mg/L)	GWB-5R	0.03	n/a	4/7/2020	0.0022	38	n/a	n/a	39.47	n/a	n/a	0.001294	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWB-6R	0.01385	n/a	4/7/2020	0.0094	23	-5.977	0.704	13.04	None	ln(x)	0.0004115	Param Intra 1 of 2
Lead (mg/L)	GWA-7	0.013	n/a	4/6/2020	0.0024	40	n/a	n/a	65	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-8	0.0095	n/a	4/6/2020	0.0001	62	n/a	n/a	90.32	n/a	n/a	0.0005007	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-1	0.005	n/a	4/7/2020	0.00012	43	n/a	n/a	97.67	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-11	0.013	n/a	4/7/2020	0.00036	42	n/a	n/a	78.57	n/a	n/a	0.001077	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-12	0.005	n/a	4/7/2020	0.000081	43	n/a	n/a	76.74	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-13	0.0078	n/a	4/8/2020	0.00017	43	n/a	n/a	81.4	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-14	0.005	n/a	4/7/2020	0.005ND	62	n/a	n/a	95.16	n/a	n/a	0.0005007	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-15	0.0065	n/a	4/7/2020	0.000086	43	n/a	n/a	88.37	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-16	0.005	n/a	4/7/2020	0.00023	61	n/a	n/a	90.16	n/a	n/a	0.0005144	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-17	0.005	n/a	4/8/2020	0.000084	43	n/a	n/a	93.02	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-2	0.0069	n/a	4/8/2020	0.005ND	41	n/a	n/a	90.24	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-20	0.005	n/a	4/8/2020	0.005ND	22	n/a	n/a	86.36	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-21	0.005	n/a	4/7/2020	0.005ND	21	n/a	n/a	80.95	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-22	0.013	n/a	4/7/2020	0.00067	21	n/a	n/a	57.14	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-9	0.0051	n/a	4/8/2020	0.00021	42	n/a	n/a	88.1	n/a	n/a	0.001077	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWB-4R	0.011	n/a	4/7/2020	0.00073	37	n/a	n/a	59.46	n/a	n/a	0.001361	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWB-5R	0.011	n/a	4/7/2020	0.0014	35	n/a	n/a	77.14	n/a	n/a	0.001497	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWB-6R	0.025	n/a	4/7/2020	0.00063	43	n/a	n/a	81.4	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-7	0.0438	n/a	4/6/2020	0.0078	40	n/a	n/a	65	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-8	0.01	n/a	4/6/2020	0.01ND	62	n/a	n/a	96.77	n/a	n/a	0.0005007	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-1	0.023	n/a	4/7/2020	0.0013	41	n/a	n/a	58.54	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-11	0.036	n/a	4/7/2020	0.0021	43	n/a	n/a	62.79	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-12	0.01	n/a	4/7/2020	0.01ND	43	n/a	n/a	93.02	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-14	0.01944	n/a	4/7/2020	0.005	27	0.007544	0.005074	22.22	Kaplan-Meier	No	0.0004115	Param Intra 1 of 2
Selenium (mg/L)	GWC-15	0.01	n/a	4/7/2020	0.0029	39	n/a	n/a	92.31	n/a	n/a	0.001226	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-16	0.01	n/a	4/7/2020	0.01ND	62	n/a	n/a	75.81	n/a	n/a	0.0005007	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-17	0.01	n/a	4/8/2020	0.01ND	43	n/a	n/a	83.72	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-2	0.01	n/a	4/8/2020	0.01ND	41	n/a	n/a	92.68	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-20	0.01	n/a	4/8/2020	0.0013	22	n/a	n/a	86.36	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-21	0.04956	n/a	4/7/2020	0.012	21	0.02277	0.01093	4.762	None	No	0.0004115	Param Intra 1 of 2
Selenium (mg/L)	GWC-22	0.01	n/a	4/7/2020	0.01ND	21	n/a	n/a	80.95	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-9	0.01	n/a	4/8/2020	0.01ND	43	n/a	n/a	97.67	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWB-4R	0.01	n/a	4/7/2020	0.0025	34	n/a	n/a	67.65	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWB-5R	0.011	n/a	4/7/2020	0.01ND	43	n/a	n/a	88.37	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWB-6R	0.01	n/a	4/7/2020	0.01ND	43	n/a	n/a	83.72	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-7	0.5207	n/a	4/6/2020	0.12	16	0.2627	0.09909	0	None	No	0.0004115	Param Intra 1 of 2

# Intrawell Prediction Limits (State) - All Results

Page 3

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/24/2020, 8:58 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Vanadium (mg/L)	GWA-8	0.01	n/a	4/6/2020	0.01ND	60	n/a	n/a	91.67	n/a	n/a	0.0005281	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-1	0.01	n/a	4/7/2020	0.0015	39	n/a	n/a	58.97	n/a	n/a	0.001226	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-11	0.01	n/a	4/7/2020	0.01ND	40	n/a	n/a	55	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-12	0.01	n/a	4/7/2020	0.0024	40	n/a	n/a	80	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-13	0.01	n/a	4/8/2020	0.01ND	40	n/a	n/a	80	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-14	0.05462	n/a	4/7/2020	0.0026	36	0.1496	0.03719	0	None	sqrt(x)	0.0004115	Param Intra 1 of 2
Vanadium (mg/L)	GWC-15	0.01	n/a	4/7/2020	0.01ND	40	n/a	n/a	72.5	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-16	0.012	n/a	4/7/2020	0.01ND	62	n/a	n/a	50	n/a	n/a	0.0005007	NP Intra (normality) 1 of 2
Vanadium (mg/L)	GWC-17	0.01	n/a	4/8/2020	0.01ND	40	n/a	n/a	75	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-2	0.01	n/a	4/8/2020	0.01ND	38	n/a	n/a	100	n/a	n/a	0.001294	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-20	0.01	n/a	4/8/2020	0.01ND	21	n/a	n/a	38.1	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Vanadium (mg/L)	GWC-21	0.007919	n/a	4/7/2020	0.01ND	18	-5.764	0.3646	33.33	Kaplan-Meier	ln(x)	0.0004115	Param Intra 1 of 2
Vanadium (mg/L)	GWC-22	0.01	n/a	4/7/2020	0.0014	18	n/a	n/a	61.11	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-9	0.014	n/a	4/8/2020	0.0015	40	n/a	n/a	87.5	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWB-4R	0.07366	n/a	4/7/2020	0.0037	22	0.04594	0.0114	0	None	No	0.0004115	Param Intra 1 of 2
Vanadium (mg/L)	GWB-5R	0.04817	n/a	4/7/2020	0.0053	33	-4.848	0.7947	15.15	Kaplan-Meier	ln(x)	0.0004115	Param Intra 1 of 2
Vanadium (mg/L)	GWB-6R	0.053	n/a	4/7/2020	0.041	23	n/a	n/a	13.04	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWA-7	0.0853	n/a	4/6/2020	0.01ND	39	n/a	n/a	30.77	n/a	n/a	0.001226	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWA-8	0.01	n/a	4/6/2020	0.01ND	57	n/a	n/a	24.56	n/a	n/a	0.0005955	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-1	0.011	n/a	4/7/2020	0.01ND	40	n/a	n/a	85	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-11	0.013	n/a	4/7/2020	0.01ND	39	n/a	n/a	69.23	n/a	n/a	0.001226	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-12	0.01	n/a	4/7/2020	0.01ND	28	n/a	n/a	32.14	n/a	n/a	0.002337	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-13	0.036	n/a	4/8/2020	0.023	38	n/a	n/a	28.95	n/a	n/a	0.001294	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-14	0.011	n/a	4/7/2020	0.01ND	63	n/a	n/a	87.3	n/a	n/a	0.000487	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-15	0.011	n/a	4/7/2020	0.01ND	41	n/a	n/a	90.24	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-16	0.01	n/a	4/7/2020	0.01ND	61	n/a	n/a	67.21	n/a	n/a	0.0005144	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-17	0.0175	n/a	4/8/2020	0.01ND	40	n/a	n/a	32.5	n/a	n/a	0.001159	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-2	0.012	n/a	4/8/2020	0.01ND	37	n/a	n/a	81.08	n/a	n/a	0.001361	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-20	0.01	n/a	4/8/2020	0.01ND	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-21	0.01	n/a	4/7/2020	0.01ND	17	n/a	n/a	58.82	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-22	0.02471	n/a	4/7/2020	0.01ND	17	0.008441	0.00633	11.76	None	No	0.0004115	Param Intra 1 of 2
Zinc (mg/L)	GWC-9	0.01	n/a	4/8/2020	0.01ND	37	n/a	n/a	45.95	n/a	n/a	0.001361	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWB-4R	0.1912	n/a	4/7/2020	0.01ND	40	-4.471	1.259	17.5	Kaplan-Meier	ln(x)	0.0004115	Param Intra 1 of 2
Zinc (mg/L)	GWB-5R	0.01	n/a	4/7/2020	0.01ND	30	n/a	n/a	56.67	n/a	n/a	0.002008	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWB-6R	0.01034	n/a	4/7/2020	0.01ND	19	0.06024	0.01655	26.32	Kaplan-Meier	sqrt(x)	0.0004115	Param Intra 1 of 2

## Trend Test Summary (State) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/26/2020, 9:36 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWA-7 (bg)	0	2.798	2.58	Yes	43	58.14	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWA-8 (bg)	0	-3.444	-2.58	Yes	68	91.18	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWC-1	0	-3.593	-2.58	Yes	46	58.7	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWC-15	0.002715	7.536	2.58	Yes	48	52.08	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWC-20	0.02201	126	124	Yes	27	3.704	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-8 (bg)	-0.002605	-7.718	-2.58	Yes	65	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWC-14	-0.002832	-5.38	-2.58	Yes	67	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWC-20	0.00615	171	124	Yes	27	0	n/a	n/a	0.01	NP

## Trend Test Summary (State) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/26/2020, 9:36 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWA-7 (bg)	0	2.798	2.58	Yes	43	58.14	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWA-8 (bg)	0	-3.444	-2.58	Yes	68	91.18	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWC-1	0	-3.593	-2.58	Yes	46	58.7	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWC-15	0.002715	7.536	2.58	Yes	48	52.08	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWC-20	0.02201	126	124	Yes	27	3.704	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-7 (bg)	-0.0003887	-0.4366	-2.58	No	46	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-8 (bg)	-0.002605	-7.718	-2.58	Yes	65	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWC-14	-0.002832	-5.38	-2.58	Yes	67	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWC-16	0.0008429	2.186	2.58	No	64	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWC-20	0.00615	171	124	Yes	27	0	n/a	n/a	0.01	NP

# Intrawell Prediction Limits (Federal) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:16 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWB-6R	4.2	n/a	4/7/2020	5.6	8	2.62	0.6468	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-11	0.3714	n/a	4/7/2020	0.67	8	-2.326	0.5469	0	None	In(x)	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-16	6.286	n/a	4/7/2020	10.5	8	2.815	1.422	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWB-6R	569	n/a	4/7/2020	775	8	428.3	57.63	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-11	760	n/a	4/7/2020	780	8	264.3	203	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-16	1386	n/a	4/7/2020	1500	8	893.1	201.8	0	None	No	0.0004702	Param 1 of 3

# Intrawell Prediction Limits (Federal) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:16 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWA-7	28.17	n/a	4/6/2020	6.1	8	17.29	4.455	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWA-8	0.1446	n/a	4/6/2020	0.14	8	0.1185	0.0107	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWB-4R	9.727	n/a	4/7/2020	5.5	8	7.539	0.8959	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWB-5R	7.397	n/a	4/7/2020	4.6	8	3.278	1.687	0	None	No	0.0004702	Param 1 of 3
<b>Boron (mg/L)</b>	<b>GWB-6R</b>	<b>4.2</b>	<b>n/a</b>	<b>4/7/2020</b>	<b>5.6</b>	<b>8</b>	<b>2.62</b>	<b>0.6468</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004702</b>	<b>Param 1 of 3</b>
Boron (mg/L)	GWC-1	1.625	n/a	4/7/2020	1	8	1.067	0.2284	0	None	No	0.0004702	Param 1 of 3
<b>Boron (mg/L)</b>	<b>GWC-11</b>	<b>0.3714</b>	<b>n/a</b>	<b>4/7/2020</b>	<b>0.67</b>	<b>8</b>	<b>-2.326</b>	<b>0.5469</b>	<b>0</b>	<b>None</b>	<b>In(x)</b>	<b>0.0004702</b>	<b>Param 1 of 3</b>
Boron (mg/L)	GWC-12	9.63	n/a	4/7/2020	5.3	8	6.358	1.34	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-13	0.3009	n/a	4/8/2020	0.28	8	0.1458	0.06354	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-14	0.08961	n/a	4/7/2020	0.061	8	0.07295	0.006824	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-15	1.943	n/a	4/7/2020	0.96	7	1.364	0.2101	0	None	No	0.0004702	Param 1 of 3
<b>Boron (mg/L)</b>	<b>GWC-16</b>	<b>6.286</b>	<b>n/a</b>	<b>4/7/2020</b>	<b>10.5</b>	<b>8</b>	<b>2.815</b>	<b>1.422</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004702</b>	<b>Param 1 of 3</b>
Boron (mg/L)	GWC-17	1.869	n/a	4/8/2020	0.99	8	0.8828	0.4041	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-2	0.05241	n/a	4/8/2020	0.031	8	0.1559	0.02991	0	None	sqrt(x)	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-20	5.558	n/a	4/8/2020	2.5	8	2.855	1.107	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-21	1.031	n/a	4/7/2020	0.24	8	0.383	0.2654	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-22	16.9	n/a	4/7/2020	3.1	8	5.403	4.71	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-9	0.03214	n/a	4/8/2020	0.023	7	0.02137	0.003908	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWA-7	4478	n/a	4/6/2020	1670	8	3044	587.2	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWA-8	384.6	n/a	4/6/2020	214	8	227.8	64.23	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWB-4R	1282	n/a	4/7/2020	482	8	998.9	115.9	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWB-5R	559.8	n/a	4/7/2020	483	7	322.1	86.22	0	None	No	0.0004702	Param 1 of 3
<b>Total Dissolved Solids (mg/L)</b>	<b>GWB-6R</b>	<b>569</b>	<b>n/a</b>	<b>4/7/2020</b>	<b>775</b>	<b>8</b>	<b>428.3</b>	<b>57.63</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004702</b>	<b>Param 1 of 3</b>
Total Dissolved Solids (mg/L)	GWC-1	460.5	n/a	4/7/2020	195	8	291.9	69.05	0	None	No	0.0004702	Param 1 of 3
<b>Total Dissolved Solids (mg/L)</b>	<b>GWC-11</b>	<b>760</b>	<b>n/a</b>	<b>4/7/2020</b>	<b>780</b>	<b>8</b>	<b>264.3</b>	<b>203</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004702</b>	<b>Param 1 of 3</b>
Total Dissolved Solids (mg/L)	GWC-12	1845	n/a	4/7/2020	464	8	1213	258.9	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-13	150.3	n/a	4/8/2020	65	8	54	39.43	25	Kaplan-Meier	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-14	1226	n/a	4/7/2020	843	8	772	185.8	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-15	672	n/a	4/7/2020	428	8	544.6	52.18	0	None	No	0.0004702	Param 1 of 3
<b>Total Dissolved Solids (mg/L)</b>	<b>GWC-16</b>	<b>1386</b>	<b>n/a</b>	<b>4/7/2020</b>	<b>1500</b>	<b>8</b>	<b>893.1</b>	<b>201.8</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004702</b>	<b>Param 1 of 3</b>
Total Dissolved Solids (mg/L)	GWC-17	2945	n/a	4/8/2020	881	8	1860	444.3	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-2	157.3	n/a	4/8/2020	38	8	57.06	41.05	12.5	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-20	1016	n/a	4/8/2020	986	8	546.9	192	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-21	328.6	n/a	4/7/2020	106	8	140.6	77.02	12.5	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-22	2575	n/a	4/7/2020	819	8	1067	617.6	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-9	272.4	n/a	4/8/2020	80	8	188.5	34.38	0	None	No	0.0004702	Param 1 of 3

# Interwell Prediction Limits (Federal) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:04 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	GWC-11	35.8	n/a	4/7/2020	84.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-12	35.8	n/a	4/7/2020	52.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-14	35.8	n/a	4/7/2020	135	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-15	35.8	n/a	4/7/2020	129	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-16	35.8	n/a	4/7/2020	225	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-17	35.8	n/a	4/8/2020	53.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-20	35.8	n/a	4/8/2020	175	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-22	35.8	n/a	4/7/2020	65.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWB-4R	35.8	n/a	4/7/2020	62.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-17	260	n/a	4/8/2020	277	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GWC-17	0.4583	n/a	4/8/2020	0.55	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
pH (SU)	GWC-12	6.43	4.24	4/7/2020	4.1	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-15	6.43	4.24	4/7/2020	6.83	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-11	160	n/a	4/7/2020	446	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-12	160	n/a	4/7/2020	297	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-14	160	n/a	4/7/2020	456	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-16	160	n/a	4/7/2020	844	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-17	160	n/a	4/8/2020	239	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-20	160	n/a	4/8/2020	428	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-22	160	n/a	4/7/2020	333	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWB-4R	160	n/a	4/7/2020	221	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWB-5R	160	n/a	4/7/2020	180	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWB-6R	160	n/a	4/7/2020	180	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2

# Interwell Prediction Limits (Federal) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:04 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	GWC-1	35.8	n/a	4/7/2020	31.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-11	35.8	n/a	4/7/2020	84.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-12	35.8	n/a	4/7/2020	52.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-13	35.8	n/a	4/8/2020	2.5	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-14	35.8	n/a	4/7/2020	135	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-15	35.8	n/a	4/7/2020	129	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-16	35.8	n/a	4/7/2020	225	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-17	35.8	n/a	4/8/2020	53.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-2	35.8	n/a	4/8/2020	0.24	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-20	35.8	n/a	4/8/2020	175	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-21	35.8	n/a	4/7/2020	12.5	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-22	35.8	n/a	4/7/2020	65.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-9	35.8	n/a	4/8/2020	5.3	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWB-4R	35.8	n/a	4/7/2020	62.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWB-5R	35.8	n/a	4/7/2020	34.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWB-6R	35.8	n/a	4/7/2020	7.8	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-1	260	n/a	4/7/2020	7.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-11	260	n/a	4/7/2020	103	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-12	260	n/a	4/7/2020	32.5	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-13	260	n/a	4/8/2020	4.5	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-14	260	n/a	4/7/2020	41.6	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-15	260	n/a	4/7/2020	3.4	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-16	260	n/a	4/7/2020	49.3	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-17	260	n/a	4/8/2020	277	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-2	260	n/a	4/8/2020	5.2	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-20	260	n/a	4/8/2020	20.2	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-21	260	n/a	4/7/2020	4.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-22	260	n/a	4/7/2020	146	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-9	260	n/a	4/8/2020	16.9	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWB-4R	260	n/a	4/7/2020	14.5	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWB-5R	260	n/a	4/7/2020	44.3	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWB-6R	260	n/a	4/7/2020	56.4	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GWC-1	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-11	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-12	0.4583	n/a	4/7/2020	0.27	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-13	0.4583	n/a	4/8/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-14	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-15	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-16	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-17	0.4583	n/a	4/8/2020	0.55	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-2	0.4583	n/a	4/8/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-20	0.4583	n/a	4/8/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-21	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-22	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-9	0.4583	n/a	4/8/2020	0.058	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWB-4R	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWB-5R	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWB-6R	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
pH (SU)	GWC-1	6.43	4.24	4/7/2020	5.3	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-11	6.43	4.24	4/7/2020	5.05	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2

# Interwell Prediction Limits (Federal) - All Results

Page 2

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:04 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
pH (SU)	<b>GWC-12</b>	<b>6.43</b>	<b>4.24</b>	<b>4/7/2020</b>	<b>4.1</b>	<b>24</b>	n/a	n/a	0	n/a	n/a	<b>0.005292</b>	<b>NP Inter (normality) 1 of 2</b>
pH (SU)	GWC-13	6.43	4.24	4/8/2020	4.81	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-14	6.43	4.24	4/7/2020	6.2	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	<b>GWC-15</b>	<b>6.43</b>	<b>4.24</b>	<b>4/7/2020</b>	<b>6.83</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.005292</b>	<b>NP Inter (normality) 1 of 2</b>
pH (SU)	GWC-16	6.43	4.24	4/7/2020	5.94	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-17	6.43	4.24	4/8/2020	4.71	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-2	6.43	4.24	4/8/2020	4.66	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-20	6.43	4.24	4/8/2020	6.31	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-21	6.43	4.24	4/7/2020	6	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-22	6.43	4.24	4/7/2020	4.8	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-9	6.43	4.24	4/8/2020	4.73	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWB-4R	6.43	4.24	4/7/2020	5.74	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWB-5R	6.43	4.24	4/7/2020	5.45	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWB-6R	6.43	4.24	4/7/2020	5.86	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-1	160	n/a	4/7/2020	83	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	<b>GWC-11</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>446</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	<b>GWC-12</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>297</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-13	160	n/a	4/8/2020	30.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	<b>GWC-14</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>456</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-15	160	n/a	4/7/2020	26.9	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	<b>GWC-16</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>844</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	<b>GWC-17</b>	<b>160</b>	n/a	<b>4/8/2020</b>	<b>239</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-2	160	n/a	4/8/2020	12.9	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	<b>GWC-20</b>	<b>160</b>	n/a	<b>4/8/2020</b>	<b>428</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-21	160	n/a	4/7/2020	33.2	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	<b>GWC-22</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>333</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-9	160	n/a	4/8/2020	34.2	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	<b>GWB-4R</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>221</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	<b>GWB-5R</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>180</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	<b>GWB-6R</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>180</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>

## Trend Test Summary (Federal) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:25 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWA-7 (bg)	-4.496	-42	-38	Yes	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	GWC-16	2.531	56	38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-7 (bg)	-0.9737	-47	-38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-8 (bg)	2.805	41	38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-11	17.85	40	38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-12	-15.09	-64	-38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-16	39.32	47	38	Yes	12	0	n/a	n/a	0.01	NP
pH (SU)	GWC-15	0.1181	40	38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-12	-185.6	-50	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWA-7 (bg)	-571.2	-59	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWC-16	251.9	51	38	Yes	12	0	n/a	n/a	0.01	NP

## Trend Test Summary (Federal) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:25 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWA-7 (bg)	<b>-4.496</b>	<b>-42</b>	<b>-38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Boron (mg/L)	GWA-8 (bg)	0.001627	4	38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	GWC-11	0.05085	34	38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	<b>GWC-16</b>	<b>2.531</b>	<b>56</b>	<b>38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Boron (mg/L)	GWB-6R	1.171	32	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-7 (bg)	<b>-0.9737</b>	<b>-47</b>	<b>-38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Calcium (mg/L)	GWA-8 (bg)	<b>2.805</b>	<b>41</b>	<b>38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Calcium (mg/L)	GWC-11	<b>17.85</b>	<b>40</b>	<b>38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Calcium (mg/L)	<b>GWC-12</b>	<b>-15.09</b>	<b>-64</b>	<b>-38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Calcium (mg/L)	GWC-14	-2.399	-2	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-15	3.001	10	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	<b>GWC-16</b>	<b>39.32</b>	<b>47</b>	<b>38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Calcium (mg/L)	GWC-17	-6.933	-12	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-20	6.478	10	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-22	-17.39	-33	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWB-4R	12.38	32	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-7 (bg)	-23.13	-29	-38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-8 (bg)	1.079	29	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-17	-112.5	-19	-38	No	12	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWA-7 (bg)	0.01096	8	43	No	13	30.77	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWA-8 (bg)	0	-1	-43	No	13	15.38	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWC-17	-0.09821	-16	-43	No	13	7.692	n/a	n/a	0.01	NP
pH (SU)	GWA-7 (bg)	-0.07309	-35	-38	No	12	0	n/a	n/a	0.01	NP
pH (SU)	GWA-8 (bg)	-0.002245	-1	-38	No	12	0	n/a	n/a	0.01	NP
pH (SU)	GWC-12	0.006067	3	43	No	13	0	n/a	n/a	0.01	NP
pH (SU)	<b>GWC-15</b>	<b>0.1181</b>	<b>40</b>	<b>38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Sulfate (mg/L)	GWA-7 (bg)	-4.959	-20	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-8 (bg)	-2.933	-10	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-11	79.87	32	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	<b>GWC-12</b>	<b>-185.6</b>	<b>-50</b>	<b>-38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Sulfate (mg/L)	GWC-14	-63.51	-22	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-16	137.3	34	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-17	12.32	3	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-20	-21.31	-8	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-22	-117.1	-38	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWB-4R	0	-2	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWB-5R	14.55	12	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWB-6R	20.38	34	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	<b>GWA-7 (bg)</b>	<b>-571.2</b>	<b>-59</b>	<b>-38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Total Dissolved Solids (mg/L)	GWA-8 (bg)	-2.336	-2	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWC-11	157.7	29	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	<b>GWC-16</b>	<b>251.9</b>	<b>51</b>	<b>38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Total Dissolved Solids (mg/L)	GWB-6R	114.6	34	38	No	12	0	n/a	n/a	0.01	NP

## Tolerance Limit Summary Table - Appendix IV

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/25/2020, 8:50 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.003	n/a	115	n/a	n/a	94.78	n/a	n/a	0.002743	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.014	n/a	111	n/a	n/a	78.38	n/a	n/a	0.003368	NP Inter(NDs)
Barium (mg/L)	n/a	0.22	n/a	111	n/a	n/a	0	n/a	n/a	0.003368	NP Inter(normality)
Beryllium (mg/L)	n/a	0.003	n/a	32	n/a	n/a	50	n/a	n/a	0.1937	NP Inter(normality)
Cadmium (mg/L)	n/a	0.0025	n/a	31	n/a	n/a	93.55	n/a	n/a	0.2039	NP Inter(NDs)
Chromium (mg/L)	n/a	0.068	n/a	112	n/a	n/a	66.96	n/a	n/a	0.003199	NP Inter(normality)
Cobalt (mg/L)	n/a	0.0102	n/a	34	n/a	n/a	50	n/a	n/a	0.1748	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	n/a	33.8	n/a	22	n/a	n/a	0	n/a	n/a	0.3235	NP Inter
Fluoride (mg/L)	n/a	0.6556	n/a	26	0.2365	0.1606	23.08	Cohen's	No	0.01	Inter
Lead (mg/L)	n/a	0.013	n/a	111	n/a	n/a	77.48	n/a	n/a	0.003368	NP Inter(NDs)
Lithium (mg/L)	n/a	0.05	n/a	17	n/a	n/a	76.47	n/a	n/a	0.4181	NP Inter(NDs)
Mercury (mg/L)	n/a	0.0005	n/a	20	n/a	n/a	85	n/a	n/a	0.3585	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	19	n/a	n/a	84.21	n/a	n/a	0.3774	NP Inter(NDs)
Selenium (mg/L)	n/a	0.0438	n/a	110	n/a	n/a	82.73	n/a	n/a	0.003545	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	54	n/a	n/a	92.59	n/a	n/a	0.06267	NP Inter(NDs)

GRUMMAN ROAD LANDFILL GWPS (State)				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.0287	0.0287
Barium, Total (mg/L)	2		0.22	2
Beryllium, Total (mg/L)	0.004		0.003	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005
Chromium, Total (mg/L)	0.1		0.068	0.1
Cobalt, Total (mg/L)		0.006	0.0102	0.0102
Combined Radium, Total (pCi/L)	5		33.8	33.8
Fluoride, Total (mg/L)	4		0.6556	4
Lead, Total (mg/L)		0.015	0.013	0.013
Lithium, Total (mg/L)		0.04	0.03	0.03
Mercury, Total (mg/L)	0.002		0.0005	0.002
Molybdenum, Total (mg/L)		0.1	0.01	0.01
Selenium, Total (mg/L)	0.05		0.0438	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

\*Highlighted cells indicated Background is higher than MCLs or CCR-Rule Specified levels.

\*MCL = Maximum Contaminant Level

\*CCR = Coal Combustion Residual

\*GWPS = Groundwater Protection Standard

GRUMMAN ROAD LANDFILL GWPS (Federal)				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.0287	0.0287
Barium, Total (mg/L)	2		0.22	2
Beryllium, Total (mg/L)	0.004		0.003	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005
Chromium, Total (mg/L)	0.1		0.068	0.1
Cobalt, Total (mg/L)		0.006	0.0102	0.0102
Combined Radium, Total (pCi/L)	5		33.8	33.8
Fluoride, Total (mg/L)	4		0.6556	4
Lead, Total (mg/L)		0.015	0.013	0.015
Lithium, Total (mg/L)		0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0005	0.002
Molybdenum, Total (mg/L)		0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.0438	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

\*Highlighted cells indicated Background is higher than MCLs or CCR-Rule Specified levels.

\*MCL = Maximum Contaminant Level

\*CCR = Coal Combustion Residual

\*GWPS = Groundwater Protection Standard

## Confidence Interval Summary Table (State) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:54 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWC-15	0.1293	0.05039	0.0287	Yes	15	0.08984	0.05821	0	None	No	0.01	Param.
Arsenic (mg/L)	GWC-16	0.08406	0.0633	0.0287	Yes	16	0.07368	0.01595	0	None	No	0.01	Param.
Arsenic (mg/L)	GWC-20	0.3752	0.277	0.0287	Yes	15	0.3261	0.07248	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-1	0.1888	0.07681	0.01	Yes	11	0.1328	0.06721	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-15	0.1139	0.08688	0.01	Yes	11	0.1004	0.01621	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-16	0.2054	0.104	0.01	Yes	11	0.1547	0.06085	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-20	0.2605	0.09096	0.01	Yes	11	0.1757	0.1017	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-21	0.06805	0.01392	0.01	Yes	11	0.04098	0.03248	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWB-4R	0.1	0.0209	0.01	Yes	11	0.04843	0.04052	0	None	No	0.006	NP (normality)

# Confidence Interval Summary Table (State) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:54 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWA-7 (bg)	0.003	0.0013	0.006	No	15	0.002513	0.0008568	73.33	None	No	0.01	NP (normality)
Antimony (mg/L)	GWA-8 (bg)	0.003	0.003	0.006	No	16	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-1	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-11	0.003	0.0005	0.006	No	15	0.001877	0.001249	53.33	None	No	0.01	NP (normality)
Antimony (mg/L)	GWC-12	0.003	0.003	0.006	No	14	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-13	0.003	0.0006	0.006	No	15	0.00284	0.0006197	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-14	0.003	0.003	0.006	No	16	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-15	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-16	0.003	0.003	0.006	No	16	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-17	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-2	0.003	0.0013	0.006	No	15	0.002887	0.0004389	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-20	0.003	0.0019	0.006	No	15	0.002927	0.000284	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-21	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-22	0.003	0.00049	0.006	No	15	0.002663	0.0008903	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-9	0.003	0.0016	0.006	No	15	0.002729	0.0007552	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-4R	0.003	0.0003	0.006	No	15	0.00282	0.0006971	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-5R	0.003	0.00054	0.006	No	15	0.002836	0.0006352	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-6R	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWA-7 (bg)	0.01379	0.004635	0.0287	No	12	0.009508	0.00692	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GWA-8 (bg)	0.005	0.0006	0.0287	No	16	0.003391	0.00215	62.5	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-1	0.0042	0.0015	0.0287	No	14	0.004343	0.006598	0	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-11	0.005	0.005	0.0287	No	15	0.005	0	100	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-12	0.005	0.0009	0.0287	No	15	0.004153	0.001754	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-13	0.005	0.0006	0.0287	No	15	0.004412	0.001552	86.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-14	0.0026	0.0018	0.0287	No	16	0.002271	0.0008184	6.25	None	No	0.01	NP (normality)
Arsenic (mg/L)	<b>GWC-15</b>	<b>0.1293</b>	<b>0.05039</b>	<b>0.0287</b>	<b>Yes</b>	<b>15</b>	<b>0.08984</b>	<b>0.05821</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	<b>GWC-16</b>	<b>0.08406</b>	<b>0.0633</b>	<b>0.0287</b>	<b>Yes</b>	<b>16</b>	<b>0.07368</b>	<b>0.01595</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GWC-17	0.005	0.0009	0.0287	No	15	0.002521	0.001835	33.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-2	0.005	0.00094	0.0287	No	15	0.004129	0.001807	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	<b>GWC-20</b>	<b>0.3752</b>	<b>0.277</b>	<b>0.0287</b>	<b>Yes</b>	<b>15</b>	<b>0.3261</b>	<b>0.07248</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GWC-21	0.005955	0.00332	0.0287	No	15	0.004067	0.001312	40	Cohen's	No	0.01	Param.
Arsenic (mg/L)	GWC-22	0.005	0.0006	0.0287	No	15	0.002705	0.002021	40	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-9	0.005	0.00084	0.0287	No	15	0.004723	0.001074	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWB-4R	0.003147	0.001641	0.0287	No	15	0.002457	0.001208	13.33	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GWB-5R	0.005	0.0009	0.0287	No	15	0.002487	0.001924	26.67	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWB-6R	0.005	0.0011	0.0287	No	15	0.002829	0.001743	33.33	None	No	0.01	NP (Cohens/xfrm)
Barium (mg/L)	GWA-7 (bg)	0.1545	0.0802	2	No	14	0.1174	0.05248	0	None	No	0.01	Param.
Barium (mg/L)	GWA-8 (bg)	0.0664	0.06025	2	No	16	0.06333	0.00472	0	None	No	0.01	Param.
Barium (mg/L)	GWC-1	0.0575	0.04982	2	No	15	0.05366	0.005669	0	None	No	0.01	Param.
Barium (mg/L)	GWC-11	0.1125	0.05506	2	No	15	0.08379	0.0424	0	None	No	0.01	Param.
Barium (mg/L)	GWC-12	0.0191	0.0162	2	No	15	0.01847	0.003995	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-13	0.02474	0.01968	2	No	15	0.02221	0.003733	0	None	No	0.01	Param.
Barium (mg/L)	GWC-14	0.067	0.0248	2	No	16	0.03726	0.01953	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-15	0.049	0.04021	2	No	15	0.04461	0.006483	0	None	No	0.01	Param.
Barium (mg/L)	GWC-16	0.1049	0.05422	2	No	14	0.08131	0.0372	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-17	0.1245	0.04703	2	No	15	0.09051	0.06112	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-2	0.057	0.049	2	No	14	0.05407	0.008399	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-20	0.148	0.078	2	No	15	0.1071	0.03885	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-21	0.07381	0.05031	2	No	15	0.06206	0.01734	0	None	No	0.01	Param.
Barium (mg/L)	GWC-22	0.09974	0.06378	2	No	15	0.08279	0.0285	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-9	0.2743	0.1982	2	No	15	0.2363	0.05612	0	None	No	0.01	Param.
Barium (mg/L)	GWB-4R	0.09633	0.07886	2	No	15	0.08759	0.01289	0	None	No	0.01	Param.
Barium (mg/L)	GWB-5R	0.1628	0.09057	2	No	15	0.1294	0.05934	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWB-6R	0.107	0.013	2	No	15	0.07353	0.04511	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWA-7 (bg)	0.003	0.0002	0.004	No	8	0.001225	0.001208	25	None	No	0.004	NP (Cohens/xfrm)

# Confidence Interval Summary Table (State) - All Results

Page 2

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	GWA-8 (bg)	0.00024	0.0002	0.004	No	11	0.0004564	0.0008438	9.091	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-1	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-11	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-12	0.000918	0.0005275	0.004	No	11	0.0007227	0.0002343	0	None	No	0.01	Param.
Beryllium (mg/L)	GWC-13	0.003	0.003	0.004	No	11	0.002733	0.000887	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-14	0.003	0.00009	0.004	No	11	0.002205	0.001362	72.73	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-15	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-16	0.003	0.00008	0.004	No	11	0.001147	0.001469	36.36	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-17	0.003159	0.001658	0.004	No	11	0.002427	0.0009318	0	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	GWC-2	0.003	0.00009	0.004	No	12	0.00229	0.001286	75	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-20	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-21	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-22	0.003	0.00009	0.004	No	11	0.001433	0.001501	45.45	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-9	0.0003	0.0002	0.004	No	11	0.0002582	0.00004916	0	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWB-4R	0.003	0.0001	0.004	No	11	0.001445	0.001491	45.45	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWB-5R	0.003	0.0001	0.004	No	11	0.0007051	0.001137	18.18	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWB-6R	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWA-7 (bg)	0.0025	0.0001	0.005	No	9	0.002033	0.0009381	77.78	None	No	0.002	NP (NDs)
Cadmium (mg/L)	GWA-8 (bg)	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-1	0.0025	0.0001	0.005	No	11	0.002061	0.0009769	81.82	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-11	0.0007221	0.0001598	0.005	No	11	0.0005255	0.0006754	9.091	None	In(x)	0.01	Param.
Cadmium (mg/L)	GWC-12	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-13	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-14	0.0025	0.00017	0.005	No	11	0.001234	0.001213	45.45	None	No	0.006	NP (normality)
Cadmium (mg/L)	GWC-15	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-16	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-17	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-2	0.0025	0.0025	0.005	No	12	0.0025	0	100	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-20	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-21	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-22	0.0025	0.00001	0.005	No	11	0.0008245	0.001083	27.27	None	No	0.006	NP (normality)
Cadmium (mg/L)	GWC-9	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWB-4R	0.0025	0.00009	0.005	No	11	0.001644	0.001189	63.64	None	No	0.006	NP (normality)
Cadmium (mg/L)	GWB-5R	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWB-6R	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Chromium (mg/L)	GWA-7 (bg)	0.04592	0.02183	0.1	No	14	0.03387	0.017	0	None	No	0.01	Param.
Chromium (mg/L)	GWA-8 (bg)	0.01	0.0006	0.1	No	16	0.007657	0.004192	75	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-1	0.0062	0.0015	0.1	No	15	0.002653	0.002337	6.667	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-11	0.01	0.0007	0.1	No	15	0.005071	0.004747	40	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-12	0.01	0.00085	0.1	No	15	0.003005	0.00365	20	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-13	0.01	0.0007	0.1	No	15	0.005792	0.004666	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-14	0.01	0.00074	0.1	No	16	0.003754	0.004355	31.25	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-15	0.01	0.0012	0.1	No	15	0.004787	0.004412	40	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-16	0.01	0.0009	0.1	No	16	0.005468	0.004682	43.75	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-17	0.01	0.0009	0.1	No	15	0.004343	0.004295	33.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-2	0.01	0.00065	0.1	No	15	0.005669	0.004794	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-20	0.01	0.00089	0.1	No	15	0.005159	0.004688	46.67	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-21	0.01	0.0006	0.1	No	15	0.005641	0.004824	46.67	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-22	0.01	0.00057	0.1	No	15	0.005612	0.004856	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-9	0.01	0.001	0.1	No	15	0.004793	0.004418	40	None	No	0.01	NP (normality)
Chromium (mg/L)	GWB-4R	0.01066	0.004643	0.1	No	15	0.007653	0.004442	0	None	No	0.01	Param.
Chromium (mg/L)	GWB-5R	0.012	0.0011	0.1	No	15	0.009707	0.01775	26.67	None	No	0.01	NP (Cohens/xfrm)
Chromium (mg/L)	GWB-6R	0.011	0.0013	0.1	No	15	0.005607	0.005891	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWA-7 (bg)	0.00677	0.00267	0.0102	No	10	0.00472	0.002298	0	None	No	0.01	Param.
Cobalt (mg/L)	GWA-8 (bg)	0.005	0.0004	0.0102	No	11	0.002095	0.002304	36.36	None	No	0.006	NP (normality)

# Confidence Interval Summary Table (State) - All Results

Page 3

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	GWC-1	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-11	0.005	0.005	0.0102	No	11	0.004573	0.001417	90.91	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-12	0.001461	0.0009338	0.0102	No	11	0.001197	0.0003162	0	None	No	0.01	Param.
Cobalt (mg/L)	GWC-13	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-14	0.005	0.005	0.0102	No	11	0.004573	0.001417	90.91	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-15	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-16	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-17	0.006889	0.003475	0.0102	No	11	0.005182	0.002048	0	None	No	0.01	Param.
Cobalt (mg/L)	GWC-2	0.005	0.0003	0.0102	No	12	0.003115	0.002339	58.33	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-20	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-21	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-22	0.005	0.0007	0.0102	No	11	0.002676	0.00223	45.45	None	No	0.006	NP (normality)
Cobalt (mg/L)	GWC-9	0.0017	0.00099	0.0102	No	9	0.001453	0.0003465	0	None	No	0.002	NP (normality)
Cobalt (mg/L)	GWB-4R	0.0024	0.0008	0.0102	No	11	0.001509	0.001244	9.091	None	No	0.006	NP (normality)
Cobalt (mg/L)	GWB-5R	0.005	0.00053	0.0102	No	11	0.003548	0.001882	54.55	None	No	0.006	NP (normality)
Cobalt (mg/L)	GWB-6R	0.005	0.005	0.0102	No	11	0.00458	0.001393	90.91	None	No	0.006	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GWA-7 (bg)	16.91	4.867	33.8	No	11	11.4	9.532	0	None	$x^{(1/3)}$	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWA-8 (bg)	2.886	1.863	33.8	No	11	2.375	0.6138	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-1	2.45	1.595	33.8	No	11	2.023	0.5129	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-11	6.309	2.104	33.8	No	11	4.207	2.523	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-12	3.199	1.981	33.8	No	11	2.59	0.7307	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-13	1.373	0.6802	33.8	No	11	1.026	0.4155	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-14	1.353	0.8114	33.8	No	11	1.082	0.3249	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-15	1.815	0.9742	33.8	No	11	1.395	0.5045	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-16	2.13	1.72	33.8	No	11	2.042	0.7575	0	None	No	0.006	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GWC-17	4.417	2.7	33.8	No	11	3.558	1.03	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-2	1.008	0.5555	33.8	No	11	0.7818	0.2716	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-20	3.207	1.453	33.8	No	11	2.33	1.053	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-21	1.862	1.039	33.8	No	11	1.451	0.4937	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-22	7.261	4.254	33.8	No	11	5.757	1.804	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-9	4.327	2.194	33.8	No	11	3.362	1.746	0	None	$\ln(x)$	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWB-4R	5.1	2.32	33.8	No	11	3.632	1.278	0	None	No	0.006	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GWB-5R	3.833	1.921	33.8	No	11	2.971	1.568	0	None	$\ln(x)$	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWB-6R	4.613	1.962	33.8	No	11	3.287	1.591	0	None	No	0.01	Param.
Fluoride (mg/L)	GWA-7 (bg)	0.3628	0.1388	4	No	13	0.2508	0.1506	30.77	None	No	0.01	Param.
Fluoride (mg/L)	GWA-8 (bg)	0.269	0.09469	4	No	13	0.1724	0.1027	15.38	Cohen's $\delta$	No	0.01	Param.
Fluoride (mg/L)	GWC-1	0.3	0.051	4	No	13	0.2455	0.09649	69.23	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-11	0.3	0.3	4	No	13	0.3	0	100	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-12	0.9234	0.3391	4	No	13	0.6312	0.3929	7.692	None	No	0.01	Param.
Fluoride (mg/L)	GWC-13	0.55	0.09	4	No	13	0.284	0.1172	76.92	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-14	0.3707	0.2416	4	No	13	0.3062	0.08685	53.85	None	No	0.01	Param.
Fluoride (mg/L)	GWC-15	0.5	0.13	4	No	13	0.2662	0.1082	61.54	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-16	0.55	0.1	4	No	13	0.3092	0.2106	46.15	None	No	0.01	NP (Cohen's/xfrm)
Fluoride (mg/L)	GWC-17	1.5	0.6906	4	No	13	1.095	0.5444	7.692	None	No	0.01	Param.
Fluoride (mg/L)	GWC-2	0.62	0.07	4	No	13	0.2264	0.1614	46.15	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-20	0.3	0.04	4	No	13	0.2264	0.118	69.23	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-21	0.3	0.071	4	No	13	0.2824	0.06351	92.31	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-22	0.3	0.04	4	No	13	0.1977	0.1179	53.85	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-9	0.3664	0.1032	4	No	13	0.2572	0.2511	0	None	$x^{(1/3)}$	0.01	Param.
Fluoride (mg/L)	GWB-4R	0.38	0.05	4	No	13	0.3004	0.2966	53.85	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWB-5R	0.3	0.04	4	No	13	0.1641	0.1206	38.46	None	No	0.01	NP (Cohen's/xfrm)
Fluoride (mg/L)	GWB-6R	0.3	0.053	4	No	13	0.1868	0.1042	30.77	None	No	0.01	NP (normality)
Lead (mg/L)	GWA-7 (bg)	0.009351	0.003464	0.013	No	13	0.006408	0.003959	0	None	No	0.01	Param.
Lead (mg/L)	GWA-8 (bg)	0.005	0.0001	0.013	No	16	0.003169	0.002442	62.5	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-1	0.005	0.00012	0.013	No	15	0.004348	0.001721	86.67	None	No	0.01	NP (NDs)

# Confidence Interval Summary Table (State) - All Results

Page 4

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	GWC-11	0.00036	0.0001	0.013	No	14	0.00058	0.001274	7.143	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-12	0.005	0.000081	0.013	No	15	0.001983	0.002358	33.33	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-13	0.005	0.00017	0.013	No	15	0.002021	0.002208	33.33	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-14	0.005	0.00051	0.013	No	16	0.003799	0.00215	75	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-15	0.005	0.00012	0.013	No	15	0.002756	0.002484	53.33	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-16	0.005	0.0001	0.013	No	16	0.002271	0.002486	43.75	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-17	0.005	0.0001	0.013	No	15	0.003422	0.002317	66.67	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-2	0.005	0.0002	0.013	No	15	0.00339	0.002358	66.67	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-20	0.005	0.0001	0.013	No	15	0.003374	0.00238	66.67	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-21	0.005	0.00009	0.013	No	15	0.003046	0.002477	60	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-22	0.001163	0.0003349	0.013	No	15	0.001011	0.001307	6.667	None	In(x)	0.01	Param.
Lead (mg/L)	GWC-9	0.005	0.0001	0.013	No	15	0.003091	0.002425	60	None	No	0.01	NP (normality)
Lead (mg/L)	GWB-4R	0.006465	0.00267	0.013	No	14	0.004567	0.002679	14.29	None	No	0.01	Param.
Lead (mg/L)	GWB-5R	0.005	0.0002	0.013	No	15	0.00242	0.002266	40	None	No	0.01	NP (normality)
Lead (mg/L)	GWB-6R	0.005	0.0002	0.013	No	15	0.002544	0.002389	46.67	None	No	0.01	NP (normality)
Lithium (mg/L)	GWA-7 (bg)	0.03	0.03	0.03	No	6	0.03	0	100	None	No	0.0155	NP (NDs)
Lithium (mg/L)	GWA-8 (bg)	0.03	0.001	0.03	No	11	0.01948	0.0146	63.64	None	No	0.006	NP (normality)
Lithium (mg/L)	GWC-1	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-11	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-12	0.03	0.00094	0.03	No	11	0.01683	0.01513	54.55	None	No	0.006	NP (normality)
Lithium (mg/L)	GWC-13	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-14	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-15	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-16	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-17	0.007283	0.005226	0.03	No	11	0.006255	0.001234	0	None	No	0.01	Param.
Lithium (mg/L)	GWC-2	0.03	0.03	0.03	No	12	0.03	0	100	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-20	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-21	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-22	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-9	0.002162	0.001798	0.03	No	10	0.00198	0.0002044	0	None	No	0.01	Param.
Lithium (mg/L)	GWB-4R	0.013	0.0039	0.03	No	11	0.0073	0.00417	0	None	No	0.006	NP (normality)
Lithium (mg/L)	GWB-5R	0.03	0.0027	0.03	No	11	0.01333	0.01325	36.36	None	No	0.006	NP (normality)
Lithium (mg/L)	GWB-6R	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	GWA-7 (bg)	0.0005	0.0001	0.002	No	10	0.000381	0.000194	70	None	No	0.011	NP (normality)
Mercury (mg/L)	GWA-8 (bg)	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-1	0.0005	0.0005	0.002	No	10	0.000454	0.0001455	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-11	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-12	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-13	0.0005	0.0005	0.002	No	10	0.000463	0.000117	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-14	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-15	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-16	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-17	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-2	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	GWC-20	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-21	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-22	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-9	0.0005	0.0005	0.002	No	10	0.000455	0.0001423	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWB-4R	0.0005	0.0005	0.002	No	10	0.0004549	0.0001426	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWB-5R	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	GWB-6R	0.0005	0.0005	0.002	No	10	0.0004543	0.0001445	90	None	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWA-7 (bg)	0.01	0.0013	0.01	No	8	0.0078	0.004012	62.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GWA-8 (bg)	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
<b>Molybdenum (mg/L)</b>	<b>GWC-1</b>	<b>0.1888</b>	<b>0.07681</b>	<b>0.01</b>	<b>Yes</b>	<b>11</b>	<b>0.1328</b>	<b>0.06721</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GWC-11	0.01	0.01	0.01	No	11	0.009255	0.002472	90.91	None	No	0.006	NP (NDs)

# Confidence Interval Summary Table (State) - All Results

Page 5

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	GWC-12	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-13	0.01	0.01	0.01	No	11	0.0096	0.001327	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-14	0.028	0.0022	0.01	No	10	0.00946	0.01198	0	None	No	0.011	NP (normality)
<b>Molybdenum (mg/L)</b>	<b>GWC-15</b>	<b>0.1139</b>	<b>0.08688</b>	<b>0.01</b>	<b>Yes</b>	<b>11</b>	<b>0.1004</b>	<b>0.01621</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Molybdenum (mg/L)</b>	<b>GWC-16</b>	<b>0.2054</b>	<b>0.104</b>	<b>0.01</b>	<b>Yes</b>	<b>11</b>	<b>0.1547</b>	<b>0.06085</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GWC-17	0.01	0.0036	0.01	No	11	0.008182	0.003136	72.73	None	No	0.006	NP (normality)
Molybdenum (mg/L)	GWC-2	0.01	0.01	0.01	No	12	0.01	0	100	None	No	0.01	NP (NDs)
<b>Molybdenum (mg/L)</b>	<b>GWC-20</b>	<b>0.2605</b>	<b>0.09096</b>	<b>0.01</b>	<b>Yes</b>	<b>11</b>	<b>0.1757</b>	<b>0.1017</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Molybdenum (mg/L)</b>	<b>GWC-21</b>	<b>0.06805</b>	<b>0.01392</b>	<b>0.01</b>	<b>Yes</b>	<b>11</b>	<b>0.04098</b>	<b>0.03248</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GWC-22	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-9	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
<b>Molybdenum (mg/L)</b>	<b>GWB-4R</b>	<b>0.1</b>	<b>0.0209</b>	<b>0.01</b>	<b>Yes</b>	<b>11</b>	<b>0.04843</b>	<b>0.04052</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.006</b>	<b>NP (normality)</b>
Molybdenum (mg/L)	GWB-5R	0.01	0.01	0.01	No	11	0.0092	0.002653	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWB-6R	0.01	0.01	0.01	No	11	0.009327	0.002231	90.91	None	No	0.006	NP (NDs)
Selenium (mg/L)	GWA-7 (bg)	0.03164	0.01103	0.05	No	11	0.02134	0.01237	0	None	No	0.01	Param.
Selenium (mg/L)	GWA-8 (bg)	0.01	0.0013	0.05	No	16	0.008894	0.003023	87.5	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-1	0.0052	0.0016	0.05	No	15	0.004147	0.005656	6.667	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-11	0.01	0.0052	0.05	No	15	0.009033	0.005691	26.67	None	No	0.01	NP (Cohens/xfrm)
Selenium (mg/L)	GWC-12	0.01	0.0025	0.05	No	15	0.008427	0.003259	80	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-13	0.01	0.01	0.05	No	15	0.01	0	100	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-14	0.00512	0.002676	0.05	No	16	0.004017	0.002087	6.25	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	GWC-15	0.014	0.0029	0.05	No	15	0.00846	0.00334	53.33	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-16	0.006459	0.003525	0.05	No	16	0.004992	0.002255	6.25	None	No	0.01	Param.
Selenium (mg/L)	GWC-17	0.01	0.0012	0.05	No	15	0.00616	0.00431	53.33	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-2	0.01	0.0035	0.05	No	15	0.009033	0.002567	86.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-20	0.01	0.0014	0.05	No	15	0.007127	0.004206	66.67	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-21	0.0234	0.01368	0.05	No	15	0.01854	0.007169	0	None	No	0.01	Param.
Selenium (mg/L)	GWC-22	0.01	0.0022	0.05	No	15	0.007793	0.003799	73.33	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-9	0.01	0.01	0.05	No	15	0.01	0	100	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWB-4R	0.01	0.0029	0.05	No	15	0.0058	0.003265	33.33	None	No	0.01	NP (Cohens/xfrm)
Selenium (mg/L)	GWB-5R	0.01	0.0073	0.05	No	15	0.008827	0.002656	80	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWB-6R	0.05	0.0033	0.05	No	15	0.01109	0.01125	73.33	None	No	0.01	NP (normality)
Thallium (mg/L)	GWA-7 (bg)	0.001	0.001	0.002	No	11	0.0009545	0.0001508	90.91	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWA-8 (bg)	0.001	0.00006	0.002	No	11	0.0007429	0.0004403	72.73	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-1	0.001	0.000054	0.002	No	11	0.0007416	0.0004425	72.73	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-11	0.001	0.00007	0.002	No	11	0.0005925	0.0004693	54.55	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-12	0.001	0.00013	0.002	No	11	0.0004073	0.0003839	27.27	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-13	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-14	0.001	0.00007	0.002	No	11	0.00083	0.0003782	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-15	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-16	0.001	0.00006	0.002	No	11	0.0008282	0.0003823	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-17	0.001	0.000066	0.002	No	11	0.0004998	0.0004791	45.45	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-2	0.001	0.00011	0.002	No	12	0.0009258	0.0002569	91.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	GWC-20	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-21	0.001	0.001	0.002	No	11	0.0009136	0.0002864	90.91	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-22	0.001	0.000065	0.002	No	11	0.0006646	0.0004654	63.64	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-9	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWB-4R	0.001	0.00007	0.002	No	11	0.0008309	0.0003762	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWB-5R	0.001	0.00031	0.002	No	11	0.0008515	0.0003351	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWB-6R	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)

## Confidence Interval Summary Table (Federal) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:57 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWC-15	0.1293	0.05039	0.0287	Yes	15	0.08984	0.05821	0	None	No	0.01	Param.
Arsenic (mg/L)	GWC-16	0.08406	0.0633	0.0287	Yes	16	0.07368	0.01595	0	None	No	0.01	Param.
Arsenic (mg/L)	GWC-20	0.3752	0.277	0.0287	Yes	15	0.3261	0.07248	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-16	0.2054	0.104	0.1	Yes	11	0.1547	0.06085	0	None	No	0.01	Param.

# Confidence Interval Summary Table (Federal) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:57 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWA-7 (bg)	0.003	0.0013	0.006	No	15	0.002513	0.0008568	73.33	None	No	0.01	NP (normality)
Antimony (mg/L)	GWA-8 (bg)	0.003	0.003	0.006	No	16	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-1	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-11	0.003	0.0005	0.006	No	15	0.001877	0.001249	53.33	None	No	0.01	NP (normality)
Antimony (mg/L)	GWC-12	0.003	0.003	0.006	No	14	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-13	0.003	0.0006	0.006	No	15	0.00284	0.0006197	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-14	0.003	0.003	0.006	No	16	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-15	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-16	0.003	0.003	0.006	No	16	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-17	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-2	0.003	0.0013	0.006	No	15	0.002887	0.0004389	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-20	0.003	0.0019	0.006	No	15	0.002927	0.000284	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-21	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-22	0.003	0.00049	0.006	No	15	0.002663	0.0008903	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-9	0.003	0.0016	0.006	No	15	0.002729	0.0007552	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-4R	0.003	0.0003	0.006	No	15	0.00282	0.0006971	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-5R	0.003	0.00054	0.006	No	15	0.002836	0.0006352	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-6R	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWA-7 (bg)	0.01379	0.004635	0.0287	No	12	0.009508	0.00692	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GWA-8 (bg)	0.005	0.0006	0.0287	No	16	0.003391	0.00215	62.5	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-1	0.0042	0.0015	0.0287	No	14	0.004343	0.006598	0	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-11	0.005	0.005	0.0287	No	15	0.005	0	100	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-12	0.005	0.0009	0.0287	No	15	0.004153	0.001754	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-13	0.005	0.0006	0.0287	No	15	0.004412	0.001552	86.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-14	0.0026	0.0018	0.0287	No	16	0.002271	0.0008184	6.25	None	No	0.01	NP (normality)
Arsenic (mg/L)	<b>GWC-15</b>	<b>0.1293</b>	<b>0.05039</b>	<b>0.0287</b>	<b>Yes</b>	<b>15</b>	<b>0.08984</b>	<b>0.05821</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	<b>GWC-16</b>	<b>0.08406</b>	<b>0.0633</b>	<b>0.0287</b>	<b>Yes</b>	<b>16</b>	<b>0.07368</b>	<b>0.01595</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GWC-17	0.005	0.0009	0.0287	No	15	0.002521	0.001835	33.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-2	0.005	0.00094	0.0287	No	15	0.004129	0.001807	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	<b>GWC-20</b>	<b>0.3752</b>	<b>0.277</b>	<b>0.0287</b>	<b>Yes</b>	<b>15</b>	<b>0.3261</b>	<b>0.07248</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GWC-21	0.005955	0.00332	0.0287	No	15	0.004067	0.001312	40	Cohen's	No	0.01	Param.
Arsenic (mg/L)	GWC-22	0.005	0.0006	0.0287	No	15	0.002705	0.002021	40	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-9	0.005	0.00084	0.0287	No	15	0.004723	0.001074	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWB-4R	0.003147	0.001641	0.0287	No	15	0.002457	0.001208	13.33	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GWB-5R	0.005	0.0009	0.0287	No	15	0.002487	0.001924	26.67	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWB-6R	0.005	0.0011	0.0287	No	15	0.002829	0.001743	33.33	None	No	0.01	NP (Cohens/xfrm)
Barium (mg/L)	GWA-7 (bg)	0.1545	0.0802	2	No	14	0.1174	0.05248	0	None	No	0.01	Param.
Barium (mg/L)	GWA-8 (bg)	0.0664	0.06025	2	No	16	0.06333	0.00472	0	None	No	0.01	Param.
Barium (mg/L)	GWC-1	0.0575	0.04982	2	No	15	0.05366	0.005669	0	None	No	0.01	Param.
Barium (mg/L)	GWC-11	0.1125	0.05506	2	No	15	0.08379	0.0424	0	None	No	0.01	Param.
Barium (mg/L)	GWC-12	0.0191	0.0162	2	No	15	0.01847	0.003995	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-13	0.02474	0.01968	2	No	15	0.02221	0.003733	0	None	No	0.01	Param.
Barium (mg/L)	GWC-14	0.067	0.0248	2	No	16	0.03726	0.01953	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-15	0.049	0.04021	2	No	15	0.04461	0.006483	0	None	No	0.01	Param.
Barium (mg/L)	GWC-16	0.1049	0.05422	2	No	14	0.08131	0.0372	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-17	0.1245	0.04703	2	No	15	0.09051	0.06112	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-2	0.057	0.049	2	No	14	0.05407	0.008399	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-20	0.148	0.078	2	No	15	0.1071	0.03885	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-21	0.07381	0.05031	2	No	15	0.06206	0.01734	0	None	No	0.01	Param.
Barium (mg/L)	GWC-22	0.09974	0.06378	2	No	15	0.08279	0.0285	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-9	0.2743	0.1982	2	No	15	0.2363	0.05612	0	None	No	0.01	Param.
Barium (mg/L)	GWB-4R	0.09633	0.07886	2	No	15	0.08759	0.01289	0	None	No	0.01	Param.
Barium (mg/L)	GWB-5R	0.1628	0.09057	2	No	15	0.1294	0.05934	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWB-6R	0.107	0.013	2	No	15	0.07353	0.04511	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWA-7 (bg)	0.003	0.0002	0.004	No	8	0.001225	0.001208	25	None	No	0.004	NP (Cohens/xfrm)

# Confidence Interval Summary Table (Federal) - All Results

Page 2

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:57 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	GWA-8 (bg)	0.00024	0.0002	0.004	No	11	0.0004564	0.0008438	9.091	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-1	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-11	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-12	0.000918	0.0005275	0.004	No	11	0.0007227	0.0002343	0	None	No	0.01	Param.
Beryllium (mg/L)	GWC-13	0.003	0.003	0.004	No	11	0.002733	0.000887	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-14	0.003	0.00009	0.004	No	11	0.002205	0.001362	72.73	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-15	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-16	0.003	0.00008	0.004	No	11	0.001147	0.001469	36.36	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-17	0.003159	0.001658	0.004	No	11	0.002427	0.0009318	0	None	sqr(x)	0.01	Param.
Beryllium (mg/L)	GWC-2	0.003	0.00009	0.004	No	12	0.00229	0.001286	75	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-20	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-21	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-22	0.003	0.00009	0.004	No	11	0.001433	0.001501	45.45	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-9	0.0003	0.0002	0.004	No	11	0.0002582	0.00004916	0	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWB-4R	0.003	0.0001	0.004	No	11	0.001445	0.001491	45.45	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWB-5R	0.003	0.0001	0.004	No	11	0.0007051	0.001137	18.18	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWB-6R	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWA-7 (bg)	0.0025	0.0001	0.005	No	9	0.002033	0.0009381	77.78	None	No	0.002	NP (NDs)
Cadmium (mg/L)	GWA-8 (bg)	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-1	0.0025	0.0001	0.005	No	11	0.002061	0.0009769	81.82	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-11	0.0007221	0.0001598	0.005	No	11	0.0005255	0.0006754	9.091	None	In(x)	0.01	Param.
Cadmium (mg/L)	GWC-12	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-13	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-14	0.0025	0.00017	0.005	No	11	0.001234	0.001213	45.45	None	No	0.006	NP (normality)
Cadmium (mg/L)	GWC-15	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-16	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-17	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-2	0.0025	0.0025	0.005	No	12	0.0025	0	100	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-20	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-21	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-22	0.0025	0.00001	0.005	No	11	0.0008245	0.001083	27.27	None	No	0.006	NP (normality)
Cadmium (mg/L)	GWC-9	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWB-4R	0.0025	0.00009	0.005	No	11	0.001644	0.001189	63.64	None	No	0.006	NP (normality)
Cadmium (mg/L)	GWB-5R	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWB-6R	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Chromium (mg/L)	GWA-7 (bg)	0.04592	0.02183	0.1	No	14	0.03387	0.017	0	None	No	0.01	Param.
Chromium (mg/L)	GWA-8 (bg)	0.01	0.0006	0.1	No	16	0.007657	0.004192	75	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-1	0.0062	0.0015	0.1	No	15	0.002653	0.002337	6.667	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-11	0.01	0.0007	0.1	No	15	0.005071	0.004747	40	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-12	0.01	0.00085	0.1	No	15	0.003005	0.00365	20	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-13	0.01	0.0007	0.1	No	15	0.005792	0.004666	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-14	0.01	0.00074	0.1	No	16	0.003754	0.004355	31.25	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-15	0.01	0.0012	0.1	No	15	0.004787	0.004412	40	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-16	0.01	0.0009	0.1	No	16	0.005468	0.004682	43.75	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-17	0.01	0.0009	0.1	No	15	0.004343	0.004295	33.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-2	0.01	0.00065	0.1	No	15	0.005669	0.004794	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-20	0.01	0.00089	0.1	No	15	0.005159	0.004688	46.67	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-21	0.01	0.0006	0.1	No	15	0.005641	0.004824	46.67	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-22	0.01	0.00057	0.1	No	15	0.005612	0.004856	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-9	0.01	0.001	0.1	No	15	0.004793	0.004418	40	None	No	0.01	NP (normality)
Chromium (mg/L)	GWB-4R	0.01066	0.004643	0.1	No	15	0.007653	0.004442	0	None	No	0.01	Param.
Chromium (mg/L)	GWB-5R	0.012	0.0011	0.1	No	15	0.009707	0.01775	26.67	None	No	0.01	NP (Cohens/xfrm)
Chromium (mg/L)	GWB-6R	0.011	0.0013	0.1	No	15	0.005607	0.005891	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWA-7 (bg)	0.00677	0.00267	0.0102	No	10	0.00472	0.002298	0	None	No	0.01	Param.
Cobalt (mg/L)	GWA-8 (bg)	0.005	0.0004	0.0102	No	11	0.002095	0.002304	36.36	None	No	0.006	NP (normality)

# Confidence Interval Summary Table (Federal) - All Results

Page 3

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:57 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	GWC-1	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-11	0.005	0.005	0.0102	No	11	0.004573	0.001417	90.91	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-12	0.001461	0.0009338	0.0102	No	11	0.001197	0.0003162	0	None	No	0.01	Param.
Cobalt (mg/L)	GWC-13	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-14	0.005	0.005	0.0102	No	11	0.004573	0.001417	90.91	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-15	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-16	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-17	0.006889	0.003475	0.0102	No	11	0.005182	0.002048	0	None	No	0.01	Param.
Cobalt (mg/L)	GWC-2	0.005	0.0003	0.0102	No	12	0.003115	0.002339	58.33	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-20	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-21	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-22	0.005	0.0007	0.0102	No	11	0.002676	0.00223	45.45	None	No	0.006	NP (normality)
Cobalt (mg/L)	GWC-9	0.0017	0.00099	0.0102	No	9	0.001453	0.0003465	0	None	No	0.002	NP (normality)
Cobalt (mg/L)	GWB-4R	0.0024	0.0008	0.0102	No	11	0.001509	0.001244	9.091	None	No	0.006	NP (normality)
Cobalt (mg/L)	GWB-5R	0.005	0.00053	0.0102	No	11	0.003548	0.001882	54.55	None	No	0.006	NP (normality)
Cobalt (mg/L)	GWB-6R	0.005	0.005	0.0102	No	11	0.00458	0.001393	90.91	None	No	0.006	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GWA-7 (bg)	16.91	4.867	33.8	No	11	11.4	9.532	0	None	$x^{(1/3)}$	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWA-8 (bg)	2.886	1.863	33.8	No	11	2.375	0.6138	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-1	2.45	1.595	33.8	No	11	2.023	0.5129	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-11	6.309	2.104	33.8	No	11	4.207	2.523	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-12	3.199	1.981	33.8	No	11	2.59	0.7307	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-13	1.373	0.6802	33.8	No	11	1.026	0.4155	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-14	1.353	0.8114	33.8	No	11	1.082	0.3249	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-15	1.815	0.9742	33.8	No	11	1.395	0.5045	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-16	2.13	1.72	33.8	No	11	2.042	0.7575	0	None	No	0.006	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GWC-17	4.417	2.7	33.8	No	11	3.558	1.03	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-2	1.008	0.5555	33.8	No	11	0.7818	0.2716	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-20	3.207	1.453	33.8	No	11	2.33	1.053	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-21	1.862	1.039	33.8	No	11	1.451	0.4937	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-22	7.261	4.254	33.8	No	11	5.757	1.804	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-9	4.327	2.194	33.8	No	11	3.362	1.746	0	None	$\ln(x)$	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWB-4R	5.1	2.32	33.8	No	11	3.632	1.278	0	None	No	0.006	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GWB-5R	3.833	1.921	33.8	No	11	2.971	1.568	0	None	$\ln(x)$	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWB-6R	4.613	1.962	33.8	No	11	3.287	1.591	0	None	No	0.01	Param.
Fluoride (mg/L)	GWA-7 (bg)	0.3628	0.1388	4	No	13	0.2508	0.1506	30.77	None	No	0.01	Param.
Fluoride (mg/L)	GWA-8 (bg)	0.269	0.09469	4	No	13	0.1724	0.1027	15.38	Cohen's $\delta$	No	0.01	Param.
Fluoride (mg/L)	GWC-1	0.3	0.051	4	No	13	0.2455	0.09649	69.23	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-11	0.3	0.3	4	No	13	0.3	0	100	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-12	0.9234	0.3391	4	No	13	0.6312	0.3929	7.692	None	No	0.01	Param.
Fluoride (mg/L)	GWC-13	0.55	0.09	4	No	13	0.284	0.1172	76.92	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-14	0.3707	0.2416	4	No	13	0.3062	0.08685	53.85	None	No	0.01	Param.
Fluoride (mg/L)	GWC-15	0.5	0.13	4	No	13	0.2662	0.1082	61.54	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-16	0.55	0.1	4	No	13	0.3092	0.2106	46.15	None	No	0.01	NP (Cohen's/xfrm)
Fluoride (mg/L)	GWC-17	1.5	0.6906	4	No	13	1.095	0.5444	7.692	None	No	0.01	Param.
Fluoride (mg/L)	GWC-2	0.62	0.07	4	No	13	0.2264	0.1614	46.15	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-20	0.3	0.04	4	No	13	0.2264	0.118	69.23	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-21	0.3	0.071	4	No	13	0.2824	0.06351	92.31	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-22	0.3	0.04	4	No	13	0.1977	0.1179	53.85	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-9	0.3664	0.1032	4	No	13	0.2572	0.2511	0	None	$x^{(1/3)}$	0.01	Param.
Fluoride (mg/L)	GWB-4R	0.38	0.05	4	No	13	0.3004	0.2966	53.85	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWB-5R	0.3	0.04	4	No	13	0.1641	0.1206	38.46	None	No	0.01	NP (Cohen's/xfrm)
Fluoride (mg/L)	GWB-6R	0.3	0.053	4	No	13	0.1868	0.1042	30.77	None	No	0.01	NP (normality)
Lead (mg/L)	GWA-7 (bg)	0.009351	0.003464	0.013	No	13	0.006408	0.003959	0	None	No	0.01	Param.
Lead (mg/L)	GWA-8 (bg)	0.005	0.0001	0.013	No	16	0.003169	0.002442	62.5	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-1	0.005	0.00012	0.013	No	15	0.004348	0.001721	86.67	None	No	0.01	NP (NDs)

# Confidence Interval Summary Table (Federal) - All Results

Page 4

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:57 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	GWC-11	0.00036	0.0001	0.013	No	14	0.00058	0.001274	7.143	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-12	0.005	0.000081	0.013	No	15	0.001983	0.002358	33.33	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-13	0.005	0.00017	0.013	No	15	0.002021	0.002208	33.33	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-14	0.005	0.00051	0.013	No	16	0.003799	0.00215	75	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-15	0.005	0.00012	0.013	No	15	0.002756	0.002484	53.33	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-16	0.005	0.0001	0.013	No	16	0.002271	0.002486	43.75	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-17	0.005	0.0001	0.013	No	15	0.003422	0.002317	66.67	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-2	0.005	0.0002	0.013	No	15	0.00339	0.002358	66.67	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-20	0.005	0.0001	0.013	No	15	0.003374	0.00238	66.67	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-21	0.005	0.00009	0.013	No	15	0.003046	0.002477	60	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-22	0.001163	0.0003349	0.013	No	15	0.001011	0.001307	6.667	None	In(x)	0.01	Param.
Lead (mg/L)	GWC-9	0.005	0.0001	0.013	No	15	0.003091	0.002425	60	None	No	0.01	NP (normality)
Lead (mg/L)	GWB-4R	0.006465	0.00267	0.013	No	14	0.004567	0.002679	14.29	None	No	0.01	Param.
Lead (mg/L)	GWB-5R	0.005	0.0002	0.013	No	15	0.00242	0.002266	40	None	No	0.01	NP (normality)
Lead (mg/L)	GWB-6R	0.005	0.0002	0.013	No	15	0.002544	0.002389	46.67	None	No	0.01	NP (normality)
Lithium (mg/L)	GWA-7 (bg)	0.03	0.03	0.04	No	6	0.03	0	100	None	No	0.0155	NP (NDs)
Lithium (mg/L)	GWA-8 (bg)	0.03	0.001	0.04	No	11	0.01948	0.0146	63.64	None	No	0.006	NP (normality)
Lithium (mg/L)	GWC-1	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-11	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-12	0.03	0.00094	0.04	No	11	0.01683	0.01513	54.55	None	No	0.006	NP (normality)
Lithium (mg/L)	GWC-13	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-14	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-15	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-16	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-17	0.007283	0.005226	0.04	No	11	0.006255	0.001234	0	None	No	0.01	Param.
Lithium (mg/L)	GWC-2	0.03	0.03	0.04	No	12	0.03	0	100	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-20	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-21	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-22	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-9	0.002162	0.001798	0.04	No	10	0.00198	0.0002044	0	None	No	0.01	Param.
Lithium (mg/L)	GWB-4R	0.013	0.0039	0.04	No	11	0.0073	0.00417	0	None	No	0.006	NP (normality)
Lithium (mg/L)	GWB-5R	0.03	0.0027	0.04	No	11	0.01333	0.01325	36.36	None	No	0.006	NP (normality)
Lithium (mg/L)	GWB-6R	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	GWA-7 (bg)	0.0005	0.0001	0.002	No	10	0.000381	0.000194	70	None	No	0.011	NP (normality)
Mercury (mg/L)	GWA-8 (bg)	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-1	0.0005	0.0005	0.002	No	10	0.000454	0.0001455	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-11	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-12	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-13	0.0005	0.0005	0.002	No	10	0.000463	0.000117	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-14	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-15	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-16	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-17	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-2	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	GWC-20	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-21	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-22	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-9	0.0005	0.0005	0.002	No	10	0.000455	0.0001423	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWB-4R	0.0005	0.0005	0.002	No	10	0.0004549	0.0001426	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWB-5R	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	GWB-6R	0.0005	0.0005	0.002	No	10	0.0004543	0.0001445	90	None	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWA-7 (bg)	0.01	0.0013	0.1	No	8	0.0078	0.004012	62.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GWA-8 (bg)	0.01	0.01	0.1	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-1	0.1888	0.07681	0.1	No	11	0.1328	0.06721	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-11	0.01	0.01	0.1	No	11	0.009255	0.002472	90.91	None	No	0.006	NP (NDs)

# Confidence Interval Summary Table (Federal) - All Results

Page 5

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:57 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	GWC-12	0.01	0.01	0.1	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-13	0.01	0.01	0.1	No	11	0.0096	0.001327	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-14	0.028	0.0022	0.1	No	10	0.00946	0.01198	0	None	No	0.011	NP (normality)
Molybdenum (mg/L)	GWC-15	0.1139	0.08688	0.1	No	11	0.1004	0.01621	0	None	No	0.01	Param.
<b>Molybdenum (mg/L)</b>	<b>GWC-16</b>	<b>0.2054</b>	<b>0.104</b>	<b>0.1</b>	<b>Yes</b>	<b>11</b>	<b>0.1547</b>	<b>0.06085</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GWC-17	0.01	0.0036	0.1	No	11	0.008182	0.003136	72.73	None	No	0.006	NP (normality)
Molybdenum (mg/L)	GWC-2	0.01	0.01	0.1	No	12	0.01	0	100	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	GWC-20	0.2605	0.09096	0.1	No	11	0.1757	0.1017	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-21	0.06805	0.01392	0.1	No	11	0.04098	0.03248	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-22	0.01	0.01	0.1	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-9	0.01	0.01	0.1	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWB-4R	0.1	0.0209	0.1	No	11	0.04843	0.04052	0	None	No	0.006	NP (normality)
Molybdenum (mg/L)	GWB-5R	0.01	0.01	0.1	No	11	0.0092	0.002653	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWB-6R	0.01	0.01	0.1	No	11	0.009327	0.002231	90.91	None	No	0.006	NP (NDs)
Selenium (mg/L)	GWA-7 (bg)	0.03164	0.01103	0.05	No	11	0.02134	0.01237	0	None	No	0.01	Param.
Selenium (mg/L)	GWA-8 (bg)	0.01	0.0013	0.05	No	16	0.008894	0.003023	87.5	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-1	0.0052	0.0016	0.05	No	15	0.004147	0.005656	6.667	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-11	0.01	0.0052	0.05	No	15	0.009033	0.005691	26.67	None	No	0.01	NP (Cohens/xfrm)
Selenium (mg/L)	GWC-12	0.01	0.0025	0.05	No	15	0.008427	0.003259	80	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-13	0.01	0.01	0.05	No	15	0.01	0	100	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-14	0.00512	0.002676	0.05	No	16	0.004017	0.002087	6.25	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	GWC-15	0.014	0.0029	0.05	No	15	0.00846	0.00334	53.33	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-16	0.006459	0.003525	0.05	No	16	0.004992	0.002255	6.25	None	No	0.01	Param.
Selenium (mg/L)	GWC-17	0.01	0.0012	0.05	No	15	0.00616	0.00431	53.33	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-2	0.01	0.0035	0.05	No	15	0.009033	0.002567	86.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-20	0.01	0.0014	0.05	No	15	0.007127	0.004206	66.67	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-21	0.0234	0.01368	0.05	No	15	0.01854	0.007169	0	None	No	0.01	Param.
Selenium (mg/L)	GWC-22	0.01	0.0022	0.05	No	15	0.007793	0.003799	73.33	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-9	0.01	0.01	0.05	No	15	0.01	0	100	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWB-4R	0.01	0.0029	0.05	No	15	0.0058	0.003265	33.33	None	No	0.01	NP (Cohens/xfrm)
Selenium (mg/L)	GWB-5R	0.01	0.0073	0.05	No	15	0.008827	0.002656	80	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWB-6R	0.05	0.0033	0.05	No	15	0.01109	0.01125	73.33	None	No	0.01	NP (normality)
Thallium (mg/L)	GWA-7 (bg)	0.001	0.001	0.002	No	11	0.0009545	0.0001508	90.91	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWA-8 (bg)	0.001	0.00006	0.002	No	11	0.0007429	0.0004403	72.73	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-1	0.001	0.000054	0.002	No	11	0.0007416	0.0004425	72.73	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-11	0.001	0.00007	0.002	No	11	0.0005925	0.0004693	54.55	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-12	0.001	0.00013	0.002	No	11	0.0004073	0.0003839	27.27	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-13	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-14	0.001	0.00007	0.002	No	11	0.00083	0.0003782	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-15	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-16	0.001	0.00006	0.002	No	11	0.0008282	0.0003823	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-17	0.001	0.000066	0.002	No	11	0.0004998	0.0004791	45.45	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-2	0.001	0.00011	0.002	No	12	0.0009258	0.0002569	91.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	GWC-20	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-21	0.001	0.001	0.002	No	11	0.0009136	0.0002864	90.91	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-22	0.001	0.000065	0.002	No	11	0.0006646	0.0004654	63.64	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-9	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWB-4R	0.001	0.00007	0.002	No	11	0.0008309	0.0003762	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWB-5R	0.001	0.00031	0.002	No	11	0.0008515	0.0003351	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWB-6R	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)

# Outlier Summary

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:33 PM

	GWC-12 Antimony (mg/L)	GWA-7 Arsenic (mg/L)	GWC-1 Arsenic (mg/L)	GWA-7 Barium (mg/L)	GWC-16 Barium (mg/L)	GWC-2 Barium (mg/L)	GWA-7 Beryllium (mg/L)	GWC-15 Boron (mg/L)	GWC-9 Boron (mg/L)	GWA-7 Cadmium (mg/L)
1/17/2016		0.024 (o)								
1/18/2016	<0.003 (o)									
8/31/2016								0.096 (J,o)		
9/1/2016		0.415 (o)					9.01 (o)			
10/26/2016				0.113 (o)						
10/3/2017				0.135 (o)						
10/4/2017										
1/9/2018										
7/9/2018										
7/10/2018			0.16 (o)							
7/11/2018	<0.025 (o)					<0.015 (o)				
1/16/2019	<0.025 (o)									
1/17/2019										
1/18/2019										
1/21/2019										
3/25/2019										
8/26/2019					<0.015 (o)			<0.012 (o)		
10/8/2019					<0.015 (o)			<0.012 (o)		
4/6/2020	<0.025 (o)									

	GWC-13 Calcium (mg/L)	GWA-7 Chromium (mg/L)	GWA-7 Cobalt (mg/L)	GWC-9 Cobalt (mg/L)	GWA-7 Lead (mg/L)	GWC-11 Lead (mg/L)	GWB-4R Lead (mg/L)	GWA-7 Lithium (mg/L)	GWC-9 Lithium (mg/L)	GWA-7 Molybdenum (mg/L)
1/17/2016										
1/18/2016										
8/31/2016	2.77 (o)				0.0021 (J,o)			<0.05 (o)		
9/1/2016		0.119 (o)			0.0663 (o)		0.0166 (o)			
10/26/2016										
10/3/2017										
10/4/2017				0.0015 (J,o)						
1/9/2018							<0.15 (o)			
7/9/2018										
7/10/2018										
7/11/2018		<0.05 (o)			<0.005 (o)		<0.15 (o)		<0.05 (o)	
1/16/2019					<0.025 (o)					
1/17/2019										
1/18/2019										
1/21/2019										
3/25/2019										
8/26/2019						<0.15 (o)		<0.05 (o)		
10/8/2019						<0.15 (o)		<0.05 (o)		
4/6/2020						<0.15 (o)				

# Outlier Summary

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:33 PM



1/17/2016

1/18/2016

8/31/2016

9/1/2016

10/26/2016

10/3/2017

10/4/2017

1/9/2018

7/9/2018 0.01 (o)

7/10/2018

7/11/2018

1/16/2019

6.16 (o) 6.45 (o)

1/17/2019

8.44 (o)

1/18/2019

6.98 (o) 6.87 (o)

1/21/2019

7.73 (o)

3/25/2019

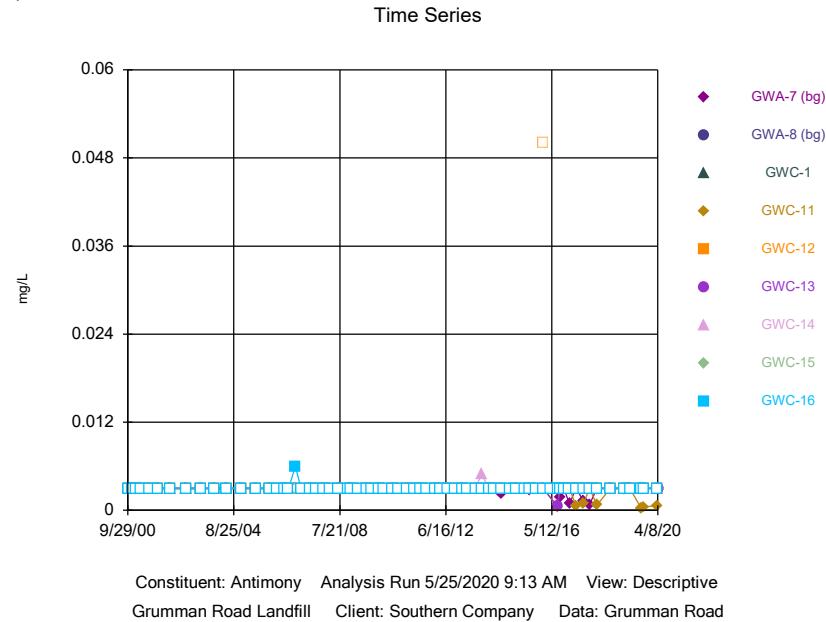
8/26/2019

10/8/2019

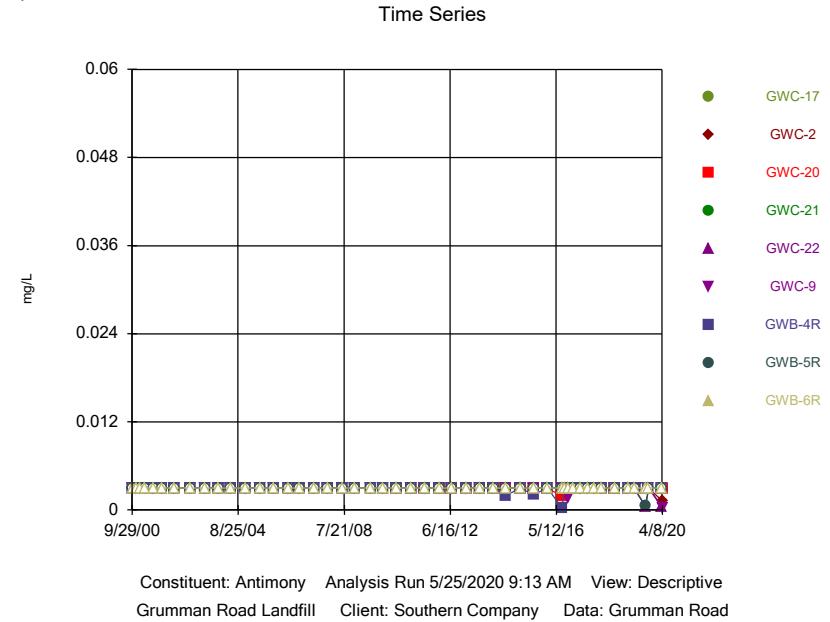
4/6/2020

# FIGURE A.

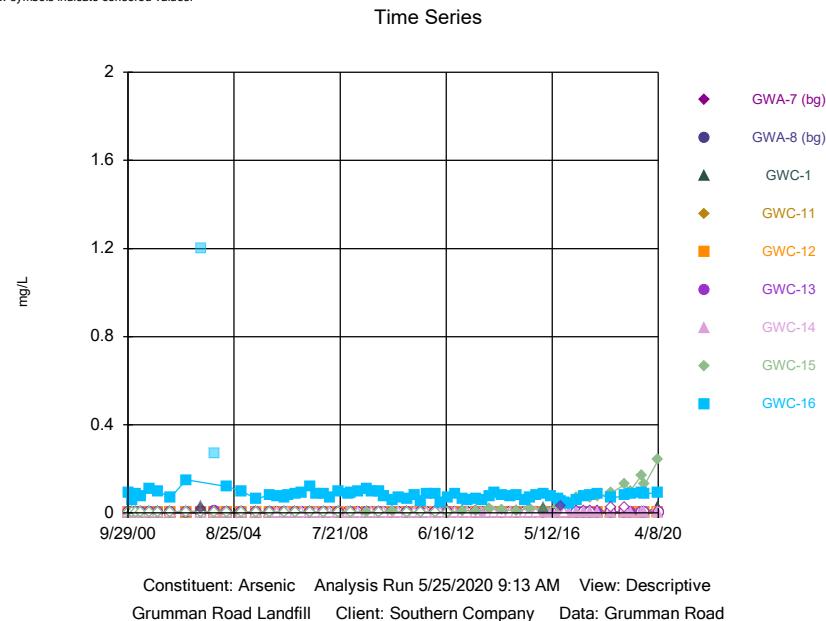
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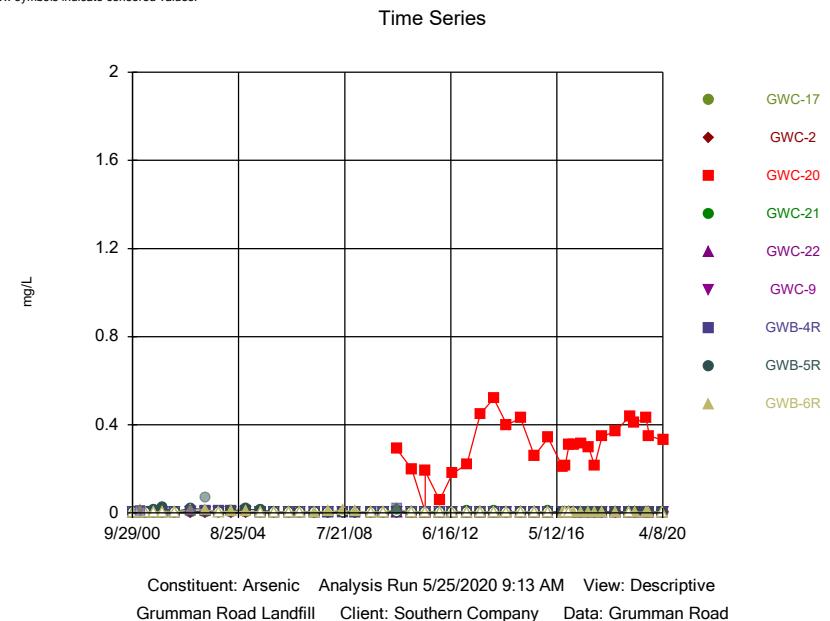
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Hollow symbols indicate censored values.



Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
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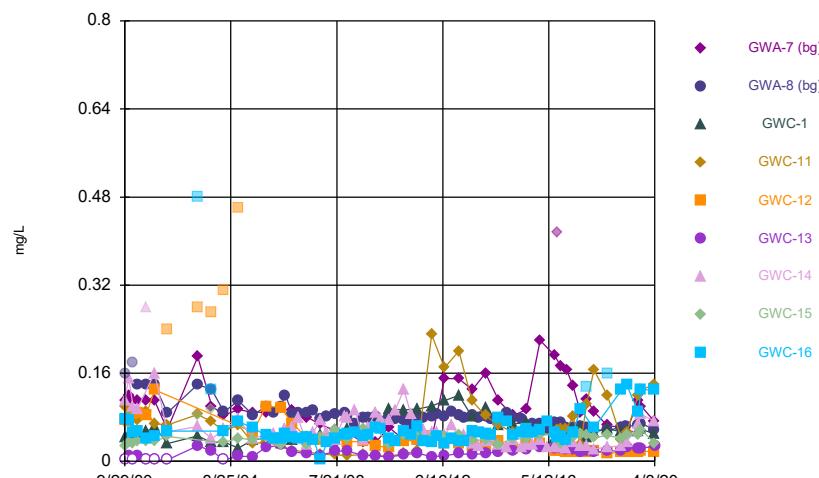


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Hollow symbols indicate censored values.



Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

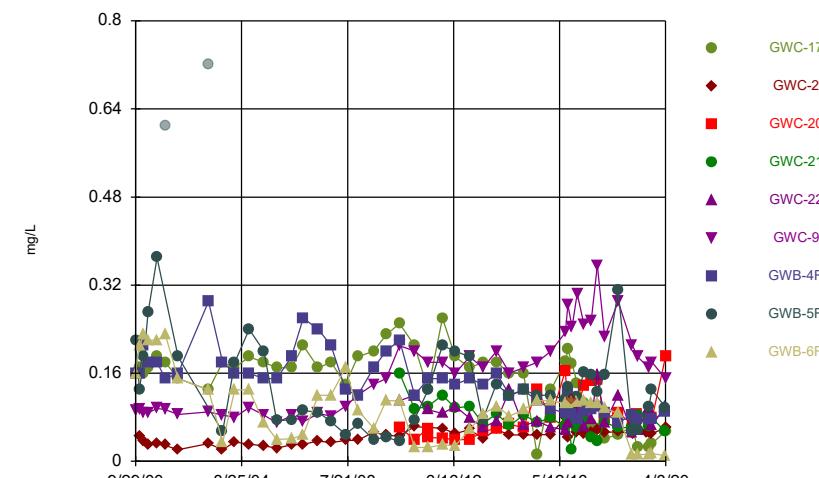
### Time Series



Constituent: Barium Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG

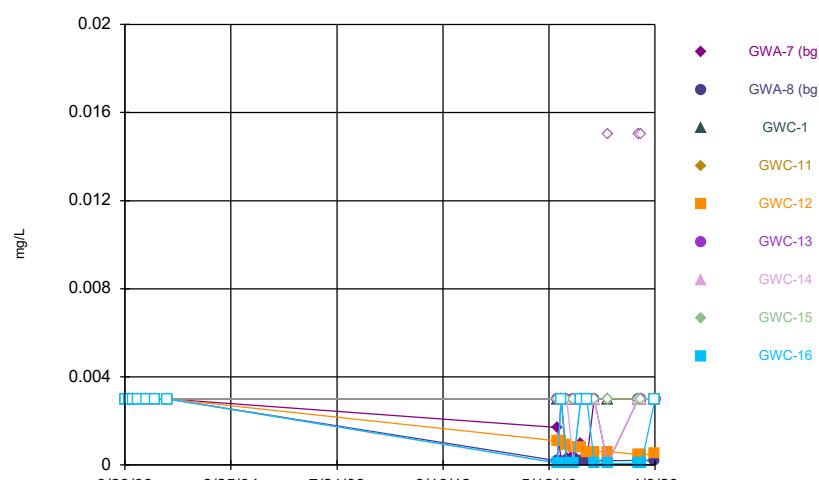
### Time Series



Constituent: Barium Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

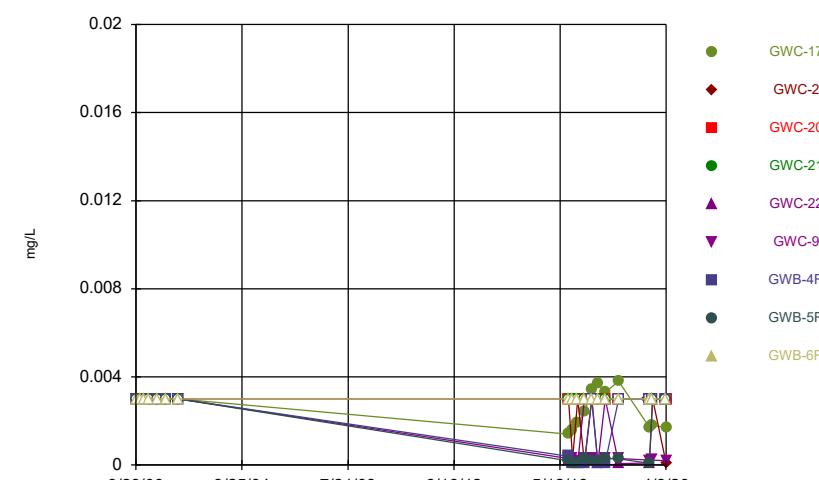
### Time Series



Constituent: Beryllium Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

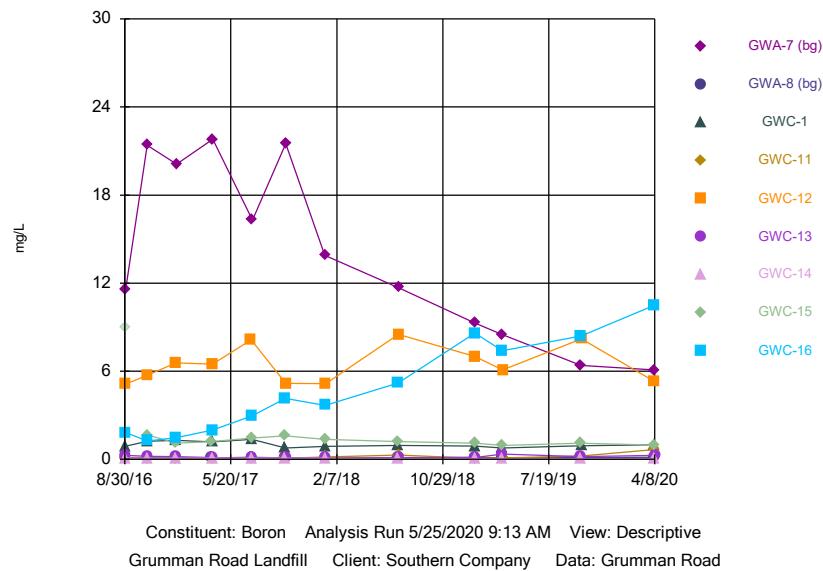
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

### Time Series

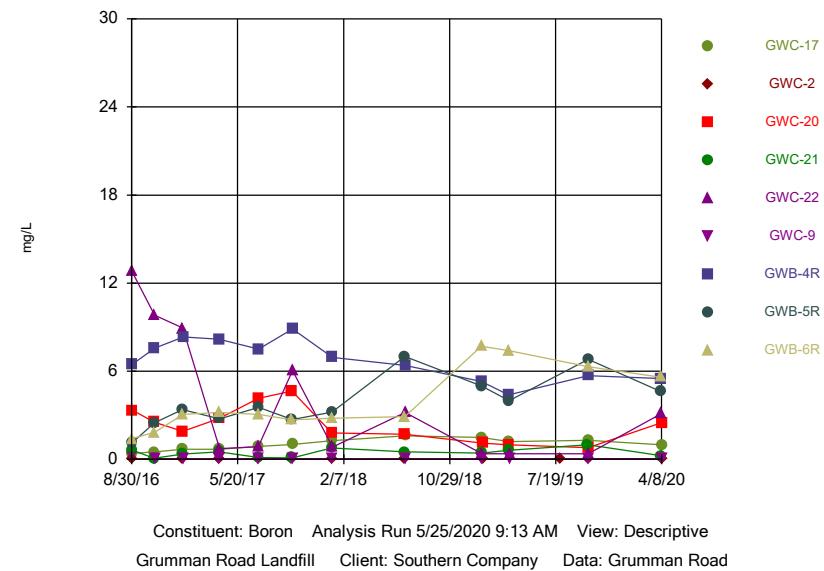


Constituent: Beryllium Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

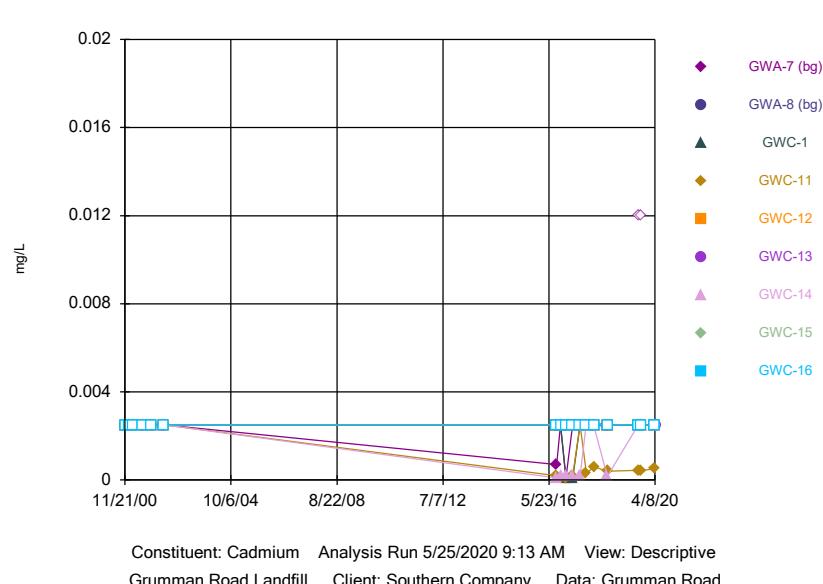
## Time Series



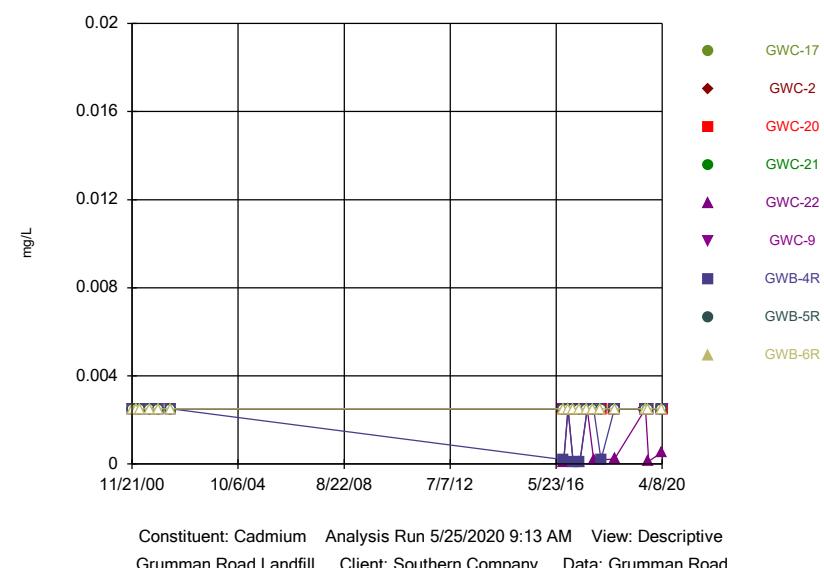
## Time Series



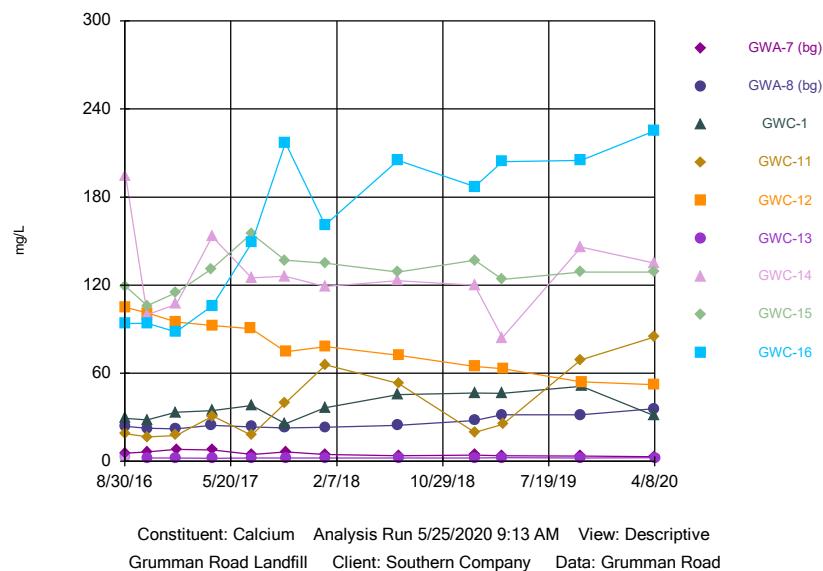
## Time Series



## Time Series

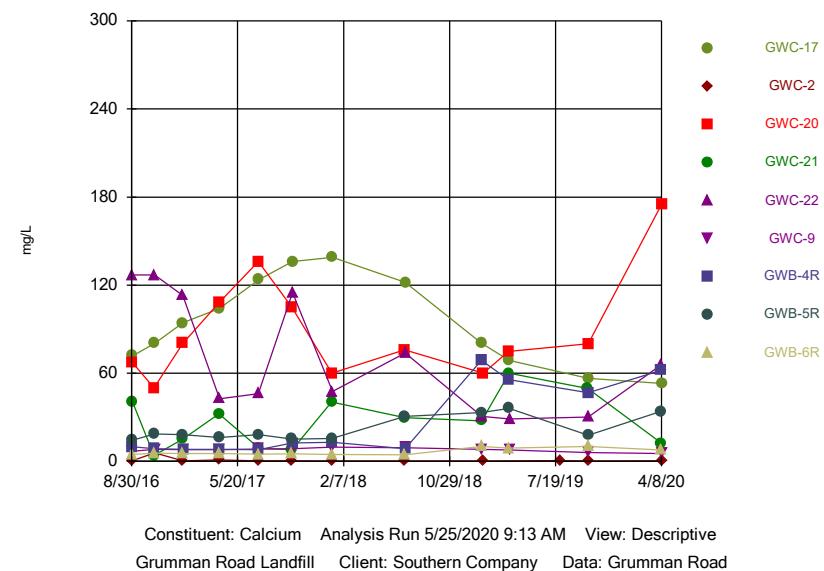


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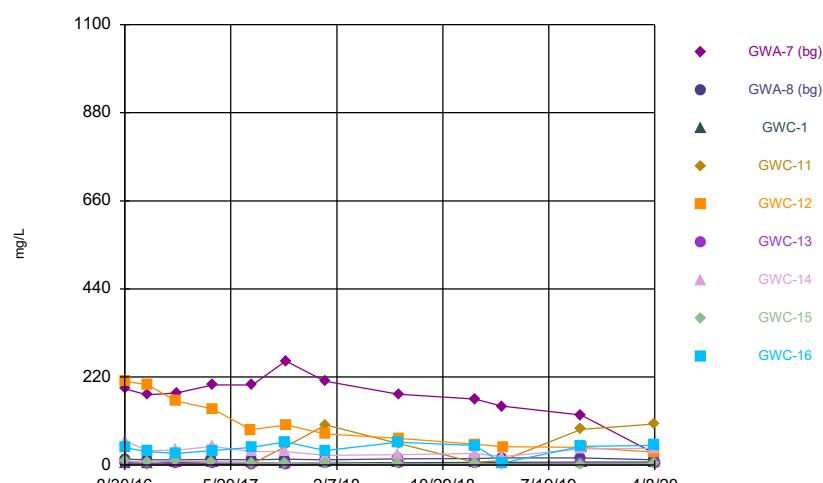
Constituent: Calcium Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Time Series



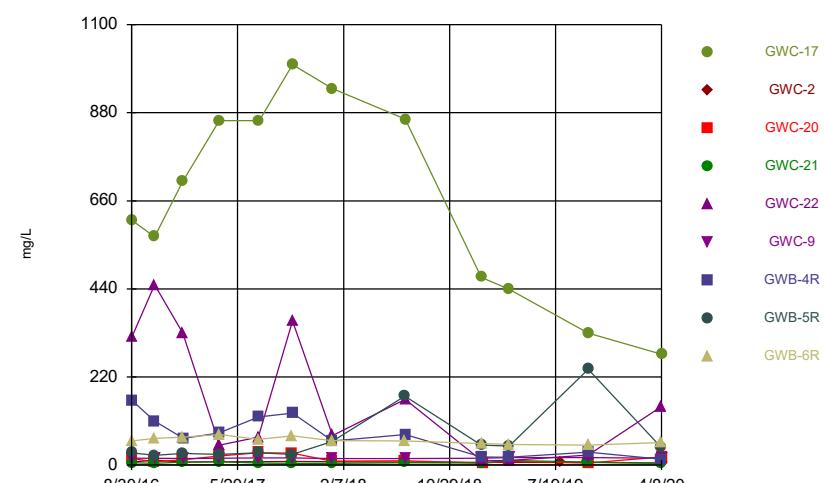
Constituent: Calcium Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Time Series



Constituent: Chloride Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

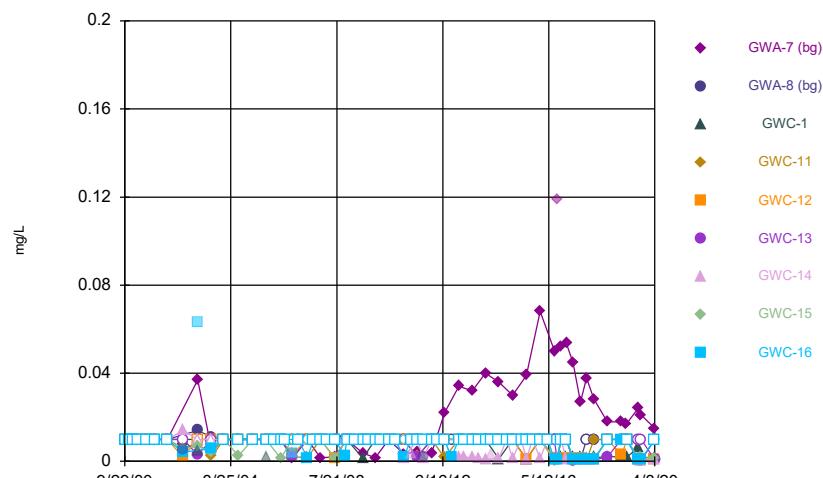
## Time Series



Constituent: Chloride Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

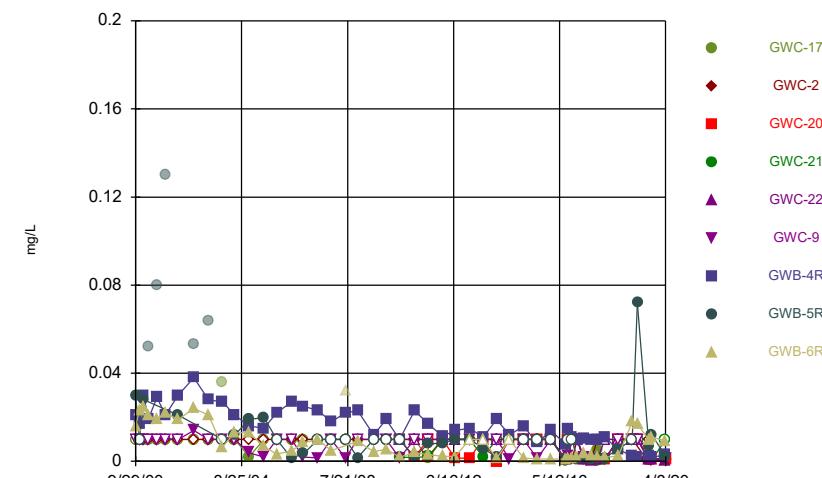
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

### Time Series



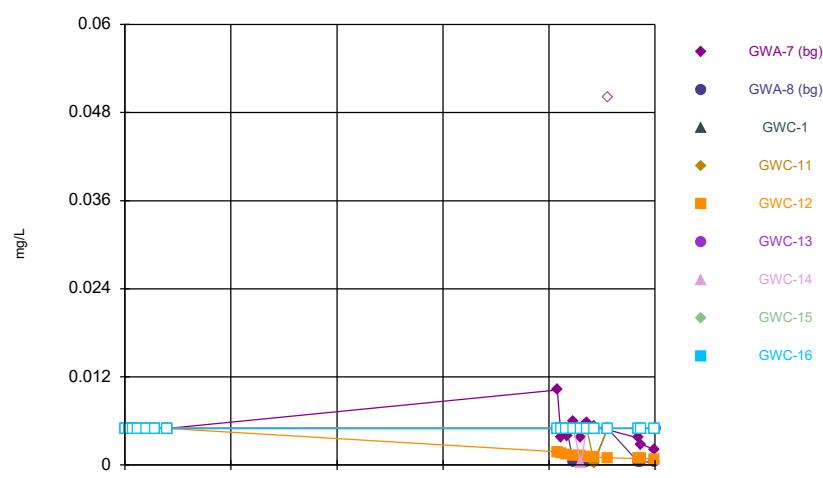
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

### Time Series



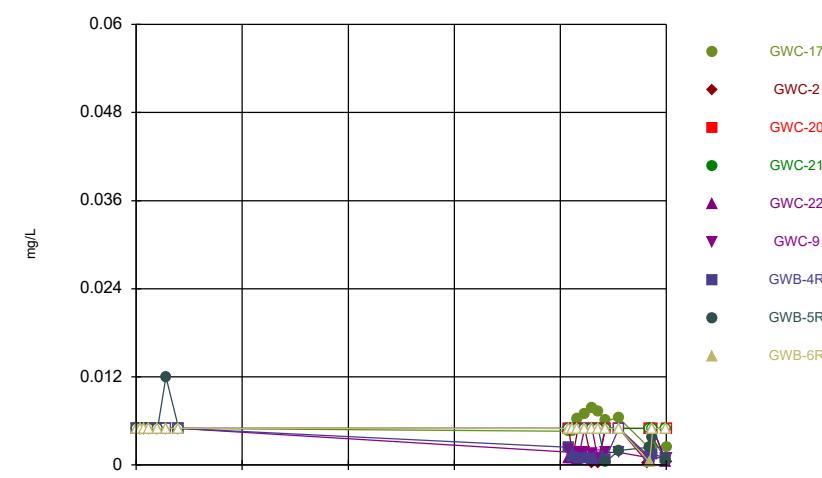
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Hollow symbols indicate censored values.

### Time Series

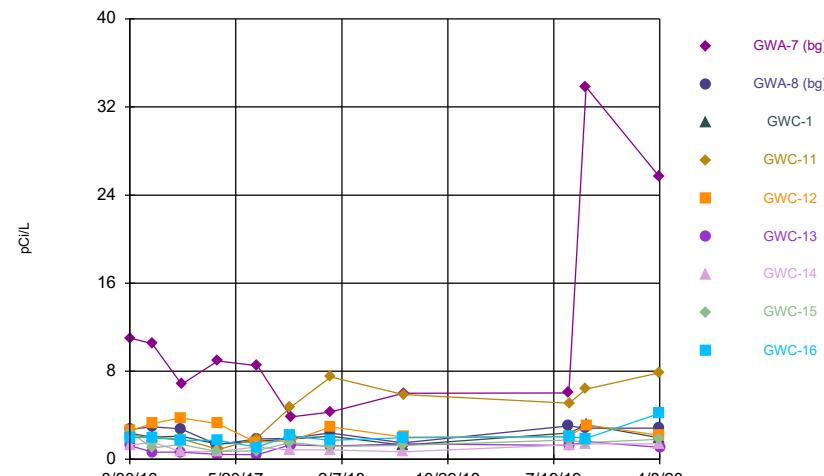


Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

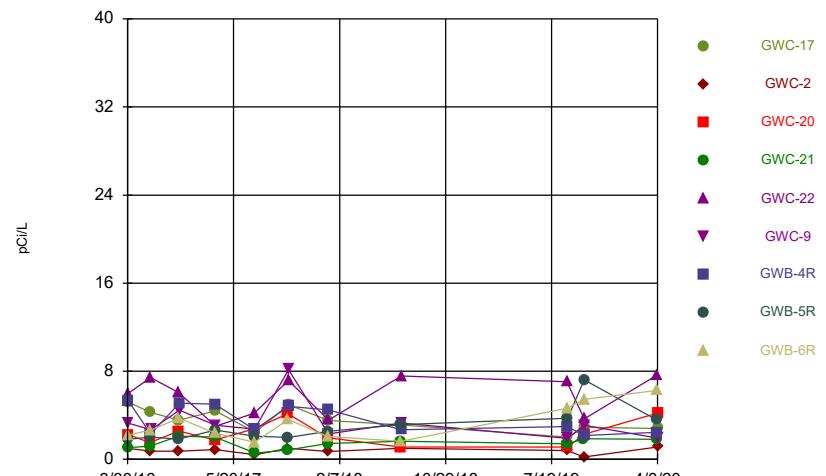
### Time Series



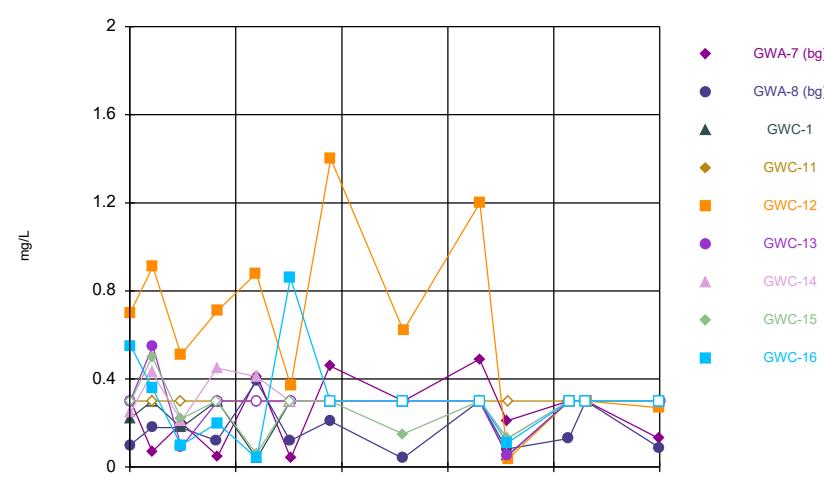
## Time Series



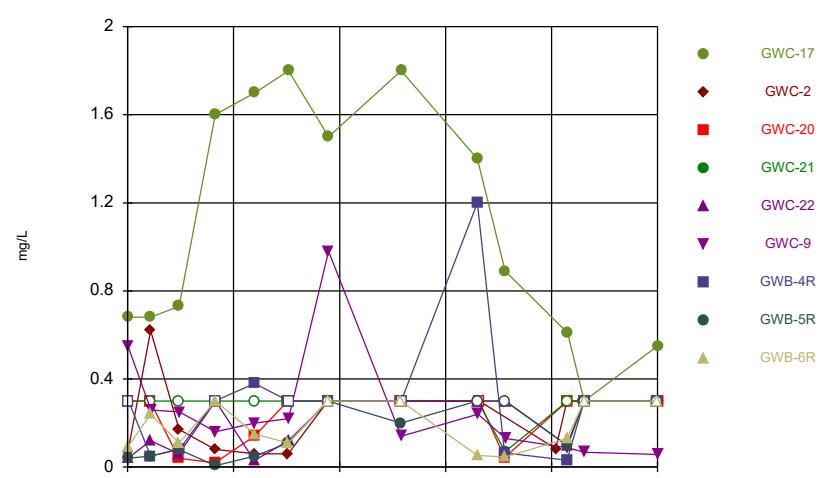
## Time Series



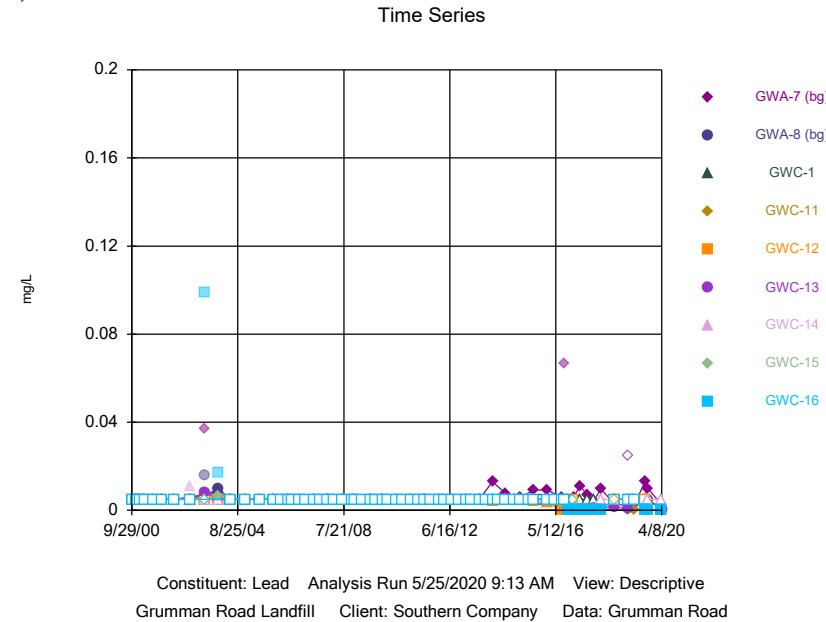
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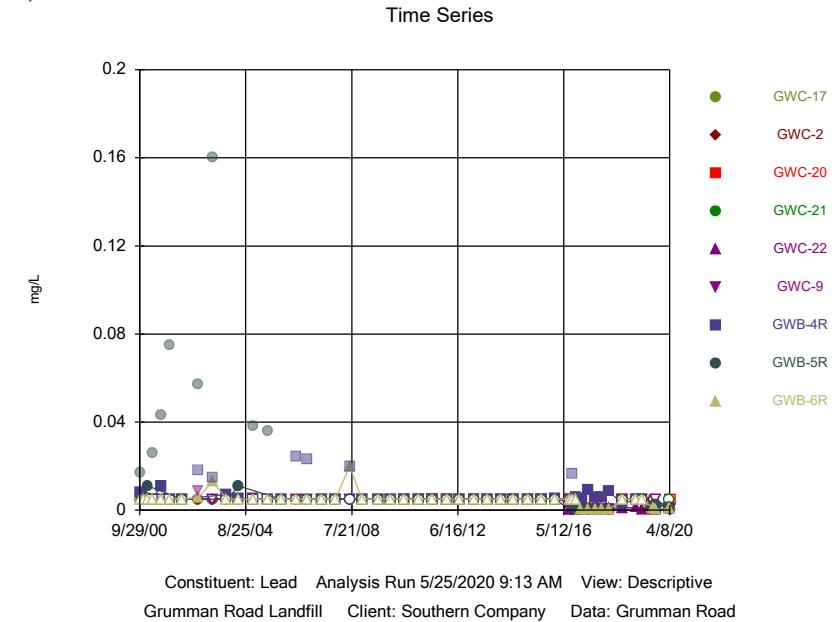
## Time Series



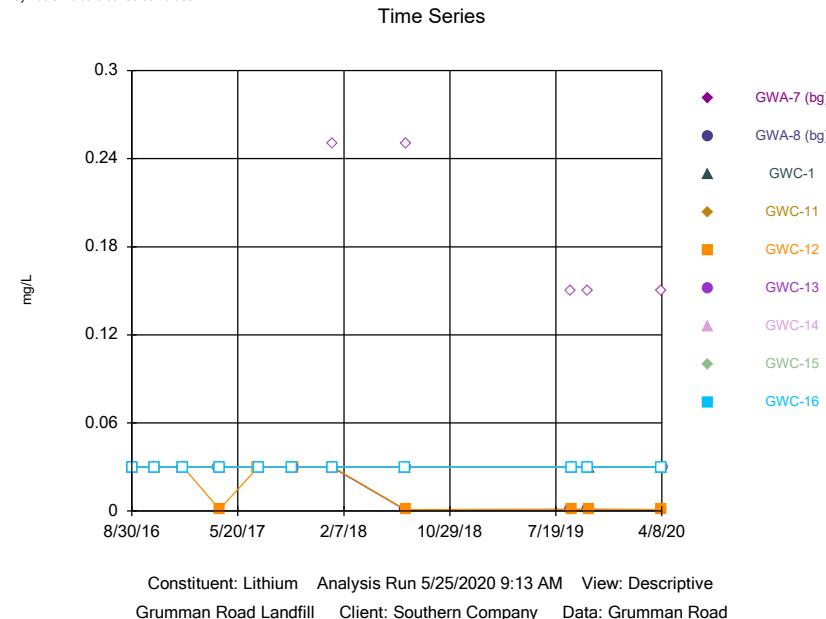
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Hollow symbols indicate censored values.



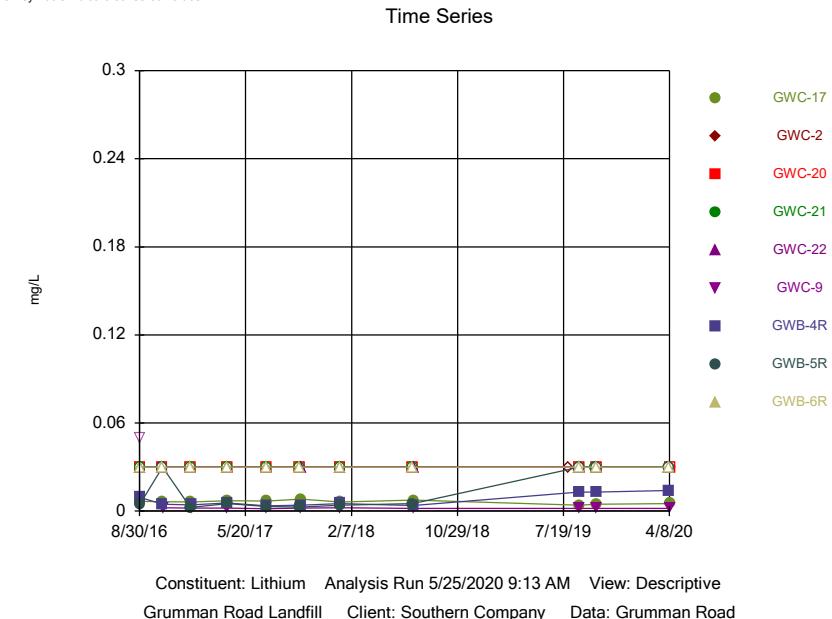
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Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG  
Hollow symbols indicate censored values.

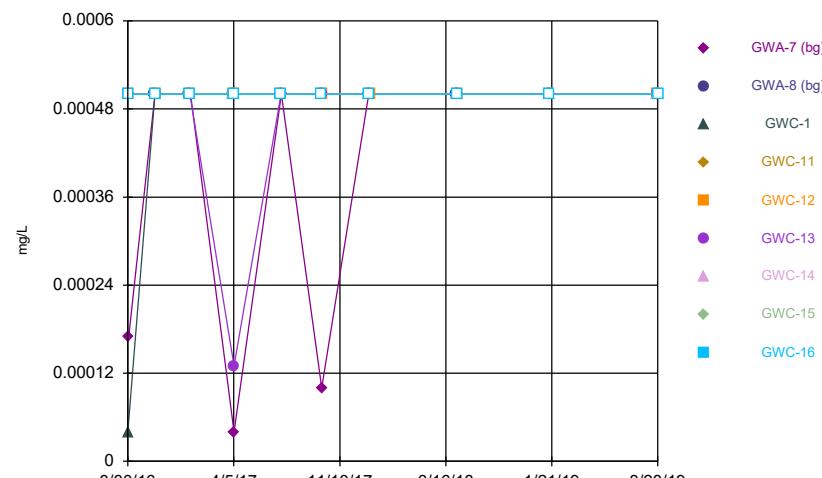


Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UC  
Hollow symbols indicate censored values.



Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

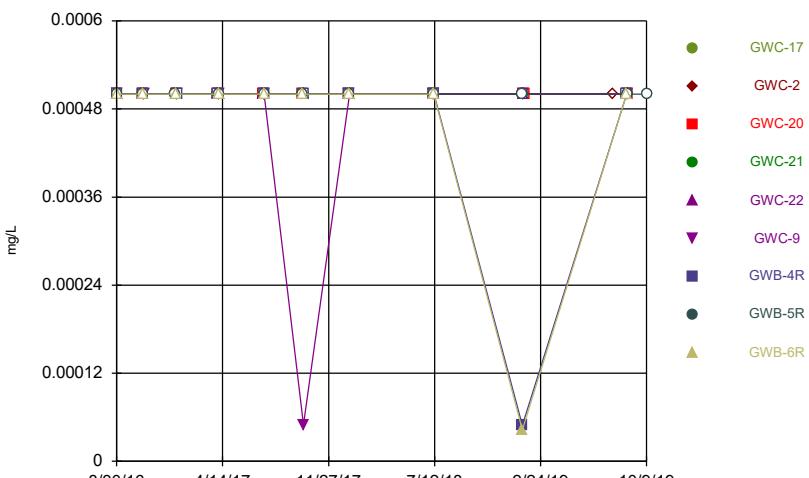
### Time Series



Constituent: Mercury Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

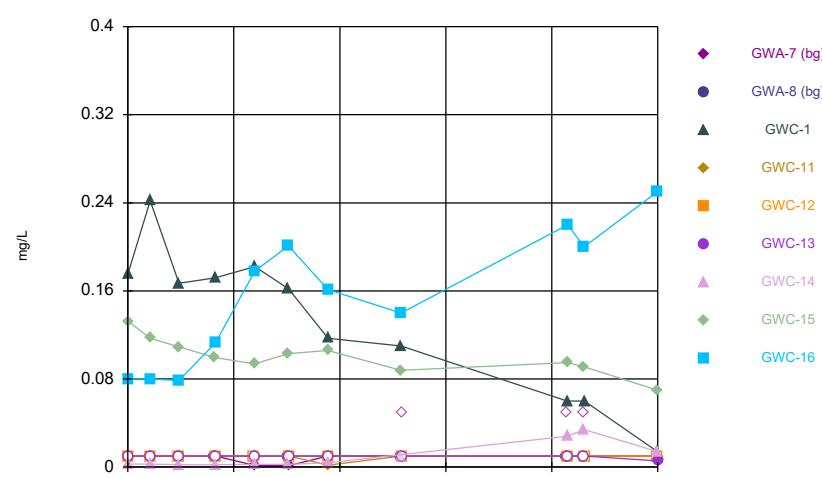
### Time Series



Constituent: Mercury Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

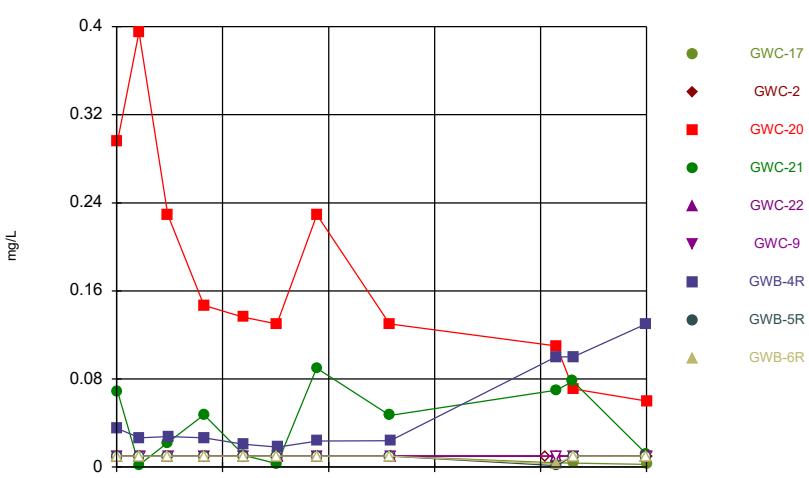
### Time Series



Constituent: Molybdenum Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

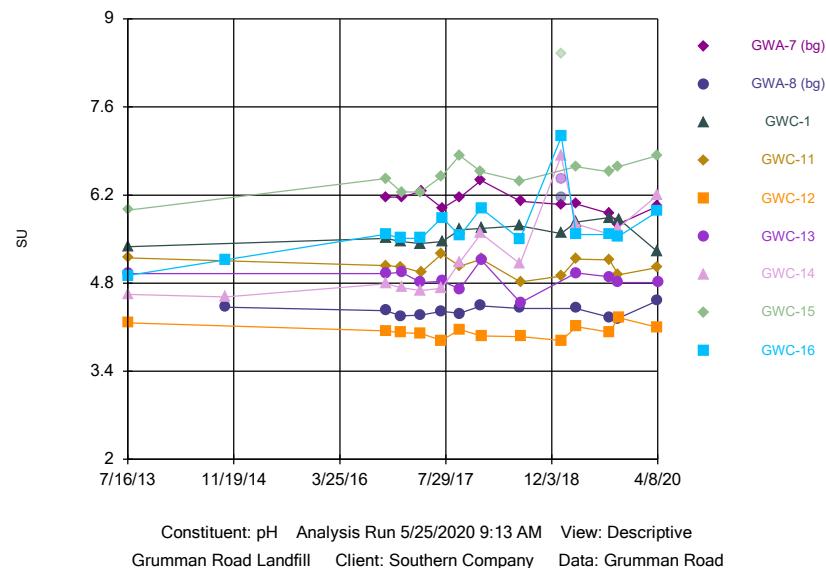
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

### Time Series

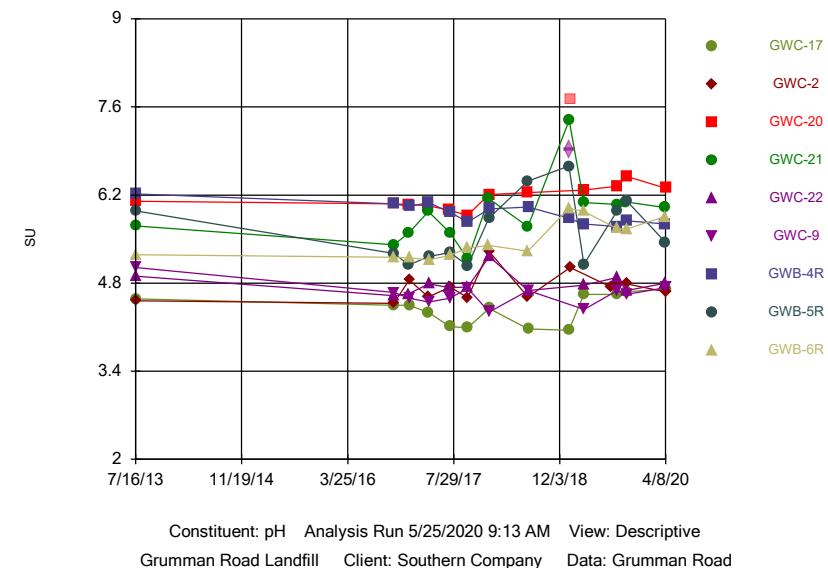


Constituent: Molybdenum Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

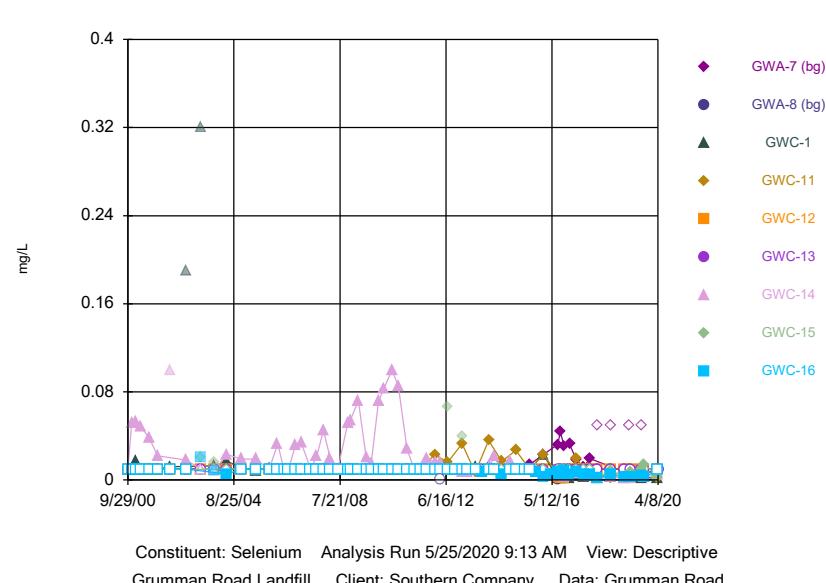
Time Series



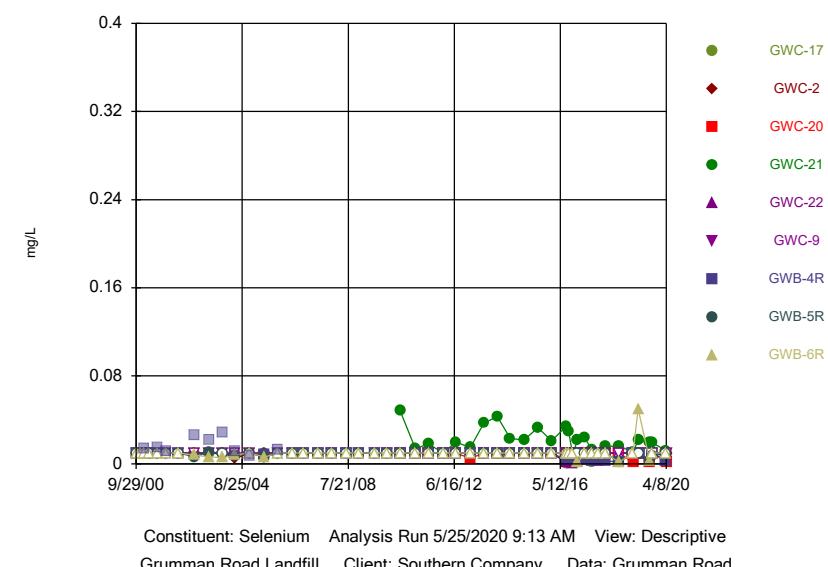
Time Series

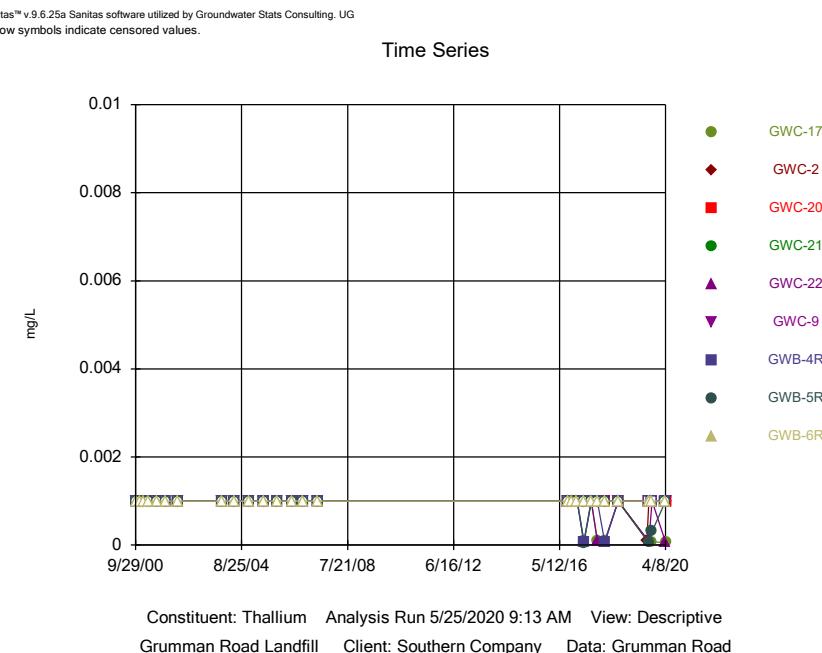
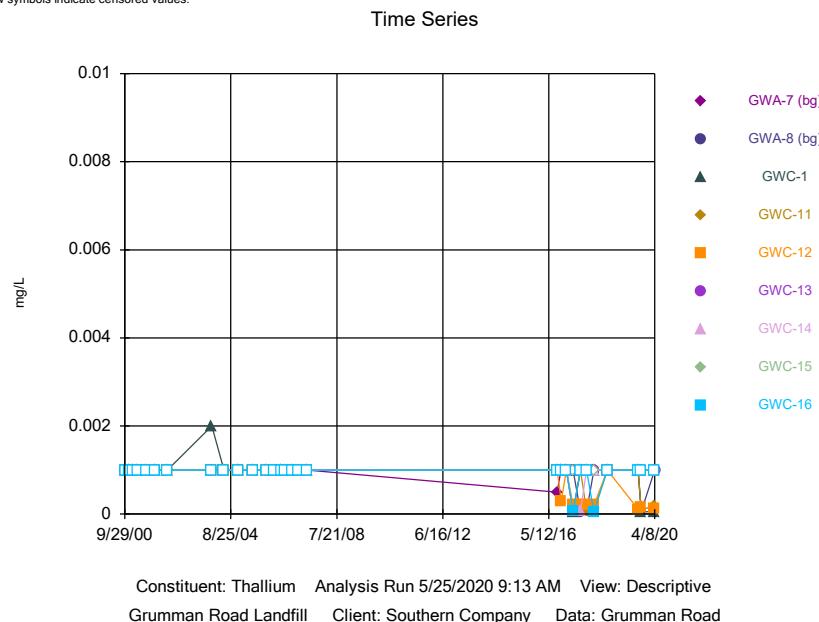
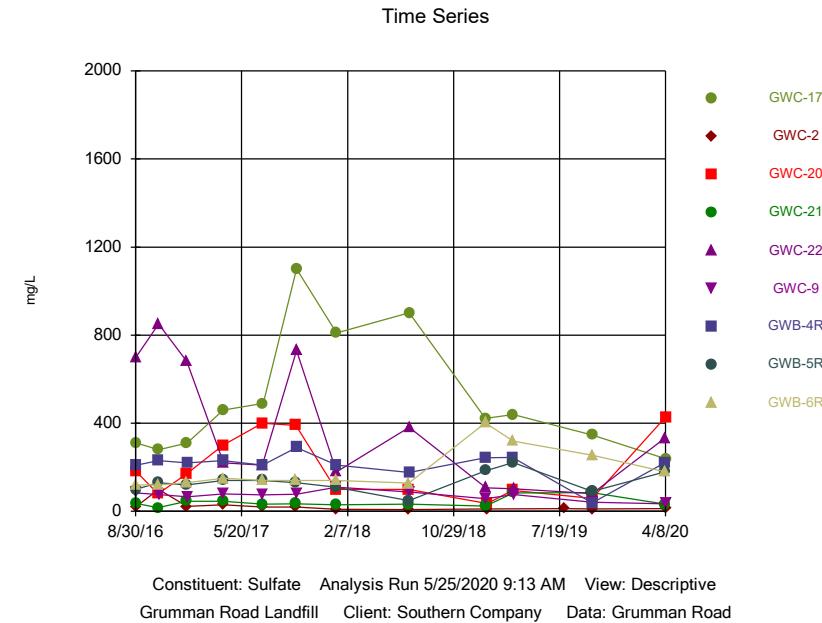
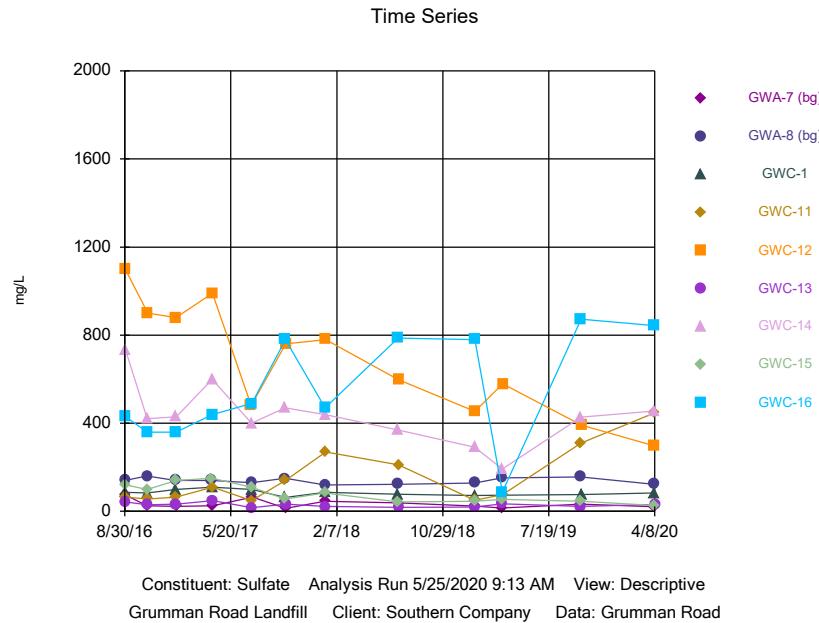


Time Series



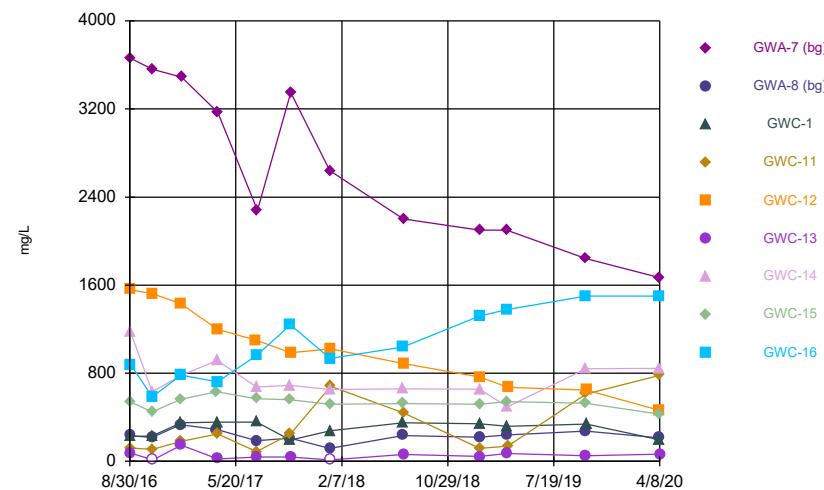
Time Series





Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

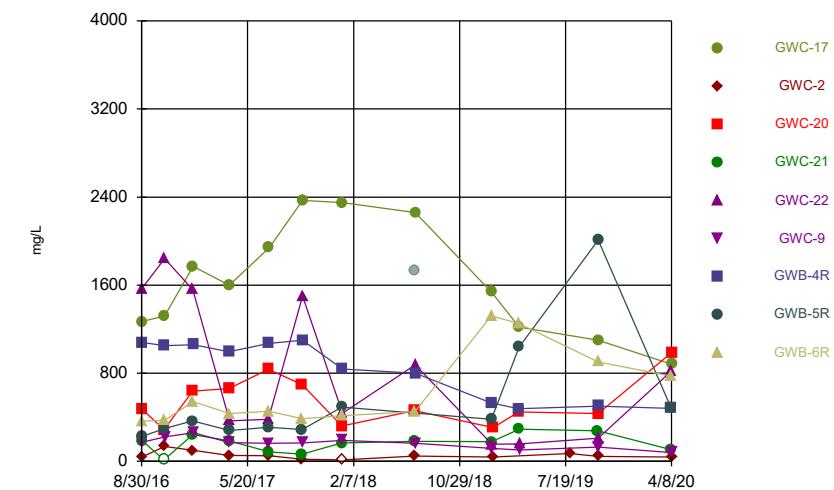
### Time Series



Constituent: Total Dissolved Solids Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Total Dissolved Solids Analysis Run 5/25/2020 9:13 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Time Series

Constituent: Antimony (mg/L) Analysis Run 5/25/2020 9:32 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
9/29/2000	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
11/21/2000	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1/20/2001	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
3/14/2001	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
7/16/2001	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
11/1/2001	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
4/25/2002	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
11/20/2002		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
6/6/2003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
12/12/2003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
5/26/2004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
12/7/2004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
6/21/2005	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
12/12/2005	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
4/4/2006		<0.003					<0.003		<0.003
6/27/2006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8/30/2006		<0.003					<0.003		<0.003
12/4/2006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.006
2/15/2007		<0.003					<0.003		<0.003
6/23/2007	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
9/11/2007		<0.003					<0.003		<0.003
12/11/2007	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
3/11/2008		<0.003					<0.003		<0.003
6/23/2008	<0.003	<0.003		<0.003	<0.003	<0.003			
6/24/2008			<0.003				<0.003	<0.003	<0.003
11/3/2008		<0.003					<0.003		<0.003
12/4/2008	<0.003	<0.003		<0.003	<0.003	<0.003	<0.003		
12/5/2008			<0.003					<0.003	<0.003
3/25/2009		<0.003					<0.003		<0.003
7/7/2009	<0.003	<0.003	<0.003						
7/8/2009				<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
9/14/2009		<0.003					<0.003		<0.003
12/20/2009	<0.003	<0.003	<0.003				<0.003	<0.003	<0.003
12/21/2009				<0.003	<0.003	<0.003			
3/4/2010		<0.003					<0.003		<0.003
6/20/2010	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	
6/21/2010									<0.003
9/14/2010		<0.003					<0.003		<0.003
1/6/2011			<0.003	<0.003		<0.003			
1/7/2011	<0.003	<0.003			<0.003		<0.003	<0.003	<0.003
4/15/2011		<0.003					<0.003		<0.003
7/7/2011	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
9/25/2011		<0.003					<0.003		<0.003
1/17/2012	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	
1/18/2012									<0.003
4/4/2012		<0.003					<0.003		<0.003
7/9/2012	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	
7/10/2012		<0.003							<0.003
10/9/2012		<0.003					<0.003		<0.003
1/17/2013			<0.003	<0.003	<0.003	<0.003	<0.003		
1/18/2013	<0.003	<0.003					<0.003	<0.003	<0.003
4/5/2013		<0.003					<0.003		<0.003

# Time Series

Page 2

Constituent: Antimony (mg/L) Analysis Run 5/25/2020 9:32 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
7/16/2013			<0.003	<0.003	<0.003	<0.003			
7/17/2013	<0.003	<0.003					<0.003	<0.003	<0.003
10/11/2013		<0.003					0.005		<0.003
1/13/2014	<0.003		<0.003	<0.003	<0.003	<0.003		<0.003	
1/14/2014		<0.003					<0.003		<0.003
4/3/2014		<0.003					<0.003		<0.003
7/8/2014				<0.003	<0.003	<0.003			
7/9/2014	0.0022 (J)	<0.003	<0.003				<0.003	<0.003	<0.003
10/24/2014		<0.003					<0.003		<0.003
1/13/2015	<0.003		<0.003	<0.003	<0.003	<0.003		<0.003	
1/14/2015		<0.003					<0.003		<0.003
5/10/2015		<0.003					<0.003		
5/11/2015									<0.003
7/16/2015	0.0028 (J)		<0.003	<0.003	<0.003	<0.003		<0.003	<0.003
7/17/2015		<0.003					<0.003		
10/6/2015		<0.003					<0.003		<0.003
1/17/2016			<0.003				<0.003	<0.003	<0.003
1/18/2016	<0.003	<0.003			<0.05 (o)	<0.003			
1/19/2016				<0.003					
4/26/2016		<0.003					<0.003		<0.003
7/26/2016				0.0005 (J)		0.0006 (J)			
7/27/2016	<0.003		<0.003		<0.003		<0.003	<0.003	
7/28/2016		<0.003							<0.003
8/30/2016		<0.003	<0.003						
8/31/2016				<0.003	<0.003	<0.003			
9/1/2016	0.0017 (J)						<0.003	<0.003	<0.003
10/24/2016		<0.003							
10/25/2016	<0.003		<0.003				<0.003	<0.003	<0.003
10/26/2016				<0.003	<0.003	<0.003			
1/3/2017		<0.003							
1/4/2017			<0.003	<0.003	<0.003				<0.003
1/5/2017						<0.003	<0.003	<0.003	
1/6/2017	0.0009 (J)								
4/3/2017		<0.003							<0.003
4/4/2017			<0.003				<0.003		
4/5/2017					<0.003				<0.003
4/6/2017	<0.003			0.0006 (J)		<0.003			
7/10/2017					<0.003				
7/11/2017		<0.003		0.0009 (J)			<0.003	<0.003	
7/12/2017			<0.003			<0.003			<0.003
7/13/2017	0.0013 (J)								
10/2/2017		<0.003					<0.003	<0.003	
10/3/2017			<0.003	<0.003					<0.003
10/4/2017	0.0008 (J)				<0.003	<0.003			
1/9/2018	<0.003	<0.003					<0.003	<0.003	
1/10/2018			<0.003			<0.003			<0.003
1/11/2018				0.0007 (J)	<0.003			<0.003	
7/9/2018		<0.003					<0.003		
7/10/2018			<0.003					<0.003	<0.003
7/11/2018	<0.003			<0.003	<0.003	<0.003			
1/16/2019	<0.003	<0.003	<0.003		<0.003	<0.003	<0.003		<0.003
1/17/2019					<0.003			<0.003	<0.003

## Time Series

Constituent: Antimony (mg/L) Analysis Run 5/25/2020 9:32 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
3/25/2019	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
3/26/2019			<0.003			<0.003	<0.003	<0.003	<0.003
3/27/2019				<0.003	<0.003				
8/26/2019	<0.003	<0.003							
8/27/2019			<0.003	0.00033 (J)	<0.003	<0.003	<0.003	<0.003	
8/28/2019									<0.003
10/7/2019		<0.003							
10/8/2019	<0.003			0.00046 (J)		<0.003	<0.003	<0.003	<0.003
10/9/2019			<0.003		<0.003				
4/6/2020	<0.003	<0.003							
4/7/2020			<0.003	0.00066 (J)	<0.003		<0.003	<0.003	<0.003
4/8/2020						<0.003			

## Time Series

Constituent: Antimony (mg/L) Analysis Run 5/25/2020 9:32 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
9/29/2000	<0.003					<0.003	<0.003	<0.003	<0.003
11/21/2000	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
1/20/2001	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
3/14/2001	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
7/16/2001	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
11/1/2001	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
4/25/2002	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
11/20/2002	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
6/6/2003	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
12/12/2003	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
5/26/2004	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
12/7/2004	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
6/21/2005	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
12/12/2005	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
6/27/2006	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
12/4/2006	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
6/23/2007	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
12/11/2007	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
6/23/2008						<0.003			
6/24/2008	<0.003	<0.003					<0.003	<0.003	<0.003
12/4/2008		<0.003				<0.003			
12/5/2008	<0.003						<0.003	<0.003	<0.003
7/7/2009							<0.003	<0.003	<0.003
7/8/2009	<0.003	<0.003				<0.003			
12/20/2009		<0.003					<0.003	<0.003	<0.003
12/21/2009	<0.003					<0.003	<0.003	<0.003	<0.003
6/20/2010		<0.003				<0.003		<0.003	<0.003
6/21/2010	<0.003		<0.003	<0.003	<0.003		<0.003		
1/6/2011		<0.003						<0.003	
1/7/2011	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003		<0.003
7/7/2011			<0.003					<0.003	<0.003
7/8/2011	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003		
1/17/2012		<0.003							<0.003
1/18/2012	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003		<0.003
7/9/2012		<0.003							<0.003
7/10/2012	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003		<0.003
1/17/2013		<0.003							<0.003
1/18/2013	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003		<0.003
7/16/2013									<0.003
7/17/2013	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003		<0.003
1/13/2014		<0.003							<0.003
1/14/2014	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003		<0.003
7/9/2014	<0.003	<0.003		<0.003	<0.003	<0.003	0.002 (J)	<0.003	<0.003
7/10/2014			<0.003		<0.003				
1/12/2015			<0.003				<0.003		
1/13/2015		<0.003						<0.003	
1/14/2015	<0.003			<0.003	<0.003	<0.003			<0.003
7/16/2015		<0.003					0.0021 (J)	<0.003	
7/17/2015				<0.003		<0.003			<0.003
7/18/2015	<0.003		<0.003		<0.003				
1/17/2016		<0.003	<0.003	<0.003	<0.003				
1/18/2016	<0.003					<0.003	<0.003	<0.003	<0.003

# Time Series

Page 2

Constituent: Antimony (mg/L) Analysis Run 5/25/2020 9:32 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
7/27/2016		<0.003						<0.003	
7/28/2016			0.0019 (J)	<0.003		<0.003			<0.003
7/29/2016	<0.003				<0.003		0.0003 (J)		
8/30/2016								<0.003	<0.003
8/31/2016		<0.003			<0.003	<0.003			
9/1/2016	<0.003		<0.003	<0.003			<0.003		
10/25/2016			<0.003	<0.003					
10/26/2016	<0.003	<0.003			<0.003		<0.003	<0.003	<0.003
10/27/2016						0.0016 (J)			
1/3/2017								<0.003	
1/4/2017			<0.003	<0.003	<0.003				
1/5/2017	<0.003	<0.003							<0.003
1/6/2017						<0.003	<0.003		
4/4/2017		<0.003	<0.003	<0.003			<0.003		
4/5/2017	<0.003				<0.003	<0.003		<0.003	<0.003
4/6/2017					<0.003			<0.003	<0.003
7/11/2017			<0.003		<0.003				
7/12/2017						<0.003	<0.003	<0.003	<0.003
7/13/2017	<0.003	<0.003		<0.003					
10/2/2017			<0.003						
10/3/2017		<0.003		<0.003				<0.003	<0.003
10/4/2017	<0.003				<0.003	<0.003	<0.003		
1/9/2018					<0.003				<0.003
1/10/2018		<0.003	<0.003					<0.003	
1/11/2018	<0.003				<0.003	<0.003	<0.003		
7/9/2018			<0.003						
7/10/2018		<0.003		<0.003				<0.003	<0.003
7/11/2018	<0.003				<0.003	<0.003	<0.003		
1/16/2019	<0.003						<0.003	<0.003	<0.003
1/17/2019				<0.003					
1/18/2019					<0.003	<0.003			
1/21/2019		<0.003	<0.003						
3/25/2019			<0.003				<0.003		
3/26/2019	<0.003			<0.003				<0.003	<0.003
3/27/2019					<0.003	<0.003			
7/30/2019		<0.003							
8/27/2019		<0.003			0.00045 (J)		<0.003		<0.003
8/28/2019	<0.003		<0.003	<0.003		<0.003		0.00054 (J)	
10/8/2019				<0.003					
10/9/2019	<0.003	<0.003	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003
4/7/2020					<0.003	0.00049 (J)		<0.003	<0.003
4/8/2020	<0.003	0.0013 (J)	<0.003			0.00033 (J)			

## Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/25/2020 9:32 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
9/29/2000	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.094
11/21/2000	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.059
1/20/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.087
3/14/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.075
7/16/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.11
11/1/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.098
4/25/2002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.071
11/20/2002		<0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	0.15
6/6/2003	0.02 (o)	<0.005	0.03 (o)	<0.005	<0.005	<0.005	<0.005	<0.005	1.2 (o)
12/12/2003	<0.005	<0.005	<0.005	<0.005	<0.005	0.0064	<0.005	<0.005	0.27 (o)
5/26/2004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.12
12/7/2004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.098
6/21/2005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.065
12/12/2005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.081
4/4/2006		<0.005					<0.005		0.077
6/27/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.071
8/30/2006		<0.005				<0.005			0.08
12/4/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.085
2/15/2007		<0.005					<0.005		0.09
6/23/2007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.12
9/11/2007		<0.005					<0.005		0.088
12/11/2007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.088
3/11/2008		<0.005					<0.005		0.071
6/23/2008	<0.005	<0.005		<0.005	<0.005	<0.005			
6/24/2008			<0.005				<0.005	<0.005	0.097
11/3/2008		<0.005					<0.005		0.089
12/4/2008	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005		
12/5/2008			<0.005					<0.005	0.092
3/25/2009		<0.005					<0.005		0.095
7/7/2009	<0.005	<0.005	<0.005						
7/8/2009				<0.005	<0.005	<0.005	<0.005	0.0052	0.11
9/14/2009		<0.005					<0.005		0.099
12/20/2009	<0.005	<0.005	<0.005				<0.005	<0.005	0.1
12/21/2009				<0.005	<0.005	<0.005			
3/4/2010		<0.005					<0.005		0.074
6/20/2010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0068	
6/21/2010									0.056
9/14/2010		<0.005					<0.005		0.067
1/6/2011			<0.005	<0.005		<0.005			
1/7/2011	<0.005	<0.005			<0.005		<0.005	<0.005	0.066
4/15/2011		<0.005					<0.005		0.08
7/7/2011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.054
9/25/2011		<0.005					<0.005		0.085
1/17/2012	<0.005	<0.005	0.0071	<0.005	<0.005	<0.005	<0.005	<0.005	
1/18/2012									0.089
4/4/2012		<0.005					<0.005		0.0473
7/9/2012	0.0052		0.0076	<0.005	<0.005	<0.005	<0.005	<0.005	
7/10/2012		<0.005							0.07
10/9/2012		<0.005					<0.005		0.088
1/17/2013			0.0086	<0.005	<0.005	<0.005			
1/18/2013	0.0087	<0.005					<0.005	0.0089	0.063
4/5/2013		<0.005					<0.005		0.06

# Time Series

Page 2

Constituent: Arsenic (mg/L) Analysis Run 5/25/2020 9:32 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
7/16/2013			<0.005	<0.005	<0.005	<0.005			
7/17/2013	0.0084	<0.005					<0.005	0.011	0.063
10/11/2013		<0.005					0.005		0.059
1/13/2014	0.009		<0.005	<0.005	<0.005	<0.005		0.017	
1/14/2014		<0.005					<0.005		0.077
4/3/2014		<0.005					<0.005		0.091
7/8/2014				<0.005	<0.005	<0.005			
7/9/2014	0.008	<0.005	0.0022 (J)				<0.005	0.014	0.08
10/24/2014		<0.005					<0.005		0.073
1/13/2015	0.0077		<0.005	<0.005	<0.005	<0.005		0.011	
1/14/2015		<0.005					<0.005		0.079
5/10/2015		<0.005					<0.005		
5/11/2015									0.058
7/16/2015	0.0077		0.0037 (J)	<0.005	<0.005	<0.005		0.02	0.068
7/17/2015		<0.005					<0.005		
10/6/2015		<0.005					<0.005		0.078
1/17/2016			0.024 (o)				0.002 (J)	0.014	0.089
1/18/2016	0.014	<0.005			<0.005	<0.005			
1/19/2016				<0.005					
4/26/2016		0.0011 (J)					0.00183 (J)		0.0731
7/26/2016				<0.005		<0.005			
7/27/2016	0.0111		0.0046 (J)		<0.005		0.0021 (J)	0.0303	
7/28/2016		<0.005							0.0627
8/30/2016		<0.005	0.0023 (J)		<0.005	<0.005			
8/31/2016				<0.005	<0.005	<0.005			
9/1/2016	0.0287 (o)						0.0024 (J)	0.0533	0.0551
10/24/2016		<0.005							
10/25/2016	0.0069		0.0035 (J)				<0.005	0.0551	0.0466
10/26/2016				<0.005	<0.005	<0.005			
1/3/2017		<0.005							
1/4/2017			0.0018 (J)	<0.005	<0.005				0.0444
1/5/2017						<0.005	0.0024 (J)	0.0437	
1/6/2017	0.0097								
4/3/2017		0.0006 (J)						0.0713	
4/4/2017			0.0015 (J)				0.003 (J)		
4/5/2017					0.0006 (J)				0.0591
4/6/2017	0.0104			<0.005		<0.005			
7/10/2017					0.0008 (J)				
7/11/2017		0.0006 (J)		<0.005			0.0019 (J)	0.0745	
7/12/2017			0.0015 (J)				<0.005		0.0776
7/13/2017	0.0064								
10/2/2017		0.0006 (J)					0.0026 (J)	0.0723	
10/3/2017			0.0013 (J)	<0.005					0.0813
10/4/2017	0.0078				0.0009 (J)	<0.005			
1/9/2018	0.0091 (J)	0.0009 (J)					0.0021 (J)	0.0731	
1/10/2018			0.0023 (J)			0.0006 (J)			0.085
1/11/2018				<0.005	<0.005				
7/9/2018		<0.005					0.0019 (J)		
7/10/2018			0.0031 (J)					0.09	0.067
7/11/2018	<0.025 (o)			<0.005	<0.005	<0.005			
1/16/2019	<0.025 (o)	<0.005	0.0023 (J)			<0.005	0.0016 (J)		
1/17/2019				<0.005	<0.005			0.13	0.079

## Time Series

Page 3

Constituent: Arsenic (mg/L) Analysis Run 5/25/2020 9:32 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
3/25/2019	0.0029 (J)	<0.005				0.00058 (J)	0.0023 (J)	0.1	0.089
3/26/2019			0.0032 (J)						
3/27/2019				<0.005	<0.005				
8/26/2019	0.0041 (J)	<0.005							
8/27/2019			0.0022 (J)	<0.005	<0.005	<0.005	0.0017 (J)	0.17	
8/28/2019									0.091
10/7/2019		<0.005							
10/8/2019	0.003 (J)			<0.005		<0.005	0.0017 (J)	0.13	0.088
10/9/2019			0.0042 (J)		<0.005				
4/6/2020	<0.005	0.00045 (J)		0.027	<0.005	<0.005		0.0018 (J)	0.24
4/7/2020									0.091
4/8/2020						<0.005			

## Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
9/29/2000	<0.005					<0.005	<0.005	<0.005	<0.005
11/21/2000	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
1/20/2001	<0.005	<0.005				<0.005	0.01 (o)	<0.005	0.014
3/14/2001	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
7/16/2001	<0.005	<0.005				<0.005	<0.005	0.014	<0.005
11/1/2001	<0.005	<0.005				<0.005	<0.005	0.023	<0.005
4/25/2002	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
11/20/2002	<0.005	<0.005				<0.005	0.0096 (o)	0.022	0.014
6/6/2003	<0.005	<0.005				<0.005	0.0076	0.07 (o)	0.014
12/12/2003	<0.005	<0.005				<0.005	0.0058	<0.005	<0.005
5/26/2004	<0.005	<0.005				<0.005	0.0068	0.0074	0.0082
12/7/2004	<0.005	<0.005				<0.005	0.0066	0.017	0.0062
6/21/2005	<0.005	<0.005				<0.005	<0.005	0.013	<0.005
12/12/2005	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
6/27/2006	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
12/4/2006	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
6/23/2007	<0.005	<0.005				<0.005	<0.005	<0.005	0.0053
12/11/2007	<0.005	<0.005				<0.005	<0.005	<0.005	0.0057
6/23/2008						<0.005			
6/24/2008	<0.005	<0.005					0.005	<0.005	0.012
12/4/2008		<0.005				<0.005			
12/5/2008	<0.005						<0.005	<0.005	0.0064
7/7/2009							<0.005	<0.005	<0.005
7/8/2009	<0.005	<0.005				<0.005			
12/20/2009		<0.005							
12/21/2009	<0.005					<0.005	<0.005	<0.005	<0.005
6/20/2010		<0.005				<0.005		<0.005	0.017
6/21/2010	<0.005		0.29	0.013 (o)	<0.005		0.018 (o)		
1/6/2011		<0.005						<0.005	
1/7/2011	<0.005		0.2	<0.005	<0.005	<0.005	<0.005		<0.005
7/7/2011			<0.005					<0.005	<0.005
7/8/2011	<0.005		0.19	<0.005	<0.005	<0.005	<0.005		
1/17/2012		<0.005						<0.005	
1/18/2012	<0.005		0.058	<0.005	<0.005	<0.005	<0.005		<0.005
7/9/2012		<0.005						<0.005	
7/10/2012	<0.005		0.18	<0.005	<0.005	<0.005	0.0052		<0.005
1/17/2013		<0.005						<0.005	
1/18/2013	<0.005		0.22	0.0061	<0.005	<0.005	<0.005		<0.005
7/16/2013								<0.005	
7/17/2013	<0.005	<0.005	0.45	<0.005	<0.005	<0.005	<0.005		<0.005
1/13/2014		<0.005						<0.005	
1/14/2014	<0.005		0.52	0.006	<0.005	<0.005	<0.005		<0.005
7/9/2014	<0.005	<0.005		<0.005		<0.005	0.0023 (J)	<0.005	<0.005
7/10/2014			0.4		0.0027 (J)				
1/12/2015			0.43				0.0028 (J)		
1/13/2015		<0.005						<0.005	
1/14/2015	<0.005			<0.005	<0.005	<0.005			<0.005
7/16/2015		<0.005					<0.005	<0.005	
7/17/2015				<0.005		<0.005			<0.005
7/18/2015	<0.005		0.26		<0.005				
1/17/2016		<0.005	0.34	0.0065		<0.005	<0.005	<0.005	
1/18/2016	<0.005				<0.005	<0.005	<0.005	<0.005	

# Time Series

Page 2

Constituent: Arsenic (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
7/27/2016		<0.005						0.0008 (J)	
7/28/2016			0.209	<0.005		<0.005			0.0009 (J)
7/29/2016	0.0009 (J)				0.002 (J)		0.0014 (J)		
8/30/2016					0.0017 (J)	<0.005		<0.005	<0.005
8/31/2016		<0.005							
9/1/2016	<0.005		0.215	0.0039 (J)			0.0033 (J)		
10/25/2016			0.307	<0.005					
10/26/2016	<0.005	<0.005			<0.005		0.0016 (J)	<0.005	<0.005
10/27/2016						<0.005			
1/3/2017								<0.005	
1/4/2017			0.311	<0.005	<0.005				
1/5/2017	<0.005	<0.005							0.0021 (J)
1/6/2017						<0.005	<0.005		
4/4/2017		<0.005	0.317	0.0031 (J)			0.0021 (J)		
4/5/2017	0.0011 (J)				0.0006 (J)	<0.005		0.0006 (J)	0.0011 (J)
4/6/2017			0.299		0.0012 (J)				
7/11/2017						<0.005	0.0015 (J)	0.0009 (J)	0.0014 (J)
7/12/2017									
7/13/2017	0.0016 (J)	<0.005		<0.005					
10/2/2017			0.216						
10/3/2017		<0.005		<0.005				0.001 (J)	0.0014 (J)
10/4/2017	0.0019 (J)				0.0025 (J)	<0.005	0.0018 (J)		
1/9/2018				0.0033 (J)					0.0017 (J)
1/10/2018		0.0006 (J)	0.347		0.0006 (J)	<0.005	0.0015 (J)		0.0012 (J)
1/11/2018	0.0015 (J)								
7/9/2018			0.37						
7/10/2018		<0.005		0.0027 (J)				0.0016 (J)	0.00063 (J)
7/11/2018	0.00082 (J)				0.0011 (J)	<0.005	0.00095 (J)		
1/16/2019	<0.005						0.0024 (J)	0.0011 (J)	<0.005
1/17/2019				0.0022 (J)					
1/18/2019					<0.005	<0.005			
1/21/2019		<0.005	0.44						
3/25/2019			0.41				0.0029 (J)		
3/26/2019	0.0015 (J)			0.0045 (J)				0.0014 (J)	0.0029 (J)
3/27/2019					<0.005	<0.005			
7/30/2019		0.00039 (J)							
8/27/2019		<0.005			0.00044 (J)		0.0023 (J)		0.0035 (J)
8/28/2019	0.0011 (J)		0.43	0.002 (J)		<0.005		0.0023 (J)	
10/8/2019				0.0028 (J)					
10/9/2019	0.0011 (J)	<0.005	0.35		<0.005	<0.005	0.0024 (J)	0.0053 (J)	0.0018 (J)
4/7/2020					<0.005	0.00043 (J)		0.0027 (J)	0.0011 (J)
4/8/2020	0.0013 (J)	0.00094 (J)	0.33			0.00084 (J)			<0.005

## Time Series

Constituent: Barium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
9/29/2000	0.11	0.16 (o)	0.044	0.1	0.075	<0.005	0.11	0.028	0.076
11/21/2000	0.12		0.047	0.082	0.072	0.01	0.15	0.035	0.075
1/20/2001	0.11	0.18 (o)	0.051	0.083	0.086	<0.005	0.1	0.032	0.053
3/14/2001	0.11	0.14	0.048	0.075	0.088	0.01	0.095	0.036	0.055
7/16/2001	0.11	0.14	0.054	0.091	0.084	<0.005	0.28 (o)	0.036	0.041
11/1/2001	0.11	0.14	0.063	0.068	0.13	<0.005	0.16	0.036	0.045
4/25/2002	0.058	0.088	0.032	0.066	0.24 (o)	<0.005	0.054	0.045	0.055
6/6/2003	0.19	0.14	0.046	0.085	0.28 (o)	0.028	0.063	0.083 (o)	0.48 (o)
12/12/2003	0.1	0.13	0.034	0.072	0.27 (o)	0.019	0.041	0.094 (o)	0.13 (o)
5/26/2004	0.084	0.09	0.035	0.055	0.31 (o)	<0.005	0.059	0.034	0.055
12/7/2004	0.094	0.11	0.024	0.066	0.46 (o)	0.009	0.076	0.042	0.072
6/21/2005	0.089	0.084	0.039	0.033	0.053	0.0089	0.042	0.039	0.061
12/12/2005	0.089	0.1	0.042	0.034	0.1	0.026	0.048	0.043	0.047
4/4/2006		0.089					0.05		0.042
6/27/2006	0.096	0.1	0.033	0.029	0.098	0.029	0.036	0.031	0.042
8/30/2006		0.12					0.059		0.05
12/4/2006	0.092	0.086	0.04	0.02	0.068	0.017	0.062	0.043	0.044
2/15/2007		0.088					0.079		0.041
6/23/2007	0.08	0.089	0.044	0.017	0.042	0.014	0.03	0.031	0.044
9/11/2007		0.092					0.053		0.04
12/11/2007	0.067	0.077	0.049	0.013	0.04	0.011	0.075	0.044	0.0035
3/11/2008		0.082					0.052		0.034
6/23/2008	0.056	0.086		0.012	0.041	0.018			
6/24/2008			0.038				0.039	0.057	0.042
11/3/2008		0.088					0.082		0.049
12/4/2008	0.054	0.081		0.011	0.035	0.019	0.079		
12/5/2008			0.06					0.041	0.05
3/25/2009		0.069					0.093		0.052
7/7/2009	0.034	0.078	0.043						
7/8/2009				0.012	0.036	0.011	0.039	0.058	0.046
9/14/2009		0.079					0.061		0.048
12/20/2009	0.034	0.081	0.065				0.088	0.062	0.062
12/21/2009				0.011	0.028	0.01			
3/4/2010		0.065					0.077		0.058
6/20/2010	0.062	0.078	0.095	0.0089	0.025	0.0081	0.075	0.03	
6/21/2010									0.041
9/14/2010		0.076					0.093		0.036
1/6/2011			0.093	0.014		0.012			
1/7/2011	0.039	0.074			0.037		0.13	0.049	0.054
4/15/2011		0.065					0.086		0.049
7/7/2011	0.036	0.081	0.095	0.018	0.039	0.015	0.051	0.05	0.063
9/25/2011		0.078					0.056		0.037
1/17/2012	0.041	0.082	0.1	0.23	0.045	0.0086	0.052	0.044	
1/18/2012									0.034
4/4/2012		0.0861					0.0519		0.0446
7/9/2012	0.15		0.11	0.17	0.032	0.01	0.048	0.045	
7/10/2012		0.082							0.033
10/9/2012		0.09					0.065		0.041
1/17/2013			0.12	0.2	0.033	0.014			
1/18/2013	0.15	0.083					0.045	0.049	0.036
4/5/2013		0.078					0.047		0.036
7/16/2013			0.081	0.11	0.027	0.012			

# Time Series

Page 2

Constituent: Barium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
7/17/2013	0.13	0.083					0.032	0.039	0.054
10/11/2013		0.078					0.028		0.052
1/13/2014	0.16		0.096	0.083	0.027	0.015		0.038	
1/14/2014		0.081					0.036		0.051
4/3/2014		0.077					0.038		0.047
7/8/2014				0.066	0.037	0.017			
7/9/2014	0.11	0.073	0.066				0.03	0.031	0.08
10/24/2014		0.087					0.025		0.072
1/13/2015	0.083		0.068	0.053	0.023	0.019		0.041	
1/14/2015		0.079					0.04		0.047
5/10/2015		0.076					0.026		
5/11/2015									0.053
7/16/2015	0.094		0.07	0.052	0.03	0.022		0.041	0.059
7/17/2015		0.061					0.029		
10/6/2015		0.067					0.03		0.053
1/17/2016			0.062				0.038	0.048	0.056
1/18/2016	0.22	0.068			0.032	0.026			
1/19/2016				0.048					
4/26/2016		0.0596					0.025		0.0721
7/26/2016				0.051		0.0236			
7/27/2016	0.192		0.0417		0.0191		0.0248	0.0487	
7/28/2016		0.0701							0.0534
8/30/2016		0.0687	0.0545						
8/31/2016				0.0565	0.019	0.0273			
9/1/2016	0.415 (o)						0.0346	0.0403	0.0445
10/24/2016		0.07							
10/25/2016	0.173		0.0504				0.0248	0.0329	0.0464
10/26/2016				0.0591	0.0197	0.0238			
1/3/2017		0.061							
1/4/2017			0.0534	0.0598	0.0174				0.0379
1/5/2017						0.0218	0.0245	0.0392	
1/6/2017	0.167								
4/3/2017		0.0612						0.0439	
4/4/2017			0.0549				0.0342		
4/5/2017					0.0174				0.0534
4/6/2017	0.136			0.0813		0.0204			
7/10/2017					0.0172				
7/11/2017		0.0624		0.0302			0.0276	0.051	
7/12/2017			0.0614			0.0161			0.0944
7/13/2017	0.0891								
10/2/2017		0.0618					0.0274	0.047	
10/3/2017			0.0436	0.103					0.135 (o)
10/4/2017	0.113				0.0162	0.0185			
1/9/2018	0.0901	0.0574					0.0222	0.0431	
1/10/2018			0.053			0.0166			0.0603
1/11/2018				0.166	0.018				
7/9/2018		0.056					0.026		
7/10/2018			0.059					0.047	0.16 (o)
7/11/2018	0.065			0.12	0.014	0.019			
1/16/2019	0.062	0.062	0.054			0.019	0.028		
1/17/2019				0.039	0.017			0.042	0.13
3/25/2019	0.054	0.064							

## Time Series

Page 3

Constituent: Barium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
3/26/2019			0.055			0.026	0.034	0.047	0.14
3/27/2019				0.053	0.017				
8/26/2019	0.11	0.065							
8/27/2019			0.054	0.12	0.017	0.024	0.067	0.049	
8/28/2019									0.09
10/7/2019		0.069							
10/8/2019	0.1			0.13		0.024	0.085	0.057	0.13
10/9/2019			0.058		0.019				
4/6/2020	0.072	0.057		0.05	0.14	0.017		0.073	0.033
4/7/2020									0.13
4/8/2020						0.027			

## Time Series

Constituent: Barium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
9/29/2000	0.16					0.093	0.16	0.22	0.16
11/21/2000	0.17	0.046				0.095	0.16	0.13	0.21
1/20/2001	0.16	0.036				0.089	0.21	0.19	0.23
3/14/2001	0.17	0.03				0.088	0.18	0.27	0.22
7/16/2001	0.19	0.032				0.096	0.18	0.37	0.22
11/1/2001	0.18	0.029				0.094	0.15	0.61 (o)	0.23
4/25/2002	0.15	0.021				0.085	0.16	0.19	0.15
6/6/2003	0.13	0.032				0.09	0.29	0.72 (o)	0.13
12/12/2003	0.18	0.021				0.084	0.18	0.054	0.034
5/26/2004	0.17	0.035				0.08	0.16	0.18	0.13
12/7/2004	0.19	0.031				0.098	0.16	0.24	0.13
6/21/2005	0.18	0.028				0.084	0.15	0.2	0.07
12/12/2005	0.17	0.024				0.07	0.15	0.074	0.04
6/27/2006	0.17	0.03				0.083	0.19	0.075	0.041
12/4/2006	0.21	0.031				0.072	0.26	0.092	0.048
6/23/2007	0.17	0.037				0.087	0.24	0.089	0.12
12/11/2007	0.18	0.034				0.082	0.21	0.072	0.12
6/23/2008						0.1			
6/24/2008	0.14	0.038					0.13	0.049	0.17
12/4/2008		0.038				0.12			
12/5/2008	0.19						0.12	0.067	0.093
7/7/2009							0.17	0.04	0.06
7/8/2009	0.2	0.053				0.14			
12/20/2009		0.047							
12/21/2009	0.23					0.15	0.2	0.044	0.11
6/20/2010		0.046				0.21		0.036	0.11
6/21/2010	0.25		0.062	0.16	0.11		0.22		
1/6/2011		0.063						0.075	
1/7/2011	0.21		0.039	0.095	0.12	0.2	0.12		0.025
7/7/2011		0.06						0.13	0.025
7/8/2011	0.13		0.043	0.1	0.094	0.18	0.15		
1/17/2012		0.06						0.21	
1/18/2012	0.26		0.042	0.12	0.087	0.18	0.15		0.03
7/9/2012		0.05						0.2	
7/10/2012	0.19		0.039	0.097	0.1	0.16	0.14		0.028
1/17/2013		0.058						0.19	
1/18/2013	0.17		0.04	0.1	0.078	0.19	0.15		0.058
7/16/2013								0.076	
7/17/2013	0.18	0.041	0.055	0.069	0.062	0.17	0.14		0.086
1/13/2014		0.058						0.14	
1/14/2014	0.18		0.059	0.086	0.073	0.2	0.16		0.1
7/9/2014	0.16	0.048		0.065		0.16	0.12	0.12	0.082
7/10/2014			0.067		0.13				
1/12/2015		0.061					0.13		
1/13/2015		0.048						0.13	
1/14/2015	0.16			0.084	0.065	0.17			0.094
7/16/2015		0.048					0.11	0.12	
7/17/2015				0.071		0.18			0.11
7/18/2015	0.012		0.13		0.073				
1/17/2016		0.049	0.08	0.079					
1/18/2016	0.13				0.062	0.2	0.095	0.12	0.11
7/27/2016		0.0796						0.112	

# Time Series

Page 2

Constituent: Barium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GW-B-5R	GWB-6R
7/28/2016			0.164	0.0626		0.234			0.105
7/29/2016	0.181				0.0575		0.0883		
8/30/2016								0.135	0.106
8/31/2016		0.0429			0.0693	0.284			
9/1/2016	0.203		0.0976	0.077			0.123		
10/25/2016			0.0702	0.0217					
10/26/2016	0.177	0.113 (o)			0.0966		0.0863	0.103	0.107
10/27/2016						0.244			
1/3/2017								0.118	
1/4/2017			0.0999	0.0617	0.0975				
1/5/2017	0.142	0.0526							0.107
1/6/2017						0.305	0.0758		
4/4/2017		0.0503	0.136	0.0761			0.091		
4/5/2017	0.106								
4/6/2017					0.064	0.249		0.162	0.111
7/11/2017			0.145		0.0778				
7/12/2017						0.256	0.0941	0.157	0.106
7/13/2017	0.0686	0.0529		0.0428					
10/2/2017			0.148						
10/3/2017		0.057		0.0376				0.127	0.105
10/4/2017	0.0589				0.156	0.356	0.0994		
1/9/2018				0.0704					0.0969
1/10/2018		0.0527	0.0788					0.158	
1/11/2018	0.0412				0.0702	0.226	0.088		
7/9/2018			0.087						
7/10/2018		0.054		0.061				0.31	0.087
7/11/2018	0.049				0.12	0.29	0.071		
1/16/2019	0.063						0.083	0.054	0.013 (J)
1/17/2019			0.061						
1/18/2019					0.052	0.21			
1/21/2019		0.05	0.069						
3/25/2019			0.085				0.077		
3/26/2019	0.025			0.084				0.057	0.012 (J)
3/27/2019					0.057	0.19			
7/30/2019		0.052							
8/27/2019		0.053			0.097		0.076		0.013
8/28/2019	0.026		0.078	0.063		0.17		0.1	
10/8/2019				0.079					
10/9/2019	0.032	0.05	0.078		0.065	0.18	0.076	0.13	0.014 (J)
4/7/2020					0.054	0.1		0.09	0.098
4/8/2020	0.055	0.061	0.19			0.15			0.01 (J)

## Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
9/29/2000	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
11/21/2000	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1/20/2001	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
3/14/2001	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
7/16/2001	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
11/1/2001	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
4/25/2002	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8/30/2016		0.0002 (J)	<0.003						
8/31/2016				<0.003	0.0011 (J)	<0.003			
9/1/2016	0.0017 (J)						0.0001 (J)	<0.003	0.0001 (J)
10/24/2016		<0.003							
10/25/2016	0.0002 (J)		<0.003				<0.003	<0.003	<0.003
10/26/2016				<0.003	0.0011 (J)	<0.003			
1/3/2017		0.0002 (J)		<0.003					
1/4/2017				<0.003	<0.003	0.0009 (J)			9E-05 (J)
1/5/2017							<0.003	<0.003	<0.003
1/6/2017	0.0003 (J)								
4/3/2017		0.0002 (J)		<0.003				<0.003	
4/4/2017				<0.003			9E-05 (J)		
4/5/2017					0.0008 (J)				9E-05 (J)
4/6/2017	0.0004 (J)			<0.003		<0.003			
7/10/2017					0.0008 (J)				
7/11/2017		0.0002 (J)		<0.003				<0.003	<0.003
7/12/2017				<0.003			<0.003		<0.003
7/13/2017	0.001 (J)								
10/2/2017		0.0002 (J)		<0.003			<0.003	<0.003	
10/3/2017				<0.003	<0.003				<0.003
10/4/2017	0.0002 (J)				0.0006 (J)	<0.003			
1/9/2018	<0.003	0.0002 (J)		<0.003				<0.003	<0.003
1/10/2018				<0.003		<0.003			0.0001 (J)
1/11/2018					0.0006 (J)				
7/9/2018		0.0002 (J)					6.2E-05 (J)		
7/10/2018				<0.003				<0.003	6E-05 (J)
7/11/2018	<0.015 (o)				<0.003	0.00061 (J)	5.8E-05 (J)		
8/26/2019	<0.015 (o)	0.00021 (J)		<0.003	<0.003	0.00047 (J)	<0.003	<0.003	
8/27/2019				<0.003					
8/28/2019									8E-05 (J)
10/7/2019		0.00024 (J)			<0.003				
10/8/2019	<0.015 (o)				<0.003		<0.003	<0.003	9.8E-05 (J)
10/9/2019				<0.003		0.00046 (J)			
4/6/2020	<0.003	0.00017 (J)		<0.003	<0.003	0.00051 (J)		<0.003	<0.003
4/7/2020								<0.003	
4/8/2020							<0.003		

## Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
9/29/2000	<0.003					<0.003	<0.003	<0.003	<0.003
11/21/2000	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
1/20/2001	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
3/14/2001	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
7/16/2001	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
11/1/2001	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
4/25/2002	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
8/30/2016								0.0002 (J)	<0.003
8/31/2016		<0.003			0.0002 (J)	0.0003 (J)			
9/1/2016	0.0014 (J)		<0.003	<0.003			0.0004 (J)		
10/25/2016			<0.003	<0.003					
10/26/2016	0.0016 (J)	0.0003 (J)			0.0002 (J)		0.0001 (J)	0.0001 (J)	<0.003
10/27/2016						0.0003 (J)			
1/3/2017								0.0001 (J)	
1/4/2017			<0.003	<0.003	0.0001 (J)				
1/5/2017	0.0019 (J)	<0.003							<0.003
1/6/2017						0.0002 (J)	0.0001 (J)		
4/4/2017		9E-05 (J)	<0.003	<0.003			0.0001 (J)		
4/5/2017	0.0024 (J)								
4/6/2017					<0.003	0.0003 (J)		0.0003 (J)	<0.003
7/11/2017			<0.003		<0.003				
7/12/2017						0.0003 (J)	<0.003	0.0002 (J)	<0.003
7/13/2017	0.0034	<0.003		<0.003					
10/2/2017			<0.003						
10/3/2017		<0.003		<0.003				0.0002 (J)	<0.003
10/4/2017	0.0037				0.0001 (J)	0.0002 (J)	0.0001 (J)		
1/9/2018				<0.003					<0.003
1/10/2018		<0.003	<0.003					0.0003 (J)	
1/11/2018	0.0033				<0.003	0.0003 (J)	0.0001 (J)		
7/9/2018			<0.003						
7/10/2018		<0.003		<0.003				0.00028 (J)	<0.003
7/11/2018	0.0038				7E-05 (J)	0.0003 (J)	<0.003		
7/30/2019		<0.003							
8/27/2019		<0.003			9E-05 (J)		<0.003		<0.003
8/28/2019	0.0017 (J)		<0.003	<0.003		0.00022 (J)		7.6E-05 (J)	
10/8/2019				<0.003					
10/9/2019	0.0018 (J)	<0.003	<0.003		<0.003	0.00023 (J)	<0.003	<0.003	<0.003
4/7/2020					<0.003	<0.003	<0.003	<0.003	<0.003
4/8/2020	0.0017 (J)	8.8E-05 (J)	<0.003			0.00019 (J)			

## Time Series

Constituent: Boron (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
8/30/2016		0.117	0.875						
8/31/2016				0.0688 (J)	5.1	0.261			
9/1/2016	11.6						0.071 (J)	9.01 (o)	1.82
10/24/2016		0.126							
10/25/2016	21.4		1.22				0.0819 (J)	1.66	1.26
10/26/2016				0.083 (J)	5.74	0.211			
1/3/2017		0.124							
1/4/2017			1.3	0.0738	6.56				1.46
1/5/2017						0.179	0.0813	1.1	
1/6/2017	20.1								
4/3/2017		0.105						1.21	
4/4/2017			1.19				0.0723		
4/5/2017					6.49				2
4/6/2017	21.8			0.0754		0.112			
7/10/2017					8.13				
7/11/2017		0.136		0.0614			0.0734	1.44	
7/12/2017			1.37			0.0882			2.95
7/13/2017	16.3								
10/2/2017		0.107					0.0748	1.59	
10/3/2017			0.765	0.0838					4.15
10/4/2017	21.5				5.18	0.116			
1/9/2018	13.9	0.123					0.0679	1.35	
1/10/2018			0.876			0.101			3.68
1/11/2018				0.169	5.16				
7/9/2018		0.11					0.061		
7/10/2018			0.94					1.2	5.2
7/11/2018	11.7			0.3	8.5	0.098			
1/16/2019	9.3	0.13	0.91			0.11	0.046		
1/17/2019				0.065	7			1.1	8.6
3/25/2019	8.5	0.098							
3/26/2019			0.77			0.35	0.037 (J)	0.95	7.4
3/27/2019				0.089	6.1				
10/7/2019		0.12							
10/8/2019	6.4			0.22		0.18	0.048	1.1	8.4
10/9/2019					8.2				
4/6/2020	6.1	0.14					0.061 (J)	0.96	10.5
4/7/2020			1	0.67	5.3				
4/8/2020						0.28			

## Time Series

Constituent: Boron (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016								1.09	1.41
8/31/2016		0.0196 (J)			12.8	0.096 (J,o)			
9/1/2016	0.408		3.34	0.62			6.48		
10/25/2016			2.54	0.0658 (J)					
10/26/2016	0.5	0.05 (J)			9.81		7.57	2.5	1.83
10/27/2016						0.0281 (J)			
1/3/2017								3.39	
1/4/2017			1.91	0.36	8.94				
1/5/2017	0.676	0.0162 (J)							3.07
1/6/2017						0.0189 (J)	8.34		
4/4/2017		0.019 (J)	2.77	0.509			8.18		
4/5/2017	0.69								
4/6/2017					0.733	0.0181 (J)		2.76	3.19
7/11/2017			4.14		0.852				
7/12/2017						0.0211 (J)	7.51	3.55	3.06
7/13/2017	0.888	0.023 (J)		0.126					
10/2/2017			4.65						
10/3/2017		0.0266 (J)		0.1				2.72	2.69
10/4/2017	1.02				6.05	0.0254 (J)	8.88		
1/9/2018				0.783					2.81
1/10/2018		0.0203 (J)	1.79					3.21	
1/11/2018	1.28				0.838	0.018 (J)	6.95		
7/9/2018			1.7						
7/10/2018		0.026 (J)		0.5				7	2.9
7/11/2018	1.6				3.2	0.02 (J)	6.4		
1/16/2019	1.5						5.3	5	7.7
1/17/2019				0.43					
1/18/2019					0.37	0.018 (J)			
1/21/2019		0.018 (J)	1.1						
3/25/2019			1				4.4		
3/26/2019	1.2			0.61				4	7.4
3/27/2019					0.37	0.016 (J)			
7/30/2019		0.02 (J)							
10/8/2019				1					
10/9/2019	1.3	0.024 (J)	0.79		0.39	0.019 (J)	5.7	6.8	6.3
4/7/2020					0.24	3.1		5.5	4.6
4/8/2020	0.99	0.031 (J)	2.5			0.023 (J)			5.6

## Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
11/21/2000	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
1/20/2001	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
3/14/2001	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
7/16/2001	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
11/1/2001	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
4/25/2002	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
8/30/2016		<0.0025	<0.0025						
8/31/2016				0.0002 (J)	<0.0025	<0.0025			
9/1/2016	0.0007 (J)						0.0001 (J)	<0.0025	<0.0025
10/24/2016		<0.0025							
10/25/2016	<0.0025		<0.0025				0.0002 (J)	<0.0025	<0.0025
10/26/2016				0.0001 (J)	<0.0025	<0.0025			
1/3/2017		<0.0025							<0.0025
1/4/2017			0.0001 (J)	0.0001 (J)	<0.0025				
1/5/2017						<0.0025	0.0002 (J)	<0.0025	
1/6/2017	0.0001 (J)								
4/3/2017		<0.0025						<0.0025	
4/4/2017			7E-05 (J)				0.0002 (J)		
4/5/2017					<0.0025				<0.0025
4/6/2017	<0.0025			0.0002 (J)		<0.0025			
7/10/2017					<0.0025				
7/11/2017		<0.0025		<0.0025			0.0002 (J)	<0.0025	
7/12/2017			<0.0025			<0.0025			<0.0025
7/13/2017	<0.0025								
10/2/2017		<0.0025					<0.0025	<0.0025	
10/3/2017			<0.0025	0.0003 (J)					<0.0025
10/4/2017	<0.0025				<0.0025	<0.0025			
1/9/2018	<0.0025	<0.0025					<0.0025	<0.0025	
1/10/2018			<0.0025			<0.0025			<0.0025
1/11/2018				0.0006 (J)	<0.0025				
7/9/2018		<0.0025					0.00017 (J)		
7/10/2018			<0.0025					<0.0025	<0.0025
7/11/2018	<0.0025			0.0004 (J)	<0.0025	<0.0025			
8/26/2019	<0.012 (o)	<0.0025							
8/27/2019			<0.0025	0.00044 (J)	<0.0025	<0.0025	<0.0025	<0.0025	
8/28/2019									<0.0025
10/7/2019		<0.0025							
10/8/2019	<0.012 (o)			0.00043 (J)		<0.0025	<0.0025	<0.0025	<0.0025
10/9/2019					<0.0025	<0.0025			
4/6/2020	<0.0025	<0.0025							
4/7/2020			<0.0025	0.00051 (J)	<0.0025			<0.0025	<0.0025
4/8/2020						<0.0025			

## Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
11/21/2000	<0.0025	<0.0025				<0.0025	<0.0025	<0.0025	<0.0025
1/20/2001	<0.0025	<0.0025				<0.0025	<0.0025	<0.0025	<0.0025
3/14/2001	<0.0025	<0.0025				<0.0025	<0.0025	<0.0025	<0.0025
7/16/2001	<0.0025	<0.0025				<0.0025	<0.0025	<0.0025	<0.0025
11/1/2001	<0.0025	<0.0025				<0.0025	<0.0025	<0.0025	<0.0025
4/25/2002	<0.0025	<0.0025				<0.0025	<0.0025	<0.0025	<0.0025
8/30/2016								<0.0025	<0.0025
8/31/2016		<0.0025			8E-05 (J)	<0.0025			
9/1/2016	<0.0025		<0.0025	<0.0025			0.0002 (J)		
10/25/2016			<0.0025	<0.0025					
10/26/2016	<0.0025	<0.0025			<0.0025		<0.0025	<0.0025	<0.0025
10/27/2016						<0.0025			
1/3/2017								<0.0025	
1/4/2017			<0.0025	<0.0025	0.0001 (J)				
1/5/2017	<0.0025	<0.0025							<0.0025
1/6/2017						<0.0025	9E-05 (J)		
4/4/2017		<0.0025	<0.0025	<0.0025			9E-05 (J)		
4/5/2017	<0.0025								
4/6/2017					0.0001 (J)	<0.0025		<0.0025	<0.0025
7/11/2017			<0.0025		<0.0025				
7/12/2017						<0.0025	<0.0025	<0.0025	<0.0025
7/13/2017	<0.0025	<0.0025		<0.0025					
10/2/2017			<0.0025						
10/3/2017		<0.0025		<0.0025				<0.0025	<0.0025
10/4/2017	<0.0025				0.0002 (J)	<0.0025	<0.0025		
1/9/2018				<0.0025					<0.0025
1/10/2018		<0.0025	<0.0025						<0.0025
1/11/2018	<0.0025				0.0002 (J)	<0.0025	0.0002 (J)		
7/9/2018			<0.0025						
7/10/2018		<0.0025		<0.0025				<0.0025	<0.0025
7/11/2018	<0.0025				0.00023 (J)	<0.0025	<0.0025		
7/30/2019		<0.0025							
8/27/2019		<0.0025			<0.0025		<0.0025		<0.0025
8/28/2019	<0.0025		<0.0025	<0.0025		<0.0025			<0.0025
10/8/2019				<0.0025					
10/9/2019	<0.0025	<0.0025	<0.0025		0.00012 (J)	<0.0025	<0.0025	<0.0025	<0.0025
4/7/2020					<0.0025	0.00054 (J)		<0.0025	<0.0025
4/8/2020	<0.0025	<0.0025	<0.0025			<0.0025			<0.0025

## Time Series

Constituent: Calcium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
8/30/2016		23.8	29.4						
8/31/2016				18.8	105	2.77 (o)			
9/1/2016	5.59						194	119	93.8
10/24/2016		22.5							
10/25/2016	6.43		28.3				100	106	94.1
10/26/2016				16.6	101	2.25			
1/3/2017		22.1							
1/4/2017			33.4	17.6	94.9				88.2
1/5/2017						2.27	107	115	
1/6/2017	8.13								
4/3/2017		24.6 (J)						131	
4/4/2017			34.6				153		
4/5/2017					92.5				106
4/6/2017	7.72			30.9		2.04			
7/10/2017					90.3				
7/11/2017		23.5		17.7			125	155	
7/12/2017			38			2.25			149
7/13/2017	4.57								
10/2/2017		22.7					126	137	
10/3/2017			25.5	39.8					217
10/4/2017	6.41				74.6	2.19			
1/9/2018	4.68	23.2					119	135	
1/10/2018			36.5			2.28			161
1/11/2018				65.6	78.1				
7/9/2018		24.6 (J)					123		
7/10/2018			45.5					129	205
7/11/2018	3.9			53	72.2	2.3			
1/16/2019	4.3	27.7	46.5			2.3	120		
1/17/2019				19.8 (J)	64.7			137	187
3/25/2019	3.9	31.7							
3/26/2019			46.3			2.4	84.2	124	204
3/27/2019				25.1	63.1				
10/7/2019		31.6							
10/8/2019	3.5			69.2		2.3	146	129	205
10/9/2019			51.2		54.2				
4/6/2020	3.1	35.8							
4/7/2020			31.1	84.7	52.1		135	129	225
4/8/2020						2.5			

## Time Series

Constituent: Calcium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016								14.3	4.68
8/31/2016		0.371 (J)			127	6.9			
9/1/2016	71.9		67.2	40.5			9.91		
10/25/2016			50.1	3.91					
10/26/2016	80.3	5.84			127		8.56	18.6	5.45
10/27/2016						8.2			
1/3/2017								18.1	
1/4/2017			80.4	15.2	113				
1/5/2017	94.4	0.379 (J)							5.35
1/6/2017						7.97	8.18		
4/4/2017		0.993	108	32.3			8.12		
4/5/2017	104					42.7	7.95		5.41
4/6/2017								16.2	
7/11/2017			136		46				
7/12/2017						8.37	8	18.1	4.81
7/13/2017	124	0.388 (J)		8.92					
10/2/2017			105						
10/3/2017		0.251 (J)		7.88				15.2	5.17
10/4/2017	136				115	8.57	12.5		
1/9/2018				40.5					4.73
1/10/2018		0.177 (J)	60.1					15.5	
1/11/2018	139				47.6	9.78	12.9		
7/9/2018			75.9						
7/10/2018		0.17 (J)		29.8				30.6	4.5
7/11/2018	122				73.7	9.2	8.6		
1/16/2019	80.5						68.8	33.3	10.1
1/17/2019				27.6					
1/18/2019					30.6	8.1			
1/21/2019		0.19 (J)	60						
3/25/2019				74.8			55.6		
3/26/2019	68.8			60.1				36.1	9
3/27/2019					28.8	7.7			
7/30/2019		0.43							
10/8/2019				49.5					
10/9/2019	56.6	0.18	80.1		30.1	6	46.7	17.7	10.1
4/7/2020					12.5	65.7		62.1	34.1
4/8/2020	53.1	0.24 (J)	175			5.3			7.8

## Time Series

Constituent: Chloride (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
8/30/2016		15	5.5						
8/31/2016				3.5	210	4.3			
9/1/2016	190						60	10	43
10/24/2016		13							
10/25/2016	175 (D)		5.1				36	6.5	34
10/26/2016				2.5	200	4.9			
1/3/2017		13							
1/4/2017			6.9	3.8	160				29
1/5/2017						4.1	37	10	
1/6/2017	180								
4/3/2017		14						7.3	
4/4/2017			6.5				47		
4/5/2017					140				36
4/6/2017	200			7.1		3.7			
7/10/2017					88				
7/11/2017		13		3.1			34	5.7	
7/12/2017			6.5			2.6			44
7/13/2017	200								
10/2/2017		15					34	4.4	
10/3/2017			4.5	46					58
10/4/2017	260				100	3			
1/9/2018	210	13					24	5.7	
1/10/2018			6.9			3.4			36
1/11/2018				100	78				
7/9/2018		15.4					25.9		
7/10/2018			6.2					3.1	57
7/11/2018	177			53.7	66.9	3.2			
1/16/2019	165	16	6.6			3.8	29.2		
1/17/2019				6.6	52			3.2	48.9
3/25/2019	147	17.7							
3/26/2019			7			3.2	21.1	3	5.1
3/27/2019				11.9	45.6				
10/7/2019		18							
10/8/2019	125			89		4	40.2	2.9	46.4
10/9/2019			7.2		44.1				
4/6/2020	30.2	13.5		7.7	103	32.5		41.6	3.4
4/7/2020									49.3
4/8/2020						4.5			

## Time Series

Constituent: Chloride (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016								31	60
8/31/2016		7.8			320	17			
9/1/2016	610		16	5.9			160		
10/25/2016			8.1	4.4					
10/26/2016	570	12			450		110	24	67
10/27/2016						17			
1/3/2017								29	
1/4/2017			13	7.7	330				
1/5/2017	710	7.4							70
1/6/2017						16	67		
4/4/2017		8.7	23	8			80		
4/5/2017	860				50	17		27	76
4/6/2017									
7/11/2017			31		70				
7/12/2017						18	120	31	64
7/13/2017	860	8.3		5.4					
10/2/2017			30						
10/3/2017		9		4.4				27	73
10/4/2017	1000				360	18	130		
1/9/2018				4.4					61
1/10/2018		8.2	9.7					59	
1/11/2018	940				74	16	60		
7/9/2018			10.8					172	60.2
7/10/2018		7.3		6.3					
7/11/2018	864				164	16.2	75.9		
1/16/2019	469						20.2	49.7	54.1
1/17/2019				5.4					
1/18/2019					11	17.5			
1/21/2019		6.9	5.1						
3/25/2019				9.4			19.7		
3/26/2019	439				11.9			47.9	51.8
3/27/2019						11.5	18.9		
7/30/2019		7.1							
10/8/2019				7.8					
10/9/2019	330	7	5.4		25.3	19	32.1	239	49.7
4/7/2020					4.7	146		14.5	44.3
4/8/2020	277	5.2	20.2				16.9		56.4

# Time Series

Constituent: Chromium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill

Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
9/29/2000	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
11/21/2000	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1/20/2001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3/14/2001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7/16/2001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
11/1/2001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4/25/2002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
11/20/2002		0.0051 (o)	<0.01	0.006	0.002	<0.01	0.014	0.0058	0.0041
6/6/2003	0.037	0.014	0.005 (o)	0.0082	<0.01	0.003	<0.01	0.0068	0.063 (o)
12/12/2003	0.0044	0.011	<0.01	0.0023	<0.01	<0.01	<0.01	0.0041	0.0059
5/26/2004	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
12/7/2004	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0026	<0.01
6/21/2005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
12/12/2005	<0.01	<0.01	0.002 (o)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4/4/2006		<0.01					<0.01		<0.01
6/27/2006	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0013	<0.01
8/30/2006		<0.01					<0.01		<0.01
12/4/2006	0.0015	<0.01	<0.01	0.0021	0.0032	0.0017	0.0042 (o)	<0.01	0.0036 (o)
2/15/2007		<0.01					<0.01		<0.01
6/23/2007	<0.01	<0.01	<0.01	0.0017	<0.01	<0.01	<0.01	<0.01	0.0016
9/11/2007		<0.01					<0.01		<0.01
12/11/2007	0.0016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3/11/2008		<0.01					<0.01		<0.01
6/23/2008	0.0019	<0.01		<0.01	0.0016	<0.01			
6/24/2008			<0.01				<0.01	0.0014	<0.01
11/3/2008		<0.01					<0.01		0.0025
12/4/2008	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
12/5/2008			<0.01					<0.01	<0.01
3/25/2009		<0.01					<0.01		<0.01
7/7/2009	0.0037	<0.01	0.0013						
7/8/2009				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
9/14/2009		<0.01					<0.01		<0.01
12/20/2009	0.0016	<0.01	<0.01				<0.01	<0.01	<0.01
12/21/2009				<0.01	<0.01	<0.01			
3/4/2010		<0.01					<0.01		<0.01
6/20/2010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
6/21/2010									<0.01
9/14/2010		<0.01					<0.01		<0.01
1/6/2011			<0.01	<0.01		<0.01			
1/7/2011	0.0033	<0.01			<0.01		0.0016	<0.01	0.0018
4/15/2011		<0.01					0.0034 (o)		<0.01
7/7/2011	0.0044	<0.01	<0.01	0.0023	<0.01	0.0019	<0.01	<0.01	<0.01
9/25/2011		0.0021 (o)					0.0013		<0.01
1/17/2012	0.0038	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
1/18/2012									<0.01
4/4/2012		<0.01					<0.01		<0.01
7/9/2012	0.022		<0.01	0.0017	<0.01	<0.01	<0.01	<0.01	
7/10/2012		<0.01							<0.01
10/9/2012		<0.01					0.0019		0.0018
1/17/2013			<0.01	<0.01	<0.01	<0.01			
1/18/2013	0.034	<0.01					0.0017	<0.01	<0.01
4/5/2013		<0.01					0.0019		<0.01

# Time Series

Page 2

Constituent: Chromium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
7/16/2013			<0.01	<0.01	<0.01	<0.01			
7/17/2013	0.032	<0.01					0.0017	<0.01	<0.01
10/11/2013		<0.01					0.0013		<0.01
1/13/2014	0.04		<0.01	<0.01	<0.01	<0.01		<0.01	
1/14/2014		<0.01					0.001		<0.01
4/3/2014		<0.01					0.0031 (o)		<0.01
7/8/2014				<0.01	<0.01	<0.01			
7/9/2014	0.036	<0.01	0.0011 (J)				0.0012 (J)	<0.01	<0.01
10/24/2014		<0.01					<0.01		<0.01
1/13/2015	0.03		<0.01	<0.01	<0.01	<0.01		<0.01	
1/14/2015		<0.01					0.0013		<0.01
5/10/2015		<0.01					<0.01		
5/11/2015									<0.01
7/16/2015	0.039		0.0011 (J)	<0.01	0.001 (J)	<0.01		<0.01	<0.01
7/17/2015		<0.01					0.001 (J)		
10/6/2015		<0.01					<0.01		<0.01
1/17/2016			<0.01				0.0012 (J)	<0.01	<0.01
1/18/2016	0.068	<0.01			<0.01	<0.01			
1/19/2016				<0.01					
4/26/2016		<0.01					<0.01		<0.01
7/26/2016				0.0005 (J)		<0.01			
7/27/2016	0.05		0.0016 (J)		0.0014 (J)		0.0008 (J)	0.0007 (J)	
7/28/2016		<0.01							0.0006 (J)
8/30/2016		<0.01	0.0015 (J)						
8/31/2016				0.001 (J)	0.0012 (J)	0.0011 (J)			
9/1/2016	0.119 (o)						0.0015 (J)	0.0011 (J)	0.0011 (J)
10/24/2016		<0.01							
10/25/2016	0.0519		0.0018 (J)				<0.01	<0.01	<0.01
10/26/2016				<0.01	0.0012 (J)	<0.01			
1/3/2017		<0.01							
1/4/2017			0.0021 (J)	<0.01	0.0012 (J)				<0.01
1/5/2017						<0.01	0.001 (J)	<0.01	
1/6/2017	0.0536								
4/3/2017		0.0004 (J)						0.0015 (J)	
4/4/2017			0.002 (J)				0.001 (J)		
4/5/2017					0.0013 (J)				0.001 (J)
4/6/2017	0.0447 (J)			0.0007 (J)		0.0011 (J)			
7/10/2017					0.0014 (J)				
7/11/2017		0.0006 (J)		0.0006 (J)			0.0008 (J)	0.0013 (J)	
7/12/2017			0.0021 (J)			0.0007 (J)			0.0011 (J)
7/13/2017	0.0269								
10/2/2017		<0.01					0.0009 (J)	0.0013 (J)	
10/3/2017			0.0014 (J)	0.0007 (J)					0.0009 (J)
10/4/2017	0.0378				0.0011 (J)	0.0008 (J)			
1/9/2018	0.0283 (J)	<0.01					0.0006 (J)	0.0012 (J)	
1/10/2018			0.0017 (J)			0.0007 (J)			0.0007 (J)
1/11/2018				0.0098 (J)	0.001 (J)				
7/9/2018		<0.01					<0.01		
7/10/2018			0.0021 (J)					<0.01	<0.01
7/11/2018	0.018 (J)			<0.01	<0.01	0.0019 (J)			
1/16/2019	0.018 (J)	<0.01	0.0021 (J)			<0.01	<0.01		
1/17/2019				<0.01	0.0028 (J)			<0.01	0.01 (J)

## Time Series

Page 3

Constituent: Chromium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
3/25/2019	0.017 (J)	<0.01							
3/26/2019			0.0018 (J)			<0.01	<0.01	<0.01	<0.01
3/27/2019				<0.01	<0.01				
8/26/2019	0.024 (J)	0.001 (J)							
8/27/2019			0.0062 (J)	0.00092 (J)	0.00085 (J)	<0.01	0.001 (J)	0.0016 (J)	
8/28/2019									0.0011 (J)
10/7/2019		0.00052 (J)							
10/8/2019	0.021 (J)			0.00091 (J)		<0.01	0.00053 (J)	0.0017 (J)	0.00099 (J)
10/9/2019			0.0019 (J)		0.00081 (J)				
4/6/2020	0.015 (J)	<0.01							
4/7/2020			0.0015 (J)	0.00094 (J)	0.00082 (J)		0.00074 (J)	0.0014 (J)	<0.01
4/8/2020						0.00058 (J)			

## Time Series

Constituent: Chromium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
9/29/2000	<0.01					<0.01	0.021	0.03	0.016
11/21/2000	<0.01	<0.01				<0.01	0.017	<0.01	0.023
1/20/2001	<0.01	<0.01				<0.01	0.03	0.028	0.025
3/14/2001	<0.01	<0.01				<0.01	0.019	0.052 (o)	0.021
7/16/2001	<0.01	<0.01				<0.01	0.029	0.08 (o)	0.019
11/1/2001	<0.01	<0.01				<0.01	0.021	0.13 (o)	0.022
4/25/2002	<0.01	<0.01				<0.01	0.03	0.021	0.019
11/20/2002	<0.01	<0.01				0.014	0.038	0.053 (o)	0.024
6/6/2003	<0.01	<0.01				<0.01	0.028	0.064 (o)	0.021
12/12/2003	0.036 (o)	<0.01				<0.01	0.027	<0.01	0.0066
5/26/2004	<0.01	<0.01				<0.01	0.021	0.012	0.013
12/7/2004	0.0021	<0.01				0.0039	0.016	0.019	0.013
6/21/2005	<0.01	<0.01				0.002	0.015	0.02	0.0067
12/12/2005	<0.01	<0.01				<0.01	0.022	<0.01	0.0033
6/27/2006	<0.01	<0.01				<0.01	0.027	0.0015	0.0047
12/4/2006	<0.01	<0.01				0.0019	0.025	0.0034	0.0084
6/23/2007	<0.01	<0.01				0.0015	0.023	<0.01	0.01
12/11/2007	<0.01	<0.01				<0.01	0.018	<0.01	0.0049
6/23/2008						0.0015			
6/24/2008	<0.01	<0.01					0.022	<0.01	0.032 (o)
12/4/2008		<0.01				<0.01			
12/5/2008	<0.01						0.023	0.0016	0.009
7/7/2009							0.012	<0.01	0.0044
7/8/2009	<0.01	<0.01				<0.01			
12/20/2009		<0.01							
12/21/2009	<0.01					<0.01	0.019	<0.01	0.0055
6/20/2010		<0.01				0.0015		<0.01	0.002
6/21/2010	<0.01		<0.01	0.0019	<0.01		0.01		
1/6/2011		<0.01						0.0017	
1/7/2011	<0.01		0.0018	0.0017	<0.01	<0.01	0.023		0.0039
7/7/2011			<0.01					0.008	0.0031
7/8/2011	0.0013		0.0019	0.0023	<0.01	<0.01	0.017		
1/17/2012		<0.01						0.0082	
1/18/2012	<0.01		<0.01	<0.01	<0.01	<0.01	0.0114		0.0023
7/9/2012		<0.01						0.01	
7/10/2012	<0.01		0.0013	<0.01	<0.01	<0.01	0.014		0.0022
1/17/2013		<0.01						0.01	
1/18/2013	<0.01		0.0015	<0.01	<0.01	<0.01	0.015		<0.01
7/16/2013								0.0061	
7/17/2013	<0.01	<0.01	<0.01	0.0019	<0.01	<0.01	0.011		<0.01
1/13/2014		<0.01						0.002	
1/14/2014	<0.01		0	<0.01	<0.01	<0.01	0.019		0.0013
7/9/2014	<0.01	<0.01		<0.01		0.0011 (J)	0.012	<0.01	<0.01
7/10/2014			<0.01		<0.01				
1/12/2015			<0.01				0.016		
1/13/2015		<0.01						<0.01	
1/14/2015	<0.01			<0.01	<0.01	<0.01			0.0015
7/16/2015		<0.01					0.0084	<0.01	
7/17/2015				<0.01		0.0013			0.0011 (J)
7/18/2015	<0.01		<0.01		<0.01				
1/17/2016		<0.01	<0.01	<0.01	<0.01				
1/18/2016	<0.01				<0.01	<0.01	0.014	<0.01	0.0011 (J)

# Time Series

Page 2

Constituent: Chromium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
7/27/2016		0.0008 (J)						0.0006 (J)	
7/28/2016				0.0007 (J)	0.0005 (J)		0.0011 (J)		0.001 (J)
7/29/2016	0.0009 (J)					0.0007 (J)		0.0077 (J)	
8/30/2016								<0.01	0.0013 (J)
8/31/2016		<0.01				<0.01	0.0024 (J)		
9/1/2016	0.0011 (J)			<0.01	<0.01			0.015	
10/25/2016				<0.01	<0.01				
10/26/2016	<0.01	0.001 (J)				<0.01		0.0106	<0.01
10/27/2016							<0.01		0.0014 (J)
1/3/2017									0.001 (J)
1/4/2017				<0.01	<0.01	<0.01			
1/5/2017	0.0012 (J)	<0.01							0.002 (J)
1/6/2017							<0.01	0.0098 (J)	
4/4/2017		0.0008 (J)	0.0011 (J)	0.0008 (J)				0.0101	
4/5/2017	0.0015 (J)					0.0006 (J)	0.0019 (J)		0.0034 (J)
4/6/2017						0.0005 (J)			
7/11/2017			0.0009 (J)				0.0011 (J)	0.0096 (J)	0.0011 (J)
7/12/2017								0.0024 (J)	
7/13/2017	0.0012 (J)	0.0006 (J)		0.0006 (J)					
10/2/2017				0.0009 (J)					
10/3/2017		<0.01			0.0005 (J)			0.0012 (J)	0.0022 (J)
10/4/2017	0.0055 (J)					0.0006 (J)	0.0011 (J)	0.0097 (J)	
1/9/2018					0.0007 (J)				0.0019 (J)
1/10/2018		<0.01	0.0008 (J)						0.0016 (J)
1/11/2018	0.0009 (J)					<0.01	0.001 (J)	0.0109	
7/9/2018			<0.01						
7/10/2018		<0.01		<0.01				0.0055 (J)	0.0023 (J)
7/11/2018	<0.01					<0.01	<0.01	0.0055 (J)	
1/16/2019	<0.01							0.0024 (J)	<0.01
1/17/2019				0.01					0.018 (J)
1/18/2019						<0.01	<0.01		
1/21/2019		<0.01	<0.01						
3/25/2019				<0.01			0.002 (J)		
3/26/2019	<0.01				<0.01			0.072	0.017 (J)
3/27/2019						<0.01	<0.01		
7/30/2019		0.00065 (J)							
8/27/2019		<0.01				0.00057 (J)		0.0027 (J)	0.0097 (J)
8/28/2019	0.0013 (J)		0.00089 (J)	0.00087 (J)		0.00089 (J)			0.0071 (J)
10/8/2019				0.00065 (J)					
10/9/2019	0.00081 (J)	0.00049 (J)	0.0011 (J)		0.00072 (J)	0.0009 (J)	0.002 (J)	0.012 (J)	0.011 (J)
4/7/2020					<0.01	0.00049 (J)		0.0028 (J)	0.0022 (J)
4/8/2020	0.00073 (J)	0.00069 (J)	0.001 (J)				0.0015 (J)		0.0094 (J)

## Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
9/29/2000	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
11/21/2000	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/20/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3/14/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
7/16/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
11/1/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4/25/2002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/30/2016		<0.005	<0.005						
8/31/2016				<0.005	0.0018 (J)	<0.005			
9/1/2016	0.0102						<0.005	<0.005	<0.005
10/24/2016		<0.005							
10/25/2016	0.0037 (J)		<0.005				<0.005	<0.005	<0.005
10/26/2016				<0.005	0.0016 (J)	<0.005			
1/3/2017		<0.005							
1/4/2017			<0.005	<0.005	0.0014 (J)				<0.005
1/5/2017						<0.005	<0.005	<0.005	
1/6/2017	0.0039 (J)								
4/3/2017		0.0005 (J)						<0.005	
4/4/2017			<0.005				<0.005		
4/5/2017					0.0013 (J)				<0.005
4/6/2017	0.006 (J)			<0.005		<0.005			
7/10/2017					0.0013 (J)				
7/11/2017		0.0005 (J)		<0.005				0.0003 (J)	<0.005
7/12/2017			<0.005				<0.005		<0.005
7/13/2017	0.0037 (J)								
10/2/2017		0.0004 (J)					<0.005	<0.005	
10/3/2017			<0.005	<0.005					<0.005
10/4/2017	0.0058 (J)				0.0011 (J)	<0.005			
1/9/2018	0.0053 (J)	0.0004 (J)						<0.005	<0.005
1/10/2018			<0.005				<0.005		<0.005
1/11/2018				0.0003 (J)	0.0011 (J)				
7/9/2018		<0.005					<0.005		
7/10/2018			<0.005					<0.005	<0.005
7/11/2018	<0.05 (o)			<0.005	0.00096 (J)	<0.005			
8/26/2019	0.0037 (J)	0.00042 (J)		<0.005	<0.005	<0.005	<0.005	<0.005	
8/27/2019			<0.005	<0.005	0.0009 (J)	<0.005	<0.005	<0.005	
8/28/2019									<0.005
10/7/2019		0.00046 (J)		<0.005					
10/8/2019	0.0028 (J)			<0.005		<0.005	<0.005	<0.005	<0.005
10/9/2019				<0.005		0.00094 (J)			
4/6/2020	0.0021 (J)	0.00036 (J)		<0.005	<0.005	0.00077 (J)		<0.005	<0.005
4/7/2020				<0.005	<0.005			<0.005	<0.005
4/8/2020						<0.005			

## Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
9/29/2000	<0.005					<0.005	<0.005	<0.005	<0.005
11/21/2000	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
1/20/2001	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
3/14/2001	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
7/16/2001	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
11/1/2001	<0.005	<0.005				<0.005	<0.005	0.012	<0.005
4/25/2002	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
8/30/2016								<0.005	<0.005
8/31/2016		<0.005			0.001 (J)	0.0021 (J,o)			
9/1/2016	0.0046 (J)		<0.005	<0.005			0.0024 (J)		
10/25/2016			<0.005	<0.005					
10/26/2016	0.0046 (J)	0.0011 (J)			0.0009 (J)		0.0011 (J)	<0.005	<0.005
10/27/2016						0.0017 (J)			
1/3/2017								<0.005	
1/4/2017			<0.005	<0.005	0.0007 (J)				
1/5/2017	0.0062 (J)	<0.005							<0.005
1/6/2017						0.0017 (J)	0.001 (J)		
4/4/2017		<0.005	<0.005	<0.005			0.001 (J)		
4/5/2017	0.007 (J)								
4/6/2017					<0.005	0.0017 (J)		<0.005	<0.005
7/11/2017			<0.005		<0.005				
7/12/2017						0.0016 (J)	0.0008 (J)	<0.005	<0.005
7/13/2017	0.0077 (J)	0.0003 (J)		<0.005					
10/2/2017			<0.005						
10/3/2017		0.0003 (J)		<0.005				<0.005	<0.005
10/4/2017	0.0073 (J)				0.0007 (J)	0.0015 (J,o)	0.001 (J)		
1/9/2018				<0.005					<0.005
1/10/2018		<0.005	<0.005					0.0004 (J)	
1/11/2018	0.0061 (J)				<0.005	0.0017 (J)	0.0008 (J)		
7/9/2018			<0.005						
7/10/2018		<0.005		<0.005				0.002 (J)	<0.005
7/11/2018	0.0064 (J)				<0.005	0.0017 (J)	<0.005		
7/30/2019		0.00032 (J)							
8/27/2019		<0.005			0.00077 (J)		0.0011 (J)		0.00038 (J)
8/28/2019	0.0023 (J)		<0.005	<0.005		0.00099 (J)		0.0024 (J)	
10/8/2019				<0.005					
10/9/2019	0.0024 (J)	<0.005	<0.005		<0.005	0.00099 (J)	0.0015 (J)	0.0037 (J)	<0.005
4/7/2020					<0.005	0.00037 (J)		0.0009 (J)	0.00053 (J)
4/8/2020	0.0024 (J)	0.00036 (J)	<0.005			0.001 (J)			

## Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
8/30/2016		2.72	2.36						
8/31/2016				2.2	2.61	1.23			
9/1/2016	11						1.28	2.45	1.99
10/24/2016		2.96							
10/25/2016	10.5		2.02				1.54	1.04 (U)	1.98
10/26/2016				1.96	3.28	0.641 (U)			
1/3/2017		2.76							
1/4/2017			2.1	1.88	3.77				1.72
1/5/2017						0.657 (U)	0.715 (U)	1.36	
1/6/2017	6.81								
4/3/2017		1.36						0.697 (U)	
4/4/2017			1.39 (U)				0.699 (U)		
4/5/2017					3.25				1.72
4/6/2017	8.93					0.439 (U)			
4/8/2017				0.893 (U)					
7/10/2017					1.55				
7/11/2017		1.85		1.89			1.12	0.754 (U)	
7/12/2017			1.63			0.414 (U)			1.11
7/13/2017	8.51								
10/2/2017		1.9					0.855 (U)	1.52	
10/3/2017			1.84	4.73					2.13
10/4/2017	3.85				1.68	1.33			
1/9/2018	4.28	2.39					0.861 (U)	1.17	
1/10/2018			2.11			1.21			1.74
1/11/2018				7.49	2.94				
7/9/2018		1.49					0.693 (U)		
7/10/2018			1.29					1.26	1.97
7/11/2018	5.99			5.88	2.03	1.4 (U)			
8/26/2019	6.03	3.03							
8/27/2019			2.41	5.09	2.09	1.27	1.32	1.75	
8/28/2019									2.04
10/7/2019		2.83							
10/8/2019	33.8			6.39		1.62	1.41	1.52	1.89
10/9/2019				3.13		3.11			
4/6/2020	25.7	2.83			2.18				
4/7/2020				1.97	7.87		1.41	1.82	4.17
4/8/2020						1.08 (U)			

## Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016								1.81	2.19
8/31/2016		1.01			5.96	3.3			
9/1/2016	5.19		2.21	1.05			5.27		
10/25/2016			1.51 (U)	1.2					
10/26/2016	4.25	0.725 (U)			7.42		2.32	2.03	2.67
10/27/2016						2.7			
1/3/2017								1.85	
1/4/2017			2.56	2.11	6.07				
1/5/2017	3.55	0.735 (U)							3.74
1/6/2017						4.45	5.1		
4/4/2017		0.87 (U)	1.77	2.02			5		
4/5/2017	4.39								
4/6/2017					3	3.1		2.66	2.36
7/11/2017			2.76		4.2		2.73	2.69	2.1
7/12/2017									1.54
7/13/2017	2.44	0.42 (U)		0.576 (U)					
10/2/2017			4.15						
10/3/2017		0.995 (U)		0.86				2	3.63
10/4/2017	4.95				7.16	8.16	4.82		
1/9/2018				1.43					2.07
1/10/2018		0.698 (U)	1.96					2.55	
1/11/2018	3.53				3.57	2.31	4.48		
7/9/2018			1.11						
7/10/2018		1.01		1.63				3.14	1.63
7/11/2018	3.13				7.57	3.31	2.69		
8/27/2019		0.787 (U)			7.04		2.97		4.63
8/28/2019	2.01		1.13 (U)	1.4 (U)		1.91		3.74	
10/8/2019				1.88					
10/9/2019	2.91	0.22 (U)	2.28		3.68	3.09	2.17	7.23	5.45
4/7/2020				1.8	7.66		2.44	3.57	6.25
4/8/2020	2.79	1.13 (U)	4.19			1.92			

## Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
8/30/2016		0.1 (J)	0.22 (J)						
8/31/2016				<0.3	0.7	<0.3			
9/1/2016	<0.3						0.25 (J)	<0.3	0.55
10/24/2016		0.18 (J)							
10/25/2016	0.07 (J)		<0.3				0.43	0.5	0.36
10/26/2016				<0.3	0.91	0.55			
1/3/2017		0.18 (J)							
1/4/2017			0.18 (J)	<0.3	0.51				0.1 (J)
1/5/2017						0.09 (J)	0.21 (J)	0.22 (J)	
1/6/2017	0.2 (J)								
4/3/2017		0.12 (J)						<0.3	
4/4/2017			<0.3				0.45		
4/5/2017					0.71				0.2 (J)
4/6/2017	0.05 (J)			<0.3		<0.3			
7/10/2017					0.88				
7/11/2017		0.39		<0.3			0.41	0.06 (J)	
7/12/2017			0.04 (J)			<0.3			0.04 (J)
7/13/2017	0.41								
10/2/2017		0.12 (J)					<0.3	<0.3	
10/3/2017			<0.3	<0.3					0.86
10/4/2017	0.04 (J)				0.37	<0.3			
1/9/2018	0.46	0.21 (J)					<0.3	<0.3	
1/10/2018			<0.3			<0.3			<0.3
1/11/2018				<0.3	1.4				
7/9/2018		0.04 (J)					<0.3		
7/10/2018			<0.3					0.15 (J)	<0.3
7/11/2018	<0.3			<0.3	0.62	<0.3			
1/16/2019	0.49	<0.3	<0.3			<0.3	<0.3		
1/17/2019				<0.3	1.2			<0.3	<0.3
3/25/2019	0.21 (J)	0.082 (J)							
3/26/2019			0.051 (J)			0.052 (J)	0.13 (J)	0.13 (J)	0.11 (J)
3/27/2019				<0.3	0.036 (J)				
8/26/2019	<0.3	0.13							
8/27/2019			<0.3	<0.3	0.3	<0.3	<0.3		
8/28/2019									<0.3
10/7/2019		<0.3							
10/8/2019	<0.3			<0.3		<0.3	<0.3	<0.3	<0.3
10/9/2019				<0.3		<0.3			
4/6/2020	0.13 (J)	0.089 (J)							
4/7/2020			<0.3	<0.3	0.27 (J)		<0.3	<0.3	<0.3
4/8/2020						<0.3			

## Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016								0.04 (J)	0.09 (J)
8/31/2016		0.07 (J)			0.04 (J)	0.55			
9/1/2016	0.68		<0.3	<0.3			<0.3		
10/25/2016			<0.3	<0.3					
10/26/2016	0.68	0.62			0.12 (J)		0.05 (J)	0.05 (J)	0.24 (J)
10/27/2016						0.26 (J)			
1/3/2017								0.08 (J)	
1/4/2017			0.04 (J)	<0.3	0.06 (J)				
1/5/2017	0.73	0.17 (J)							0.11 (J)
1/6/2017						0.25 (J)	0.08 (J)		
4/4/2017		0.08 (J)	0.02 (J)	<0.3			<0.3		
4/5/2017	1.6								
4/6/2017					<0.3	0.16 (J)		0.006 (J)	0.3
7/11/2017			0.14 (J)		0.03 (J)				
7/12/2017						0.2 (J)	0.38	0.05 (J)	0.15 (J)
7/13/2017	1.7	0.06 (J)		<0.3					
10/2/2017			<0.3						
10/3/2017		0.06 (J)		<0.3				0.11 (J)	0.11 (J)
10/4/2017	1.8				0.12 (J)	0.22 (J)	<0.3		
1/9/2018				<0.3					<0.3
1/10/2018		<0.3	<0.3						
1/11/2018	1.5					0.98	<0.3		
7/9/2018			<0.3					0.2 (J)	<0.3
7/10/2018		<0.3		<0.3					
7/11/2018	1.8					0.14 (J)	<0.3		
1/16/2019	1.4						1.2	<0.3	0.053 (J)
1/17/2019				<0.3					
1/18/2019					<0.3	0.24 (J)			
1/21/2019		<0.3	<0.3						
3/25/2019			0.043 (J)				0.064 (J)		
3/26/2019	0.89			0.071 (J)				<0.3	0.046 (J)
3/27/2019					<0.3	0.13 (J)			
7/30/2019		0.083 (J)							
8/27/2019		<0.3			0.1		0.031 (J)		0.13 (J)
8/28/2019	0.61		<0.3	<0.3		0.088 (J)		0.097 (J)	
10/8/2019				<0.3					
10/9/2019	<0.3	<0.3	<0.3		<0.3	0.068 (J)	<0.3	<0.3	<0.3
4/7/2020					<0.3	<0.3		<0.3	<0.3
4/8/2020	0.55	<0.3	<0.3			0.058 (J)			

## Time Series

Constituent: Lead (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
9/29/2000	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
11/21/2000	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/20/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3/14/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
7/16/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
11/1/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4/25/2002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
11/20/2002		<0.005	<0.005	<0.005	<0.005	<0.005	0.011 (o)	<0.005	<0.005
6/6/2003	0.037 (o)	0.016 (o)	<0.005	0.0068	<0.005	0.0078	<0.005	<0.005	0.099 (o)
12/12/2003	0.008	0.0095	<0.005	<0.005	<0.005	0.0055	<0.005	0.0065	0.017 (o)
5/26/2004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
12/7/2004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
6/21/2005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
12/12/2005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4/4/2006		<0.005					<0.005		<0.005
6/27/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/30/2006		<0.005					<0.005		<0.005
12/4/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/15/2007		<0.005					<0.005		<0.005
6/23/2007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
9/11/2007		<0.005					<0.005		<0.005
12/11/2007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3/11/2008		<0.005					<0.005		<0.005
6/23/2008	<0.005	<0.005		<0.005	<0.005	<0.005			
6/24/2008			<0.005				<0.005	<0.005	<0.005
11/3/2008		<0.005					<0.005		<0.005
12/4/2008	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005		
12/5/2008			<0.005					<0.005	<0.005
3/25/2009		<0.005					<0.005		<0.005
7/7/2009	<0.005	<0.005	<0.005						
7/8/2009				<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
9/14/2009		<0.005					<0.005		<0.005
12/20/2009	<0.005	<0.005	<0.005				<0.005	<0.005	<0.005
12/21/2009				<0.005	<0.005	<0.005			
3/4/2010		<0.005					<0.005		<0.005
6/20/2010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
6/21/2010									<0.005
9/14/2010		<0.005					<0.005		<0.005
1/6/2011			<0.005	<0.005		<0.005			
1/7/2011	<0.005	<0.005			<0.005		<0.005	<0.005	<0.005
4/15/2011		<0.005					<0.005		<0.005
7/7/2011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
9/25/2011		<0.005					<0.005		<0.005
1/17/2012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
1/18/2012									<0.005
4/4/2012		<0.005					<0.005		<0.005
7/9/2012	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
7/10/2012		<0.005							<0.005
10/9/2012		<0.005					<0.005		<0.005
1/17/2013			<0.005	<0.005	<0.005	<0.005			
1/18/2013	<0.005	<0.005					<0.005	<0.005	<0.005
4/5/2013		<0.005					<0.005		<0.005

# Time Series

Page 2

Constituent: Lead (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
7/16/2013			<0.005	<0.005	<0.005	<0.005			
7/17/2013	<0.005	<0.005					<0.005	<0.005	<0.005
10/11/2013		<0.005					<0.005		<0.005
1/13/2014	0.013		<0.005	<0.005	0.004	<0.005		<0.005	
1/14/2014		<0.005					<0.005		<0.005
4/3/2014		<0.005					<0.005		<0.005
7/8/2014				<0.005	<0.005	<0.005			
7/9/2014	0.0076 (J)	<0.005	<0.005				<0.005	<0.005	<0.005
10/24/2014		<0.005					<0.005		<0.005
1/13/2015	0.0057 (J)		<0.005	<0.005	<0.005	<0.005		<0.005	
1/14/2015		<0.005					<0.005		<0.005
5/10/2015		<0.005					<0.005		
5/11/2015									<0.005
7/16/2015	0.009 (J)		<0.005	<0.005	0.0044 (J)	<0.005		<0.005	<0.005
7/17/2015		<0.005					<0.005		
10/6/2015		<0.005							
1/17/2016			<0.005				<0.005	<0.005	<0.005
1/18/2016	0.0094 (J)	<0.005			0.0034 (J)	<0.005			
1/19/2016				<0.005					
4/26/2016		<0.005					<0.005		<0.005
7/26/2016				0.0001 (J)		<0.005			
7/27/2016	0.0058		<0.005		0.0001 (J)		<0.005	<0.005	
7/28/2016		<0.005							<0.005
8/30/2016		<0.005	<0.005						
8/31/2016				0.0002 (J)	0.0001 (J)	<0.005			
9/1/2016	0.0663 (o)						<0.005	<0.005	<0.005
10/24/2016		<0.005							
10/25/2016	0.0003 (J)		<0.005				<0.005	<0.005	0.0002 (J)
10/26/2016				0.0001 (J)	0.0001 (J)	<0.005			
1/3/2017		0.0001 (J)							
1/4/2017			<0.005	0.0002 (J)	<0.005				0.0001 (J)
1/5/2017						0.0002 (J)	<0.005	<0.005	
1/6/2017	0.006								
4/3/2017		0.0002 (J)						0.0003 (J)	
4/4/2017			<0.005				0.0001 (J)		
4/5/2017					0.0003 (J)				0.0002 (J)
4/6/2017	0.0109			0.0003 (J)		0.0005 (J)			
7/10/2017					0.0003 (J)				
7/11/2017		0.0001 (J)		0.0002 (J)			8E-05 (J)	0.0001 (J)	
7/12/2017			<0.005			0.0005 (J)			0.0001 (J)
7/13/2017	0.007								
10/2/2017		0.0001 (J)					0.0001 (J)	0.0002 (J)	
10/3/2017			<0.005	0.0003 (J)					0.0001 (J)
10/4/2017	0.0042 (J)				0.0001 (J)	0.0007 (J)			
1/9/2018	0.0098	0.0001 (J)					<0.005	0.0002 (J)	
1/10/2018			0.0001 (J)			0.0009 (J)			0.0002 (J)
1/11/2018				0.0003 (J)	0.0002 (J)				
7/9/2018		<0.005					<0.005		
7/10/2018			<0.005					<0.005	<0.005
7/11/2018	0.0028 (J)			<0.005 (o)	<0.005	0.0015 (J)			
1/16/2019	<0.025 (o)	<0.005	<0.005			0.00061 (J)	<0.005		
1/17/2019				0.00028 (J)	<0.005			<0.005	<0.005

## Time Series

Page 3

Constituent: Lead (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
3/25/2019	0.0019 (J)	<0.005							
3/26/2019			<0.005			<0.005	<0.005	<0.005	<0.005
3/27/2019				0.00029 (J)	<0.005				
8/26/2019	0.013 (J)	<0.005							
8/27/2019			<0.005	0.00021 (J)	<0.005	0.0001 (J)	0.00051 (J)	0.00033 (J)	
8/28/2019									0.0001 (J)
10/7/2019		<0.005							
10/8/2019	0.0098 (J)			0.00028 (J)		0.00013 (J)	<0.005	0.00012 (J)	0.0001 (J)
10/9/2019			<0.005		6.6E-05 (J)				
4/6/2020	0.0024 (J)	0.0001 (J)		0.00012 (J)	0.00036 (J)	8.1E-05 (J)		<0.005	8.6E-05 (J)
4/7/2020									0.00023 (J)
4/8/2020						0.00017 (J)			

## Time Series

Constituent: Lead (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
9/29/2000	<0.005					<0.005	0.0083	0.017 (o)	<0.005
11/21/2000	<0.005	0.0069				<0.005	0.0052	<0.005	<0.005
1/20/2001	<0.005	<0.005				<0.005	<0.005	0.011	<0.005
3/14/2001	<0.005	<0.005				<0.005	<0.005	0.026 (o)	<0.005
7/16/2001	<0.005	<0.005				<0.005	0.011	0.043 (o)	<0.005
11/1/2001	<0.005	<0.005				<0.005	<0.005	0.075 (o)	<0.005
4/25/2002	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
11/20/2002	<0.005	<0.005				0.0086 (o)	0.018 (o)	0.057 (o)	0.0057 (J)
6/6/2003	<0.005	<0.005				<0.005	0.015 (o)	0.16 (o)	0.013
12/12/2003	<0.005	<0.005				<0.005	0.0072	<0.005	<0.005
5/26/2004	<0.005	<0.005				<0.005	0.0055	0.011	<0.005
12/7/2004	<0.005	<0.005				0.0051	<0.005	0.038 (o)	<0.005
6/21/2005	<0.005	<0.005				<0.005	<0.005	0.036 (o)	<0.005
12/12/2005	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
6/27/2006	<0.005	<0.005				<0.005	0.024 (o)	<0.005	<0.005
12/4/2006	<0.005	<0.005				<0.005	0.023 (o)	<0.005	<0.005
6/23/2007	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
12/11/2007	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
6/23/2008						<0.005			
6/24/2008	<0.005	<0.005					0.02 (o)	<0.005	0.02
12/4/2008		<0.005				<0.005			
12/5/2008	<0.005						<0.005	<0.005	<0.005
7/7/2009							<0.005	<0.005	<0.005
7/8/2009	<0.005	<0.005				<0.005			
12/20/2009		<0.005							
12/21/2009	<0.005					<0.005	<0.005	<0.005	<0.005
6/20/2010		<0.005				<0.005			
6/21/2010	<0.005		<0.005	<0.005	<0.005		<0.005		
1/6/2011		<0.005						<0.005	
1/7/2011	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005		<0.005
7/7/2011		<0.005						<0.005	<0.005
7/8/2011	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005		
1/17/2012		<0.005						<0.005	
1/18/2012	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005		<0.005
7/9/2012		<0.005						<0.005	
7/10/2012	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005		<0.005
1/17/2013		<0.005						<0.005	
1/18/2013	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005		<0.005
7/16/2013								<0.005	
7/17/2013	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005
1/13/2014		<0.005						<0.005	
1/14/2014	<0.005		<0.005	<0.005	<0.005	<0.005	0.005		<0.005
7/9/2014	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
7/10/2014			<0.005		<0.005				
1/12/2015			<0.005				<0.005		
1/13/2015		<0.005						<0.005	
1/14/2015	<0.005			<0.005	<0.005	<0.005			<0.005
7/16/2015		<0.005					<0.005	<0.005	
7/17/2015				<0.005		<0.005			<0.005
7/18/2015	<0.005		<0.005		<0.005				
1/17/2016		<0.005	<0.005	<0.005	<0.005				
1/18/2016	<0.005					<0.005	0.0055 (J)	<0.005	<0.005

# Time Series

Page 2

Constituent: Lead (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
7/27/2016		<0.005						<0.005	
7/28/2016				<0.005	<0.005		<0.005		<0.005
7/29/2016	<0.005				0.0004 (J)		0.003 (J)		
8/30/2016					0.0003 (J)	0.0007 (J)		<0.005	<0.005
8/31/2016		<0.005							
9/1/2016	<0.005			<0.005	<0.005			0.0166 (o)	
10/25/2016				0.0001 (J)	<0.005				
10/26/2016	<0.005	<0.005			0.0003 (J)		0.0057	0.0002 (J)	<0.005
10/27/2016							<0.005		
1/3/2017								0.0001 (J)	
1/4/2017				<0.005	<0.005	0.0003 (J)			
1/5/2017	<0.005	<0.005							0.0003 (J)
1/6/2017							<0.005	0.0053	
4/4/2017		0.0002 (J)	7E-05 (J)	9E-05 (J)				0.0092	
4/5/2017	0.0009 (J)					0.0003 (J)	0.0001 (J)		0.0002 (J)
4/6/2017						0.0002 (J)		0.0003 (J)	0.0002 (J)
7/11/2017			<0.005						
7/12/2017							<0.005	0.006	0.0002 (J)
7/13/2017	<0.005	0.0003 (J)		7E-05 (J)					0.0002 (J)
10/2/2017				<0.005					
10/3/2017		<0.005			0.0001 (J)			0.0002 (J)	0.0001 (J)
10/4/2017	0.0001 (J)					0.0008 (J)	9E-05 (J)	0.0057	
1/9/2018					9E-05 (J)				0.0003 (J)
1/10/2018		8E-05 (J)	0.0002 (J)						0.0003 (J)
1/11/2018	0.0001 (J)					0.0009 (J)	0.0002 (J)	0.0085	
7/9/2018			<0.005						
7/10/2018		<0.005			<0.005			<0.005	<0.005
7/11/2018	<0.005					0.001 (J)	<0.005	0.0029 (J)	
1/16/2019	<0.005							<0.005	<0.005
1/17/2019					<0.005				
1/18/2019						0.0012 (J)	<0.005		
1/21/2019		<0.005	<0.005						
3/25/2019				<0.005				<0.005	
3/26/2019	<0.005				<0.005			<0.005	<0.005
3/27/2019						0.00047 (J)	<0.005		
7/30/2019		0.0002 (J)							
8/27/2019		<0.005				0.003 (J)		0.001 (J)	0.0011 (J)
8/28/2019	<0.005		6.5E-05 (J)	0.00018 (J)			6.1E-05 (J)		0.0011 (J)
10/8/2019				0.00016 (J)					
10/9/2019	0.00015 (J)	6.4E-05 (J)	0.00018 (J)		0.00032 (J)	<0.005	0.00041 (J)	0.0025 (J)	0.00033 (J)
4/7/2020					<0.005	0.00067 (J)		0.00073 (J)	0.0014 (J)
4/8/2020	8.4E-05 (J)	<0.005	<0.005				0.00021 (J)		0.00063 (J)

## Time Series

Constituent: Lithium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
8/30/2016		<0.03	<0.03						
8/31/2016				<0.03	<0.03	<0.03			
9/1/2016	<0.03						<0.03	<0.03	<0.03
10/24/2016		<0.03							
10/25/2016	<0.03		<0.03				<0.03	<0.03	<0.03
10/26/2016				<0.03	<0.03	<0.03			
1/3/2017		<0.03							
1/4/2017			<0.03	<0.03	<0.03				<0.03
1/5/2017						<0.03	<0.03	<0.03	
1/6/2017	<0.03								
4/3/2017		<0.03						<0.03	
4/4/2017			<0.03				<0.03		
4/5/2017					0.0012 (J)				<0.03
4/6/2017	<0.03			<0.03		<0.03			
7/10/2017					<0.03				
7/11/2017		<0.03		<0.03			<0.03	<0.03	
7/12/2017			<0.03			<0.03			<0.03
7/13/2017	<0.03								
10/2/2017		<0.03					<0.03	<0.03	
10/3/2017			<0.03	<0.03					<0.03
10/4/2017	<0.03				<0.03	<0.03			
1/9/2018	<0.25 (o)	<0.03					<0.03	<0.03	
1/10/2018			<0.03			<0.03			<0.03
1/11/2018				<0.03	<0.03				
7/9/2018		0.001 (J)					<0.03		
7/10/2018			<0.03					<0.03	<0.03
7/11/2018	<0.25 (o)			<0.03	0.00098 (J)	<0.03			
8/26/2019	<0.15 (o)	0.0012 (J)							
8/27/2019			<0.03	<0.03	0.00094 (J)	<0.03	<0.03	<0.03	
8/28/2019									<0.03
10/7/2019		0.0012 (J)							
10/8/2019	<0.15 (o)			<0.03		<0.03	<0.03	<0.03	<0.03
10/9/2019					0.0011 (J)				
4/6/2020	<0.15 (o)	0.00086 (J)		<0.03	<0.03	0.00094 (J)		<0.03	
4/7/2020							<0.03	<0.03	<0.03
4/8/2020						<0.03			

## Time Series

Constituent: Lithium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016								0.0042 (J)	<0.03
8/31/2016		<0.03			<0.03	<0.05 (o)			
9/1/2016	0.0066 (J)		<0.03	<0.03			0.0092 (J)		
10/25/2016			<0.03	<0.03					
10/26/2016	0.0065 (J)	<0.03			<0.03		0.0046 (J)	<0.03	<0.03
10/27/2016						0.0023 (J)			
1/3/2017								0.0024 (J)	
1/4/2017			<0.03	<0.03	<0.03				
1/5/2017	0.0062 (J)	<0.03							<0.03
1/6/2017						0.0021 (J)	0.0042 (J)		
4/4/2017		<0.03	<0.03	<0.03			0.0056 (J)		
4/5/2017	0.007 (J)								
4/6/2017					<0.03	0.0021 (J)		0.0051 (J)	<0.03
7/11/2017			<0.03		<0.03		0.0017 (J)	0.0035 (J)	0.0031 (J)
7/13/2017	0.0069 (J)	<0.03		<0.03					<0.03
10/2/2017			<0.03						
10/3/2017		<0.03		<0.03				0.0027 (J)	<0.03
10/4/2017	0.0082 (J)				<0.03	0.0021 (J)	0.0041 (J)		
1/9/2018				<0.03					<0.03
1/10/2018		<0.03	<0.03					0.0041 (J)	
1/11/2018	0.0061 (J)				<0.03	0.0022 (J)	0.0052 (J)		
7/9/2018			<0.03						
7/10/2018		<0.03		<0.03				0.005 (J)	<0.03
7/11/2018	0.0075 (J)				<0.03	0.0019 (J)	0.0039 (J)		
7/30/2019		<0.03							
8/27/2019		<0.03			<0.03		0.013 (J)		<0.03
8/28/2019	0.0041 (J)		<0.03	<0.03		0.0018 (J)		<0.03	
10/8/2019				<0.03					
10/9/2019	0.0046 (J)	<0.03	<0.03		<0.03	0.0018 (J)	0.013 (J)	<0.03	<0.03
4/7/2020					<0.03	<0.03	0.014 (J)	<0.03	<0.03
4/8/2020	0.0051 (J)	<0.03	<0.03			0.0018 (J)			

## Time Series

Constituent: Mercury (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Time Series

Constituent: Mercury (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016								<0.0005	<0.0005
8/31/2016		<0.0005			<0.0005	<0.0005			
9/1/2016	<0.0005		<0.0005	<0.0005			<0.0005		
10/25/2016			<0.0005	<0.0005					
10/26/2016	<0.0005	<0.0005			<0.0005		<0.0005	<0.0005	<0.0005
10/27/2016						<0.0005			
1/3/2017								<0.0005	
1/4/2017			<0.0005	<0.0005	<0.0005				
1/5/2017	<0.0005	<0.0005							<0.0005
1/6/2017						<0.0005	<0.0005		
4/4/2017		<0.0005	<0.0005	<0.0005			<0.0005		
4/5/2017	<0.0005								
4/6/2017					<0.0005	<0.0005		<0.0005	<0.0005
7/11/2017			<0.0005		<0.0005				
7/12/2017						<0.0005	<0.0005	<0.0005	<0.0005
7/13/2017	<0.0005	<0.0005		<0.0005					
10/2/2017			<0.0005						
10/3/2017		<0.0005		<0.0005				<0.0005	<0.0005
10/4/2017	<0.0005				<0.0005	5E-05 (J)	<0.0005		
1/9/2018				<0.0005					<0.0005
1/10/2018		<0.0005	<0.0005					<0.0005	
1/11/2018	<0.0005				<0.0005	<0.0005	<0.0005		
7/9/2018			<0.0005						
7/10/2018		<0.0005		<0.0005				<0.0005	<0.0005
7/11/2018	<0.0005				<0.0005	<0.0005	<0.0005		
1/16/2019	<0.0005						4.9E-05 (J)	<0.0005	4.3E-05 (J)
1/17/2019				<0.0005					
1/18/2019					<0.0005	<0.0005			
1/21/2019		<0.0005	<0.0005						
7/30/2019		<0.0005							
8/27/2019		<0.0005			<0.0005		<0.0005		<0.0005
8/28/2019	<0.0005		<0.0005	<0.0005		<0.0005		<0.0005	
10/9/2019								<0.0005	

## Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
8/30/2016		<0.01	0.175						
8/31/2016				<0.01	<0.01	<0.01			
9/1/2016	0.0098 (J)						0.0027 (J)	0.132	0.08
10/24/2016		<0.01							
10/25/2016	<0.01		0.242				0.0028 (J)	0.117	0.08
10/26/2016				<0.01	<0.01	<0.01			
1/3/2017		<0.01							
1/4/2017			0.167	<0.01	<0.01				0.0786
1/5/2017						<0.01	0.0022 (J)	0.109	
1/6/2017	<0.01								
4/3/2017		<0.01						0.0994	
4/4/2017			0.172				0.0022 (J)		
4/5/2017					<0.01				0.113
4/6/2017	<0.01			<0.01		<0.01			
7/10/2017					<0.01				
7/11/2017		<0.01		<0.01			0.0024 (J)	0.0938	
7/12/2017			0.182			<0.01			0.178
7/13/2017	0.0013 (J)								
10/2/2017		<0.01					0.0025 (J)	0.103	
10/3/2017			0.162	<0.01					0.201
10/4/2017	0.0013 (J)				<0.01	<0.01			
1/9/2018	<0.01	<0.01					0.0038 (J)	0.106	
1/10/2018			0.117			<0.01			0.161
1/11/2018				0.0018 (J)	<0.01				
7/9/2018		<0.01					0.01 (o)		
7/10/2018			0.11					0.088	0.14
7/11/2018	<0.05 (o)			<0.01	<0.01	<0.01			
8/26/2019	<0.05 (o)	<0.01							
8/27/2019			0.06	<0.01	<0.01	<0.01	0.028	0.095	
8/28/2019									0.22
10/7/2019		<0.01							
10/8/2019	<0.05 (o)			<0.01		<0.01	0.034	0.091	0.2
10/9/2019			0.06		<0.01				
4/6/2020	<0.01	<0.01		0.014	<0.01	<0.01		0.014	0.07
4/7/2020									0.25
4/8/2020						0.0056 (J)			

## Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016								<0.01	<0.01
8/31/2016		<0.01			<0.01	<0.01			
9/1/2016	<0.01		0.296	0.0686			0.035		
10/25/2016			0.395	0.0018 (J)					
10/26/2016	<0.01	<0.01			<0.01		0.0267	<0.01	<0.01
10/27/2016						<0.01			
1/3/2017								<0.01	
1/4/2017			0.229	0.0222	<0.01				
1/5/2017	<0.01	<0.01							<0.01
1/6/2017						<0.01	0.0278		
4/4/2017		<0.01	0.147	0.0476			0.0265		
4/5/2017	<0.01								
4/6/2017					<0.01	<0.01		<0.01	<0.01
7/11/2017			0.136		<0.01				
7/12/2017						<0.01	0.0209	<0.01	<0.01
7/13/2017	<0.01	<0.01		0.0105					
10/2/2017			0.13						
10/3/2017		<0.01		0.0031 (J)				<0.01	<0.01
10/4/2017	<0.01				<0.01	<0.01	0.0181		
1/9/2018				0.09					<0.01
1/10/2018		<0.01	0.229						
1/11/2018	<0.01				<0.01	<0.01	0.0237		
7/9/2018			0.13						
7/10/2018		<0.01		0.047				<0.01	<0.01
7/11/2018	<0.01				<0.01	<0.01	0.024		
7/30/2019		<0.01							
8/27/2019		<0.01			<0.01		0.1		0.0026 (J)
8/28/2019	0.004 (J)		0.11	0.07		<0.01		0.0012 (J)	
10/8/2019				0.078					
10/9/2019	0.0036 (J)	<0.01	0.071		<0.01	<0.01	0.1	<0.01	<0.01
4/7/2020					0.012	<0.01		0.13	<0.01
4/8/2020	0.0024 (J)	<0.01	0.06			<0.01			<0.01

## Time Series

Constituent: pH (SU) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
7/16/2013			5.38	5.2	4.17	4.95	4.62	5.96	4.92
10/11/2014		4.42					4.58		5.17
10/24/2016		4.36							
10/25/2016	6.17		5.51				4.79	6.46	5.58
10/26/2016				5.08	4.04	4.95			
1/3/2017		4.28							
1/4/2017			5.46	5.06	4.01				5.51
1/5/2017						4.97	4.73	6.25	
1/6/2017	6.16								
4/3/2017		4.29						6.25	
4/4/2017			5.43				4.68		
4/5/2017					4	4.81			5.51
4/6/2017	6.26			4.97					
7/10/2017					3.89				
7/11/2017		4.35		5.26			4.72	6.5	
7/12/2017			5.46			4.83			5.84
7/13/2017	5.99								
10/2/2017		4.32					5.13	6.83	
10/3/2017			5.65	5.07					5.55
10/4/2017	6.16				4.06	4.71			
1/9/2018	6.43	4.44					5.59	6.57	
1/10/2018			5.67			5.17			5.99
1/11/2018				5.18	3.96				
7/9/2018		4.4					5.11		
7/10/2018			5.71					6.42	5.5
7/11/2018	6.1			4.82	3.95	4.49			
1/16/2019	6.05	6.16 (o)	5.59			6.45 (o)	6.82		
1/17/2019				4.91	3.89			8.44 (o)	7.13
3/25/2019	6.06	4.4							
3/26/2019			5.77			4.96	5.74	6.65	5.57
3/27/2019				5.18	4.11				
8/26/2019	5.91	4.26						6.57	
8/27/2019				5.84	5.17	4.02	4.9		
8/28/2019							5.58		5.57
10/7/2019		4.24							
10/8/2019	5.74			4.93		4.81	5.68	6.65	5.54
10/9/2019					4.25				
4/6/2020	6.02	4.52							
4/7/2020			5.3	5.05	4.1		6.2	6.83	5.94
4/8/2020						4.81			

## Time Series

Constituent: pH (SU) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
7/16/2013	4.55	4.52	6.1	5.71	4.91	5.05	6.22	5.95	5.25
10/25/2016			6.06	5.41					
10/26/2016	4.45	4.48			4.6		6.06	5.27	5.21
10/27/2016						4.65			
1/3/2017								5.09	
1/4/2017			6.05	5.6	4.63				
1/5/2017	4.45	4.85							5.2
1/6/2017						4.56	6.02		
4/4/2017		4.58	6.03	5.94			6.08		
4/5/2017	4.33								
4/6/2017					4.79	4.5		5.22	5.17
7/11/2017			5.96		4.73				
7/12/2017						4.56	5.93	5.29	5.24
7/13/2017	4.11	4.74		5.6					
10/2/2017			5.88						
10/3/2017		4.57		5.18				5.08	5.36
10/4/2017	4.09				4.74	4.72	5.77		
1/9/2018				6.14					5.4
1/10/2018		5.31	6.21						5.83
1/11/2018	4.4					5.22	4.34	5.98	
7/9/2018			6.24						
7/10/2018		4.58		5.7				6.42	5.31
7/11/2018	4.07				4.68	4.68	6.01		
1/16/2019	4.05						5.83	6.66	5.99
1/17/2019				7.39					
1/18/2019					6.98 (o)	6.87 (o)			
1/21/2019		5.05	7.73 (o)						
3/25/2019			6.28				5.74		
3/26/2019	4.62			6.08				5.1	5.94
3/27/2019					4.77	4.38			
7/30/2019		4.74							
8/27/2019		4.77			4.89		5.7		5.67
8/28/2019	4.62		6.34	6.05		4.68		5.95	
10/8/2019				6.09					
10/9/2019	4.66	4.79	6.5		4.68	4.62	5.79	6.11	5.66
4/7/2020				6	4.8		5.74	5.45	5.86
4/8/2020	4.71	4.66	6.31			4.73			

# Time Series

Constituent: Selenium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
9/29/2000	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
11/21/2000	<0.01		<0.01	<0.01	<0.01	<0.01	0.052	<0.01	<0.01
1/20/2001	<0.01	<0.01	0.017	<0.01	<0.01	<0.01	0.053	<0.01	<0.01
3/14/2001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.049	<0.01	<0.01
7/16/2001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.038	<0.01	<0.01
11/1/2001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.022	<0.01	<0.01
4/25/2002	<0.01	<0.01	0.012	<0.01	<0.01	<0.01	0.1 (o)	<0.01	<0.01
11/20/2002		<0.01	0.19 (o)	<0.01	<0.01	<0.01	0.018	0.0094	<0.01
6/6/2003	<0.01	<0.01	0.32 (o)	<0.01	<0.01	<0.01	<0.01	0.021 (o)	0.021 (o)
12/12/2003	<0.01	<0.01	0.013	<0.01	<0.01	<0.01	<0.01	0.016 (o)	0.0078 (o)
5/26/2004	<0.01	<0.01	0.017	<0.01	<0.01	<0.01	0.023	<0.01	0.0053
12/7/2004	<0.01	<0.01	0.011	<0.01	<0.01	<0.01	0.019	<0.01	<0.01
6/21/2005	<0.01	<0.01	0.0088	<0.01	<0.01	<0.01	0.019	<0.01	<0.01
12/12/2005	<0.01	<0.01	0.011	<0.01	<0.01	<0.01	0.0095	<0.01	<0.01
4/4/2006		<0.01					0.033		<0.01
6/27/2006	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
8/30/2006		<0.01					<0.01		<0.01
12/4/2006	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.032	<0.01	<0.01
2/15/2007		<0.01					0.034		<0.01
6/23/2007	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
9/11/2007		<0.01					0.022		<0.01
12/11/2007	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.045	<0.01	<0.01
3/11/2008		<0.01					0.02		<0.01
6/23/2008	<0.01	<0.01		<0.01	<0.01	<0.01			
6/24/2008			<0.01				<0.01	<0.01	<0.01
11/3/2008		<0.01					0.052		<0.01
12/4/2008	<0.01	<0.01		<0.01	<0.01	<0.01	0.054		
12/5/2008			<0.01					<0.01	<0.01
3/25/2009		<0.01					0.072		<0.01
7/7/2009	<0.01	<0.01	<0.01						
7/8/2009				<0.01	<0.01	<0.01	0.021	<0.01	<0.01
9/14/2009		<0.01					0.015		<0.01
12/20/2009	<0.01	<0.01	<0.01				0.072	<0.01	<0.01
12/21/2009				<0.01	<0.01	<0.01			
3/4/2010		<0.01					0.083		<0.01
6/20/2010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.1	<0.01	
6/21/2010									<0.01
9/14/2010		<0.01					0.085		<0.01
1/6/2011			<0.01	<0.01		<0.01			
1/7/2011	<0.01	<0.01			<0.01		0.028	<0.01	<0.01
4/15/2011		<0.01					<0.01		<0.01
7/7/2011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
9/25/2011		<0.01					0.02		<0.01
1/17/2012	<0.01	<0.01	<0.01	0.023	<0.01	<0.01	0.016	<0.01	
1/18/2012									<0.01
4/4/2012		<0.0005 (o)					0.0156		<0.01
7/9/2012	<0.01		<0.01	0.016	<0.01	<0.01	<0.01	0.066 (o)	
7/10/2012		<0.01							<0.01
10/9/2012		<0.01					0.0094		<0.01
1/17/2013			<0.01	0.033	<0.01	<0.01			
1/18/2013	0.009	<0.01					0.0067	0.04 (o)	<0.01
4/5/2013		<0.01					0.0077		<0.01

# Time Series

Page 2

Constituent: Selenium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
7/16/2013			0.012	0.0068	<0.01	<0.01			
7/17/2013	0.011	<0.01					0.01	<0.01	<0.01
10/11/2013		<0.01					0.0087		0.0069
1/13/2014	0.012		<0.01	0.036	<0.01	<0.01		<0.01	
1/14/2014		<0.01					0.012		<0.01
4/3/2014		<0.01					0.022		<0.01
7/8/2014				0.017	<0.01	<0.01			
7/9/2014	0.011	<0.01	<0.01				0.0089	<0.01	0.005
10/24/2014		<0.01					0.017		<0.01
1/13/2015	0.0092		<0.01	0.027	<0.01	<0.01		<0.01	
1/14/2015		<0.01					<0.01		<0.01
5/10/2015		<0.01					<0.01		
5/11/2015									<0.01
7/16/2015	0.014		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01
7/17/2015		<0.01					<0.01		
10/6/2015		<0.01					<0.01		0.0073
1/17/2016			0.023				<0.01	<0.01	0.0031 (J)
1/18/2016	0.023	<0.01			<0.01	<0.01			
1/19/2016				0.023					
4/26/2016		<0.01					0.00428 (J)		0.00497 (J)
7/26/2016				0.0056 (J)		<0.01			
7/27/2016	0.0323		0.002 (J)		0.0025 (J)		0.0038 (J)	<0.01	
7/28/2016		0.001 (J)							0.0076 (J)
8/30/2016		<0.01	0.002 (J)						
8/31/2016				0.0084 (J)	0.0019 (J)	<0.01			
9/1/2016	0.0438						0.0056 (J)	<0.01	0.0052 (J)
10/24/2016		0.0013 (J)							
10/25/2016	0.031		0.0022 (J)				0.0023 (J)	<0.01	0.0085 (J)
10/26/2016				0.0052 (J)	0.002 (J)	<0.01			
1/3/2017		<0.01							
1/4/2017			0.0016 (J)	0.0062 (J)	<0.01				0.0048 (J)
1/5/2017						<0.01	0.0038 (J)	<0.01	
1/6/2017	0.0324								
4/3/2017		<0.01						<0.01	
4/4/2017			0.0052 (J)				0.0064 (J)		
4/5/2017					<0.01				0.0068 (J)
4/6/2017	0.0188 (J)			0.0195		<0.01			
7/10/2017					<0.01				
7/11/2017		<0.01		<0.01			0.0044 (J)	<0.01	
7/12/2017			0.0024 (J)			<0.01			0.0048 (J)
7/13/2017	0.0118								
10/2/2017		<0.01					0.004 (J)	<0.01	
10/3/2017			<0.01	0.0079 (J)					0.0051 (J)
10/4/2017	0.0195				<0.01	<0.01			
1/9/2018	<0.05 (o)	<0.01					0.0019 (J)	0.0019 (J)	
1/10/2018			0.0018 (J)			<0.01			0.0018 (J)
1/11/2018				0.0054 (J)	<0.01				
7/9/2018		<0.01					0.0029 (J)		
7/10/2018			0.0026 (J)					0.0086 (J)	0.0045 (J)
7/11/2018	<0.05 (o)			0.0022 (J)	<0.01	<0.01			
1/16/2019	0.0071 (J)	<0.01	0.0018 (J)		<0.01	<0.01	0.0016 (J)		
1/17/2019				<0.01	<0.01			0.0029 (J)	0.0031 (J)

## Time Series

Page 3

Constituent: Selenium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
3/25/2019	<0.05 (o)	<0.01				<0.01			
3/26/2019			0.0023 (J)				0.0022 (J)	0.0074 (J)	0.0033 (J)
3/27/2019				0.01 (J)	<0.01				
8/26/2019	<0.05 (o)	<0.01							
8/27/2019			0.0016 (J)	<0.01	<0.01	<0.01	0.0035 (J)	0.0092 (J)	
8/28/2019									0.004 (J)
10/7/2019		<0.01							
10/8/2019	0.0072 (J)			<0.01		<0.01	0.0026 (J)	0.014	0.0023 (J)
10/9/2019			0.0024 (J)		<0.01				
4/6/2020	0.0078 (J)	<0.01		0.0013 (J)	0.0021 (J)	<0.01		0.0029 (J)	<0.01
4/7/2020							0.005 (J)		
4/8/2020						<0.01			

## Time Series

Constituent: Selenium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
9/29/2000	<0.01					<0.01	<0.01	<0.01	<0.01
11/21/2000	<0.01	<0.01				<0.01	<0.01	<0.01	<0.01
1/20/2001	<0.01	<0.01				<0.01	0.014 (o)	<0.01	<0.01
3/14/2001	<0.01	<0.01				<0.01	<0.01	<0.01	<0.01
7/16/2001	<0.01	<0.01				<0.01	0.015 (o)	<0.01	<0.01
11/1/2001	<0.01	<0.01				<0.01	0.012 (o)	<0.01	<0.01
4/25/2002	<0.01	<0.01				<0.01	0.01	<0.01	<0.01
11/20/2002	<0.01	<0.01				<0.01	0.026 (o)	0.0064	0.008
6/6/2003	<0.01	<0.01				<0.01	0.022 (o)	0.011	0.0066
12/12/2003	<0.01	<0.01				<0.01	0.028 (o)	<0.01	0.0056
5/26/2004	<0.01	0.005				<0.01	0.012 (o)	0.007	0.0084
12/7/2004	<0.01	<0.01				<0.01	0.0073 (o)	<0.01	<0.01
6/21/2005	<0.01	<0.01				0.0062	0.0087	0.0063	0.0062
12/12/2005	<0.01	<0.01				<0.01	0.013 (o)	<0.01	<0.01
6/27/2006	<0.01	<0.01				<0.01	<0.01	<0.01	<0.01
12/4/2006	<0.01	<0.01				<0.01	<0.01	<0.01	<0.01
6/23/2007	<0.01	<0.01				<0.01	<0.01	<0.01	<0.01
12/11/2007	<0.01	<0.01				<0.01	<0.01	<0.01	<0.01
6/23/2008						<0.01			
6/24/2008	<0.01	<0.01					<0.01	<0.01	<0.01
12/4/2008		<0.01				<0.01			
12/5/2008	<0.01						<0.01	<0.01	<0.01
7/7/2009							<0.01	<0.01	<0.01
7/8/2009	<0.01	<0.01				<0.01			
12/20/2009		<0.01					<0.01	<0.01	<0.01
12/21/2009	<0.01					<0.01	<0.01	<0.01	<0.01
6/20/2010		<0.01				<0.01		<0.01	<0.01
6/21/2010	<0.01		<0.01	0.048	<0.01		<0.01		
1/6/2011		<0.01						<0.01	
1/7/2011	<0.01		<0.01	0.014	<0.01	<0.01	<0.01		<0.01
7/7/2011			<0.01					<0.01	<0.01
7/8/2011	<0.01		<0.01	0.018	<0.01	<0.01	<0.01		
1/17/2012		<0.01						<0.01	
1/18/2012	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01		<0.01
7/9/2012		<0.01						<0.01	
7/10/2012	<0.01		<0.01	0.02	<0.01	<0.01	<0.01		<0.01
1/17/2013		<0.01						<0.01	
1/18/2013	<0.01		0.005	0.015	<0.01	<0.01	<0.01		<0.01
7/16/2013								<0.01	
7/17/2013	<0.01	<0.01	<0.01	0.037	<0.01	<0.01	<0.01		<0.01
1/13/2014		<0.01						<0.01	
1/14/2014	<0.01		<0.01	0.043	<0.01	<0.01	<0.01		<0.01
7/9/2014	<0.01	<0.01		0.023		<0.01	<0.01	<0.01	<0.01
7/10/2014			<0.01		<0.01				
1/12/2015			<0.01				<0.01		
1/13/2015		<0.01						<0.01	
1/14/2015	<0.01			0.022	<0.01	<0.01			<0.01
7/16/2015		<0.01					<0.01	<0.01	
7/17/2015				0.033		<0.01			<0.01
7/18/2015	<0.01		<0.01		<0.01				
1/17/2016		<0.01	<0.01	0.021		<0.01	<0.01	<0.01	
1/18/2016	<0.01				<0.01	<0.01	<0.01	<0.01	

# Time Series

Page 2

Constituent: Selenium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
7/27/2016		0.002 (J)				<0.01		<0.01	
7/28/2016			<0.01	0.0341		<0.01			<0.01
7/29/2016	0.0011 (J)				0.0022 (J)		0.0036 (J)		
8/30/2016					0.0014 (J)	<0.01		<0.01	<0.01
8/31/2016		<0.01							
9/1/2016	0.0012 (J)		<0.01	0.0297			0.0067 (J)		
10/25/2016			0.0014 (J)	0.0095 (J)					
10/26/2016	0.0013 (J)	0.0035 (J)			0.001 (J)		0.0042 (J)	<0.01	<0.01
10/27/2016						<0.01			
1/3/2017								<0.01	
1/4/2017			0.0014 (J)	0.022	<0.01				
1/5/2017	0.0012 (J)	<0.01				<0.01	0.0042 (J)		0.0014 (J)
1/6/2017									
4/4/2017		<0.01	<0.01	0.0236			0.0043 (J)		
4/5/2017	<0.01								
4/6/2017					<0.01	<0.01		<0.01	<0.01
7/11/2017			<0.01		<0.01				
7/12/2017						<0.01	0.0033 (J)	<0.01	<0.01
7/13/2017	0.0018 (J)	<0.01		0.013					
10/2/2017			<0.01						
10/3/2017		<0.01		0.01 (J)				<0.01	<0.01
10/4/2017	0.0042 (J)				0.0023 (J)	<0.01	0.0038 (J)		
1/9/2018				0.0162					<0.01
1/10/2018		<0.01	<0.01			<0.01			<0.01
1/11/2018	<0.01					<0.01	0.0029 (J)		
7/9/2018			<0.01						
7/10/2018		<0.01		0.016				0.0018 (J)	0.0016 (J)
7/11/2018	0.0016 (J)				<0.01	<0.01	0.0015 (J)		
1/16/2019	<0.01						<0.01	<0.01	<0.01
1/17/2019				0.011					
1/18/2019					<0.01	<0.01			
1/21/2019		<0.01	0.0014 (J)						
3/25/2019			<0.01				<0.01		
3/26/2019	<0.01			0.022		<0.01		<0.01	0.05 (J)
3/27/2019						<0.01	<0.01		
7/30/2019		<0.01							
8/27/2019		<0.01			<0.01		<0.01		0.0033 (J)
8/28/2019	<0.01		0.0014 (J)	0.019		<0.01		0.0033 (J)	
10/8/2019				0.019					
10/9/2019	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	0.0073 (J)	<0.01
4/7/2020				0.012	<0.01		0.0025 (J)	<0.01	<0.01
4/8/2020	<0.01	<0.01	0.0013 (J)			<0.01			

## Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
8/30/2016		140	87						
8/31/2016				64	1100	43			
9/1/2016	73						730	120	430
10/24/2016		160							
10/25/2016	26		83				420	100	360
10/26/2016				56	900	29			
1/3/2017		140							
1/4/2017			99	65	880				360
1/5/2017						32	430	140	
1/6/2017	23								
4/3/2017		140		110				150	
4/4/2017							600		
4/5/2017					990				440
4/6/2017	25			110		49			
7/10/2017					480				
7/11/2017		130		49			400	110	
7/12/2017			100			16			490
7/13/2017	65								
10/2/2017		150					470	56	
10/3/2017			63	140					780
10/4/2017	13				760	33			
1/9/2018	45	120					440	84	
1/10/2018			86			22			470
1/11/2018				270	780				
7/9/2018		123					369		
7/10/2018			77.7					43	787
7/11/2018	37.7			211	598	17.8			
1/16/2019	24.5	129	71.2			20.2	291		
1/17/2019				50.3	454			45.2	780
3/25/2019	14.7	152							
3/26/2019			73.8			33.6	192	54	87.9
3/27/2019				76.8	579				
10/7/2019		156							
10/8/2019	32.8			310		22	428	45.8	872
10/9/2019			76.3		392				
4/6/2020	20.3	123		83	446	297		456	26.9
4/7/2020									844
4/8/2020						30.7			

## Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016								100	120
8/31/2016		21			700	84			
9/1/2016	310		180	36			210		
10/25/2016			79	16					
10/26/2016	280	100			850		230	130	120
10/27/2016						76			
1/3/2017								120	
1/4/2017			170	45	680				
1/5/2017	310	22							130
1/6/2017						66	220		
4/4/2017		29	300	46			230		
4/5/2017	460								
4/6/2017					220	79		140	150
7/11/2017			400		210				
7/12/2017						75	210	140	140
7/13/2017	490	20		33					
10/2/2017			390						
10/3/2017		20		34				130	140
10/4/2017	1100				730	78	290		
1/9/2018				29					140
1/10/2018		9.5	99						
1/11/2018	810				180	110	210		
7/9/2018			99.2						
7/10/2018		8.5		33.2				48.1	128
7/11/2018	902				381	87.4	177		
1/16/2019	422						244	184	402
1/17/2019				24.1					
1/18/2019					107	56.9			
1/21/2019		10.2	35.5						
3/25/2019				95.6			245		
3/26/2019	439				83.9			222	319
3/27/2019						103	76.2		
7/30/2019		12.3							
10/8/2019				85.6					
10/9/2019	346	10.1	58.5		80.2	41.1	38.5	90.8	255
4/7/2020					33.2	333		221	180
4/8/2020	239	12.9	428				34.2		180

## Time Series

Constituent: Thallium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
9/29/2000	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
11/21/2000	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/20/2001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
3/14/2001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
7/16/2001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
11/1/2001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
4/25/2002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/12/2003	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
5/26/2004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/7/2004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
6/21/2005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/12/2005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
4/4/2006		<0.001					<0.001		<0.001
6/27/2006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/30/2006		<0.001					<0.001		<0.001
12/4/2006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/15/2007		<0.001					<0.001		<0.001
6/23/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/30/2016		<0.001	<0.001						
8/31/2016				<0.001	<0.001	<0.001			
9/1/2016	0.0005 (J)						<0.001	<0.001	<0.001
10/24/2016		<0.001							
10/25/2016	<0.001		<0.001				<0.001	<0.001	<0.001
10/26/2016				<0.001	0.0003 (J)	<0.001			
1/3/2017		<0.001							
1/4/2017			<0.001	<0.001	<0.001				<0.001
1/5/2017						<0.001	<0.001	<0.001	
1/6/2017	<0.001								
4/3/2017		<0.001						<0.001	
4/4/2017			5E-05 (J)				7E-05 (J)		6E-05 (J)
4/5/2017					0.0002 (J)				
4/6/2017	<0.001			6E-05 (J)		<0.001			
7/10/2017					0.0002 (J)				
7/11/2017		5E-05 (J)		<0.001			6E-05 (J)	<0.001	
7/12/2017			<0.001			<0.001			<0.001
7/13/2017	<0.001								
10/2/2017		6E-05 (J)					<0.001	<0.001	
10/3/2017			<0.001	7E-05 (J)					<0.001
10/4/2017	<0.001				0.0002 (J)	<0.001			
1/9/2018	<0.001	<0.001					<0.001	<0.001	
1/10/2018			<0.001			<0.001			5E-05 (J)
1/11/2018				0.0001 (J)	0.0002 (J)				
7/9/2018		<0.001					<0.001		
7/10/2018			<0.001					<0.001	<0.001
7/11/2018	<0.001			<0.001	<0.001	<0.001	<0.001		
8/26/2019	<0.001	<0.001		<0.001	<0.001	0.00011 (J)	<0.001	<0.001	
8/27/2019				<0.001	<0.001		<0.001	<0.001	
8/28/2019									<0.001
10/7/2019		6.2E-05 (J)							
10/8/2019	<0.001			9.8E-05 (J)			<0.001	<0.001	<0.001
10/9/2019				5.4E-05 (J)		0.00014 (J)			
4/6/2020	<0.001	<0.001							

## Time Series

Page 2

Constituent: Thallium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
4/7/2020		5.4E-05 (J)	0.00019 (J)	0.00013 (J)		<0.001	<0.001	<0.001
4/8/2020					<0.001			

## Time Series

Constituent: Thallium (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
9/29/2000	<0.001					<0.001	<0.001	<0.001	<0.001
11/21/2000	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
1/20/2001	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
3/14/2001	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
7/16/2001	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
11/1/2001	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
4/25/2002	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
12/12/2003	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
5/26/2004	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
12/7/2004	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
6/21/2005	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
12/12/2005	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
6/27/2006	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
12/4/2006	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
6/23/2007	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
8/30/2016								<0.001	<0.001
8/31/2016		<0.001			<0.001	<0.001			
9/1/2016	<0.001		<0.001	<0.001			<0.001		
10/25/2016			<0.001	<0.001					
10/26/2016	<0.001	<0.001			<0.001		<0.001	<0.001	<0.001
10/27/2016						<0.001			
1/3/2017								<0.001	
1/4/2017			<0.001	<0.001	<0.001				
1/5/2017	<0.001	<0.001							<0.001
1/6/2017						<0.001	<0.001		
4/4/2017		<0.001	<0.001	5E-05 (J)			7E-05 (J)		
4/5/2017	0.0001 (J)								
4/6/2017					<0.001	<0.001		<0.001	<0.001
7/11/2017			<0.001		<0.001				
7/12/2017						<0.001	<0.001	<0.001	<0.001
7/13/2017	<0.001	<0.001		<0.001					
10/2/2017			<0.001						
10/3/2017		<0.001		<0.001				<0.001	<0.001
10/4/2017	0.0001 (J)				0.0001 (J)	<0.001	<0.001		
1/9/2018				<0.001					<0.001
1/10/2018		<0.001	<0.001					<0.001	
1/11/2018	0.0001 (J)				6E-05 (J)	<0.001	7E-05 (J)		
7/9/2018			<0.001						
7/10/2018		<0.001		<0.001				<0.001	<0.001
7/11/2018	<0.001				<0.001	<0.001	<0.001		
7/30/2019		0.00011 (J)							
8/27/2019		<0.001			8.6E-05 (J)		<0.001		<0.001
8/28/2019	6.6E-05 (J)		<0.001	<0.001		<0.001		5.7E-05 (J)	
10/8/2019				<0.001					
10/9/2019	7.6E-05 (J)	<0.001	<0.001		<0.001	<0.001	<0.001	0.00031 (J)	<0.001
4/7/2020					<0.001	6.5E-05 (J)		<0.001	<0.001
4/8/2020	5.6E-05 (J)	<0.001	<0.001			<0.001			

## Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWA-8 (bg)	GWC-1	GWC-11	GWC-12	GWC-13	GWC-14	GWC-15	GWC-16
8/30/2016		234	225						
8/31/2016				119	1560	77			
9/1/2016	3660						1170	539	878
10/24/2016		216							
10/25/2016	3560		230				633	449	585
10/26/2016				108	1520	<25			
1/3/2017		333							
1/4/2017			349	182	1430				783
1/5/2017						146	781	565	
1/6/2017	3490								
4/3/2017		288						632	
4/4/2017			356				916		
4/5/2017					1200				722
4/6/2017	3170			248		23 (J)			
7/10/2017					1100				
7/11/2017		188		88			675	569	
7/12/2017			357			39			962
7/13/2017	2280								
10/2/2017		210					689	559	
10/3/2017			192	248					1240
10/4/2017	3350				986	38			
1/9/2018	2640	118					653	520	
1/10/2018			277			<25			935
1/11/2018				681	1020				
7/9/2018		235					659		
7/10/2018			349					524	1040
7/11/2018	2200			440	888	63			
1/16/2019	2100	219	341				44	656	
1/17/2019				118	765			518 (D)	1320
3/25/2019	2100	240							
3/26/2019			317			72	496	541	1380
3/27/2019				138	673				
10/7/2019		275							
10/8/2019	1840			613			51	841	526
10/9/2019			338		647				1500
4/6/2020	1670	214		195	780	464		843	428
4/7/2020									1500
4/8/2020						65			

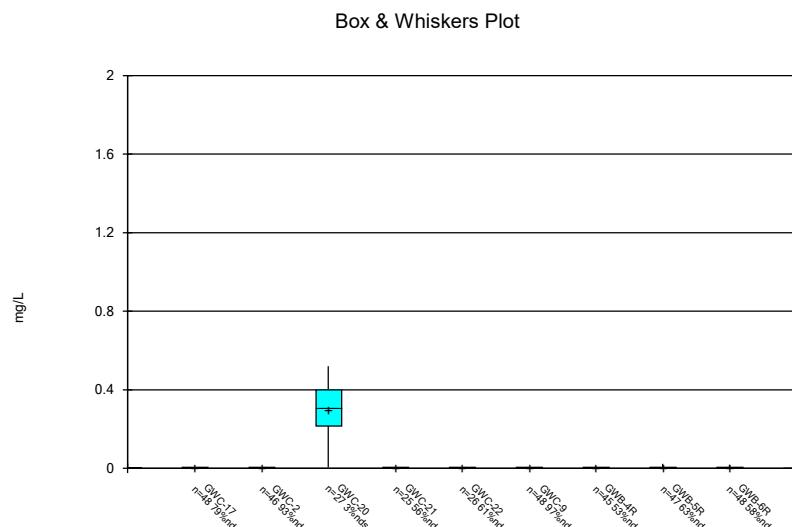
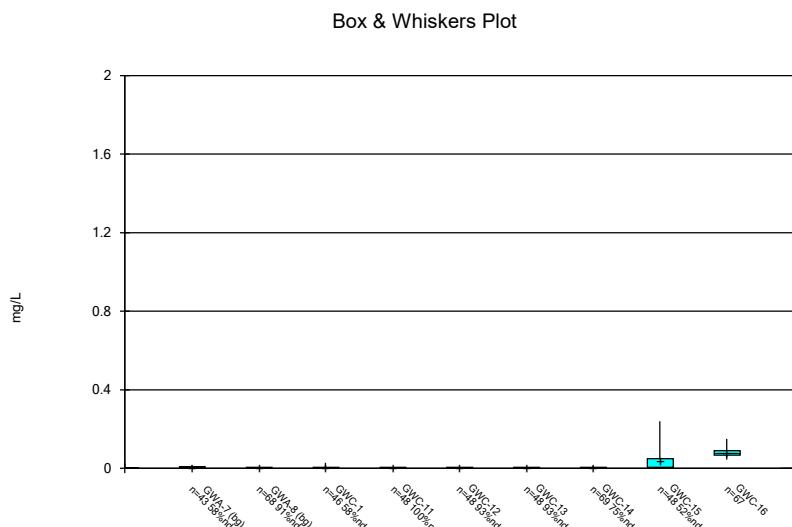
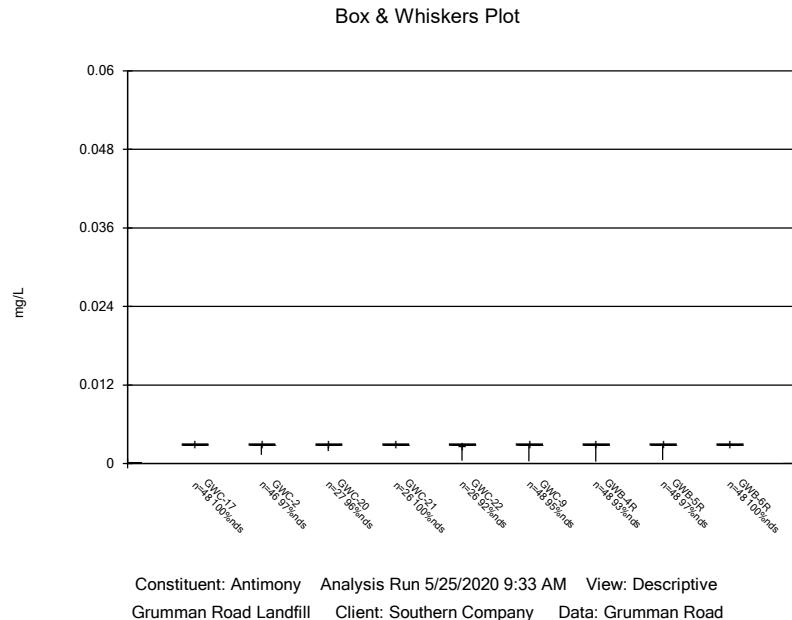
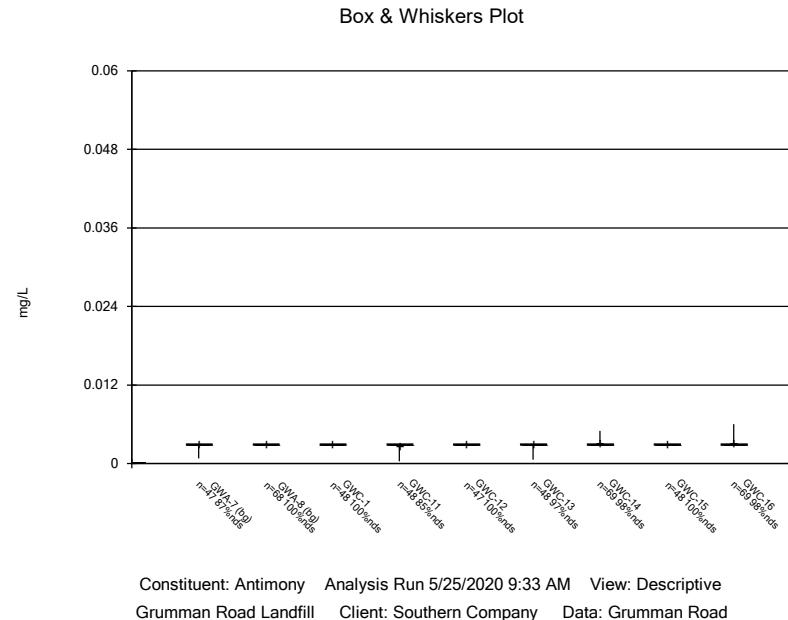
## Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/25/2020 9:33 AM View: Descriptive

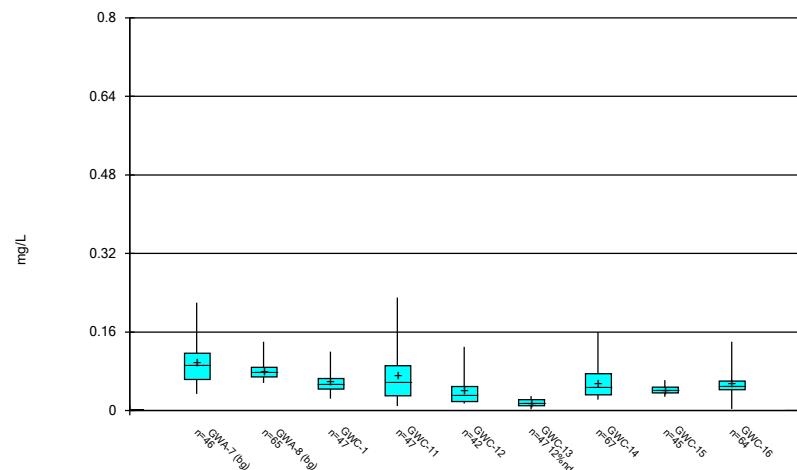
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17	GWC-2	GWC-20	GWC-21	GWC-22	GWC-9	GWB-4R	GWB-5R	GWB-6R
8/30/2016								224	365
8/31/2016		39			1570	173			
9/1/2016	1270		470	184			1080		
10/25/2016			289	<25					
10/26/2016	1320	135			1840		1050	297	373
10/27/2016						221			
1/3/2017								366	
1/4/2017			639	242	1560				
1/5/2017	1770	99							543
1/6/2017						259	1060		
4/4/2017		54	660	187			994		
4/5/2017	1600				368	169		279	434
4/6/2017			836		383				
7/11/2017						163	1070	308	454
7/12/2017				86					
7/13/2017	1940	50							
10/2/2017			698						
10/3/2017		18 (J)		66				288	389
10/4/2017	2370				1500	168	1100		
1/9/2018				167					415
1/10/2018		<25	322					493	
1/11/2018	2350				438	190	838		
7/9/2018			461						
7/10/2018		49		180				1730 (o)	453
7/11/2018	2260				876	165	799		
1/16/2019	1540						530	382	1320
1/17/2019				178					
1/18/2019					154	118			
1/21/2019		39	307						
3/25/2019				449			479		
3/26/2019	1220			292				1040	1250
3/27/2019					158	104			
7/30/2019		70							
10/8/2019				278					
10/9/2019	1100	46	434		211	128	502	2010	903
4/7/2020					106	819		482	483
4/8/2020	881	38	986			80			775

## FIGURE B.

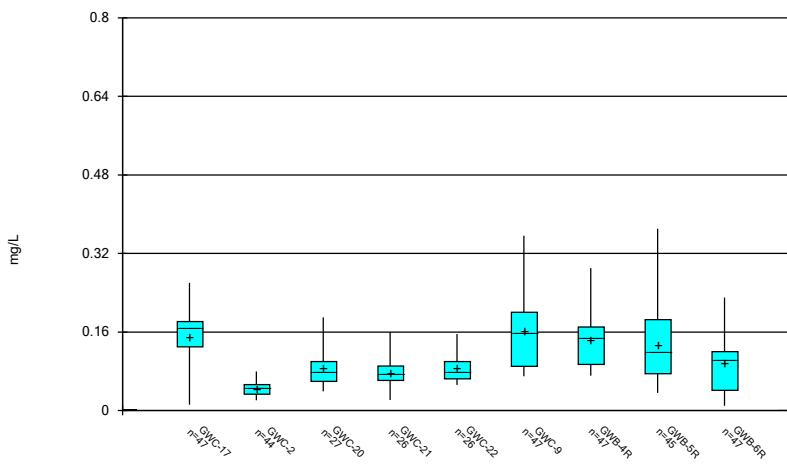


## Box &amp; Whiskers Plot



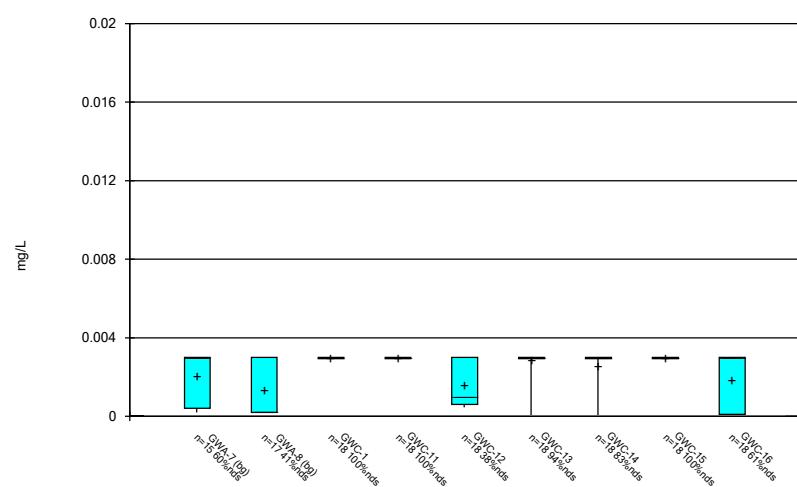
Constituent: Barium Analysis Run 5/25/2020 9:33 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



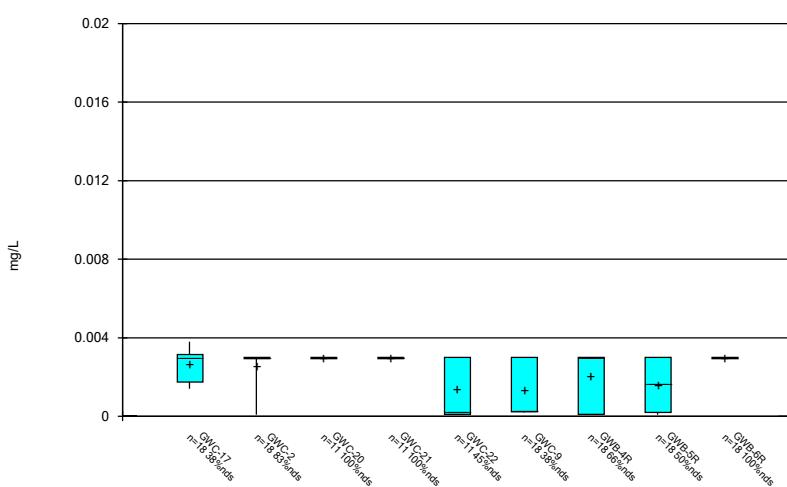
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Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



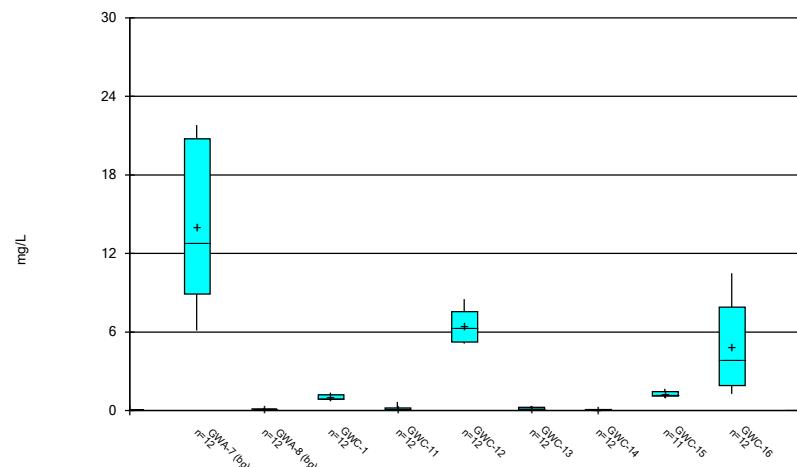
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Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



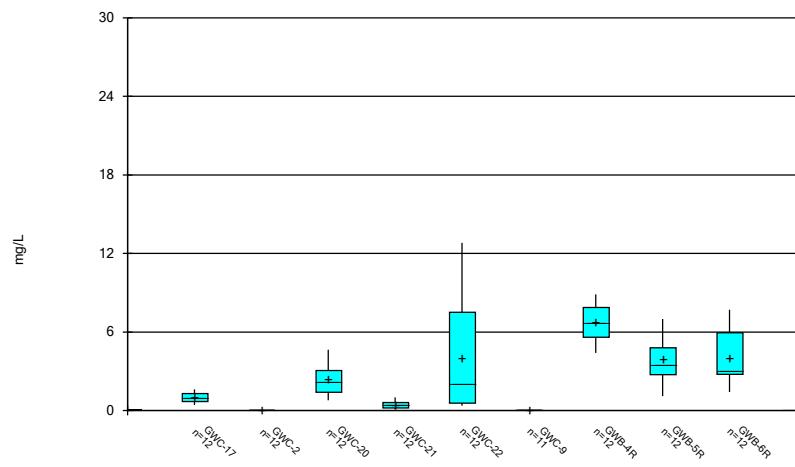
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Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



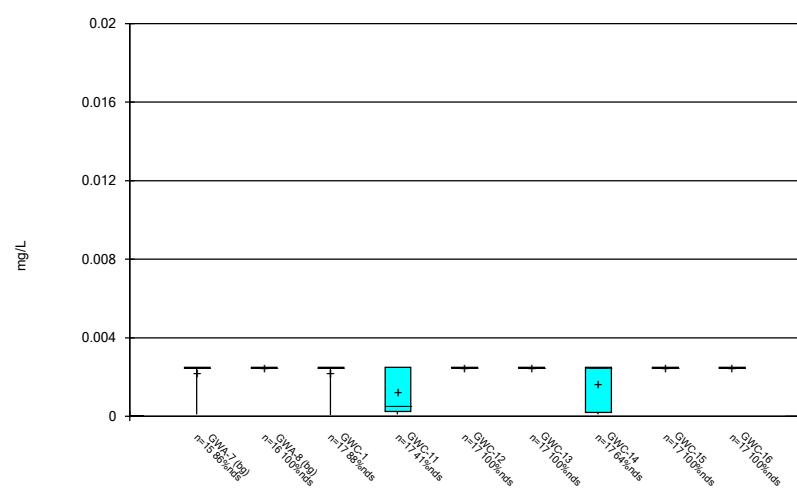
Constituent: Boron Analysis Run 5/25/2020 9:33 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



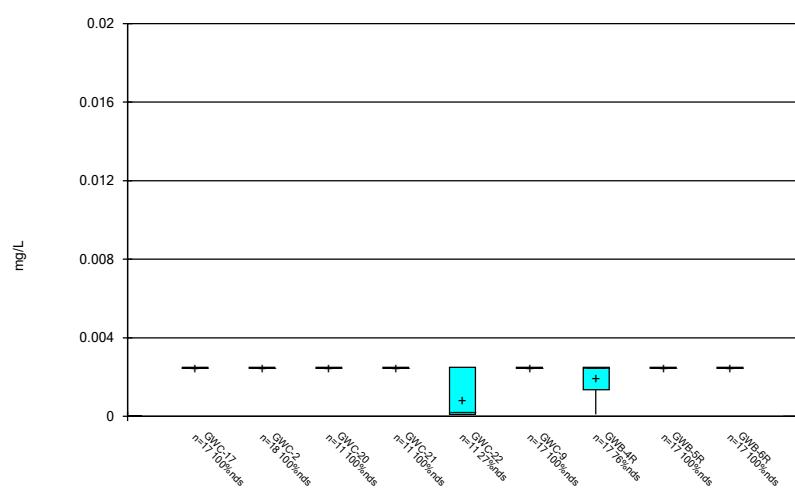
Constituent: Boron Analysis Run 5/25/2020 9:33 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



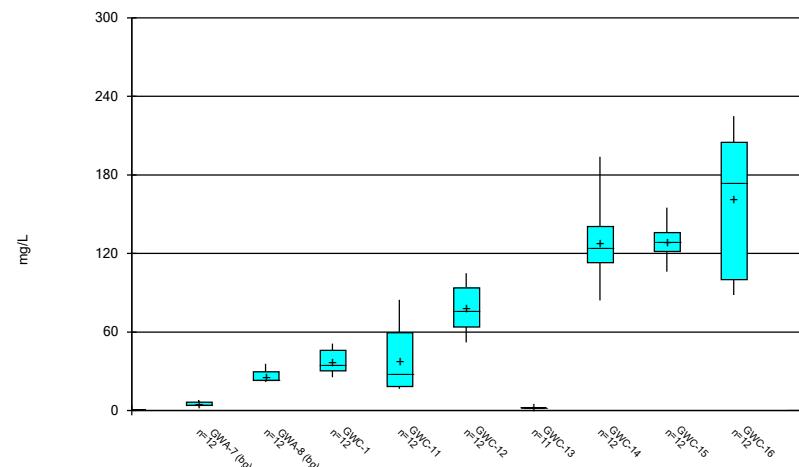
Constituent: Cadmium Analysis Run 5/25/2020 9:33 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



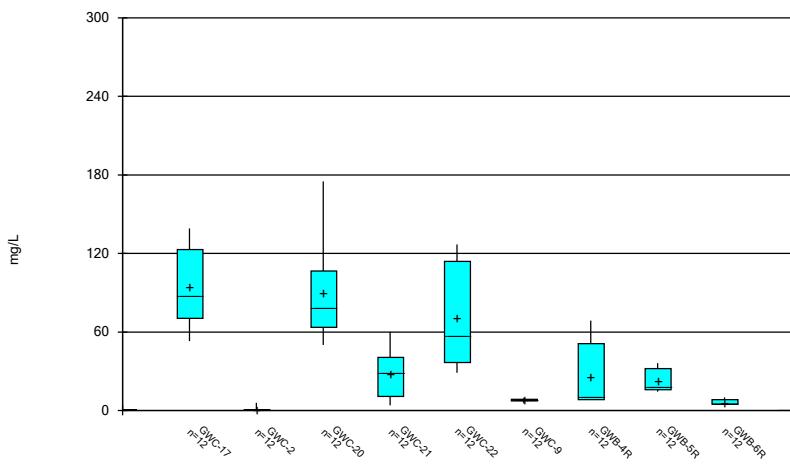
Constituent: Cadmium Analysis Run 5/25/2020 9:33 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



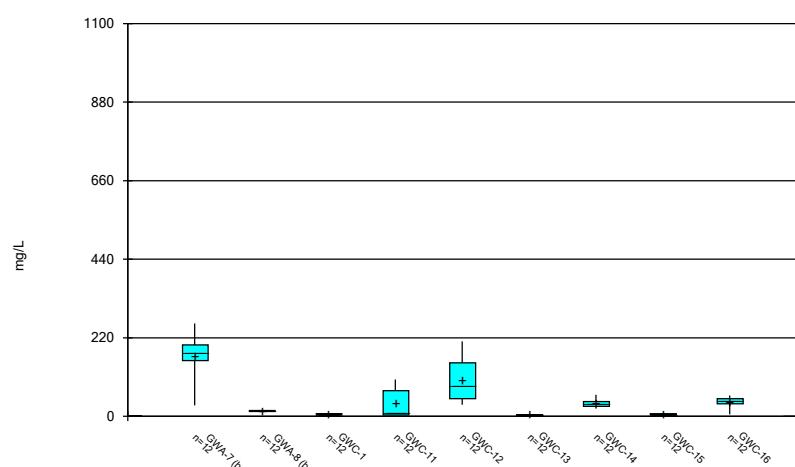
Constituent: Calcium Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



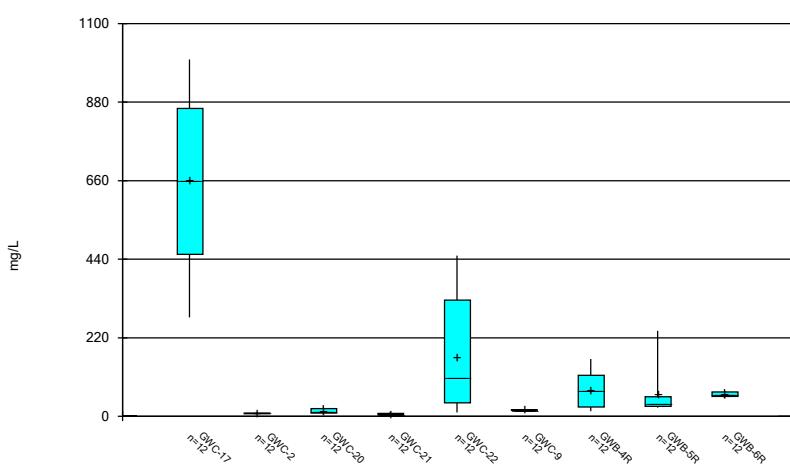
Constituent: Calcium Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



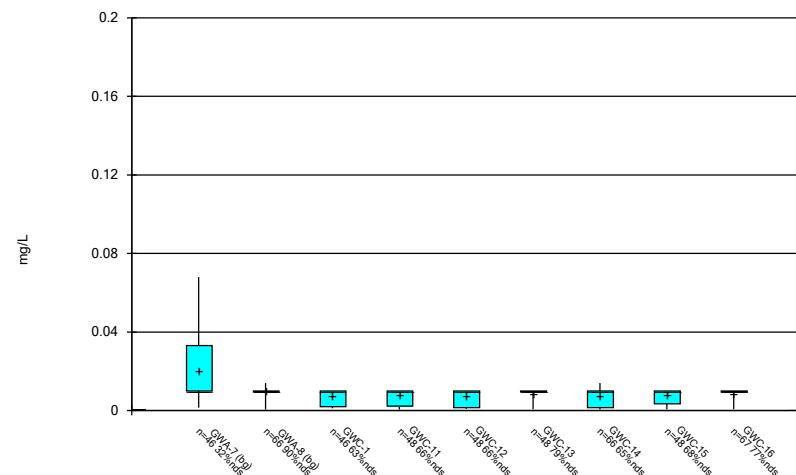
Constituent: Chloride Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot

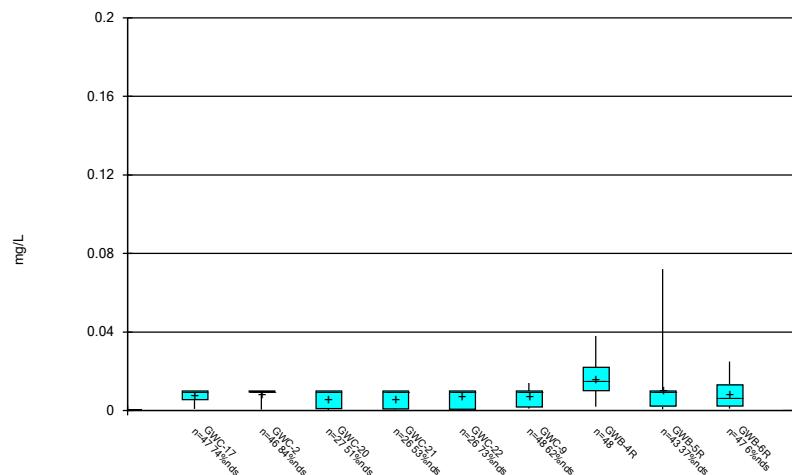


Constituent: Chloride Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

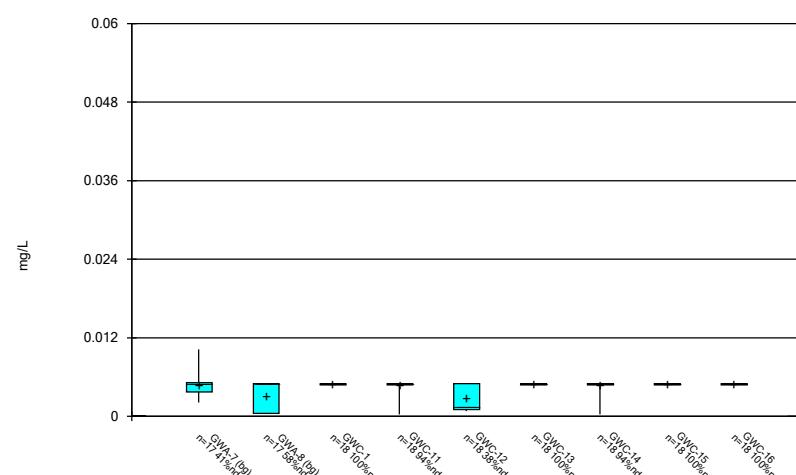
Box &amp; Whiskers Plot



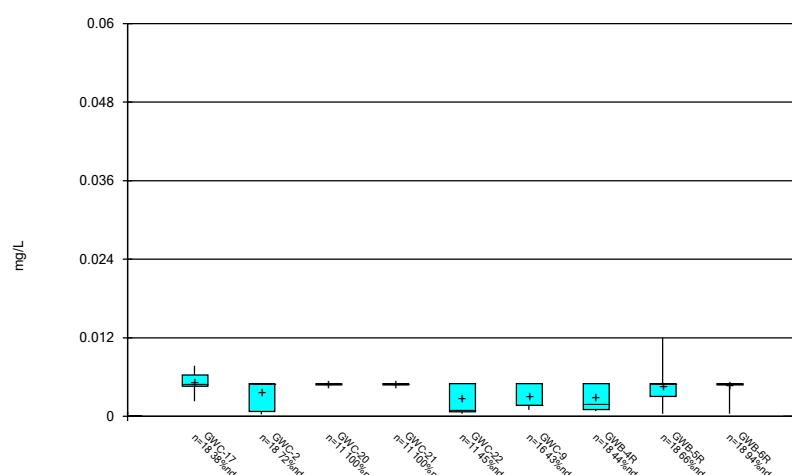
Box &amp; Whiskers Plot



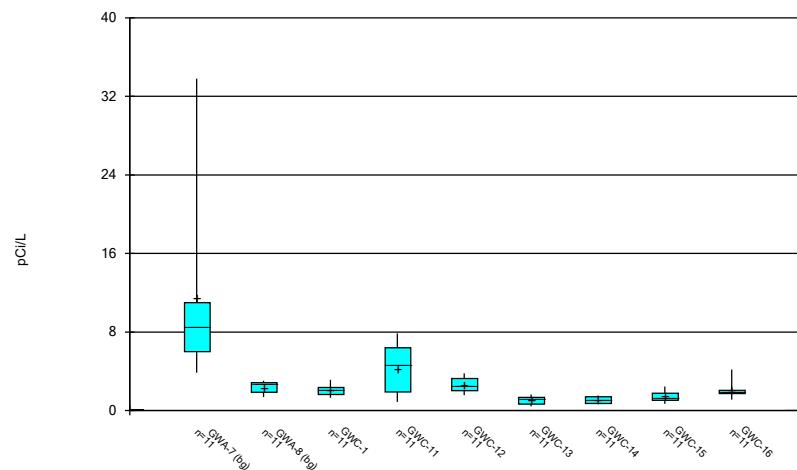
Box &amp; Whiskers Plot



Box &amp; Whiskers Plot

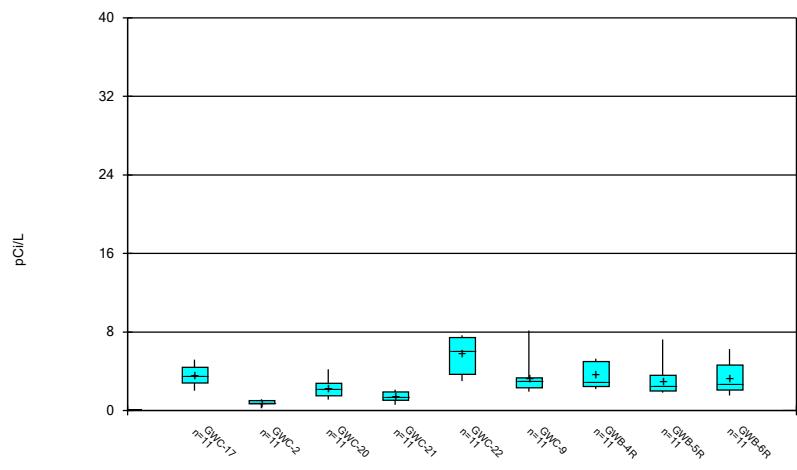


## Box &amp; Whiskers Plot



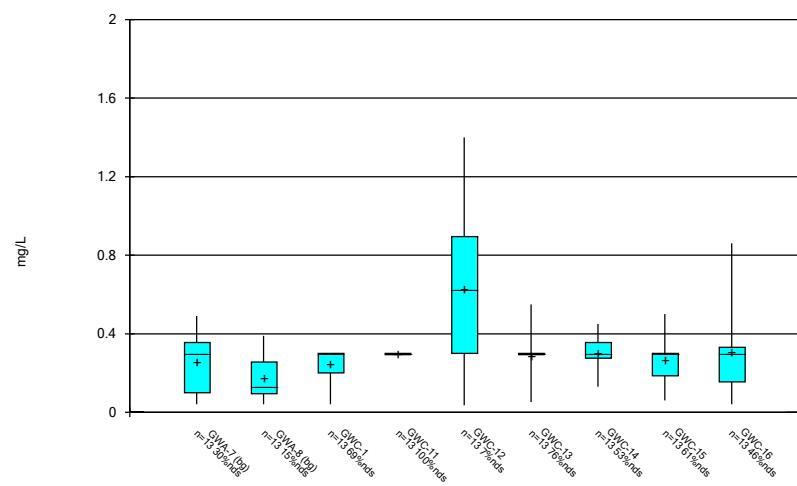
Constituent: Combined Radium 226 + 228 Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



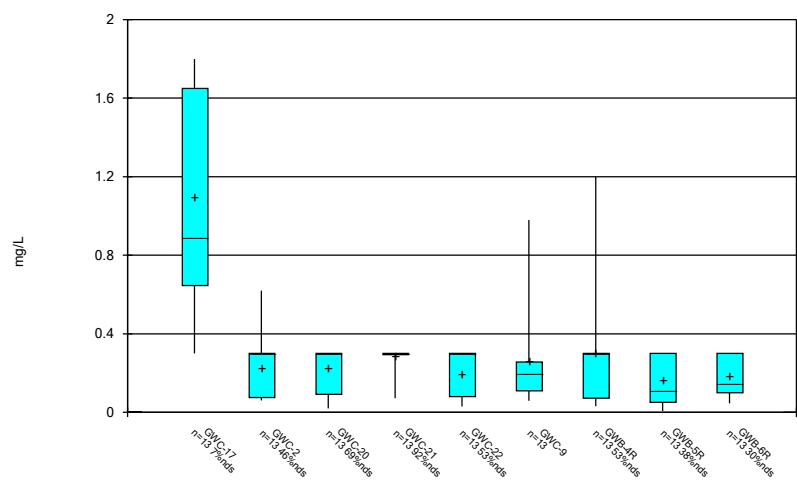
Constituent: Combined Radium 226 + 228 Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



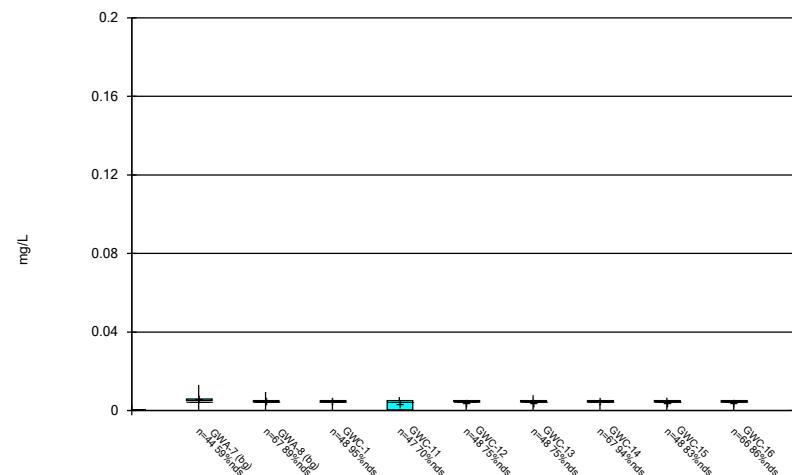
Constituent: Fluoride Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot

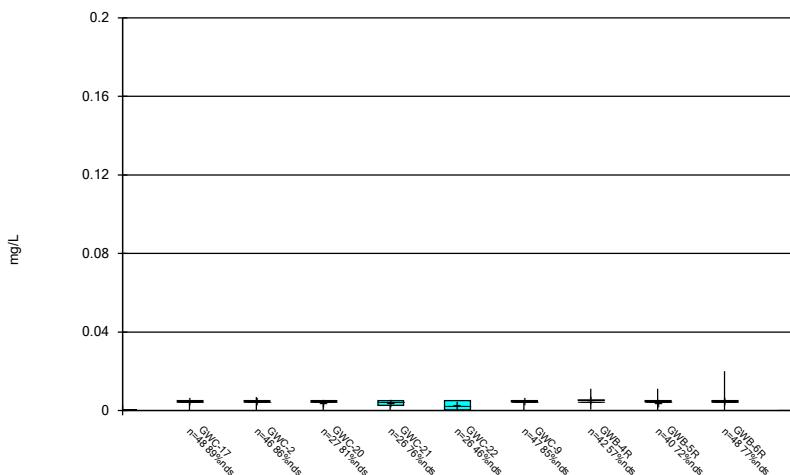


Constituent: Fluoride Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

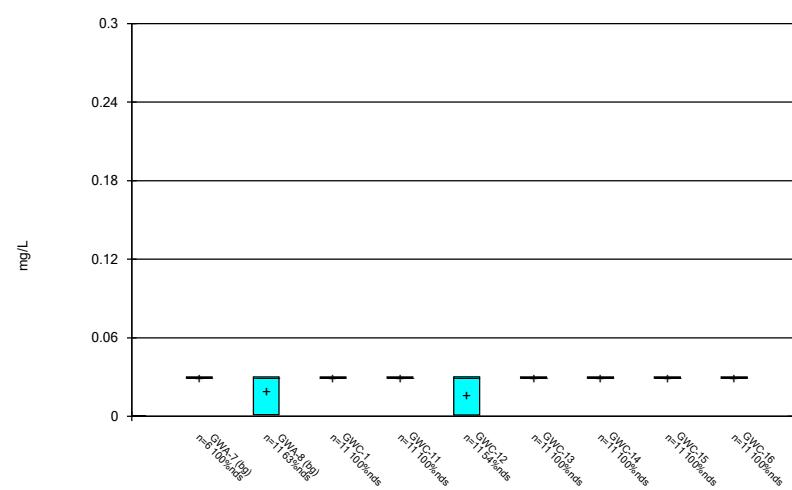
## Box &amp; Whiskers Plot



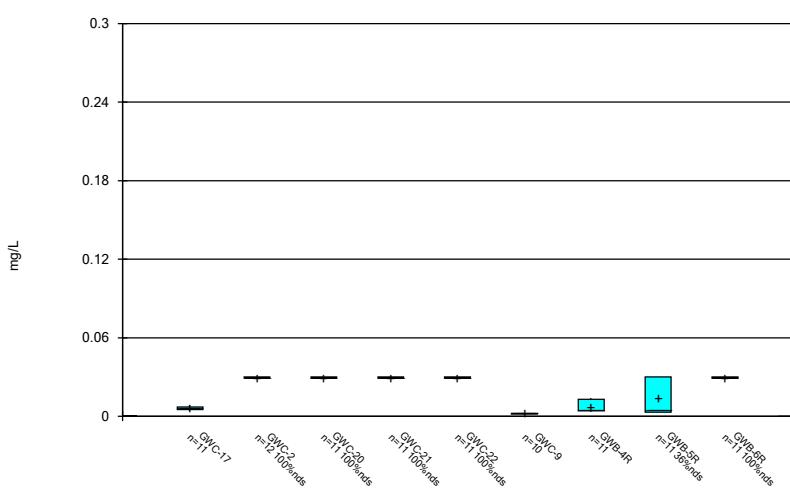
## Box &amp; Whiskers Plot



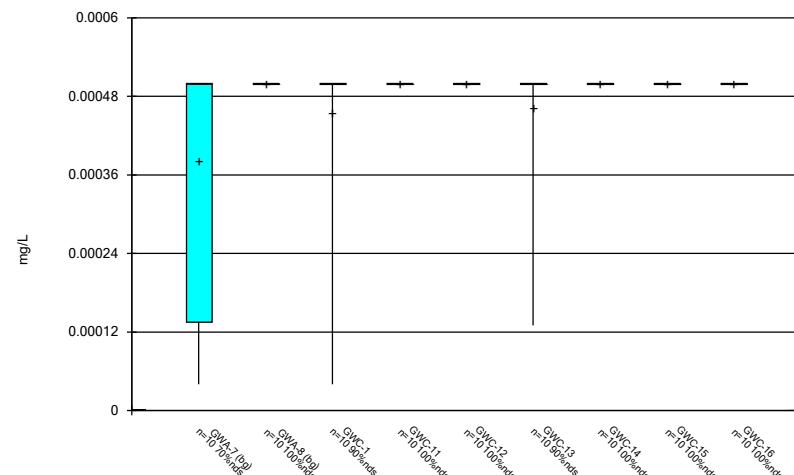
## Box &amp; Whiskers Plot



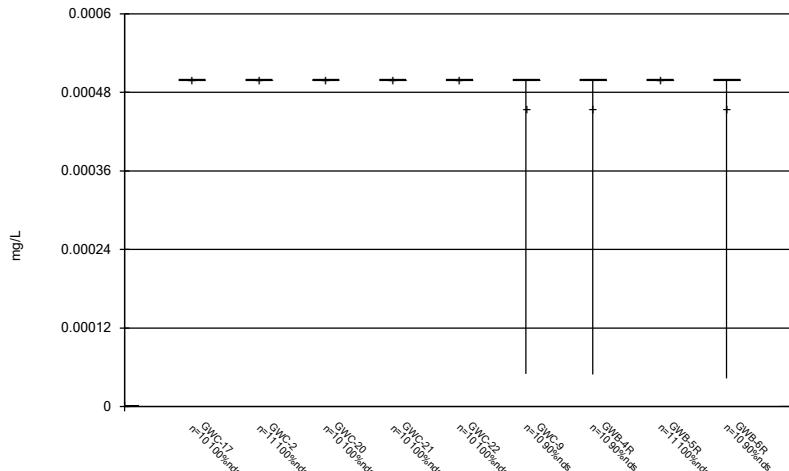
## Box &amp; Whiskers Plot



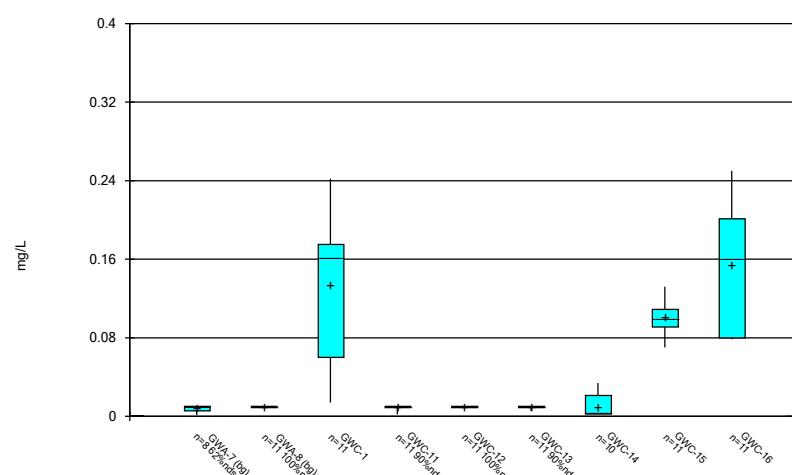
## Box &amp; Whiskers Plot



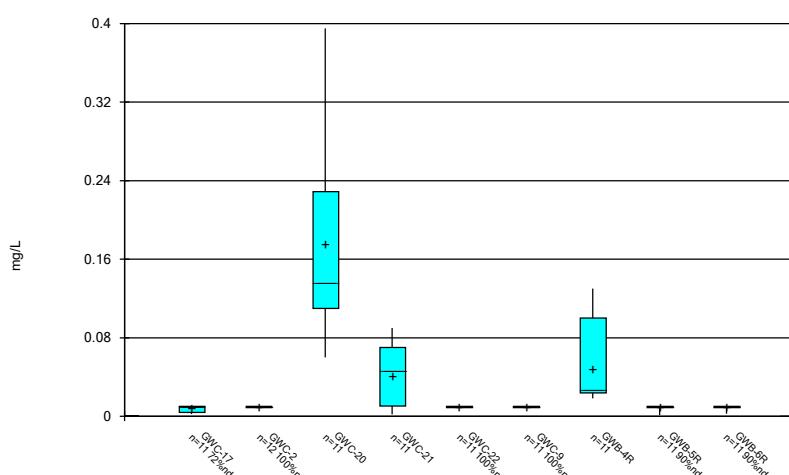
## Box &amp; Whiskers Plot



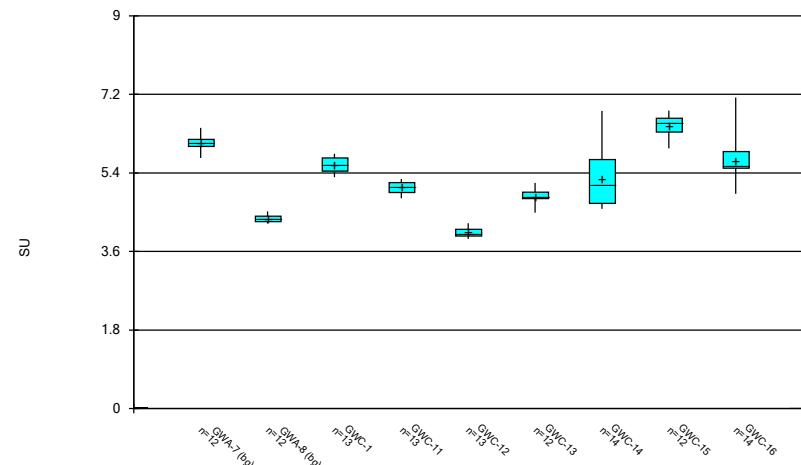
## Box &amp; Whiskers Plot



## Box &amp; Whiskers Plot

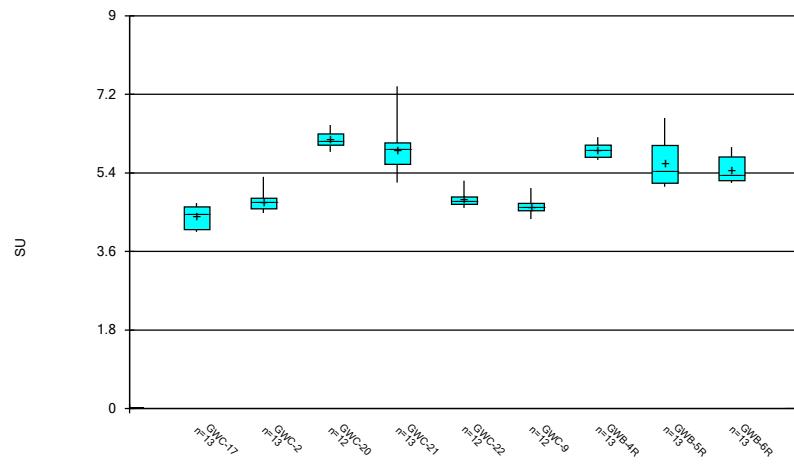


## Box &amp; Whiskers Plot



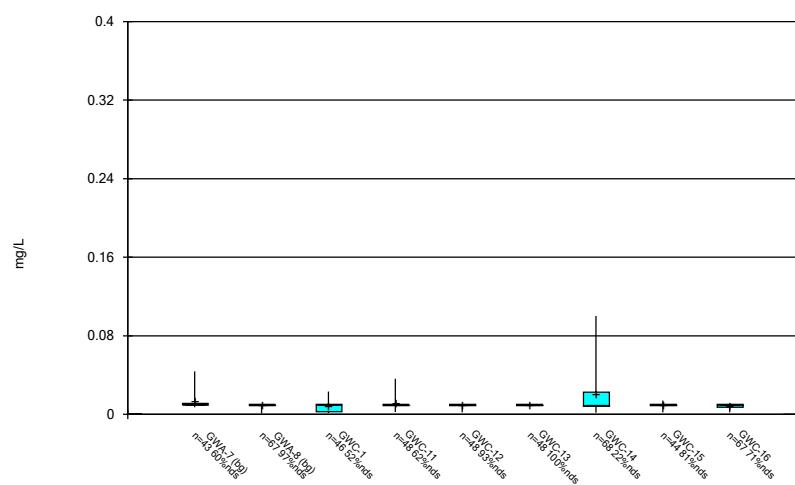
Constituent: pH Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



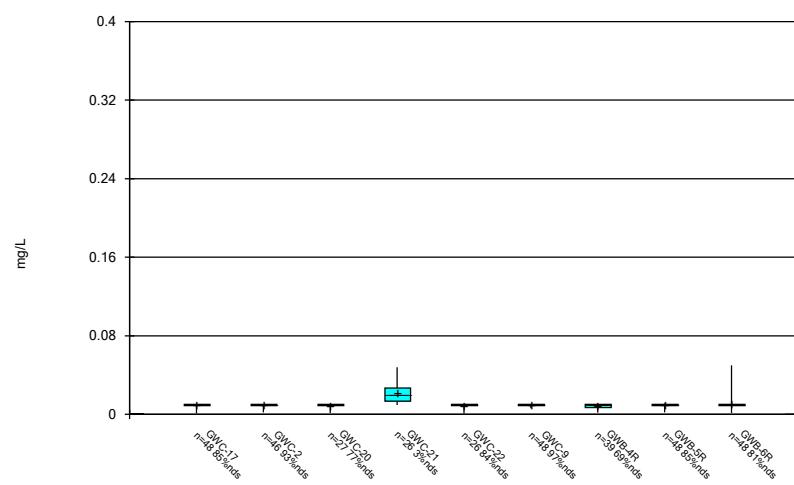
Constituent: pH Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



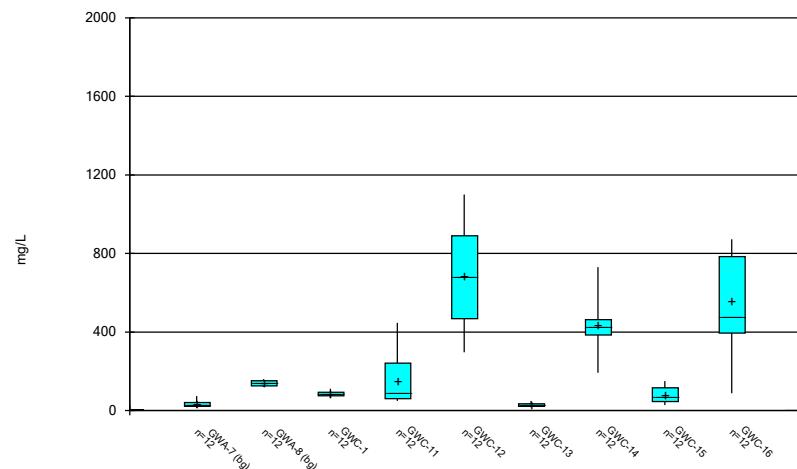
Constituent: Selenium Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Box &amp; Whiskers Plot



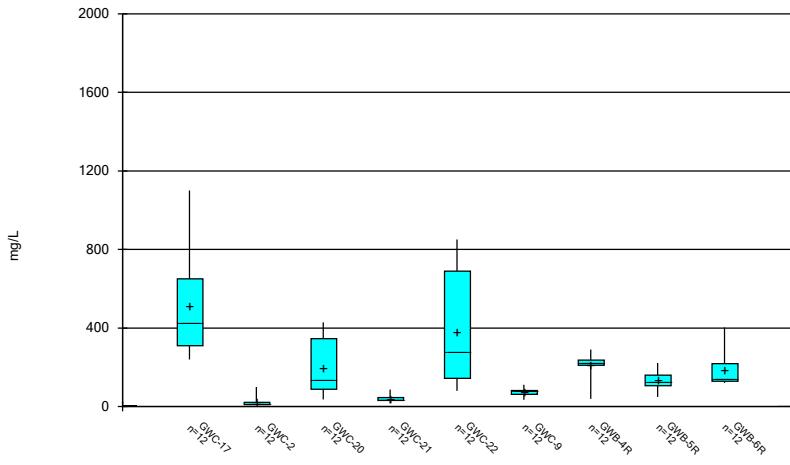
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Grumman Road Landfill Client: Southern Company Data: Grumman Road

Box &amp; Whiskers Plot



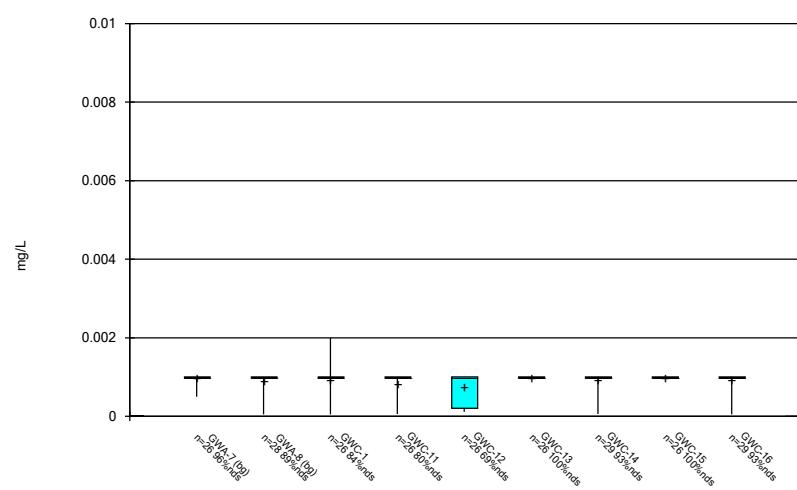
Constituent: Sulfate Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Box &amp; Whiskers Plot



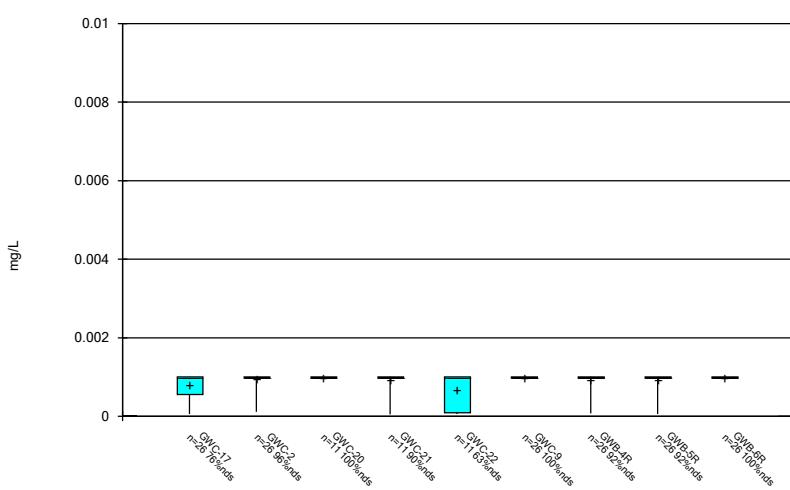
Constituent: Sulfate Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Box &amp; Whiskers Plot



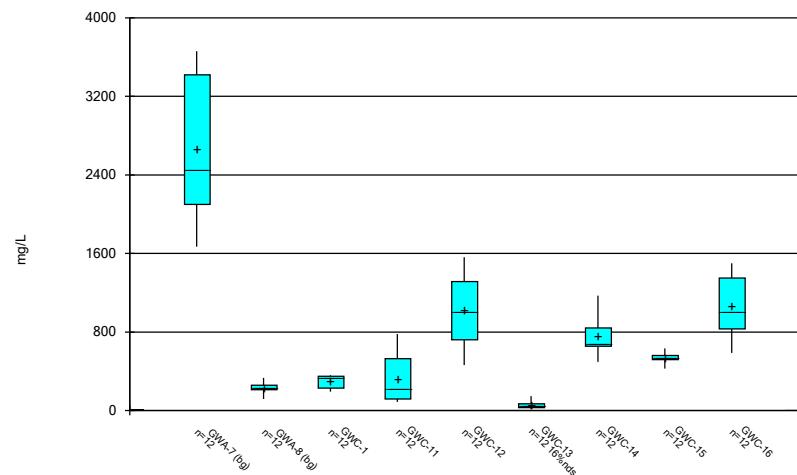
Constituent: Thallium Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Box &amp; Whiskers Plot



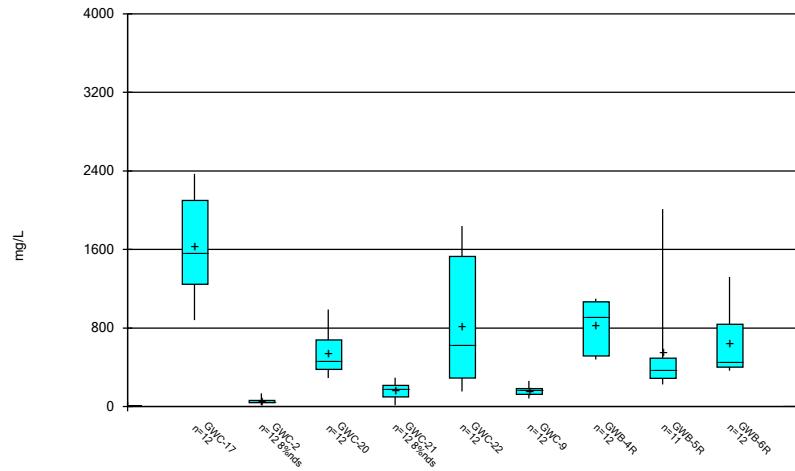
Constituent: Thallium Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Box &amp; Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Box &amp; Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/25/2020 9:34 AM View: Descriptive  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

# FIGURE C.

# Outlier Summary

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:33 PM

	GWC-12 Antimony (mg/L)	GWA-7 Arsenic (mg/L)	GWC-1 Arsenic (mg/L)	GWA-7 Barium (mg/L)	GWC-16 Barium (mg/L)	GWC-2 Barium (mg/L)	GWA-7 Beryllium (mg/L)	GWC-15 Boron (mg/L)	GWC-9 Boron (mg/L)	GWA-7 Cadmium (mg/L)
1/17/2016		0.024 (o)								
1/18/2016	<0.003 (o)									
8/31/2016								0.096 (J,o)		
9/1/2016		0.415 (o)					9.01 (o)			
10/26/2016				0.113 (o)						
10/3/2017				0.135 (o)						
10/4/2017										
1/9/2018										
7/9/2018										
7/10/2018			0.16 (o)							
7/11/2018	<0.025 (o)					<0.015 (o)				
1/16/2019	<0.025 (o)									
1/17/2019										
1/18/2019										
1/21/2019										
3/25/2019										
8/26/2019					<0.015 (o)			<0.012 (o)		
10/8/2019					<0.015 (o)			<0.012 (o)		
4/6/2020	<0.025 (o)									

	GWC-13 Calcium (mg/L)	GWA-7 Chromium (mg/L)	GWA-7 Cobalt (mg/L)	GWC-9 Cobalt (mg/L)	GWA-7 Lead (mg/L)	GWC-11 Lead (mg/L)	GWB-4R Lead (mg/L)	GWA-7 Lithium (mg/L)	GWC-9 Lithium (mg/L)	GWA-7 Molybdenum (mg/L)
1/17/2016										
1/18/2016										
8/31/2016	2.77 (o)				0.0021 (J,o)			<0.05 (o)		
9/1/2016		0.119 (o)			0.0663 (o)		0.0166 (o)			
10/26/2016										
10/3/2017										
10/4/2017				0.0015 (J,o)						
1/9/2018							<0.15 (o)			
7/9/2018										
7/10/2018										
7/11/2018	<0.05 (o)				<0.005 (o)		<0.15 (o)		<0.05 (o)	
1/16/2019					<0.025 (o)					
1/17/2019										
1/18/2019										
1/21/2019										
3/25/2019										
8/26/2019						<0.15 (o)		<0.05 (o)		
10/8/2019						<0.15 (o)		<0.05 (o)		
4/6/2020						<0.15 (o)				

# Outlier Summary

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:33 PM

GWC-14 Molybdenum (mg/L)	GWA-8 pH (SU)	GWC-13 pH (SU)	GWC-15 pH (SU)	GWC-20 pH (SU)	GWC-22 pH (SU)	GWC-9 pH (SU)	GWA-7 Selenium (mg/L)	GWB-5R Total Dissolved Solids (mg/L)
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1/17/2016

1/18/2016

8/31/2016

9/1/2016

10/26/2016

10/3/2017

10/4/2017

1/9/2018

<0.05 (o)

7/9/2018 0.01 (o)

7/10/2018

1730 (o)

7/11/2018

<0.05 (o)

1/16/2019

6.16 (o) 6.45 (o)

1/17/2019

8.44 (o)

1/18/2019

6.98 (o) 6.87 (o)

1/21/2019

7.73 (o)

3/25/2019

<0.05 (o)

8/26/2019

<0.05 (o)

10/8/2019

4/6/2020

# FIGURE D.

## Date Ranges

Page 1

Date: 5/23/2020 2:33 PM

Grumman Road Landfill

Client: Southern Company Data: Grumman Road

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Arsenic (mg/L)

GWB-5R background:12/12/2005-7/10/2018  
GWB-6R background:1/7/2011-7/10/2018

Barium (mg/L)

GWC-14 background:7/17/2013-7/10/2018

Chromium (mg/L)

GWB-4R background:1/7/2011-7/11/2018  
GWB-6R background:7/7/2009-7/10/2018

Selenium (mg/L)

GWC-14 background:1/17/2012-7/9/2018

Vanadium (mg/L)

GWA-7 background:7/9/2012-7/11/2018  
GWC-14 background:3/25/2009-7/9/2018  
GWB-4R background:6/24/2008-7/11/2018  
GWB-6R background:12/11/2007-7/10/2018

# FIGURE E.

## Intrawell Prediction Limits (State) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/24/2020, 8:58 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWC-1	0.0086	n/a	4/7/2020	0.027	41	n/a	n/a	65.85	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-15	0.09	n/a	4/7/2020	0.24	43	n/a	n/a	58.14	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWC-14	0.04252	n/a	4/7/2020	0.073	21	0.02967	0.00524	0	None	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-16	0.0944	n/a	4/7/2020	0.13	59	n/a	n/a	0	n/a	n/a	0.0005506	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-20	0.1775	n/a	4/8/2020	0.19	22	0.08198	0.03928	0	None	No	0.0004115	Param Intra 1 of 2

# Intrawell Prediction Limits (State) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/24/2020, 8:58 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWA-7	0.003	n/a	4/6/2020	0.003ND	42	n/a	n/a	85.71	n/a	n/a	0.001077	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-11	0.003	n/a	4/7/2020	0.00066	43	n/a	n/a	90.7	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-13	0.003	n/a	4/8/2020	0.003ND	43	n/a	n/a	97.67	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-14	0.005	n/a	4/7/2020	0.003ND	64	n/a	n/a	98.44	n/a	n/a	0.0004732	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-16	0.006	n/a	4/7/2020	0.003ND	64	n/a	n/a	98.44	n/a	n/a	0.0004732	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-2	0.003	n/a	4/8/2020	0.0013	41	n/a	n/a	100	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-20	0.003	n/a	4/8/2020	0.003ND	22	n/a	n/a	95.45	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-22	0.003	n/a	4/7/2020	0.00049	21	n/a	n/a	100	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-9	0.003	n/a	4/8/2020	0.00033	43	n/a	n/a	97.67	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWB-4R	0.003	n/a	4/7/2020	0.003ND	43	n/a	n/a	93.02	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWB-5R	0.003	n/a	4/7/2020	0.003ND	43	n/a	n/a	100	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-7	0.014	n/a	4/6/2020	0.005ND	39	n/a	n/a	61.54	n/a	n/a	0.001226	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-8	0.005	n/a	4/6/2020	0.00045	63	n/a	n/a	92.06	n/a	n/a	0.000487	NP Intra (NDs) 1 of 2
<b>Arsenic (mg/L)</b>	<b>GWC-1</b>	<b>0.0086</b>	n/a	<b>4/7/2020</b>	<b>0.027</b>	<b>41</b>	n/a	n/a	<b>65.85</b>	n/a	n/a	<b>0.001118</b>	<b>NP Intra (NDs) 1 of 2</b>
Arsenic (mg/L)	GWC-12	0.005	n/a	4/7/2020	0.005ND	43	n/a	n/a	93.02	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-13	0.0064	n/a	4/8/2020	0.005ND	43	n/a	n/a	95.35	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-14	0.011	n/a	4/7/2020	0.0018	64	n/a	n/a	81.25	n/a	n/a	0.0004732	NP Intra (NDs) 1 of 2
<b>Arsenic (mg/L)</b>	<b>GWC-15</b>	<b>0.09</b>	n/a	<b>4/7/2020</b>	<b>0.24</b>	<b>43</b>	n/a	n/a	<b>58.14</b>	n/a	n/a	<b>0.001037</b>	<b>NP Intra (NDs) 1 of 2</b>
Arsenic (mg/L)	GWC-16	0.1212	n/a	4/7/2020	0.091	62	0.07945	0.01932	0	None	No	0.0004115	Param Intra 1 of 2
Arsenic (mg/L)	GWC-17	0.005	n/a	4/8/2020	0.0013	43	n/a	n/a	86.05	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-2	0.005	n/a	4/8/2020	0.00094	41	n/a	n/a	97.56	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-20	0.5741	n/a	4/8/2020	0.33	22	0.2788	0.1215	4.545	None	No	0.0004115	Param Intra 1 of 2
Arsenic (mg/L)	GWC-21	0.005	n/a	4/7/2020	0.005ND	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-22	0.005	n/a	4/7/2020	0.00043	21	n/a	n/a	61.9	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-9	0.005	n/a	4/8/2020	0.00084	43	n/a	n/a	100	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWB-4R	0.0076	n/a	4/7/2020	0.0027	40	n/a	n/a	60	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWB-5R	0.005	n/a	4/7/2020	0.0011	30	n/a	n/a	80	n/a	n/a	0.002008	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWB-6R	0.005	n/a	4/7/2020	0.005ND	20	n/a	n/a	65	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWA-7	0.2043	n/a	4/6/2020	0.072	41	0.1021	0.04574	0	None	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWA-8	0.14	n/a	4/6/2020	0.057	60	n/a	n/a	0	n/a	n/a	0.0005281	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-1	0.1141	n/a	4/7/2020	0.05	42	0.2379	0.04483	0	None	sqrt(x)	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-11	0.2074	n/a	4/7/2020	0.14	42	0.2407	0.09636	0	None	sqrt(x)	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-12	0.1228	n/a	4/7/2020	0.017	37	0.3382	0.07041	0	None	x^(1/3)	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-13	0.03175	n/a	4/8/2020	0.027	42	0.01478	0.00762	14.29	None	No	0.0004115	Param Intra 1 of 2
<b>Barium (mg/L)</b>	<b>GWC-14</b>	<b>0.04252</b>	n/a	<b>4/7/2020</b>	<b>0.073</b>	<b>21</b>	<b>0.02967</b>	<b>0.00524</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004115</b>	<b>Param Intra 1 of 2</b>
Barium (mg/L)	GWC-15	0.05948	n/a	4/7/2020	0.033	40	0.04178	0.00791	0	None	No	0.0004115	Param Intra 1 of 2
<b>Barium (mg/L)</b>	<b>GWC-16</b>	<b>0.0944</b>	n/a	<b>4/7/2020</b>	<b>0.13</b>	<b>59</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.0005506</b>	<b>NP Intra (normality) 1 of 2</b>
Barium (mg/L)	GWC-17	0.247	n/a	4/8/2020	0.055	42	0.02849	0.01459	0	None	x^2	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-2	0.07214	n/a	4/8/2020	0.061	39	0.04318	0.0129	0	None	No	0.0004115	Param Intra 1 of 2
<b>Barium (mg/L)</b>	<b>GWC-20</b>	<b>0.1775</b>	n/a	<b>4/8/2020</b>	<b>0.19</b>	<b>22</b>	<b>0.08198</b>	<b>0.03928</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004115</b>	<b>Param Intra 1 of 2</b>
Barium (mg/L)	GWC-21	0.1503	n/a	4/7/2020	0.054	21	0.07795	0.0295	0	None	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-22	0.1535	n/a	4/7/2020	0.1	21	0.08871	0.02642	0	None	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWC-9	0.356	n/a	4/8/2020	0.15	42	n/a	n/a	0	n/a	n/a	0.001077	NP Intra (normality) 1 of 2
Barium (mg/L)	GWB-4R	0.261	n/a	4/7/2020	0.09	42	0.1503	0.04972	0	None	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWB-5R	0.3072	n/a	4/7/2020	0.098	40	0.1394	0.07497	0	None	No	0.0004115	Param Intra 1 of 2
Barium (mg/L)	GWB-6R	0.2605	n/a	4/7/2020	0.01	42	0.3159	0.0873	0	None	sqrt(x)	0.0004115	Param Intra 1 of 2
Chromium (mg/L)	GWA-7	0.068	n/a	4/6/2020	0.015	41	n/a	n/a	36.59	n/a	n/a	0.001118	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWA-8	0.014	n/a	4/6/2020	0.01ND	61	n/a	n/a	93.44	n/a	n/a	0.0005144	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-1	0.01	n/a	4/7/2020	0.0015	41	n/a	n/a	70.73	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-11	0.01	n/a	4/7/2020	0.00094	43	n/a	n/a	69.77	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2

# Intrawell Prediction Limits (State) - All Results

Page 2

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/24/2020, 8:58 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	GWC-12	0.01	n/a	4/7/2020	0.00082	43	n/a	n/a	72.09	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-13	0.01	n/a	4/8/2020	0.00058	43	n/a	n/a	79.07	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-14	0.014	n/a	4/7/2020	0.00074	61	n/a	n/a	67.21	n/a	n/a	0.0005144	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-15	0.01	n/a	4/7/2020	0.0014	43	n/a	n/a	72.09	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-16	0.01	n/a	4/7/2020	0.01ND	62	n/a	n/a	80.65	n/a	n/a	0.0005007	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-17	0.01	n/a	4/8/2020	0.00073	42	n/a	n/a	78.57	n/a	n/a	0.001077	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-2	0.01	n/a	4/8/2020	0.00069	41	n/a	n/a	90.24	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-20	0.01	n/a	4/8/2020	0.001	22	n/a	n/a	54.55	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-21	0.01	n/a	4/7/2020	0.01ND	21	n/a	n/a	57.14	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-22	0.01	n/a	4/7/2020	0.00049	21	n/a	n/a	80.95	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-9	0.014	n/a	4/8/2020	0.0015	43	n/a	n/a	65.12	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWB-4R	0.02279	n/a	4/7/2020	0.0028	20	0.01249	0.004168	0	None	No	0.0004115	Param Intra 1 of 2
Chromium (mg/L)	GWB-5R	0.03	n/a	4/7/2020	0.0022	38	n/a	n/a	39.47	n/a	n/a	0.001294	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWB-6R	0.01385	n/a	4/7/2020	0.0094	23	-5.977	0.704	13.04	None	ln(x)	0.0004115	Param Intra 1 of 2
Lead (mg/L)	GWA-7	0.013	n/a	4/6/2020	0.0024	40	n/a	n/a	65	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-8	0.0095	n/a	4/6/2020	0.0001	62	n/a	n/a	90.32	n/a	n/a	0.0005007	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-1	0.005	n/a	4/7/2020	0.00012	43	n/a	n/a	97.67	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-11	0.013	n/a	4/7/2020	0.00036	42	n/a	n/a	78.57	n/a	n/a	0.001077	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-12	0.005	n/a	4/7/2020	0.000081	43	n/a	n/a	76.74	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-13	0.0078	n/a	4/8/2020	0.00017	43	n/a	n/a	81.4	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-14	0.005	n/a	4/7/2020	0.005ND	62	n/a	n/a	95.16	n/a	n/a	0.0005007	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-15	0.0065	n/a	4/7/2020	0.000086	43	n/a	n/a	88.37	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-16	0.005	n/a	4/7/2020	0.00023	61	n/a	n/a	90.16	n/a	n/a	0.0005144	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-17	0.005	n/a	4/8/2020	0.000084	43	n/a	n/a	93.02	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-2	0.0069	n/a	4/8/2020	0.005ND	41	n/a	n/a	90.24	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-20	0.005	n/a	4/8/2020	0.005ND	22	n/a	n/a	86.36	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-21	0.005	n/a	4/7/2020	0.005ND	21	n/a	n/a	80.95	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-22	0.013	n/a	4/7/2020	0.00067	21	n/a	n/a	57.14	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-9	0.0051	n/a	4/8/2020	0.00021	42	n/a	n/a	88.1	n/a	n/a	0.001077	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWB-4R	0.011	n/a	4/7/2020	0.00073	37	n/a	n/a	59.46	n/a	n/a	0.001361	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWB-5R	0.011	n/a	4/7/2020	0.0014	35	n/a	n/a	77.14	n/a	n/a	0.001497	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWB-6R	0.025	n/a	4/7/2020	0.00063	43	n/a	n/a	81.4	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-7	0.0438	n/a	4/6/2020	0.0078	40	n/a	n/a	65	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-8	0.01	n/a	4/6/2020	0.01ND	62	n/a	n/a	96.77	n/a	n/a	0.0005007	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-1	0.023	n/a	4/7/2020	0.0013	41	n/a	n/a	58.54	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-11	0.036	n/a	4/7/2020	0.0021	43	n/a	n/a	62.79	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-12	0.01	n/a	4/7/2020	0.01ND	43	n/a	n/a	93.02	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-14	0.01944	n/a	4/7/2020	0.005	27	0.007544	0.005074	22.22	Kaplan-Meier	No	0.0004115	Param Intra 1 of 2
Selenium (mg/L)	GWC-15	0.01	n/a	4/7/2020	0.0029	39	n/a	n/a	92.31	n/a	n/a	0.001226	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-16	0.01	n/a	4/7/2020	0.01ND	62	n/a	n/a	75.81	n/a	n/a	0.0005007	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-17	0.01	n/a	4/8/2020	0.01ND	43	n/a	n/a	83.72	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-2	0.01	n/a	4/8/2020	0.01ND	41	n/a	n/a	92.68	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-20	0.01	n/a	4/8/2020	0.0013	22	n/a	n/a	86.36	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-21	0.04956	n/a	4/7/2020	0.012	21	0.02277	0.01093	4.762	None	No	0.0004115	Param Intra 1 of 2
Selenium (mg/L)	GWC-22	0.01	n/a	4/7/2020	0.01ND	21	n/a	n/a	80.95	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-9	0.01	n/a	4/8/2020	0.01ND	43	n/a	n/a	97.67	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWB-4R	0.01	n/a	4/7/2020	0.0025	34	n/a	n/a	67.65	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWB-5R	0.011	n/a	4/7/2020	0.01ND	43	n/a	n/a	88.37	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWB-6R	0.01	n/a	4/7/2020	0.01ND	43	n/a	n/a	83.72	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-7	0.5207	n/a	4/6/2020	0.12	16	0.2627	0.09909	0	None	No	0.0004115	Param Intra 1 of 2

# Intrawell Prediction Limits (State) - All Results

Page 3

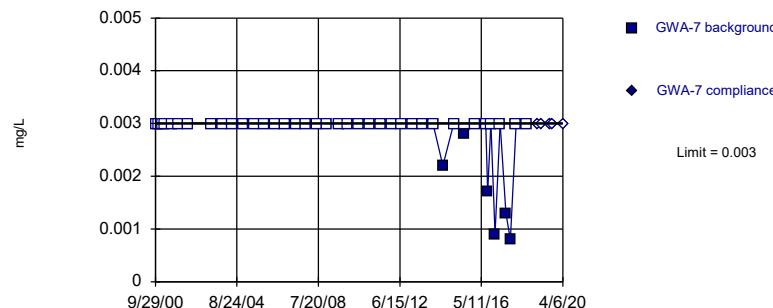
Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/24/2020, 8:58 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Vanadium (mg/L)	GWA-8	0.01	n/a	4/6/2020	0.01ND	60	n/a	n/a	91.67	n/a	n/a	0.0005281	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-1	0.01	n/a	4/7/2020	0.0015	39	n/a	n/a	58.97	n/a	n/a	0.001226	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-11	0.01	n/a	4/7/2020	0.01ND	40	n/a	n/a	55	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-12	0.01	n/a	4/7/2020	0.0024	40	n/a	n/a	80	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-13	0.01	n/a	4/8/2020	0.01ND	40	n/a	n/a	80	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-14	0.05462	n/a	4/7/2020	0.0026	36	0.1496	0.03719	0	None	sqrt(x)	0.0004115	Param Intra 1 of 2
Vanadium (mg/L)	GWC-15	0.01	n/a	4/7/2020	0.01ND	40	n/a	n/a	72.5	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-16	0.012	n/a	4/7/2020	0.01ND	62	n/a	n/a	50	n/a	n/a	0.0005007	NP Intra (normality) 1 of 2
Vanadium (mg/L)	GWC-17	0.01	n/a	4/8/2020	0.01ND	40	n/a	n/a	75	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-2	0.01	n/a	4/8/2020	0.01ND	38	n/a	n/a	100	n/a	n/a	0.001294	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-20	0.01	n/a	4/8/2020	0.01ND	21	n/a	n/a	38.1	n/a	n/a	0.003999	NP Intra (normality) 1 of 2
Vanadium (mg/L)	GWC-21	0.007919	n/a	4/7/2020	0.01ND	18	-5.764	0.3646	33.33	Kaplan-Meier	ln(x)	0.0004115	Param Intra 1 of 2
Vanadium (mg/L)	GWC-22	0.01	n/a	4/7/2020	0.0014	18	n/a	n/a	61.11	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-9	0.014	n/a	4/8/2020	0.0015	40	n/a	n/a	87.5	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWB-4R	0.07366	n/a	4/7/2020	0.0037	22	0.04594	0.0114	0	None	No	0.0004115	Param Intra 1 of 2
Vanadium (mg/L)	GWB-5R	0.04817	n/a	4/7/2020	0.0053	33	-4.848	0.7947	15.15	Kaplan-Meier	ln(x)	0.0004115	Param Intra 1 of 2
Vanadium (mg/L)	GWB-6R	0.053	n/a	4/7/2020	0.041	23	n/a	n/a	13.04	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWA-7	0.0853	n/a	4/6/2020	0.01ND	39	n/a	n/a	30.77	n/a	n/a	0.001226	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWA-8	0.01	n/a	4/6/2020	0.01ND	57	n/a	n/a	24.56	n/a	n/a	0.0005955	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-1	0.011	n/a	4/7/2020	0.01ND	40	n/a	n/a	85	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-11	0.013	n/a	4/7/2020	0.01ND	39	n/a	n/a	69.23	n/a	n/a	0.001226	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-12	0.01	n/a	4/7/2020	0.01ND	28	n/a	n/a	32.14	n/a	n/a	0.002337	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-13	0.036	n/a	4/8/2020	0.023	38	n/a	n/a	28.95	n/a	n/a	0.001294	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-14	0.011	n/a	4/7/2020	0.01ND	63	n/a	n/a	87.3	n/a	n/a	0.000487	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-15	0.011	n/a	4/7/2020	0.01ND	41	n/a	n/a	90.24	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-16	0.01	n/a	4/7/2020	0.01ND	61	n/a	n/a	67.21	n/a	n/a	0.0005144	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-17	0.0175	n/a	4/8/2020	0.01ND	40	n/a	n/a	32.5	n/a	n/a	0.001159	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-2	0.012	n/a	4/8/2020	0.01ND	37	n/a	n/a	81.08	n/a	n/a	0.001361	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-20	0.01	n/a	4/8/2020	0.01ND	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-21	0.01	n/a	4/7/2020	0.01ND	17	n/a	n/a	58.82	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-22	0.02471	n/a	4/7/2020	0.01ND	17	0.008441	0.00633	11.76	None	No	0.0004115	Param Intra 1 of 2
Zinc (mg/L)	GWC-9	0.01	n/a	4/8/2020	0.01ND	37	n/a	n/a	45.95	n/a	n/a	0.001361	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWB-4R	0.1912	n/a	4/7/2020	0.01ND	40	-4.471	1.259	17.5	Kaplan-Meier	ln(x)	0.0004115	Param Intra 1 of 2
Zinc (mg/L)	GWB-5R	0.01	n/a	4/7/2020	0.01ND	30	n/a	n/a	56.67	n/a	n/a	0.002008	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWB-6R	0.01034	n/a	4/7/2020	0.01ND	19	0.06024	0.01655	26.32	Kaplan-Meier	sqrt(x)	0.0004115	Param Intra 1 of 2

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric

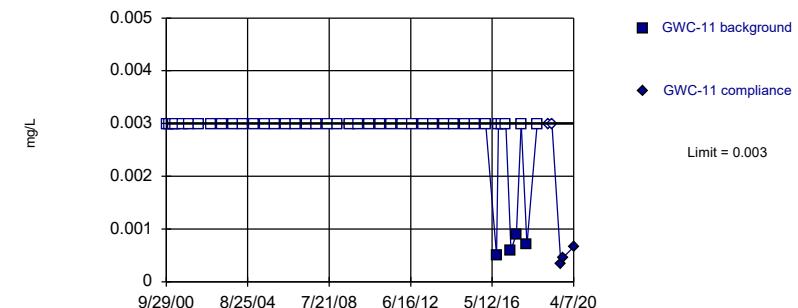


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 90.7% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

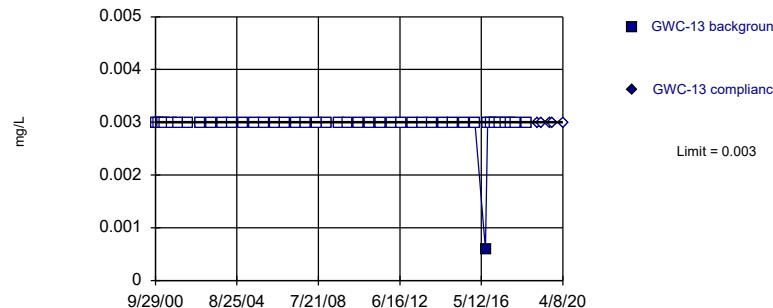
Constituent: Antimony Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Antimony Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric

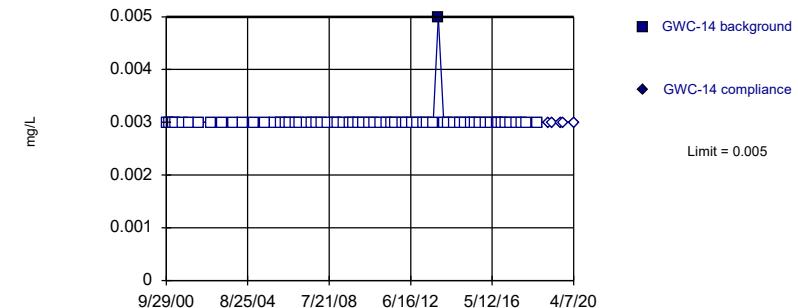


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 97.67% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric



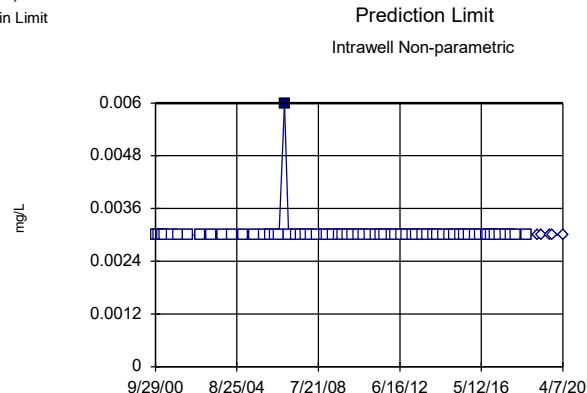
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 64 background values. 98.44% NDs. Well-constituent pair annual alpha = 0.0009462. Individual comparison alpha = 0.0004732 (1 of 2).

Constituent: Antimony Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Antimony Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

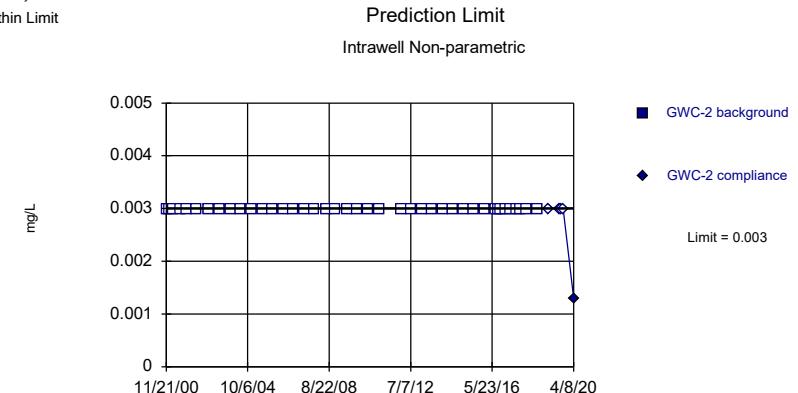
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 64 background values. 98.44% NDs. Well-constituent pair annual alpha = 0.0009462. Individual comparison alpha = 0.0004732 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



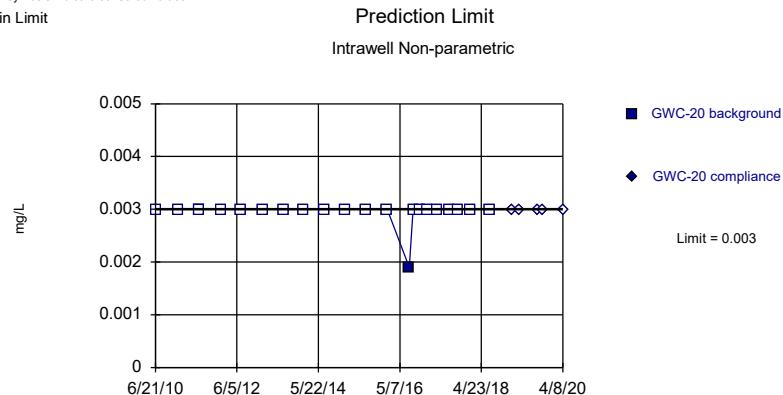
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 41) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Constituent: Antimony Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Antimony Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

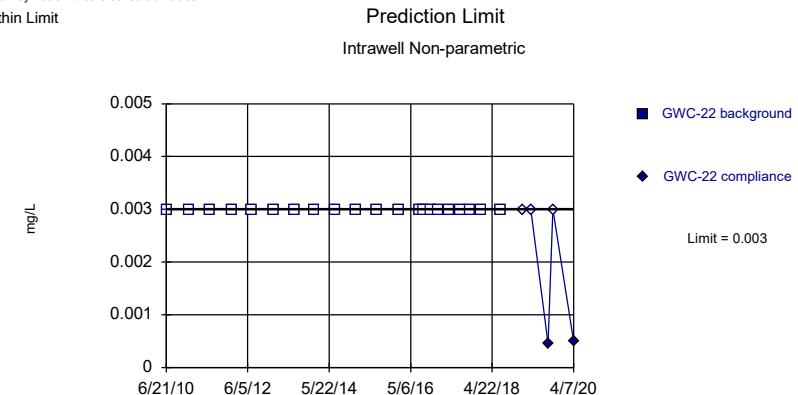
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 95.45% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 21) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

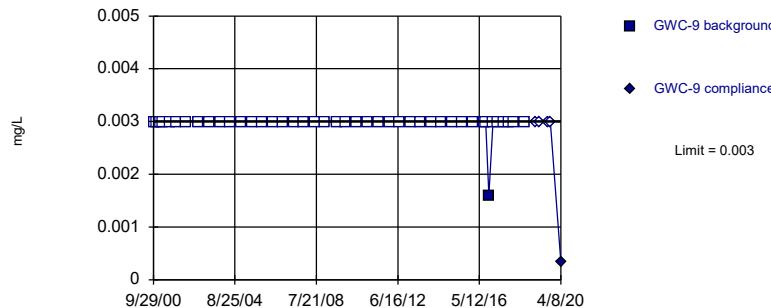
Constituent: Antimony Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Antimony Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric

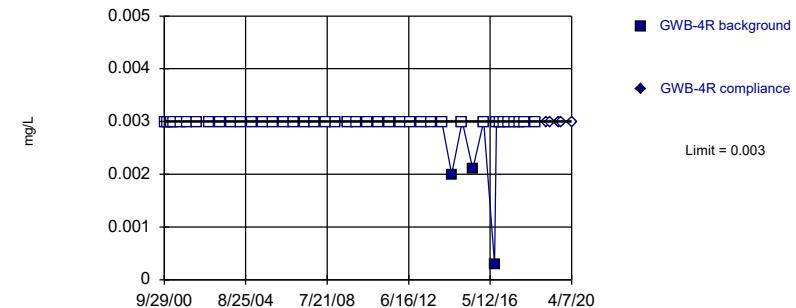


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 97.67% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 93.02% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

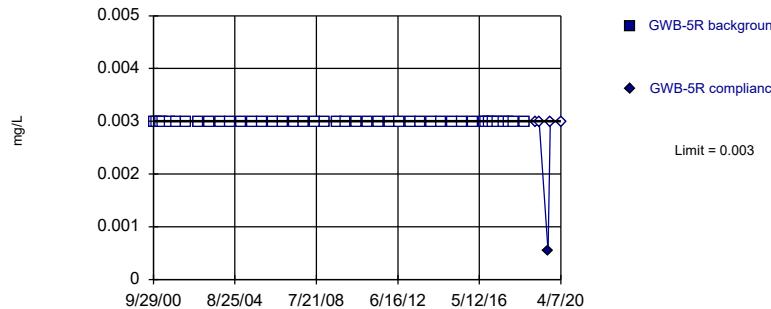
Constituent: Antimony Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Antimony Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric

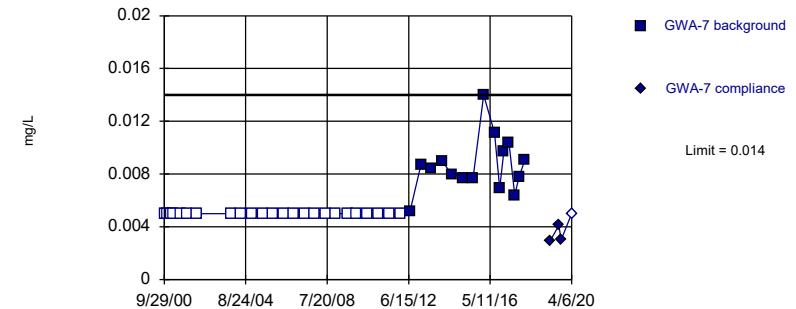


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 43) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric



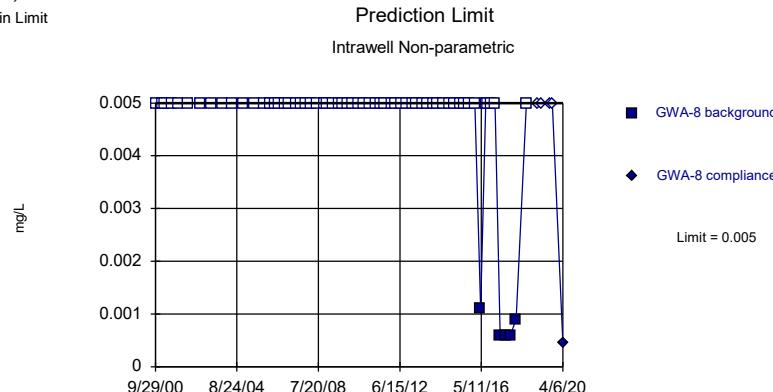
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 61.54% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

Constituent: Antimony Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Arsenic Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

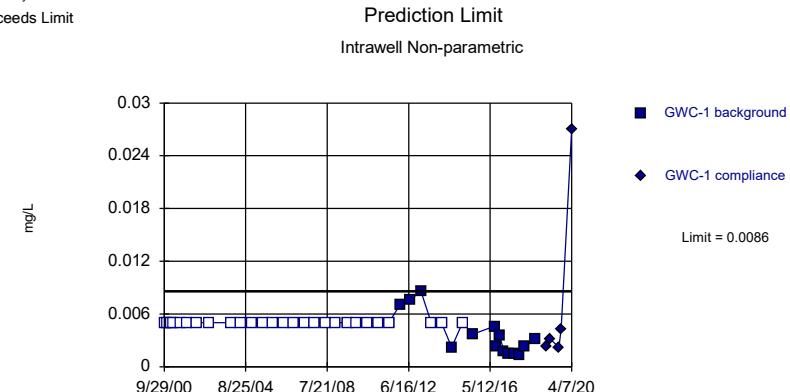
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 63 background values. 92.06% NDs. Well-constituent pair annual alpha = 0.0009737. Individual comparison alpha = 0.000487 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Exceeds Limit



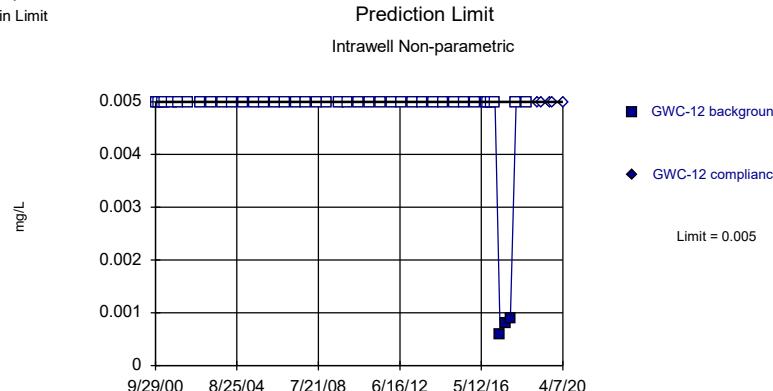
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 65.85% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Constituent: Arsenic Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Arsenic Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

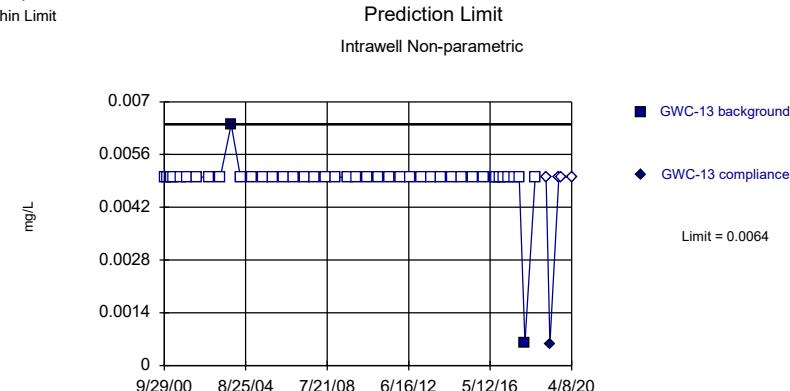
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 93.02% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



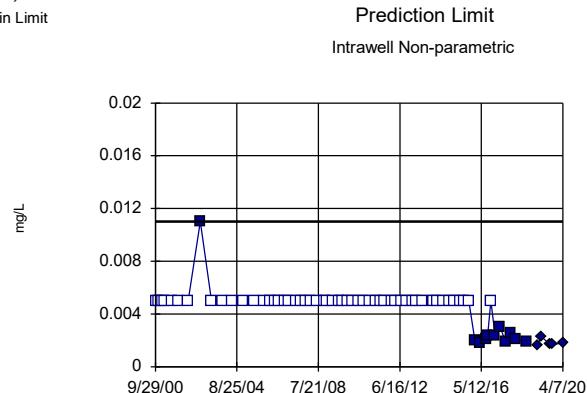
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 95.35% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Arsenic Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Arsenic Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

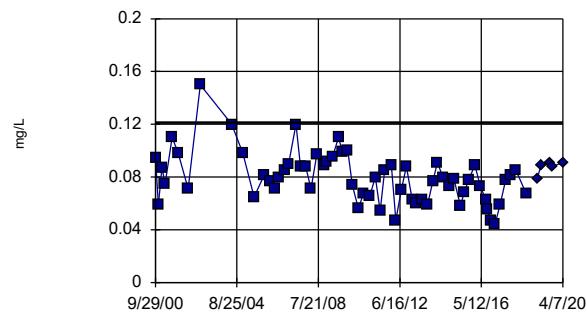


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 64 background values. 81.25% NDs. Well-constituent pair annual alpha = 0.0009462. Individual comparison alpha = 0.0004732 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG

Within Limit

Prediction Limit  
Intrawell Parametric



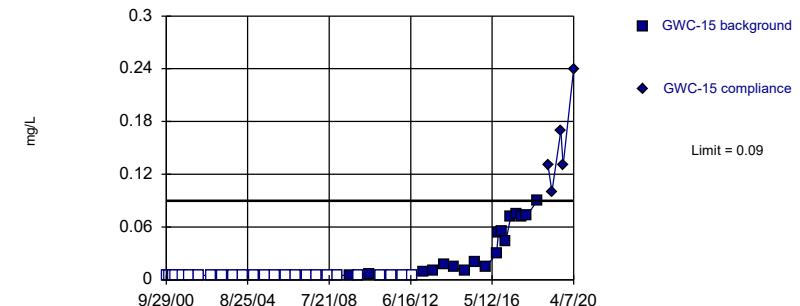
Background Data Summary: Mean=0.07945, Std. Dev.=0.01932, n=62. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9486, critical = 0.947. Kappa = 2.162 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Arsenic Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit  
Intrawell Non-parametric



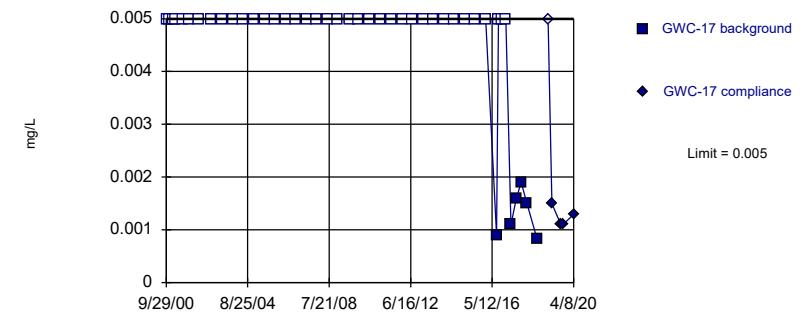
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 58.14% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Arsenic Analysis Run 5/24/2020 8:39 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG

Within Limit

Prediction Limit  
Intrawell Non-parametric

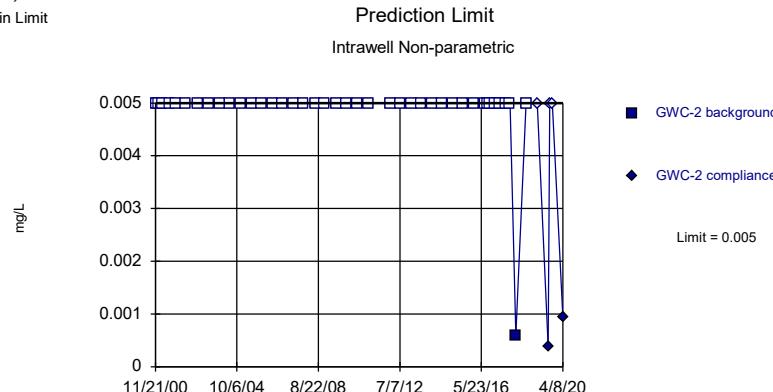


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 86.05% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Arsenic Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

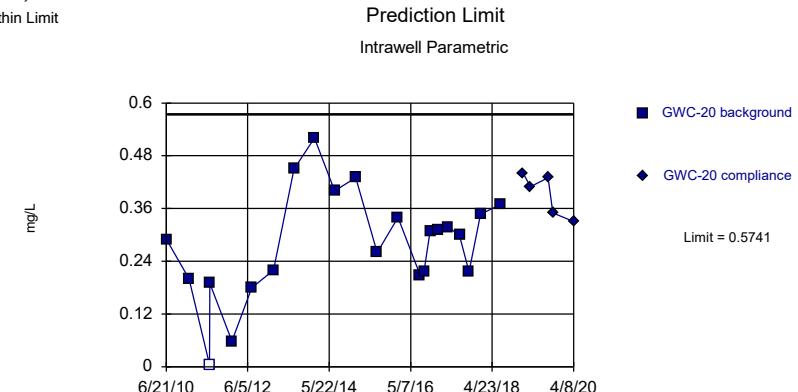
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 97.56% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



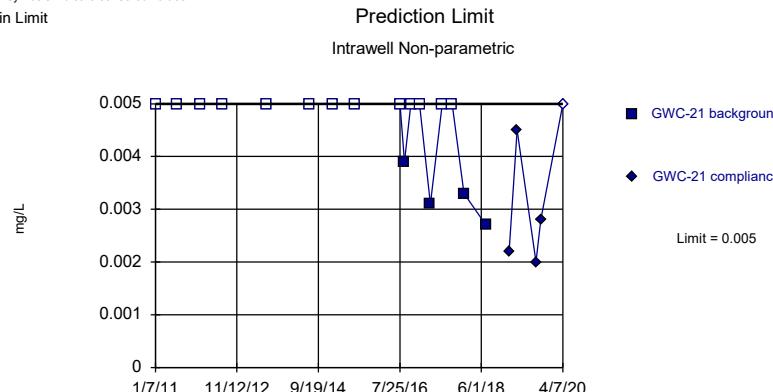
Background Data Summary: Mean=0.2788, Std. Dev.=0.1215, n=22, 4.545% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9753, critical = 0.878. Kappa = 2.431 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Arsenic Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Arsenic Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

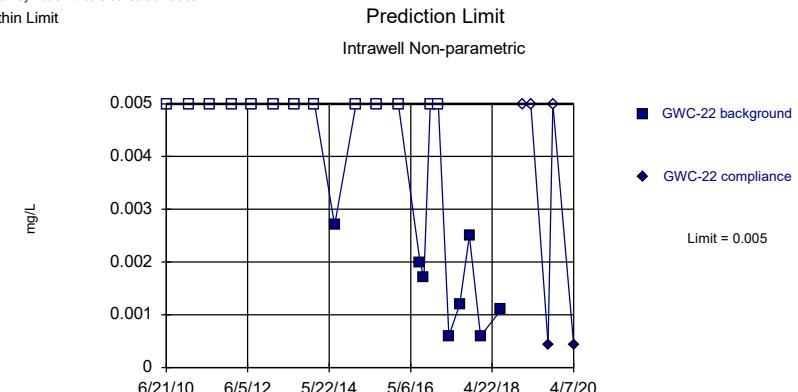
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



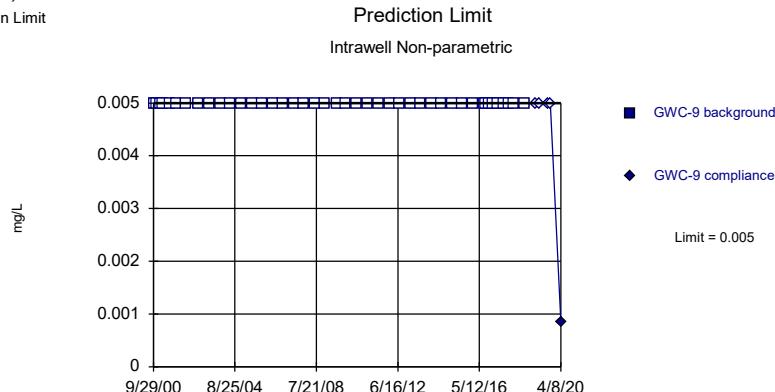
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 61.9% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Arsenic Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Arsenic Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

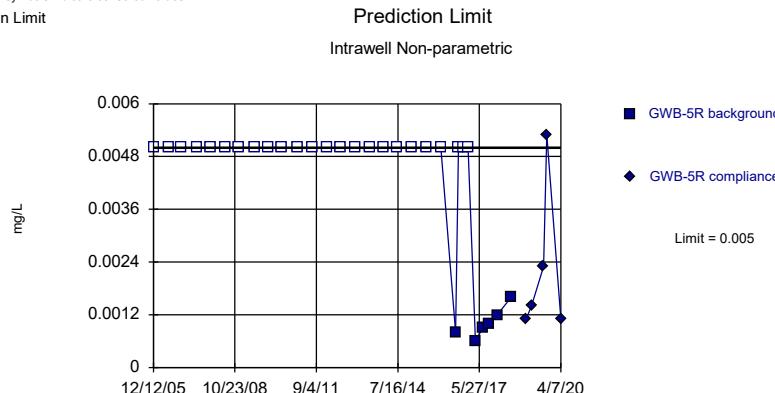
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values ( $n = 43$ ) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

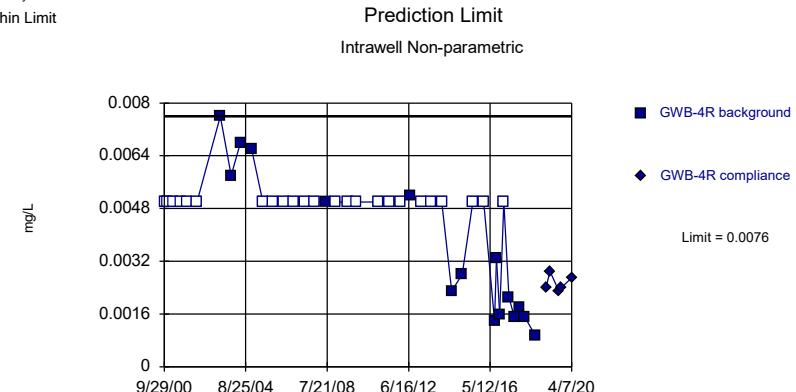


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 80% NDs. Well-constituent pair annual alpha = 0.004011. Individual comparison alpha = 0.002008 (1 of 2).

Constituent: Arsenic Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

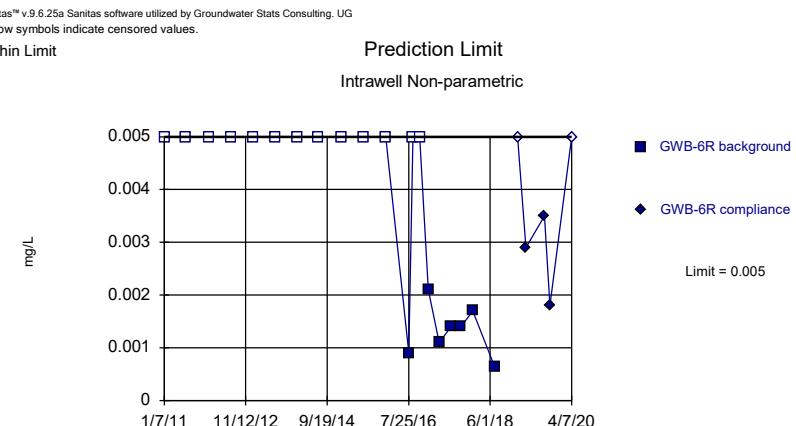


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 60% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Constituent: Arsenic Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



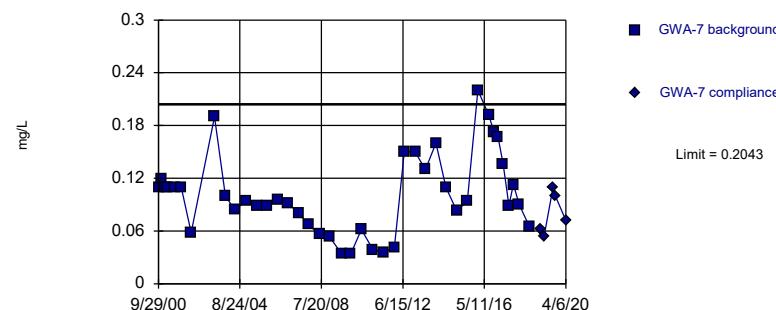
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

## Prediction Limit

Intrawell Parametric

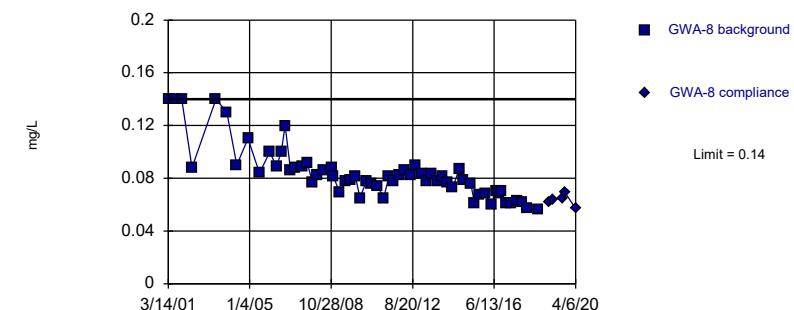


Background Data Summary: Mean=0.1021, Std. Dev.=0.04574, n=41. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9479, critical = 0.92. Kappa = 2.233 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Within Limit

## Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. Well-constituent pair annual alpha = 0.001056. Individual comparison alpha = 0.0005281 (1 of 2).

Constituent: Barium Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Barium Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

## Prediction Limit

Intrawell Parametric

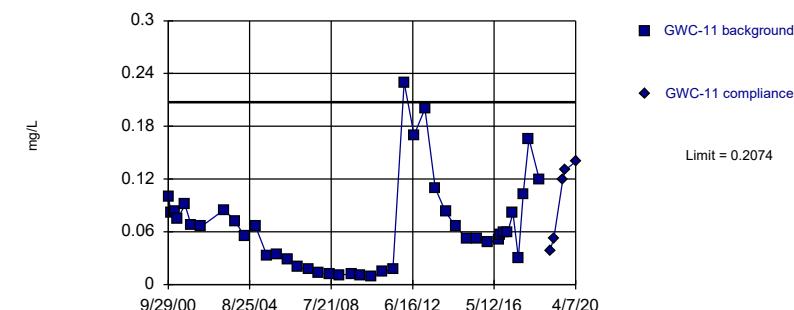


Background Data Summary (based on square root transformation): Mean=0.2379, Std. Dev.=0.04483, n=42. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9416, critical = 0.922. Kappa = 2.228 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Within Limit

## Prediction Limit

Intrawell Parametric



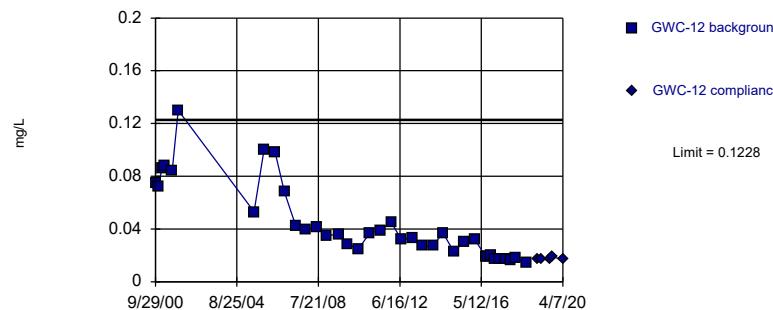
Background Data Summary (based on square root transformation): Mean=0.2407, Std. Dev.=0.09636, n=42. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9464, critical = 0.922. Kappa = 2.228 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Barium Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Barium Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

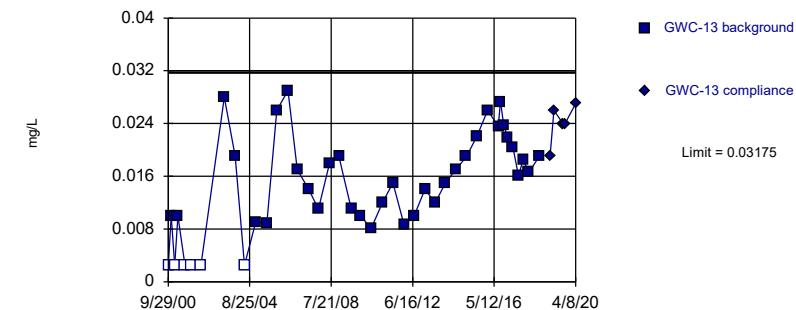
**Prediction Limit**  
Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=0.3382, Std. Dev.=0.07041, n=37.  
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9179, critical = 0.914. Kappa = 2.256 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Within Limit

**Prediction Limit**  
Intrawell Parametric



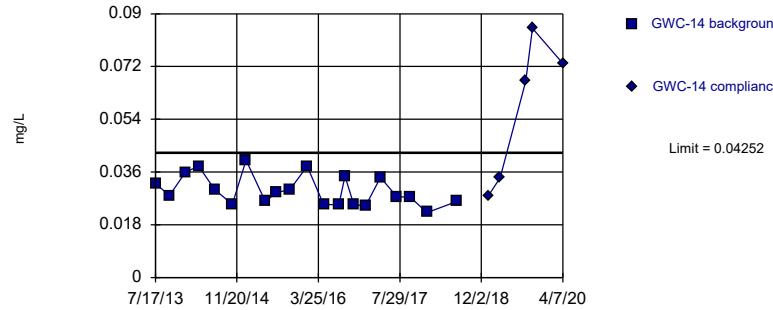
Background Data Summary: Mean=0.01478, Std. Dev.=0.00762, n=42, 14 29% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9482, critical = 0.922. Kappa = 2.228 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Barium Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Barium Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Exceeds Limit

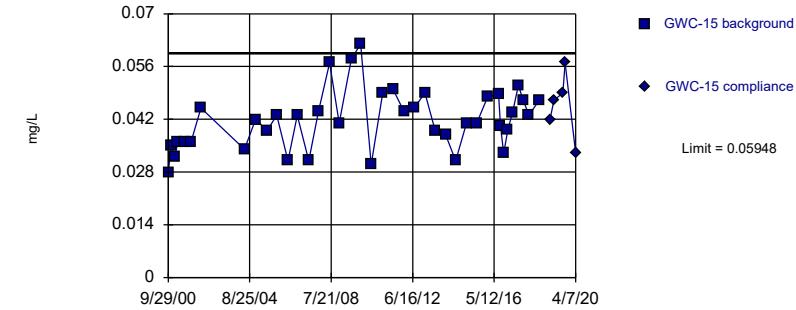
**Prediction Limit**  
Intrawell Parametric



Background Data Summary: Mean=0.02967, Std. Dev.=0.00524, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9173, critical = 0.873. Kappa = 2.452 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Within Limit

**Prediction Limit**  
Intrawell Parametric



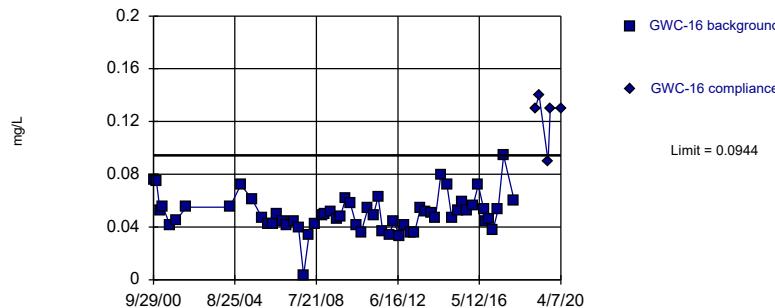
Background Data Summary: Mean=0.04178, Std. Dev.=0.00791, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.969, critical = 0.919. Kappa = 2.238 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Barium Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Barium Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Exceeds Limit

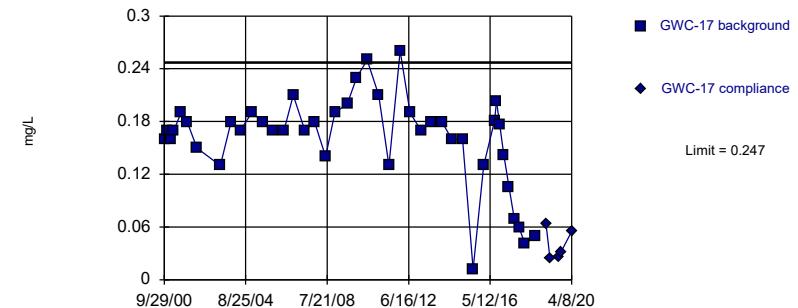
**Prediction Limit**  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 59 background values. Well-constituent pair annual alpha = 0.001101. Individual comparison alpha = 0.0005506 (1 of 2).

Within Limit

**Prediction Limit**  
Intrawell Parametric



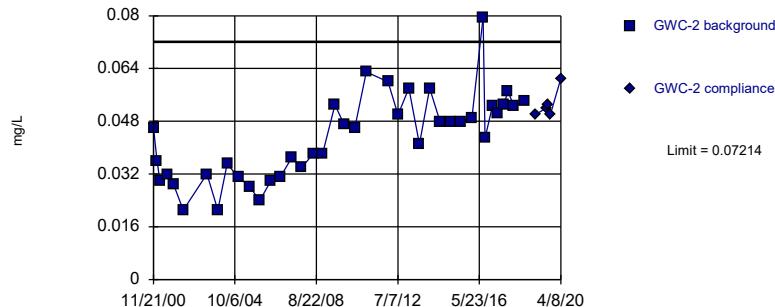
Background Data Summary (based on square transformation): Mean=0.02849, Std. Dev.=0.01459, n=42. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9442, critical = 0.922. Kappa = 2.228 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Barium Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Barium Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

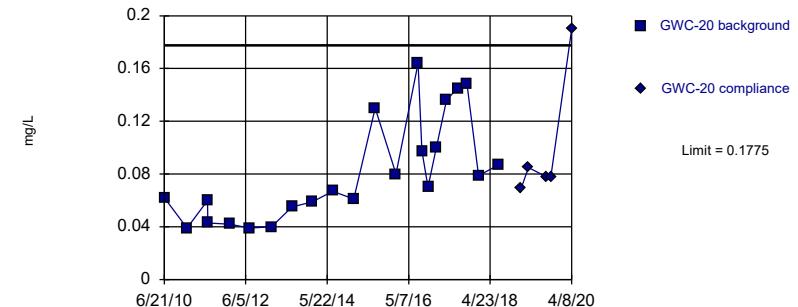
**Prediction Limit**  
Intrawell Parametric



Background Data Summary: Mean=0.04318, Std. Dev.=0.0129, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9652, critical = 0.917. Kappa = 2.244 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Exceeds Limit

**Prediction Limit**  
Intrawell Parametric



Background Data Summary: Mean=0.08198, Std. Dev.=0.03928, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8843, critical = 0.878. Kappa = 2.431 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

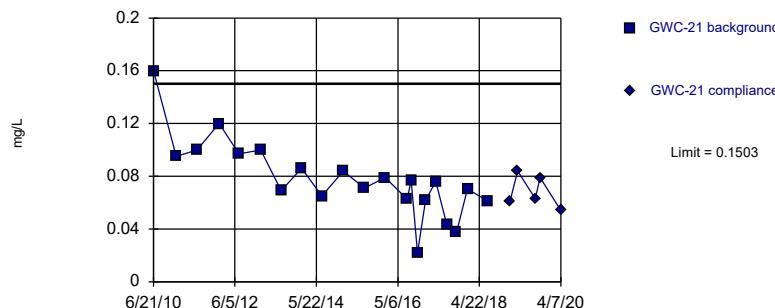
Constituent: Barium Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Barium Analysis Run 5/24/2020 8:40 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

## Prediction Limit

Intrawell Parametric

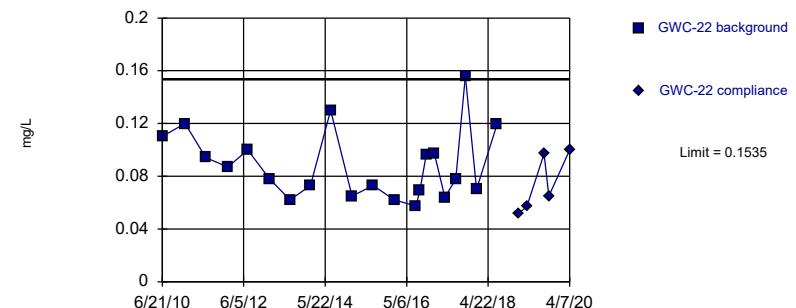


Background Data Summary: Mean=0.07795, Std. Dev.=0.0295, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9451, critical = 0.873. Kappa = 2.452 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.08871, Std. Dev.=0.02642, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9073, critical = 0.873. Kappa = 2.452 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Barium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Barium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

## Prediction Limit

Intrawell Non-parametric

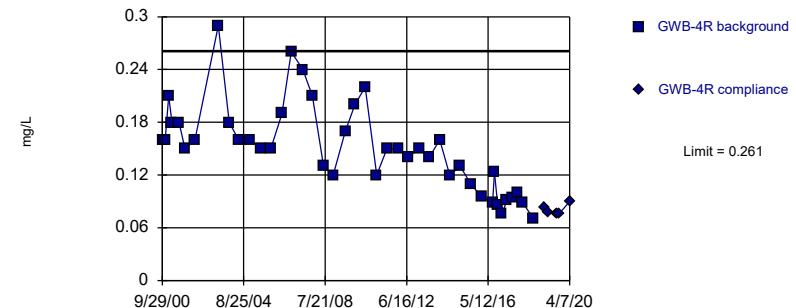


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 42 background values. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Within Limit

## Prediction Limit

Intrawell Parametric



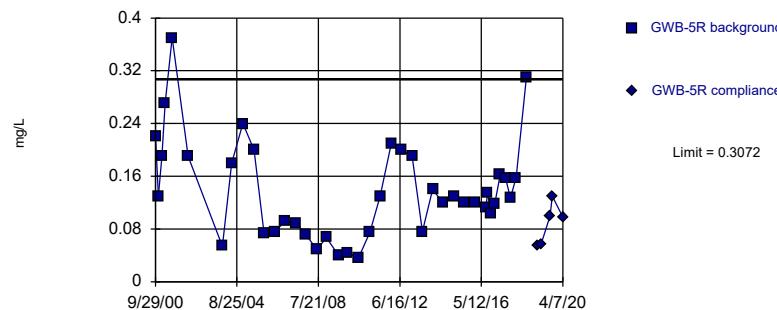
Background Data Summary: Mean=0.1503, Std. Dev.=0.04972, n=42. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9535, critical = 0.922. Kappa = 2.228 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Barium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Barium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

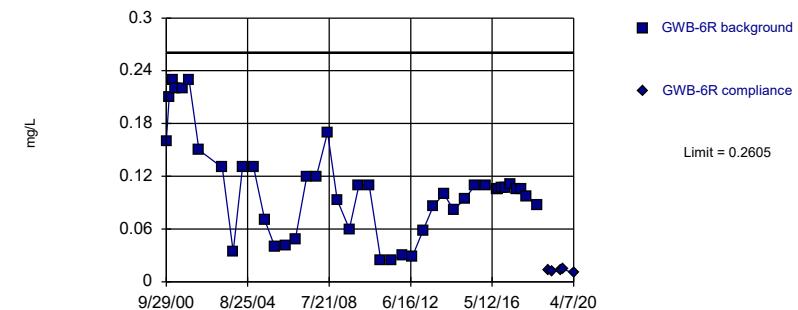
**Prediction Limit**  
Intrawell Parametric



Background Data Summary: Mean=0.1394, Std. Dev.=0.07497, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.93, critical = 0.919. Kappa = 2.238 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Within Limit

**Prediction Limit**  
Intrawell Parametric



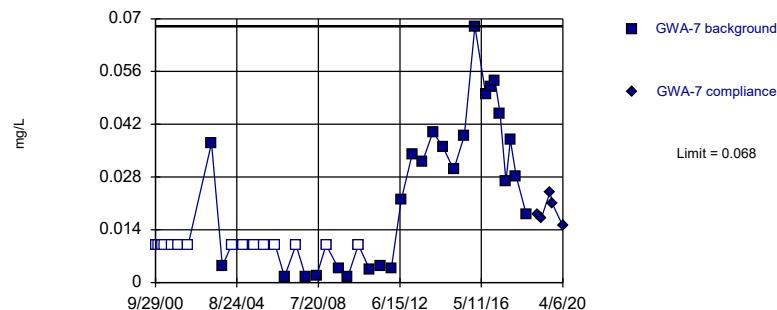
Background Data Summary (based on square root transformation): Mean=0.3159, Std. Dev.=0.0873, n=42. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9364, critical = 0.922. Kappa = 2.228 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Barium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Barium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

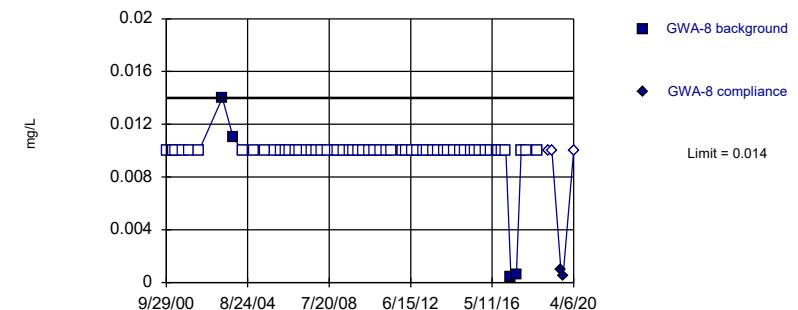
**Prediction Limit**  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 41 background values. 36.59% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Within Limit

**Prediction Limit**  
Intrawell Non-parametric



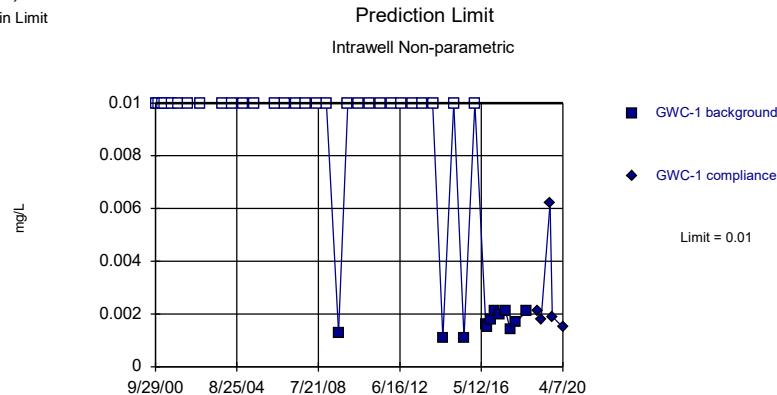
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 61 background values. 93.44% NDs. Well-constituent pair annual alpha = 0.001029. Individual comparison alpha = 0.0005144 (1 of 2).

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

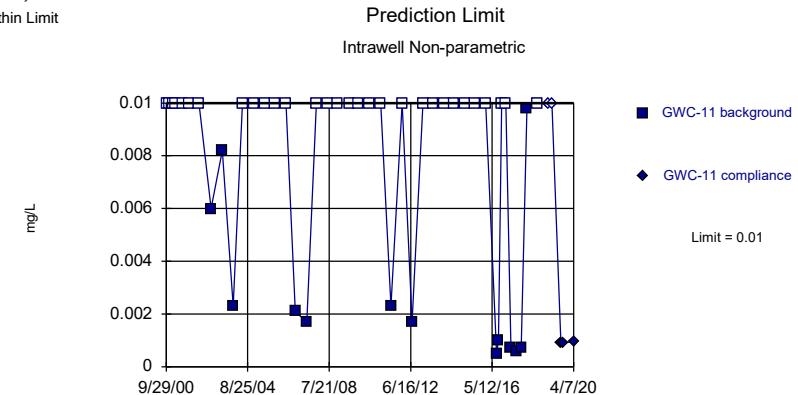
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 70.73% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



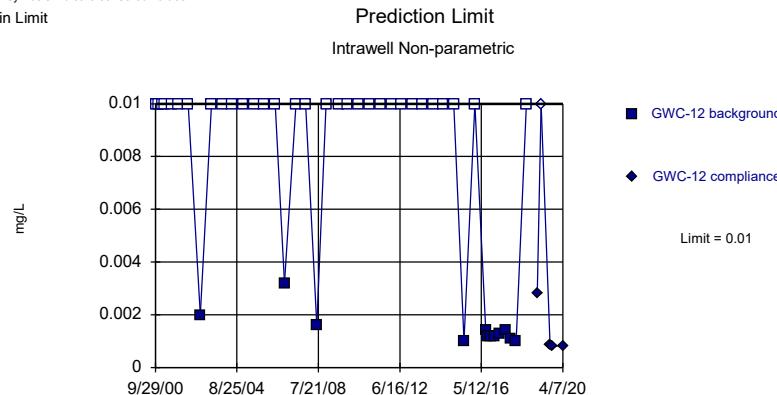
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 69.77% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

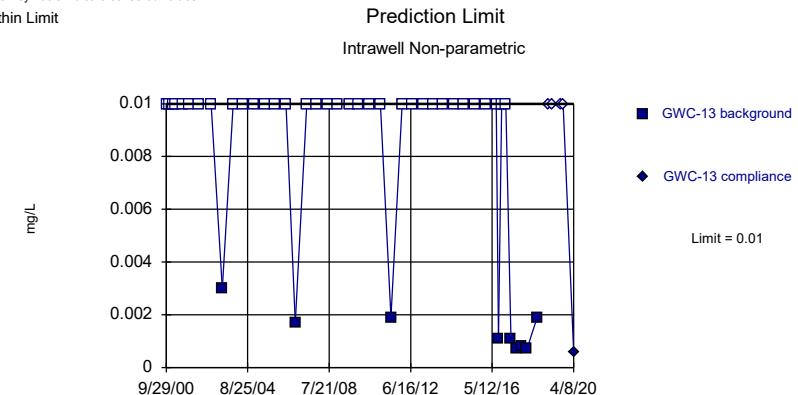
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 72.09% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



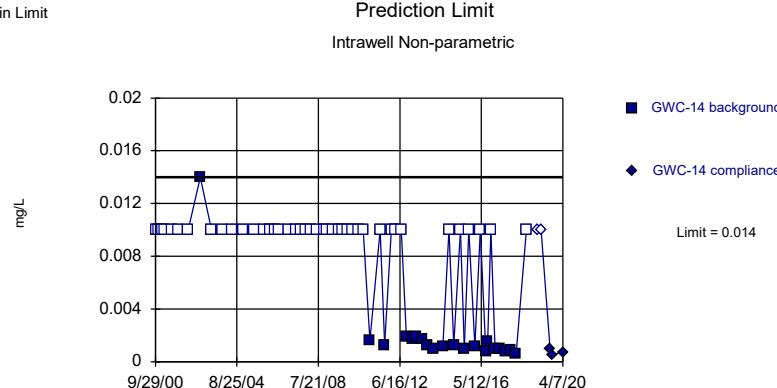
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 79.07% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

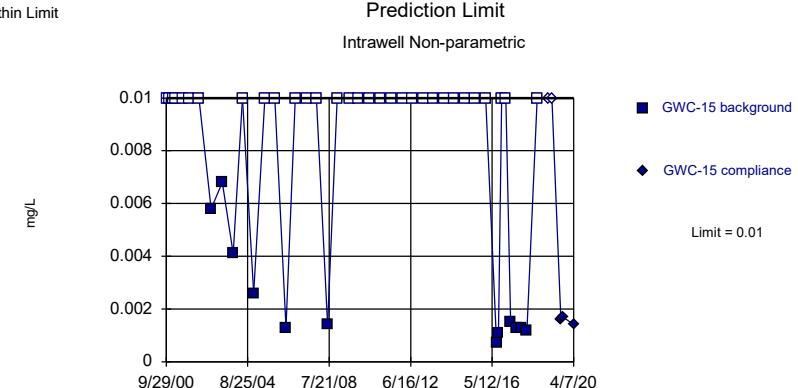
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 61 background values. 67.21% NDs. Well-constituent pair annual alpha = 0.001029. Individual comparison alpha = 0.0005144 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



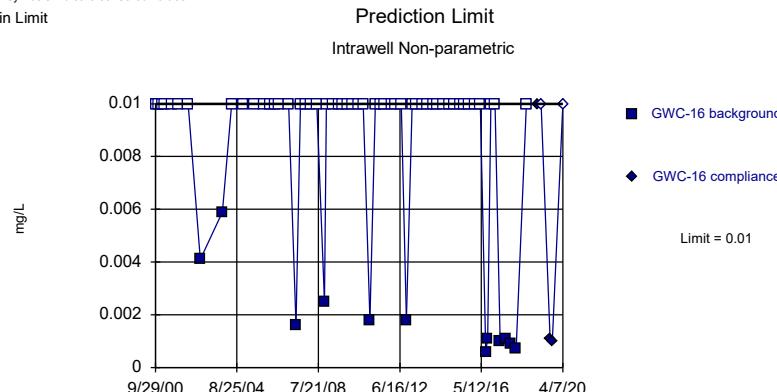
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 72.09% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

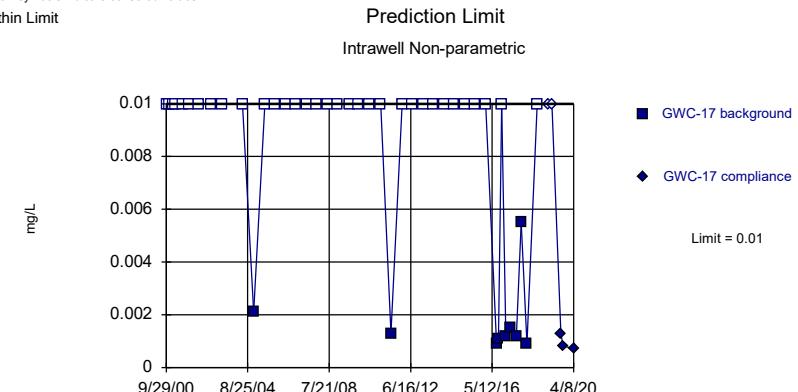
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 62 background values. 80.65% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



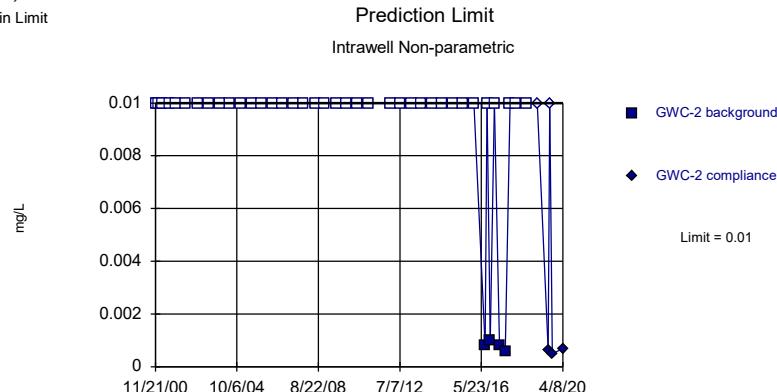
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 78.57% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

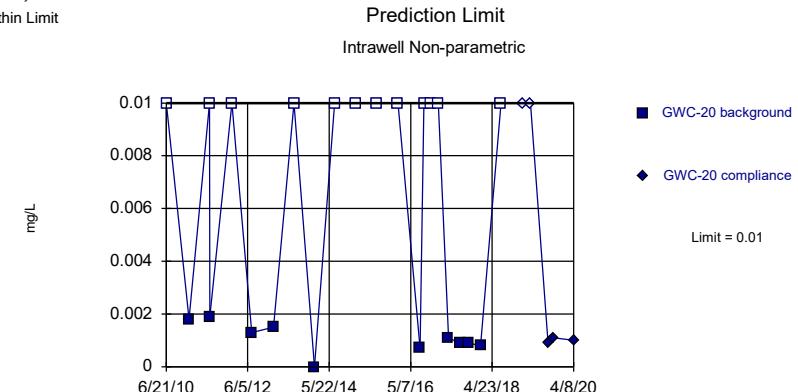
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 90.24% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



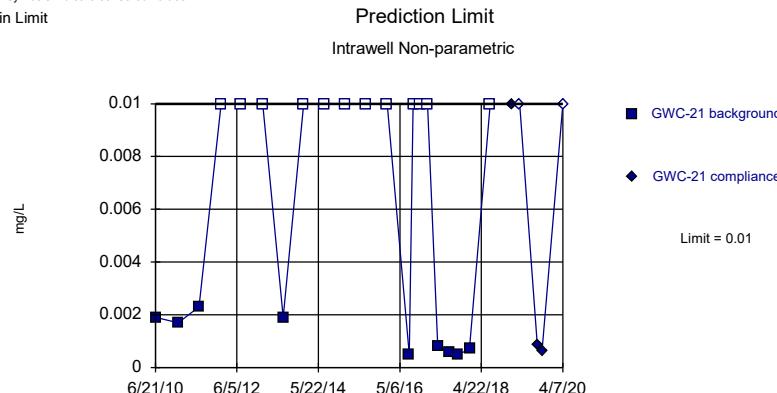
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

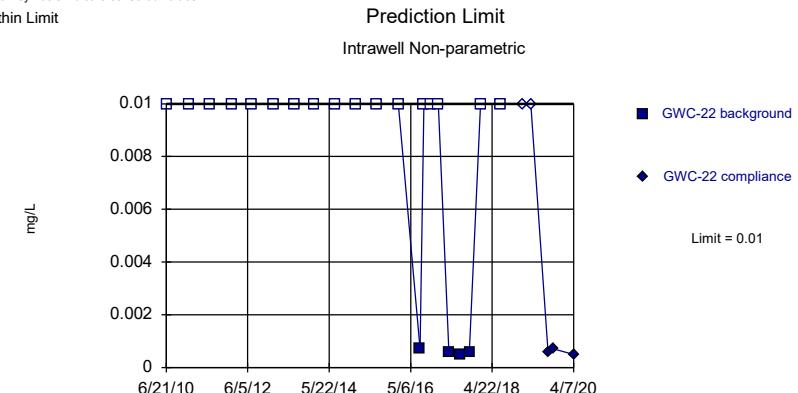
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



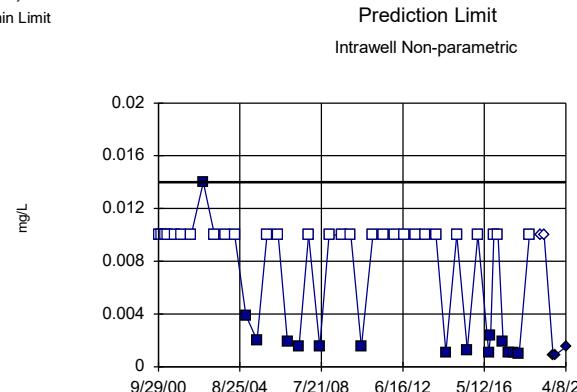
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 80.95% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

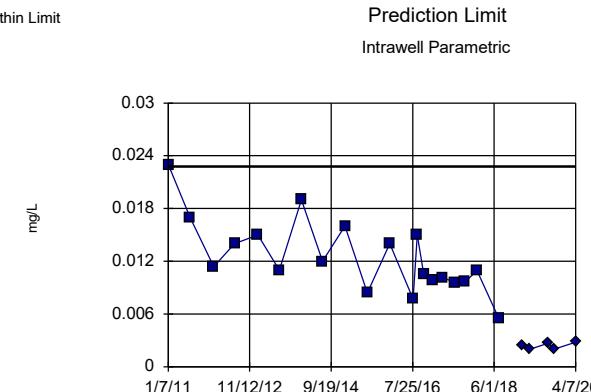
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 65.12% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG

Within Limit



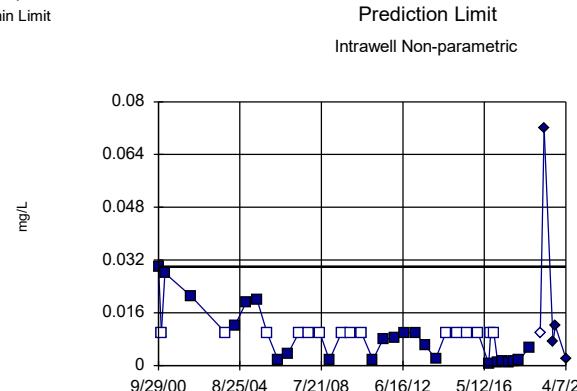
Background Data Summary: Mean=0.01249, Std. Dev.=0.004168, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9524, critical = 0.868. Kappa = 2.472 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Chromium Analysis Run 5/24/2020 8:41 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Chromium Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

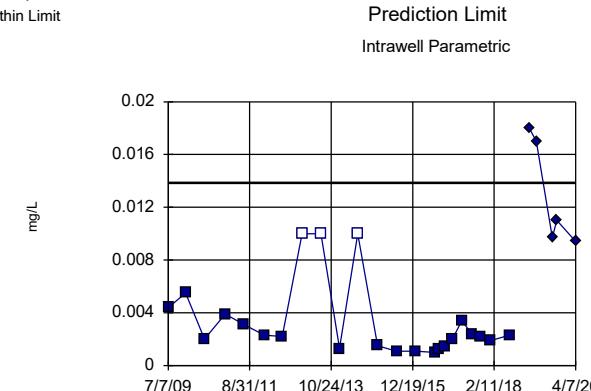
Within Limit



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 38 background values. 39.47% NDs. Well-constituent pair annual alpha = 0.002586. Individual comparison alpha = 0.001294 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



Background Data Summary (based on natural log transformation): Mean=-5.977, Std. Dev.=0.704, n=23, 13.04% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9066, critical = 0.881. Kappa = 2.411 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

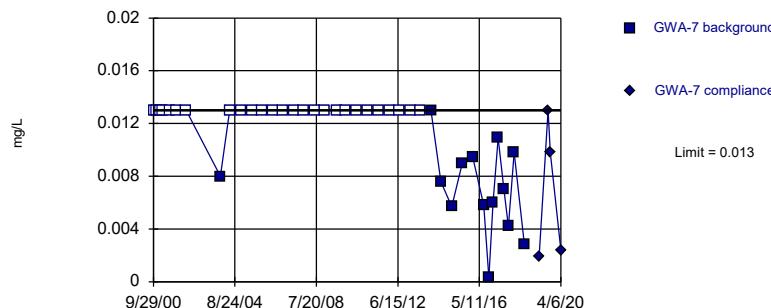
Constituent: Chromium Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Chromium Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric

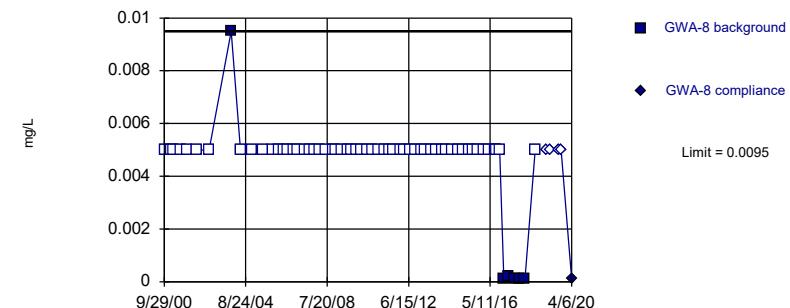


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 65% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 62 background values. 90.32% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

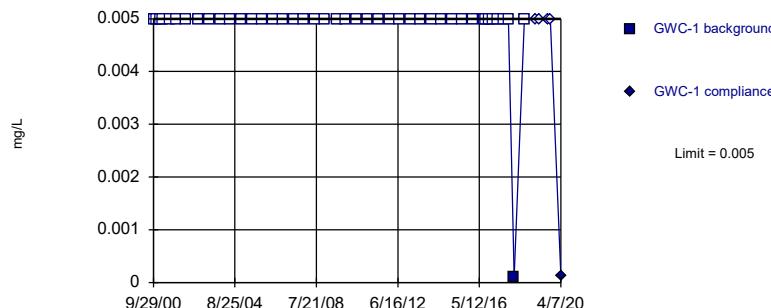
Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric

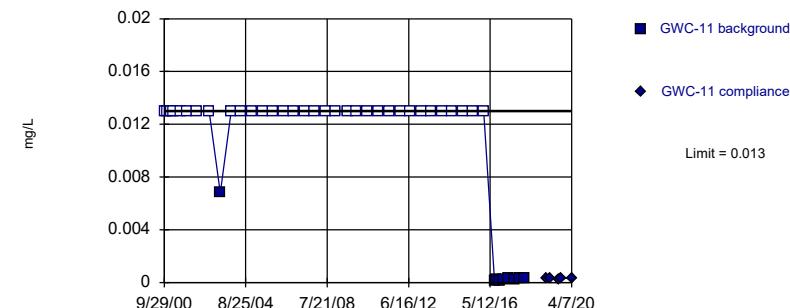


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 97.67% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric



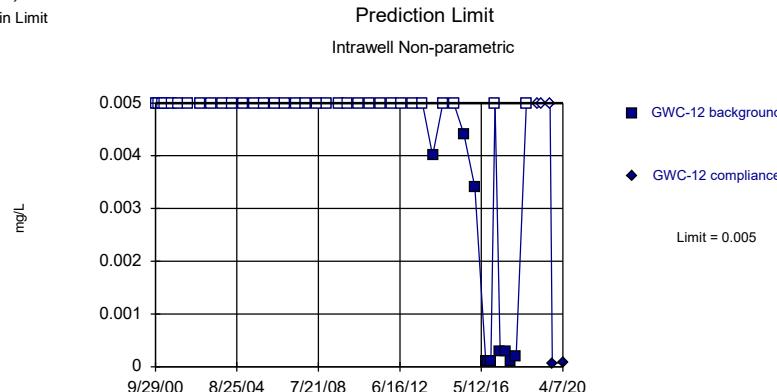
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 78.57% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

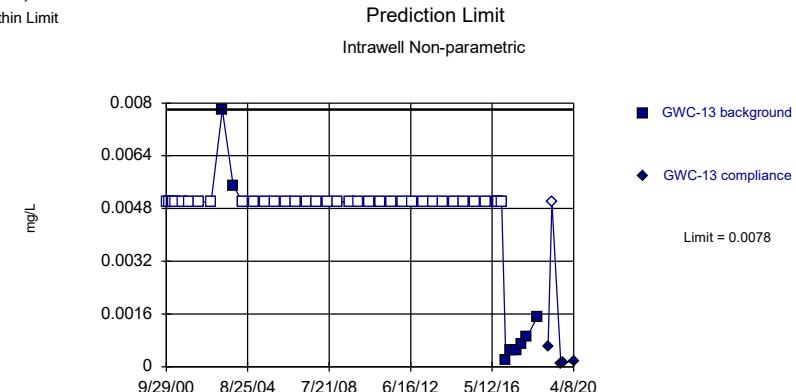
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 76.74% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



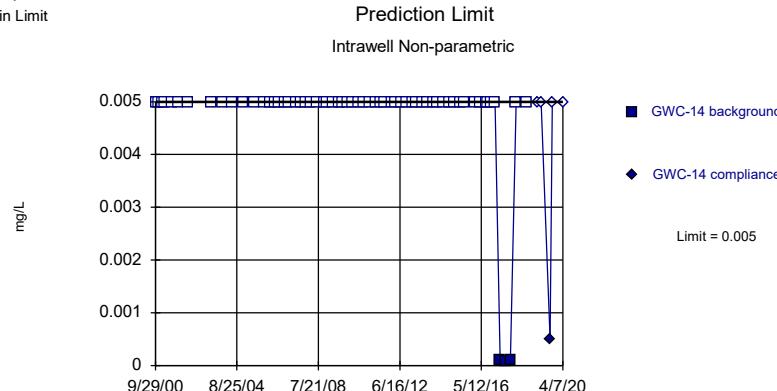
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 81.4% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

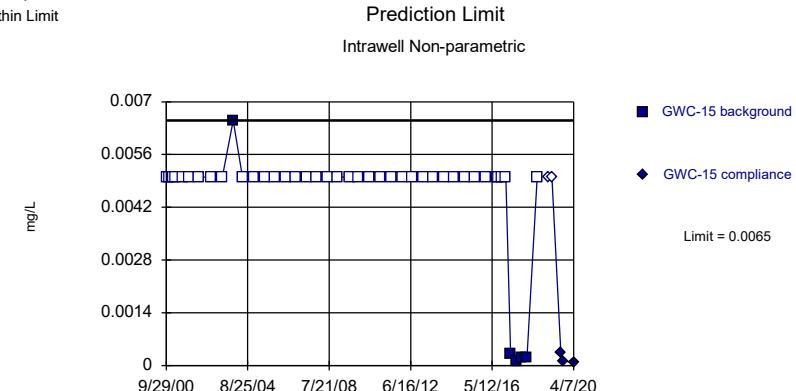
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 62 background values. 95.16% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



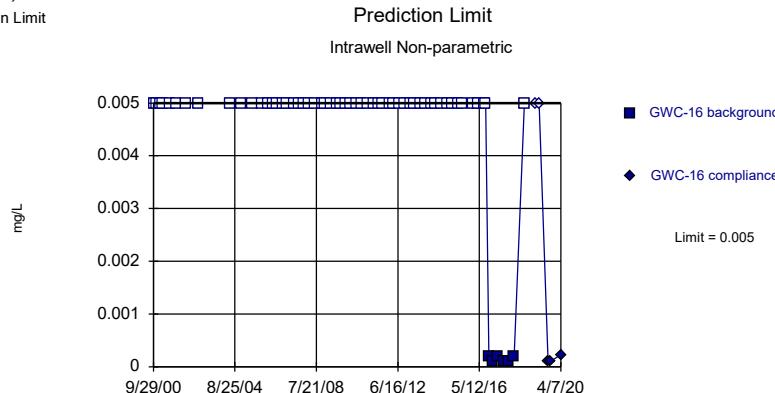
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 88.37% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

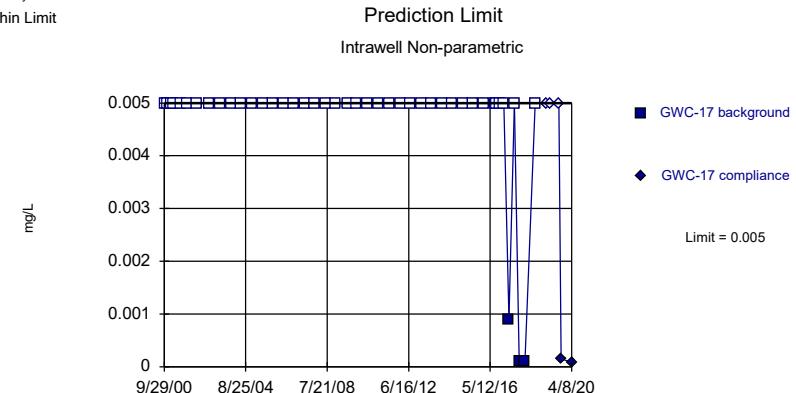
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 61 background values. 90.16% NDs. Well-constituent pair annual alpha = 0.001029. Individual comparison alpha = 0.0005144 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



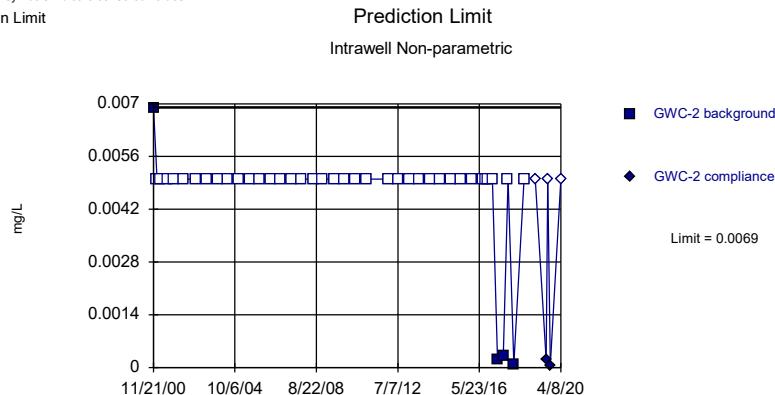
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 93.02% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

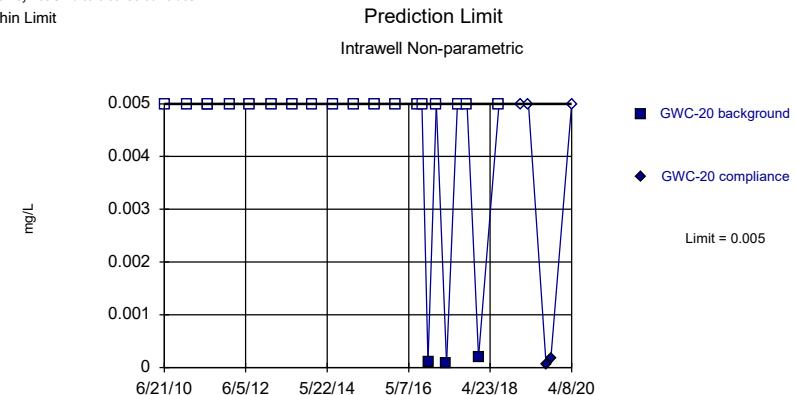
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 90.24% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



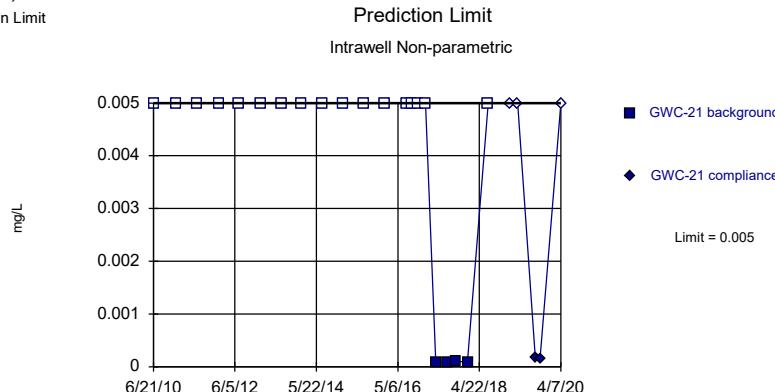
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 86.36% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

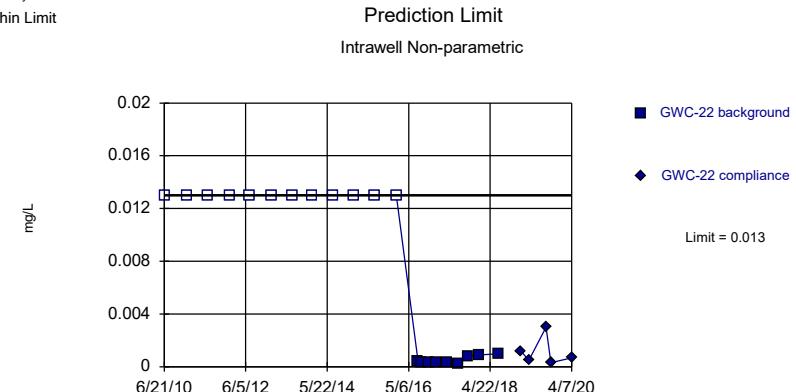
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 80.95% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



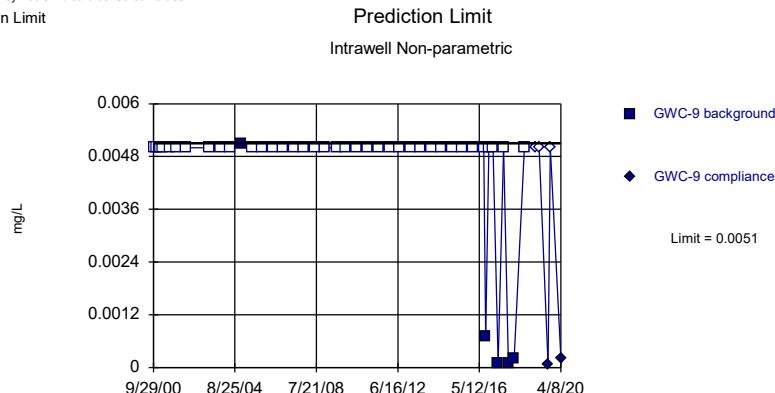
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

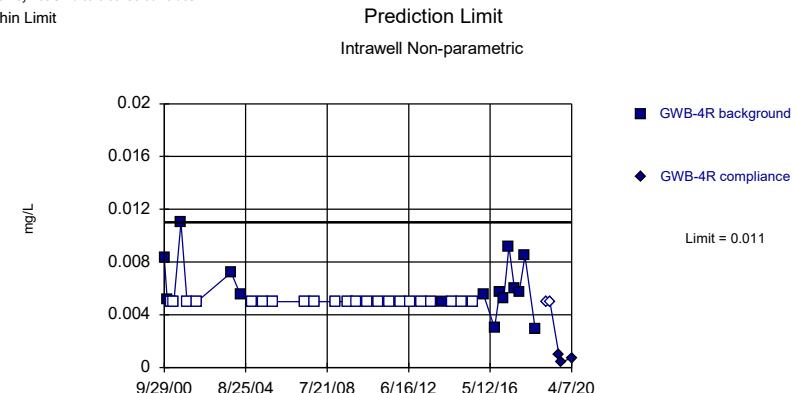
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 88.1% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 37 background values. 59.46% NDs. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha = 0.001361 (1 of 2).

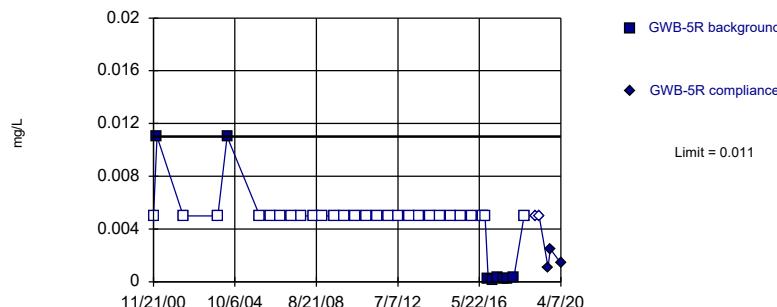
Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric

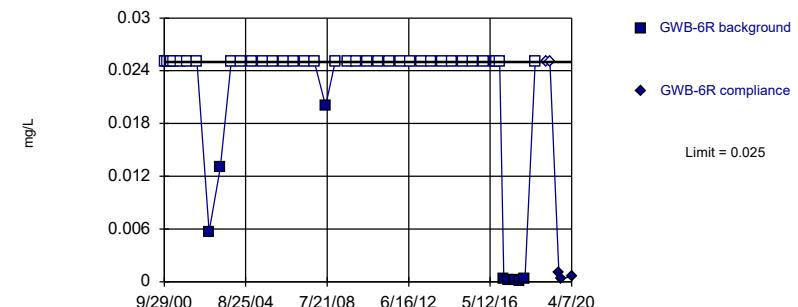


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 35 background values. 77.14% NDs. Well-constituent pair annual alpha = 0.002991. Individual comparison alpha = 0.001497 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 81.4% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

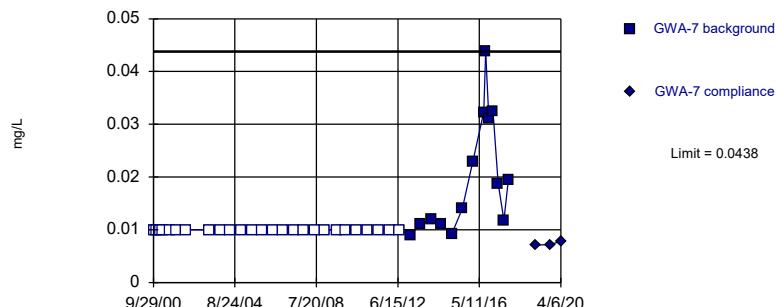
Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Lead Analysis Run 5/24/2020 8:42 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric

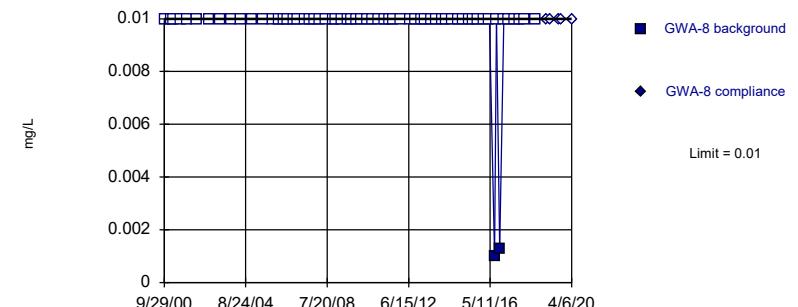


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 65% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 62 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

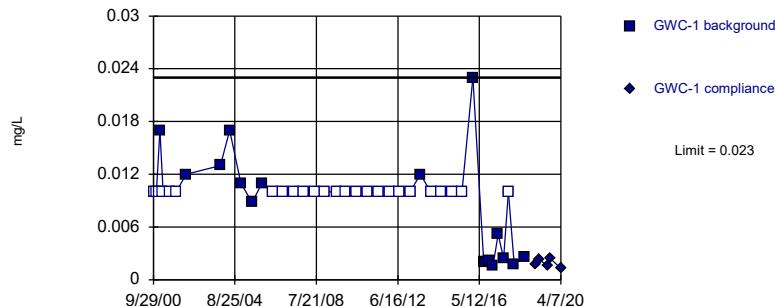
Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric



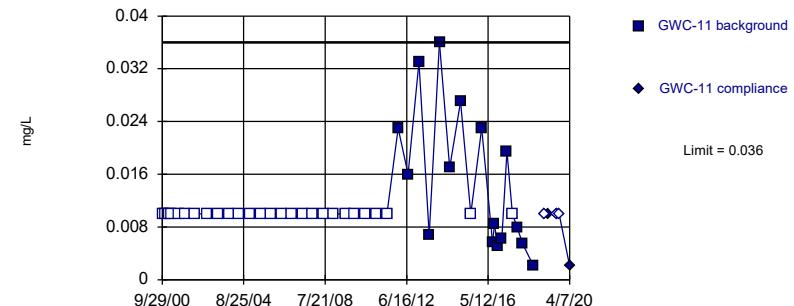
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 58.54% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 62.79% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

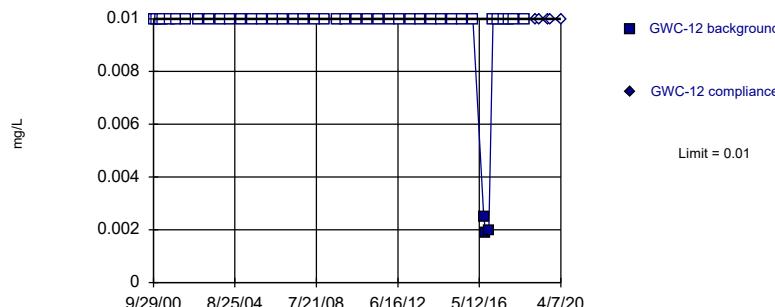
Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Non-parametric

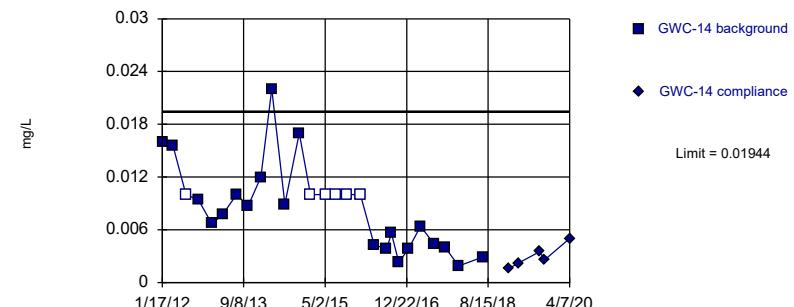


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 93.02% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric



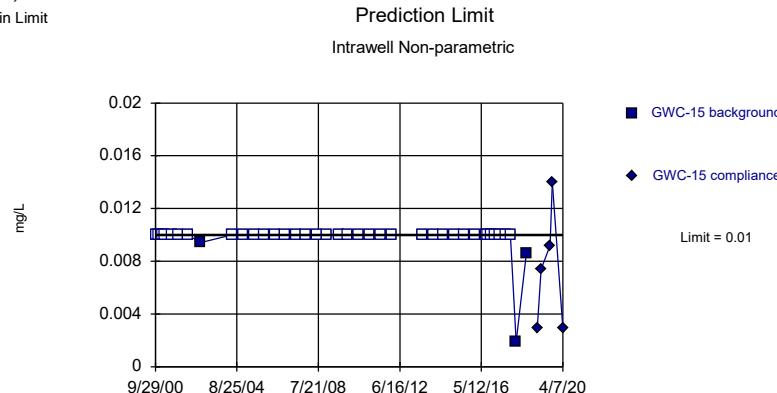
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.007544, Std. Dev.=0.005074, n=27, 22.22% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9204, critical = 0.894. Kappa = 2.345 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

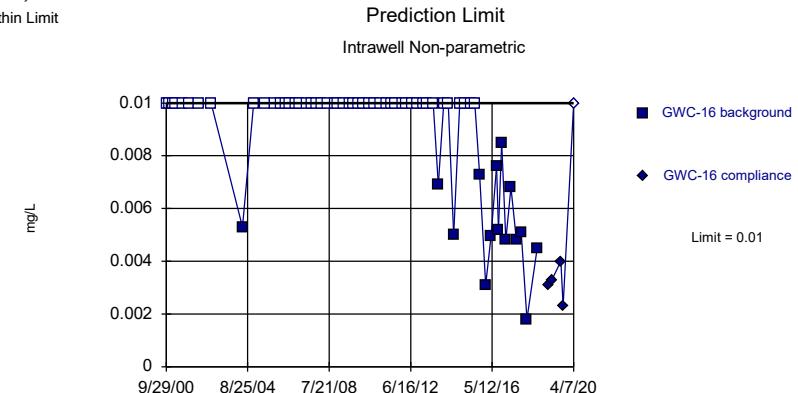
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



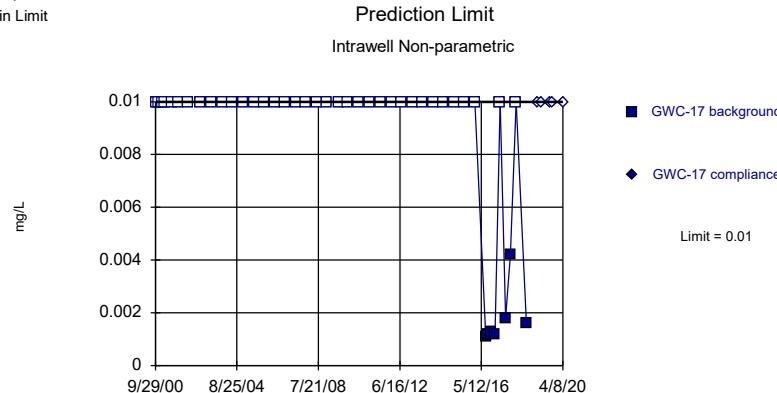
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 62 background values. 75.81% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

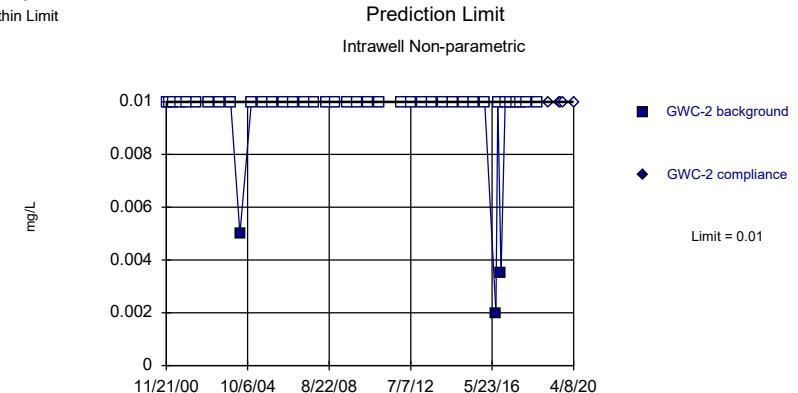
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 83.72% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



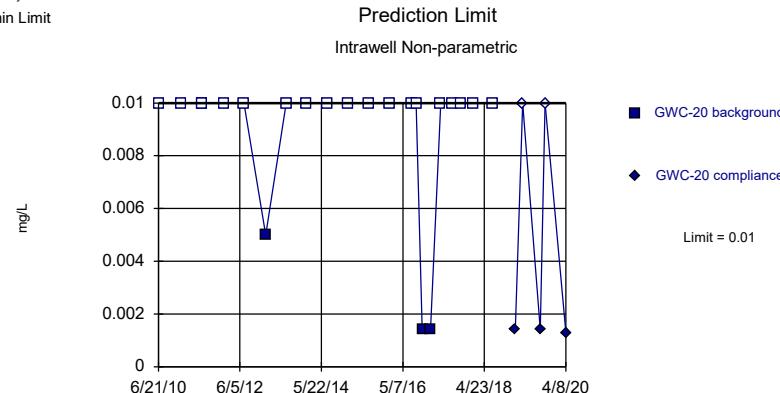
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 92.68% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

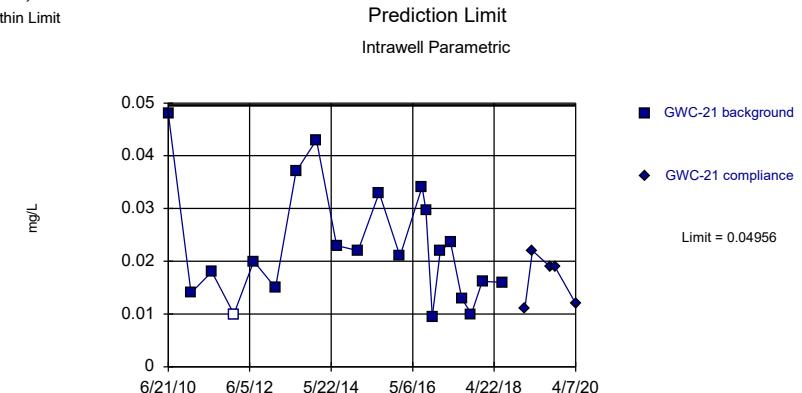
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 86.36% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



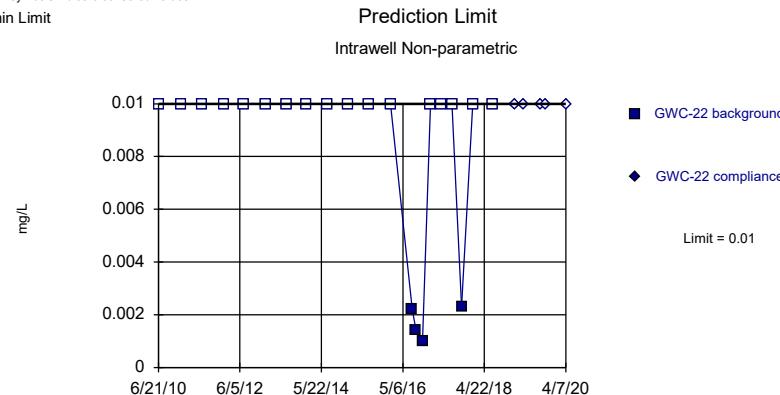
Background Data Summary: Mean=0.02277, Std. Dev.=0.01093, n=21, 4.762% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9174, critical = 0.873. Kappa = 2.452 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

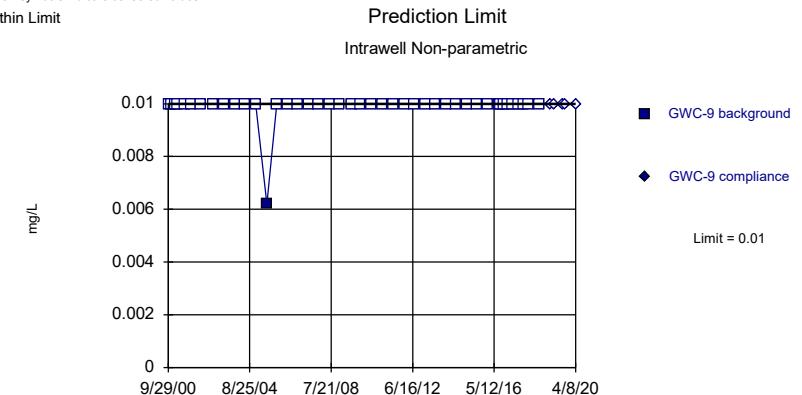
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 80.95% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



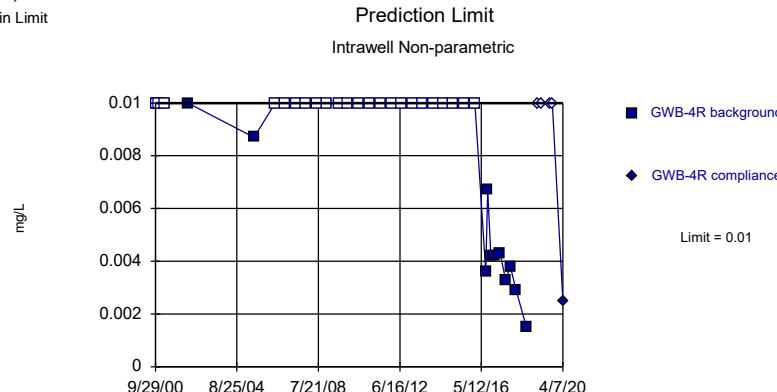
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 97.67% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

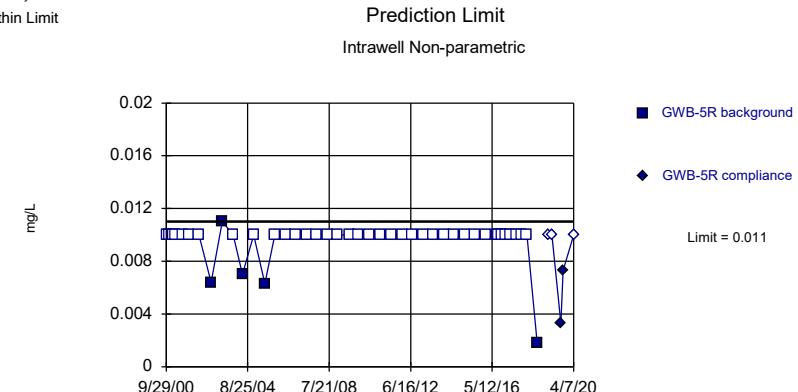
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 67.65% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



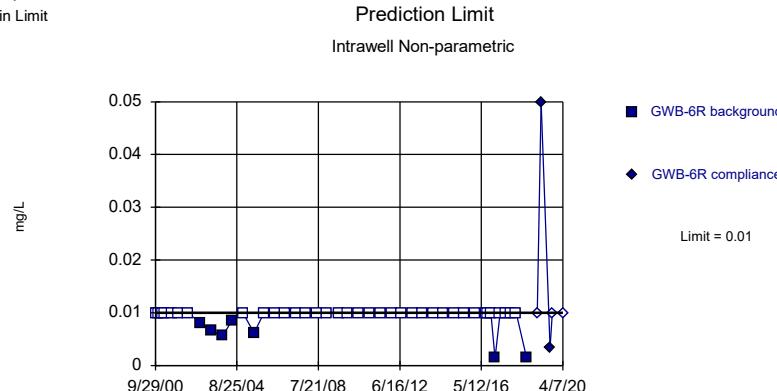
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 88.37% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

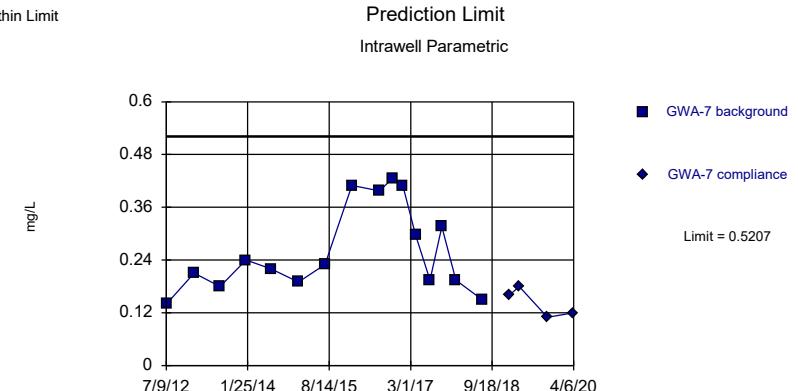
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 83.72% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG

Within Limit



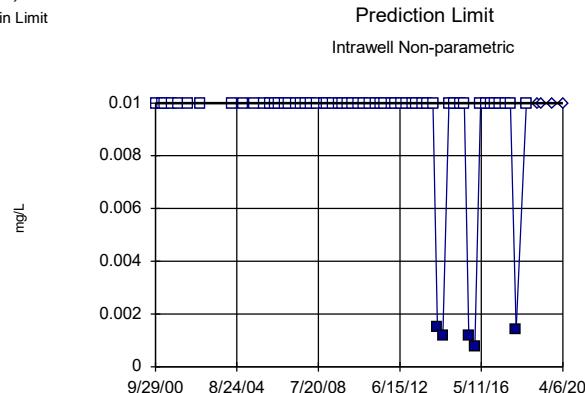
Background Data Summary: Mean=0.2627, Std. Dev.=0.09909, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8688, critical = 0.844. Kappa = 2.604 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Selenium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Vanadium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

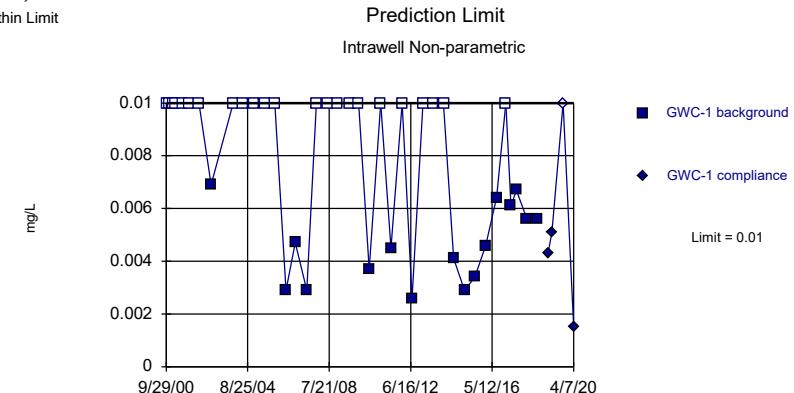
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 60 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.001056. Individual comparison alpha = 0.0005281 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



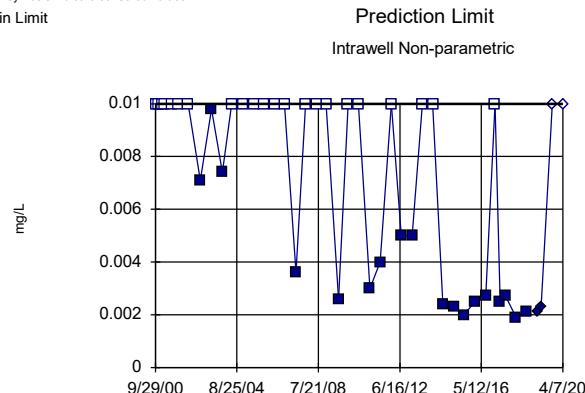
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 58.97% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

Constituent: Vanadium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Vanadium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

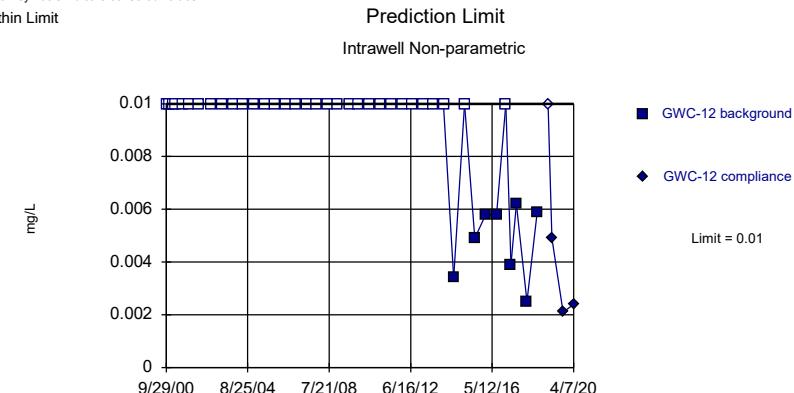
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 55% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



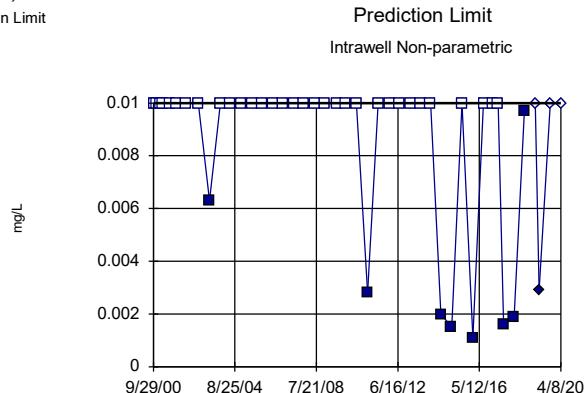
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 80% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Constituent: Vanadium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Vanadium Analysis Run 5/24/2020 8:43 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

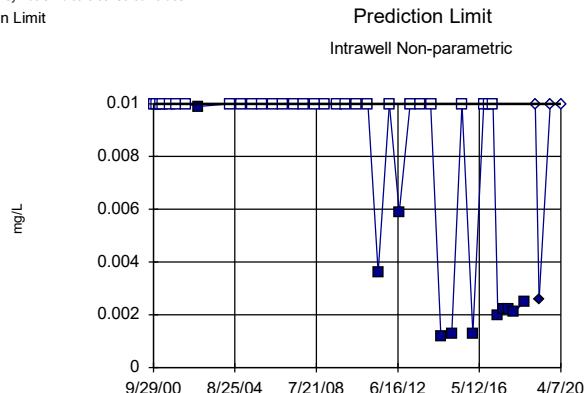
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 80% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

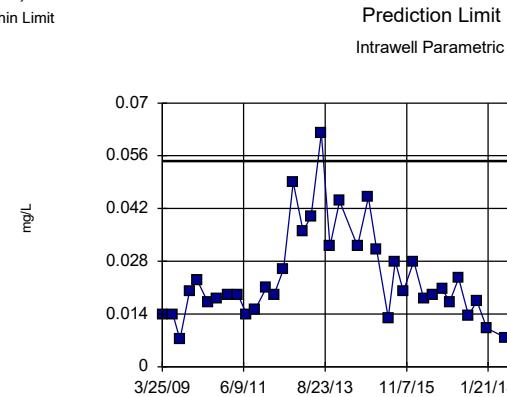


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 72.5% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Constituent: Vanadium Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



Background Data Summary (based on square root transformation): Mean=0.1496, Std. Dev.=0.03719, n=36.  
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9489, critical = 0.912. Kappa = 2.262 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

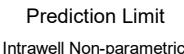
Constituent: Vanadium Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

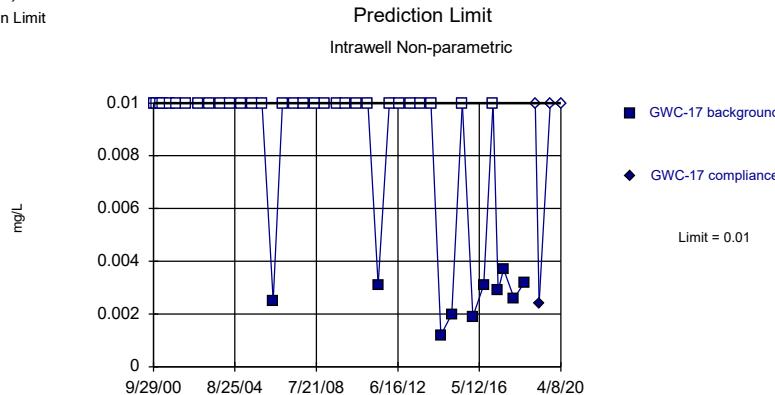


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 62 background values. 50% NDs. Well-constituent pair annual alpha = 0.001001. Individual comparison alpha = 0.0005007 (1 of 2).

Constituent: Vanadium Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

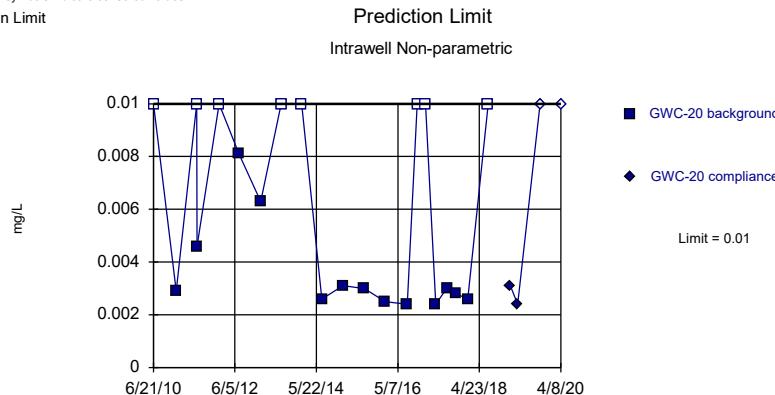
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 75% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



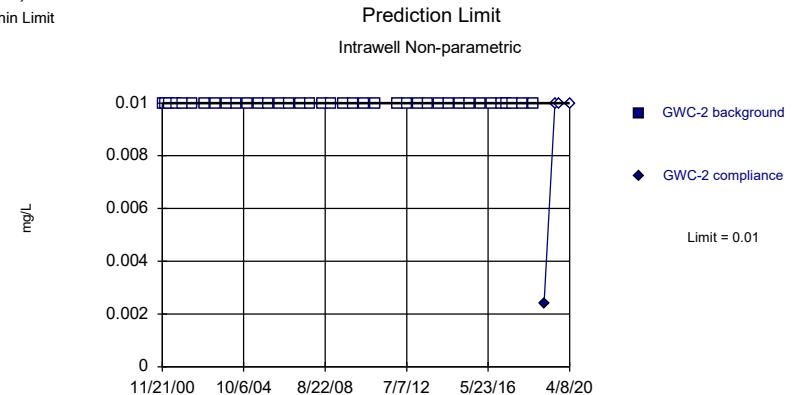
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 38.1% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

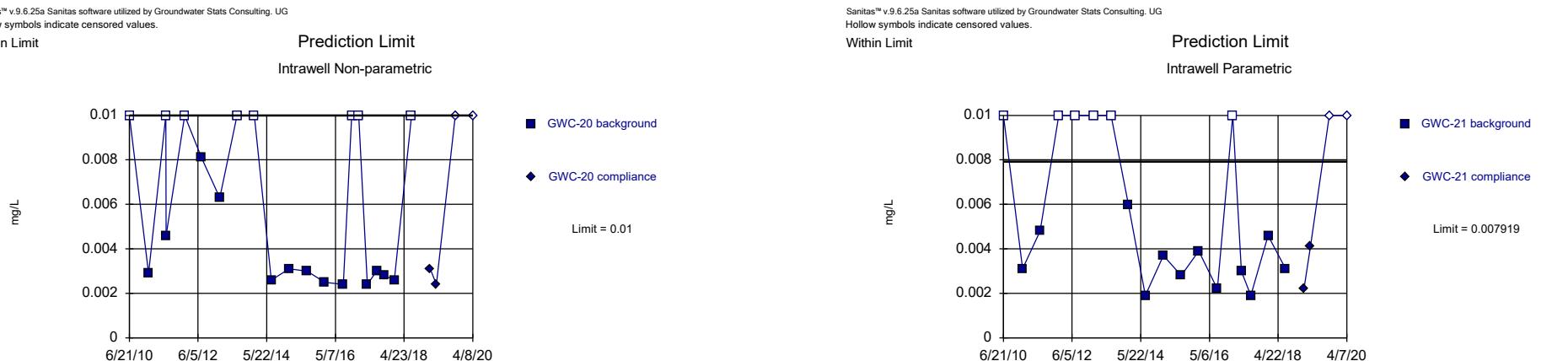
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 38) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002586. Individual comparison alpha = 0.001294 (1 of 2).

Constituent: Vanadium Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Vanadium Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



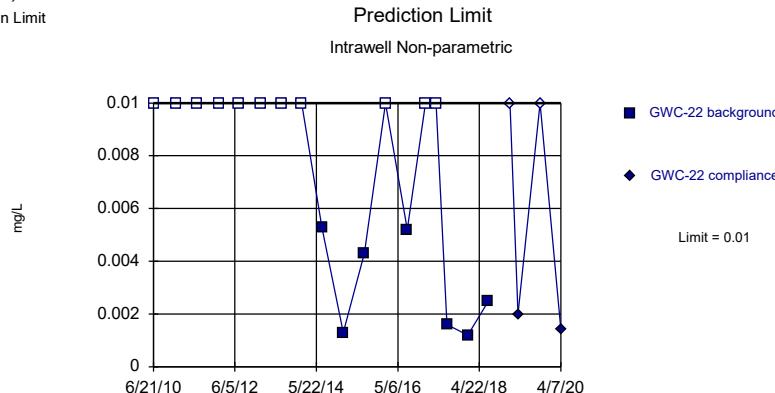
Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-5.764, Std. Dev.=0.3646, n=18, 33.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8708, critical = 0.858. Kappa = 2.538 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Vanadium Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Vanadium Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

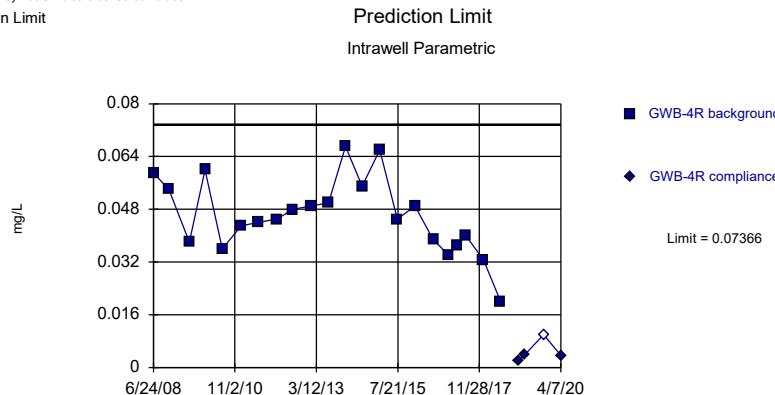
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 61.11% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

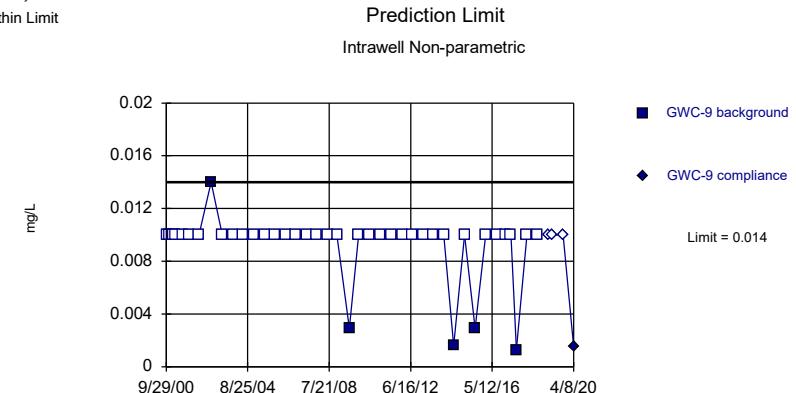


Background Data Summary: Mean=0.04594, Std. Dev.=0.0114, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9794, critical = 0.878. Kappa = 2.431 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Vanadium Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

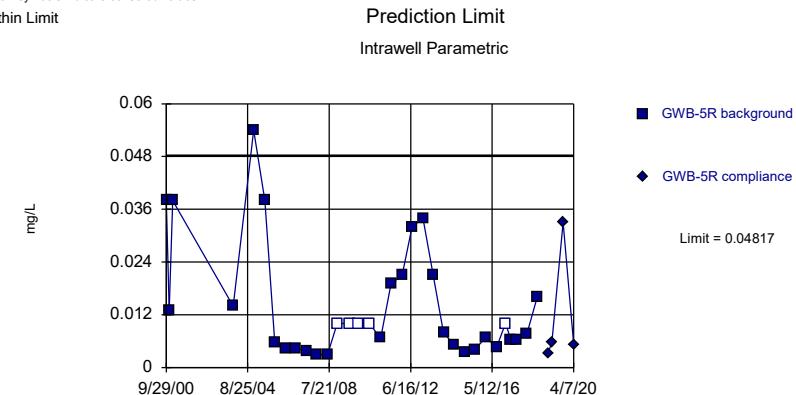


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Constituent: Vanadium Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

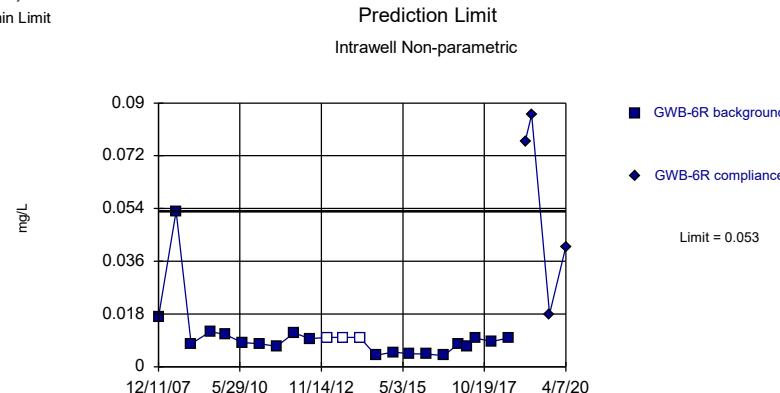


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-4.848, Std. Dev.=0.7947, n=33, 15.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9378, critical = 0.906. Kappa = 2.284 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Vanadium Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

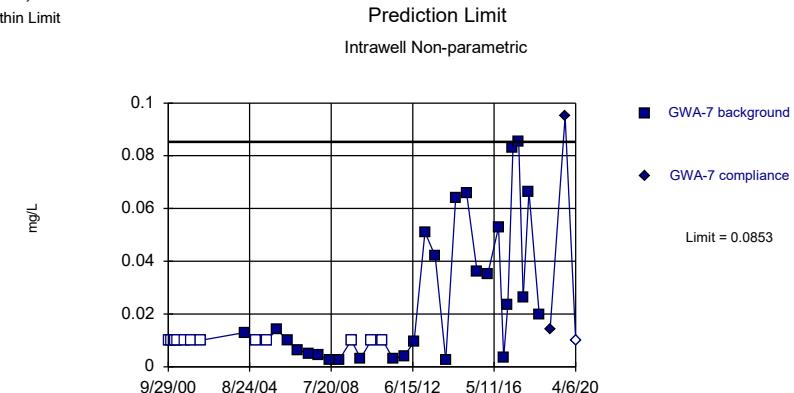
Within Limit



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 23 background values. 13.04% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



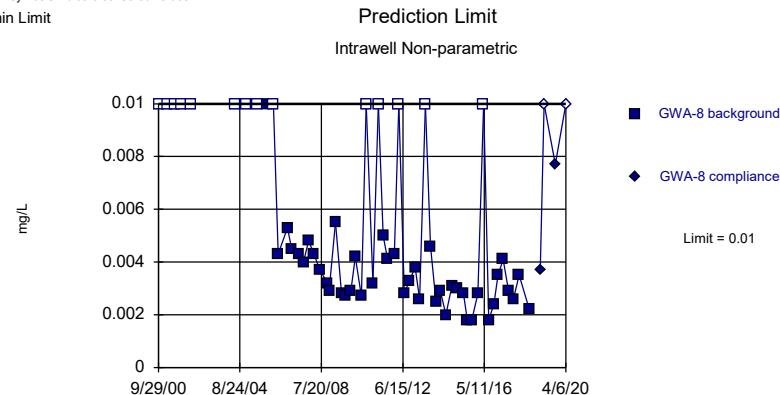
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 39 background values. 30.77% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

Constituent: Vanadium Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

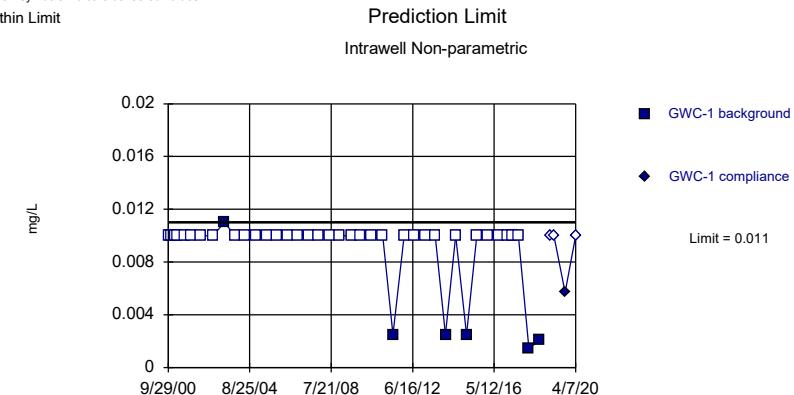
Within Limit



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 57 background values. 24.56% NDs. Well-constituent pair annual alpha = 0.001191. Individual comparison alpha = 0.0005955 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



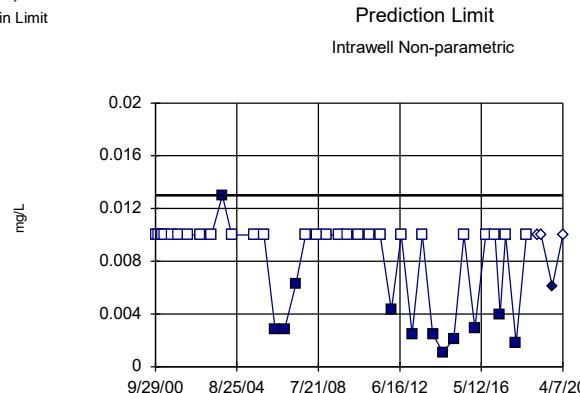
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 85% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

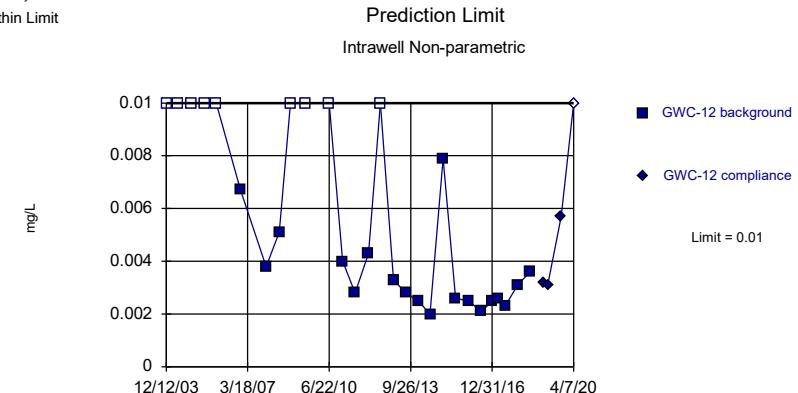
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



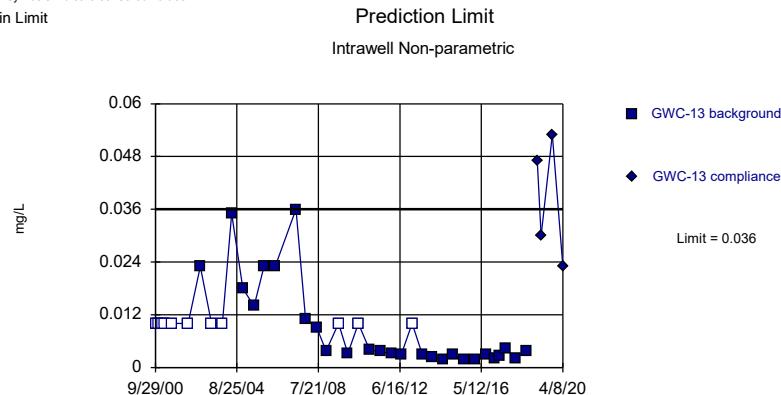
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 28 background values. 32.14% NDs. Well-constituent pair annual alpha = 0.004669. Individual comparison alpha = 0.002337 (1 of 2).

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

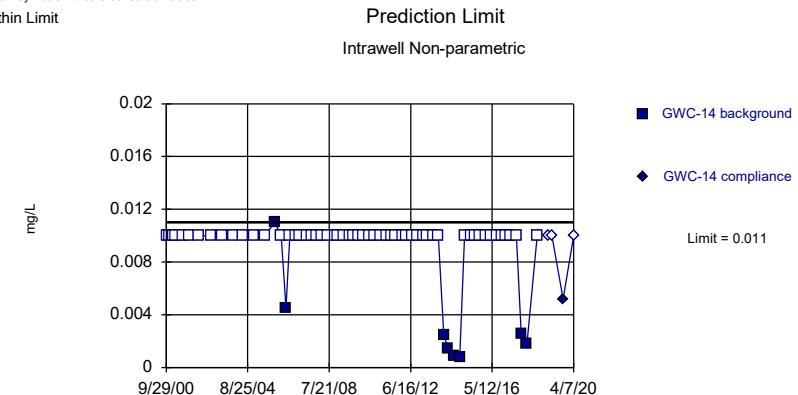
Within Limit



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 38 background values. 28.95% NDs. Well-constituent pair annual alpha = 0.002586. Individual comparison alpha = 0.001294 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



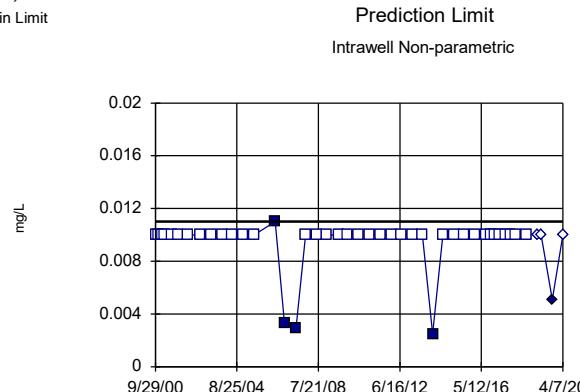
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 63 background values. 87.3% NDs. Well-constituent pair annual alpha = 0.0009737. Individual comparison alpha = 0.000487 (1 of 2).

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

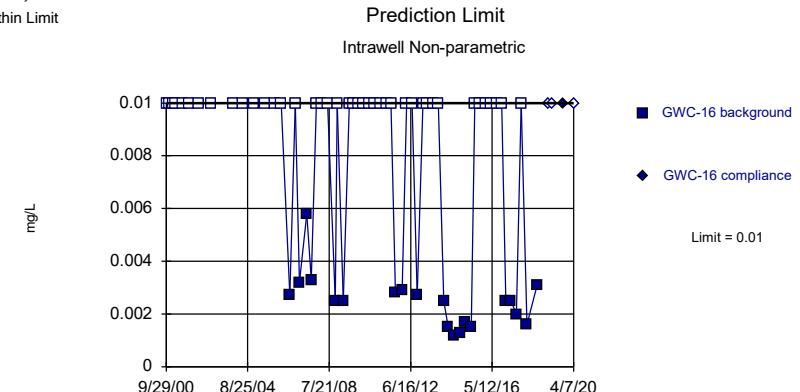
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 90.24% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



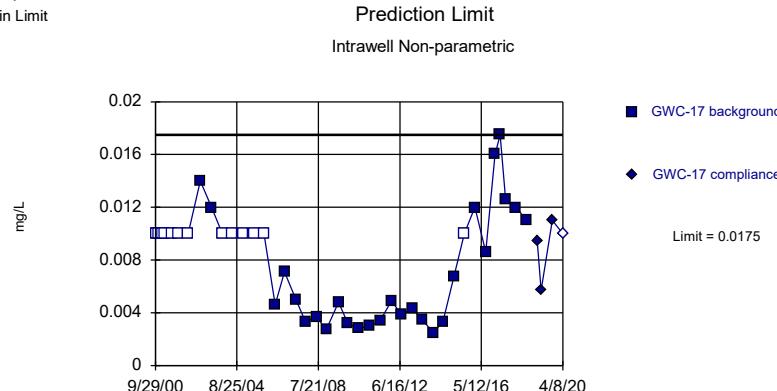
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 61 background values. 67.21% NDs. Well-constituent pair annual alpha = 0.001029. Individual comparison alpha = 0.0005144 (1 of 2).

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

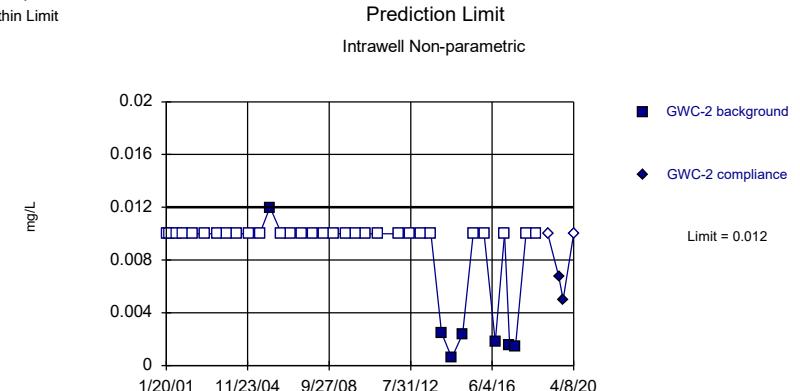
Within Limit



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 32.5% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



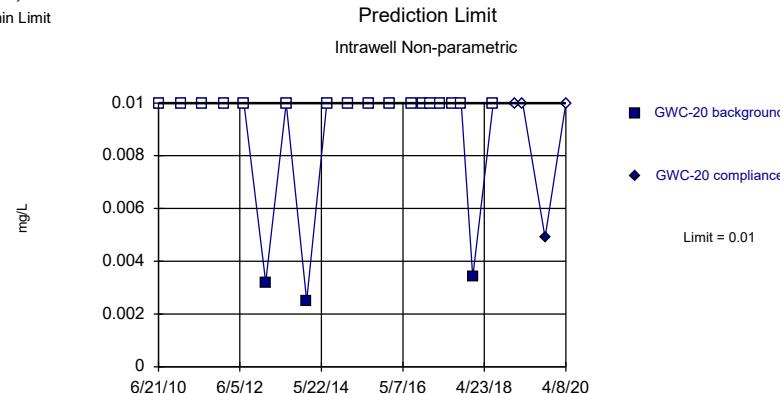
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 37 background values. 81.08% NDs. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha = 0.001361 (1 of 2).

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

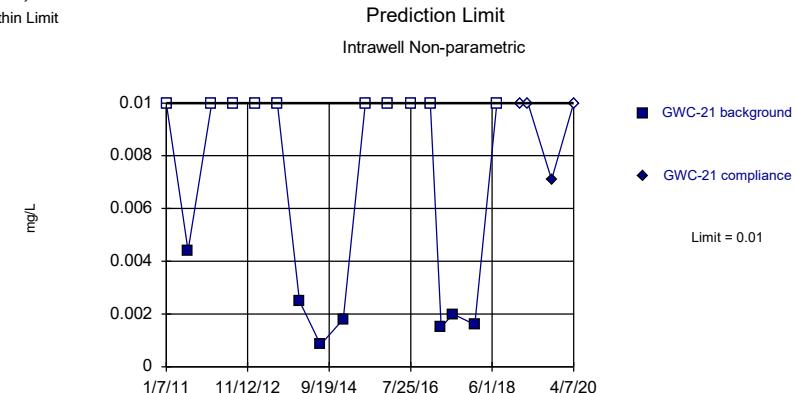
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



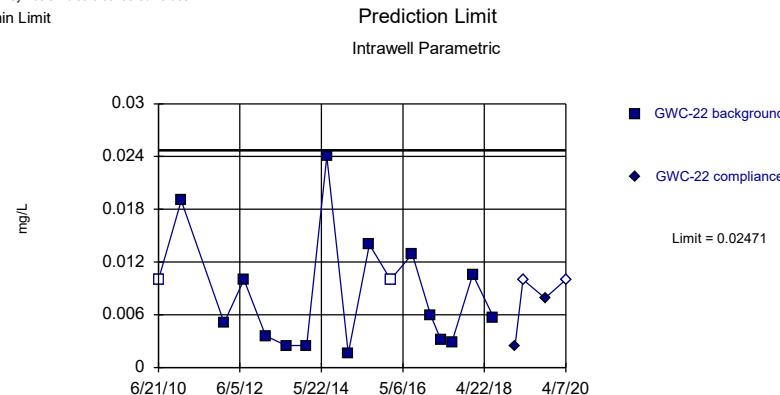
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 58.82% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Zinc Analysis Run 5/24/2020 8:44 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

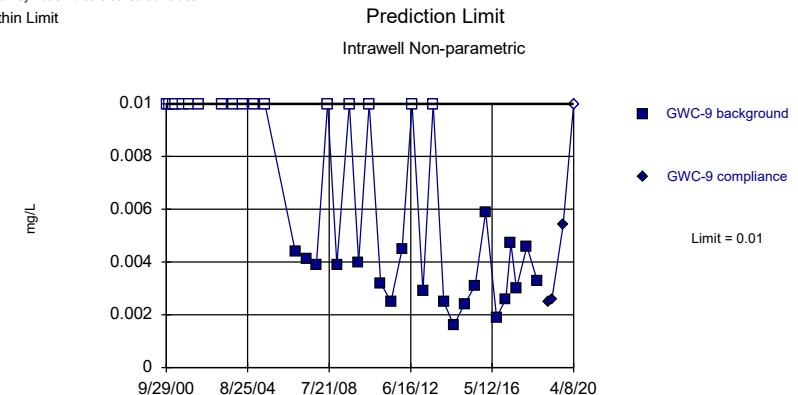
Within Limit



Background Data Summary: Mean=0.008441, Std. Dev.=0.00633, n=17, 11.76% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8837, critical = 0.851. Kappa = 2.571 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 37 background values. 45.95% NDs. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha = 0.001361 (1 of 2).

Constituent: Zinc Analysis Run 5/24/2020 8:45 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

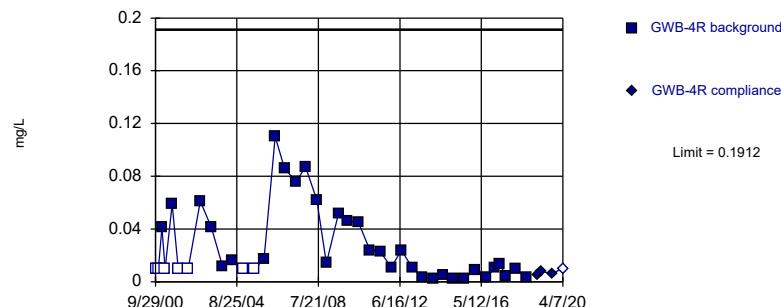
Constituent: Zinc Analysis Run 5/24/2020 8:45 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

### Prediction Limit

#### Intrawell Parametric



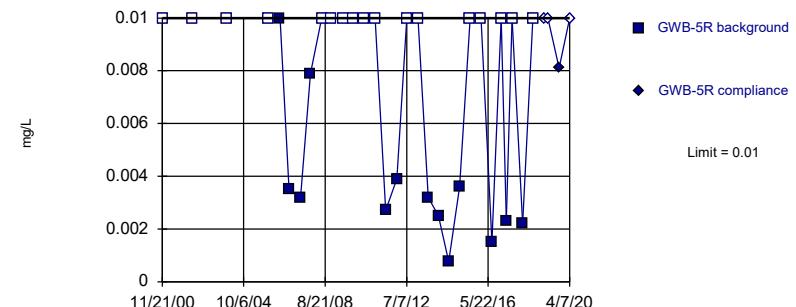
Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=4.471, Std. Dev.=1.259, n=40, 17.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.936, critical = 0.919. Kappa = 2.238 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

### Prediction Limit

#### Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 56.67% NDs. Well-constituent pair annual alpha = 0.004011. Individual comparison alpha = 0.002008 (1 of 2).

Constituent: Zinc Analysis Run 5/24/2020 8:45 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

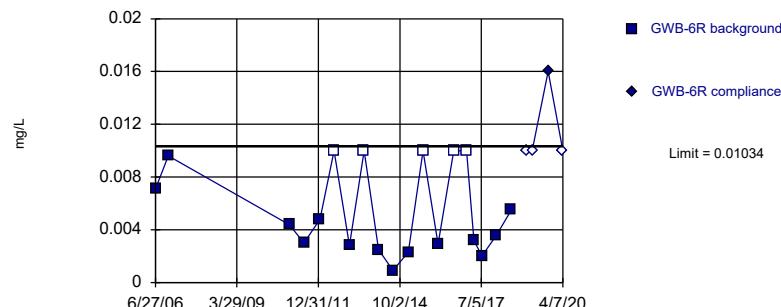
Constituent: Zinc Analysis Run 5/24/2020 8:45 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

### Prediction Limit

#### Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.06024, Std. Dev.=0.01655, n=19, 26.32% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.883, critical = 0.863. Kappa = 2.505 (c=8, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004115.

Constituent: Zinc Analysis Run 5/24/2020 8:45 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7
9/29/2000	<0.003
11/21/2000	<0.003
1/20/2001	<0.003
3/14/2001	<0.003
7/16/2001	<0.003
11/1/2001	<0.003
4/25/2002	<0.003
6/6/2003	<0.003
12/12/2003	<0.003
5/26/2004	<0.003
12/7/2004	<0.003
6/21/2005	<0.003
12/12/2005	<0.003
6/27/2006	<0.003
12/4/2006	<0.003
6/23/2007	<0.003
12/11/2007	<0.003
6/23/2008	<0.003
12/4/2008	<0.003
7/7/2009	<0.003
12/20/2009	<0.003
6/20/2010	<0.003
1/7/2011	<0.003
7/7/2011	<0.003
1/17/2012	<0.003
7/9/2012	<0.003
1/18/2013	<0.003
7/17/2013	<0.003
1/13/2014	<0.003
7/9/2014	0.0022 (J)
1/13/2015	<0.003
7/16/2015	0.0028 (J)
1/18/2016	<0.003
7/27/2016	<0.003
9/1/2016	0.0017 (J)
10/25/2016	<0.003
1/6/2017	0.0009 (J)
4/6/2017	<0.003
7/13/2017	0.0013 (J)
10/4/2017	0.0008 (J)
1/9/2018	<0.003
7/11/2018	<0.003
1/16/2019	<0.003
3/25/2019	<0.003
8/26/2019	<0.003
10/8/2019	<0.003
4/6/2020	<0.003

## Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-11	GWC-11
9/29/2000	<0.003	
11/21/2000	<0.003	
1/20/2001	<0.003	
3/14/2001	<0.003	
7/16/2001	<0.003	
11/1/2001	<0.003	
4/25/2002	<0.003	
11/20/2002	<0.003	
6/6/2003	<0.003	
12/12/2003	<0.003	
5/26/2004	<0.003	
12/7/2004	<0.003	
6/21/2005	<0.003	
12/12/2005	<0.003	
6/27/2006	<0.003	
12/4/2006	<0.003	
6/23/2007	<0.003	
12/11/2007	<0.003	
6/23/2008	<0.003	
12/4/2008	<0.003	
7/8/2009	<0.003	
12/21/2009	<0.003	
6/20/2010	<0.003	
1/6/2011	<0.003	
7/7/2011	<0.003	
1/17/2012	<0.003	
7/9/2012	<0.003	
1/17/2013	<0.003	
7/16/2013	<0.003	
1/13/2014	<0.003	
7/8/2014	<0.003	
1/13/2015	<0.003	
7/16/2015	<0.003	
1/19/2016	<0.003	
7/26/2016	0.0005 (J)	
8/31/2016	<0.003	
10/26/2016	<0.003	
1/4/2017	<0.003	
4/6/2017	0.0006 (J)	
7/11/2017	0.0009 (J)	
10/3/2017	<0.003	
1/11/2018	0.0007 (J)	
7/11/2018	<0.003	
1/17/2019	<0.003	
3/27/2019	<0.003	
8/27/2019	0.00033 (J)	
10/8/2019	0.00046 (J)	
4/7/2020	0.00066 (J)	

## Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-13	GWC-13
9/29/2000	<0.003	
11/21/2000	<0.003	
1/20/2001	<0.003	
3/14/2001	<0.003	
7/16/2001	<0.003	
11/1/2001	<0.003	
4/25/2002	<0.003	
11/20/2002	<0.003	
6/6/2003	<0.003	
12/12/2003	<0.003	
5/26/2004	<0.003	
12/7/2004	<0.003	
6/21/2005	<0.003	
12/12/2005	<0.003	
6/27/2006	<0.003	
12/4/2006	<0.003	
6/23/2007	<0.003	
12/11/2007	<0.003	
6/23/2008	<0.003	
12/4/2008	<0.003	
7/8/2009	<0.003	
12/21/2009	<0.003	
6/20/2010	<0.003	
1/6/2011	<0.003	
7/7/2011	<0.003	
1/17/2012	<0.003	
7/9/2012	<0.003	
1/17/2013	<0.003	
7/16/2013	<0.003	
1/13/2014	<0.003	
7/8/2014	<0.003	
1/13/2015	<0.003	
7/16/2015	<0.003	
1/18/2016	<0.003	
7/26/2016	0.0006 (J)	
8/31/2016	<0.003	
10/26/2016	<0.003	
1/5/2017	<0.003	
4/6/2017	<0.003	
7/12/2017	<0.003	
10/4/2017	<0.003	
1/10/2018	<0.003	
7/11/2018	<0.003	
1/16/2019		<0.003
3/26/2019		<0.003
8/27/2019		<0.003
10/8/2019		<0.003
4/8/2020		<0.003

## Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-14	GWC-14
9/29/2000	<0.003	
11/21/2000	<0.003	
1/20/2001	<0.003	
3/14/2001	<0.003	
7/16/2001	<0.003	
11/1/2001	<0.003	
4/25/2002	<0.003	
11/20/2002	<0.003	
6/6/2003	<0.003	
12/12/2003	<0.003	
5/26/2004	<0.003	
12/7/2004	<0.003	
6/21/2005	<0.003	
12/12/2005	<0.003	
4/4/2006	<0.003	
6/27/2006	<0.003	
8/30/2006	<0.003	
12/4/2006	<0.003	
2/15/2007	<0.003	
6/23/2007	<0.003	
9/11/2007	<0.003	
12/11/2007	<0.003	
3/11/2008	<0.003	
6/24/2008	<0.003	
11/3/2008	<0.003	
12/4/2008	<0.003	
3/25/2009	<0.003	
7/8/2009	<0.003	
9/14/2009	<0.003	
12/20/2009	<0.003	
3/4/2010	<0.003	
6/20/2010	<0.003	
9/14/2010	<0.003	
1/7/2011	<0.003	
4/15/2011	<0.003	
7/7/2011	<0.003	
9/25/2011	<0.003	
1/17/2012	<0.003	
4/4/2012	<0.003	
7/9/2012	<0.003	
10/9/2012	<0.003	
1/18/2013	<0.003	
4/5/2013	<0.003	
7/17/2013	<0.003	
10/11/2013	0.005	
1/14/2014	<0.003	
4/3/2014	<0.003	
7/9/2014	<0.003	
10/24/2014	<0.003	
1/14/2015	<0.003	
5/10/2015	<0.003	
7/17/2015	<0.003	

## Prediction Limit

Page 2

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-14	GWC-14
10/6/2015	<0.003
1/17/2016	<0.003
4/26/2016	<0.003
7/27/2016	<0.003
9/1/2016	<0.003
10/25/2016	<0.003
1/5/2017	<0.003
4/4/2017	<0.003
7/11/2017	<0.003
10/2/2017	<0.003
1/9/2018	<0.003
7/9/2018	<0.003
1/16/2019	<0.003
3/26/2019	<0.003
8/27/2019	<0.003
10/8/2019	<0.003
4/7/2020	<0.003

## Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-16
9/29/2000	<0.003	
11/21/2000	<0.003	
1/20/2001	<0.003	
3/14/2001	<0.003	
7/16/2001	<0.003	
11/1/2001	<0.003	
4/25/2002	<0.003	
11/20/2002	<0.003	
6/6/2003	<0.003	
12/12/2003	<0.003	
5/26/2004	<0.003	
12/7/2004	<0.003	
6/21/2005	<0.003	
12/12/2005	<0.003	
4/4/2006	<0.003	
6/27/2006	<0.003	
8/30/2006	<0.003	
12/4/2006	0.006	
2/15/2007	<0.003	
6/23/2007	<0.003	
9/11/2007	<0.003	
12/11/2007	<0.003	
3/11/2008	<0.003	
6/24/2008	<0.003	
11/3/2008	<0.003	
12/5/2008	<0.003	
3/25/2009	<0.003	
7/8/2009	<0.003	
9/14/2009	<0.003	
12/20/2009	<0.003	
3/4/2010	<0.003	
6/21/2010	<0.003	
9/14/2010	<0.003	
1/7/2011	<0.003	
4/15/2011	<0.003	
7/7/2011	<0.003	
9/25/2011	<0.003	
1/18/2012	<0.003	
4/4/2012	<0.003	
7/10/2012	<0.003	
10/9/2012	<0.003	
1/18/2013	<0.003	
4/5/2013	<0.003	
7/17/2013	<0.003	
10/11/2013	<0.003	
1/14/2014	<0.003	
4/3/2014	<0.003	
7/9/2014	<0.003	
10/24/2014	<0.003	
1/14/2015	<0.003	
5/11/2015	<0.003	
7/16/2015	<0.003	

## Prediction Limit

Page 2

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16
10/6/2015	<0.003
1/17/2016	<0.003
4/26/2016	<0.003
7/28/2016	<0.003
9/1/2016	<0.003
10/25/2016	<0.003
1/4/2017	<0.003
4/5/2017	<0.003
7/12/2017	<0.003
10/3/2017	<0.003
1/10/2018	<0.003
7/10/2018	<0.003
1/17/2019	<0.003
3/26/2019	<0.003
8/28/2019	<0.003
10/8/2019	<0.003
4/7/2020	<0.003

## Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-2	GWC-2
11/21/2000	<0.003
1/20/2001	<0.003
3/14/2001	<0.003
7/16/2001	<0.003
11/1/2001	<0.003
4/25/2002	<0.003
11/20/2002	<0.003
6/6/2003	<0.003
12/12/2003	<0.003
5/26/2004	<0.003
12/7/2004	<0.003
6/21/2005	<0.003
12/12/2005	<0.003
6/27/2006	<0.003
12/4/2006	<0.003
6/23/2007	<0.003
12/11/2007	<0.003
6/24/2008	<0.003
12/4/2008	<0.003
7/8/2009	<0.003
12/20/2009	<0.003
6/20/2010	<0.003
1/6/2011	<0.003
1/17/2012	<0.003
7/9/2012	<0.003
1/17/2013	<0.003
7/17/2013	<0.003
1/13/2014	<0.003
7/9/2014	<0.003
1/13/2015	<0.003
7/16/2015	<0.003
1/17/2016	<0.003
7/27/2016	<0.003
8/31/2016	<0.003
10/26/2016	<0.003
1/5/2017	<0.003
4/4/2017	<0.003
7/13/2017	<0.003
10/3/2017	<0.003
1/10/2018	<0.003
7/10/2018	<0.003
1/21/2019	<0.003
7/30/2019	<0.003
8/27/2019	<0.003
10/9/2019	<0.003
4/8/2020	0.0013 (J)

## Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20	GWC-20
6/21/2010	<0.003	
1/7/2011	<0.003	
7/7/2011	<0.003	
7/8/2011	<0.003	
1/18/2012	<0.003	
7/10/2012	<0.003	
1/18/2013	<0.003	
7/17/2013	<0.003	
1/14/2014	<0.003	
7/10/2014	<0.003	
1/12/2015	<0.003	
7/18/2015	<0.003	
1/17/2016	<0.003	
7/28/2016	0.0019 (J)	
9/1/2016	<0.003	
10/25/2016	<0.003	
1/4/2017	<0.003	
4/4/2017	<0.003	
7/11/2017	<0.003	
10/2/2017	<0.003	
1/10/2018	<0.003	
7/9/2018	<0.003	
1/21/2019	<0.003	
3/25/2019	<0.003	
8/28/2019	<0.003	
10/9/2019	<0.003	
4/8/2020	<0.003	

## Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22
6/21/2010	<0.003
1/7/2011	<0.003
7/8/2011	<0.003
1/18/2012	<0.003
7/10/2012	<0.003
1/18/2013	<0.003
7/17/2013	<0.003
1/14/2014	<0.003
7/10/2014	<0.003
1/14/2015	<0.003
7/18/2015	<0.003
1/18/2016	<0.003
7/29/2016	<0.003
8/31/2016	<0.003
10/26/2016	<0.003
1/4/2017	<0.003
4/6/2017	<0.003
7/11/2017	<0.003
10/4/2017	<0.003
1/11/2018	<0.003
7/11/2018	<0.003
1/18/2019	<0.003
3/27/2019	<0.003
8/27/2019	0.00045 (J)
10/9/2019	<0.003
4/7/2020	0.00049 (J)

## Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWC-9
9/29/2000	<0.003	
11/21/2000	<0.003	
1/20/2001	<0.003	
3/14/2001	<0.003	
7/16/2001	<0.003	
11/1/2001	<0.003	
4/25/2002	<0.003	
11/20/2002	<0.003	
6/6/2003	<0.003	
12/12/2003	<0.003	
5/26/2004	<0.003	
12/7/2004	<0.003	
6/21/2005	<0.003	
12/12/2005	<0.003	
6/27/2006	<0.003	
12/4/2006	<0.003	
6/23/2007	<0.003	
12/11/2007	<0.003	
6/23/2008	<0.003	
12/4/2008	<0.003	
7/8/2009	<0.003	
12/21/2009	<0.003	
6/20/2010	<0.003	
1/7/2011	<0.003	
7/8/2011	<0.003	
1/18/2012	<0.003	
7/10/2012	<0.003	
1/18/2013	<0.003	
7/17/2013	<0.003	
1/14/2014	<0.003	
7/9/2014	<0.003	
1/14/2015	<0.003	
7/17/2015	<0.003	
1/18/2016	<0.003	
7/28/2016	<0.003	
8/31/2016	<0.003	
10/27/2016	0.0016 (J)	
1/6/2017	<0.003	
4/6/2017	<0.003	
7/12/2017	<0.003	
10/4/2017	<0.003	
1/11/2018	<0.003	
7/11/2018	<0.003	
1/18/2019	<0.003	
3/27/2019	<0.003	
8/28/2019	<0.003	
10/9/2019	<0.003	
4/8/2020	0.00033 (J)	

## Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-4R	GWB-4R
9/29/2000	<0.003	
11/21/2000	<0.003	
1/20/2001	<0.003	
3/14/2001	<0.003	
7/16/2001	<0.003	
11/1/2001	<0.003	
4/25/2002	<0.003	
11/20/2002	<0.003	
6/6/2003	<0.003	
12/12/2003	<0.003	
5/26/2004	<0.003	
12/7/2004	<0.003	
6/21/2005	<0.003	
12/12/2005	<0.003	
6/27/2006	<0.003	
12/4/2006	<0.003	
6/23/2007	<0.003	
12/11/2007	<0.003	
6/24/2008	<0.003	
12/5/2008	<0.003	
7/7/2009	<0.003	
12/21/2009	<0.003	
6/21/2010	<0.003	
1/7/2011	<0.003	
7/8/2011	<0.003	
1/18/2012	<0.003	
7/10/2012	<0.003	
1/18/2013	<0.003	
7/17/2013	<0.003	
1/14/2014	<0.003	
7/9/2014	0.002 (J)	
1/12/2015	<0.003	
7/16/2015	0.0021 (J)	
1/18/2016	<0.003	
7/29/2016	0.0003 (J)	
9/1/2016	<0.003	
10/26/2016	<0.003	
1/6/2017	<0.003	
4/4/2017	<0.003	
7/12/2017	<0.003	
10/4/2017	<0.003	
1/11/2018	<0.003	
7/11/2018	<0.003	
1/16/2019	<0.003	
3/25/2019	<0.003	
8/27/2019	<0.003	
10/9/2019	<0.003	
4/7/2020	<0.003	

## Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R	GWB-5R
9/29/2000	<0.003	
11/21/2000	<0.003	
1/20/2001	<0.003	
3/14/2001	<0.003	
7/16/2001	<0.003	
11/1/2001	<0.003	
4/25/2002	<0.003	
11/20/2002	<0.003	
6/6/2003	<0.003	
12/12/2003	<0.003	
5/26/2004	<0.003	
12/7/2004	<0.003	
6/21/2005	<0.003	
12/12/2005	<0.003	
6/27/2006	<0.003	
12/4/2006	<0.003	
6/23/2007	<0.003	
12/11/2007	<0.003	
6/24/2008	<0.003	
12/5/2008	<0.003	
7/7/2009	<0.003	
12/21/2009	<0.003	
6/20/2010	<0.003	
1/6/2011	<0.003	
7/7/2011	<0.003	
1/17/2012	<0.003	
7/9/2012	<0.003	
1/17/2013	<0.003	
7/16/2013	<0.003	
1/13/2014	<0.003	
7/9/2014	<0.003	
1/13/2015	<0.003	
7/16/2015	<0.003	
1/18/2016	<0.003	
7/27/2016	<0.003	
8/30/2016	<0.003	
10/26/2016	<0.003	
1/3/2017	<0.003	
4/6/2017	<0.003	
7/12/2017	<0.003	
10/3/2017	<0.003	
1/10/2018	<0.003	
7/10/2018	<0.003	
1/16/2019	<0.003	
3/26/2019	<0.003	
8/28/2019	0.00054 (J)	
10/9/2019	<0.003	
4/7/2020	<0.003	

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-7	GWA-7
9/29/2000	<0.005
11/21/2000	<0.005
1/20/2001	<0.005
3/14/2001	<0.005
7/16/2001	<0.005
11/1/2001	<0.005
4/25/2002	<0.005
6/6/2003	0.02 (o)
12/12/2003	<0.005
5/26/2004	<0.005
12/7/2004	<0.005
6/21/2005	<0.005
12/12/2005	<0.005
6/27/2006	<0.005
12/4/2006	<0.005
6/23/2007	<0.005
12/11/2007	<0.005
6/23/2008	<0.005
12/4/2008	<0.005
7/7/2009	<0.005
12/20/2009	<0.005
6/20/2010	<0.005
1/7/2011	<0.005
7/7/2011	<0.005
1/17/2012	<0.005
7/9/2012	0.0052
1/18/2013	0.0087
7/17/2013	0.0084
1/13/2014	0.009
7/9/2014	0.008
1/13/2015	0.0077
7/16/2015	0.0077
1/18/2016	0.014
7/27/2016	0.0111
9/1/2016	0.0287 (o)
10/25/2016	0.0069
1/6/2017	0.0097
4/6/2017	0.0104
7/13/2017	0.0064
10/4/2017	0.0078
1/9/2018	0.0091 (J)
7/11/2018	<0.025 (o)
1/16/2019	<0.025 (o)
3/25/2019	0.0029 (J)
8/26/2019	0.0041 (J)
10/8/2019	0.003 (J)
4/6/2020	<0.005

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
9/29/2000	<0.005
1/20/2001	<0.005
3/14/2001	<0.005
7/16/2001	<0.005
11/1/2001	<0.005
4/25/2002	<0.005
11/20/2002	<0.005
6/6/2003	<0.005
12/12/2003	<0.005
5/26/2004	<0.005
12/7/2004	<0.005
6/21/2005	<0.005
12/12/2005	<0.005
4/4/2006	<0.005
6/27/2006	<0.005
8/30/2006	<0.005
12/4/2006	<0.005
2/15/2007	<0.005
6/23/2007	<0.005
9/11/2007	<0.005
12/11/2007	<0.005
3/11/2008	<0.005
6/23/2008	<0.005
11/3/2008	<0.005
12/4/2008	<0.005
3/25/2009	<0.005
7/7/2009	<0.005
9/14/2009	<0.005
12/20/2009	<0.005
3/4/2010	<0.005
6/20/2010	<0.005
9/14/2010	<0.005
1/7/2011	<0.005
4/15/2011	<0.005
7/7/2011	<0.005
9/25/2011	<0.005
1/17/2012	<0.005
4/4/2012	<0.005
7/10/2012	<0.005
10/9/2012	<0.005
1/18/2013	<0.005
4/5/2013	<0.005
7/17/2013	<0.005
10/11/2013	<0.005
1/14/2014	<0.005
4/3/2014	<0.005
7/9/2014	<0.005
10/24/2014	<0.005
1/14/2015	<0.005
5/10/2015	<0.005
7/17/2015	<0.005
10/6/2015	<0.005

## Prediction Limit

Page 2

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
1/18/2016	<0.005
4/26/2016	0.0011 (J)
7/28/2016	<0.005
8/30/2016	<0.005
10/24/2016	<0.005
1/3/2017	<0.005
4/3/2017	0.0006 (J)
7/11/2017	0.0006 (J)
10/2/2017	0.0006 (J)
1/9/2018	0.0009 (J)
7/9/2018	<0.005
1/16/2019	<0.005
3/25/2019	<0.005
8/26/2019	<0.005
10/7/2019	<0.005
4/6/2020	0.00045 (J)

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-1	GWC-1
9/29/2000	<0.005
11/21/2000	<0.005
1/20/2001	<0.005
3/14/2001	<0.005
7/16/2001	<0.005
11/1/2001	<0.005
4/25/2002	<0.005
11/20/2002	<0.005
6/6/2003	0.03 (o)
12/12/2003	<0.005
5/26/2004	<0.005
12/7/2004	<0.005
6/21/2005	<0.005
12/12/2005	<0.005
6/27/2006	<0.005
12/4/2006	<0.005
6/23/2007	<0.005
12/11/2007	<0.005
6/24/2008	<0.005
12/5/2008	<0.005
7/7/2009	<0.005
12/20/2009	<0.005
6/20/2010	<0.005
1/6/2011	<0.005
7/7/2011	<0.005
1/17/2012	0.0071
7/9/2012	0.0076
1/17/2013	0.0086
7/16/2013	<0.005
1/13/2014	<0.005
7/9/2014	0.0022 (J)
1/13/2015	<0.005
7/16/2015	0.0037 (J)
1/17/2016	0.024 (o)
7/27/2016	0.0046 (J)
8/30/2016	0.0023 (J)
10/25/2016	0.0035 (J)
1/4/2017	0.0018 (J)
4/4/2017	0.0015 (J)
7/12/2017	0.0015 (J)
10/3/2017	0.0013 (J)
1/10/2018	0.0023 (J)
7/10/2018	0.0031 (J)
1/16/2019	0.0023 (J)
3/26/2019	0.0032 (J)
8/27/2019	0.0022 (J)
10/9/2019	0.0042 (J)
4/7/2020	0.027

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-12	GWC-12
9/29/2000	<0.005
11/21/2000	<0.005
1/20/2001	<0.005
3/14/2001	<0.005
7/16/2001	<0.005
11/1/2001	<0.005
4/25/2002	<0.005
11/20/2002	<0.005
6/6/2003	<0.005
12/12/2003	<0.005
5/26/2004	<0.005
12/7/2004	<0.005
6/21/2005	<0.005
12/12/2005	<0.005
6/27/2006	<0.005
12/4/2006	<0.005
6/23/2007	<0.005
12/11/2007	<0.005
6/23/2008	<0.005
12/4/2008	<0.005
7/8/2009	<0.005
12/21/2009	<0.005
6/20/2010	<0.005
1/7/2011	<0.005
7/7/2011	<0.005
1/17/2012	<0.005
7/9/2012	<0.005
1/17/2013	<0.005
7/16/2013	<0.005
1/13/2014	<0.005
7/8/2014	<0.005
1/13/2015	<0.005
7/16/2015	<0.005
1/18/2016	<0.005
7/27/2016	<0.005
8/31/2016	<0.005
10/26/2016	<0.005
1/4/2017	<0.005
4/5/2017	0.0006 (J)
7/10/2017	0.0008 (J)
10/4/2017	0.0009 (J)
1/11/2018	<0.005
7/11/2018	<0.005
1/17/2019	<0.005
3/27/2019	<0.005
8/27/2019	<0.005
10/9/2019	<0.005
4/7/2020	<0.005

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-13	GWC-13
9/29/2000	<0.005	
11/21/2000	<0.005	
1/20/2001	<0.005	
3/14/2001	<0.005	
7/16/2001	<0.005	
11/1/2001	<0.005	
4/25/2002	<0.005	
11/20/2002	<0.005	
6/6/2003	<0.005	
12/12/2003	0.0064	
5/26/2004	<0.005	
12/7/2004	<0.005	
6/21/2005	<0.005	
12/12/2005	<0.005	
6/27/2006	<0.005	
12/4/2006	<0.005	
6/23/2007	<0.005	
12/11/2007	<0.005	
6/23/2008	<0.005	
12/4/2008	<0.005	
7/8/2009	<0.005	
12/21/2009	<0.005	
6/20/2010	<0.005	
1/6/2011	<0.005	
7/7/2011	<0.005	
1/17/2012	<0.005	
7/9/2012	<0.005	
1/17/2013	<0.005	
7/16/2013	<0.005	
1/13/2014	<0.005	
7/8/2014	<0.005	
1/13/2015	<0.005	
7/16/2015	<0.005	
1/18/2016	<0.005	
7/26/2016	<0.005	
8/31/2016	<0.005	
10/26/2016	<0.005	
1/5/2017	<0.005	
4/6/2017	<0.005	
7/12/2017	<0.005	
10/4/2017	<0.005	
1/10/2018	0.0006 (J)	
7/11/2018	<0.005	
1/16/2019	<0.005	
3/26/2019	0.00058 (J)	
8/27/2019	<0.005	
10/8/2019	<0.005	
4/8/2020	<0.005	

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-14	GWC-14
9/29/2000	<0.005	
11/21/2000	<0.005	
1/20/2001	<0.005	
3/14/2001	<0.005	
7/16/2001	<0.005	
11/1/2001	<0.005	
4/25/2002	<0.005	
11/20/2002	0.011	
6/6/2003	<0.005	
12/12/2003	<0.005	
5/26/2004	<0.005	
12/7/2004	<0.005	
6/21/2005	<0.005	
12/12/2005	<0.005	
4/4/2006	<0.005	
6/27/2006	<0.005	
8/30/2006	<0.005	
12/4/2006	<0.005	
2/15/2007	<0.005	
6/23/2007	<0.005	
9/11/2007	<0.005	
12/11/2007	<0.005	
3/11/2008	<0.005	
6/24/2008	<0.005	
11/3/2008	<0.005	
12/4/2008	<0.005	
3/25/2009	<0.005	
7/8/2009	<0.005	
9/14/2009	<0.005	
12/20/2009	<0.005	
3/4/2010	<0.005	
6/20/2010	<0.005	
9/14/2010	<0.005	
1/7/2011	<0.005	
4/15/2011	<0.005	
7/7/2011	<0.005	
9/25/2011	<0.005	
1/17/2012	<0.005	
4/4/2012	<0.005	
7/9/2012	<0.005	
10/9/2012	<0.005	
1/18/2013	<0.005	
4/5/2013	<0.005	
7/17/2013	<0.005	
10/11/2013	0.005	
1/14/2014	<0.005	
4/3/2014	<0.005	
7/9/2014	<0.005	
10/24/2014	<0.005	
1/14/2015	<0.005	
5/10/2015	<0.005	
7/17/2015	<0.005	

## Prediction Limit

Page 2

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-14
10/6/2015	<0.005
1/17/2016	0.002 (J)
4/26/2016	0.00183 (J)
7/27/2016	0.0021 (J)
9/1/2016	0.0024 (J)
10/25/2016	<0.005
1/5/2017	0.0024 (J)
4/4/2017	0.003 (J)
7/11/2017	0.0019 (J)
10/2/2017	0.0026 (J)
1/9/2018	0.0021 (J)
7/9/2018	0.0019 (J)
1/16/2019	0.0016 (J)
3/26/2019	0.0023 (J)
8/27/2019	0.0017 (J)
10/8/2019	0.0017 (J)
4/7/2020	0.0018 (J)

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-15	GWC-15
9/29/2000	<0.005	
11/21/2000	<0.005	
1/20/2001	<0.005	
3/14/2001	<0.005	
7/16/2001	<0.005	
11/1/2001	<0.005	
4/25/2002	<0.005	
11/20/2002	<0.005	
6/6/2003	<0.005	
12/12/2003	<0.005	
5/26/2004	<0.005	
12/7/2004	<0.005	
6/21/2005	<0.005	
12/12/2005	<0.005	
6/27/2006	<0.005	
12/4/2006	<0.005	
6/23/2007	<0.005	
12/11/2007	<0.005	
6/24/2008	<0.005	
12/5/2008	<0.005	
7/8/2009	0.0052	
12/20/2009	<0.005	
6/20/2010	0.0068	
1/7/2011	<0.005	
7/7/2011	<0.005	
1/17/2012	<0.005	
7/9/2012	<0.005	
1/18/2013	0.0089	
7/17/2013	0.011	
1/13/2014	0.017	
7/9/2014	0.014	
1/13/2015	0.011	
7/16/2015	0.02	
1/17/2016	0.014	
7/27/2016	0.0303	
9/1/2016	0.0533	
10/25/2016	0.0551	
1/5/2017	0.0437	
4/3/2017	0.0713	
7/11/2017	0.0745	
10/2/2017	0.0723	
1/9/2018	0.0731	
7/10/2018	0.09	
1/17/2019	0.13	
3/26/2019	0.1	
8/27/2019	0.17	
10/8/2019	0.13	
4/7/2020	0.24	

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-16
9/29/2000	0.094	
11/21/2000	0.059	
1/20/2001	0.087	
3/14/2001	0.075	
7/16/2001	0.11	
11/1/2001	0.098	
4/25/2002	0.071	
11/20/2002	0.15	
6/6/2003	1.2 (o)	
12/12/2003	0.27 (o)	
5/26/2004	0.12	
12/7/2004	0.098	
6/21/2005	0.065	
12/12/2005	0.081	
4/4/2006	0.077	
6/27/2006	0.071	
8/30/2006	0.08	
12/4/2006	0.085	
2/15/2007	0.09	
6/23/2007	0.12	
9/11/2007	0.088	
12/11/2007	0.088	
3/11/2008	0.071	
6/24/2008	0.097	
11/3/2008	0.089	
12/5/2008	0.092	
3/25/2009	0.095	
7/8/2009	0.11	
9/14/2009	0.099	
12/20/2009	0.1	
3/4/2010	0.074	
6/21/2010	0.056	
9/14/2010	0.067	
1/7/2011	0.066	
4/15/2011	0.08	
7/7/2011	0.054	
9/25/2011	0.085	
1/18/2012	0.089	
4/4/2012	0.0473	
7/10/2012	0.07	
10/9/2012	0.088	
1/18/2013	0.063	
4/5/2013	0.06	
7/17/2013	0.063	
10/11/2013	0.059	
1/14/2014	0.077	
4/3/2014	0.091	
7/9/2014	0.08	
10/24/2014	0.073	
1/14/2015	0.079	
5/11/2015	0.058	
7/16/2015	0.068	

## Prediction Limit

Page 2

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-16	GWC-16
10/6/2015	0.078
1/17/2016	0.089
4/26/2016	0.0731
7/28/2016	0.0627
9/1/2016	0.0551
10/25/2016	0.0466
1/4/2017	0.0444
4/5/2017	0.0591
7/12/2017	0.0776
10/3/2017	0.0813
1/10/2018	0.085
7/10/2018	0.067
1/17/2019	0.079
3/26/2019	0.089
8/28/2019	0.091
10/8/2019	0.088
4/7/2020	0.091

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-17	GWC-17
9/29/2000	<0.005
11/21/2000	<0.005
1/20/2001	<0.005
3/14/2001	<0.005
7/16/2001	<0.005
11/1/2001	<0.005
4/25/2002	<0.005
11/20/2002	<0.005
6/6/2003	<0.005
12/12/2003	<0.005
5/26/2004	<0.005
12/7/2004	<0.005
6/21/2005	<0.005
12/12/2005	<0.005
6/27/2006	<0.005
12/4/2006	<0.005
6/23/2007	<0.005
12/11/2007	<0.005
6/24/2008	<0.005
12/5/2008	<0.005
7/8/2009	<0.005
12/21/2009	<0.005
6/21/2010	<0.005
1/7/2011	<0.005
7/8/2011	<0.005
1/18/2012	<0.005
7/10/2012	<0.005
1/18/2013	<0.005
7/17/2013	<0.005
1/14/2014	<0.005
7/9/2014	<0.005
1/14/2015	<0.005
7/18/2015	<0.005
1/18/2016	<0.005
7/29/2016	0.0009 (J)
9/1/2016	<0.005
10/26/2016	<0.005
1/5/2017	<0.005
4/5/2017	0.0011 (J)
7/13/2017	0.0016 (J)
10/4/2017	0.0019 (J)
1/11/2018	0.0015 (J)
7/11/2018	0.00082 (J)
1/16/2019	<0.005
3/26/2019	0.0015 (J)
8/28/2019	0.0011 (J)
10/9/2019	0.0011 (J)
4/8/2020	0.0013 (J)

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-2	GWC-2
11/21/2000	<0.005
1/20/2001	<0.005
3/14/2001	<0.005
7/16/2001	<0.005
11/1/2001	<0.005
4/25/2002	<0.005
11/20/2002	<0.005
6/6/2003	<0.005
12/12/2003	<0.005
5/26/2004	<0.005
12/7/2004	<0.005
6/21/2005	<0.005
12/12/2005	<0.005
6/27/2006	<0.005
12/4/2006	<0.005
6/23/2007	<0.005
12/11/2007	<0.005
6/24/2008	<0.005
12/4/2008	<0.005
7/8/2009	<0.005
12/20/2009	<0.005
6/20/2010	<0.005
1/6/2011	<0.005
1/17/2012	<0.005
7/9/2012	<0.005
1/17/2013	<0.005
7/17/2013	<0.005
1/13/2014	<0.005
7/9/2014	<0.005
1/13/2015	<0.005
7/16/2015	<0.005
1/17/2016	<0.005
7/27/2016	<0.005
8/31/2016	<0.005
10/26/2016	<0.005
1/5/2017	<0.005
4/4/2017	<0.005
7/13/2017	<0.005
10/3/2017	<0.005
1/10/2018	0.0006 (J)
7/10/2018	<0.005
1/21/2019	<0.005
7/30/2019	0.00039 (J)
8/27/2019	<0.005
10/9/2019	<0.005
4/8/2020	0.00094 (J)

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20
6/21/2010	0.29
1/7/2011	0.2
7/7/2011	<0.005
7/8/2011	0.19
1/18/2012	0.058
7/10/2012	0.18
1/18/2013	0.22
7/17/2013	0.45
1/14/2014	0.52
7/10/2014	0.4
1/12/2015	0.43
7/18/2015	0.26
1/17/2016	0.34
7/28/2016	0.209
9/1/2016	0.215
10/25/2016	0.307
1/4/2017	0.311
4/4/2017	0.317
7/11/2017	0.299
10/2/2017	0.216
1/10/2018	0.347
7/9/2018	0.37
1/21/2019	0.44
3/25/2019	0.41
8/28/2019	0.43
10/9/2019	0.35
4/8/2020	0.33

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-21	GWC-21
6/21/2010	0.013 (o)
1/7/2011	<0.005
7/8/2011	<0.005
1/18/2012	<0.005
7/10/2012	<0.005
1/18/2013	0.0061 (o)
7/17/2013	<0.005
1/14/2014	0.006 (o)
7/9/2014	<0.005
1/14/2015	<0.005
7/17/2015	<0.005
1/17/2016	0.0065 (o)
7/28/2016	<0.005
9/1/2016	0.0039 (J)
10/25/2016	<0.005
1/4/2017	<0.005
4/4/2017	0.0031 (J)
7/13/2017	<0.005
10/3/2017	<0.005
1/9/2018	0.0033 (J)
7/10/2018	0.0027 (J)
1/17/2019	0.0022 (J)
3/26/2019	0.0045 (J)
8/28/2019	0.002 (J)
10/8/2019	0.0028 (J)
4/7/2020	<0.005

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22	GWC-22
6/21/2010	<0.005	
1/7/2011	<0.005	
7/8/2011	<0.005	
1/18/2012	<0.005	
7/10/2012	<0.005	
1/18/2013	<0.005	
7/17/2013	<0.005	
1/14/2014	<0.005	
7/10/2014	0.0027 (J)	
1/14/2015	<0.005	
7/18/2015	<0.005	
1/18/2016	<0.005	
7/29/2016	0.002 (J)	
8/31/2016	0.0017 (J)	
10/26/2016	<0.005	
1/4/2017	<0.005	
4/6/2017	0.0006 (J)	
7/11/2017	0.0012 (J)	
10/4/2017	0.0025 (J)	
1/11/2018	0.0006 (J)	
7/11/2018	0.0011 (J)	
1/18/2019	<0.005	
3/27/2019	<0.005	
8/27/2019	0.00044 (J)	
10/9/2019	<0.005	
4/7/2020	0.00043 (J)	

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-9	GWC-9
9/29/2000	<0.005
11/21/2000	<0.005
1/20/2001	<0.005
3/14/2001	<0.005
7/16/2001	<0.005
11/1/2001	<0.005
4/25/2002	<0.005
11/20/2002	<0.005
6/6/2003	<0.005
12/12/2003	<0.005
5/26/2004	<0.005
12/7/2004	<0.005
6/21/2005	<0.005
12/12/2005	<0.005
6/27/2006	<0.005
12/4/2006	<0.005
6/23/2007	<0.005
12/11/2007	<0.005
6/23/2008	<0.005
12/4/2008	<0.005
7/8/2009	<0.005
12/21/2009	<0.005
6/20/2010	<0.005
1/7/2011	<0.005
7/8/2011	<0.005
1/18/2012	<0.005
7/10/2012	<0.005
1/18/2013	<0.005
7/17/2013	<0.005
1/14/2014	<0.005
7/9/2014	<0.005
1/14/2015	<0.005
7/17/2015	<0.005
1/18/2016	<0.005
7/28/2016	<0.005
8/31/2016	<0.005
10/27/2016	<0.005
1/6/2017	<0.005
4/6/2017	<0.005
7/12/2017	<0.005
10/4/2017	<0.005
1/11/2018	<0.005
7/11/2018	<0.005
1/18/2019	<0.005
3/27/2019	<0.005
8/28/2019	<0.005
10/9/2019	<0.005
4/8/2020	0.00084 (J)

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-4R	GWB-4R
9/29/2000	<0.005	
11/21/2000	<0.005	
1/20/2001	0.01 (o)	
3/14/2001	<0.005	
7/16/2001	<0.005	
11/1/2001	<0.005	
4/25/2002	<0.005	
11/20/2002	0.0096 (o)	
6/6/2003	0.0076	
12/12/2003	0.0058	
5/26/2004	0.0068	
12/7/2004	0.0066	
6/21/2005	<0.005	
12/12/2005	<0.005	
6/27/2006	<0.005	
12/4/2006	<0.005	
6/23/2007	<0.005	
12/11/2007	<0.005	
6/24/2008	0.005	
12/5/2008	<0.005	
7/7/2009	<0.005	
12/21/2009	<0.005	
6/21/2010	0.018 (o)	
1/7/2011	<0.005	
7/8/2011	<0.005	
1/18/2012	<0.005	
7/10/2012	0.0052	
1/18/2013	<0.005	
7/17/2013	<0.005	
1/14/2014	<0.005	
7/9/2014	0.0023 (J)	
1/12/2015	0.0028 (J)	
7/16/2015	<0.005	
1/18/2016	<0.005	
7/29/2016	0.0014 (J)	
9/1/2016	0.0033 (J)	
10/26/2016	0.0016 (J)	
1/6/2017	<0.005	
4/4/2017	0.0021 (J)	
7/12/2017	0.0015 (J)	
10/4/2017	0.0018 (J)	
1/11/2018	0.0015 (J)	
7/11/2018	0.00095 (J)	
1/16/2019	0.0024 (J)	
3/25/2019	0.0029 (J)	
8/27/2019	0.0023 (J)	
10/9/2019	0.0024 (J)	
4/7/2020	0.0027 (J)	

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R	GWB-5R
9/29/2000	<0.005	
11/21/2000	<0.005	
1/20/2001	<0.005	
3/14/2001	<0.005	
7/16/2001	0.014	
11/1/2001	0.023	
4/25/2002	<0.005	
11/20/2002	0.022	
6/6/2003	0.07 (o)	
12/12/2003	<0.005	
5/26/2004	0.0074	
12/7/2004	0.017	
6/21/2005	0.013	
12/12/2005	<0.005	
6/27/2006	<0.005	
12/4/2006	<0.005	
6/23/2007	<0.005	
12/11/2007	<0.005	
6/24/2008	<0.005	
12/5/2008	<0.005	
7/7/2009	<0.005	
12/21/2009	<0.005	
6/20/2010	<0.005	
1/6/2011	<0.005	
7/7/2011	<0.005	
1/17/2012	<0.005	
7/9/2012	<0.005	
1/17/2013	<0.005	
7/16/2013	<0.005	
1/13/2014	<0.005	
7/9/2014	<0.005	
1/13/2015	<0.005	
7/16/2015	<0.005	
1/18/2016	<0.005	
7/27/2016	0.0008 (J)	
8/30/2016	<0.005	
10/26/2016	<0.005	
1/3/2017	<0.005	
4/6/2017	0.0006 (J)	
7/12/2017	0.0009 (J)	
10/3/2017	0.001 (J)	
1/10/2018	0.0012 (J)	
7/10/2018	0.0016 (J)	
1/16/2019	0.0011 (J)	
3/26/2019	0.0014 (J)	
8/28/2019	0.0023 (J)	
10/9/2019	0.0053 (J)	
4/7/2020	0.0011 (J)	

## Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-6R
9/29/2000	<0.005	
11/21/2000	<0.005	
1/20/2001	0.014	
3/14/2001	<0.005	
7/16/2001	<0.005	
11/1/2001	<0.005	
4/25/2002	<0.005	
11/20/2002	0.014	
6/6/2003	0.014	
12/12/2003	<0.005	
5/26/2004	0.0082	
12/7/2004	0.0062	
6/21/2005	<0.005	
12/12/2005	<0.005	
6/27/2006	<0.005	
12/4/2006	<0.005	
6/23/2007	0.0053	
12/11/2007	0.0057	
6/24/2008	0.012	
12/5/2008	0.0064	
7/7/2009	<0.005	
12/21/2009	<0.005	
6/20/2010	0.017	
1/7/2011	<0.005	
7/7/2011	<0.005	
1/18/2012	<0.005	
7/10/2012	<0.005	
1/18/2013	<0.005	
7/17/2013	<0.005	
1/14/2014	<0.005	
7/9/2014	<0.005	
1/14/2015	<0.005	
7/17/2015	<0.005	
1/18/2016	<0.005	
7/28/2016	0.0009 (J)	
8/30/2016	<0.005	
10/26/2016	<0.005	
1/5/2017	0.0021 (J)	
4/6/2017	0.0011 (J)	
7/12/2017	0.0014 (J)	
10/3/2017	0.0014 (J)	
1/9/2018	0.0017 (J)	
7/10/2018	0.00063 (J)	
1/16/2019	<0.005	
3/26/2019	0.0029 (J)	
8/27/2019	0.0035 (J)	
10/9/2019	0.0018 (J)	
4/7/2020	<0.005	

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-7	GWA-7
9/29/2000	0.11
11/21/2000	0.12
1/20/2001	0.11
3/14/2001	0.11
7/16/2001	0.11
11/1/2001	0.11
4/25/2002	0.058
6/6/2003	0.19
12/12/2003	0.1
5/26/2004	0.084
12/7/2004	0.094
6/21/2005	0.089
12/12/2005	0.089
6/27/2006	0.096
12/4/2006	0.092
6/23/2007	0.08
12/11/2007	0.067
6/23/2008	0.056
12/4/2008	0.054
7/7/2009	0.034
12/20/2009	0.034
6/20/2010	0.062
1/7/2011	0.039
7/7/2011	0.036
1/17/2012	0.041
7/9/2012	0.15
1/18/2013	0.15
7/17/2013	0.13
1/13/2014	0.16
7/9/2014	0.11
1/13/2015	0.083
7/16/2015	0.094
1/18/2016	0.22
7/27/2016	0.192
9/1/2016	0.415 (o)
10/25/2016	0.173
1/6/2017	0.167
4/6/2017	0.136
7/13/2017	0.0891
10/4/2017	0.113
1/9/2018	0.0901
7/11/2018	0.065
1/16/2019	0.062
3/25/2019	0.054
8/26/2019	0.11
10/8/2019	0.1
4/6/2020	0.072

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
9/29/2000	0.16 (o)
1/20/2001	0.18 (o)
3/14/2001	0.14
7/16/2001	0.14
11/1/2001	0.14
4/25/2002	0.088
6/6/2003	0.14
12/12/2003	0.13
5/26/2004	0.09
12/7/2004	0.11
6/21/2005	0.084
12/12/2005	0.1
4/4/2006	0.089
6/27/2006	0.1
8/30/2006	0.12
12/4/2006	0.086
2/15/2007	0.088
6/23/2007	0.089
9/11/2007	0.092
12/11/2007	0.077
3/11/2008	0.082
6/23/2008	0.086
11/3/2008	0.088
12/4/2008	0.081
3/25/2009	0.069
7/7/2009	0.078
9/14/2009	0.079
12/20/2009	0.081
3/4/2010	0.065
6/20/2010	0.078
9/14/2010	0.076
1/7/2011	0.074
4/15/2011	0.065
7/7/2011	0.081
9/25/2011	0.078
1/17/2012	0.082
4/4/2012	0.0861
7/10/2012	0.082
10/9/2012	0.09
1/18/2013	0.083
4/5/2013	0.078
7/17/2013	0.083
10/11/2013	0.078
1/14/2014	0.081
4/3/2014	0.077
7/9/2014	0.073
10/24/2014	0.087
1/14/2015	0.079
5/10/2015	0.076
7/17/2015	0.061
10/6/2015	0.067
1/18/2016	0.068

## Prediction Limit

Page 2

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
4/26/2016	0.0596
7/28/2016	0.0701
8/30/2016	0.0687
10/24/2016	0.07
1/3/2017	0.061
4/3/2017	0.0612
7/11/2017	0.0624
10/2/2017	0.0618
1/9/2018	0.0574
7/9/2018	0.056
1/16/2019	0.062
3/25/2019	0.064
8/26/2019	0.065
10/7/2019	0.069
4/6/2020	0.057

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-1	GWC-1
9/29/2000	0.044
11/21/2000	0.047
1/20/2001	0.051
3/14/2001	0.048
7/16/2001	0.054
11/1/2001	0.063
4/25/2002	0.032
6/6/2003	0.046
12/12/2003	0.034
5/26/2004	0.035
12/7/2004	0.024
6/21/2005	0.039
12/12/2005	0.042
6/27/2006	0.033
12/4/2006	0.04
6/23/2007	0.044
12/11/2007	0.049
6/24/2008	0.038
12/5/2008	0.06
7/7/2009	0.043
12/20/2009	0.065
6/20/2010	0.095
1/6/2011	0.093
7/7/2011	0.095
1/17/2012	0.1
7/9/2012	0.11
1/17/2013	0.12
7/16/2013	0.081
1/13/2014	0.096
7/9/2014	0.066
1/13/2015	0.068
7/16/2015	0.07
1/17/2016	0.062
7/27/2016	0.0417
8/30/2016	0.0545
10/25/2016	0.0504
1/4/2017	0.0534
4/4/2017	0.0549
7/12/2017	0.0614
10/3/2017	0.0436
1/10/2018	0.053
7/10/2018	0.059
1/16/2019	0.054
3/26/2019	0.055
8/27/2019	0.054
10/9/2019	0.058
4/7/2020	0.05

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-11	GWC-11
9/29/2000	0.1
11/21/2000	0.082
1/20/2001	0.083
3/14/2001	0.075
7/16/2001	0.091
11/1/2001	0.068
4/25/2002	0.066
6/6/2003	0.085
12/12/2003	0.072
5/26/2004	0.055
12/7/2004	0.066
6/21/2005	0.033
12/12/2005	0.034
6/27/2006	0.029
12/4/2006	0.02
6/23/2007	0.017
12/11/2007	0.013
6/23/2008	0.012
12/4/2008	0.011
7/8/2009	0.012
12/21/2009	0.011
6/20/2010	0.0089
1/6/2011	0.014
7/7/2011	0.018
1/17/2012	0.23
7/9/2012	0.17
1/17/2013	0.2
7/16/2013	0.11
1/13/2014	0.083
7/8/2014	0.066
1/13/2015	0.053
7/16/2015	0.052
1/19/2016	0.048
7/26/2016	0.051
8/31/2016	0.0565
10/26/2016	0.0591
1/4/2017	0.0598
4/6/2017	0.0813
7/11/2017	0.0302
10/3/2017	0.103
1/11/2018	0.166
7/11/2018	0.12
1/17/2019	0.039
3/27/2019	0.053
8/27/2019	0.12
10/8/2019	0.13
4/7/2020	0.14

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-12	GWC-12
9/29/2000	0.075
11/21/2000	0.072
1/20/2001	0.086
3/14/2001	0.088
7/16/2001	0.084
11/1/2001	0.13
4/25/2002	0.24 (o)
6/6/2003	0.28 (o)
12/12/2003	0.27 (o)
5/26/2004	0.31 (o)
12/7/2004	0.46 (o)
6/21/2005	0.053
12/12/2005	0.1
6/27/2006	0.098
12/4/2006	0.068
6/23/2007	0.042
12/11/2007	0.04
6/23/2008	0.041
12/4/2008	0.035
7/8/2009	0.036
12/21/2009	0.028
6/20/2010	0.025
1/7/2011	0.037
7/7/2011	0.039
1/17/2012	0.045
7/9/2012	0.032
1/17/2013	0.033
7/16/2013	0.027
1/13/2014	0.027
7/8/2014	0.037
1/13/2015	0.023
7/16/2015	0.03
1/18/2016	0.032
7/27/2016	0.0191
8/31/2016	0.019
10/26/2016	0.0197
1/4/2017	0.0174
4/5/2017	0.0174
7/10/2017	0.0172
10/4/2017	0.0162
1/11/2018	0.018
7/11/2018	0.014
1/17/2019	0.017
3/27/2019	0.017
8/27/2019	0.017
10/9/2019	0.019
4/7/2020	0.017

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-13	GWC-13
9/29/2000	<0.005	
11/21/2000	0.01	
1/20/2001	<0.005	
3/14/2001	0.01	
7/16/2001	<0.005	
11/1/2001	<0.005	
4/25/2002	<0.005	
6/6/2003	0.028	
12/12/2003	0.019	
5/26/2004	<0.005	
12/7/2004	0.009	
6/21/2005	0.0089	
12/12/2005	0.026	
6/27/2006	0.029	
12/4/2006	0.017	
6/23/2007	0.014	
12/11/2007	0.011	
6/23/2008	0.018	
12/4/2008	0.019	
7/8/2009	0.011	
12/21/2009	0.01	
6/20/2010	0.0081	
1/6/2011	0.012	
7/7/2011	0.015	
1/17/2012	0.0086	
7/9/2012	0.01	
1/17/2013	0.014	
7/16/2013	0.012	
1/13/2014	0.015	
7/8/2014	0.017	
1/13/2015	0.019	
7/16/2015	0.022	
1/18/2016	0.026	
7/26/2016	0.0236	
8/31/2016	0.0273	
10/26/2016	0.0238	
1/5/2017	0.0218	
4/6/2017	0.0204	
7/12/2017	0.0161	
10/4/2017	0.0185	
1/10/2018	0.0166	
7/11/2018	0.019	
1/16/2019	0.019	
3/26/2019	0.026	
8/27/2019	0.024	
10/8/2019	0.024	
4/8/2020	0.027	

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-14	GWC-14
9/29/2000	0.11
11/21/2000	0.15
1/20/2001	0.1
3/14/2001	0.095
7/16/2001	0.28 (o)
11/1/2001	0.16
4/25/2002	0.054
6/6/2003	0.063
12/12/2003	0.041
5/26/2004	0.059
12/7/2004	0.076
6/21/2005	0.042
12/12/2005	0.048
4/4/2006	0.05
6/27/2006	0.036
8/30/2006	0.059
12/4/2006	0.062
2/15/2007	0.079
6/23/2007	0.03
9/11/2007	0.053
12/11/2007	0.075
3/11/2008	0.052
6/24/2008	0.039
11/3/2008	0.082
12/4/2008	0.079
3/25/2009	0.093
7/8/2009	0.039
9/14/2009	0.061
12/20/2009	0.088
3/4/2010	0.077
6/20/2010	0.075
9/14/2010	0.093
1/7/2011	0.13
4/15/2011	0.086
7/7/2011	0.051
9/25/2011	0.056
1/17/2012	0.052
4/4/2012	0.0519
7/9/2012	0.048
10/9/2012	0.065
1/18/2013	0.045
4/5/2013	0.047
7/17/2013	0.032
10/11/2013	0.028
1/14/2014	0.036
4/3/2014	0.038
7/9/2014	0.03
10/24/2014	0.025
1/14/2015	0.04
5/10/2015	0.026
7/17/2015	0.029
10/6/2015	0.03

## Prediction Limit

Page 2

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-14	GWC-14
1/17/2016	0.038
4/26/2016	0.025
7/27/2016	0.0248
9/1/2016	0.0346
10/25/2016	0.0248
1/5/2017	0.0245
4/4/2017	0.0342
7/11/2017	0.0276
10/2/2017	0.0274
1/9/2018	0.0222
7/9/2018	0.026
1/16/2019	0.028
3/26/2019	0.034
8/27/2019	0.067
10/8/2019	0.085
4/7/2020	0.073

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-15	GWC-15
9/29/2000	0.028	
11/21/2000	0.035	
1/20/2001	0.032	
3/14/2001	0.036	
7/16/2001	0.036	
11/1/2001	0.036	
4/25/2002	0.045	
6/6/2003	0.083 (o)	
12/12/2003	0.094 (o)	
5/26/2004	0.034	
12/7/2004	0.042	
6/21/2005	0.039	
12/12/2005	0.043	
6/27/2006	0.031	
12/4/2006	0.043	
6/23/2007	0.031	
12/11/2007	0.044	
6/24/2008	0.057	
12/5/2008	0.041	
7/8/2009	0.058	
12/20/2009	0.062	
6/20/2010	0.03	
1/7/2011	0.049	
7/7/2011	0.05	
1/17/2012	0.044	
7/9/2012	0.045	
1/18/2013	0.049	
7/17/2013	0.039	
1/13/2014	0.038	
7/9/2014	0.031	
1/13/2015	0.041	
7/16/2015	0.041	
1/17/2016	0.048	
7/27/2016	0.0487	
9/1/2016	0.0403	
10/25/2016	0.0329	
1/5/2017	0.0392	
4/3/2017	0.0439	
7/11/2017	0.051	
10/2/2017	0.047	
1/9/2018	0.0431	
7/10/2018	0.047	
1/17/2019	0.042	
3/26/2019	0.047	
8/27/2019	0.049	
10/8/2019	0.057	
4/7/2020	0.033	

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-16	GWC-16
9/29/2000	0.076
11/21/2000	0.075
1/20/2001	0.053
3/14/2001	0.055
7/16/2001	0.041
11/1/2001	0.045
4/25/2002	0.055
6/6/2003	0.48 (o)
12/12/2003	0.13 (o)
5/26/2004	0.055
12/7/2004	0.072
6/21/2005	0.061
12/12/2005	0.047
4/4/2006	0.042
6/27/2006	0.042
8/30/2006	0.05
12/4/2006	0.044
2/15/2007	0.041
6/23/2007	0.044
9/11/2007	0.04
12/11/2007	0.0035
3/11/2008	0.034
6/24/2008	0.042
11/3/2008	0.049
12/5/2008	0.05
3/25/2009	0.052
7/8/2009	0.046
9/14/2009	0.048
12/20/2009	0.062
3/4/2010	0.058
6/21/2010	0.041
9/14/2010	0.036
1/7/2011	0.054
4/15/2011	0.049
7/7/2011	0.063
9/25/2011	0.037
1/18/2012	0.034
4/4/2012	0.0446
7/10/2012	0.033
10/9/2012	0.041
1/18/2013	0.036
4/5/2013	0.036
7/17/2013	0.054
10/11/2013	0.052
1/14/2014	0.051
4/3/2014	0.047
7/9/2014	0.08
10/24/2014	0.072
1/14/2015	0.047
5/11/2015	0.053
7/16/2015	0.059
10/6/2015	0.053

## Prediction Limit

Page 2

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-16	GWC-16
1/17/2016	0.056
4/26/2016	0.0721
7/28/2016	0.0534
9/1/2016	0.0445
10/25/2016	0.0464
1/4/2017	0.0379
4/5/2017	0.0534
7/12/2017	0.0944
10/3/2017	0.135 (o)
1/10/2018	0.0603
7/10/2018	0.16 (o)
1/17/2019	0.13
3/26/2019	0.14
8/28/2019	0.09
10/8/2019	0.13
4/7/2020	0.13

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-17	GWC-17
9/29/2000	0.16
11/21/2000	0.17
1/20/2001	0.16
3/14/2001	0.17
7/16/2001	0.19
11/1/2001	0.18
4/25/2002	0.15
6/6/2003	0.13
12/12/2003	0.18
5/26/2004	0.17
12/7/2004	0.19
6/21/2005	0.18
12/12/2005	0.17
6/27/2006	0.17
12/4/2006	0.21
6/23/2007	0.17
12/11/2007	0.18
6/24/2008	0.14
12/5/2008	0.19
7/8/2009	0.2
12/21/2009	0.23
6/21/2010	0.25
1/7/2011	0.21
7/8/2011	0.13
1/18/2012	0.26
7/10/2012	0.19
1/18/2013	0.17
7/17/2013	0.18
1/14/2014	0.18
7/9/2014	0.16
1/14/2015	0.16
7/18/2015	0.012
1/18/2016	0.13
7/29/2016	0.181
9/1/2016	0.203
10/26/2016	0.177
1/5/2017	0.142
4/5/2017	0.106
7/13/2017	0.0686
10/4/2017	0.0589
1/11/2018	0.0412
7/11/2018	0.049
1/16/2019	0.063
3/26/2019	0.025
8/28/2019	0.026
10/9/2019	0.032
4/8/2020	0.055

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-2	GWC-2
11/21/2000	0.046
1/20/2001	0.036
3/14/2001	0.03
7/16/2001	0.032
11/1/2001	0.029
4/25/2002	0.021
6/6/2003	0.032
12/12/2003	0.021
5/26/2004	0.035
12/7/2004	0.031
6/21/2005	0.028
12/12/2005	0.024
6/27/2006	0.03
12/4/2006	0.031
6/23/2007	0.037
12/11/2007	0.034
6/24/2008	0.038
12/4/2008	0.038
7/8/2009	0.053
12/20/2009	0.047
6/20/2010	0.046
1/6/2011	0.063
1/17/2012	0.06
7/9/2012	0.05
1/17/2013	0.058
7/17/2013	0.041
1/13/2014	0.058
7/9/2014	0.048
1/13/2015	0.048
7/16/2015	0.048
1/17/2016	0.049
7/27/2016	0.0796
8/31/2016	0.0429
10/26/2016	0.113 (o)
1/5/2017	0.0526
4/4/2017	0.0503
7/13/2017	0.0529
10/3/2017	0.057
1/10/2018	0.0527
7/10/2018	0.054
1/21/2019	0.05
7/30/2019	0.052
8/27/2019	0.053
10/9/2019	0.05
4/8/2020	0.061

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20
6/21/2010	0.062
1/7/2011	0.039
7/7/2011	0.06
7/8/2011	0.043
1/18/2012	0.042
7/10/2012	0.039
1/18/2013	0.04
7/17/2013	0.055
1/14/2014	0.059
7/10/2014	0.067
1/12/2015	0.061
7/18/2015	0.13
1/17/2016	0.08
7/28/2016	0.164
9/1/2016	0.0976
10/25/2016	0.0702
1/4/2017	0.0999
4/4/2017	0.136
7/11/2017	0.145
10/2/2017	0.148
1/10/2018	0.0788
7/9/2018	0.087
1/21/2019	0.069
3/25/2019	0.085
8/28/2019	0.078
10/9/2019	0.078
4/8/2020	0.19

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-21	GWC-21
6/21/2010	0.16
1/7/2011	0.095
7/8/2011	0.1
1/18/2012	0.12
7/10/2012	0.097
1/18/2013	0.1
7/17/2013	0.069
1/14/2014	0.086
7/9/2014	0.065
1/14/2015	0.084
7/17/2015	0.071
1/17/2016	0.079
7/28/2016	0.0626
9/1/2016	0.077
10/25/2016	0.0217
1/4/2017	0.0617
4/4/2017	0.0761
7/13/2017	0.0428
10/3/2017	0.0376
1/9/2018	0.0704
7/10/2018	0.061
1/17/2019	0.061
3/26/2019	0.084
8/28/2019	0.063
10/8/2019	0.079
4/7/2020	0.054

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22	GWC-22
6/21/2010	0.11	
1/7/2011	0.12	
7/8/2011	0.094	
1/18/2012	0.087	
7/10/2012	0.1	
1/18/2013	0.078	
7/17/2013	0.062	
1/14/2014	0.073	
7/10/2014	0.13	
1/14/2015	0.065	
7/18/2015	0.073	
1/18/2016	0.062	
7/29/2016	0.0575	
8/31/2016	0.0693	
10/26/2016	0.0966	
1/4/2017	0.0975	
4/6/2017	0.064	
7/11/2017	0.0778	
10/4/2017	0.156	
1/11/2018	0.0702	
7/11/2018	0.12	
1/18/2019		0.052
3/27/2019		0.057
8/27/2019		0.097
10/9/2019		0.065
4/7/2020		0.1

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-9	GWC-9
9/29/2000	0.093
11/21/2000	0.095
1/20/2001	0.089
3/14/2001	0.088
7/16/2001	0.096
11/1/2001	0.094
4/25/2002	0.085
6/6/2003	0.09
12/12/2003	0.084
5/26/2004	0.08
12/7/2004	0.098
6/21/2005	0.084
12/12/2005	0.07
6/27/2006	0.083
12/4/2006	0.072
6/23/2007	0.087
12/11/2007	0.082
6/23/2008	0.1
12/4/2008	0.12
7/8/2009	0.14
12/21/2009	0.15
6/20/2010	0.21
1/7/2011	0.2
7/8/2011	0.18
1/18/2012	0.18
7/10/2012	0.16
1/18/2013	0.19
7/17/2013	0.17
1/14/2014	0.2
7/9/2014	0.16
1/14/2015	0.17
7/17/2015	0.18
1/18/2016	0.2
7/28/2016	0.234
8/31/2016	0.284
10/27/2016	0.244
1/6/2017	0.305
4/6/2017	0.249
7/12/2017	0.256
10/4/2017	0.356
1/11/2018	0.226
7/11/2018	0.29
1/18/2019	0.21
3/27/2019	0.19
8/28/2019	0.17
10/9/2019	0.18
4/8/2020	0.15

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-4R	GWB-4R
9/29/2000	0.16	
11/21/2000	0.16	
1/20/2001	0.21	
3/14/2001	0.18	
7/16/2001	0.18	
11/1/2001	0.15	
4/25/2002	0.16	
6/6/2003	0.29	
12/12/2003	0.18	
5/26/2004	0.16	
12/7/2004	0.16	
6/21/2005	0.15	
12/12/2005	0.15	
6/27/2006	0.19	
12/4/2006	0.26	
6/23/2007	0.24	
12/11/2007	0.21	
6/24/2008	0.13	
12/5/2008	0.12	
7/7/2009	0.17	
12/21/2009	0.2	
6/21/2010	0.22	
1/7/2011	0.12	
7/8/2011	0.15	
1/18/2012	0.15	
7/10/2012	0.14	
1/18/2013	0.15	
7/17/2013	0.14	
1/14/2014	0.16	
7/9/2014	0.12	
1/12/2015	0.13	
7/16/2015	0.11	
1/18/2016	0.095	
7/29/2016	0.0883	
9/1/2016	0.123	
10/26/2016	0.0863	
1/6/2017	0.0758	
4/4/2017	0.091	
7/12/2017	0.0941	
10/4/2017	0.0994	
1/11/2018	0.088	
7/11/2018	0.071	
1/16/2019		0.083
3/25/2019		0.077
8/27/2019		0.076
10/9/2019		0.076
4/7/2020		0.09

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R	GWB-5R
9/29/2000	0.22	
11/21/2000	0.13	
1/20/2001	0.19	
3/14/2001	0.27	
7/16/2001	0.37	
11/1/2001	0.61 (o)	
4/25/2002	0.19	
6/6/2003	0.72 (o)	
12/12/2003	0.054	
5/26/2004	0.18	
12/7/2004	0.24	
6/21/2005	0.2	
12/12/2005	0.074	
6/27/2006	0.075	
12/4/2006	0.092	
6/23/2007	0.089	
12/11/2007	0.072	
6/24/2008	0.049	
12/5/2008	0.067	
7/7/2009	0.04	
12/21/2009	0.044	
6/20/2010	0.036	
1/6/2011	0.075	
7/7/2011	0.13	
1/17/2012	0.21	
7/9/2012	0.2	
1/17/2013	0.19	
7/16/2013	0.076	
1/13/2014	0.14	
7/9/2014	0.12	
1/13/2015	0.13	
7/16/2015	0.12	
1/18/2016	0.12	
7/27/2016	0.112	
8/30/2016	0.135	
10/26/2016	0.103	
1/3/2017	0.118	
4/6/2017	0.162	
7/12/2017	0.157	
10/3/2017	0.127	
1/10/2018	0.158	
7/10/2018	0.31	
1/16/2019	0.054	
3/26/2019	0.057	
8/28/2019	0.1	
10/9/2019	0.13	
4/7/2020	0.098	

## Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-6R
9/29/2000	0.16	
11/21/2000	0.21	
1/20/2001	0.23	
3/14/2001	0.22	
7/16/2001	0.22	
11/1/2001	0.23	
4/25/2002	0.15	
6/6/2003	0.13	
12/12/2003	0.034	
5/26/2004	0.13	
12/7/2004	0.13	
6/21/2005	0.07	
12/12/2005	0.04	
6/27/2006	0.041	
12/4/2006	0.048	
6/23/2007	0.12	
12/11/2007	0.12	
6/24/2008	0.17	
12/5/2008	0.093	
7/7/2009	0.06	
12/21/2009	0.11	
6/20/2010	0.11	
1/7/2011	0.025	
7/7/2011	0.025	
1/18/2012	0.03	
7/10/2012	0.028	
1/18/2013	0.058	
7/17/2013	0.086	
1/14/2014	0.1	
7/9/2014	0.082	
1/14/2015	0.094	
7/17/2015	0.11	
1/18/2016	0.11	
7/28/2016	0.105	
8/30/2016	0.106	
10/26/2016	0.107	
1/5/2017	0.107	
4/6/2017	0.111	
7/12/2017	0.106	
10/3/2017	0.105	
1/9/2018	0.0969	
7/10/2018	0.087	
1/16/2019		0.013 (J)
3/26/2019		0.012 (J)
8/27/2019		0.013
10/9/2019		0.014 (J)
4/7/2020		0.01 (J)

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-7	GWA-7
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
6/6/2003	0.037
12/12/2003	0.0044
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	0.0015
6/23/2007	<0.01
12/11/2007	0.0016
6/23/2008	0.0019
12/4/2008	<0.01
7/7/2009	0.0037
12/20/2009	0.0016
6/20/2010	<0.01
1/7/2011	0.0033
7/7/2011	0.0044
1/17/2012	0.0038
7/9/2012	0.022
1/18/2013	0.034
7/17/2013	0.032
1/13/2014	0.04
7/9/2014	0.036
1/13/2015	0.03
7/16/2015	0.039
1/18/2016	0.068
7/27/2016	0.05
9/1/2016	0.119 (o)
10/25/2016	0.0519
1/6/2017	0.0536
4/6/2017	0.0447 (J)
7/13/2017	0.0269
10/4/2017	0.0378
1/9/2018	0.0283 (J)
7/11/2018	0.018 (J)
1/16/2019	0.018 (J)
3/25/2019	0.017 (J)
8/26/2019	0.024 (J)
10/8/2019	0.021 (J)
4/6/2020	0.015 (J)

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
9/29/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	0.0051 (o)
6/6/2003	0.014
12/12/2003	0.011
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
4/4/2006	<0.01
6/27/2006	<0.01
8/30/2006	<0.01
12/4/2006	<0.01
2/15/2007	<0.01
6/23/2007	<0.01
9/11/2007	<0.01
12/11/2007	<0.01
3/11/2008	<0.01
6/23/2008	<0.01
11/3/2008	<0.01
12/4/2008	<0.01
3/25/2009	<0.01
7/7/2009	<0.01
9/14/2009	<0.01
12/20/2009	<0.01
3/4/2010	<0.01
6/20/2010	<0.01
9/14/2010	<0.01
1/7/2011	<0.01
4/15/2011	<0.01
7/7/2011	<0.01
9/25/2011	0.0021 (o)
1/17/2012	<0.01
4/4/2012	<0.01
7/10/2012	<0.01
10/9/2012	<0.01
1/18/2013	<0.01
4/5/2013	<0.01
7/17/2013	<0.01
10/11/2013	<0.01
1/14/2014	<0.01
4/3/2014	<0.01
7/9/2014	<0.01
10/24/2014	<0.01
1/14/2015	<0.01
5/10/2015	<0.01
7/17/2015	<0.01
10/6/2015	<0.01

## Prediction Limit

Page 2

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
1/18/2016	<0.01
4/26/2016	<0.01
7/28/2016	<0.01
8/30/2016	<0.01
10/24/2016	<0.01
1/3/2017	<0.01
4/3/2017	0.0004 (J)
7/11/2017	0.0006 (J)
10/2/2017	<0.01
1/9/2018	<0.01
7/9/2018	<0.01
1/16/2019	<0.01
3/25/2019	<0.01
8/26/2019	0.001 (J)
10/7/2019	0.00052 (J)
4/6/2020	<0.01

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	0.005 (o)
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	0.002 (o)
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/24/2008	<0.01
12/5/2008	<0.01
7/7/2009	0.0013
12/20/2009	<0.01
6/20/2010	<0.01
1/6/2011	<0.01
7/7/2011	<0.01
1/17/2012	<0.01
7/9/2012	<0.01
1/17/2013	<0.01
7/16/2013	<0.01
1/13/2014	<0.01
7/9/2014	0.0011 (J)
1/13/2015	<0.01
7/16/2015	0.0011 (J)
1/17/2016	<0.01
7/27/2016	0.0016 (J)
8/30/2016	0.0015 (J)
10/25/2016	0.0018 (J)
1/4/2017	0.0021 (J)
4/4/2017	0.002 (J)
7/12/2017	0.0021 (J)
10/3/2017	0.0014 (J)
1/10/2018	0.0017 (J)
7/10/2018	0.0021 (J)
1/16/2019	0.0021 (J)
3/26/2019	0.0018 (J)
8/27/2019	0.0062 (J)
10/9/2019	0.0019 (J)
4/7/2020	0.0015 (J)

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-11	GWC-11
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	0.006	
6/6/2003	0.0082	
12/12/2003	0.0023	
5/26/2004	<0.01	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	<0.01	
6/27/2006	<0.01	
12/4/2006	0.0021	
6/23/2007	0.0017	
12/11/2007	<0.01	
6/23/2008	<0.01	
12/4/2008	<0.01	
7/8/2009	<0.01	
12/21/2009	<0.01	
6/20/2010	<0.01	
1/6/2011	<0.01	
7/7/2011	0.0023	
1/17/2012	<0.01	
7/9/2012	0.0017	
1/17/2013	<0.01	
7/16/2013	<0.01	
1/13/2014	<0.01	
7/8/2014	<0.01	
1/13/2015	<0.01	
7/16/2015	<0.01	
1/19/2016	<0.01	
7/26/2016	0.0005 (J)	
8/31/2016	0.001 (J)	
10/26/2016	<0.01	
1/4/2017	<0.01	
4/6/2017	0.0007 (J)	
7/11/2017	0.0006 (J)	
10/3/2017	0.0007 (J)	
1/11/2018	0.0098 (J)	
7/11/2018	<0.01	
1/17/2019	<0.01	
3/27/2019	<0.01	
8/27/2019	0.00092 (J)	
10/8/2019	0.00091 (J)	
4/7/2020	0.00094 (J)	

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-12	GWC-12
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	0.002	
6/6/2003	<0.01	
12/12/2003	<0.01	
5/26/2004	<0.01	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	<0.01	
6/27/2006	<0.01	
12/4/2006	0.0032	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/23/2008	0.0016	
12/4/2008	<0.01	
7/8/2009	<0.01	
12/21/2009	<0.01	
6/20/2010	<0.01	
1/7/2011	<0.01	
7/7/2011	<0.01	
1/17/2012	<0.01	
7/9/2012	<0.01	
1/17/2013	<0.01	
7/16/2013	<0.01	
1/13/2014	<0.01	
7/8/2014	<0.01	
1/13/2015	<0.01	
7/16/2015	0.001 (J)	
1/18/2016	<0.01	
7/27/2016	0.0014 (J)	
8/31/2016	0.0012 (J)	
10/26/2016	0.0012 (J)	
1/4/2017	0.0012 (J)	
4/5/2017	0.0013 (J)	
7/10/2017	0.0014 (J)	
10/4/2017	0.0011 (J)	
1/11/2018	0.001 (J)	
7/11/2018	<0.01	
1/17/2019	0.0028 (J)	
3/27/2019	<0.01	
8/27/2019	0.00085 (J)	
10/9/2019	0.00081 (J)	
4/7/2020	0.00082 (J)	

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-13	GWC-13
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	<0.01	
6/6/2003	0.003	
12/12/2003	<0.01	
5/26/2004	<0.01	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	<0.01	
6/27/2006	<0.01	
12/4/2006	0.0017	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/23/2008	<0.01	
12/4/2008	<0.01	
7/8/2009	<0.01	
12/21/2009	<0.01	
6/20/2010	<0.01	
1/6/2011	<0.01	
7/7/2011	0.0019	
1/17/2012	<0.01	
7/9/2012	<0.01	
1/17/2013	<0.01	
7/16/2013	<0.01	
1/13/2014	<0.01	
7/8/2014	<0.01	
1/13/2015	<0.01	
7/16/2015	<0.01	
1/18/2016	<0.01	
7/26/2016	<0.01	
8/31/2016	0.0011 (J)	
10/26/2016	<0.01	
1/5/2017	<0.01	
4/6/2017	0.0011 (J)	
7/12/2017	0.0007 (J)	
10/4/2017	0.0008 (J)	
1/10/2018	0.0007 (J)	
7/11/2018	0.0019 (J)	
1/16/2019	<0.01	
3/26/2019	<0.01	
8/27/2019	<0.01	
10/8/2019	<0.01	
4/8/2020	0.00058 (J)	

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:58 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-14
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	0.0014
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
4/4/2006	<0.01
6/27/2006	<0.01
8/30/2006	<0.01
12/4/2006	0.0042 (o)
2/15/2007	<0.01
6/23/2007	<0.01
9/11/2007	<0.01
12/11/2007	<0.01
3/11/2008	<0.01
6/24/2008	<0.01
11/3/2008	<0.01
12/4/2008	<0.01
3/25/2009	<0.01
7/8/2009	<0.01
9/14/2009	<0.01
12/20/2009	<0.01
3/4/2010	<0.01
6/20/2010	<0.01
9/14/2010	<0.01
1/7/2011	0.0016
4/15/2011	0.0034 (o)
7/7/2011	<0.01
9/25/2011	0.0013
1/17/2012	<0.01
4/4/2012	<0.01
7/9/2012	<0.01
10/9/2012	0.0019
1/18/2013	0.0017
4/5/2013	0.0019
7/17/2013	0.0017
10/11/2013	0.0013
1/14/2014	0.001
4/3/2014	0.0031 (o)
7/9/2014	0.0012 (J)
10/24/2014	<0.01
1/14/2015	0.0013
5/10/2015	<0.01
7/17/2015	0.001 (J)

## Prediction Limit

Page 2

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-14	GWC-14
10/6/2015	<0.01	
1/17/2016	0.0012 (J)	
4/26/2016	<0.01	
7/27/2016	0.0008 (J)	
9/1/2016	0.0015 (J)	
10/25/2016	<0.01	
1/5/2017	0.001 (J)	
4/4/2017	0.001 (J)	
7/11/2017	0.0008 (J)	
10/2/2017	0.0009 (J)	
1/9/2018	0.0006 (J)	
7/9/2018	<0.01	
1/16/2019	<0.01	
3/26/2019	<0.01	
8/27/2019	0.001 (J)	
10/8/2019	0.00053 (J)	
4/7/2020	0.00074 (J)	

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-15	GWC-15
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	0.0058	
6/6/2003	0.0068	
12/12/2003	0.0041	
5/26/2004	<0.01	
12/7/2004	0.0026	
6/21/2005	<0.01	
12/12/2005	<0.01	
6/27/2006	0.0013	
12/4/2006	<0.01	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/24/2008	0.0014	
12/5/2008	<0.01	
7/8/2009	<0.01	
12/20/2009	<0.01	
6/20/2010	<0.01	
1/7/2011	<0.01	
7/7/2011	<0.01	
1/17/2012	<0.01	
7/9/2012	<0.01	
1/18/2013	<0.01	
7/17/2013	<0.01	
1/13/2014	<0.01	
7/9/2014	<0.01	
1/13/2015	<0.01	
7/16/2015	<0.01	
1/17/2016	<0.01	
7/27/2016	0.0007 (J)	
9/1/2016	0.0011 (J)	
10/25/2016	<0.01	
1/5/2017	<0.01	
4/3/2017	0.0015 (J)	
7/11/2017	0.0013 (J)	
10/2/2017	0.0013 (J)	
1/9/2018	0.0012 (J)	
7/10/2018	<0.01	
1/17/2019	<0.01	
3/26/2019	<0.01	
8/27/2019	0.0016 (J)	
10/8/2019	0.0017 (J)	
4/7/2020	0.0014 (J)	

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-16
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	0.0041	
6/6/2003	0.063 (o)	
12/12/2003	0.0059	
5/26/2004	<0.01	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	<0.01	
4/4/2006	<0.01	
6/27/2006	<0.01	
8/30/2006	<0.01	
12/4/2006	0.0036 (o)	
2/15/2007	<0.01	
6/23/2007	0.0016	
9/11/2007	<0.01	
12/11/2007	<0.01	
3/11/2008	<0.01	
6/24/2008	<0.01	
11/3/2008	0.0025	
12/5/2008	<0.01	
3/25/2009	<0.01	
7/8/2009	<0.01	
9/14/2009	<0.01	
12/20/2009	<0.01	
3/4/2010	<0.01	
6/21/2010	<0.01	
9/14/2010	<0.01	
1/7/2011	0.0018	
4/15/2011	<0.01	
7/7/2011	<0.01	
9/25/2011	<0.01	
1/18/2012	<0.01	
4/4/2012	<0.01	
7/10/2012	<0.01	
10/9/2012	0.0018	
1/18/2013	<0.01	
4/5/2013	<0.01	
7/17/2013	<0.01	
10/11/2013	<0.01	
1/14/2014	<0.01	
4/3/2014	<0.01	
7/9/2014	<0.01	
10/24/2014	<0.01	
1/14/2015	<0.01	
5/11/2015	<0.01	
7/16/2015	<0.01	

## Prediction Limit

Page 2

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16
10/6/2015	<0.01
1/17/2016	<0.01
4/26/2016	<0.01
7/28/2016	0.0006 (J)
9/1/2016	0.0011 (J)
10/25/2016	<0.01
1/4/2017	<0.01
4/5/2017	0.001 (J)
7/12/2017	0.0011 (J)
10/3/2017	0.0009 (J)
1/10/2018	0.0007 (J)
7/10/2018	<0.01
1/17/2019	0.01 (J)
3/26/2019	<0.01
8/28/2019	0.0011 (J)
10/8/2019	0.00099 (J)
4/7/2020	<0.01

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-17	GWC-17
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	<0.01
12/12/2003	0.036 (o)
5/26/2004	<0.01
12/7/2004	0.0021
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/24/2008	<0.01
12/5/2008	<0.01
7/8/2009	<0.01
12/21/2009	<0.01
6/21/2010	<0.01
1/7/2011	<0.01
7/8/2011	0.0013
1/18/2012	<0.01
7/10/2012	<0.01
1/18/2013	<0.01
7/17/2013	<0.01
1/14/2014	<0.01
7/9/2014	<0.01
1/14/2015	<0.01
7/18/2015	<0.01
1/18/2016	<0.01
7/29/2016	0.0009 (J)
9/1/2016	0.0011 (J)
10/26/2016	<0.01
1/5/2017	0.0012 (J)
4/5/2017	0.0015 (J)
7/13/2017	0.0012 (J)
10/4/2017	0.0055 (J)
1/11/2018	0.0009 (J)
7/11/2018	<0.01
1/16/2019	<0.01
3/26/2019	<0.01
8/28/2019	0.0013 (J)
10/9/2019	0.00081 (J)
4/8/2020	0.00073 (J)

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-2	GWC-2
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/24/2008	<0.01
12/4/2008	<0.01
7/8/2009	<0.01
12/20/2009	<0.01
6/20/2010	<0.01
1/6/2011	<0.01
1/17/2012	<0.01
7/9/2012	<0.01
1/17/2013	<0.01
7/17/2013	<0.01
1/13/2014	<0.01
7/9/2014	<0.01
1/13/2015	<0.01
7/16/2015	<0.01
1/17/2016	<0.01
7/27/2016	0.0008 (J)
8/31/2016	<0.01
10/26/2016	0.001 (J)
1/5/2017	<0.01
4/4/2017	0.0008 (J)
7/13/2017	0.0006 (J)
10/3/2017	<0.01
1/10/2018	<0.01
7/10/2018	<0.01
1/21/2019	<0.01
7/30/2019	0.00065 (J)
8/27/2019	<0.01
10/9/2019	0.00049 (J)
4/8/2020	0.00069 (J)

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20	GWC-20
6/21/2010	<0.01	
1/7/2011	0.0018	
7/7/2011	<0.01	
7/8/2011	0.0019	
1/18/2012	<0.01	
7/10/2012	0.0013	
1/18/2013	0.0015	
7/17/2013	<0.01	
1/14/2014	0	
7/10/2014	<0.01	
1/12/2015	<0.01	
7/18/2015	<0.01	
1/17/2016	<0.01	
7/28/2016	0.0007 (J)	
9/1/2016	<0.01	
10/25/2016	<0.01	
1/4/2017	<0.01	
4/4/2017	0.0011 (J)	
7/11/2017	0.0009 (J)	
10/2/2017	0.0009 (J)	
1/10/2018	0.0008 (J)	
7/9/2018	<0.01	
1/21/2019	<0.01	
3/25/2019	<0.01	
8/28/2019	0.00089 (J)	
10/9/2019	0.0011 (J)	
4/8/2020	0.001 (J)	

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-21	GWC-21
6/21/2010	0.0019	
1/7/2011	0.0017	
7/8/2011	0.0023	
1/18/2012	<0.01	
7/10/2012	<0.01	
1/18/2013	<0.01	
7/17/2013	0.0019	
1/14/2014	<0.01	
7/9/2014	<0.01	
1/14/2015	<0.01	
7/17/2015	<0.01	
1/17/2016	<0.01	
7/28/2016	0.0005 (J)	
9/1/2016	<0.01	
10/25/2016	<0.01	
1/4/2017	<0.01	
4/4/2017	0.0008 (J)	
7/13/2017	0.0006 (J)	
10/3/2017	0.0005 (J)	
1/9/2018	0.0007 (J)	
7/10/2018	<0.01	
1/17/2019	0.01	
3/26/2019	<0.01	
8/28/2019	0.00087 (J)	
10/8/2019	0.00065 (J)	
4/7/2020	<0.01	

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22	GWC-22
6/21/2010	<0.01	
1/7/2011	<0.01	
7/8/2011	<0.01	
1/18/2012	<0.01	
7/10/2012	<0.01	
1/18/2013	<0.01	
7/17/2013	<0.01	
1/14/2014	<0.01	
7/10/2014	<0.01	
1/14/2015	<0.01	
7/18/2015	<0.01	
1/18/2016	<0.01	
7/29/2016	0.0007 (J)	
8/31/2016	<0.01	
10/26/2016	<0.01	
1/4/2017	<0.01	
4/6/2017	0.0006 (J)	
7/11/2017	0.0005 (J)	
10/4/2017	0.0006 (J)	
1/11/2018	<0.01	
7/11/2018	<0.01	
1/18/2019	<0.01	
3/27/2019	<0.01	
8/27/2019	0.00057 (J)	
10/9/2019	0.00072 (J)	
4/7/2020	0.00049 (J)	

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	0.014
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	0.0039
6/21/2005	0.002
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	0.0019
6/23/2007	0.0015
12/11/2007	<0.01
6/23/2008	0.0015
12/4/2008	<0.01
7/8/2009	<0.01
12/21/2009	<0.01
6/20/2010	0.0015
1/7/2011	<0.01
7/8/2011	<0.01
1/18/2012	<0.01
7/10/2012	<0.01
1/18/2013	<0.01
7/17/2013	<0.01
1/14/2014	<0.01
7/9/2014	0.0011 (J)
1/14/2015	<0.01
7/17/2015	0.0013
1/18/2016	<0.01
7/28/2016	0.0011 (J)
8/31/2016	0.0024 (J)
10/27/2016	<0.01
1/6/2017	<0.01
4/6/2017	0.0019 (J)
7/12/2017	0.0011 (J)
10/4/2017	0.0011 (J)
1/11/2018	0.001 (J)
7/11/2018	<0.01
1/18/2019	<0.01
3/27/2019	<0.01
8/28/2019	0.00089 (J)
10/9/2019	0.0009 (J)
4/8/2020	0.0015 (J)

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWB-4R	GWB-4R
9/29/2000	0.021
11/21/2000	0.017
1/20/2001	0.03
3/14/2001	0.019
7/16/2001	0.029
11/1/2001	0.021
4/25/2002	0.03
11/20/2002	0.038
6/6/2003	0.028
12/12/2003	0.027
5/26/2004	0.021
12/7/2004	0.016
6/21/2005	0.015
12/12/2005	0.022
6/27/2006	0.027
12/4/2006	0.025
6/23/2007	0.023
12/11/2007	0.018
6/24/2008	0.022
12/5/2008	0.023
7/7/2009	0.012
12/21/2009	0.019
6/21/2010	0.01
1/7/2011	0.023
7/8/2011	0.017
1/18/2012	0.0114
7/10/2012	0.014
1/18/2013	0.015
7/17/2013	0.011
1/14/2014	0.019
7/9/2014	0.012
1/12/2015	0.016
7/16/2015	0.0084
1/18/2016	0.014
7/29/2016	0.0077 (J)
9/1/2016	0.015
10/26/2016	0.0106
1/6/2017	0.0098 (J)
4/4/2017	0.0101
7/12/2017	0.0096 (J)
10/4/2017	0.0097 (J)
1/11/2018	0.0109
7/11/2018	0.0055 (J)
1/16/2019	0.0024 (J)
3/25/2019	0.002 (J)
8/27/2019	0.0027 (J)
10/9/2019	0.002 (J)
4/7/2020	0.0028 (J)

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R	GWB-5R
9/29/2000	0.03	
11/21/2000	<0.01	
1/20/2001	0.028	
3/14/2001	0.052 (o)	
7/16/2001	0.08 (o)	
11/1/2001	0.13 (o)	
4/25/2002	0.021	
11/20/2002	0.053 (o)	
6/6/2003	0.064 (o)	
12/12/2003	<0.01	
5/26/2004	0.012	
12/7/2004	0.019	
6/21/2005	0.02	
12/12/2005	<0.01	
6/27/2006	0.0015	
12/4/2006	0.0034	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/24/2008	<0.01	
12/5/2008	0.0016	
7/7/2009	<0.01	
12/21/2009	<0.01	
6/20/2010	<0.01	
1/6/2011	0.0017	
7/7/2011	0.008	
1/17/2012	0.0082	
7/9/2012	0.01	
1/17/2013	0.01	
7/16/2013	0.0061	
1/13/2014	0.002	
7/9/2014	<0.01	
1/13/2015	<0.01	
7/16/2015	<0.01	
1/18/2016	<0.01	
7/27/2016	0.0006 (J)	
8/30/2016	<0.01	
10/26/2016	<0.01	
1/3/2017	0.001 (J)	
4/6/2017	0.0013 (J)	
7/12/2017	0.0011 (J)	
10/3/2017	0.0012 (J)	
1/10/2018	0.0016 (J)	
7/10/2018	0.0055 (J)	
1/16/2019	<0.01	
3/26/2019	0.072	
8/28/2019	0.0071 (J)	
10/9/2019	0.012 (J)	
4/7/2020	0.0022 (J)	

## Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-6R
9/29/2000	0.016	
11/21/2000	0.023	
1/20/2001	0.025	
3/14/2001	0.021	
7/16/2001	0.019	
11/1/2001	0.022	
4/25/2002	0.019	
11/20/2002	0.024	
6/6/2003	0.021	
12/12/2003	0.0066	
5/26/2004	0.013	
12/7/2004	0.013	
6/21/2005	0.0067	
12/12/2005	0.0033	
6/27/2006	0.0047	
12/4/2006	0.0084	
6/23/2007	0.01	
12/11/2007	0.0049	
6/24/2008	0.032 (o)	
12/5/2008	0.009	
7/7/2009	0.0044	
12/21/2009	0.0055	
6/20/2010	0.002	
1/7/2011	0.0039	
7/7/2011	0.0031	
1/18/2012	0.0023	
7/10/2012	0.0022	
1/18/2013	<0.01	
7/17/2013	<0.01	
1/14/2014	0.0013	
7/9/2014	<0.01	
1/14/2015	0.0015	
7/17/2015	0.0011 (J)	
1/18/2016	0.0011 (J)	
7/28/2016	0.001 (J)	
8/30/2016	0.0013 (J)	
10/26/2016	0.0014 (J)	
1/5/2017	0.002 (J)	
4/6/2017	0.0034 (J)	
7/12/2017	0.0024 (J)	
10/3/2017	0.0022 (J)	
1/9/2018	0.0019 (J)	
7/10/2018	0.0023 (J)	
1/16/2019	0.018 (J)	
3/26/2019	0.017 (J)	
8/27/2019	0.0097 (J)	
10/9/2019	0.011 (J)	
4/7/2020	0.0094 (J)	

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7
9/29/2000	<0.013
11/21/2000	<0.013
1/20/2001	<0.013
3/14/2001	<0.013
7/16/2001	<0.013
11/1/2001	<0.013
4/25/2002	<0.013
6/6/2003	0.037 (o)
12/12/2003	0.008
5/26/2004	<0.013
12/7/2004	<0.013
6/21/2005	<0.013
12/12/2005	<0.013
6/27/2006	<0.013
12/4/2006	<0.013
6/23/2007	<0.013
12/11/2007	<0.013
6/23/2008	<0.013
12/4/2008	<0.013
7/7/2009	<0.013
12/20/2009	<0.013
6/20/2010	<0.013
1/7/2011	<0.013
7/7/2011	<0.013
1/17/2012	<0.013
7/9/2012	<0.013
1/18/2013	<0.013
7/17/2013	<0.013
1/13/2014	0.013
7/9/2014	0.0076 (J)
1/13/2015	0.0057 (J)
7/16/2015	0.009 (J)
1/18/2016	0.0094 (J)
7/27/2016	0.0058
9/1/2016	0.0663 (o)
10/25/2016	0.0003 (J)
1/6/2017	0.006
4/6/2017	0.0109
7/13/2017	0.007
10/4/2017	0.0042 (J)
1/9/2018	0.0098
7/11/2018	0.0028 (J)
1/16/2019	<0.025 (o)
3/25/2019	0.0019 (J)
8/26/2019	0.013 (J)
10/8/2019	0.0098 (J)
4/6/2020	0.0024 (J)

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
9/29/2000	<0.005
1/20/2001	<0.005
3/14/2001	<0.005
7/16/2001	<0.005
11/1/2001	<0.005
4/25/2002	<0.005
11/20/2002	<0.005
6/6/2003	0.016 (o)
12/12/2003	0.0095
5/26/2004	<0.005
12/7/2004	<0.005
6/21/2005	<0.005
12/12/2005	<0.005
4/4/2006	<0.005
6/27/2006	<0.005
8/30/2006	<0.005
12/4/2006	<0.005
2/15/2007	<0.005
6/23/2007	<0.005
9/11/2007	<0.005
12/11/2007	<0.005
3/11/2008	<0.005
6/23/2008	<0.005
11/3/2008	<0.005
12/4/2008	<0.005
3/25/2009	<0.005
7/7/2009	<0.005
9/14/2009	<0.005
12/20/2009	<0.005
3/4/2010	<0.005
6/20/2010	<0.005
9/14/2010	<0.005
1/7/2011	<0.005
4/15/2011	<0.005
7/7/2011	<0.005
9/25/2011	<0.005
1/17/2012	<0.005
4/4/2012	<0.005
7/10/2012	<0.005
10/9/2012	<0.005
1/18/2013	<0.005
4/5/2013	<0.005
7/17/2013	<0.005
10/11/2013	<0.005
1/14/2014	<0.005
4/3/2014	<0.005
7/9/2014	<0.005
10/24/2014	<0.005
1/14/2015	<0.005
5/10/2015	<0.005
7/17/2015	<0.005
10/6/2015	<0.005

## Prediction Limit

Page 2

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
1/18/2016	<0.005
4/26/2016	<0.005
7/28/2016	<0.005
8/30/2016	<0.005
10/24/2016	<0.005
1/3/2017	0.0001 (J)
4/3/2017	0.0002 (J)
7/11/2017	0.0001 (J)
10/2/2017	0.0001 (J)
1/9/2018	0.0001 (J)
7/9/2018	<0.005
1/16/2019	<0.005
3/25/2019	<0.005
8/26/2019	<0.005
10/7/2019	<0.005
4/6/2020	0.0001 (J)

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-1	GWC-1
9/29/2000	<0.005
11/21/2000	<0.005
1/20/2001	<0.005
3/14/2001	<0.005
7/16/2001	<0.005
11/1/2001	<0.005
4/25/2002	<0.005
11/20/2002	<0.005
6/6/2003	<0.005
12/12/2003	<0.005
5/26/2004	<0.005
12/7/2004	<0.005
6/21/2005	<0.005
12/12/2005	<0.005
6/27/2006	<0.005
12/4/2006	<0.005
6/23/2007	<0.005
12/11/2007	<0.005
6/24/2008	<0.005
12/5/2008	<0.005
7/7/2009	<0.005
12/20/2009	<0.005
6/20/2010	<0.005
1/6/2011	<0.005
7/7/2011	<0.005
1/17/2012	<0.005
7/9/2012	<0.005
1/17/2013	<0.005
7/16/2013	<0.005
1/13/2014	<0.005
7/9/2014	<0.005
1/13/2015	<0.005
7/16/2015	<0.005
1/17/2016	<0.005
7/27/2016	<0.005
8/30/2016	<0.005
10/25/2016	<0.005
1/4/2017	<0.005
4/4/2017	<0.005
7/12/2017	<0.005
10/3/2017	<0.005
1/10/2018	0.0001 (J)
7/10/2018	<0.005
1/16/2019	<0.005
3/26/2019	<0.005
8/27/2019	<0.005
10/9/2019	<0.005
4/7/2020	0.00012 (J)

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-11	GWC-11
9/29/2000	<0.013	
11/21/2000	<0.013	
1/20/2001	<0.013	
3/14/2001	<0.013	
7/16/2001	<0.013	
11/1/2001	<0.013	
4/25/2002	<0.013	
11/20/2002	<0.013	
6/6/2003	0.0068	
12/12/2003	<0.013	
5/26/2004	<0.013	
12/7/2004	<0.013	
6/21/2005	<0.013	
12/12/2005	<0.013	
6/27/2006	<0.013	
12/4/2006	<0.013	
6/23/2007	<0.013	
12/11/2007	<0.013	
6/23/2008	<0.013	
12/4/2008	<0.013	
7/8/2009	<0.013	
12/21/2009	<0.013	
6/20/2010	<0.013	
1/6/2011	<0.013	
7/7/2011	<0.013	
1/17/2012	<0.013	
7/9/2012	<0.013	
1/17/2013	<0.013	
7/16/2013	<0.013	
1/13/2014	<0.013	
7/8/2014	<0.013	
1/13/2015	<0.013	
7/16/2015	<0.013	
1/19/2016	<0.013	
7/26/2016	0.0001 (J)	
8/31/2016	0.0002 (J)	
10/26/2016	0.0001 (J)	
1/4/2017	0.0002 (J)	
4/6/2017	0.0003 (J)	
7/11/2017	0.0002 (J)	
10/3/2017	0.0003 (J)	
1/11/2018	0.0003 (J)	
7/11/2018	<0.005 (o)	
1/17/2019	0.00028 (J)	
3/27/2019	0.00029 (J)	
8/27/2019	0.00021 (J)	
10/8/2019	0.00028 (J)	
4/7/2020	0.00036 (J)	

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-12	GWC-12
9/29/2000	<0.005
11/21/2000	<0.005
1/20/2001	<0.005
3/14/2001	<0.005
7/16/2001	<0.005
11/1/2001	<0.005
4/25/2002	<0.005
11/20/2002	<0.005
6/6/2003	<0.005
12/12/2003	<0.005
5/26/2004	<0.005
12/7/2004	<0.005
6/21/2005	<0.005
12/12/2005	<0.005
6/27/2006	<0.005
12/4/2006	<0.005
6/23/2007	<0.005
12/11/2007	<0.005
6/23/2008	<0.005
12/4/2008	<0.005
7/8/2009	<0.005
12/21/2009	<0.005
6/20/2010	<0.005
1/7/2011	<0.005
7/7/2011	<0.005
1/17/2012	<0.005
7/9/2012	<0.005
1/17/2013	<0.005
7/16/2013	<0.005
1/13/2014	0.004
7/8/2014	<0.005
1/13/2015	<0.005
7/16/2015	0.0044 (J)
1/18/2016	0.0034 (J)
7/27/2016	0.0001 (J)
8/31/2016	0.0001 (J)
10/26/2016	0.0001 (J)
1/4/2017	<0.005
4/5/2017	0.0003 (J)
7/10/2017	0.0003 (J)
10/4/2017	0.0001 (J)
1/11/2018	0.0002 (J)
7/11/2018	<0.005
1/17/2019	<0.005
3/27/2019	<0.005
8/27/2019	<0.005
10/9/2019	6.6E-05 (J)
4/7/2020	8.1E-05 (J)

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-13	GWC-13
9/29/2000	<0.005	
11/21/2000	<0.005	
1/20/2001	<0.005	
3/14/2001	<0.005	
7/16/2001	<0.005	
11/1/2001	<0.005	
4/25/2002	<0.005	
11/20/2002	<0.005	
6/6/2003	0.0078	
12/12/2003	0.0055	
5/26/2004	<0.005	
12/7/2004	<0.005	
6/21/2005	<0.005	
12/12/2005	<0.005	
6/27/2006	<0.005	
12/4/2006	<0.005	
6/23/2007	<0.005	
12/11/2007	<0.005	
6/23/2008	<0.005	
12/4/2008	<0.005	
7/8/2009	<0.005	
12/21/2009	<0.005	
6/20/2010	<0.005	
1/6/2011	<0.005	
7/7/2011	<0.005	
1/17/2012	<0.005	
7/9/2012	<0.005	
1/17/2013	<0.005	
7/16/2013	<0.005	
1/13/2014	<0.005	
7/8/2014	<0.005	
1/13/2015	<0.005	
7/16/2015	<0.005	
1/18/2016	<0.005	
7/26/2016	<0.005	
8/31/2016	<0.005	
10/26/2016	<0.005	
1/5/2017	0.0002 (J)	
4/6/2017	0.0005 (J)	
7/12/2017	0.0005 (J)	
10/4/2017	0.0007 (J)	
1/10/2018	0.0009 (J)	
7/11/2018	0.0015 (J)	
1/16/2019	0.00061 (J)	
3/26/2019	<0.005	
8/27/2019	0.0001 (J)	
10/8/2019	0.00013 (J)	
4/8/2020	0.00017 (J)	

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-14	GWC-14
9/29/2000	<0.005	
11/21/2000	<0.005	
1/20/2001	<0.005	
3/14/2001	<0.005	
7/16/2001	<0.005	
11/1/2001	<0.005	
4/25/2002	<0.005	
11/20/2002	0.011 (o)	
6/6/2003	<0.005	
12/12/2003	<0.005	
5/26/2004	<0.005	
12/7/2004	<0.005	
6/21/2005	<0.005	
12/12/2005	<0.005	
4/4/2006	<0.005	
6/27/2006	<0.005	
8/30/2006	<0.005	
12/4/2006	<0.005	
2/15/2007	<0.005	
6/23/2007	<0.005	
9/11/2007	<0.005	
12/11/2007	<0.005	
3/11/2008	<0.005	
6/24/2008	<0.005	
11/3/2008	<0.005	
12/4/2008	<0.005	
3/25/2009	<0.005	
7/8/2009	<0.005	
9/14/2009	<0.005	
12/20/2009	<0.005	
3/4/2010	<0.005	
6/20/2010	<0.005	
9/14/2010	<0.005	
1/7/2011	<0.005	
4/15/2011	<0.005	
7/7/2011	<0.005	
9/25/2011	<0.005	
1/17/2012	<0.005	
4/4/2012	<0.005	
7/9/2012	<0.005	
10/9/2012	<0.005	
1/18/2013	<0.005	
4/5/2013	<0.005	
7/17/2013	<0.005	
10/11/2013	<0.005	
1/14/2014	<0.005	
4/3/2014	<0.005	
7/9/2014	<0.005	
10/24/2014	<0.005	
1/14/2015	<0.005	
5/10/2015	<0.005	
7/17/2015	<0.005	

## Prediction Limit

Page 2

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-14	GWC-14
1/17/2016	<0.005
4/26/2016	<0.005
7/27/2016	<0.005
9/1/2016	<0.005
10/25/2016	<0.005
1/5/2017	<0.005
4/4/2017	0.0001 (J)
7/11/2017	8E-05 (J)
10/2/2017	0.0001 (J)
1/9/2018	<0.005
7/9/2018	<0.005
1/16/2019	<0.005
3/26/2019	<0.005
8/27/2019	0.00051 (J)
10/8/2019	<0.005
4/7/2020	<0.005

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-15	GWC-15
9/29/2000	<0.005	
11/21/2000	<0.005	
1/20/2001	<0.005	
3/14/2001	<0.005	
7/16/2001	<0.005	
11/1/2001	<0.005	
4/25/2002	<0.005	
11/20/2002	<0.005	
6/6/2003	<0.005	
12/12/2003	0.0065	
5/26/2004	<0.005	
12/7/2004	<0.005	
6/21/2005	<0.005	
12/12/2005	<0.005	
6/27/2006	<0.005	
12/4/2006	<0.005	
6/23/2007	<0.005	
12/11/2007	<0.005	
6/24/2008	<0.005	
12/5/2008	<0.005	
7/8/2009	<0.005	
12/20/2009	<0.005	
6/20/2010	<0.005	
1/7/2011	<0.005	
7/7/2011	<0.005	
1/17/2012	<0.005	
7/9/2012	<0.005	
1/18/2013	<0.005	
7/17/2013	<0.005	
1/13/2014	<0.005	
7/9/2014	<0.005	
1/13/2015	<0.005	
7/16/2015	<0.005	
1/17/2016	<0.005	
7/27/2016	<0.005	
9/1/2016	<0.005	
10/25/2016	<0.005	
1/5/2017	<0.005	
4/3/2017	0.0003 (J)	
7/11/2017	0.0001 (J)	
10/2/2017	0.0002 (J)	
1/9/2018	0.0002 (J)	
7/10/2018	<0.005	
1/17/2019	<0.005	
3/26/2019	<0.005	
8/27/2019	0.00033 (J)	
10/8/2019	0.00012 (J)	
4/7/2020	8.6E-05 (J)	

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-16
9/29/2000	<0.005	
11/21/2000	<0.005	
1/20/2001	<0.005	
3/14/2001	<0.005	
7/16/2001	<0.005	
11/1/2001	<0.005	
4/25/2002	<0.005	
11/20/2002	<0.005	
6/6/2003	0.099 (o)	
12/12/2003	0.017 (o)	
5/26/2004	<0.005	
12/7/2004	<0.005	
6/21/2005	<0.005	
12/12/2005	<0.005	
4/4/2006	<0.005	
6/27/2006	<0.005	
8/30/2006	<0.005	
12/4/2006	<0.005	
2/15/2007	<0.005	
6/23/2007	<0.005	
9/11/2007	<0.005	
12/11/2007	<0.005	
3/11/2008	<0.005	
6/24/2008	<0.005	
11/3/2008	<0.005	
12/5/2008	<0.005	
3/25/2009	<0.005	
7/8/2009	<0.005	
9/14/2009	<0.005	
12/20/2009	<0.005	
3/4/2010	<0.005	
6/21/2010	<0.005	
9/14/2010	<0.005	
1/7/2011	<0.005	
4/15/2011	<0.005	
7/7/2011	<0.005	
9/25/2011	<0.005	
1/18/2012	<0.005	
4/4/2012	<0.005	
7/10/2012	<0.005	
10/9/2012	<0.005	
1/18/2013	<0.005	
4/5/2013	<0.005	
7/17/2013	<0.005	
10/11/2013	<0.005	
1/14/2014	<0.005	
4/3/2014	<0.005	
7/9/2014	<0.005	
10/24/2014	<0.005	
1/14/2015	<0.005	
5/11/2015	<0.005	
7/16/2015	<0.005	

## Prediction Limit

Page 2

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-16	GWC-16
1/17/2016	<0.005
4/26/2016	<0.005
7/28/2016	<0.005
9/1/2016	<0.005
10/25/2016	0.0002 (J)
1/4/2017	0.0001 (J)
4/5/2017	0.0002 (J)
7/12/2017	0.0001 (J)
10/3/2017	0.0001 (J)
1/10/2018	0.0002 (J)
7/10/2018	<0.005
1/17/2019	<0.005
3/26/2019	<0.005
8/28/2019	0.0001 (J)
10/8/2019	0.0001 (J)
4/7/2020	0.00023 (J)

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-17	GWC-17
9/29/2000	<0.005
11/21/2000	<0.005
1/20/2001	<0.005
3/14/2001	<0.005
7/16/2001	<0.005
11/1/2001	<0.005
4/25/2002	<0.005
11/20/2002	<0.005
6/6/2003	<0.005
12/12/2003	<0.005
5/26/2004	<0.005
12/7/2004	<0.005
6/21/2005	<0.005
12/12/2005	<0.005
6/27/2006	<0.005
12/4/2006	<0.005
6/23/2007	<0.005
12/11/2007	<0.005
6/24/2008	<0.005
12/5/2008	<0.005
7/8/2009	<0.005
12/21/2009	<0.005
6/21/2010	<0.005
1/7/2011	<0.005
7/8/2011	<0.005
1/18/2012	<0.005
7/10/2012	<0.005
1/18/2013	<0.005
7/17/2013	<0.005
1/14/2014	<0.005
7/9/2014	<0.005
1/14/2015	<0.005
7/18/2015	<0.005
1/18/2016	<0.005
7/29/2016	<0.005
9/1/2016	<0.005
10/26/2016	<0.005
1/5/2017	<0.005
4/5/2017	0.0009 (J)
7/13/2017	<0.005
10/4/2017	0.0001 (J)
1/11/2018	0.0001 (J)
7/11/2018	<0.005
1/16/2019	<0.005
3/26/2019	<0.005
8/28/2019	<0.005
10/9/2019	0.00015 (J)
4/8/2020	8.4E-05 (J)

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-2	GWC-2
11/21/2000	0.0069
1/20/2001	<0.005
3/14/2001	<0.005
7/16/2001	<0.005
11/1/2001	<0.005
4/25/2002	<0.005
11/20/2002	<0.005
6/6/2003	<0.005
12/12/2003	<0.005
5/26/2004	<0.005
12/7/2004	<0.005
6/21/2005	<0.005
12/12/2005	<0.005
6/27/2006	<0.005
12/4/2006	<0.005
6/23/2007	<0.005
12/11/2007	<0.005
6/24/2008	<0.005
12/4/2008	<0.005
7/8/2009	<0.005
12/20/2009	<0.005
6/20/2010	<0.005
1/6/2011	<0.005
1/17/2012	<0.005
7/9/2012	<0.005
1/17/2013	<0.005
7/17/2013	<0.005
1/13/2014	<0.005
7/9/2014	<0.005
1/13/2015	<0.005
7/16/2015	<0.005
1/17/2016	<0.005
7/27/2016	<0.005
8/31/2016	<0.005
10/26/2016	<0.005
1/5/2017	<0.005
4/4/2017	0.0002 (J)
7/13/2017	0.0003 (J)
10/3/2017	<0.005
1/10/2018	8E-05 (J)
7/10/2018	<0.005
1/21/2019	<0.005
7/30/2019	0.0002 (J)
8/27/2019	<0.005
10/9/2019	6.4E-05 (J)
4/8/2020	<0.005

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20	GWC-20
6/21/2010	<0.005	
1/7/2011	<0.005	
7/7/2011	<0.005	
7/8/2011	<0.005	
1/18/2012	<0.005	
7/10/2012	<0.005	
1/18/2013	<0.005	
7/17/2013	<0.005	
1/14/2014	<0.005	
7/10/2014	<0.005	
1/12/2015	<0.005	
7/18/2015	<0.005	
1/17/2016	<0.005	
7/28/2016	<0.005	
9/1/2016	<0.005	
10/25/2016	0.0001 (J)	
1/4/2017	<0.005	
4/4/2017	7E-05 (J)	
7/11/2017	<0.005	
10/2/2017	<0.005	
1/10/2018	0.0002 (J)	
7/9/2018	<0.005	
1/21/2019		<0.005
3/25/2019		<0.005
8/28/2019		6.5E-05 (J)
10/9/2019		0.00018 (J)
4/8/2020		<0.005

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-21	GWC-21
6/21/2010	<0.005	
1/7/2011	<0.005	
7/8/2011	<0.005	
1/18/2012	<0.005	
7/10/2012	<0.005	
1/18/2013	<0.005	
7/17/2013	<0.005	
1/14/2014	<0.005	
7/9/2014	<0.005	
1/14/2015	<0.005	
7/17/2015	<0.005	
1/17/2016	<0.005	
7/28/2016	<0.005	
9/1/2016	<0.005	
10/25/2016	<0.005	
1/4/2017	<0.005	
4/4/2017	9E-05 (J)	
7/13/2017	7E-05 (J)	
10/3/2017	0.0001 (J)	
1/9/2018	9E-05 (J)	
7/10/2018	<0.005	
1/17/2019		<0.005
3/26/2019		<0.005
8/28/2019		0.00018 (J)
10/8/2019		0.00016 (J)
4/7/2020		<0.005

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22
6/21/2010	<0.013
1/7/2011	<0.013
7/8/2011	<0.013
1/18/2012	<0.013
7/10/2012	<0.013
1/18/2013	<0.013
7/17/2013	<0.013
1/14/2014	<0.013
7/10/2014	<0.013
1/14/2015	<0.013
7/18/2015	<0.013
1/18/2016	<0.013
7/29/2016	0.0004 (J)
8/31/2016	0.0003 (J)
10/26/2016	0.0003 (J)
1/4/2017	0.0003 (J)
4/6/2017	0.0003 (J)
7/11/2017	0.0002 (J)
10/4/2017	0.0008 (J)
1/11/2018	0.0009 (J)
7/11/2018	0.001 (J)
1/18/2019	0.0012 (J)
3/27/2019	0.00047 (J)
8/27/2019	0.003 (J)
10/9/2019	0.00032 (J)
4/7/2020	0.00067 (J)

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9	GWC-9
9/29/2000	<0.005	
11/21/2000	<0.005	
1/20/2001	<0.005	
3/14/2001	<0.005	
7/16/2001	<0.005	
11/1/2001	<0.005	
4/25/2002	<0.005	
11/20/2002	0.0086 (o)	
6/6/2003	<0.005	
12/12/2003	<0.005	
5/26/2004	<0.005	
12/7/2004	0.0051	
6/21/2005	<0.005	
12/12/2005	<0.005	
6/27/2006	<0.005	
12/4/2006	<0.005	
6/23/2007	<0.005	
12/11/2007	<0.005	
6/23/2008	<0.005	
12/4/2008	<0.005	
7/8/2009	<0.005	
12/21/2009	<0.005	
6/20/2010	<0.005	
1/7/2011	<0.005	
7/8/2011	<0.005	
1/18/2012	<0.005	
7/10/2012	<0.005	
1/18/2013	<0.005	
7/17/2013	<0.005	
1/14/2014	<0.005	
7/9/2014	<0.005	
1/14/2015	<0.005	
7/17/2015	<0.005	
1/18/2016	<0.005	
7/28/2016	<0.005	
8/31/2016	0.0007 (J)	
10/27/2016	<0.005	
1/6/2017	<0.005	
4/6/2017	0.0001 (J)	
7/12/2017	<0.005	
10/4/2017	9E-05 (J)	
1/11/2018	0.0002 (J)	
7/11/2018	<0.005	
1/18/2019	<0.005	
3/27/2019	<0.005	
8/28/2019	6.1E-05 (J)	
10/9/2019	<0.005	
4/8/2020	0.00021 (J)	

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-4R	GWB-4R
9/29/2000	0.0083	
11/21/2000	0.0052	
1/20/2001	<0.005	
3/14/2001	<0.005	
7/16/2001	0.011	
11/1/2001	<0.005	
4/25/2002	<0.005	
11/20/2002	0.018 (o)	
6/6/2003	0.015 (o)	
12/12/2003	0.0072	
5/26/2004	0.0055	
12/7/2004	<0.005	
6/21/2005	<0.005	
12/12/2005	<0.005	
6/27/2006	0.024 (o)	
12/4/2006	0.023 (o)	
6/23/2007	<0.005	
12/11/2007	<0.005	
6/24/2008	0.02 (o)	
12/5/2008	<0.005	
7/7/2009	<0.005	
12/21/2009	<0.005	
6/21/2010	<0.005	
1/7/2011	<0.005	
7/8/2011	<0.005	
1/18/2012	<0.005	
7/10/2012	<0.005	
1/18/2013	<0.005	
7/17/2013	<0.005	
1/14/2014	0.005	
7/9/2014	<0.005	
1/12/2015	<0.005	
7/16/2015	<0.005	
1/18/2016	0.0055 (J)	
7/29/2016	0.003 (J)	
9/1/2016	0.0166 (o)	
10/26/2016	0.0057	
1/6/2017	0.0053	
4/4/2017	0.0092	
7/12/2017	0.006	
10/4/2017	0.0057	
1/11/2018	0.0085	
7/11/2018	0.0029 (J)	
1/16/2019	<0.005	
3/25/2019	<0.005	
8/27/2019	0.001 (J)	
10/9/2019	0.00041 (J)	
4/7/2020	0.00073 (J)	

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R
9/29/2000	0.017 (o)
11/21/2000	<0.005
1/20/2001	0.011
3/14/2001	0.026 (o)
7/16/2001	0.043 (o)
11/1/2001	0.075 (o)
4/25/2002	<0.005
11/20/2002	0.057 (o)
6/6/2003	0.16 (o)
12/12/2003	<0.005
5/26/2004	0.011
12/7/2004	0.038 (o)
6/21/2005	0.036 (o)
12/12/2005	<0.005
6/27/2006	<0.005
12/4/2006	<0.005
6/23/2007	<0.005
12/11/2007	<0.005
6/24/2008	<0.005
12/5/2008	<0.005
7/7/2009	<0.005
12/21/2009	<0.005
6/20/2010	<0.005
1/6/2011	<0.005
7/7/2011	<0.005
1/17/2012	<0.005
7/9/2012	<0.005
1/17/2013	<0.005
7/16/2013	<0.005
1/13/2014	<0.005
7/9/2014	<0.005
1/13/2015	<0.005
7/16/2015	<0.005
1/18/2016	<0.005
7/27/2016	<0.005
8/30/2016	<0.005
10/26/2016	0.0002 (J)
1/3/2017	0.0001 (J)
4/6/2017	0.0003 (J)
7/12/2017	0.0002 (J)
10/3/2017	0.0002 (J)
1/10/2018	0.0003 (J)
7/10/2018	<0.005
1/16/2019	<0.005
3/26/2019	<0.005
8/28/2019	0.0011 (J)
10/9/2019	0.0025 (J)
4/7/2020	0.0014 (J)

## Prediction Limit

Constituent: Lead (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-6R
9/29/2000	<0.025	
11/21/2000	<0.025	
1/20/2001	<0.025	
3/14/2001	<0.025	
7/16/2001	<0.025	
11/1/2001	<0.025	
4/25/2002	<0.025	
11/20/2002	0.0057 (J)	
6/6/2003	0.013	
12/12/2003	<0.025	
5/26/2004	<0.025	
12/7/2004	<0.025	
6/21/2005	<0.025	
12/12/2005	<0.025	
6/27/2006	<0.025	
12/4/2006	<0.025	
6/23/2007	<0.025	
12/11/2007	<0.025	
6/24/2008	0.02	
12/5/2008	<0.025	
7/7/2009	<0.025	
12/21/2009	<0.025	
6/20/2010	<0.025	
1/7/2011	<0.025	
7/7/2011	<0.025	
1/18/2012	<0.025	
7/10/2012	<0.025	
1/18/2013	<0.025	
7/17/2013	<0.025	
1/14/2014	<0.025	
7/9/2014	<0.025	
1/14/2015	<0.025	
7/17/2015	<0.025	
1/18/2016	<0.025	
7/28/2016	<0.025	
8/30/2016	<0.025	
10/26/2016	<0.025	
1/5/2017	0.0003 (J)	
4/6/2017	0.0002 (J)	
7/12/2017	0.0002 (J)	
10/3/2017	0.0001 (J)	
1/9/2018	0.0003 (J)	
7/10/2018	<0.025	
1/16/2019	<0.025	
3/26/2019	<0.025	
8/27/2019	0.0011 (J)	
10/9/2019	0.00033 (J)	
4/7/2020	0.00063 (J)	

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-7	GWA-7
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/23/2008	<0.01
12/4/2008	<0.01
7/7/2009	<0.01
12/20/2009	<0.01
6/20/2010	<0.01
1/7/2011	<0.01
7/7/2011	<0.01
1/17/2012	<0.01
7/9/2012	<0.01
1/18/2013	0.009
7/17/2013	0.011
1/13/2014	0.012
7/9/2014	0.011
1/13/2015	0.0092
7/16/2015	0.014
1/18/2016	0.023
7/27/2016	0.0323
9/1/2016	0.0438
10/25/2016	0.031
1/6/2017	0.0324
4/6/2017	0.0188 (J)
7/13/2017	0.0118
10/4/2017	0.0195
1/9/2018	<0.05 (o)
7/11/2018	<0.05 (o)
1/16/2019	0.0071 (J)
3/25/2019	<0.05 (o)
8/26/2019	<0.05 (o)
10/8/2019	0.0072 (J)
4/6/2020	0.0078 (J)

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
9/29/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
4/4/2006	<0.01
6/27/2006	<0.01
8/30/2006	<0.01
12/4/2006	<0.01
2/15/2007	<0.01
6/23/2007	<0.01
9/11/2007	<0.01
12/11/2007	<0.01
3/11/2008	<0.01
6/23/2008	<0.01
11/3/2008	<0.01
12/4/2008	<0.01
3/25/2009	<0.01
7/7/2009	<0.01
9/14/2009	<0.01
12/20/2009	<0.01
3/4/2010	<0.01
6/20/2010	<0.01
9/14/2010	<0.01
1/7/2011	<0.01
4/15/2011	<0.01
7/7/2011	<0.01
9/25/2011	<0.01
1/17/2012	<0.01
4/4/2012	<0.0005 (o)
7/10/2012	<0.01
10/9/2012	<0.01
1/18/2013	<0.01
4/5/2013	<0.01
7/17/2013	<0.01
10/11/2013	<0.01
1/14/2014	<0.01
4/3/2014	<0.01
7/9/2014	<0.01
10/24/2014	<0.01
1/14/2015	<0.01
5/10/2015	<0.01
7/17/2015	<0.01
10/6/2015	<0.01

## Prediction Limit

Page 2

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
1/18/2016	<0.01
4/26/2016	<0.01
7/28/2016	0.001 (J)
8/30/2016	<0.01
10/24/2016	0.0013 (J)
1/3/2017	<0.01
4/3/2017	<0.01
7/11/2017	<0.01
10/2/2017	<0.01
1/9/2018	<0.01
7/9/2018	<0.01
1/16/2019	<0.01
3/25/2019	<0.01
8/26/2019	<0.01
10/7/2019	<0.01
4/6/2020	<0.01

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	0.017
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	0.012
11/20/2002	0.19 (o)
6/6/2003	0.32 (o)
12/12/2003	0.013
5/26/2004	0.017
12/7/2004	0.011
6/21/2005	0.0088
12/12/2005	0.011
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/24/2008	<0.01
12/5/2008	<0.01
7/7/2009	<0.01
12/20/2009	<0.01
6/20/2010	<0.01
1/6/2011	<0.01
7/7/2011	<0.01
1/17/2012	<0.01
7/9/2012	<0.01
1/17/2013	<0.01
7/16/2013	0.012
1/13/2014	<0.01
7/9/2014	<0.01
1/13/2015	<0.01
7/16/2015	<0.01
1/17/2016	0.023
7/27/2016	0.002 (J)
8/30/2016	0.002 (J)
10/25/2016	0.0022 (J)
1/4/2017	0.0016 (J)
4/4/2017	0.0052 (J)
7/12/2017	0.0024 (J)
10/3/2017	<0.01
1/10/2018	0.0018 (J)
7/10/2018	0.0026 (J)
1/16/2019	0.0018 (J)
3/26/2019	0.0023 (J)
8/27/2019	0.0016 (J)
10/9/2019	0.0024 (J)
4/7/2020	0.0013 (J)

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-11	GWC-11
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	<0.01	
6/6/2003	<0.01	
12/12/2003	<0.01	
5/26/2004	<0.01	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	<0.01	
6/27/2006	<0.01	
12/4/2006	<0.01	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/23/2008	<0.01	
12/4/2008	<0.01	
7/8/2009	<0.01	
12/21/2009	<0.01	
6/20/2010	<0.01	
1/6/2011	<0.01	
7/7/2011	<0.01	
1/17/2012	0.023	
7/9/2012	0.016	
1/17/2013	0.033	
7/16/2013	0.0068	
1/13/2014	0.036	
7/8/2014	0.017	
1/13/2015	0.027	
7/16/2015	<0.01	
1/19/2016	0.023	
7/26/2016	0.0056 (J)	
8/31/2016	0.0084 (J)	
10/26/2016	0.0052 (J)	
1/4/2017	0.0062 (J)	
4/6/2017	0.0195	
7/11/2017	<0.01	
10/3/2017	0.0079 (J)	
1/11/2018	0.0054 (J)	
7/11/2018	0.0022 (J)	
1/17/2019	<0.01	
3/27/2019	0.01 (J)	
8/27/2019	<0.01	
10/8/2019	<0.01	
4/7/2020	0.0021 (J)	

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-12	GWC-12
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	<0.01	
6/6/2003	<0.01	
12/12/2003	<0.01	
5/26/2004	<0.01	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	<0.01	
6/27/2006	<0.01	
12/4/2006	<0.01	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/23/2008	<0.01	
12/4/2008	<0.01	
7/8/2009	<0.01	
12/21/2009	<0.01	
6/20/2010	<0.01	
1/7/2011	<0.01	
7/7/2011	<0.01	
1/17/2012	<0.01	
7/9/2012	<0.01	
1/17/2013	<0.01	
7/16/2013	<0.01	
1/13/2014	<0.01	
7/8/2014	<0.01	
1/13/2015	<0.01	
7/16/2015	<0.01	
1/18/2016	<0.01	
7/27/2016	0.0025 (J)	
8/31/2016	0.0019 (J)	
10/26/2016	0.002 (J)	
1/4/2017	<0.01	
4/5/2017	<0.01	
7/10/2017	<0.01	
10/4/2017	<0.01	
1/11/2018	<0.01	
7/11/2018	<0.01	
1/17/2019	<0.01	
3/27/2019	<0.01	
8/27/2019	<0.01	
10/9/2019	<0.01	
4/7/2020	<0.01	

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-14
1/17/2012	0.016
4/4/2012	0.0156
7/9/2012	<0.01
10/9/2012	0.0094
1/18/2013	0.0067
4/5/2013	0.0077
7/17/2013	0.01
10/11/2013	0.0087
1/14/2014	0.012
4/3/2014	0.022
7/9/2014	0.0089
10/24/2014	0.017
1/14/2015	<0.01
5/10/2015	<0.01
7/17/2015	<0.01
10/6/2015	<0.01
1/17/2016	<0.01
4/26/2016	0.00428 (J)
7/27/2016	0.0038 (J)
9/1/2016	0.0056 (J)
10/25/2016	0.0023 (J)
1/5/2017	0.0038 (J)
4/4/2017	0.0064 (J)
7/11/2017	0.0044 (J)
10/2/2017	0.004 (J)
1/9/2018	0.0019 (J)
7/9/2018	0.0029 (J)
1/16/2019	0.0016 (J)
3/26/2019	0.0022 (J)
8/27/2019	0.0035 (J)
10/8/2019	0.0026 (J)
4/7/2020	0.005 (J)

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-15	GWC-15
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	0.0094	
6/6/2003	0.021 (o)	
12/12/2003	0.016 (o)	
5/26/2004	<0.01	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	<0.01	
6/27/2006	<0.01	
12/4/2006	<0.01	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/24/2008	<0.01	
12/5/2008	<0.01	
7/8/2009	<0.01	
12/20/2009	<0.01	
6/20/2010	<0.01	
1/7/2011	<0.01	
7/7/2011	<0.01	
1/17/2012	<0.01	
7/9/2012	0.066 (o)	
1/18/2013	0.04 (o)	
7/17/2013	<0.01	
1/13/2014	<0.01	
7/9/2014	<0.01	
1/13/2015	<0.01	
7/16/2015	<0.01	
1/17/2016	<0.01	
7/27/2016	<0.01	
9/1/2016	<0.01	
10/25/2016	<0.01	
1/5/2017	<0.01	
4/3/2017	<0.01	
7/11/2017	<0.01	
10/2/2017	<0.01	
1/9/2018	0.0019 (J)	
7/10/2018	0.0086 (J)	
1/17/2019	0.0029 (J)	
3/26/2019	0.0074 (J)	
8/27/2019	0.0092 (J)	
10/8/2019	0.014	
4/7/2020	0.0029 (J)	

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-16
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	<0.01	
6/6/2003	0.021 (o)	
12/12/2003	0.0078 (o)	
5/26/2004	0.0053	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	<0.01	
4/4/2006	<0.01	
6/27/2006	<0.01	
8/30/2006	<0.01	
12/4/2006	<0.01	
2/15/2007	<0.01	
6/23/2007	<0.01	
9/11/2007	<0.01	
12/11/2007	<0.01	
3/11/2008	<0.01	
6/24/2008	<0.01	
11/3/2008	<0.01	
12/5/2008	<0.01	
3/25/2009	<0.01	
7/8/2009	<0.01	
9/14/2009	<0.01	
12/20/2009	<0.01	
3/4/2010	<0.01	
6/21/2010	<0.01	
9/14/2010	<0.01	
1/7/2011	<0.01	
4/15/2011	<0.01	
7/7/2011	<0.01	
9/25/2011	<0.01	
1/18/2012	<0.01	
4/4/2012	<0.01	
7/10/2012	<0.01	
10/9/2012	<0.01	
1/18/2013	<0.01	
4/5/2013	<0.01	
7/17/2013	<0.01	
10/11/2013	0.0069	
1/14/2014	<0.01	
4/3/2014	<0.01	
7/9/2014	0.005	
10/24/2014	<0.01	
1/14/2015	<0.01	
5/11/2015	<0.01	
7/16/2015	<0.01	

## Prediction Limit

Page 2

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-16	GWC-16
10/6/2015	0.0073
1/17/2016	0.0031 (J)
4/26/2016	0.00497 (J)
7/28/2016	0.0076 (J)
9/1/2016	0.0052 (J)
10/25/2016	0.0085 (J)
1/4/2017	0.0048 (J)
4/5/2017	0.0068 (J)
7/12/2017	0.0048 (J)
10/3/2017	0.0051 (J)
1/10/2018	0.0018 (J)
7/10/2018	0.0045 (J)
1/17/2019	0.0031 (J)
3/26/2019	0.0033 (J)
8/28/2019	0.004 (J)
10/8/2019	0.0023 (J)
4/7/2020	<0.01

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/24/2008	<0.01
12/5/2008	<0.01
7/8/2009	<0.01
12/21/2009	<0.01
6/21/2010	<0.01
1/7/2011	<0.01
7/8/2011	<0.01
1/18/2012	<0.01
7/10/2012	<0.01
1/18/2013	<0.01
7/17/2013	<0.01
1/14/2014	<0.01
7/9/2014	<0.01
1/14/2015	<0.01
7/18/2015	<0.01
1/18/2016	<0.01
7/29/2016	0.0011 (J)
9/1/2016	0.0012 (J)
10/26/2016	0.0013 (J)
1/5/2017	0.0012 (J)
4/5/2017	<0.01
7/13/2017	0.0018 (J)
10/4/2017	0.0042 (J)
1/11/2018	<0.01
7/11/2018	0.0016 (J)
1/16/2019	<0.01
3/26/2019	<0.01
8/28/2019	<0.01
10/9/2019	<0.01
4/8/2020	<0.01

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-2	GWC-2
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	0.005
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/24/2008	<0.01
12/4/2008	<0.01
7/8/2009	<0.01
12/20/2009	<0.01
6/20/2010	<0.01
1/6/2011	<0.01
1/17/2012	<0.01
7/9/2012	<0.01
1/17/2013	<0.01
7/17/2013	<0.01
1/13/2014	<0.01
7/9/2014	<0.01
1/13/2015	<0.01
7/16/2015	<0.01
1/17/2016	<0.01
7/27/2016	0.002 (J)
8/31/2016	<0.01
10/26/2016	0.0035 (J)
1/5/2017	<0.01
4/4/2017	<0.01
7/13/2017	<0.01
10/3/2017	<0.01
1/10/2018	<0.01
7/10/2018	<0.01
1/21/2019	<0.01
7/30/2019	<0.01
8/27/2019	<0.01
10/9/2019	<0.01
4/8/2020	<0.01

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20	GWC-20
6/21/2010	<0.01	
1/7/2011	<0.01	
7/7/2011	<0.01	
7/8/2011	<0.01	
1/18/2012	<0.01	
7/10/2012	<0.01	
1/18/2013	0.005	
7/17/2013	<0.01	
1/14/2014	<0.01	
7/10/2014	<0.01	
1/12/2015	<0.01	
7/18/2015	<0.01	
1/17/2016	<0.01	
7/28/2016	<0.01	
9/1/2016	<0.01	
10/25/2016	0.0014 (J)	
1/4/2017	0.0014 (J)	
4/4/2017	<0.01	
7/11/2017	<0.01	
10/2/2017	<0.01	
1/10/2018	<0.01	
7/9/2018	<0.01	
1/21/2019	0.0014 (J)	
3/25/2019	<0.01	
8/28/2019	0.0014 (J)	
10/9/2019	<0.01	
4/8/2020	0.0013 (J)	

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-21
6/21/2010	0.048
1/7/2011	0.014
7/8/2011	0.018
1/18/2012	<0.01
7/10/2012	0.02
1/18/2013	0.015
7/17/2013	0.037
1/14/2014	0.043
7/9/2014	0.023
1/14/2015	0.022
7/17/2015	0.033
1/17/2016	0.021
7/28/2016	0.0341
9/1/2016	0.0297
10/25/2016	0.0095 (J)
1/4/2017	0.022
4/4/2017	0.0236
7/13/2017	0.013
10/3/2017	0.01 (J)
1/9/2018	0.0162
7/10/2018	0.016
1/17/2019	0.011
3/26/2019	0.022
8/28/2019	0.019
10/8/2019	0.019
4/7/2020	0.012

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22	GWC-22
6/21/2010	<0.01	
1/7/2011	<0.01	
7/8/2011	<0.01	
1/18/2012	<0.01	
7/10/2012	<0.01	
1/18/2013	<0.01	
7/17/2013	<0.01	
1/14/2014	<0.01	
7/10/2014	<0.01	
1/14/2015	<0.01	
7/18/2015	<0.01	
1/18/2016	<0.01	
7/29/2016	0.0022 (J)	
8/31/2016	0.0014 (J)	
10/26/2016	0.001 (J)	
1/4/2017	<0.01	
4/6/2017	<0.01	
7/11/2017	<0.01	
10/4/2017	0.0023 (J)	
1/11/2018	<0.01	
7/11/2018	<0.01	
1/18/2019	<0.01	
3/27/2019	<0.01	
8/27/2019	<0.01	
10/9/2019	<0.01	
4/7/2020	<0.01	

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	0.0062
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/23/2008	<0.01
12/4/2008	<0.01
7/8/2009	<0.01
12/21/2009	<0.01
6/20/2010	<0.01
1/7/2011	<0.01
7/8/2011	<0.01
1/18/2012	<0.01
7/10/2012	<0.01
1/18/2013	<0.01
7/17/2013	<0.01
1/14/2014	<0.01
7/9/2014	<0.01
1/14/2015	<0.01
7/17/2015	<0.01
1/18/2016	<0.01
7/28/2016	<0.01
8/31/2016	<0.01
10/27/2016	<0.01
1/6/2017	<0.01
4/6/2017	<0.01
7/12/2017	<0.01
10/4/2017	<0.01
1/11/2018	<0.01
7/11/2018	<0.01
1/18/2019	<0.01
3/27/2019	<0.01
8/28/2019	<0.01
10/9/2019	<0.01
4/8/2020	<0.01

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-4R	GWB-4R
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	0.014 (o)	
3/14/2001	<0.01	
7/16/2001	0.015 (o)	
11/1/2001	0.012 (o)	
4/25/2002	0.01	
11/20/2002	0.026 (o)	
6/6/2003	0.022 (o)	
12/12/2003	0.028 (o)	
5/26/2004	0.012 (o)	
12/7/2004	0.0073 (o)	
6/21/2005	0.0087	
12/12/2005	0.013 (o)	
6/27/2006	<0.01	
12/4/2006	<0.01	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/24/2008	<0.01	
12/5/2008	<0.01	
7/7/2009	<0.01	
12/21/2009	<0.01	
6/21/2010	<0.01	
1/7/2011	<0.01	
7/8/2011	<0.01	
1/18/2012	<0.01	
7/10/2012	<0.01	
1/18/2013	<0.01	
7/17/2013	<0.01	
1/14/2014	<0.01	
7/9/2014	<0.01	
1/12/2015	<0.01	
7/16/2015	<0.01	
1/18/2016	<0.01	
7/29/2016	0.0036 (J)	
9/1/2016	0.0067 (J)	
10/26/2016	0.0042 (J)	
1/6/2017	0.0042 (J)	
4/4/2017	0.0043 (J)	
7/12/2017	0.0033 (J)	
10/4/2017	0.0038 (J)	
1/11/2018	0.0029 (J)	
7/11/2018	0.0015 (J)	
1/16/2019	<0.01	
3/25/2019	<0.01	
8/27/2019	<0.01	
10/9/2019	<0.01	
4/7/2020	0.0025 (J)	

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R	GWB-5R
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	0.0064	
6/6/2003	0.011	
12/12/2003	<0.01	
5/26/2004	0.007	
12/7/2004	<0.01	
6/21/2005	0.0063	
12/12/2005	<0.01	
6/27/2006	<0.01	
12/4/2006	<0.01	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/24/2008	<0.01	
12/5/2008	<0.01	
7/7/2009	<0.01	
12/21/2009	<0.01	
6/20/2010	<0.01	
1/6/2011	<0.01	
7/7/2011	<0.01	
1/17/2012	<0.01	
7/9/2012	<0.01	
1/17/2013	<0.01	
7/16/2013	<0.01	
1/13/2014	<0.01	
7/9/2014	<0.01	
1/13/2015	<0.01	
7/16/2015	<0.01	
1/18/2016	<0.01	
7/27/2016	<0.01	
8/30/2016	<0.01	
10/26/2016	<0.01	
1/3/2017	<0.01	
4/6/2017	<0.01	
7/12/2017	<0.01	
10/3/2017	<0.01	
1/10/2018	<0.01	
7/10/2018	0.0018 (J)	
1/16/2019	<0.01	
3/26/2019	<0.01	
8/28/2019	0.0033 (J)	
10/9/2019	0.0073 (J)	
4/7/2020	<0.01	

## Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-6R
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	0.008	
6/6/2003	0.0066	
12/12/2003	0.0056	
5/26/2004	0.0084	
12/7/2004	<0.01	
6/21/2005	0.0062	
12/12/2005	<0.01	
6/27/2006	<0.01	
12/4/2006	<0.01	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/24/2008	<0.01	
12/5/2008	<0.01	
7/7/2009	<0.01	
12/21/2009	<0.01	
6/20/2010	<0.01	
1/7/2011	<0.01	
7/7/2011	<0.01	
1/18/2012	<0.01	
7/10/2012	<0.01	
1/18/2013	<0.01	
7/17/2013	<0.01	
1/14/2014	<0.01	
7/9/2014	<0.01	
1/14/2015	<0.01	
7/17/2015	<0.01	
1/18/2016	<0.01	
7/28/2016	<0.01	
8/30/2016	<0.01	
10/26/2016	<0.01	
1/5/2017	0.0014 (J)	
4/6/2017	<0.01	
7/12/2017	<0.01	
10/3/2017	<0.01	
1/9/2018	<0.01	
7/10/2018	0.0016 (J)	
1/16/2019	<0.01	
3/26/2019	0.05 (J)	
8/27/2019	0.0033 (J)	
10/9/2019	<0.01	
4/7/2020	<0.01	

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-7	GWA-7
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
6/6/2003	0.047
12/12/2003	0.0086
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	0.0027
6/23/2007	0.0027
12/11/2007	0.0033
6/23/2008	0.0074
12/4/2008	0.0084
7/7/2009	0.023
12/20/2009	0.007
6/20/2010	0.0047
1/7/2011	0.018
7/7/2011	0.019
1/17/2012	0.0298
7/9/2012	0.14
1/18/2013	0.21
7/17/2013	0.18
1/13/2014	0.24
7/9/2014	0.22
1/13/2015	0.19
7/16/2015	0.23
1/18/2016	0.41
7/27/2016	0.397
10/25/2016	0.425
1/6/2017	0.41
4/6/2017	0.297
7/13/2017	0.194
10/4/2017	0.316
1/9/2018	0.194
7/11/2018	0.15
1/16/2019	0.16
3/25/2019	0.18
10/8/2019	0.11
4/6/2020	0.12

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
9/29/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	0.017 (o)
12/12/2003	0.011 (o)
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
4/4/2006	<0.01
6/27/2006	<0.01
8/30/2006	<0.01
12/4/2006	<0.01
2/15/2007	<0.01
6/23/2007	<0.01
9/11/2007	<0.01
12/11/2007	<0.01
3/11/2008	<0.01
6/23/2008	<0.01
11/3/2008	<0.01
12/4/2008	<0.01
3/25/2009	<0.01
7/7/2009	<0.01
9/14/2009	<0.01
12/20/2009	<0.01
3/4/2010	<0.01
6/20/2010	<0.01
9/14/2010	<0.01
1/7/2011	<0.01
4/15/2011	<0.01
7/7/2011	<0.01
9/25/2011	<0.01
1/17/2012	<0.01
4/4/2012	<0.01
7/10/2012	<0.01
10/9/2012	<0.01
1/18/2013	<0.01
4/5/2013	<0.01
7/17/2013	<0.01
10/11/2013	<0.01
1/14/2014	<0.01
4/3/2014	0.0015 (J)
7/9/2014	0.0012 (J)
10/24/2014	<0.01
1/14/2015	<0.01
5/10/2015	<0.01
7/17/2015	<0.01
10/6/2015	0.0012 (J)

## Prediction Limit

Page 2

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
1/18/2016	0.00079 (J)
4/26/2016	<0.01
7/28/2016	<0.01
10/24/2016	<0.01
1/3/2017	<0.01
4/3/2017	<0.01
7/11/2017	<0.01
10/2/2017	<0.01
1/9/2018	0.0014 (J)
7/9/2018	<0.01
1/16/2019	<0.01
3/25/2019	<0.01
10/7/2019	<0.01
4/6/2020	<0.01

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	0.0069
6/6/2003	0.16 (o)
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	0.0029
12/4/2006	0.0047
6/23/2007	0.0029
12/11/2007	<0.01
6/24/2008	<0.01
12/5/2008	<0.01
7/7/2009	<0.01
12/20/2009	<0.01
6/20/2010	0.0037
1/6/2011	<0.01
7/7/2011	0.0045
1/17/2012	<0.01
7/9/2012	0.0026
1/17/2013	<0.01
7/16/2013	<0.01
1/13/2014	<0.01
7/9/2014	0.0041 (J)
1/13/2015	0.0029 (J)
7/16/2015	0.0034 (J)
1/17/2016	0.0046 (J)
7/27/2016	0.0064 (J)
1/4/2017	<0.01
4/4/2017	0.0061 (J)
7/12/2017	0.0067 (J)
1/10/2018	0.0056 (J)
7/10/2018	0.0056 (J)
1/16/2019	0.0043 (J)
3/26/2019	0.0051 (J)
10/9/2019	<0.01
4/7/2020	0.0015 (J)

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-11	GWC-11
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	0.0071
6/6/2003	0.0098
12/12/2003	0.0074
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	0.0036
12/11/2007	<0.01
6/23/2008	<0.01
12/4/2008	<0.01
7/8/2009	0.0026
12/21/2009	<0.01
6/20/2010	<0.01
1/6/2011	0.003
7/7/2011	0.004
1/17/2012	<0.01
7/9/2012	0.005
1/17/2013	0.005
7/16/2013	<0.01
1/13/2014	<0.01
7/8/2014	0.0024 (J)
1/13/2015	0.0023 (J)
7/16/2015	0.002 (J)
1/19/2016	0.0025 (J)
7/26/2016	0.0027 (J)
1/4/2017	<0.01
4/6/2017	0.0025 (J)
7/11/2017	0.0027 (J)
1/11/2018	0.0019 (J)
7/11/2018	0.0021 (J)
1/17/2019	0.0021 (J)
3/27/2019	0.0023 (J)
10/8/2019	<0.01
4/7/2020	<0.01

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-12	GWC-12
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	<0.01	
6/6/2003	<0.01	
12/12/2003	<0.01	
5/26/2004	<0.01	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	<0.01	
6/27/2006	<0.01	
12/4/2006	<0.01	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/23/2008	<0.01	
12/4/2008	<0.01	
7/8/2009	<0.01	
12/21/2009	<0.01	
6/20/2010	<0.01	
1/7/2011	<0.01	
7/7/2011	<0.01	
1/17/2012	<0.01	
7/9/2012	<0.01	
1/17/2013	<0.01	
7/16/2013	<0.01	
1/13/2014	<0.01	
7/8/2014	0.0034 (J)	
1/13/2015	<0.01	
7/16/2015	0.0049 (J)	
1/18/2016	0.0058	
7/27/2016	0.0058 (J)	
1/4/2017	<0.01	
4/5/2017	0.0039 (J)	
7/10/2017	0.0062 (J)	
1/11/2018	0.0025 (J)	
7/11/2018	0.0059 (J)	
1/17/2019	<0.01	
3/27/2019	0.0049 (J)	
10/9/2019	0.0021 (J)	
4/7/2020	0.0024 (J)	

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-13	GWC-13
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	<0.01	
6/6/2003	0.0063	
12/12/2003	<0.01	
5/26/2004	<0.01	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	<0.01	
6/27/2006	<0.01	
12/4/2006	<0.01	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/23/2008	<0.01	
12/4/2008	<0.01	
7/8/2009	<0.01	
12/21/2009	<0.01	
6/20/2010	<0.01	
1/6/2011	0.0028	
7/7/2011	<0.01	
1/17/2012	<0.01	
7/9/2012	<0.01	
1/17/2013	<0.01	
7/16/2013	<0.01	
1/13/2014	<0.01	
7/8/2014	0.002 (J)	
1/13/2015	0.0015 (J)	
7/16/2015	<0.01	
1/18/2016	0.0011 (J)	
7/26/2016	<0.01	
1/5/2017	<0.01	
4/6/2017	<0.01	
7/12/2017	0.0016 (J)	
1/10/2018	0.0019 (J)	
7/11/2018	0.0097 (J)	
1/16/2019	<0.01	
3/26/2019	0.0029 (J)	
10/8/2019	<0.01	
4/8/2020	<0.01	

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-14	GWC-14
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	0.03
6/6/2003	0.0065
12/12/2003	0.0052
5/26/2004	<0.01
12/7/2004	0.0074
6/21/2005	0.01
12/12/2005	<0.01
4/4/2006	0.013
6/27/2006	<0.01
8/30/2006	0.0039
12/4/2006	0.016
2/15/2007	0.017
6/23/2007	0.0076
9/11/2007	0.012
12/11/2007	0.017
3/11/2008	0.012
6/24/2008	0.0069
11/3/2008	0.016
12/4/2008	0.013
3/25/2009	0.014
7/8/2009	0.014
9/14/2009	0.0072
12/20/2009	0.02
3/4/2010	0.023
6/20/2010	0.017
9/14/2010	0.018
1/7/2011	0.019
4/15/2011	0.019
7/7/2011	0.014
9/25/2011	0.015
1/17/2012	0.021
4/4/2012	0.0191
7/9/2012	0.026
10/9/2012	0.049
1/18/2013	0.036
4/5/2013	0.04
7/17/2013	0.062
10/11/2013	0.032
1/14/2014	0.044
4/3/2014	0.077 (o)
7/9/2014	0.032
10/24/2014	0.045
1/14/2015	0.031
5/10/2015	0.013
7/17/2015	0.028

## Prediction Limit

Page 2

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-14	GWC-14
10/6/2015	0.02
1/17/2016	0.028
4/26/2016	0.0181
7/27/2016	0.0189
10/25/2016	0.0206
1/5/2017	0.0172
4/4/2017	0.0235
7/11/2017	0.0136
10/2/2017	0.0175
1/9/2018	0.0103
7/9/2018	0.0078 (J)
1/16/2019	0.0043 (J)
3/26/2019	0.0063 (J)
10/8/2019	<0.01
4/7/2020	0.0026 (J)

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-15	GWC-15
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	0.0099	
6/6/2003	0.019 (o)	
12/12/2003	0.018 (o)	
5/26/2004	<0.01	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	<0.01	
6/27/2006	<0.01	
12/4/2006	<0.01	
6/23/2007	<0.01	
12/11/2007	<0.01	
6/24/2008	<0.01	
12/5/2008	<0.01	
7/8/2009	<0.01	
12/20/2009	<0.01	
6/20/2010	<0.01	
1/7/2011	<0.01	
7/7/2011	0.0036	
1/17/2012	<0.01	
7/9/2012	0.0059	
1/18/2013	<0.01	
7/17/2013	<0.01	
1/13/2014	<0.01	
7/9/2014	0.0012 (J)	
1/13/2015	0.0013 (J)	
7/16/2015	<0.01	
1/17/2016	0.0013 (J)	
7/27/2016	<0.01	
10/25/2016	<0.01	
1/5/2017	<0.01	
4/3/2017	0.002 (J)	
7/11/2017	0.0022 (J)	
10/2/2017	0.0022 (J)	
1/9/2018	0.0021 (J)	
7/10/2018	0.0025 (J)	
1/17/2019	<0.01	
3/26/2019	0.0026 (J)	
10/8/2019	<0.01	
4/7/2020	<0.01	

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	0.0069
6/6/2003	0.082 (o)
12/12/2003	0.012
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
4/4/2006	<0.01
6/27/2006	<0.01
8/30/2006	<0.01
12/4/2006	0.0031
2/15/2007	0.0025
6/23/2007	0.0032
9/11/2007	<0.01
12/11/2007	<0.01
3/11/2008	<0.01
6/24/2008	<0.01
11/3/2008	0.0032
12/5/2008	<0.01
3/25/2009	<0.01
7/8/2009	0.0036
9/14/2009	0.0026
12/20/2009	0.0031
3/4/2010	<0.01
6/21/2010	0.0025
9/14/2010	0.0035
1/7/2011	0.0036
4/15/2011	<0.01
7/7/2011	0.003
9/25/2011	0.0037
1/18/2012	<0.01
4/4/2012	<0.01
7/10/2012	0.0026
10/9/2012	0.007
1/18/2013	<0.01
4/5/2013	<0.01
7/17/2013	<0.01
10/11/2013	<0.01
1/14/2014	<0.01
4/3/2014	0.0032 (J)
7/9/2014	0.0031 (J)
10/24/2014	0.0028 (J)
1/14/2015	0.0034 (J)
5/11/2015	0.0026 (J)
7/16/2015	0.0028 (J)

## Prediction Limit

Page 2

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-16
10/6/2015	0.0016 (J)	
1/17/2016	0.0029 (J)	
4/26/2016	0.00296 (J)	
7/28/2016	0.0026 (J)	
10/25/2016	<0.01	
1/4/2017	<0.01	
4/5/2017	0.0033 (J)	
7/12/2017	0.0037 (J)	
10/3/2017	0.0036 (J)	
1/10/2018	0.0029 (J)	
7/10/2018	0.0025 (J)	
1/17/2019		0.0021 (J)
3/26/2019		0.0038 (J)
10/8/2019		<0.01
4/7/2020		<0.01

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-17	GWC-17
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	0.0025
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/24/2008	<0.01
12/5/2008	<0.01
7/8/2009	<0.01
12/21/2009	<0.01
6/21/2010	<0.01
1/7/2011	<0.01
7/8/2011	0.0031
1/18/2012	<0.01
7/10/2012	<0.01
1/18/2013	<0.01
7/17/2013	<0.01
1/14/2014	<0.01
7/9/2014	0.0012 (J)
1/14/2015	0.002 (J)
7/18/2015	<0.01
1/18/2016	0.0019 (J)
7/29/2016	0.0031 (J)
1/5/2017	<0.01
4/5/2017	0.0029 (J)
7/13/2017	0.0037 (J)
1/11/2018	0.0026 (J)
7/11/2018	0.0032 (J)
1/16/2019	<0.01
3/26/2019	0.0024 (J)
10/9/2019	<0.01
4/8/2020	<0.01

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-2	GWC-2
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/24/2008	<0.01
12/4/2008	<0.01
7/8/2009	<0.01
12/20/2009	<0.01
6/20/2010	<0.01
1/6/2011	<0.01
1/17/2012	<0.01
7/9/2012	<0.01
1/17/2013	<0.01
7/17/2013	<0.01
1/13/2014	<0.01
7/9/2014	<0.01
1/13/2015	<0.01
7/16/2015	<0.01
1/17/2016	<0.01
7/27/2016	<0.01
1/5/2017	<0.01
4/4/2017	<0.01
7/13/2017	<0.01
1/10/2018	<0.01
7/10/2018	<0.01
1/21/2019	0.0024 (J)
7/30/2019	<0.01
10/9/2019	<0.01
4/8/2020	<0.01

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20	GWC-20
6/21/2010	<0.01	
1/7/2011	0.0029	
7/7/2011	<0.01	
7/8/2011	0.0046	
1/18/2012	<0.01	
7/10/2012	0.0081	
1/18/2013	0.0063	
7/17/2013	<0.01	
1/14/2014	<0.01	
7/10/2014	0.0026 (J)	
1/12/2015	0.0031 (J)	
7/18/2015	0.003 (J)	
1/17/2016	0.0025 (J)	
7/28/2016	0.0024 (J)	
10/25/2016	<0.01	
1/4/2017	<0.01	
4/4/2017	0.0024 (J)	
7/11/2017	0.003 (J)	
10/2/2017	0.0028 (J)	
1/10/2018	0.0026 (J)	
7/9/2018	<0.01	
1/21/2019		0.0031 (J)
3/25/2019		0.0024 (J)
10/9/2019		<0.01
4/8/2020		<0.01

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-21	GWC-21
6/21/2010	<0.01	
1/7/2011	0.0031	
7/8/2011	0.0048	
1/18/2012	<0.01	
7/10/2012	<0.01	
1/18/2013	<0.01	
7/17/2013	<0.01	
1/14/2014	0.006	
7/9/2014	0.0019 (J)	
1/14/2015	0.0037 (J)	
7/17/2015	0.0028 (J)	
1/17/2016	0.0039 (J)	
7/28/2016	0.0022 (J)	
1/4/2017	<0.01	
4/4/2017	0.003 (J)	
7/13/2017	0.0019 (J)	
1/9/2018	0.0046 (J)	
7/10/2018	0.0031 (J)	
1/17/2019		0.0022 (J)
3/26/2019		0.0041 (J)
10/8/2019	<0.01	
4/7/2020	<0.01	

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22
6/21/2010	<0.01
1/7/2011	<0.01
7/8/2011	<0.01
1/18/2012	<0.01
7/10/2012	<0.01
1/18/2013	<0.01
7/17/2013	<0.01
1/14/2014	<0.01
7/10/2014	0.0053
1/14/2015	0.0013 (J)
7/18/2015	0.0043 (J)
1/18/2016	<0.01
7/29/2016	0.0052 (J)
1/4/2017	<0.01
4/6/2017	<0.01
7/11/2017	0.0016 (J)
1/11/2018	0.0012 (J)
7/11/2018	0.0025 (J)
1/18/2019	<0.01
3/27/2019	0.002 (J)
10/9/2019	<0.01
4/7/2020	0.0014 (J)

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	0.014
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/23/2008	<0.01
12/4/2008	<0.01
7/8/2009	0.0029
12/21/2009	<0.01
6/20/2010	<0.01
1/7/2011	<0.01
7/8/2011	<0.01
1/18/2012	<0.01
7/10/2012	<0.01
1/18/2013	<0.01
7/17/2013	<0.01
1/14/2014	<0.01
7/9/2014	0.0016 (J)
1/14/2015	<0.01
7/17/2015	0.0029 (J)
1/18/2016	<0.01
7/28/2016	<0.01
1/6/2017	<0.01
4/6/2017	<0.01
7/12/2017	0.0013 (J)
1/11/2018	<0.01
7/11/2018	<0.01
1/18/2019	<0.01
3/27/2019	<0.01
10/9/2019	<0.01
4/8/2020	0.0015 (J)

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWB-4R	GWB-4R
9/29/2000	0.06
11/21/2000	0.068
1/20/2001	0.12
3/14/2001	0.08
7/16/2001	0.11
11/1/2001	0.079
4/25/2002	0.11
11/20/2002	0.15
6/6/2003	0.12
12/12/2003	0.13
5/26/2004	0.095
12/7/2004	0.067
6/21/2005	0.062
12/12/2005	0.09
6/27/2006	0.083
12/4/2006	0.084
6/23/2007	0.081
12/11/2007	0.067
6/24/2008	0.059
12/5/2008	0.054
7/7/2009	0.038
12/21/2009	0.06
6/21/2010	0.036
1/7/2011	0.043
7/8/2011	0.044
1/18/2012	0.045
7/10/2012	0.048
1/18/2013	0.049
7/17/2013	0.05
1/14/2014	0.067
7/9/2014	0.055
1/12/2015	0.066
7/16/2015	0.045
1/18/2016	0.049
7/29/2016	0.0388
1/6/2017	0.0341
4/4/2017	0.0371
7/12/2017	0.0399
1/11/2018	0.0327
7/11/2018	0.02
1/16/2019	0.0022 (J)
3/25/2019	0.004 (J)
10/9/2019	<0.01
4/7/2020	0.0037 (J)

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R	GWB-5R
9/29/2000	0.038	
11/21/2000	0.013	
1/20/2001	0.038	
12/12/2003	0.014	
12/7/2004	0.054	
6/21/2005	0.038	
12/12/2005	0.0056	
6/27/2006	0.0043	
12/4/2006	0.0044	
6/23/2007	0.0039	
12/11/2007	0.0029	
6/24/2008	0.003	
12/5/2008	<0.01	
7/7/2009	<0.01	
12/21/2009	<0.01	
6/20/2010	<0.01	
1/6/2011	0.0067	
7/7/2011	0.019	
1/17/2012	0.021	
7/9/2012	0.032	
1/17/2013	0.034	
7/16/2013	0.021	
1/13/2014	0.008	
7/9/2014	0.0052	
1/13/2015	0.0036 (J)	
7/16/2015	0.004 (J)	
1/18/2016	0.0069	
7/27/2016	0.0046 (J)	
1/3/2017	<0.01	
4/6/2017	0.0063 (J)	
7/12/2017	0.0064 (J)	
1/10/2018	0.0077 (J)	
7/10/2018	0.016	
1/16/2019		0.0033 (J)
3/26/2019		0.0058 (J)
10/9/2019		0.033 (J)
4/7/2020		0.0053 (J)

## Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-6R
9/29/2000	0.12	
11/21/2000	0.13	
1/20/2001	0.14	
3/14/2001	0.13	
7/16/2001	0.18	
11/1/2001	0.12	
4/25/2002	0.15	
11/20/2002	0.15	
6/6/2003	0.11	
12/12/2003	0.089	
5/26/2004	0.09	
12/7/2004	0.072	
6/21/2005	0.04	
12/12/2005	0.021	
6/27/2006	0.02	
12/4/2006	0.022	
6/23/2007	0.027	
12/11/2007	0.017	
6/24/2008	0.053	
12/5/2008	0.0078	
7/7/2009	0.012	
12/21/2009	0.011	
6/20/2010	0.0083	
1/7/2011	0.0079	
7/7/2011	0.007	
1/18/2012	0.0116	
7/10/2012	0.0096	
1/18/2013	<0.01	
7/17/2013	<0.01	
1/14/2014	<0.01	
7/9/2014	0.0039 (J)	
1/14/2015	0.005	
7/17/2015	0.0045 (J)	
1/18/2016	0.0044 (J)	
7/28/2016	0.0038 (J)	
1/5/2017	0.0077 (J)	
4/6/2017	0.0069 (J)	
7/12/2017	0.0098 (J)	
1/9/2018	0.0086 (J)	
7/10/2018	0.0098 (J)	
1/16/2019	0.077	
3/26/2019	0.086	
10/9/2019	0.018 (J)	
4/7/2020	0.041 (J)	

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-7	GWA-7
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
6/6/2003	0.69 (o)
12/12/2003	0.12 (o)
5/26/2004	0.013
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	0.014
6/27/2006	0.01
12/4/2006	0.0065
6/23/2007	0.0049
12/11/2007	0.0043
6/23/2008	0.0025
12/4/2008	0.0025
7/7/2009	<0.01
12/20/2009	0.0031
6/20/2010	<0.01
1/7/2011	<0.01
7/7/2011	0.0031
1/17/2012	0.004
7/9/2012	0.0096
1/18/2013	0.051
7/17/2013	0.042
1/13/2014	0.0025
7/9/2014	0.064
1/13/2015	0.066
7/16/2015	0.036
1/18/2016	0.035
7/27/2016	0.0529
10/25/2016	0.0035 (J)
1/6/2017	0.0235
4/6/2017	0.0829
7/13/2017	0.0853
10/4/2017	0.0263
1/9/2018	0.0665
7/11/2018	0.02 (J)
1/16/2019	0.014 (J)
3/25/2019	<0.05 (o)
10/8/2019	0.095
4/6/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
9/29/2000	<0.01
1/20/2001	0.025 (o)
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	0.016 (o)
6/6/2003	0.032 (o)
12/12/2003	0.019 (o)
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	0.01
4/4/2006	<0.01
6/27/2006	0.0043
8/30/2006	0.017 (o)
12/4/2006	0.0053
2/15/2007	0.0045
6/23/2007	0.0043
9/11/2007	0.004
12/11/2007	0.0048
3/11/2008	0.0043
6/23/2008	0.0037
11/3/2008	0.0032
12/4/2008	0.0029
3/25/2009	0.0055
7/7/2009	0.0028
9/14/2009	0.0027
12/20/2009	0.0029
3/4/2010	0.0042
6/20/2010	0.0027
9/14/2010	<0.01
1/7/2011	0.0032
4/15/2011	<0.01
7/7/2011	0.005
9/25/2011	0.0041
1/17/2012	0.0043
4/4/2012	<0.01
7/10/2012	0.0028
10/9/2012	0.0033
1/18/2013	0.0038
4/5/2013	0.0026
7/17/2013	<0.01
10/11/2013	0.0046
1/14/2014	0.0025
4/3/2014	0.0029
7/9/2014	0.002 (J)
10/24/2014	0.0031
1/14/2015	0.003
5/10/2015	0.0028
7/17/2015	0.0018 (J)
10/6/2015	0.0018 (J)

## Prediction Limit

Page 2

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
1/18/2016	0.0028
4/26/2016	<0.01
7/28/2016	0.0018 (J)
10/24/2016	0.0024 (J)
1/3/2017	0.0035 (J)
4/3/2017	0.0041 (J)
7/11/2017	0.0029 (J)
10/2/2017	0.0026 (J)
1/9/2018	0.0035 (J)
7/9/2018	0.0022 (J)
1/16/2019	0.0037 (J)
3/25/2019	<0.01
10/7/2019	0.0077 (J)
4/6/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-1	GWC-1
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	0.011
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/24/2008	<0.01
12/5/2008	<0.01
7/7/2009	<0.01
12/20/2009	<0.01
6/20/2010	<0.01
1/6/2011	<0.01
7/7/2011	0.0025
1/17/2012	<0.01
7/9/2012	<0.01
1/17/2013	<0.01
7/16/2013	<0.01
1/13/2014	0.0025
7/9/2014	<0.01
1/13/2015	0.0025
7/16/2015	<0.01
1/17/2016	<0.01
7/27/2016	<0.01
1/4/2017	<0.01
4/4/2017	<0.01
7/12/2017	<0.01
1/10/2018	0.0014 (J)
7/10/2018	0.0021 (J)
1/16/2019	<0.01
3/26/2019	<0.01
10/9/2019	0.0057 (J)
4/7/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-11	GWC-11
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	<0.01
12/12/2003	0.013
5/26/2004	<0.01
12/7/2004	0.028 (o)
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	0.0028
12/4/2006	0.0028
6/23/2007	0.0063
12/11/2007	<0.01
6/23/2008	<0.01
12/4/2008	<0.01
7/8/2009	<0.01
12/21/2009	<0.01
6/20/2010	<0.01
1/6/2011	<0.01
7/7/2011	<0.01
1/17/2012	0.0043
7/9/2012	<0.01
1/17/2013	0.0025
7/16/2013	<0.01
1/13/2014	0.0025
7/8/2014	0.0011 (J)
1/13/2015	0.0021 (J)
7/16/2015	<0.01
1/19/2016	0.0029
7/26/2016	<0.01
1/4/2017	<0.01
4/6/2017	0.004 (J)
7/11/2017	<0.01
1/11/2018	0.0018 (J)
7/11/2018	<0.01
1/17/2019	<0.01
3/27/2019	<0.01
10/8/2019	0.0061 (J)
4/7/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-12	GWC-12
9/29/2000	0.38 (o)
11/21/2000	0.077 (o)
1/20/2001	0.23 (o)
3/14/2001	0.24 (o)
7/16/2001	0.053 (o)
11/1/2001	0.022 (o)
4/25/2002	1.2 (o)
11/20/2002	0.045 (o)
6/6/2003	0.042 (o)
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	0.012 (o)
12/4/2006	0.0067
6/23/2007	0.025 (o)
12/11/2007	0.0038
6/23/2008	0.0051
12/4/2008	<0.01
7/8/2009	<0.01
12/21/2009	0.013 (o)
6/20/2010	<0.01
1/7/2011	0.004
7/7/2011	0.0028
1/17/2012	0.0043
7/9/2012	<0.01
1/17/2013	0.0033
7/16/2013	0.0028
1/13/2014	0.0025
7/8/2014	0.002 (J)
1/13/2015	0.0079
7/16/2015	0.0026
1/18/2016	0.0025
7/27/2016	0.0021 (J)
1/4/2017	0.0025 (J)
4/5/2017	0.0026 (J)
7/10/2017	0.0023 (J)
1/11/2018	0.0031 (J)
7/11/2018	0.0036 (J)
1/17/2019	0.0032 (J)
3/27/2019	0.0031 (J)
10/9/2019	0.0057 (J)
4/7/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-13	GWC-13
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	0.044 (o)	
4/25/2002	<0.01	
11/20/2002	0.023	
6/6/2003	<0.01	
12/12/2003	<0.01	
5/26/2004	0.035	
12/7/2004	0.018	
6/21/2005	0.014	
12/12/2005	0.023	
6/27/2006	0.023	
12/4/2006	0.046 (o)	
6/23/2007	0.036	
12/11/2007	0.011	
6/23/2008	0.0091	
12/4/2008	0.0038	
7/8/2009	<0.01	
12/21/2009	0.0032	
6/20/2010	<0.01	
1/6/2011	0.004	
7/7/2011	0.0037	
1/17/2012	0.0031	
7/9/2012	0.003	
1/17/2013	<0.01	
7/16/2013	0.0029	
1/13/2014	0.0025	
7/8/2014	0.0018 (J)	
1/13/2015	0.0028	
7/16/2015	0.0018 (J)	
1/18/2016	0.0017 (J)	
7/26/2016	0.0028 (J)	
1/5/2017	0.0021 (J)	
4/6/2017	0.0027 (J)	
7/12/2017	0.0043 (J)	
1/10/2018	0.0021 (J)	
7/11/2018	0.0039 (J)	
1/16/2019	0.047	
3/26/2019	0.03	
10/8/2019	0.053	
4/8/2020	0.023	

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-14	GWC-14
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	0.011
4/4/2006	<0.01
6/27/2006	0.0045
8/30/2006	<0.01
12/4/2006	<0.01
2/15/2007	<0.01
6/23/2007	<0.01
9/11/2007	<0.01
12/11/2007	<0.01
3/11/2008	<0.01
6/24/2008	<0.01
11/3/2008	<0.01
12/4/2008	<0.01
3/25/2009	<0.01
7/8/2009	<0.01
9/14/2009	<0.01
12/20/2009	<0.01
3/4/2010	<0.01
6/20/2010	<0.01
9/14/2010	<0.01
1/7/2011	<0.01
4/15/2011	<0.01
7/7/2011	<0.01
9/25/2011	<0.01
1/17/2012	<0.01
4/4/2012	<0.01
7/9/2012	<0.01
10/9/2012	<0.01
1/18/2013	<0.01
4/5/2013	<0.01
7/17/2013	<0.01
10/11/2013	<0.01
1/14/2014	0.0025
4/3/2014	0.0014 (J)
7/9/2014	0.00086 (J)
10/24/2014	0.00083 (J)
1/14/2015	<0.01
5/10/2015	<0.01
7/17/2015	<0.01

## Prediction Limit

Page 2

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-14	GWC-14
10/6/2015	<0.01
1/17/2016	<0.01
4/26/2016	<0.01
7/27/2016	<0.01
10/25/2016	<0.01
1/5/2017	<0.01
4/4/2017	<0.01
7/11/2017	<0.01
10/2/2017	0.0026 (J)
1/9/2018	0.0018 (J)
7/9/2018	<0.01
1/16/2019	<0.01
3/26/2019	<0.01
10/8/2019	0.0052 (J)
4/7/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-15	GWC-15
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	<0.01	
6/6/2003	<0.01	
12/12/2003	<0.01	
5/26/2004	<0.01	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	0.064 (o)	
6/27/2006	0.011	
12/4/2006	0.0033	
6/23/2007	0.0029	
12/11/2007	<0.01	
6/24/2008	<0.01	
12/5/2008	<0.01	
7/8/2009	<0.01	
12/20/2009	<0.01	
6/20/2010	<0.01	
1/7/2011	<0.01	
7/7/2011	<0.01	
1/17/2012	<0.01	
7/9/2012	<0.01	
1/18/2013	<0.01	
7/17/2013	<0.01	
1/13/2014	0.0025	
7/9/2014	<0.01	
1/13/2015	<0.01	
7/16/2015	<0.01	
1/17/2016	<0.01	
7/27/2016	<0.01	
10/25/2016	<0.01	
1/5/2017	<0.01	
4/3/2017	<0.01	
7/11/2017	<0.01	
10/2/2017	<0.01	
1/9/2018	<0.01	
7/10/2018	<0.01	
1/17/2019	<0.01	
3/26/2019	<0.01	
10/8/2019	0.0051 (J)	
4/7/2020	<0.01	

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16	GWC-16
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	<0.01	
3/14/2001	<0.01	
7/16/2001	<0.01	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	<0.01	
6/6/2003	0.035 (o)	
12/12/2003	<0.01	
5/26/2004	<0.01	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	<0.01	
4/4/2006	<0.01	
6/27/2006	0.077 (o)	
8/30/2006	0.0027	
12/4/2006	<0.01	
2/15/2007	0.0032	
6/23/2007	0.0058	
9/11/2007	0.0033	
12/11/2007	<0.01	
3/11/2008	<0.01	
6/24/2008	<0.01	
11/3/2008	0.0025	
12/5/2008	<0.01	
3/25/2009	0.0025	
7/8/2009	<0.01	
9/14/2009	<0.01	
12/20/2009	<0.01	
3/4/2010	<0.01	
6/21/2010	<0.01	
9/14/2010	<0.01	
1/7/2011	<0.01	
4/15/2011	<0.01	
7/7/2011	<0.01	
9/25/2011	0.0028	
1/18/2012	0.0029	
4/4/2012	<0.01	
7/10/2012	<0.01	
10/9/2012	0.0027	
1/18/2013	<0.01	
4/5/2013	<0.01	
7/17/2013	<0.01	
10/11/2013	<0.01	
1/14/2014	0.0025	
4/3/2014	0.0015 (J)	
7/9/2014	0.0012 (J)	
10/24/2014	0.0013 (J)	
1/14/2015	0.0017 (J)	
5/11/2015	0.0015 (J)	
7/16/2015	<0.01	

## Prediction Limit

Page 2

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16
10/6/2015	<0.01
1/17/2016	<0.01
4/26/2016	<0.01
7/28/2016	<0.01
10/25/2016	<0.01
1/4/2017	0.0025 (J)
4/5/2017	0.0025 (J)
7/12/2017	0.002 (J)
10/3/2017	<0.01
1/10/2018	0.0016 (J)
7/10/2018	0.0031 (J)
1/17/2019	<0.01
3/26/2019	<0.01
10/8/2019	0.01
4/7/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-17	GWC-17
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	0.014
6/6/2003	0.012
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	<0.01
6/27/2006	0.0046
12/4/2006	0.0071
6/23/2007	0.005
12/11/2007	0.0033
6/24/2008	0.0037
12/5/2008	0.0027
7/8/2009	0.0048
12/21/2009	0.0032
6/21/2010	0.0028
1/7/2011	0.003
7/8/2011	0.0034
1/18/2012	0.0049
7/10/2012	0.0039
1/18/2013	0.0043
7/17/2013	0.0035
1/14/2014	0.0025
7/9/2014	0.0033
1/14/2015	0.0067
7/18/2015	<0.01
1/18/2016	0.012
7/29/2016	0.0086 (J)
1/5/2017	0.016
4/5/2017	0.0175
7/13/2017	0.0126
1/11/2018	0.012
7/11/2018	0.011
1/16/2019	0.0094 (J)
3/26/2019	0.0057 (J)
10/9/2019	0.011
4/8/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-2	GWC-2
11/21/2000	0.021 (o)
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	<0.01
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	0.012
6/27/2006	<0.01
12/4/2006	<0.01
6/23/2007	<0.01
12/11/2007	<0.01
6/24/2008	<0.01
12/4/2008	<0.01
7/8/2009	<0.01
12/20/2009	<0.01
6/20/2010	<0.01
1/6/2011	<0.01
1/17/2012	<0.01
7/9/2012	<0.01
1/17/2013	<0.01
7/17/2013	<0.01
1/13/2014	0.0025
7/9/2014	0.00058 (J)
1/13/2015	0.0024 (J)
7/16/2015	<0.01
1/17/2016	<0.01
7/27/2016	0.0018 (J)
1/5/2017	<0.01
4/4/2017	0.0015 (J)
7/13/2017	0.0014 (J)
1/10/2018	<0.01
7/10/2018	<0.01
1/21/2019	<0.01
7/30/2019	0.0067 (J)
10/9/2019	0.005 (J)
4/8/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20	GWC-20
6/21/2010	<0.01	
1/7/2011	<0.01	
7/7/2011	<0.01	
7/8/2011	0.086 (J,o)	
1/18/2012	<0.01	
7/10/2012	<0.01	
1/18/2013	0.0032	
7/17/2013	<0.01	
1/14/2014	0.0025	
7/10/2014	<0.01	
1/12/2015	<0.01	
7/18/2015	<0.01	
1/17/2016	<0.01	
7/28/2016	<0.01	
10/25/2016	<0.01	
1/4/2017	<0.01	
4/4/2017	<0.01	
7/11/2017	<0.01	
10/2/2017	<0.01	
1/10/2018	0.0034 (J)	
7/9/2018	<0.01	
1/21/2019		<0.01
3/25/2019		<0.01
10/9/2019		0.0049 (J)
4/8/2020		<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-21
6/21/2010	0.04 (o)
1/7/2011	<0.01
7/8/2011	0.0044
1/18/2012	<0.01
7/10/2012	<0.01
1/18/2013	<0.01
7/17/2013	<0.01
1/14/2014	0.0025
7/9/2014	0.00084 (J)
1/14/2015	0.0018 (J)
7/17/2015	<0.01
1/17/2016	<0.01
7/28/2016	<0.01
1/4/2017	<0.01
4/4/2017	0.0015 (J)
7/13/2017	0.002 (J)
1/9/2018	0.0016 (J)
7/10/2018	<0.01
1/17/2019	<0.01
3/26/2019	<0.01
10/8/2019	0.0071 (J)
4/7/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22
6/21/2010	<0.01
1/7/2011	0.019
7/8/2011	0.1 (o)
1/18/2012	0.0051
7/10/2012	0.01
1/18/2013	0.0036
7/17/2013	0.0025
1/14/2014	0.0025
7/10/2014	0.024
1/14/2015	0.0016 (J)
7/18/2015	0.014
1/18/2016	<0.01
7/29/2016	0.0129
1/4/2017	0.006 (J)
4/6/2017	0.0031 (J)
7/11/2017	0.0029 (J)
1/11/2018	0.0106
7/11/2018	0.0057 (J)
1/18/2019	0.0024 (J)
3/27/2019	<0.01
10/9/2019	0.0079 (J)
4/7/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-9
9/29/2000	<0.01
11/21/2000	<0.01
1/20/2001	<0.01
3/14/2001	<0.01
7/16/2001	<0.01
11/1/2001	<0.01
4/25/2002	<0.01
11/20/2002	0.033 (o)
6/6/2003	<0.01
12/12/2003	<0.01
5/26/2004	<0.01
12/7/2004	<0.01
6/21/2005	<0.01
12/12/2005	0.032 (o)
6/27/2006	0.018 (o)
12/4/2006	0.0044
6/23/2007	0.0041
12/11/2007	0.0039
6/23/2008	<0.01
12/4/2008	0.0039
7/8/2009	<0.01
12/21/2009	0.004
6/20/2010	<0.01
1/7/2011	0.0032
7/8/2011	0.0025
1/18/2012	0.0045
7/10/2012	<0.01
1/18/2013	0.0029
7/17/2013	<0.01
1/14/2014	0.0025
7/9/2014	0.0016 (J)
1/14/2015	0.0024 (J)
7/17/2015	0.0031
1/18/2016	0.0059
7/28/2016	0.0019 (J)
1/6/2017	0.0026 (J)
4/6/2017	0.0047 (J)
7/12/2017	0.003 (J)
1/11/2018	0.0046 (J)
7/11/2018	0.0033 (J)
1/18/2019	0.0025 (J)
3/27/2019	0.0026 (J)
10/9/2019	0.0054 (J)
4/8/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-4R	GWB-4R
9/29/2000	<0.01	
11/21/2000	<0.01	
1/20/2001	0.041	
3/14/2001	<0.01	
7/16/2001	0.059	
11/1/2001	<0.01	
4/25/2002	<0.01	
11/20/2002	0.061	
6/6/2003	0.041	
12/12/2003	0.012	
5/26/2004	0.016	
12/7/2004	<0.01	
6/21/2005	<0.01	
12/12/2005	0.017	
6/27/2006	0.11	
12/4/2006	0.086	
6/23/2007	0.076	
12/11/2007	0.087	
6/24/2008	0.062	
12/5/2008	0.014	
7/7/2009	0.052	
12/21/2009	0.046	
6/21/2010	0.045	
1/7/2011	0.024	
7/8/2011	0.023	
1/18/2012	0.011	
7/10/2012	0.024	
1/18/2013	0.011	
7/17/2013	0.0029	
1/14/2014	0.0025	
7/9/2014	0.0051	
1/12/2015	0.0023 (J)	
7/16/2015	0.0021 (J)	
1/18/2016	0.0092	
7/29/2016	0.003 (J)	
1/6/2017	0.0104	
4/4/2017	0.0132	
7/12/2017	0.0046 (J)	
1/11/2018	0.0095 (J)	
7/11/2018	0.0028 (J)	
1/16/2019	0.0052 (J)	
3/25/2019	0.0078 (J)	
10/9/2019	0.0064 (J)	
4/7/2020	<0.01	

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R
9/29/2000	0.026 (o)
11/21/2000	<0.01
1/20/2001	0.031 (o)
3/14/2001	0.063 (o)
7/16/2001	0.08 (o)
11/1/2001	0.16 (o)
4/25/2002	<0.01
11/20/2002	0.14 (o)
6/6/2003	0.51 (o)
12/12/2003	<0.01
5/26/2004	0.036 (o)
12/7/2004	0.069 (o)
6/21/2005	0.076 (o)
12/12/2005	<0.01
6/27/2006	0.01
12/4/2006	0.0035
6/23/2007	0.0032
12/11/2007	0.0079
6/24/2008	<0.01
12/5/2008	<0.01
7/7/2009	<0.01
12/21/2009	<0.01
6/20/2010	<0.01
1/6/2011	<0.01
7/7/2011	0.0027
1/17/2012	0.0039
7/9/2012	<0.01
1/17/2013	<0.01
7/16/2013	0.0032
1/13/2014	0.0025
7/9/2014	0.00076 (J)
1/13/2015	0.0036
7/16/2015	<0.01
1/18/2016	<0.01
7/27/2016	0.0015 (J)
1/3/2017	<0.01
4/6/2017	0.0023 (J)
7/12/2017	<0.01
1/10/2018	0.0022 (J)
7/10/2018	<0.01
1/16/2019	<0.01
3/26/2019	<0.01
10/9/2019	0.0081 (J)
4/7/2020	<0.01

## Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/24/2020 8:59 AM View: PL's State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-6R
6/27/2006	0.0071	
12/4/2006	0.0096	
1/7/2011	0.0044	
7/7/2011	0.003	
1/18/2012	0.0048	
7/10/2012	<0.01	
1/18/2013	0.0028	
7/17/2013	<0.01	
1/14/2014	0.0025	
7/9/2014	0.00093 (J)	
1/14/2015	0.0023 (J)	
7/17/2015	<0.01	
1/18/2016	0.0029	
7/28/2016	<0.01	
1/5/2017	<0.01	
4/6/2017	0.0032 (J)	
7/12/2017	0.002 (J)	
1/9/2018	0.0036 (J)	
7/10/2018	0.0055 (J)	
1/16/2019		<0.01
3/26/2019		<0.01
10/9/2019		0.016 (J)
4/7/2020		<0.01

# FIGURE F.

## Trend Test Summary (State) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/26/2020, 9:36 AM

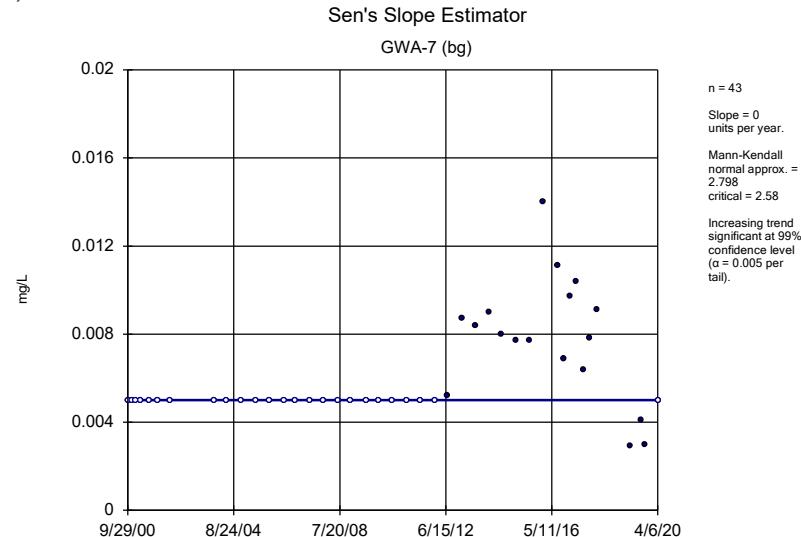
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWA-7 (bg)	0	2.798	2.58	Yes	43	58.14	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWA-8 (bg)	0	-3.444	-2.58	Yes	68	91.18	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWC-1	0	-3.593	-2.58	Yes	46	58.7	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWC-15	0.002715	7.536	2.58	Yes	48	52.08	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWC-20	0.02201	126	124	Yes	27	3.704	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-8 (bg)	-0.002605	-7.718	-2.58	Yes	65	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWC-14	-0.002832	-5.38	-2.58	Yes	67	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWC-20	0.00615	171	124	Yes	27	0	n/a	n/a	0.01	NP

## Trend Test Summary (State) - All Results

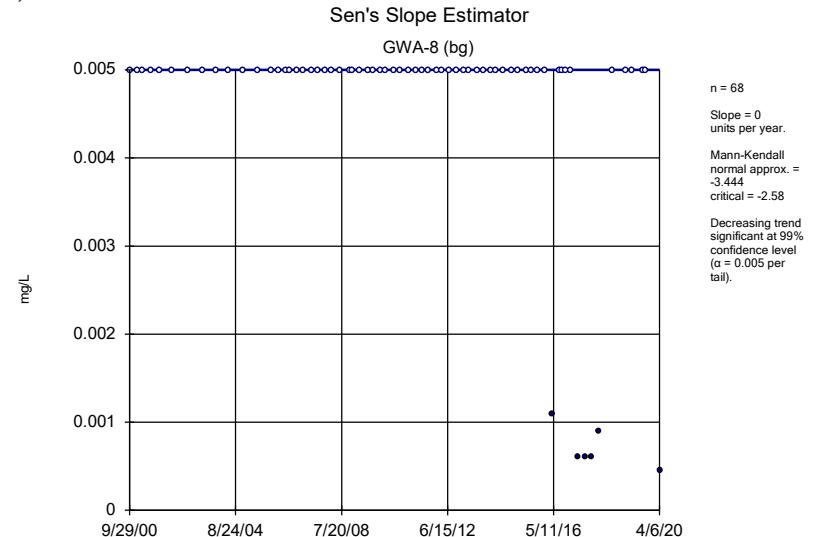
Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/26/2020, 9:36 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWA-7 (bg)	0	2.798	2.58	Yes	43	58.14	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWA-8 (bg)	0	-3.444	-2.58	Yes	68	91.18	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWC-1	0	-3.593	-2.58	Yes	46	58.7	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWC-15	0.002715	7.536	2.58	Yes	48	52.08	n/a	n/a	0.01	NP
Arsenic (mg/L)	GWC-20	0.02201	126	124	Yes	27	3.704	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-7 (bg)	-0.0003887	-0.4366	-2.58	No	46	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-8 (bg)	-0.002605	-7.718	-2.58	Yes	65	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWC-14	-0.002832	-5.38	-2.58	Yes	67	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWC-16	0.0008429	2.186	2.58	No	64	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWC-20	0.00615	171	124	Yes	27	0	n/a	n/a	0.01	NP

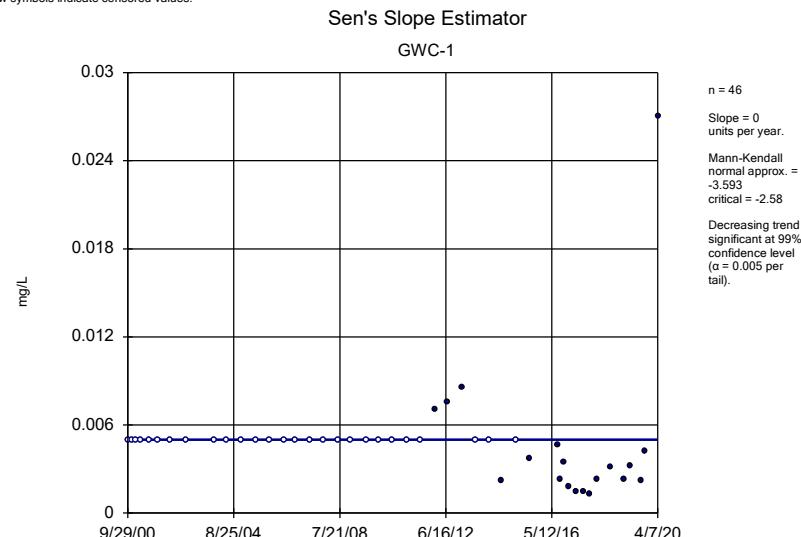
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.



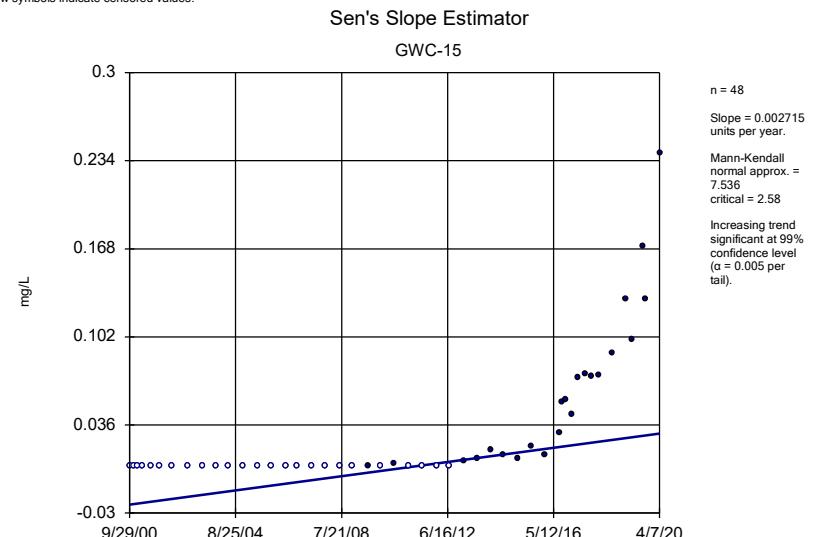
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

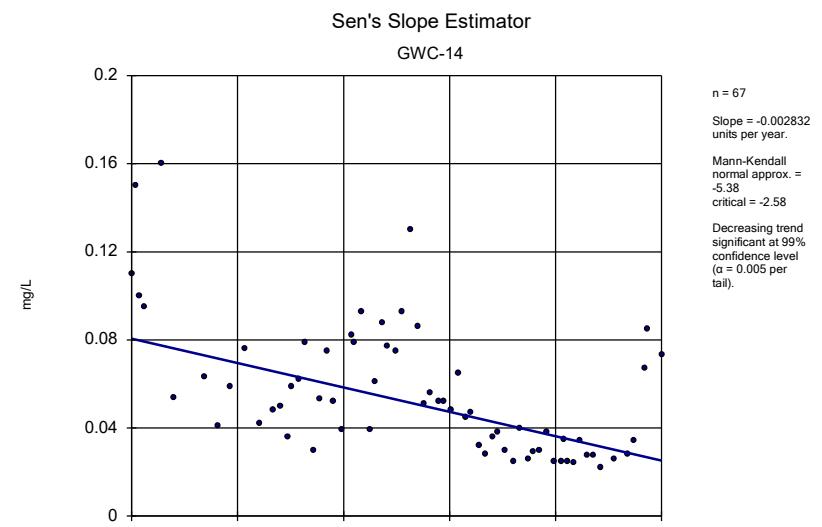
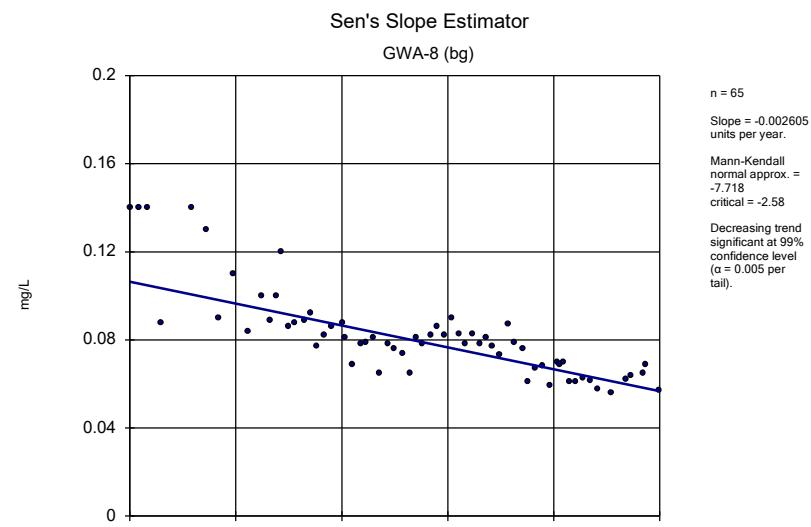
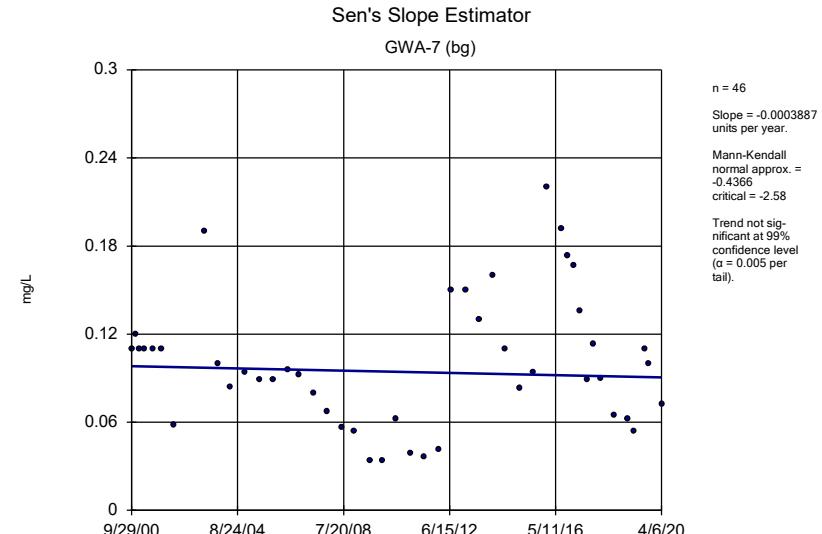
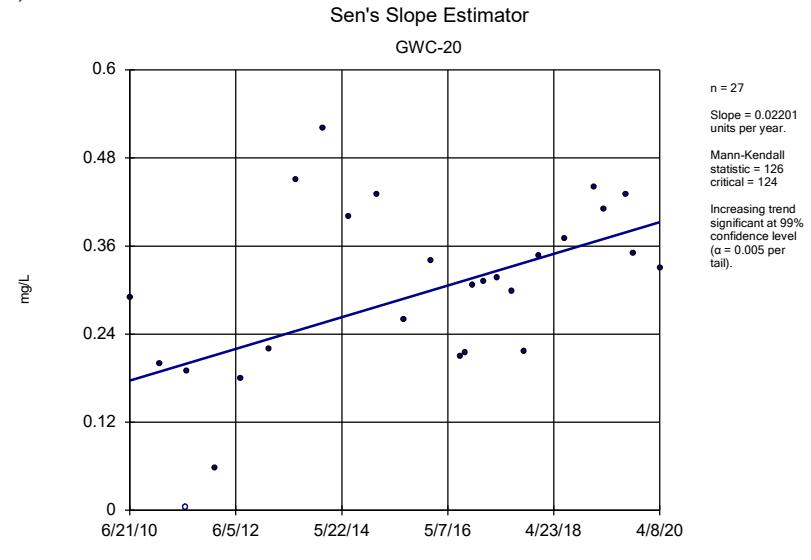


Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.



Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.





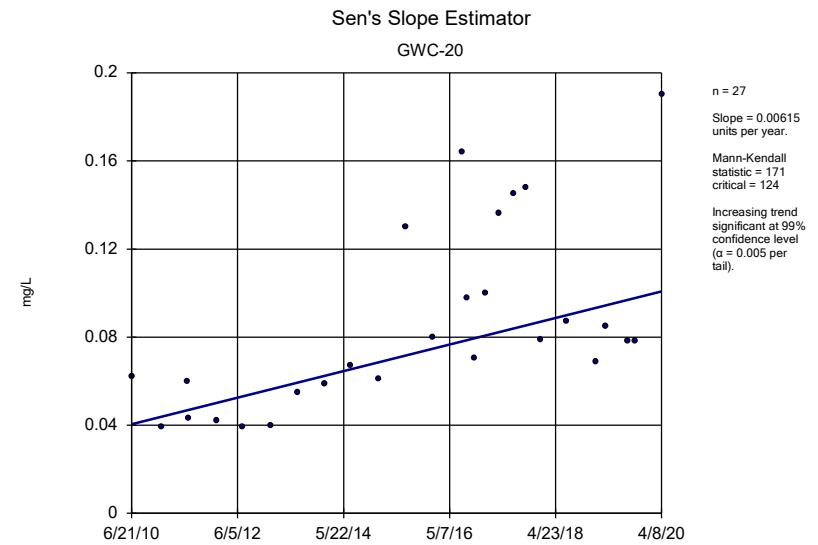
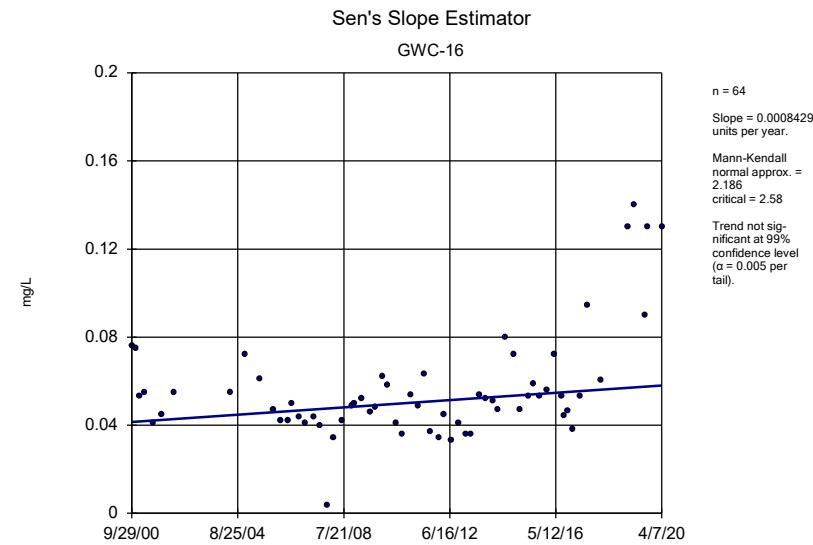


FIGURE G.

# Intrawell Prediction Limits (Federal) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:16 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWB-6R	4.2	n/a	4/7/2020	5.6	8	2.62	0.6468	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-11	0.3714	n/a	4/7/2020	0.67	8	-2.326	0.5469	0	None	In(x)	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-16	6.286	n/a	4/7/2020	10.5	8	2.815	1.422	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWB-6R	569	n/a	4/7/2020	775	8	428.3	57.63	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-11	760	n/a	4/7/2020	780	8	264.3	203	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-16	1386	n/a	4/7/2020	1500	8	893.1	201.8	0	None	No	0.0004702	Param 1 of 3

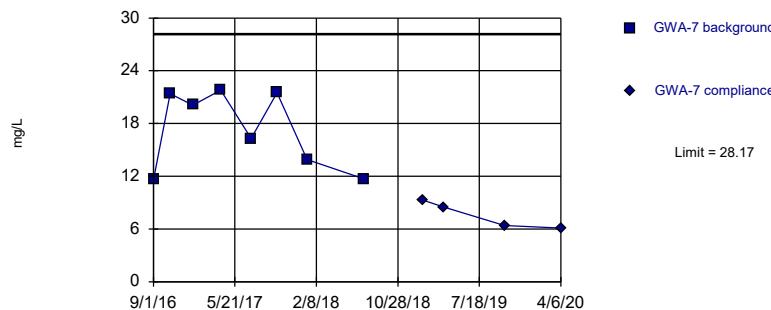
# Intrawell Prediction Limits (Federal) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:16 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWA-7	28.17	n/a	4/6/2020	6.1	8	17.29	4.455	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWA-8	0.1446	n/a	4/6/2020	0.14	8	0.1185	0.0107	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWB-4R	9.727	n/a	4/7/2020	5.5	8	7.539	0.8959	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWB-5R	7.397	n/a	4/7/2020	4.6	8	3.278	1.687	0	None	No	0.0004702	Param 1 of 3
<b>Boron (mg/L)</b>	<b>GWB-6R</b>	<b>4.2</b>	<b>n/a</b>	<b>4/7/2020</b>	<b>5.6</b>	<b>8</b>	<b>2.62</b>	<b>0.6468</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004702</b>	<b>Param 1 of 3</b>
Boron (mg/L)	GWC-1	1.625	n/a	4/7/2020	1	8	1.067	0.2284	0	None	No	0.0004702	Param 1 of 3
<b>Boron (mg/L)</b>	<b>GWC-11</b>	<b>0.3714</b>	<b>n/a</b>	<b>4/7/2020</b>	<b>0.67</b>	<b>8</b>	<b>-2.326</b>	<b>0.5469</b>	<b>0</b>	<b>None</b>	<b>In(x)</b>	<b>0.0004702</b>	<b>Param 1 of 3</b>
Boron (mg/L)	GWC-12	9.63	n/a	4/7/2020	5.3	8	6.358	1.34	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-13	0.3009	n/a	4/8/2020	0.28	8	0.1458	0.06354	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-14	0.08961	n/a	4/7/2020	0.061	8	0.07295	0.006824	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-15	1.943	n/a	4/7/2020	0.96	7	1.364	0.2101	0	None	No	0.0004702	Param 1 of 3
<b>Boron (mg/L)</b>	<b>GWC-16</b>	<b>6.286</b>	<b>n/a</b>	<b>4/7/2020</b>	<b>10.5</b>	<b>8</b>	<b>2.815</b>	<b>1.422</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004702</b>	<b>Param 1 of 3</b>
Boron (mg/L)	GWC-17	1.869	n/a	4/8/2020	0.99	8	0.8828	0.4041	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-2	0.05241	n/a	4/8/2020	0.031	8	0.1559	0.02991	0	None	sqrt(x)	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-20	5.558	n/a	4/8/2020	2.5	8	2.855	1.107	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-21	1.031	n/a	4/7/2020	0.24	8	0.383	0.2654	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-22	16.9	n/a	4/7/2020	3.1	8	5.403	4.71	0	None	No	0.0004702	Param 1 of 3
Boron (mg/L)	GWC-9	0.03214	n/a	4/8/2020	0.023	7	0.02137	0.003908	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWA-7	4478	n/a	4/6/2020	1670	8	3044	587.2	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWA-8	384.6	n/a	4/6/2020	214	8	227.8	64.23	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWB-4R	1282	n/a	4/7/2020	482	8	998.9	115.9	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWB-5R	559.8	n/a	4/7/2020	483	7	322.1	86.22	0	None	No	0.0004702	Param 1 of 3
<b>Total Dissolved Solids (mg/L)</b>	<b>GWB-6R</b>	<b>569</b>	<b>n/a</b>	<b>4/7/2020</b>	<b>775</b>	<b>8</b>	<b>428.3</b>	<b>57.63</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004702</b>	<b>Param 1 of 3</b>
Total Dissolved Solids (mg/L)	GWC-1	460.5	n/a	4/7/2020	195	8	291.9	69.05	0	None	No	0.0004702	Param 1 of 3
<b>Total Dissolved Solids (mg/L)</b>	<b>GWC-11</b>	<b>760</b>	<b>n/a</b>	<b>4/7/2020</b>	<b>780</b>	<b>8</b>	<b>264.3</b>	<b>203</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004702</b>	<b>Param 1 of 3</b>
Total Dissolved Solids (mg/L)	GWC-12	1845	n/a	4/7/2020	464	8	1213	258.9	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-13	150.3	n/a	4/8/2020	65	8	54	39.43	25	Kaplan-Meier	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-14	1226	n/a	4/7/2020	843	8	772	185.8	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-15	672	n/a	4/7/2020	428	8	544.6	52.18	0	None	No	0.0004702	Param 1 of 3
<b>Total Dissolved Solids (mg/L)</b>	<b>GWC-16</b>	<b>1386</b>	<b>n/a</b>	<b>4/7/2020</b>	<b>1500</b>	<b>8</b>	<b>893.1</b>	<b>201.8</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0004702</b>	<b>Param 1 of 3</b>
Total Dissolved Solids (mg/L)	GWC-17	2945	n/a	4/8/2020	881	8	1860	444.3	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-2	157.3	n/a	4/8/2020	38	8	57.06	41.05	12.5	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-20	1016	n/a	4/8/2020	986	8	546.9	192	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-21	328.6	n/a	4/7/2020	106	8	140.6	77.02	12.5	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-22	2575	n/a	4/7/2020	819	8	1067	617.6	0	None	No	0.0004702	Param 1 of 3
Total Dissolved Solids (mg/L)	GWC-9	272.4	n/a	4/8/2020	80	8	188.5	34.38	0	None	No	0.0004702	Param 1 of 3

Within Limit

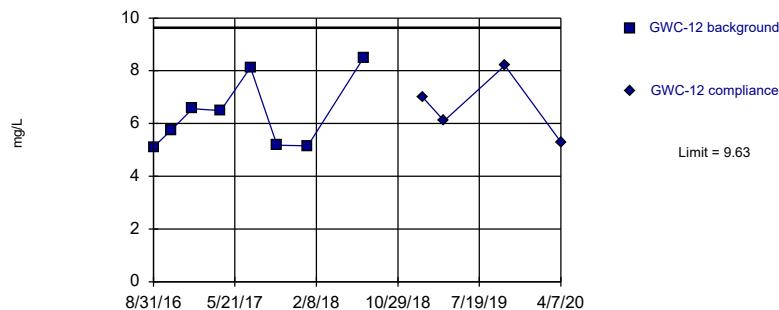
**Prediction Limit**  
Intrawell Parametric



Within Limit

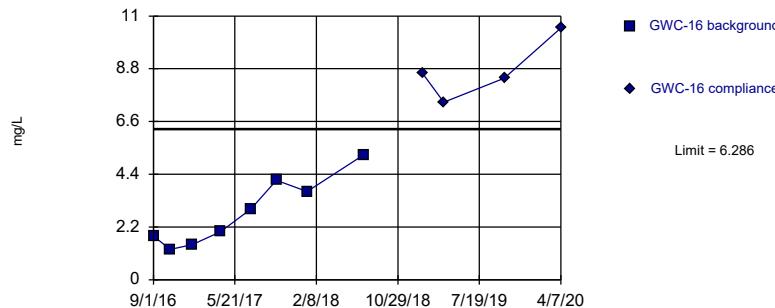
## Prediction Limit

Intrawell Parametric



Exceeds Limit

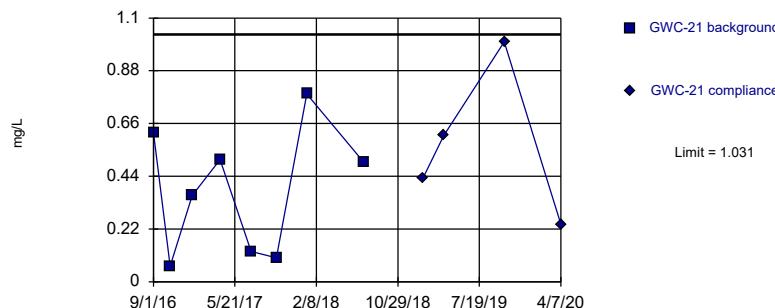
**Prediction Limit**  
Intrawell Parametric



Within Limit

## Prediction Limit

Intrawell Parametric

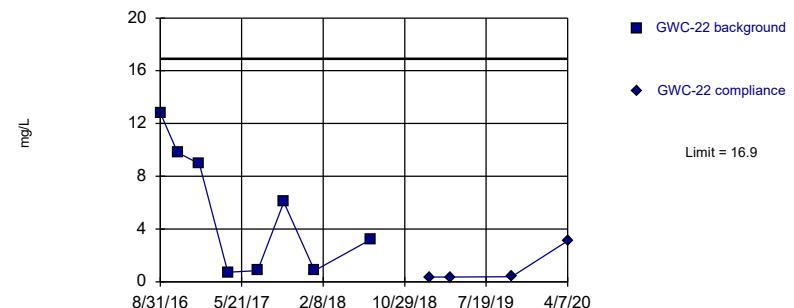


Background Data Summary: Mean=0.383, Std. Dev.=0.2654, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9192, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.403, Std. Dev.=4.71, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8833, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

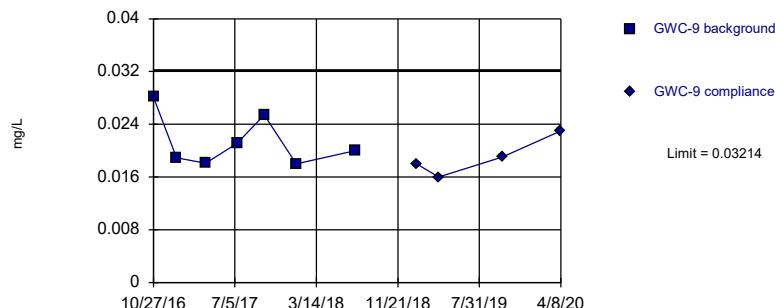
Constituent: Boron Analysis Run 5/23/2020 2:10 PM View: PL's Intrawell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Boron Analysis Run 5/23/2020 2:10 PM View: PL's Intrawell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

## Prediction Limit

Intrawell Parametric

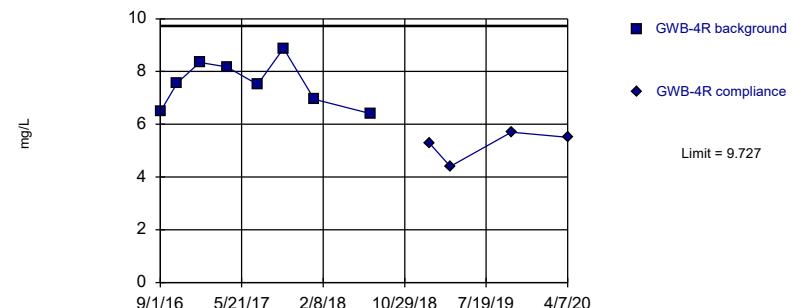


Background Data Summary: Mean=0.02137, Std. Dev.=0.003908, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8482, critical = 0.73. Kappa = 2.756 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.539, Std. Dev.=0.8959, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9474, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

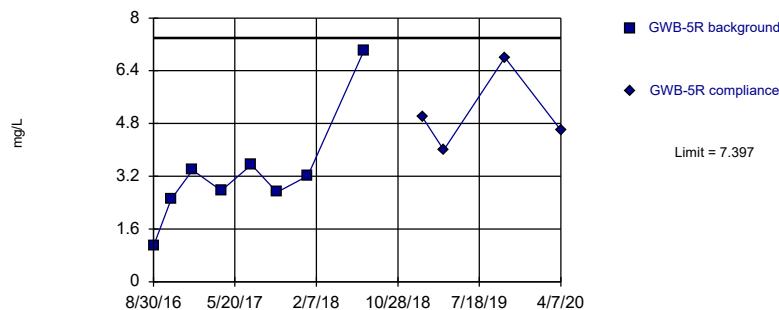
Constituent: Boron Analysis Run 5/23/2020 2:10 PM View: PL's Intrawell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Boron Analysis Run 5/23/2020 2:10 PM View: PL's Intrawell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

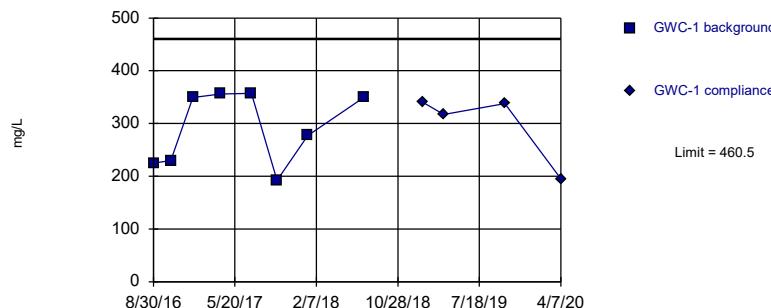
## Prediction Limit

Intrawell Parametric



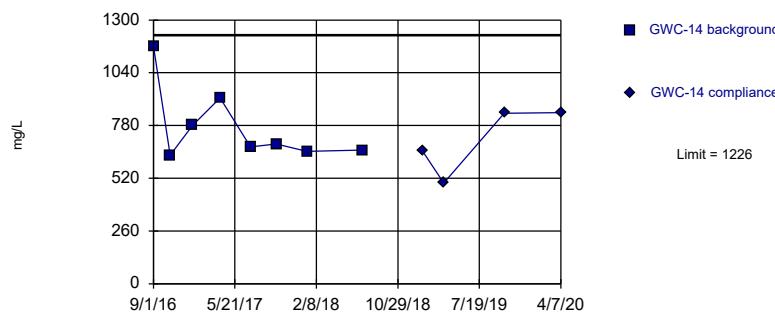
Within Limit

### Prediction Limit Intrawell Parametric



Within Limit

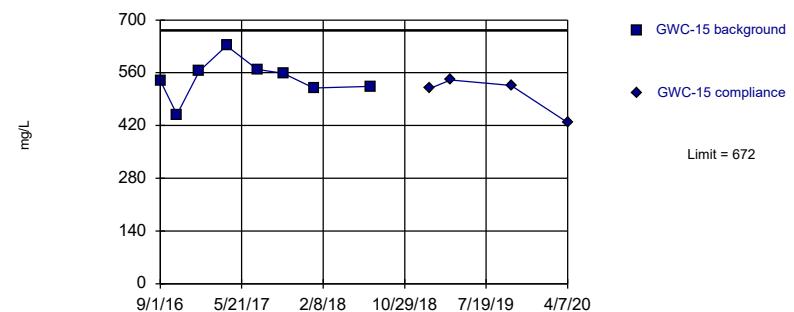
**Prediction Limit**  
Intrawell Parametric



Background Data Summary: Mean=772, Std. Dev.=185.8, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7657, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

**Prediction Limit**  
Intrawell Parametric



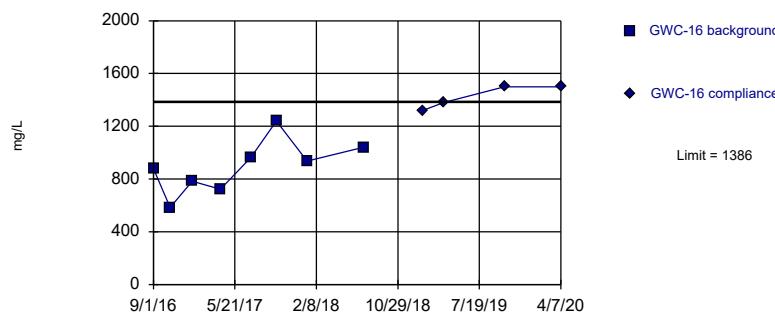
Background Data Summary: Mean=544.6, Std. Dev.=52.18, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9496, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:10 PM View: PL's Intrawell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:10 PM View: PL's Intrawell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Exceeds Limit

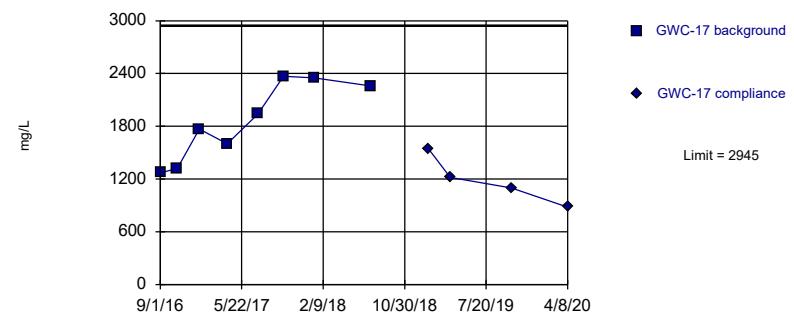
**Prediction Limit**  
Intrawell Parametric



Background Data Summary: Mean=893.1, Std. Dev.=201.8, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.991, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

**Prediction Limit**  
Intrawell Parametric



Background Data Summary: Mean=1860, Std. Dev.=444.3, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9015, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

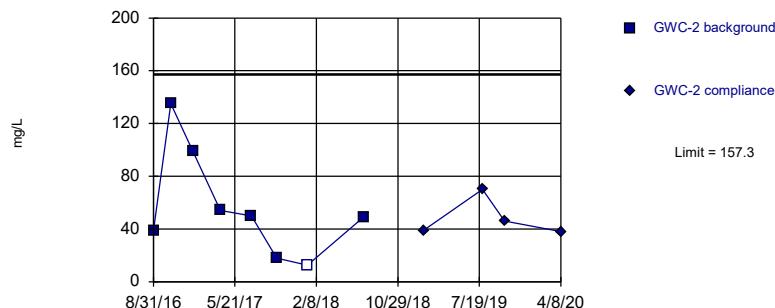
Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:10 PM View: PL's Intrawell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:10 PM View: PL's Intrawell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting, UG  
Hollow symbols indicate censored values.

Within Limit

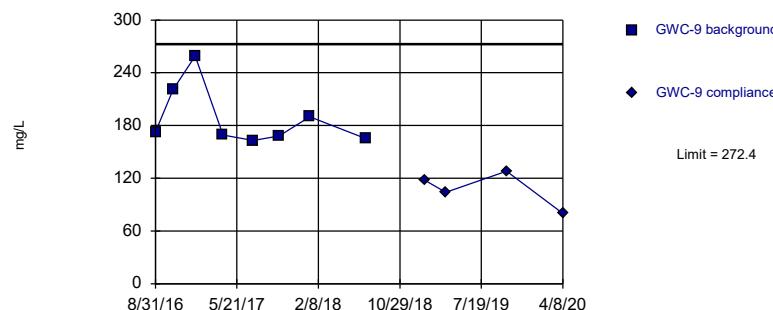
Prediction Limit  
Intrawell Parametric



Within Limit

## Prediction Limit

## Intrawell Parametric

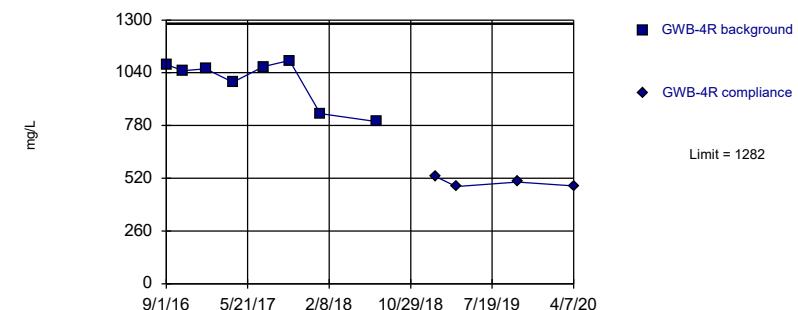


Background Data Summary: Mean=188.5, Std. Dev.=34.38, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7713, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Within Limit

## Prediction Limit

## Intrawell Parametric



Background Data Summary: Mean=998.9, Std. Dev.=115.9, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7896, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

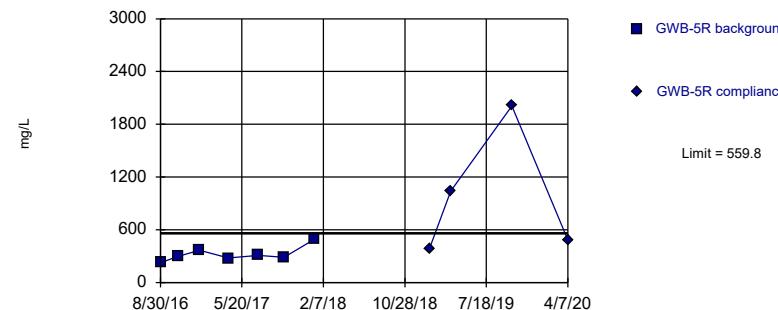
Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:10 PM View: PL's Intrawell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:10 PM View: PL's Intrawell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Within Limit

## Prediction Limit

## Intrawell Parametric

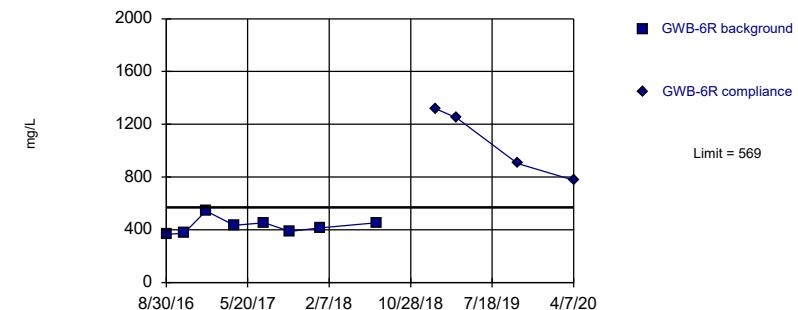


Background Data Summary: Mean=322.1, Std. Dev.=86.22, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8686, critical = 0.73. Kappa = 2.756 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Exceeds Limit

## Prediction Limit

## Intrawell Parametric



Background Data Summary: Mean=428.3, Std. Dev.=57.63, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9117, critical = 0.749. Kappa = 2.442 (c=7, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:10 PM View: PL's Intrawell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:10 PM View: PL's Intrawell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7
9/1/2016	11.6
10/25/2016	21.4
1/6/2017	20.1
4/6/2017	21.8
7/13/2017	16.3
10/4/2017	21.5
1/9/2018	13.9
7/11/2018	11.7
1/16/2019	9.3
3/25/2019	8.5
10/8/2019	6.4
4/6/2020	6.1

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
8/30/2016	0.117
10/24/2016	0.126
1/3/2017	0.124
4/3/2017	0.105
7/11/2017	0.136
10/2/2017	0.107
1/9/2018	0.123
7/9/2018	0.11
1/16/2019	0.13
3/25/2019	0.098
10/7/2019	0.12
4/6/2020	0.14

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-1	GWC-1
8/30/2016	0.875
10/25/2016	1.22
1/4/2017	1.3
4/4/2017	1.19
7/12/2017	1.37
10/3/2017	0.765
1/10/2018	0.876
7/10/2018	0.94
1/16/2019	0.91
3/26/2019	0.77
10/9/2019	0.93
4/7/2020	1

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-11	GWC-11
8/31/2016	0.0688 (J)	
10/26/2016	0.083 (J)	
1/4/2017	0.0738	
4/6/2017	0.0754	
7/11/2017	0.0614	
10/3/2017	0.0838	
1/11/2018	0.169	
7/11/2018	0.3	
1/17/2019		0.065
3/27/2019		0.089
10/8/2019		0.22
4/7/2020		0.67

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-12	GWC-12
8/31/2016	5.1	
10/26/2016	5.74	
1/4/2017	6.56	
4/5/2017	6.49	
7/10/2017	8.13	
10/4/2017	5.18	
1/11/2018	5.16	
7/11/2018	8.5	
1/17/2019		7
3/27/2019		6.1
10/9/2019		8.2
4/7/2020		5.3

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-13
8/31/2016	0.261
10/26/2016	0.211
1/5/2017	0.179
4/6/2017	0.112
7/12/2017	0.0882
10/4/2017	0.116
1/10/2018	0.101
7/11/2018	0.098
1/16/2019	0.11
3/26/2019	0.35
10/8/2019	0.18
4/8/2020	0.28

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-14	GWC-14
9/1/2016	0.071 (J)	
10/25/2016	0.0819 (J)	
1/5/2017	0.0813	
4/4/2017	0.0723	
7/11/2017	0.0734	
10/2/2017	0.0748	
1/9/2018	0.0679	
7/9/2018	0.061	
1/16/2019		0.046
3/26/2019		0.037 (J)
10/8/2019		0.048
4/7/2020		0.061 (J)

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-15	GWC-15
9/1/2016	9.01 (o)	
10/25/2016	1.66	
1/5/2017	1.1	
4/3/2017	1.21	
7/11/2017	1.44	
10/2/2017	1.59	
1/9/2018	1.35	
7/10/2018	1.2	
1/17/2019		1.1
3/26/2019		0.95
10/8/2019		1.1
4/7/2020		0.96

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16
9/1/2016	1.82
10/25/2016	1.26
1/4/2017	1.46
4/5/2017	2
7/12/2017	2.95
10/3/2017	4.15
1/10/2018	3.68
7/10/2018	5.2
1/17/2019	8.6
3/26/2019	7.4
10/8/2019	8.4
4/7/2020	10.5

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-17
9/1/2016	0.408
10/26/2016	0.5
1/5/2017	0.676
4/5/2017	0.69
7/13/2017	0.888
10/4/2017	1.02
1/11/2018	1.28
7/11/2018	1.6
1/16/2019	1.5
3/26/2019	1.2
10/9/2019	1.3
4/8/2020	0.99

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-2	GWC-2
8/31/2016	0.0196 (J)	
10/26/2016	0.05 (J)	
1/5/2017	0.0162 (J)	
4/4/2017	0.019 (J)	
7/13/2017	0.023 (J)	
10/3/2017	0.0266 (J)	
1/10/2018	0.0203 (J)	
7/10/2018	0.026 (J)	
1/21/2019		0.018 (J)
7/30/2019		0.02 (J)
10/9/2019		0.024 (J)
4/8/2020		0.031 (J)

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20	GWC-20
9/1/2016	3.34	
10/25/2016	2.54	
1/4/2017	1.91	
4/4/2017	2.77	
7/11/2017	4.14	
10/2/2017	4.65	
1/10/2018	1.79	
7/9/2018	1.7	
1/21/2019		1.1
3/25/2019		1
10/9/2019		0.79
4/8/2020		2.5

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-21	GWC-21
9/1/2016	0.62	
10/25/2016	0.0658 (J)	
1/4/2017	0.36	
4/4/2017	0.509	
7/13/2017	0.126	
10/3/2017	0.1	
1/9/2018	0.783	
7/10/2018	0.5	
1/17/2019		0.43
3/26/2019		0.61
10/8/2019		1
4/7/2020		0.24

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22
8/31/2016	12.8
10/26/2016	9.81
1/4/2017	8.94
4/6/2017	0.733
7/11/2017	0.852
10/4/2017	6.05
1/11/2018	0.838
7/11/2018	3.2
1/18/2019	0.37
3/27/2019	0.37
10/9/2019	0.39
4/7/2020	3.1

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-9	GWC-9
8/31/2016	0.096 (J,o)
10/27/2016	0.0281 (J)
1/6/2017	0.0189 (J)
4/6/2017	0.0181 (J)
7/12/2017	0.0211 (J)
10/4/2017	0.0254 (J)
1/11/2018	0.018 (J)
7/11/2018	0.02 (J)
1/18/2019	0.018 (J)
3/27/2019	0.016 (J)
10/9/2019	0.019 (J)
4/8/2020	0.023 (J)

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-4R	GWB-4R
9/1/2016	6.48	
10/26/2016	7.57	
1/6/2017	8.34	
4/4/2017	8.18	
7/12/2017	7.51	
10/4/2017	8.88	
1/11/2018	6.95	
7/11/2018	6.4	
1/16/2019		5.3
3/25/2019		4.4
10/9/2019		5.7
4/7/2020		5.5

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R	GWB-5R
8/30/2016	1.09	
10/26/2016	2.5	
1/3/2017	3.39	
4/6/2017	2.76	
7/12/2017	3.55	
10/3/2017	2.72	
1/10/2018	3.21	
7/10/2018	7	
1/16/2019		5
3/26/2019		4
10/9/2019		6.8
4/7/2020		4.6

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-6R
8/30/2016	1.41	
10/26/2016	1.83	
1/5/2017	3.07	
4/6/2017	3.19	
7/12/2017	3.06	
10/3/2017	2.69	
1/9/2018	2.81	
7/10/2018	2.9	
1/16/2019		7.7
3/26/2019		7.4
10/9/2019		6.3
4/7/2020		5.6

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7
9/1/2016	3660
10/25/2016	3560
1/6/2017	3490
4/6/2017	3170
7/13/2017	2280
10/4/2017	3350
1/9/2018	2640
7/11/2018	2200
1/16/2019	2100
3/25/2019	2100
10/8/2019	1840
4/6/2020	1670

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWA-8	GWA-8
8/30/2016	234
10/24/2016	216
1/3/2017	333
4/3/2017	288
7/11/2017	188
10/2/2017	210
1/9/2018	118
7/9/2018	235
1/16/2019	219
3/25/2019	240
10/7/2019	275
4/6/2020	214

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-1	GWC-1
8/30/2016	225
10/25/2016	230
1/4/2017	349
4/4/2017	356
7/12/2017	357
10/3/2017	192
1/10/2018	277
7/10/2018	349
1/16/2019	341
3/26/2019	317
10/9/2019	338
4/7/2020	195

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-11	GWC-11
8/31/2016	119
10/26/2016	108
1/4/2017	182
4/6/2017	248
7/11/2017	88
10/3/2017	248
1/11/2018	681
7/11/2018	440
1/17/2019	118
3/27/2019	138
10/8/2019	613
4/7/2020	780

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-12
8/31/2016	1560
10/26/2016	1520
1/4/2017	1430
4/5/2017	1200
7/10/2017	1100
10/4/2017	986
1/11/2018	1020
7/11/2018	888
1/17/2019	765
3/27/2019	673
10/9/2019	647
4/7/2020	464

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-13
8/31/2016	77
10/26/2016	<25
1/5/2017	146
4/6/2017	23 (J)
7/12/2017	39
10/4/2017	38
1/10/2018	<25
7/11/2018	63
1/16/2019	44
3/26/2019	72
10/8/2019	51
4/8/2020	65

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-14
9/1/2016	1170
10/25/2016	633
1/5/2017	781
4/4/2017	916
7/11/2017	675
10/2/2017	689
1/9/2018	653
7/9/2018	659
1/16/2019	656
3/26/2019	496
10/8/2019	841
4/7/2020	843

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-15	GWC-15
9/1/2016	539
10/25/2016	449
1/5/2017	565
4/3/2017	632
7/11/2017	569
10/2/2017	559
1/9/2018	520
7/10/2018	524
1/17/2019	518 (D)
3/26/2019	541
10/8/2019	526
4/7/2020	428

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-16
9/1/2016	878
10/25/2016	585
1/4/2017	783
4/5/2017	722
7/12/2017	962
10/3/2017	1240
1/10/2018	935
7/10/2018	1040
1/17/2019	1320
3/26/2019	1380
10/8/2019	1500
4/7/2020	1500

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-17	GWC-17
9/1/2016	1270
10/26/2016	1320
1/5/2017	1770
4/5/2017	1600
7/13/2017	1940
10/4/2017	2370
1/11/2018	2350
7/11/2018	2260
1/16/2019	1540
3/26/2019	1220
10/9/2019	1100
4/8/2020	881

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-2	GWC-2
8/31/2016	39
10/26/2016	135
1/5/2017	99
4/4/2017	54
7/13/2017	50
10/3/2017	18 (J)
1/10/2018	<25
7/10/2018	49
1/21/2019	39
7/30/2019	70
10/9/2019	46
4/8/2020	38

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-20
9/1/2016	470
10/25/2016	289
1/4/2017	639
4/4/2017	660
7/11/2017	836
10/2/2017	698
1/10/2018	322
7/9/2018	461
1/21/2019	307
3/25/2019	449
10/9/2019	434
4/8/2020	986

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-21
9/1/2016	184
10/25/2016	<25
1/4/2017	242
4/4/2017	187
7/13/2017	86
10/3/2017	66
1/9/2018	167
7/10/2018	180
1/17/2019	178
3/26/2019	292
10/8/2019	278
4/7/2020	106

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-22
8/31/2016	1570
10/26/2016	1840
1/4/2017	1560
4/6/2017	368
7/11/2017	383
10/4/2017	1500
1/11/2018	438
7/11/2018	876
1/18/2019	154
3/27/2019	158
10/9/2019	211
4/7/2020	819

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

GWC-9	GWC-9
8/31/2016	173
10/27/2016	221
1/6/2017	259
4/6/2017	169
7/12/2017	163
10/4/2017	168
1/11/2018	190
7/11/2018	165
1/18/2019	118
3/27/2019	104
10/9/2019	128
4/8/2020	80

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-4R
9/1/2016	1080
10/26/2016	1050
1/6/2017	1060
4/4/2017	994
7/12/2017	1070
10/4/2017	1100
1/11/2018	838
7/11/2018	799
1/16/2019	530
3/25/2019	479
10/9/2019	502
4/7/2020	482

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R
8/30/2016	224
10/26/2016	297
1/3/2017	366
4/6/2017	279
7/12/2017	308
10/3/2017	288
1/10/2018	493
7/10/2018	1730 (o)
1/16/2019	382
3/26/2019	1040
10/9/2019	2010
4/7/2020	483

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/23/2020 2:16 PM View: PL's IntraWell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R
8/30/2016	365
10/26/2016	373
1/5/2017	543
4/6/2017	434
7/12/2017	454
10/3/2017	389
1/9/2018	415
7/10/2018	453
1/16/2019	1320
3/26/2019	1250
10/9/2019	903
4/7/2020	775

# FIGURE H.

# Interwell Prediction Limits (Federal) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:04 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	GWC-11	35.8	n/a	4/7/2020	84.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-12	35.8	n/a	4/7/2020	52.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-14	35.8	n/a	4/7/2020	135	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-15	35.8	n/a	4/7/2020	129	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-16	35.8	n/a	4/7/2020	225	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-17	35.8	n/a	4/8/2020	53.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-20	35.8	n/a	4/8/2020	175	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-22	35.8	n/a	4/7/2020	65.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWB-4R	35.8	n/a	4/7/2020	62.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-17	260	n/a	4/8/2020	277	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GWC-17	0.4583	n/a	4/8/2020	0.55	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
pH (SU)	GWC-12	6.43	4.24	4/7/2020	4.1	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-15	6.43	4.24	4/7/2020	6.83	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-11	160	n/a	4/7/2020	446	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-12	160	n/a	4/7/2020	297	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-14	160	n/a	4/7/2020	456	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-16	160	n/a	4/7/2020	844	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-17	160	n/a	4/8/2020	239	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-20	160	n/a	4/8/2020	428	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-22	160	n/a	4/7/2020	333	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWB-4R	160	n/a	4/7/2020	221	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWB-5R	160	n/a	4/7/2020	180	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWB-6R	160	n/a	4/7/2020	180	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2

# Interwell Prediction Limits (Federal) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:04 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	GWC-1	35.8	n/a	4/7/2020	31.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-11	35.8	n/a	4/7/2020	84.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-12	35.8	n/a	4/7/2020	52.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-13	35.8	n/a	4/8/2020	2.5	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-14	35.8	n/a	4/7/2020	135	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-15	35.8	n/a	4/7/2020	129	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-16	35.8	n/a	4/7/2020	225	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-17	35.8	n/a	4/8/2020	53.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-2	35.8	n/a	4/8/2020	0.24	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-20	35.8	n/a	4/8/2020	175	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-21	35.8	n/a	4/7/2020	12.5	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-22	35.8	n/a	4/7/2020	65.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-9	35.8	n/a	4/8/2020	5.3	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWB-4R	35.8	n/a	4/7/2020	62.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWB-5R	35.8	n/a	4/7/2020	34.1	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWB-6R	35.8	n/a	4/7/2020	7.8	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-1	260	n/a	4/7/2020	7.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-11	260	n/a	4/7/2020	103	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-12	260	n/a	4/7/2020	32.5	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-13	260	n/a	4/8/2020	4.5	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-14	260	n/a	4/7/2020	41.6	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-15	260	n/a	4/7/2020	3.4	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-16	260	n/a	4/7/2020	49.3	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-17	260	n/a	4/8/2020	277	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-2	260	n/a	4/8/2020	5.2	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-20	260	n/a	4/8/2020	20.2	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-21	260	n/a	4/7/2020	4.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-22	260	n/a	4/7/2020	146	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-9	260	n/a	4/8/2020	16.9	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWB-4R	260	n/a	4/7/2020	14.5	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWB-5R	260	n/a	4/7/2020	44.3	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWB-6R	260	n/a	4/7/2020	56.4	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GWC-1	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-11	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-12	0.4583	n/a	4/7/2020	0.27	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-13	0.4583	n/a	4/8/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-14	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-15	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-16	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-17	0.4583	n/a	4/8/2020	0.55	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-2	0.4583	n/a	4/8/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-20	0.4583	n/a	4/8/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-21	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-22	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWC-9	0.4583	n/a	4/8/2020	0.058	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWB-4R	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWB-5R	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
Fluoride (mg/L)	GWB-6R	0.4583	n/a	4/7/2020	0.3ND	26	0.1532	0.1321	23.08	Kaplan-Meier	No	0.0004702	Param Inter 1 of 2
pH (SU)	GWC-1	6.43	4.24	4/7/2020	5.3	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-11	6.43	4.24	4/7/2020	5.05	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2

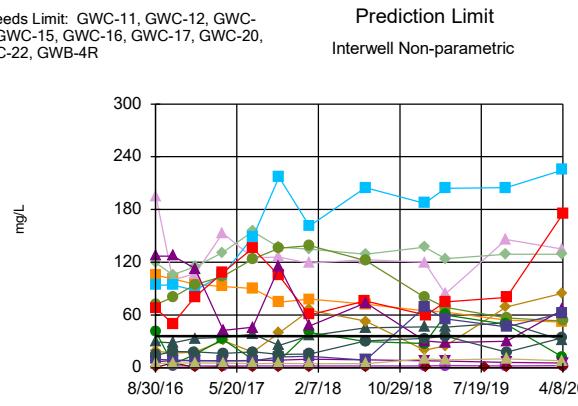
# Interwell Prediction Limits (Federal) - All Results

Page 2

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:04 PM

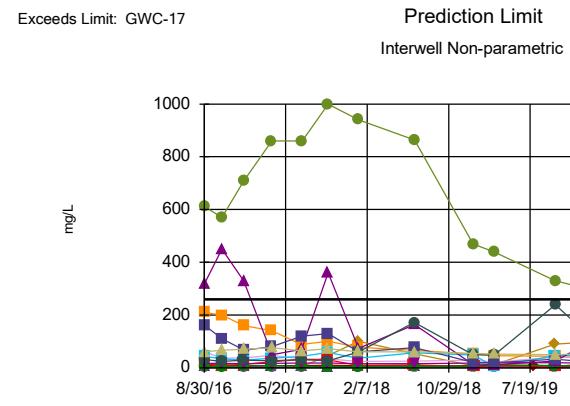
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
pH (SU)	<b>GWC-12</b>	<b>6.43</b>	<b>4.24</b>	<b>4/7/2020</b>	<b>4.1</b>	<b>24</b>	n/a	n/a	0	n/a	n/a	<b>0.005292</b>	<b>NP Inter (normality) 1 of 2</b>
pH (SU)	GWC-13	6.43	4.24	4/8/2020	4.81	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-14	6.43	4.24	4/7/2020	6.2	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	<b>GWC-15</b>	<b>6.43</b>	<b>4.24</b>	<b>4/7/2020</b>	<b>6.83</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.005292</b>	<b>NP Inter (normality) 1 of 2</b>
pH (SU)	GWC-16	6.43	4.24	4/7/2020	5.94	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-17	6.43	4.24	4/8/2020	4.71	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-2	6.43	4.24	4/8/2020	4.66	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-20	6.43	4.24	4/8/2020	6.31	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-21	6.43	4.24	4/7/2020	6	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-22	6.43	4.24	4/7/2020	4.8	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWC-9	6.43	4.24	4/8/2020	4.73	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWB-4R	6.43	4.24	4/7/2020	5.74	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWB-5R	6.43	4.24	4/7/2020	5.45	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
pH (SU)	GWB-6R	6.43	4.24	4/7/2020	5.86	24	n/a	n/a	0	n/a	n/a	0.005292	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-1	160	n/a	4/7/2020	83	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	<b>GWC-11</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>446</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	<b>GWC-12</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>297</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-13	160	n/a	4/8/2020	30.7	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	<b>GWC-14</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>456</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-15	160	n/a	4/7/2020	26.9	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	<b>GWC-16</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>844</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	<b>GWC-17</b>	<b>160</b>	n/a	<b>4/8/2020</b>	<b>239</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-2	160	n/a	4/8/2020	12.9	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	<b>GWC-20</b>	<b>160</b>	n/a	<b>4/8/2020</b>	<b>428</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-21	160	n/a	4/7/2020	33.2	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	<b>GWC-22</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>333</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	GWC-9	160	n/a	4/8/2020	34.2	24	n/a	n/a	0	n/a	n/a	0.002646	NP Inter (normality) 1 of 2
Sulfate (mg/L)	<b>GWB-4R</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>221</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	<b>GWB-5R</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>180</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	<b>GWB-6R</b>	<b>160</b>	n/a	<b>4/7/2020</b>	<b>180</b>	<b>24</b>	n/a	n/a	<b>0</b>	n/a	n/a	<b>0.002646</b>	<b>NP Inter (normality) 1 of 2</b>

Exceeds Limit: GWC-11, GWC-12, GWC-14, GWC-15, GWC-16, GWC-17, GWC-20, GWC-22, GWB-4R



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 24 background values. Annual per-constituent alpha = 0.08129. Individual comparison alpha = 0.002646 (1 of 2). Comparing 16 points to limit.

Exceeds Limit: GWC-17

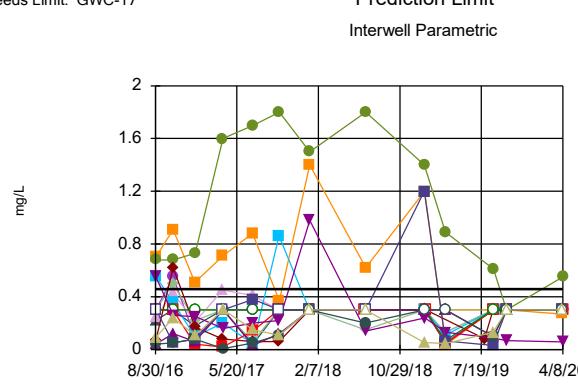


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 24 background values. Annual per-constituent alpha = 0.08129. Individual comparison alpha = 0.002646 (1 of 2). Comparing 16 points to limit.

Constituent: Calcium Analysis Run 5/23/2020 1:59 PM View: PL's Interwell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Constituent: Chloride Analysis Run 5/23/2020 1:59 PM View: PL's Interwell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

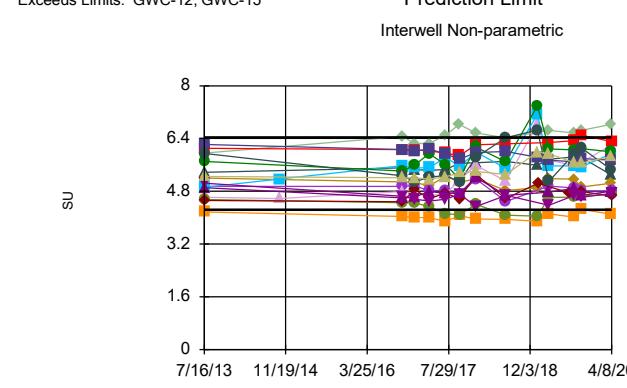
Exceeds Limit: GWC-17



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.1532, Std. Dev.=0.1321, n=26, 23.08% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9249, critical = 0.891. Kappa = 2.309 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0004702. Comparing 16 points to limit.

Constituent: Fluoride Analysis Run 5/23/2020 1:59 PM View: PL's Interwell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Exceeds Limits: GWC-12, GWC-15

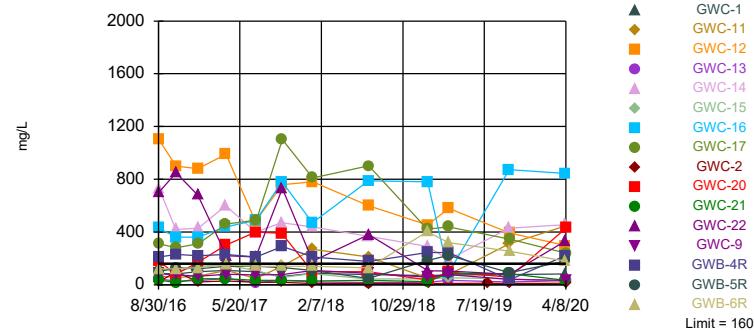


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 24 background values. Annual per-constituent alpha = 0.1626. Individual comparison alpha = 0.005292 (1 of 2). Comparing 16 points to limit.

Constituent: pH Analysis Run 5/23/2020 1:59 PM View: PL's Interwell Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Exceeds Limit: GWC-11, GWC-12, GWC-14, GWC-16, GWC-17, GWC-20, GWC-22, GWB-4R, GWB-5R, GWB-6R

Prediction Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 24 background values. Annual per-constituent alpha = 0.08129. Individual comparison alpha = 0.002646 (1 of 2). Comparing 16 points to limit.

Constituent: Sulfate Analysis Run 5/23/2020 1:59 PM View: PL's Interwell Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/23/2020 2:04 PM View: PL's Interwell Federal

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-6R	GWB-5R	GWA-8 (bg)	GWC-1	GWC-9	GWC-22	GWC-2	GWC-12	GWC-11
8/30/2016	4.68	14.3	23.8	29.4					
8/31/2016					6.9	127	0.371 (J)	105	18.8
9/1/2016									
10/24/2016			22.5						
10/25/2016				28.3					
10/26/2016	5.45	18.6				127	5.84	101	16.6
10/27/2016					8.2				
1/3/2017		18.1	22.1						
1/4/2017				33.4		113		94.9	17.6
1/5/2017	5.35						0.379 (J)		
1/6/2017					7.97				
4/3/2017			24.6 (J)						
4/4/2017				34.6			0.993		
4/5/2017								92.5	
4/6/2017	5.41	16.2			7.95	42.7			30.9
7/10/2017								90.3	
7/11/2017			23.5			46			17.7
7/12/2017	4.81	18.1		38	8.37				
7/13/2017							0.388 (J)		
10/2/2017			22.7						
10/3/2017	5.17	15.2		25.5			0.251 (J)		39.8
10/4/2017					8.57	115		74.6	
1/9/2018	4.73		23.2				0.177 (J)		
1/10/2018		15.5		36.5					
1/11/2018					9.78	47.6		78.1	65.6
7/9/2018			24.6 (J)						
7/10/2018	4.5	30.6		45.5			0.17 (J)		
7/11/2018					9.2	73.7		72.2	53
1/16/2019	10.1	33.3	27.7	46.5					
1/17/2019								64.7	19.8 (J)
1/18/2019					8.1	30.6			
1/21/2019							0.19 (J)		
3/25/2019			31.7						
3/26/2019	9	36.1		46.3				63.1	25.1
3/27/2019						7.7	28.8		
7/30/2019								0.43	
10/7/2019			31.6						
10/8/2019									69.2
10/9/2019	10.1	17.7		51.2	6	30.1	0.18	54.2	
4/6/2020				35.8					
4/7/2020	7.8	34.1		31.1			65.7		52.1
4/8/2020					5.3			0.24 (J)	84.7

# Prediction Limit

Page 2

Constituent: Calcium (mg/L) Analysis Run 5/23/2020 2:04 PM View: PL's Interwell Federal

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWA-7 (bg)	GWB-4R	GWC-21	GWC-20	GWC-16	GWC-15	GWC-14	GWC-17	GWC-13
8/30/2016									
8/31/2016									2.77 (o)
9/1/2016	5.59	9.91	40.5	67.2	93.8	119	194	71.9	
10/24/2016									
10/25/2016	6.43		3.91	50.1	94.1	106	100		
10/26/2016		8.56						80.3	2.25
10/27/2016									
1/3/2017									
1/4/2017			15.2	80.4	88.2				
1/5/2017						115	107	94.4	2.27
1/6/2017	8.13	8.18							
4/3/2017						131			
4/4/2017		8.12	32.3	108			153		
4/5/2017					106			104	
4/6/2017	7.72								2.04
7/10/2017									
7/11/2017				136		155	125		
7/12/2017		8			149				2.25
7/13/2017	4.57		8.92					124	
10/2/2017				105		137	126		
10/3/2017			7.88		217				
10/4/2017	6.41	12.5						136	2.19
1/9/2018	4.68		40.5			135	119		
1/10/2018				60.1	161				2.28
1/11/2018		12.9						139	
7/9/2018				75.9			123		
7/10/2018			29.8		205	129			
7/11/2018	3.9	8.6						122	2.3
1/16/2019	4.3	68.8					120	80.5	2.3
1/17/2019				27.6		187	137		
1/18/2019					60				
1/21/2019									
3/25/2019	3.9	55.6		74.8					
3/26/2019				60.1		204	124	84.2	68.8
3/27/2019									2.4
7/30/2019									
10/7/2019									
10/8/2019	3.5		49.5		205	129	146		2.3
10/9/2019		46.7		80.1				56.6	
4/6/2020	3.1								
4/7/2020		62.1	12.5		225	129	135		
4/8/2020				175				53.1	2.5

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/23/2020 2:04 PM View: PL's Interwell Federal

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R	GWC-1	GWA-8 (bg)	GWB-6R	GWC-22	GWC-13	GWC-2	GWC-12	GWC-9
8/30/2016	31	5.5	15	60					
8/31/2016					320	4.3	7.8	210	17
9/1/2016									
10/24/2016			13						
10/25/2016		5.1							
10/26/2016	24			67	450	4.9	12	200	
10/27/2016									17
1/3/2017	29		13						
1/4/2017		6.9			330			160	
1/5/2017				70		4.1	7.4		
1/6/2017									16
4/3/2017			14						
4/4/2017		6.5					8.7		
4/5/2017								140	
4/6/2017	27			76	50	3.7			17
7/10/2017								88	
7/11/2017			13		70				
7/12/2017	31	6.5		64		2.6			18
7/13/2017							8.3		
10/2/2017			15						
10/3/2017	27	4.5		73			9		
10/4/2017					360	3		100	18
1/9/2018			13	61					
1/10/2018	59	6.9				3.4	8.2		
1/11/2018					74			78	16
7/9/2018			15.4						
7/10/2018	172	6.2		60.2			7.3		
7/11/2018					164	3.2		66.9	16.2
1/16/2019	49.7	6.6	16	54.1		3.8			
1/17/2019								52	
1/18/2019					11				17.5
1/21/2019							6.9		
3/25/2019			17.7						
3/26/2019	47.9	7		51.8		3.2			
3/27/2019					11.5			45.6	18.9
7/30/2019							7.1		
10/7/2019			18						
10/8/2019						4			
10/9/2019	239	7.2		49.7	25.3		7	44.1	19
4/6/2020			13.5						
4/7/2020	44.3	7.7		56.4	146			32.5	
4/8/2020						4.5	5.2		16.9

# Prediction Limit

Page 2

Constituent: Chloride (mg/L) Analysis Run 5/23/2020 2:04 PM View: PL's Interwell Federal

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-11	GWA-7 (bg)	GWC-20	GWC-17	GWC-16	GWC-14	GWC-21	GWB-4R	GWC-15
8/30/2016									
8/31/2016	3.5								
9/1/2016		190	16	610	43	60	5.9	160	10
10/24/2016									
10/25/2016		175 (D)	8.1		34	36	4.4		6.5
10/26/2016	2.5			570				110	
10/27/2016									
1/3/2017									
1/4/2017	3.8		13		29		7.7		
1/5/2017				710		37			10
1/6/2017		180						67	
4/3/2017									7.3
4/4/2017			23			47	8	80	
4/5/2017				860	36				
4/6/2017	7.1	200							
7/10/2017									
7/11/2017	3.1		31			34			5.7
7/12/2017					44			120	
7/13/2017		200		860			5.4		
10/2/2017			30			34			4.4
10/3/2017	46				58		4.4		
10/4/2017		260		1000				130	
1/9/2018		210				24	4.4		5.7
1/10/2018			9.7		36				
1/11/2018	100			940				60	
7/9/2018			10.8			25.9			
7/10/2018					57		6.3		3.1
7/11/2018	53.7	177		864				75.9	
1/16/2019		165		469		29.2		20.2	
1/17/2019	6.6				48.9		5.4		3.2
1/18/2019									
1/21/2019			5.1						
3/25/2019		147	9.4					19.7	
3/26/2019				439	5.1	21.1	11.9		3
3/27/2019	11.9								
7/30/2019									
10/7/2019									
10/8/2019	89	125			46.4	40.2	7.8		2.9
10/9/2019			5.4	330				32.1	
4/6/2020		30.2							
4/7/2020	103				49.3	41.6	4.7	14.5	3.4
4/8/2020			20.2	277					

## Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/23/2020 2:04 PM View: PL's Interwell Federal

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-1	GWB-6R	GWB-5R	GWA-8 (bg)	GWC-9	GWC-22	GWC-11	GWC-12	GWC-2
8/30/2016	0.22 (J)	0.09 (J)	0.04 (J)	0.1 (J)					
8/31/2016					0.55	0.04 (J)	<0.3	0.7	0.07 (J)
9/1/2016									
10/24/2016				0.18 (J)					
10/25/2016	<0.3								
10/26/2016		0.24 (J)	0.05 (J)			0.12 (J)	<0.3	0.91	0.62
10/27/2016					0.26 (J)				
1/3/2017			0.08 (J)	0.18 (J)					
1/4/2017	0.18 (J)					0.06 (J)	<0.3	0.51	
1/5/2017		0.11 (J)							0.17 (J)
1/6/2017				0.25 (J)					
4/3/2017				0.12 (J)					
4/4/2017	<0.3								0.08 (J)
4/5/2017								0.71	
4/6/2017		0.3	0.006 (J)		0.16 (J)	<0.3	<0.3		
7/10/2017				0.39		0.03 (J)	<0.3		0.88
7/11/2017									
7/12/2017	0.04 (J)	0.15 (J)	0.05 (J)		0.2 (J)				
7/13/2017				0.12 (J)					0.06 (J)
10/2/2017									
10/3/2017	<0.3	0.11 (J)	0.11 (J)				<0.3		0.06 (J)
10/4/2017					0.22 (J)	0.12 (J)		0.37	
1/9/2018		<0.3		0.21 (J)					
1/10/2018	<0.3		<0.3						<0.3
1/11/2018					0.98	<0.3	<0.3	1.4	
7/9/2018				0.04 (J)					
7/10/2018	<0.3	<0.3	0.2 (J)						<0.3
7/11/2018					0.14 (J)	<0.3	<0.3	0.62	
1/16/2019	<0.3	0.053 (J)	<0.3	<0.3					
1/17/2019							<0.3	1.2	
1/18/2019					0.24 (J)	<0.3			
1/21/2019									<0.3
3/25/2019				0.082 (J)					
3/26/2019	0.051 (J)	0.046 (J)	<0.3						
3/27/2019					0.13 (J)	<0.3	<0.3	0.036 (J)	
7/30/2019									0.083 (J)
8/26/2019				0.13					
8/27/2019	<0.3	0.13 (J)				0.1	<0.3	0.3	<0.3
8/28/2019				0.097 (J)		0.088 (J)			
10/7/2019					<0.3				
10/8/2019							<0.3		
10/9/2019	<0.3	<0.3	<0.3		0.068 (J)	<0.3		<0.3	<0.3
4/6/2020				0.089 (J)					
4/7/2020	<0.3	<0.3	<0.3			<0.3	<0.3	0.27 (J)	
4/8/2020					0.058 (J)				<0.3

# Prediction Limit

Page 2

Constituent: Fluoride (mg/L) Analysis Run 5/23/2020 2:04 PM View: PL's Interwell Federal  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-13	GWB-4R	GWC-21	GWC-20	GWC-14	GWC-17	GWC-16	GWC-15	GWA-7 (bg)
8/30/2016									
8/31/2016	<0.3								
9/1/2016		<0.3	<0.3	<0.3	0.25 (J)	0.68	0.55	<0.3	<0.3
10/24/2016									
10/25/2016			<0.3	<0.3	0.43		0.36	0.5	0.07 (J)
10/26/2016	0.55	0.05 (J)				0.68			
10/27/2016									
1/3/2017									
1/4/2017			<0.3	0.04 (J)			0.1 (J)		
1/5/2017	0.09 (J)				0.21 (J)	0.73		0.22 (J)	
1/6/2017		0.08 (J)							0.2 (J)
4/3/2017								<0.3	
4/4/2017		<0.3	<0.3	0.02 (J)	0.45				
4/5/2017						1.6	0.2 (J)		
4/6/2017	<0.3								0.05 (J)
7/10/2017									
7/11/2017				0.14 (J)	0.41			0.06 (J)	
7/12/2017	<0.3	0.38		<0.3			0.04 (J)		
7/13/2017						1.7			0.41
10/2/2017				<0.3	<0.3			<0.3	
10/3/2017				<0.3			0.86		
10/4/2017	<0.3	<0.3				1.8			0.04 (J)
1/9/2018			<0.3		<0.3			<0.3	0.46
1/10/2018	<0.3			<0.3			<0.3		
1/11/2018		<0.3				1.5			
7/9/2018				<0.3	<0.3			<0.3	0.15 (J)
7/10/2018				<0.3					<0.3
7/11/2018	<0.3	<0.3				1.8			<0.3
1/16/2019	<0.3	1.2			<0.3	1.4			0.49
1/17/2019				<0.3			<0.3	<0.3	
1/18/2019									
1/21/2019				<0.3					
3/25/2019		0.064 (J)		0.043 (J)					0.21 (J)
3/26/2019	0.052 (J)		0.071 (J)		0.13 (J)	0.89	0.11 (J)	0.13 (J)	
3/27/2019									
7/30/2019									
8/26/2019									<0.3
8/27/2019	<0.3	0.031 (J)			<0.3			<0.3	
8/28/2019			<0.3	<0.3		0.61	<0.3		
10/7/2019									
10/8/2019	<0.3		<0.3		<0.3		<0.3	<0.3	<0.3
10/9/2019		<0.3		<0.3		<0.3			
4/6/2020									0.13 (J)
4/7/2020		<0.3	<0.3		<0.3		<0.3	<0.3	
4/8/2020	<0.3			<0.3		0.55			

# Prediction Limit

Constituent: pH (SU) Analysis Run 5/23/2020 2:04 PM View: PL's Interwell Federal  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-15	GWC-9	GWC-22	GWC-11	GWB-4R	GWC-21	GWC-20	GWB-6R	GWC-12
7/16/2013	5.96	5.05	4.91	5.2	6.22	5.71	6.1	5.25	4.17
10/11/2014									
10/24/2016									
10/25/2016	6.46					5.41	6.06		
10/26/2016			4.6	5.08	6.06			5.21	4.04
10/27/2016		4.65							
1/3/2017									
1/4/2017			4.63	5.06		5.6	6.05		4.01
1/5/2017	6.25							5.2	
1/6/2017		4.56			6.02				
4/3/2017	6.25					6.08	5.94	6.03	
4/4/2017									
4/5/2017									4
4/6/2017		4.5	4.79	4.97				5.17	
7/10/2017									3.89
7/11/2017	6.5		4.73	5.26			5.96		
7/12/2017		4.56			5.93			5.24	
7/13/2017						5.6			
10/2/2017	6.83						5.88		
10/3/2017				5.07		5.18		5.36	
10/4/2017		4.72	4.74		5.77				4.06
1/9/2018	6.57					6.14		5.4	
1/10/2018							6.21		
1/11/2018		4.34	5.22	5.18	5.98				3.96
7/9/2018							6.24		
7/10/2018	6.42					5.7		5.31	
7/11/2018		4.68	4.68	4.82	6.01				3.95
1/16/2019					5.83			5.99	
1/17/2019	8.44 (o)			4.91		7.39			3.89
1/18/2019		6.87 (o)	6.98 (o)				7.73 (o)		
1/21/2019					5.74		6.28		
3/25/2019									
3/26/2019	6.65					6.08		5.94	
3/27/2019		4.38	4.77	5.18					4.11
7/30/2019									
8/26/2019									
8/27/2019	6.57		4.89	5.17	5.7			5.67	4.02
8/28/2019		4.68				6.05	6.34		
10/7/2019									
10/8/2019	6.65			4.93		6.09			
10/9/2019		4.62	4.68		5.79			6.5	5.66
4/6/2020								4.25	
4/7/2020	6.83		4.8	5.05	5.74	6		5.86	4.1
4/8/2020		4.73					6.31		

# Prediction Limit

Page 2

Constituent: pH (SU) Analysis Run 5/23/2020 2:04 PM View: PL's Interwell Federal  
 Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-2	GWC-1	GWC-17	GWB-5R	GWC-16	GWC-14	GWC-13	GWA-8 (bg)	GWA-7 (bg)
7/16/2013	4.52	5.38	4.55	5.95	4.92	4.62	4.95		
10/11/2014					5.17	4.58		4.42	
10/24/2016								4.36	
10/25/2016		5.51			5.58	4.79			6.17
10/26/2016	4.48		4.45	5.27			4.95		
10/27/2016									
1/3/2017				5.09				4.28	
1/4/2017		5.46			5.51				
1/5/2017	4.85		4.45			4.73	4.97		
1/6/2017									6.16
4/3/2017								4.29	
4/4/2017	4.58	5.43				4.68			
4/5/2017			4.33		5.51		4.81		
4/6/2017				5.22					6.26
7/10/2017									
7/11/2017						4.72		4.35	
7/12/2017		5.46		5.29	5.84		4.83		
7/13/2017	4.74		4.11						5.99
10/2/2017						5.13		4.32	
10/3/2017	4.57	5.65		5.08	5.55				
10/4/2017			4.09				4.71		6.16
1/9/2018						5.59		4.44	6.43
1/10/2018	5.31	5.67		5.83	5.99		5.17		
1/11/2018			4.4						
7/9/2018						5.11		4.4	
7/10/2018	4.58	5.71		6.42	5.5				
7/11/2018			4.07				4.49		6.1
1/16/2019		5.59	4.05	6.66		6.82	6.45 (o)	6.16 (o)	6.05
1/17/2019					7.13				
1/18/2019									
1/21/2019	5.05							4.4	6.06
3/25/2019									
3/26/2019		5.77	4.62	5.1	5.57	5.74	4.96		
3/27/2019									
7/30/2019	4.74								
8/26/2019								4.26	5.91
8/27/2019	4.77	5.84				5.58	4.9		
8/28/2019			4.62	5.95	5.57				
10/7/2019								4.24	
10/8/2019					5.54	5.68	4.81		5.74
10/9/2019	4.79	5.82	4.66	6.11					
4/6/2020								4.52	6.02
4/7/2020		5.3		5.45	5.94	6.2			
4/8/2020	4.66		4.71				4.81		

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/23/2020 2:04 PM View: PL's Interwell Federal

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWB-5R	GWC-1	GWA-8 (bg)	GWB-6R	GWC-22	GWC-13	GWC-2	GWC-12	GWC-9
8/30/2016	100	87	140	120					
8/31/2016					700	43	21	1100	84
9/1/2016									
10/24/2016			160						
10/25/2016		83							
10/26/2016	130			120	850	29	100	900	
10/27/2016									76
1/3/2017	120		140						
1/4/2017		99			680			880	
1/5/2017				130		32	22		
1/6/2017									66
4/3/2017			140						
4/4/2017		110					29		
4/5/2017								990	
4/6/2017	140			150	220	49			79
7/10/2017								480	
7/11/2017			130		210				
7/12/2017	140	100		140		16			75
7/13/2017							20		
10/2/2017			150						
10/3/2017	130	63		140			20		
10/4/2017					730	33		760	78
1/9/2018			120	140					
1/10/2018	110	86				22	9.5		
1/11/2018					180			780	110
7/9/2018			123						
7/10/2018	48.1	77.7		128			8.5		
7/11/2018					381	17.8		598	87.4
1/16/2019	184	71.2	129	402		20.2			
1/17/2019								454	
1/18/2019					107				56.9
1/21/2019							10.2		
3/25/2019			152						
3/26/2019	222	73.8		319		33.6			
3/27/2019					103			579	76.2
7/30/2019							12.3		
10/7/2019			156						
10/8/2019						22			
10/9/2019	90.8	76.3		255	80.2			10.1	392
4/6/2020			123						41.1
4/7/2020	180	83		180	333			297	
4/8/2020						30.7	12.9		34.2

# Prediction Limit

Page 2

Constituent: Sulfate (mg/L) Analysis Run 5/23/2020 2:04 PM View: PL's Interwell Federal

Grumman Road Landfill Client: Southern Company Data: Grumman Road

	GWC-11	GWA-7 (bg)	GWC-20	GWC-17	GWC-16	GWC-14	GWC-21	GWB-4R	GWC-15
8/30/2016									
8/31/2016	64								
9/1/2016		73	180	310	430	730	36	210	120
10/24/2016									
10/25/2016		26	79		360	420	16		100
10/26/2016	56			280				230	
10/27/2016									
1/3/2017									
1/4/2017	65		170		360		45		
1/5/2017				310		430			140
1/6/2017		23						220	
4/3/2017									150
4/4/2017			300			600	46	230	
4/5/2017				460	440				
4/6/2017	110	25							
7/10/2017									
7/11/2017	49		400			400			110
7/12/2017					490			210	
7/13/2017		65		490			33		
10/2/2017			390			470			56
10/3/2017	140				780		34		
10/4/2017		13		1100				290	
1/9/2018		45				440	29		84
1/10/2018			99		470				
1/11/2018	270			810				210	
7/9/2018			99.2			369			
7/10/2018					787		33.2		43
7/11/2018	211	37.7		902				177	
1/16/2019		24.5		422		291		244	
1/17/2019	50.3				780		24.1		45.2
1/18/2019									
1/21/2019			35.5						
3/25/2019		14.7	95.6					245	
3/26/2019				439	87.9	192	83.9		54
3/27/2019	76.8								
7/30/2019									
10/7/2019									
10/8/2019	310	32.8			872	428	85.6		45.8
10/9/2019			58.5	346				38.5	
4/6/2020		20.3							
4/7/2020	446				844	456	33.2	221	26.9
4/8/2020			428	239					

FIGURE I.

## Trend Test Summary (Federal) - Significant Results

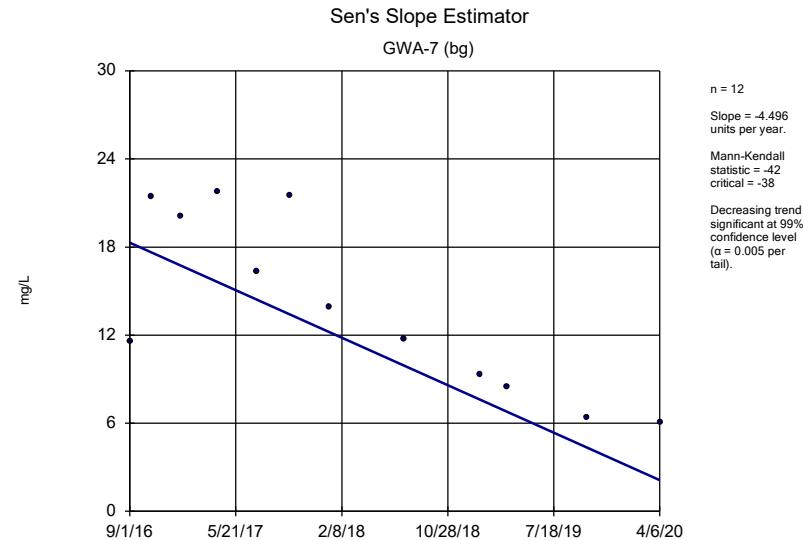
Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:25 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWA-7 (bg)	-4.496	-42	-38	Yes	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	GWC-16	2.531	56	38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-7 (bg)	-0.9737	-47	-38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-8 (bg)	2.805	41	38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-11	17.85	40	38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-12	-15.09	-64	-38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-16	39.32	47	38	Yes	12	0	n/a	n/a	0.01	NP
pH (SU)	GWC-15	0.1181	40	38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-12	-185.6	-50	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWA-7 (bg)	-571.2	-59	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWC-16	251.9	51	38	Yes	12	0	n/a	n/a	0.01	NP

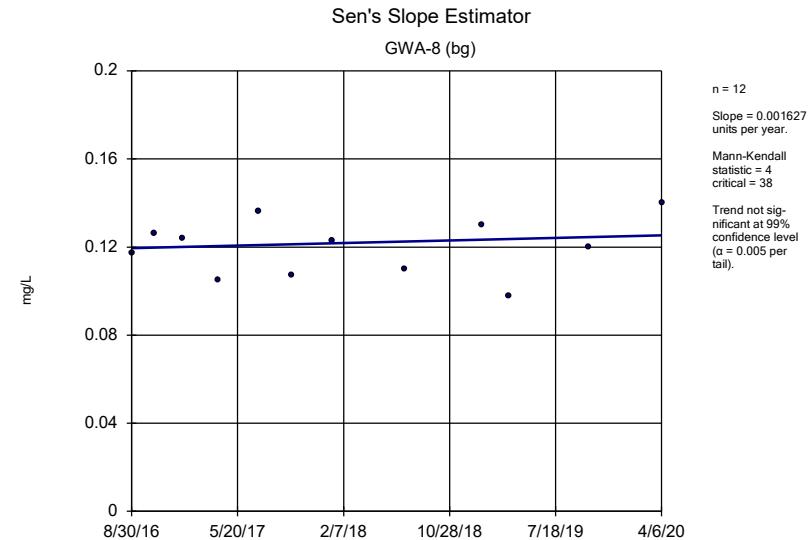
# Trend Test Summary (Federal) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/23/2020, 2:25 PM

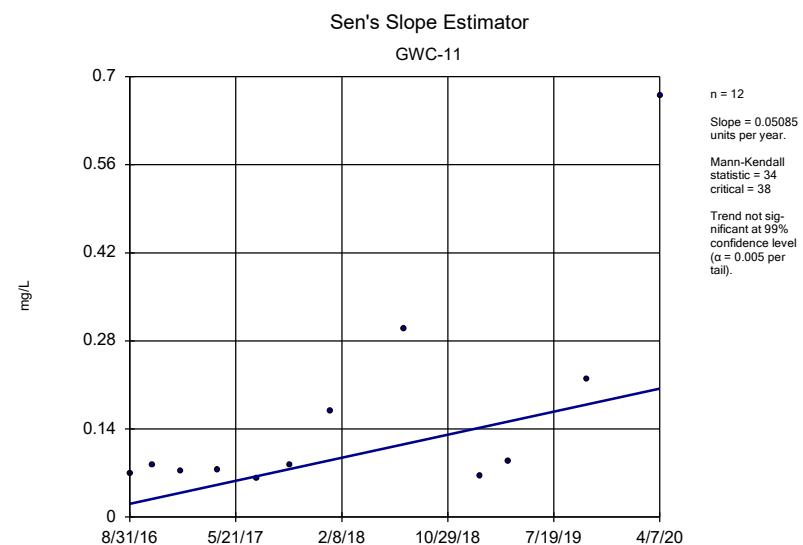
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWA-7 (bg)	<b>-4.496</b>	<b>-42</b>	<b>-38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Boron (mg/L)	GWA-8 (bg)	0.001627	4	38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	GWC-11	0.05085	34	38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	<b>GWC-16</b>	<b>2.531</b>	<b>56</b>	<b>38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Boron (mg/L)	GWB-6R	1.171	32	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-7 (bg)	<b>-0.9737</b>	<b>-47</b>	<b>-38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Calcium (mg/L)	GWA-8 (bg)	<b>2.805</b>	<b>41</b>	<b>38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Calcium (mg/L)	GWC-11	<b>17.85</b>	<b>40</b>	<b>38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Calcium (mg/L)	<b>GWC-12</b>	<b>-15.09</b>	<b>-64</b>	<b>-38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Calcium (mg/L)	GWC-14	-2.399	-2	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-15	3.001	10	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	<b>GWC-16</b>	<b>39.32</b>	<b>47</b>	<b>38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Calcium (mg/L)	GWC-17	-6.933	-12	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-20	6.478	10	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-22	-17.39	-33	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWB-4R	12.38	32	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-7 (bg)	-23.13	-29	-38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-8 (bg)	1.079	29	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-17	-112.5	-19	-38	No	12	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWA-7 (bg)	0.01096	8	43	No	13	30.77	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWA-8 (bg)	0	-1	-43	No	13	15.38	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWC-17	-0.09821	-16	-43	No	13	7.692	n/a	n/a	0.01	NP
pH (SU)	GWA-7 (bg)	-0.07309	-35	-38	No	12	0	n/a	n/a	0.01	NP
pH (SU)	GWA-8 (bg)	-0.002245	-1	-38	No	12	0	n/a	n/a	0.01	NP
pH (SU)	GWC-12	0.006067	3	43	No	13	0	n/a	n/a	0.01	NP
pH (SU)	<b>GWC-15</b>	<b>0.1181</b>	<b>40</b>	<b>38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Sulfate (mg/L)	GWA-7 (bg)	-4.959	-20	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-8 (bg)	-2.933	-10	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-11	79.87	32	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	<b>GWC-12</b>	<b>-185.6</b>	<b>-50</b>	<b>-38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Sulfate (mg/L)	GWC-14	-63.51	-22	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-16	137.3	34	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-17	12.32	3	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-20	-21.31	-8	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-22	-117.1	-38	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWB-4R	0	-2	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWB-5R	14.55	12	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWB-6R	20.38	34	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	<b>GWA-7 (bg)</b>	<b>-571.2</b>	<b>-59</b>	<b>-38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Total Dissolved Solids (mg/L)	GWA-8 (bg)	-2.336	-2	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWC-11	157.7	29	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	<b>GWC-16</b>	<b>251.9</b>	<b>51</b>	<b>38</b>	Yes	12	0	n/a	n/a	<b>0.01</b>	NP
Total Dissolved Solids (mg/L)	GWB-6R	114.6	34	38	No	12	0	n/a	n/a	0.01	NP



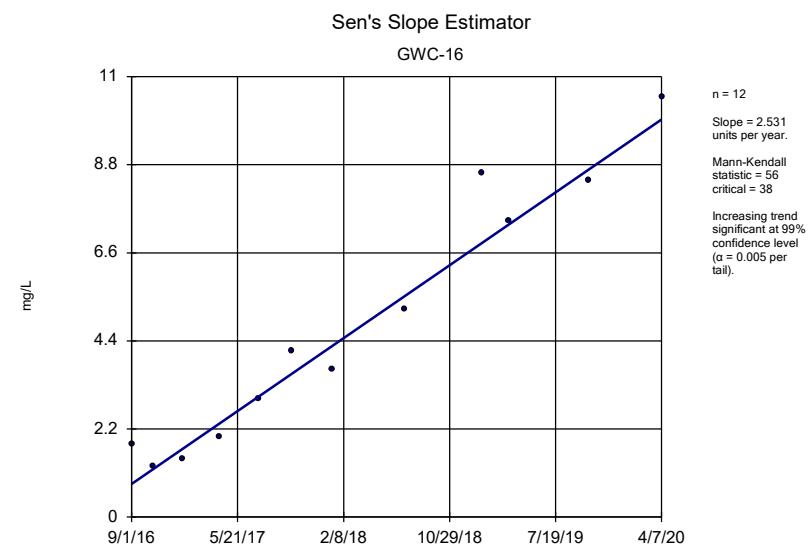
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



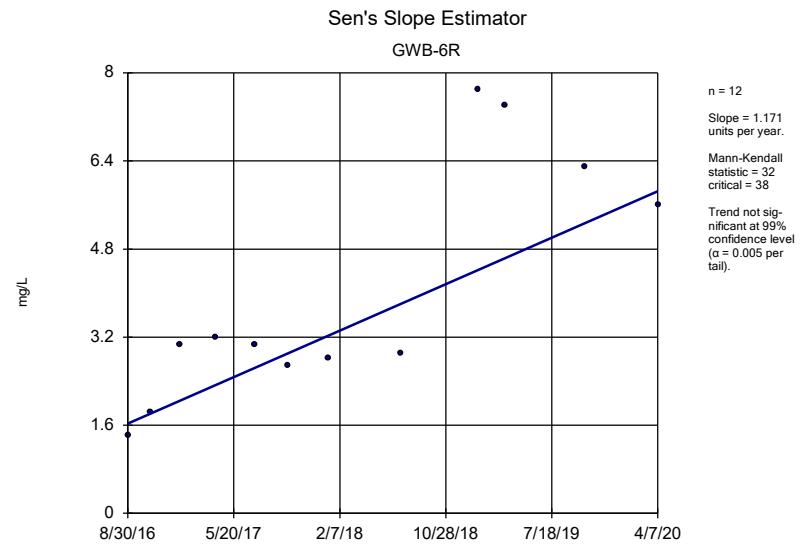
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



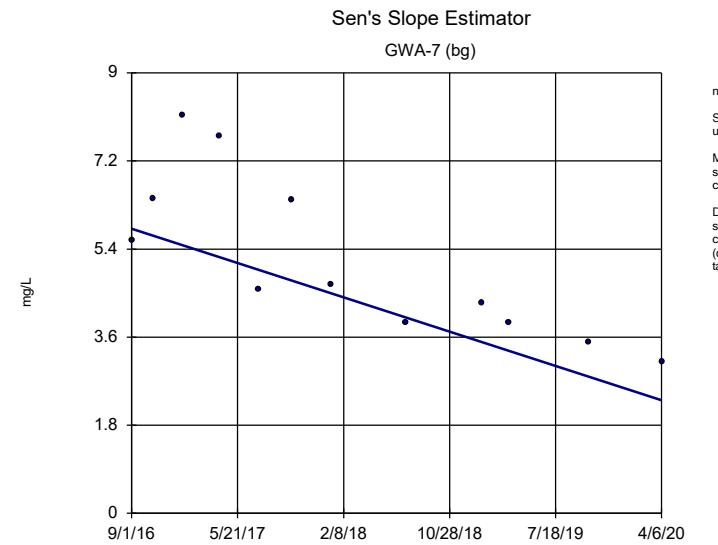
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



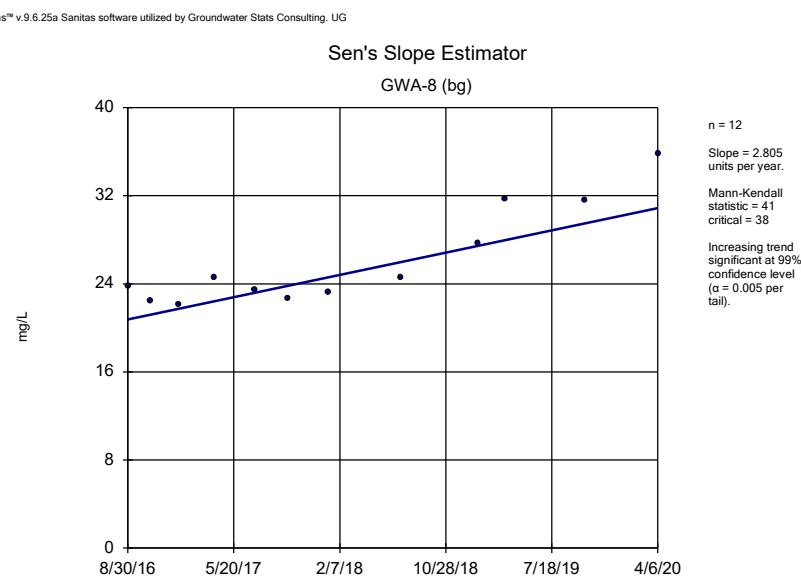
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



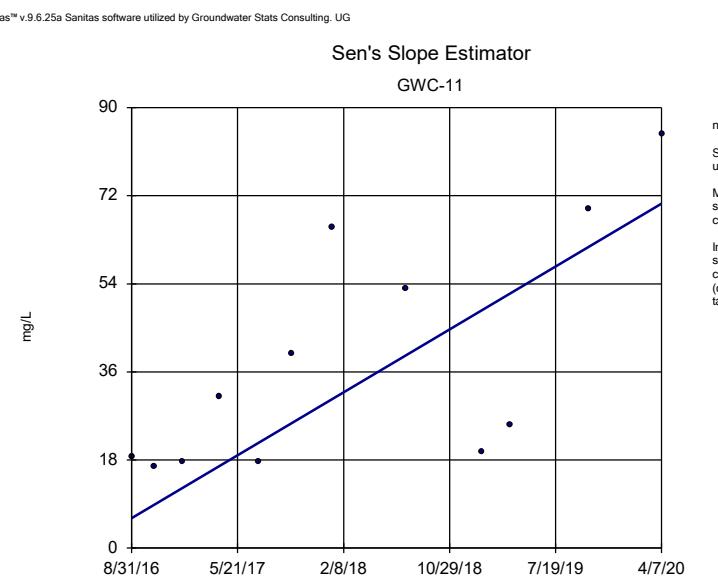
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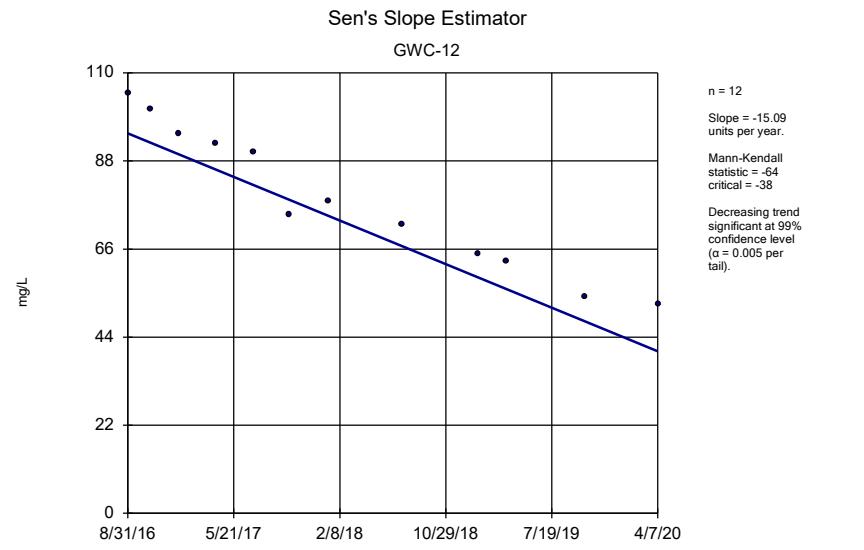
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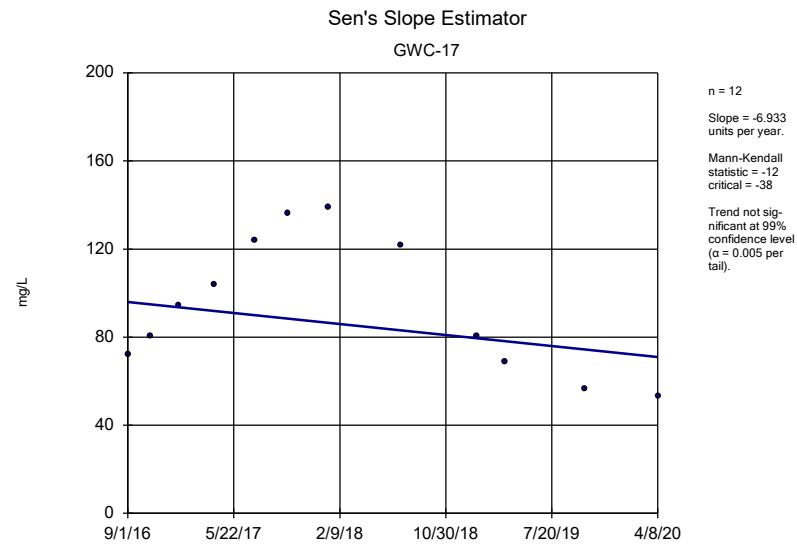


Constituent: Calcium Analysis Run 5/23/2020 2:22 PM View: Trend Tests - PL Exceedances Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

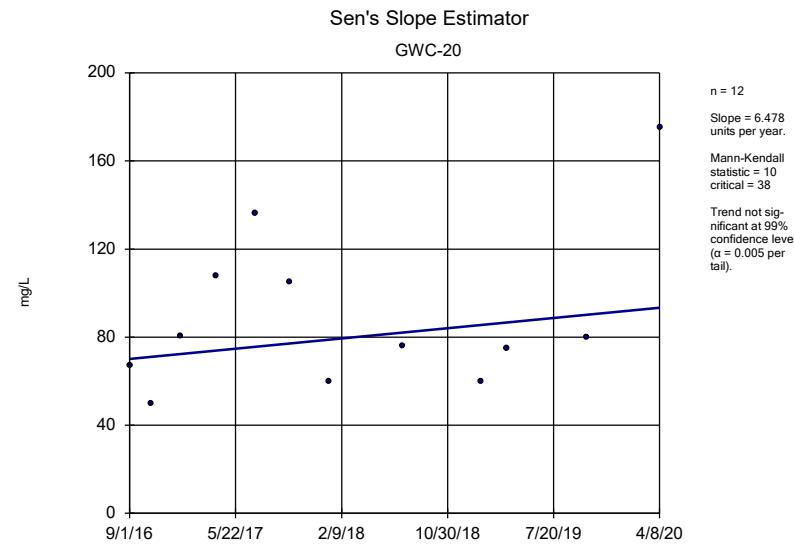


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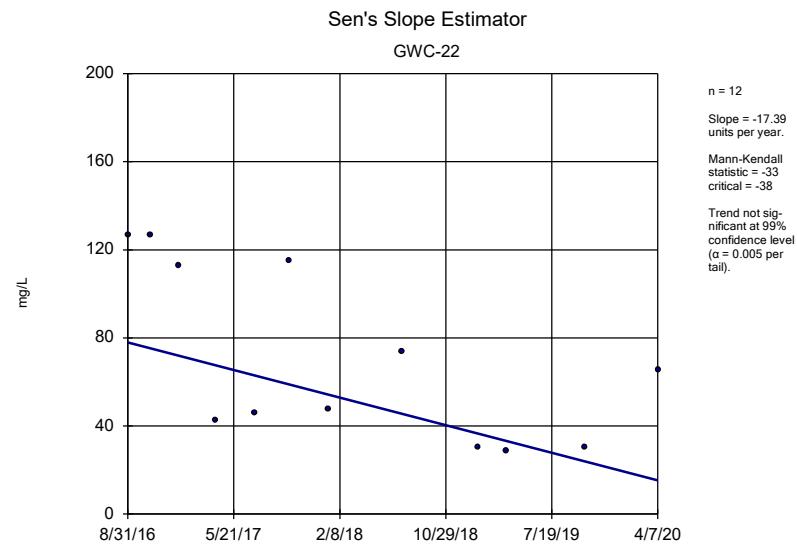




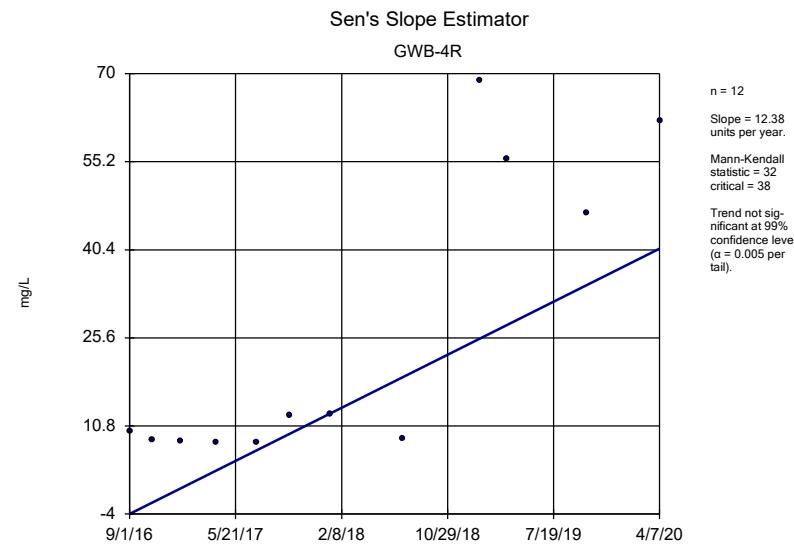
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



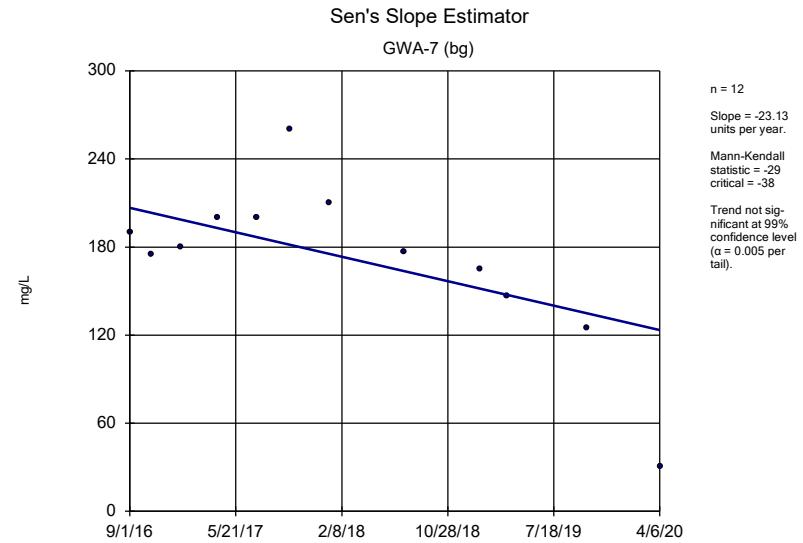
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



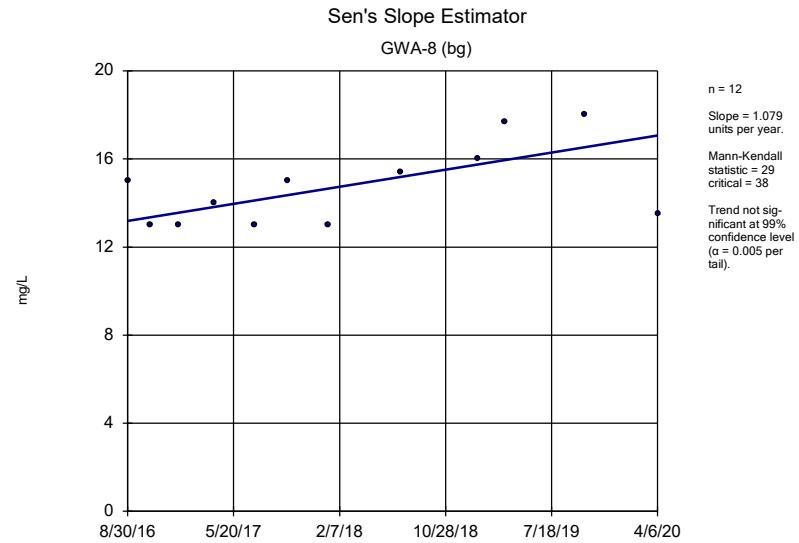
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



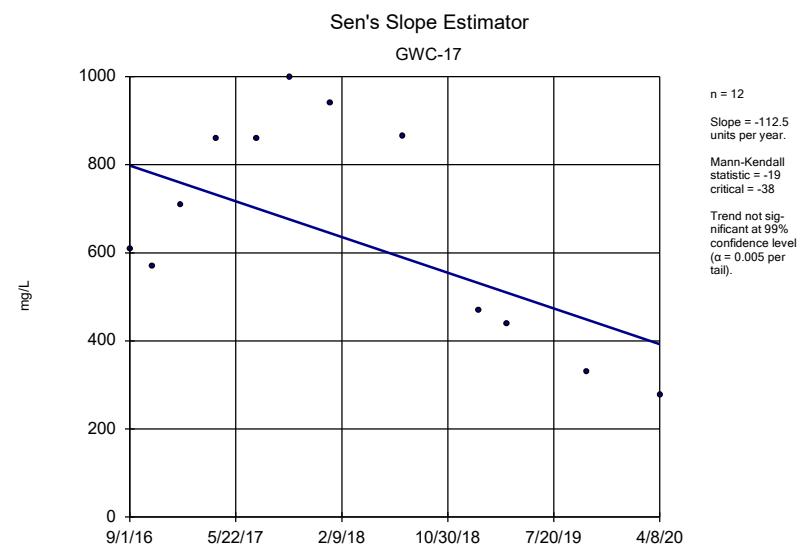
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Grumman Road Landfill Client: Southern Company Data: Grumman Road



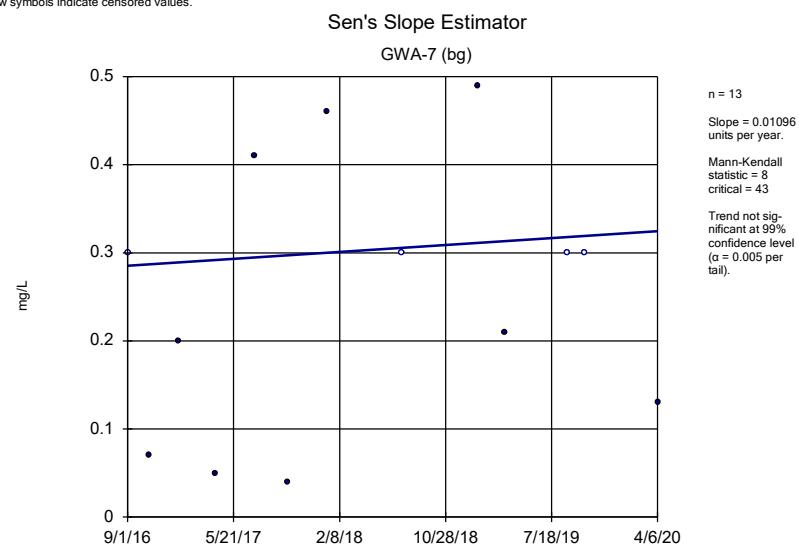
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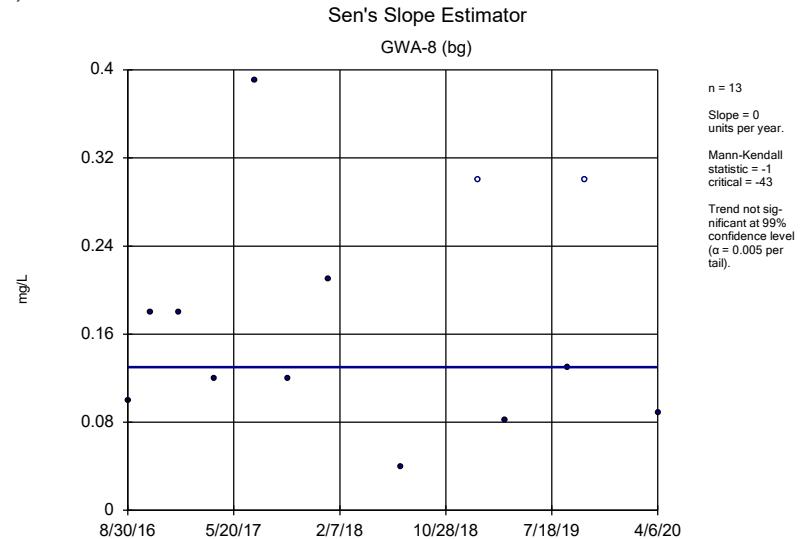


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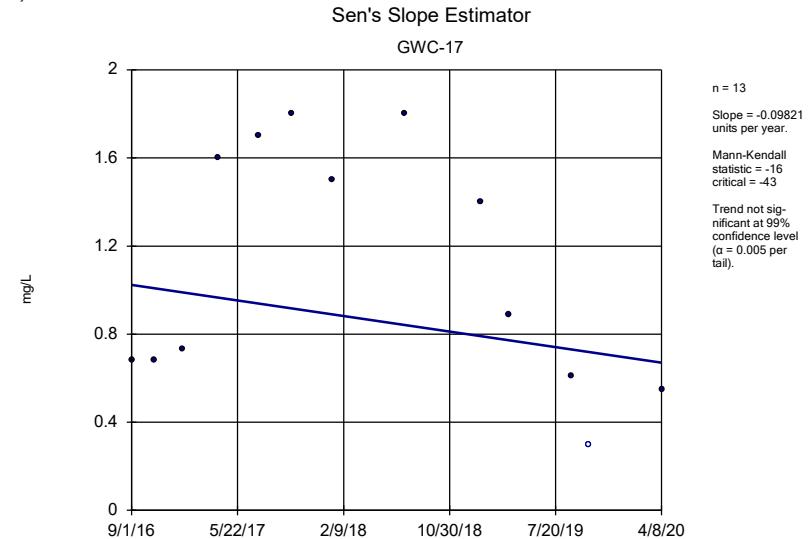


Constituent: Fluoride Analysis Run 5/23/2020 2:23 PM View: Trend Tests - PL Exceedances Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

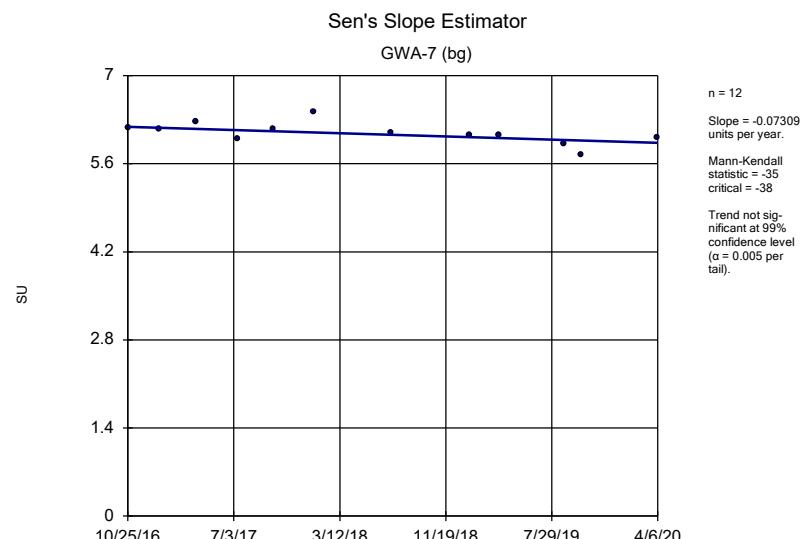
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Hollow symbols indicate censored values.



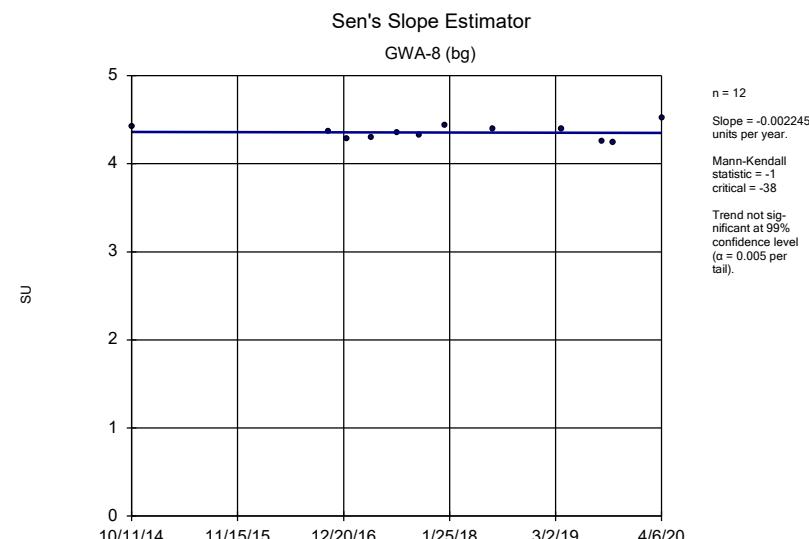
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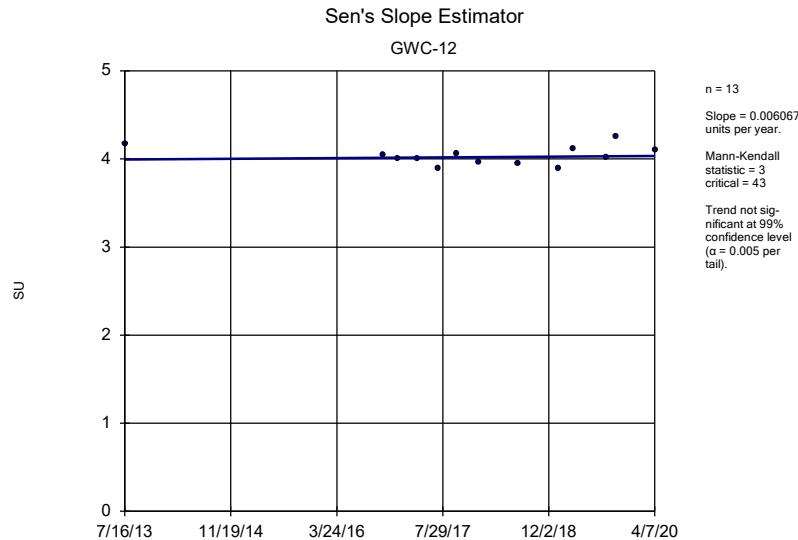


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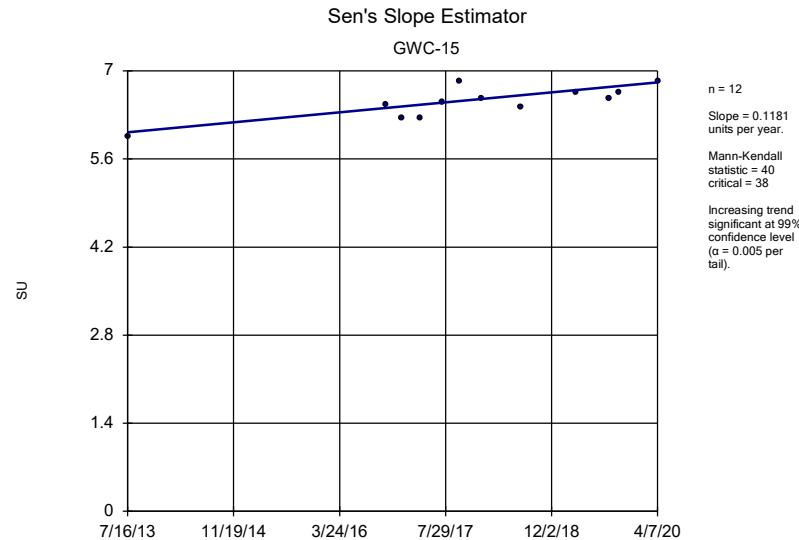


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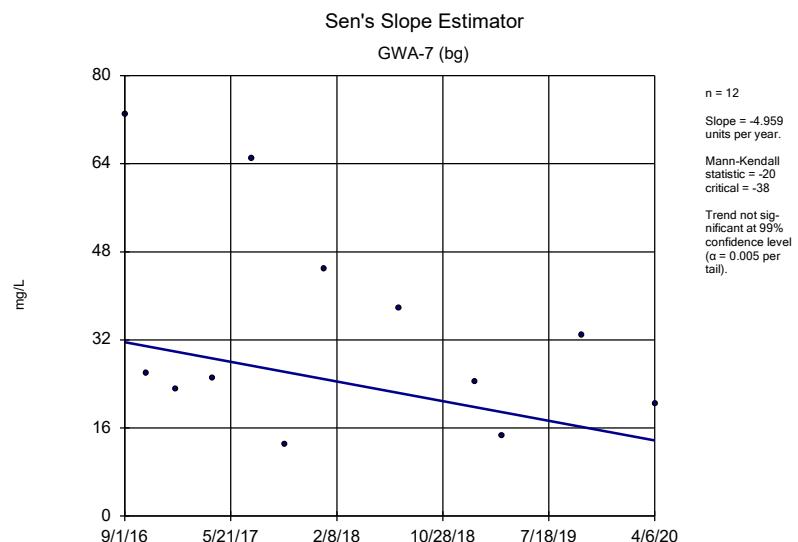




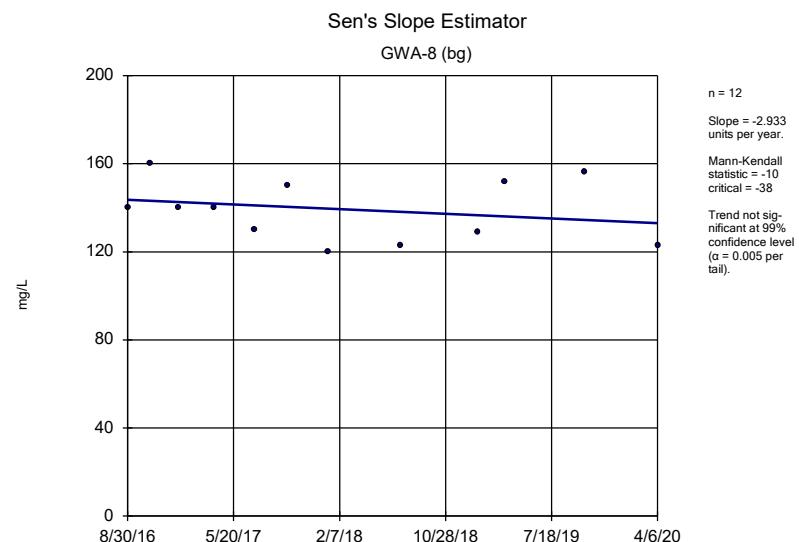
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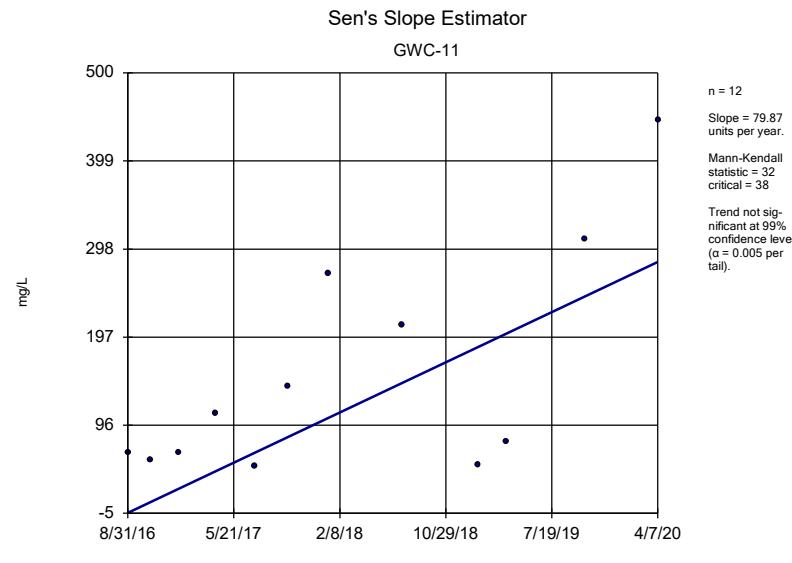
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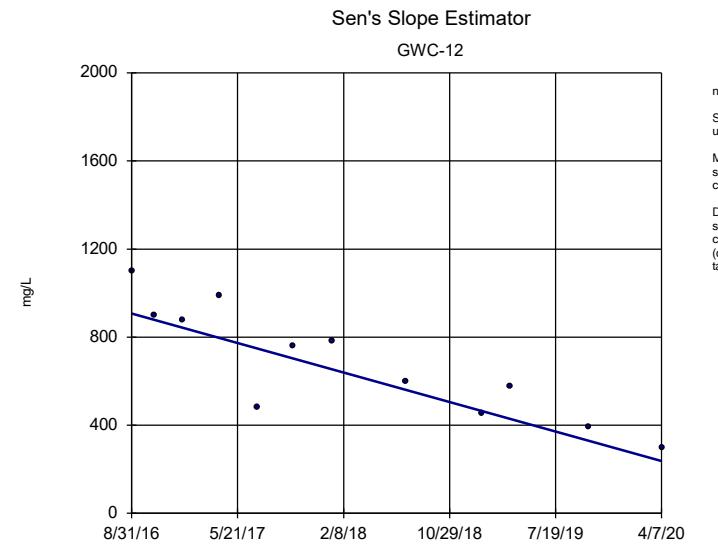
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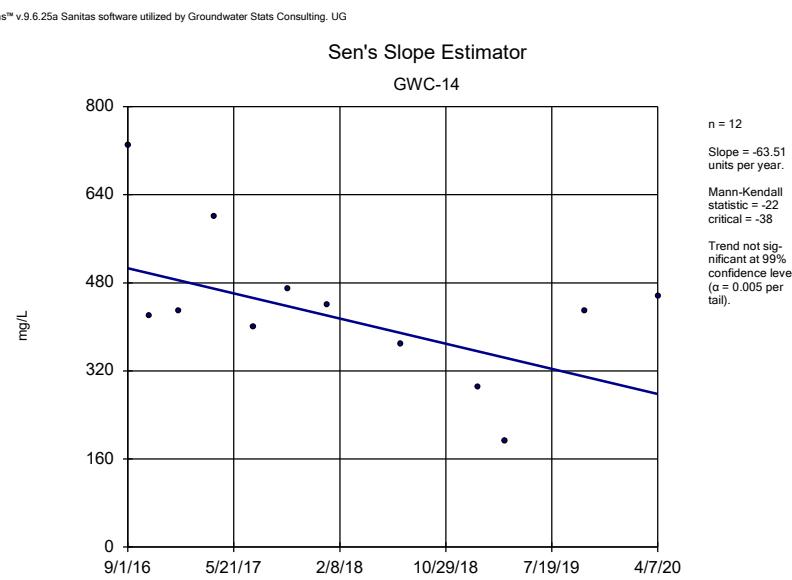
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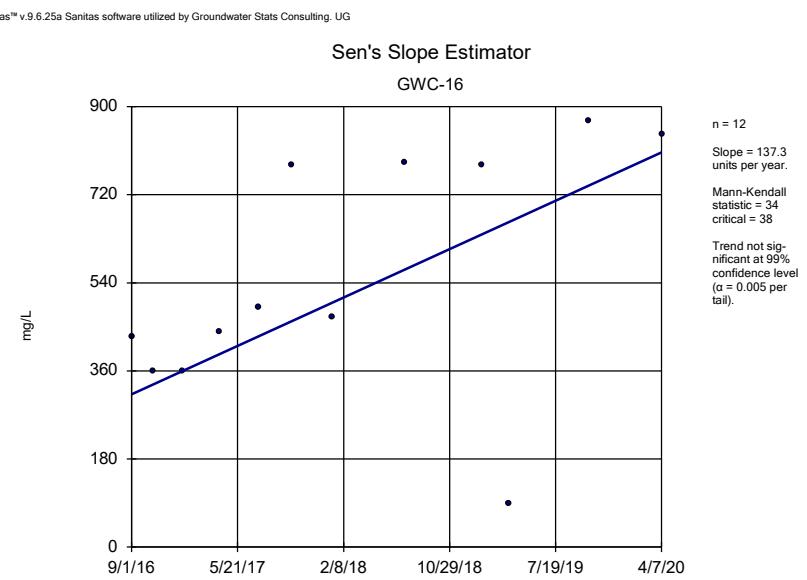
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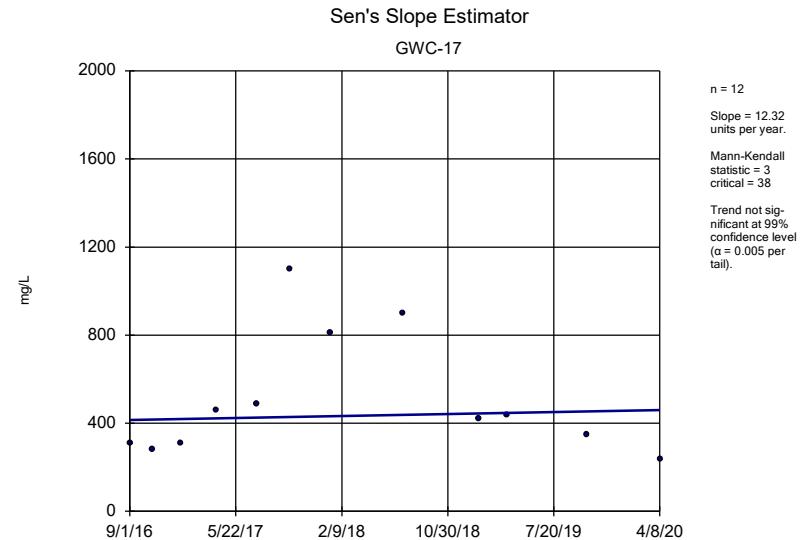
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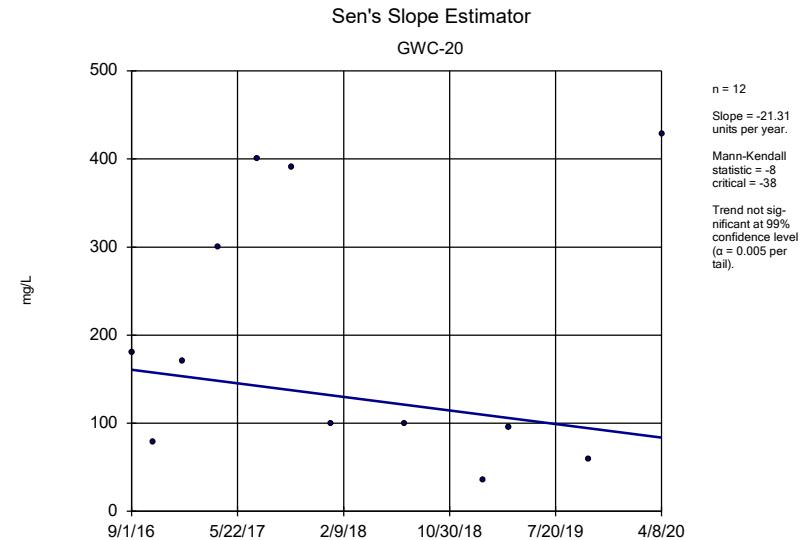
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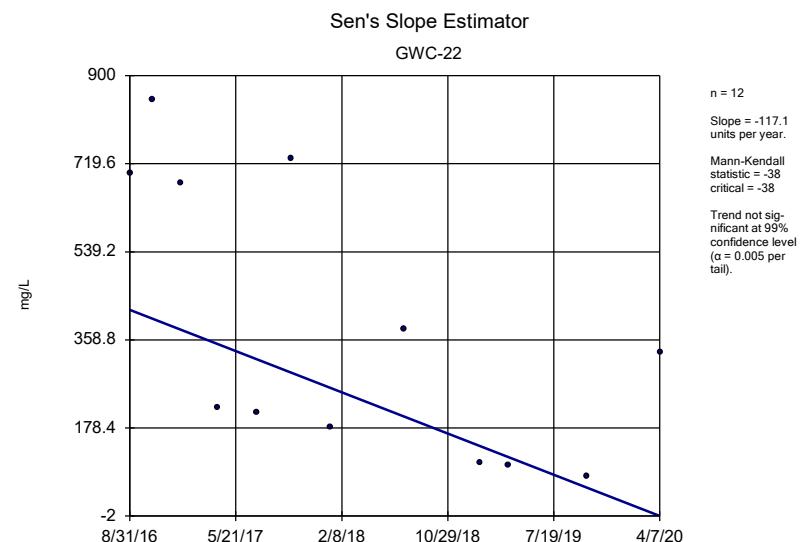
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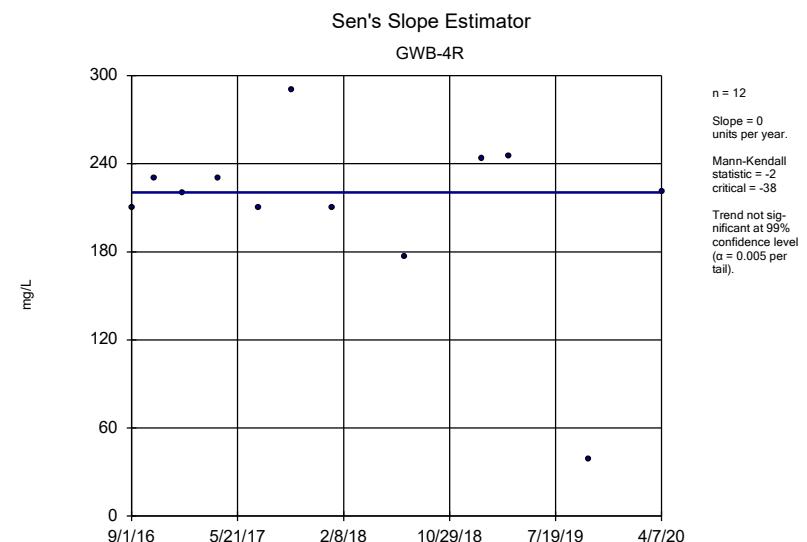
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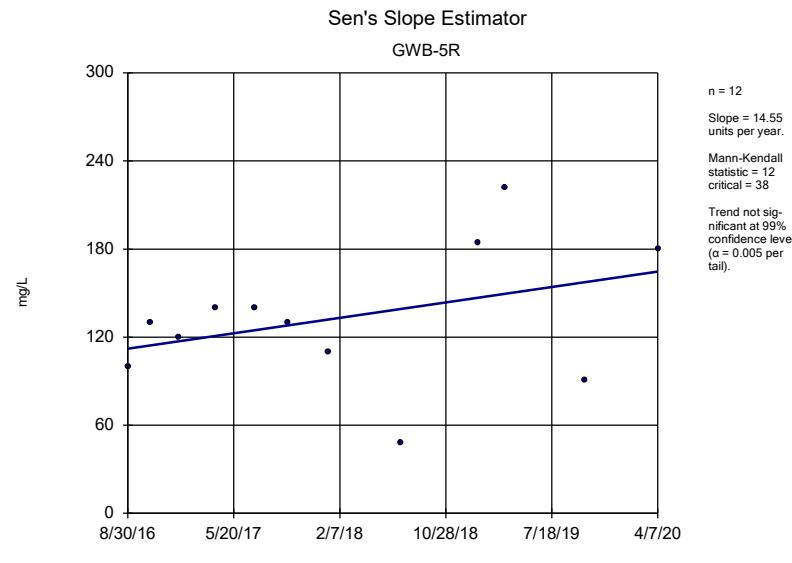
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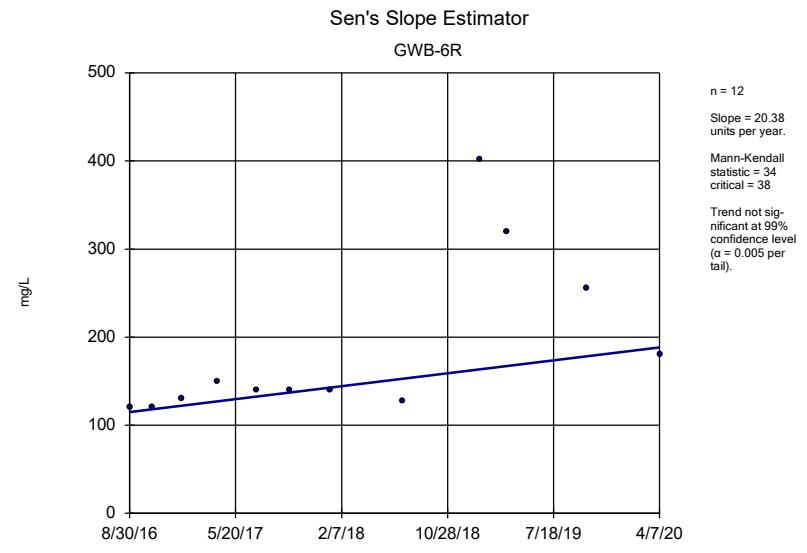
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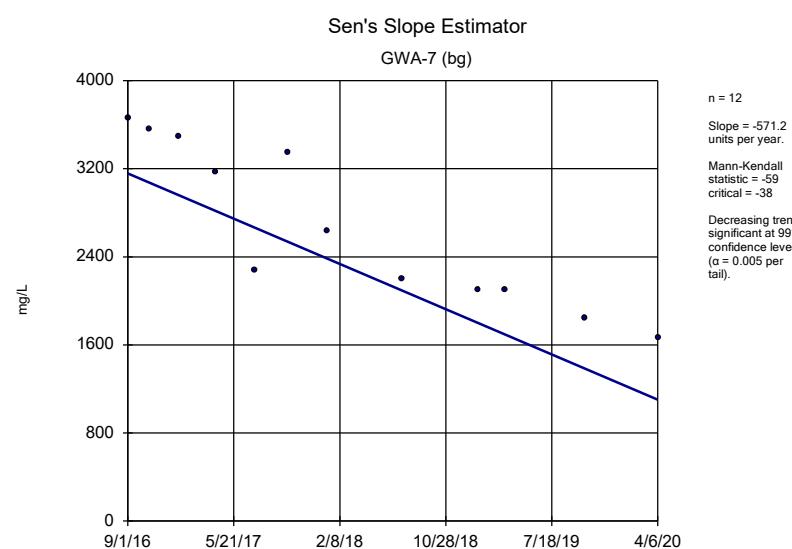
Constituent: Sulfate Analysis Run 5/23/2020 2:23 PM View: Trend Tests - PL Exceedances Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road



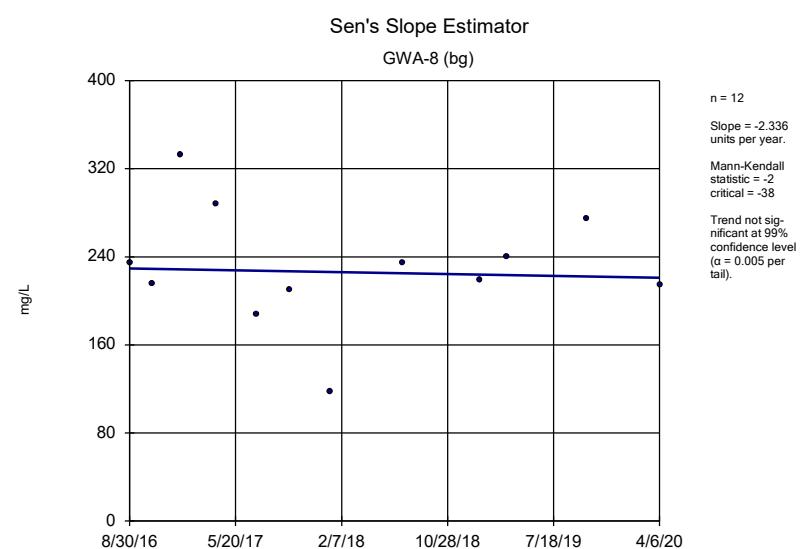
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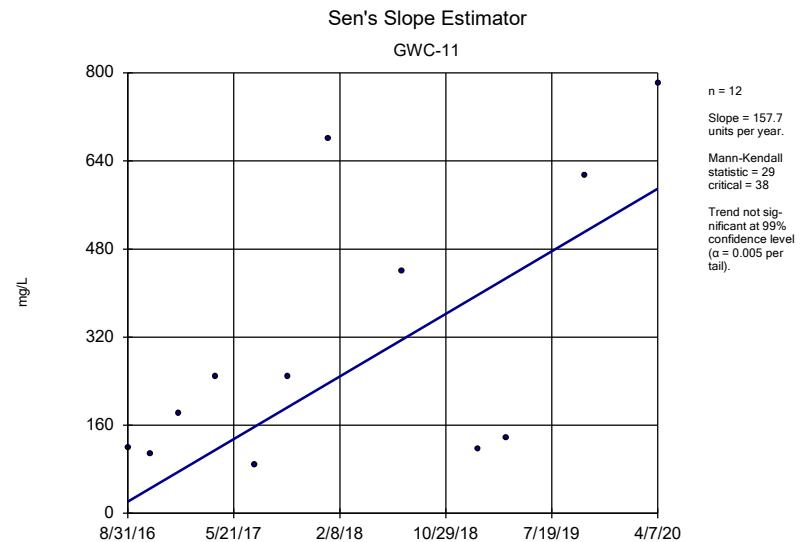
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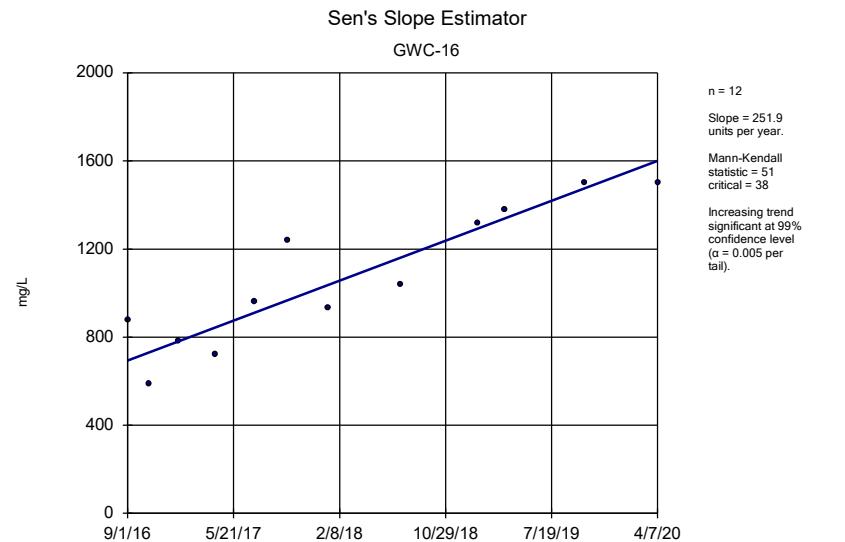
Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:23 PM View: Trend Tests - PL Exceedances Grumman Road Landfill Client: Southern Company Data: Grumman Road



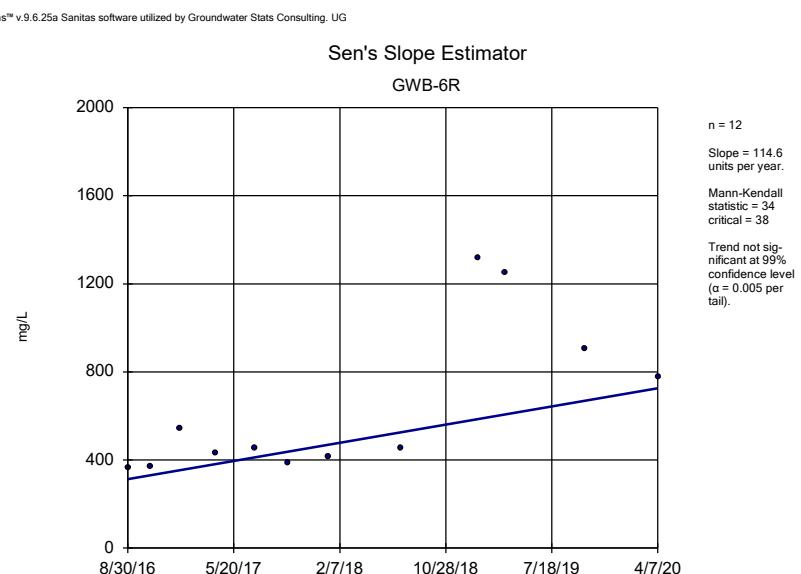
Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:23 PM View: Trend Tests - PL Exceedances Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:23 PM View: Trend Tests - PL Exceedances  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:23 PM View: Trend Tests - PL Exceedances  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Total Dissolved Solids Analysis Run 5/23/2020 2:23 PM View: Trend Tests - PL Exceedances  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

# FIGURE J.

## Tolerance Limit Summary Table - Appendix IV

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 5/25/2020, 8:50 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.003	n/a	115	n/a	n/a	94.78	n/a	n/a	0.002743	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.014	n/a	111	n/a	n/a	78.38	n/a	n/a	0.003368	NP Inter(NDs)
Barium (mg/L)	n/a	0.22	n/a	111	n/a	n/a	0	n/a	n/a	0.003368	NP Inter(normality)
Beryllium (mg/L)	n/a	0.003	n/a	32	n/a	n/a	50	n/a	n/a	0.1937	NP Inter(normality)
Cadmium (mg/L)	n/a	0.0025	n/a	31	n/a	n/a	93.55	n/a	n/a	0.2039	NP Inter(NDs)
Chromium (mg/L)	n/a	0.068	n/a	112	n/a	n/a	66.96	n/a	n/a	0.003199	NP Inter(normality)
Cobalt (mg/L)	n/a	0.0102	n/a	34	n/a	n/a	50	n/a	n/a	0.1748	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	n/a	33.8	n/a	22	n/a	n/a	0	n/a	n/a	0.3235	NP Inter
Fluoride (mg/L)	n/a	0.6556	n/a	26	0.2365	0.1606	23.08	Cohen's	No	0.01	Inter
Lead (mg/L)	n/a	0.013	n/a	111	n/a	n/a	77.48	n/a	n/a	0.003368	NP Inter(NDs)
Lithium (mg/L)	n/a	0.05	n/a	17	n/a	n/a	76.47	n/a	n/a	0.4181	NP Inter(NDs)
Mercury (mg/L)	n/a	0.0005	n/a	20	n/a	n/a	85	n/a	n/a	0.3585	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	19	n/a	n/a	84.21	n/a	n/a	0.3774	NP Inter(NDs)
Selenium (mg/L)	n/a	0.0438	n/a	110	n/a	n/a	82.73	n/a	n/a	0.003545	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	54	n/a	n/a	92.59	n/a	n/a	0.06267	NP Inter(NDs)

# FIGURE K.

GRUMMAN ROAD LANDFILL GWPS (State)				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.0287	0.0287
Barium, Total (mg/L)	2		0.22	2
Beryllium, Total (mg/L)	0.004		0.003	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005
Chromium, Total (mg/L)	0.1		0.068	0.1
Cobalt, Total (mg/L)		0.006	0.0102	0.0102
Combined Radium, Total (pCi/L)	5		33.8	33.8
Fluoride, Total (mg/L)	4		0.6556	4
Lead, Total (mg/L)		0.015	0.013	0.013
Lithium, Total (mg/L)		0.04	0.03	0.03
Mercury, Total (mg/L)	0.002		0.0005	0.002
Molybdenum, Total (mg/L)		0.1	0.01	0.01
Selenium, Total (mg/L)	0.05		0.0438	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

\*Highlighted cells indicated Background is higher than MCLs or CCR-Rule Specified levels.

\*MCL = Maximum Contaminant Level

\*CCR = Coal Combustion Residual

\*GWPS = Groundwater Protection Standard

FIGURE L.

GRUMMAN ROAD LANDFILL GWPS (Federal)				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.0287	0.0287
Barium, Total (mg/L)	2		0.22	2
Beryllium, Total (mg/L)	0.004		0.003	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005
Chromium, Total (mg/L)	0.1		0.068	0.1
Cobalt, Total (mg/L)		0.006	0.0102	0.0102
Combined Radium, Total (pCi/L)	5		33.8	33.8
Fluoride, Total (mg/L)	4		0.6556	4
Lead, Total (mg/L)		0.015	0.013	0.015
Lithium, Total (mg/L)		0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0005	0.002
Molybdenum, Total (mg/L)		0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.0438	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

\*Highlighted cells indicated Background is higher than MCLs or CCR-Rule Specified levels.

\*MCL = Maximum Contaminant Level

\*CCR = Coal Combustion Residual

\*GWPS = Groundwater Protection Standard

FIGURE M.

## Confidence Interval Summary Table (State) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:54 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWC-15	0.1293	0.05039	0.0287	Yes	15	0.08984	0.05821	0	None	No	0.01	Param.
Arsenic (mg/L)	GWC-16	0.08406	0.0633	0.0287	Yes	16	0.07368	0.01595	0	None	No	0.01	Param.
Arsenic (mg/L)	GWC-20	0.3752	0.277	0.0287	Yes	15	0.3261	0.07248	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-1	0.1888	0.07681	0.01	Yes	11	0.1328	0.06721	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-15	0.1139	0.08688	0.01	Yes	11	0.1004	0.01621	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-16	0.2054	0.104	0.01	Yes	11	0.1547	0.06085	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-20	0.2605	0.09096	0.01	Yes	11	0.1757	0.1017	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-21	0.06805	0.01392	0.01	Yes	11	0.04098	0.03248	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWB-4R	0.1	0.0209	0.01	Yes	11	0.04843	0.04052	0	None	No	0.006	NP (normality)

# Confidence Interval Summary Table (State) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:54 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWA-7 (bg)	0.003	0.0013	0.006	No	15	0.002513	0.0008568	73.33	None	No	0.01	NP (normality)
Antimony (mg/L)	GWA-8 (bg)	0.003	0.003	0.006	No	16	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-1	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-11	0.003	0.0005	0.006	No	15	0.001877	0.001249	53.33	None	No	0.01	NP (normality)
Antimony (mg/L)	GWC-12	0.003	0.003	0.006	No	14	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-13	0.003	0.0006	0.006	No	15	0.00284	0.0006197	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-14	0.003	0.003	0.006	No	16	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-15	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-16	0.003	0.003	0.006	No	16	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-17	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-2	0.003	0.0013	0.006	No	15	0.002887	0.0004389	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-20	0.003	0.0019	0.006	No	15	0.002927	0.000284	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-21	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-22	0.003	0.00049	0.006	No	15	0.002663	0.0008903	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-9	0.003	0.0016	0.006	No	15	0.002729	0.0007552	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-4R	0.003	0.0003	0.006	No	15	0.00282	0.0006971	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-5R	0.003	0.00054	0.006	No	15	0.002836	0.0006352	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-6R	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWA-7 (bg)	0.01379	0.004635	0.0287	No	12	0.009508	0.00692	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GWA-8 (bg)	0.005	0.0006	0.0287	No	16	0.003391	0.00215	62.5	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-1	0.0042	0.0015	0.0287	No	14	0.004343	0.006598	0	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-11	0.005	0.005	0.0287	No	15	0.005	0	100	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-12	0.005	0.0009	0.0287	No	15	0.004153	0.001754	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-13	0.005	0.0006	0.0287	No	15	0.004412	0.001552	86.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-14	0.0026	0.0018	0.0287	No	16	0.002271	0.0008184	6.25	None	No	0.01	NP (normality)
Arsenic (mg/L)	<b>GWC-15</b>	<b>0.1293</b>	<b>0.05039</b>	<b>0.0287</b>	<b>Yes</b>	<b>15</b>	<b>0.08984</b>	<b>0.05821</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	<b>GWC-16</b>	<b>0.08406</b>	<b>0.0633</b>	<b>0.0287</b>	<b>Yes</b>	<b>16</b>	<b>0.07368</b>	<b>0.01595</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GWC-17	0.005	0.0009	0.0287	No	15	0.002521	0.001835	33.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-2	0.005	0.00094	0.0287	No	15	0.004129	0.001807	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	<b>GWC-20</b>	<b>0.3752</b>	<b>0.277</b>	<b>0.0287</b>	<b>Yes</b>	<b>15</b>	<b>0.3261</b>	<b>0.07248</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GWC-21	0.005955	0.00332	0.0287	No	15	0.004067	0.001312	40	Cohen's	No	0.01	Param.
Arsenic (mg/L)	GWC-22	0.005	0.0006	0.0287	No	15	0.002705	0.002021	40	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-9	0.005	0.00084	0.0287	No	15	0.004723	0.001074	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWB-4R	0.003147	0.001641	0.0287	No	15	0.002457	0.001208	13.33	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GWB-5R	0.005	0.0009	0.0287	No	15	0.002487	0.001924	26.67	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWB-6R	0.005	0.0011	0.0287	No	15	0.002829	0.001743	33.33	None	No	0.01	NP (Cohens/xfrm)
Barium (mg/L)	GWA-7 (bg)	0.1545	0.0802	2	No	14	0.1174	0.05248	0	None	No	0.01	Param.
Barium (mg/L)	GWA-8 (bg)	0.0664	0.06025	2	No	16	0.06333	0.00472	0	None	No	0.01	Param.
Barium (mg/L)	GWC-1	0.0575	0.04982	2	No	15	0.05366	0.005669	0	None	No	0.01	Param.
Barium (mg/L)	GWC-11	0.1125	0.05506	2	No	15	0.08379	0.0424	0	None	No	0.01	Param.
Barium (mg/L)	GWC-12	0.0191	0.0162	2	No	15	0.01847	0.003995	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-13	0.02474	0.01968	2	No	15	0.02221	0.003733	0	None	No	0.01	Param.
Barium (mg/L)	GWC-14	0.067	0.0248	2	No	16	0.03726	0.01953	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-15	0.049	0.04021	2	No	15	0.04461	0.006483	0	None	No	0.01	Param.
Barium (mg/L)	GWC-16	0.1049	0.05422	2	No	14	0.08131	0.0372	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-17	0.1245	0.04703	2	No	15	0.09051	0.06112	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-2	0.057	0.049	2	No	14	0.05407	0.008399	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-20	0.148	0.078	2	No	15	0.1071	0.03885	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-21	0.07381	0.05031	2	No	15	0.06206	0.01734	0	None	No	0.01	Param.
Barium (mg/L)	GWC-22	0.09974	0.06378	2	No	15	0.08279	0.0285	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-9	0.2743	0.1982	2	No	15	0.2363	0.05612	0	None	No	0.01	Param.
Barium (mg/L)	GWB-4R	0.09633	0.07886	2	No	15	0.08759	0.01289	0	None	No	0.01	Param.
Barium (mg/L)	GWB-5R	0.1628	0.09057	2	No	15	0.1294	0.05934	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWB-6R	0.107	0.013	2	No	15	0.07353	0.04511	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWA-7 (bg)	0.003	0.0002	0.004	No	8	0.001225	0.001208	25	None	No	0.004	NP (Cohens/xfrm)

# Confidence Interval Summary Table (State) - All Results

Page 2

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	GWA-8 (bg)	0.00024	0.0002	0.004	No	11	0.0004564	0.0008438	9.091	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-1	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-11	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-12	0.000918	0.0005275	0.004	No	11	0.0007227	0.0002343	0	None	No	0.01	Param.
Beryllium (mg/L)	GWC-13	0.003	0.003	0.004	No	11	0.002733	0.000887	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-14	0.003	0.00009	0.004	No	11	0.002205	0.001362	72.73	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-15	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-16	0.003	0.00008	0.004	No	11	0.001147	0.001469	36.36	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-17	0.003159	0.001658	0.004	No	11	0.002427	0.0009318	0	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	GWC-2	0.003	0.00009	0.004	No	12	0.00229	0.001286	75	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-20	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-21	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-22	0.003	0.00009	0.004	No	11	0.001433	0.001501	45.45	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-9	0.0003	0.0002	0.004	No	11	0.0002582	0.00004916	0	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWB-4R	0.003	0.0001	0.004	No	11	0.001445	0.001491	45.45	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWB-5R	0.003	0.0001	0.004	No	11	0.0007051	0.001137	18.18	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWB-6R	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWA-7 (bg)	0.0025	0.0001	0.005	No	9	0.002033	0.0009381	77.78	None	No	0.002	NP (NDs)
Cadmium (mg/L)	GWA-8 (bg)	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-1	0.0025	0.0001	0.005	No	11	0.002061	0.0009769	81.82	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-11	0.0007221	0.0001598	0.005	No	11	0.0005255	0.0006754	9.091	None	In(x)	0.01	Param.
Cadmium (mg/L)	GWC-12	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-13	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-14	0.0025	0.00017	0.005	No	11	0.001234	0.001213	45.45	None	No	0.006	NP (normality)
Cadmium (mg/L)	GWC-15	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-16	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-17	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-2	0.0025	0.0025	0.005	No	12	0.0025	0	100	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-20	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-21	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-22	0.0025	0.00001	0.005	No	11	0.0008245	0.001083	27.27	None	No	0.006	NP (normality)
Cadmium (mg/L)	GWC-9	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWB-4R	0.0025	0.00009	0.005	No	11	0.001644	0.001189	63.64	None	No	0.006	NP (normality)
Cadmium (mg/L)	GWB-5R	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWB-6R	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Chromium (mg/L)	GWA-7 (bg)	0.04592	0.02183	0.1	No	14	0.03387	0.017	0	None	No	0.01	Param.
Chromium (mg/L)	GWA-8 (bg)	0.01	0.0006	0.1	No	16	0.007657	0.004192	75	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-1	0.0062	0.0015	0.1	No	15	0.002653	0.002337	6.667	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-11	0.01	0.0007	0.1	No	15	0.005071	0.004747	40	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-12	0.01	0.00085	0.1	No	15	0.003005	0.00365	20	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-13	0.01	0.0007	0.1	No	15	0.005792	0.004666	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-14	0.01	0.00074	0.1	No	16	0.003754	0.004355	31.25	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-15	0.01	0.0012	0.1	No	15	0.004787	0.004412	40	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-16	0.01	0.0009	0.1	No	16	0.005468	0.004682	43.75	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-17	0.01	0.0009	0.1	No	15	0.004343	0.004295	33.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-2	0.01	0.00065	0.1	No	15	0.005669	0.004794	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-20	0.01	0.00089	0.1	No	15	0.005159	0.004688	46.67	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-21	0.01	0.0006	0.1	No	15	0.005641	0.004824	46.67	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-22	0.01	0.00057	0.1	No	15	0.005612	0.004856	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-9	0.01	0.001	0.1	No	15	0.004793	0.004418	40	None	No	0.01	NP (normality)
Chromium (mg/L)	GWB-4R	0.01066	0.004643	0.1	No	15	0.007653	0.004442	0	None	No	0.01	Param.
Chromium (mg/L)	GWB-5R	0.012	0.0011	0.1	No	15	0.009707	0.01775	26.67	None	No	0.01	NP (Cohens/xfrm)
Chromium (mg/L)	GWB-6R	0.011	0.0013	0.1	No	15	0.005607	0.005891	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWA-7 (bg)	0.00677	0.00267	0.0102	No	10	0.00472	0.002298	0	None	No	0.01	Param.
Cobalt (mg/L)	GWA-8 (bg)	0.005	0.0004	0.0102	No	11	0.002095	0.002304	36.36	None	No	0.006	NP (normality)

# Confidence Interval Summary Table (State) - All Results

Page 3

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	GWC-1	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-11	0.005	0.005	0.0102	No	11	0.004573	0.001417	90.91	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-12	0.001461	0.0009338	0.0102	No	11	0.001197	0.0003162	0	None	No	0.01	Param.
Cobalt (mg/L)	GWC-13	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-14	0.005	0.005	0.0102	No	11	0.004573	0.001417	90.91	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-15	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-16	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-17	0.006889	0.003475	0.0102	No	11	0.005182	0.002048	0	None	No	0.01	Param.
Cobalt (mg/L)	GWC-2	0.005	0.0003	0.0102	No	12	0.003115	0.002339	58.33	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-20	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-21	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-22	0.005	0.0007	0.0102	No	11	0.002676	0.00223	45.45	None	No	0.006	NP (normality)
Cobalt (mg/L)	GWC-9	0.0017	0.00099	0.0102	No	9	0.001453	0.0003465	0	None	No	0.002	NP (normality)
Cobalt (mg/L)	GWB-4R	0.0024	0.0008	0.0102	No	11	0.001509	0.001244	9.091	None	No	0.006	NP (normality)
Cobalt (mg/L)	GWB-5R	0.005	0.00053	0.0102	No	11	0.003548	0.001882	54.55	None	No	0.006	NP (normality)
Cobalt (mg/L)	GWB-6R	0.005	0.005	0.0102	No	11	0.00458	0.001393	90.91	None	No	0.006	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GWA-7 (bg)	16.91	4.867	33.8	No	11	11.4	9.532	0	None	$x^{(1/3)}$	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWA-8 (bg)	2.886	1.863	33.8	No	11	2.375	0.6138	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-1	2.45	1.595	33.8	No	11	2.023	0.5129	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-11	6.309	2.104	33.8	No	11	4.207	2.523	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-12	3.199	1.981	33.8	No	11	2.59	0.7307	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-13	1.373	0.6802	33.8	No	11	1.026	0.4155	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-14	1.353	0.8114	33.8	No	11	1.082	0.3249	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-15	1.815	0.9742	33.8	No	11	1.395	0.5045	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-16	2.13	1.72	33.8	No	11	2.042	0.7575	0	None	No	0.006	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GWC-17	4.417	2.7	33.8	No	11	3.558	1.03	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-2	1.008	0.5555	33.8	No	11	0.7818	0.2716	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-20	3.207	1.453	33.8	No	11	2.33	1.053	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-21	1.862	1.039	33.8	No	11	1.451	0.4937	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-22	7.261	4.254	33.8	No	11	5.757	1.804	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-9	4.327	2.194	33.8	No	11	3.362	1.746	0	None	$\ln(x)$	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWB-4R	5.1	2.32	33.8	No	11	3.632	1.278	0	None	No	0.006	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GWB-5R	3.833	1.921	33.8	No	11	2.971	1.568	0	None	$\ln(x)$	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWB-6R	4.613	1.962	33.8	No	11	3.287	1.591	0	None	No	0.01	Param.
Fluoride (mg/L)	GWA-7 (bg)	0.3628	0.1388	4	No	13	0.2508	0.1506	30.77	None	No	0.01	Param.
Fluoride (mg/L)	GWA-8 (bg)	0.269	0.09469	4	No	13	0.1724	0.1027	15.38	Cohen's $\delta$	No	0.01	Param.
Fluoride (mg/L)	GWC-1	0.3	0.051	4	No	13	0.2455	0.09649	69.23	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-11	0.3	0.3	4	No	13	0.3	0	100	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-12	0.9234	0.3391	4	No	13	0.6312	0.3929	7.692	None	No	0.01	Param.
Fluoride (mg/L)	GWC-13	0.55	0.09	4	No	13	0.284	0.1172	76.92	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-14	0.3707	0.2416	4	No	13	0.3062	0.08685	53.85	None	No	0.01	Param.
Fluoride (mg/L)	GWC-15	0.5	0.13	4	No	13	0.2662	0.1082	61.54	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-16	0.55	0.1	4	No	13	0.3092	0.2106	46.15	None	No	0.01	NP (Cohen's/xfrm)
Fluoride (mg/L)	GWC-17	1.5	0.6906	4	No	13	1.095	0.5444	7.692	None	No	0.01	Param.
Fluoride (mg/L)	GWC-2	0.62	0.07	4	No	13	0.2264	0.1614	46.15	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-20	0.3	0.04	4	No	13	0.2264	0.118	69.23	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-21	0.3	0.071	4	No	13	0.2824	0.06351	92.31	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-22	0.3	0.04	4	No	13	0.1977	0.1179	53.85	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-9	0.3664	0.1032	4	No	13	0.2572	0.2511	0	None	$x^{(1/3)}$	0.01	Param.
Fluoride (mg/L)	GWB-4R	0.38	0.05	4	No	13	0.3004	0.2966	53.85	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWB-5R	0.3	0.04	4	No	13	0.1641	0.1206	38.46	None	No	0.01	NP (Cohen's/xfrm)
Fluoride (mg/L)	GWB-6R	0.3	0.053	4	No	13	0.1868	0.1042	30.77	None	No	0.01	NP (normality)
Lead (mg/L)	GWA-7 (bg)	0.009351	0.003464	0.013	No	13	0.006408	0.003959	0	None	No	0.01	Param.
Lead (mg/L)	GWA-8 (bg)	0.005	0.0001	0.013	No	16	0.003169	0.002442	62.5	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-1	0.005	0.00012	0.013	No	15	0.004348	0.001721	86.67	None	No	0.01	NP (NDs)

# Confidence Interval Summary Table (State) - All Results

Page 4

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:54 PM

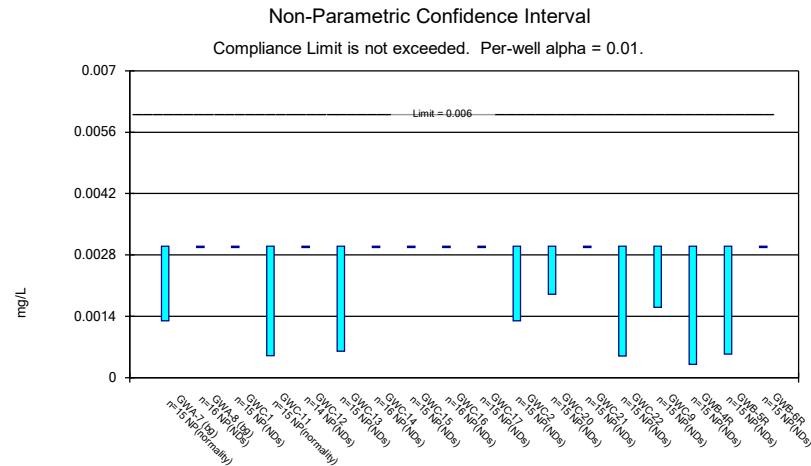
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	GWC-11	0.00036	0.0001	0.013	No	14	0.00058	0.001274	7.143	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-12	0.005	0.000081	0.013	No	15	0.001983	0.002358	33.33	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-13	0.005	0.00017	0.013	No	15	0.002021	0.002208	33.33	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-14	0.005	0.00051	0.013	No	16	0.003799	0.00215	75	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-15	0.005	0.00012	0.013	No	15	0.002756	0.002484	53.33	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-16	0.005	0.0001	0.013	No	16	0.002271	0.002486	43.75	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-17	0.005	0.0001	0.013	No	15	0.003422	0.002317	66.67	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-2	0.005	0.0002	0.013	No	15	0.00339	0.002358	66.67	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-20	0.005	0.0001	0.013	No	15	0.003374	0.00238	66.67	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-21	0.005	0.00009	0.013	No	15	0.003046	0.002477	60	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-22	0.001163	0.0003349	0.013	No	15	0.001011	0.001307	6.667	None	In(x)	0.01	Param.
Lead (mg/L)	GWC-9	0.005	0.0001	0.013	No	15	0.003091	0.002425	60	None	No	0.01	NP (normality)
Lead (mg/L)	GWB-4R	0.006465	0.00267	0.013	No	14	0.004567	0.002679	14.29	None	No	0.01	Param.
Lead (mg/L)	GWB-5R	0.005	0.0002	0.013	No	15	0.00242	0.002266	40	None	No	0.01	NP (normality)
Lead (mg/L)	GWB-6R	0.005	0.0002	0.013	No	15	0.002544	0.002389	46.67	None	No	0.01	NP (normality)
Lithium (mg/L)	GWA-7 (bg)	0.03	0.03	0.03	No	6	0.03	0	100	None	No	0.0155	NP (NDs)
Lithium (mg/L)	GWA-8 (bg)	0.03	0.001	0.03	No	11	0.01948	0.0146	63.64	None	No	0.006	NP (normality)
Lithium (mg/L)	GWC-1	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-11	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-12	0.03	0.00094	0.03	No	11	0.01683	0.01513	54.55	None	No	0.006	NP (normality)
Lithium (mg/L)	GWC-13	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-14	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-15	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-16	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-17	0.007283	0.005226	0.03	No	11	0.006255	0.001234	0	None	No	0.01	Param.
Lithium (mg/L)	GWC-2	0.03	0.03	0.03	No	12	0.03	0	100	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-20	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-21	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-22	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-9	0.002162	0.001798	0.03	No	10	0.00198	0.0002044	0	None	No	0.01	Param.
Lithium (mg/L)	GWB-4R	0.013	0.0039	0.03	No	11	0.0073	0.00417	0	None	No	0.006	NP (normality)
Lithium (mg/L)	GWB-5R	0.03	0.0027	0.03	No	11	0.01333	0.01325	36.36	None	No	0.006	NP (normality)
Lithium (mg/L)	GWB-6R	0.03	0.03	0.03	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	GWA-7 (bg)	0.0005	0.0001	0.002	No	10	0.000381	0.000194	70	None	No	0.011	NP (normality)
Mercury (mg/L)	GWA-8 (bg)	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-1	0.0005	0.0005	0.002	No	10	0.000454	0.0001455	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-11	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-12	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-13	0.0005	0.0005	0.002	No	10	0.000463	0.000117	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-14	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-15	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-16	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-17	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-2	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	GWC-20	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-21	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-22	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-9	0.0005	0.0005	0.002	No	10	0.000455	0.0001423	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWB-4R	0.0005	0.0005	0.002	No	10	0.0004549	0.0001426	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWB-5R	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	GWB-6R	0.0005	0.0005	0.002	No	10	0.0004543	0.0001445	90	None	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWA-7 (bg)	0.01	0.0013	0.01	No	8	0.0078	0.004012	62.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GWA-8 (bg)	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
<b>Molybdenum (mg/L)</b>	<b>GWC-1</b>	<b>0.1888</b>	<b>0.07681</b>	<b>0.01</b>	<b>Yes</b>	<b>11</b>	<b>0.1328</b>	<b>0.06721</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GWC-11	0.01	0.01	0.01	No	11	0.009255	0.002472	90.91	None	No	0.006	NP (NDs)

# Confidence Interval Summary Table (State) - All Results

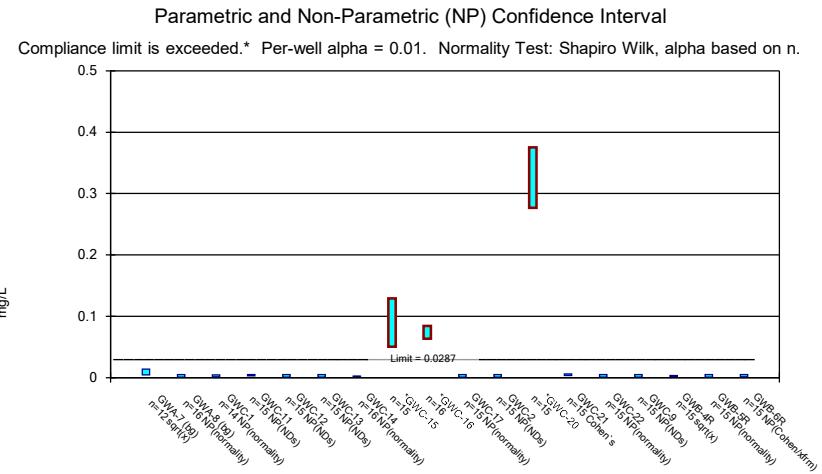
Page 5

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:54 PM

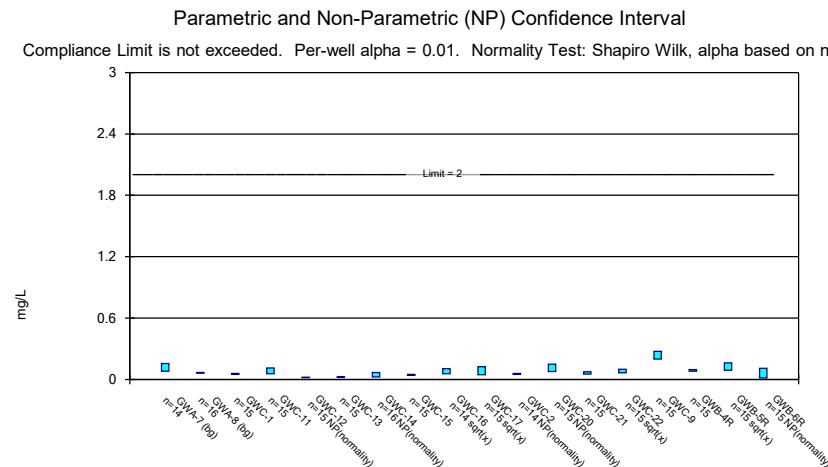
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	GWC-12	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-13	0.01	0.01	0.01	No	11	0.0096	0.001327	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-14	0.028	0.0022	0.01	No	10	0.00946	0.01198	0	None	No	0.011	NP (normality)
<b>Molybdenum (mg/L)</b>	<b>GWC-15</b>	<b>0.1139</b>	<b>0.08688</b>	<b>0.01</b>	<b>Yes</b>	<b>11</b>	<b>0.1004</b>	<b>0.01621</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Molybdenum (mg/L)</b>	<b>GWC-16</b>	<b>0.2054</b>	<b>0.104</b>	<b>0.01</b>	<b>Yes</b>	<b>11</b>	<b>0.1547</b>	<b>0.06085</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GWC-17	0.01	0.0036	0.01	No	11	0.008182	0.003136	72.73	None	No	0.006	NP (normality)
Molybdenum (mg/L)	GWC-2	0.01	0.01	0.01	No	12	0.01	0	100	None	No	0.01	NP (NDs)
<b>Molybdenum (mg/L)</b>	<b>GWC-20</b>	<b>0.2605</b>	<b>0.09096</b>	<b>0.01</b>	<b>Yes</b>	<b>11</b>	<b>0.1757</b>	<b>0.1017</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Molybdenum (mg/L)</b>	<b>GWC-21</b>	<b>0.06805</b>	<b>0.01392</b>	<b>0.01</b>	<b>Yes</b>	<b>11</b>	<b>0.04098</b>	<b>0.03248</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GWC-22	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-9	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
<b>Molybdenum (mg/L)</b>	<b>GWB-4R</b>	<b>0.1</b>	<b>0.0209</b>	<b>0.01</b>	<b>Yes</b>	<b>11</b>	<b>0.04843</b>	<b>0.04052</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.006</b>	<b>NP (normality)</b>
Molybdenum (mg/L)	GWB-5R	0.01	0.01	0.01	No	11	0.0092	0.002653	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWB-6R	0.01	0.01	0.01	No	11	0.009327	0.002231	90.91	None	No	0.006	NP (NDs)
Selenium (mg/L)	GWA-7 (bg)	0.03164	0.01103	0.05	No	11	0.02134	0.01237	0	None	No	0.01	Param.
Selenium (mg/L)	GWA-8 (bg)	0.01	0.0013	0.05	No	16	0.008894	0.003023	87.5	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-1	0.0052	0.0016	0.05	No	15	0.004147	0.005656	6.667	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-11	0.01	0.0052	0.05	No	15	0.009033	0.005691	26.67	None	No	0.01	NP (Cohens/xfrm)
Selenium (mg/L)	GWC-12	0.01	0.0025	0.05	No	15	0.008427	0.003259	80	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-13	0.01	0.01	0.05	No	15	0.01	0	100	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-14	0.00512	0.002676	0.05	No	16	0.004017	0.002087	6.25	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	GWC-15	0.014	0.0029	0.05	No	15	0.00846	0.00334	53.33	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-16	0.006459	0.003525	0.05	No	16	0.004992	0.002255	6.25	None	No	0.01	Param.
Selenium (mg/L)	GWC-17	0.01	0.0012	0.05	No	15	0.00616	0.00431	53.33	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-2	0.01	0.0035	0.05	No	15	0.009033	0.002567	86.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-20	0.01	0.0014	0.05	No	15	0.007127	0.004206	66.67	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-21	0.0234	0.01368	0.05	No	15	0.01854	0.007169	0	None	No	0.01	Param.
Selenium (mg/L)	GWC-22	0.01	0.0022	0.05	No	15	0.007793	0.003799	73.33	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-9	0.01	0.01	0.05	No	15	0.01	0	100	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWB-4R	0.01	0.0029	0.05	No	15	0.0058	0.003265	33.33	None	No	0.01	NP (Cohens/xfrm)
Selenium (mg/L)	GWB-5R	0.01	0.0073	0.05	No	15	0.008827	0.002656	80	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWB-6R	0.05	0.0033	0.05	No	15	0.01109	0.01125	73.33	None	No	0.01	NP (normality)
Thallium (mg/L)	GWA-7 (bg)	0.001	0.001	0.002	No	11	0.0009545	0.0001508	90.91	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWA-8 (bg)	0.001	0.00006	0.002	No	11	0.0007429	0.0004403	72.73	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-1	0.001	0.000054	0.002	No	11	0.0007416	0.0004425	72.73	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-11	0.001	0.00007	0.002	No	11	0.0005925	0.0004693	54.55	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-12	0.001	0.00013	0.002	No	11	0.0004073	0.0003839	27.27	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-13	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-14	0.001	0.00007	0.002	No	11	0.00083	0.0003782	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-15	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-16	0.001	0.00006	0.002	No	11	0.0008282	0.0003823	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-17	0.001	0.000066	0.002	No	11	0.0004998	0.0004791	45.45	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-2	0.001	0.00011	0.002	No	12	0.0009258	0.0002569	91.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	GWC-20	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-21	0.001	0.001	0.002	No	11	0.0009136	0.0002864	90.91	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-22	0.001	0.000065	0.002	No	11	0.0006646	0.0004654	63.64	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-9	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWB-4R	0.001	0.00007	0.002	No	11	0.0008309	0.0003762	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWB-5R	0.001	0.00031	0.002	No	11	0.0008515	0.0003351	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWB-6R	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)



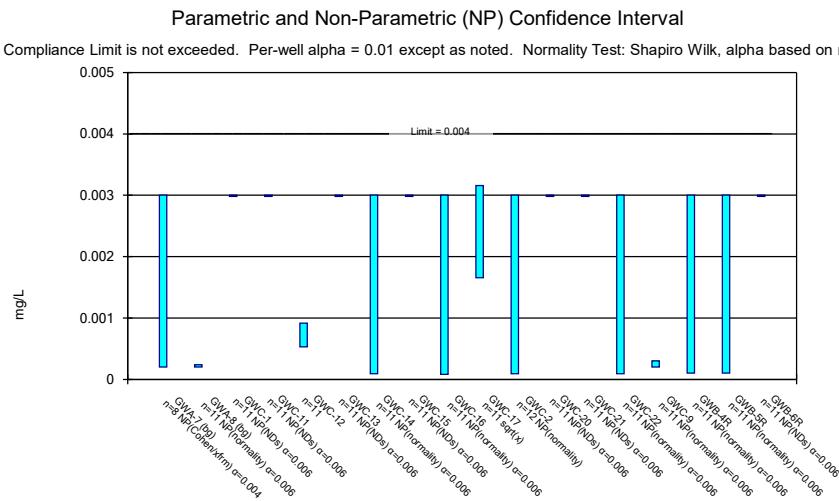
Constituent: Antimony Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Arsenic Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



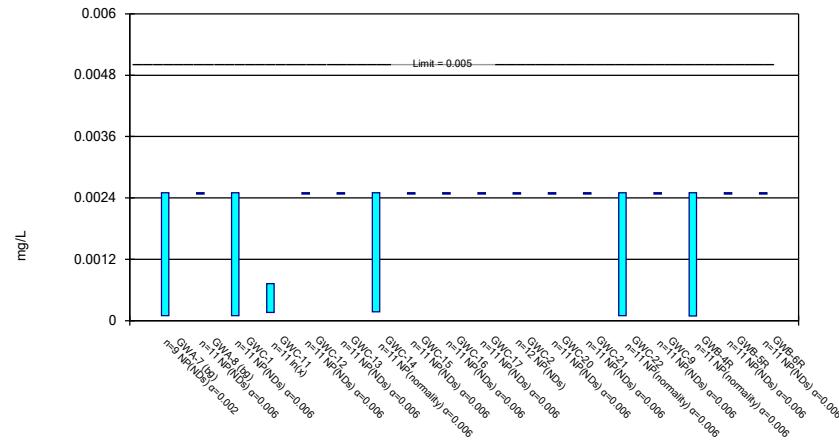
Constituent: Barium Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Beryllium Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

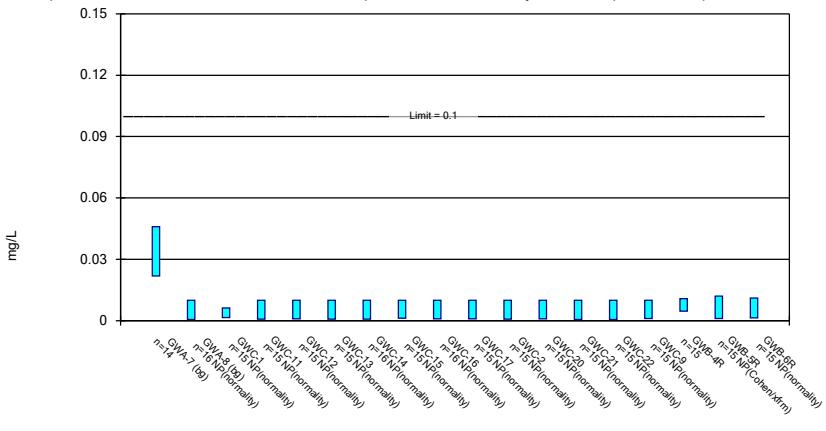
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

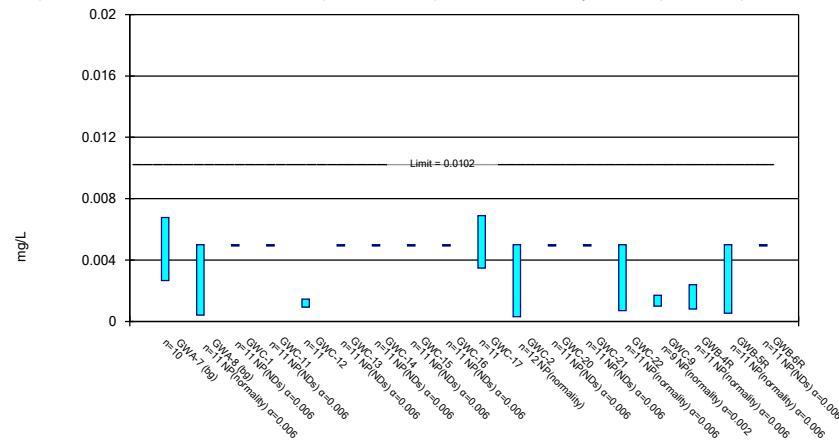
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

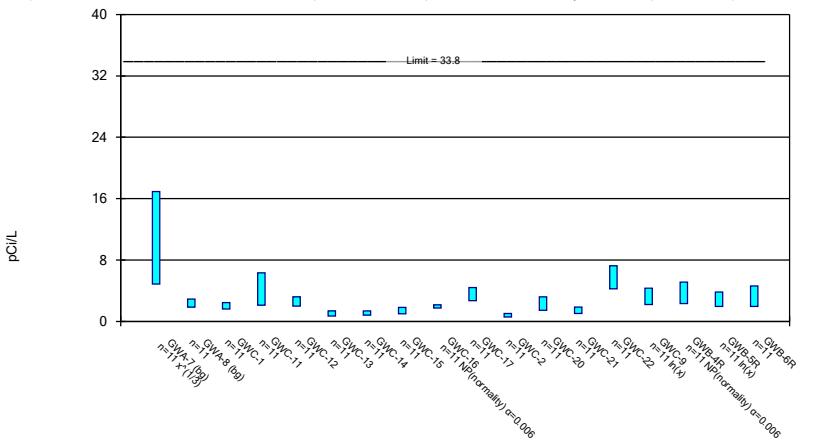
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

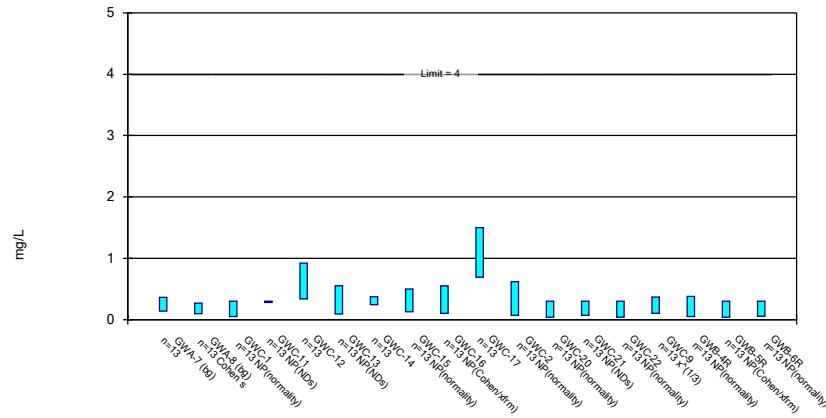
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - Sta  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

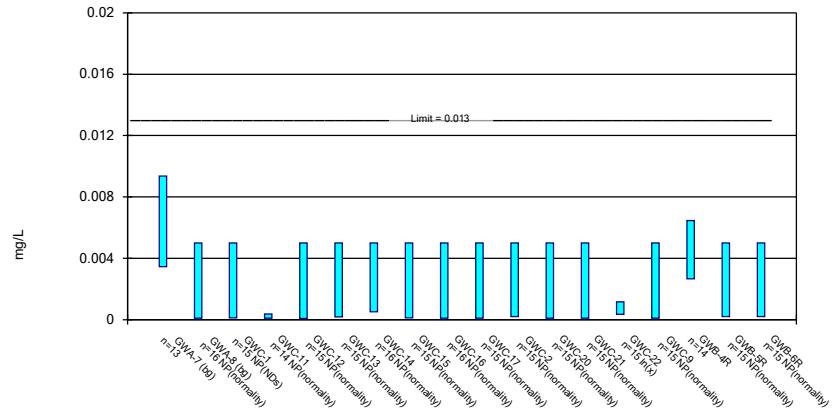
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Parametric and Non-Parametric (NP) Confidence Interval

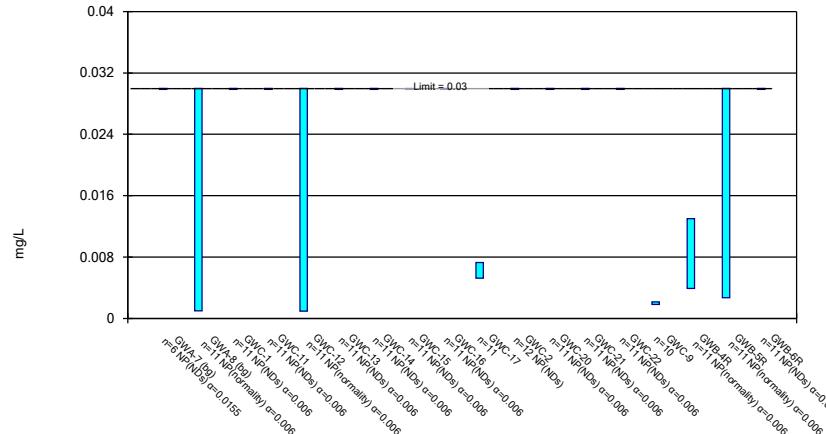
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

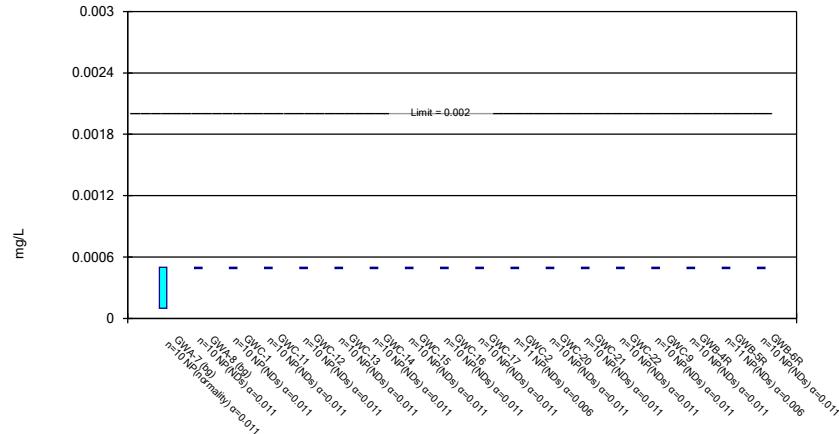
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Non-Parametric Confidence Interval

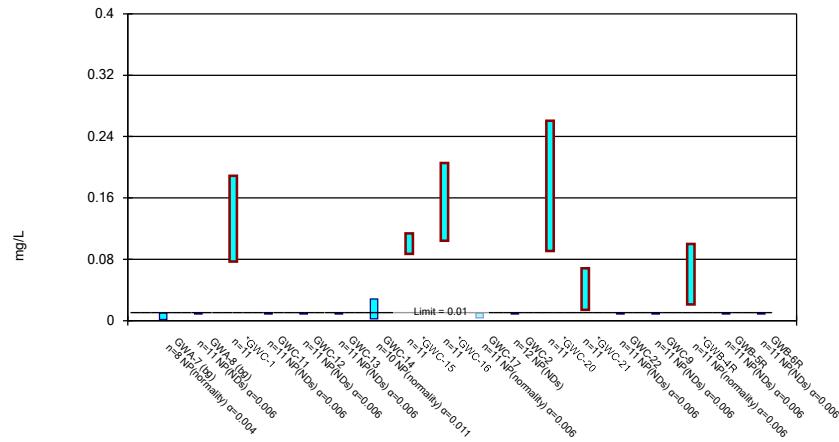
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

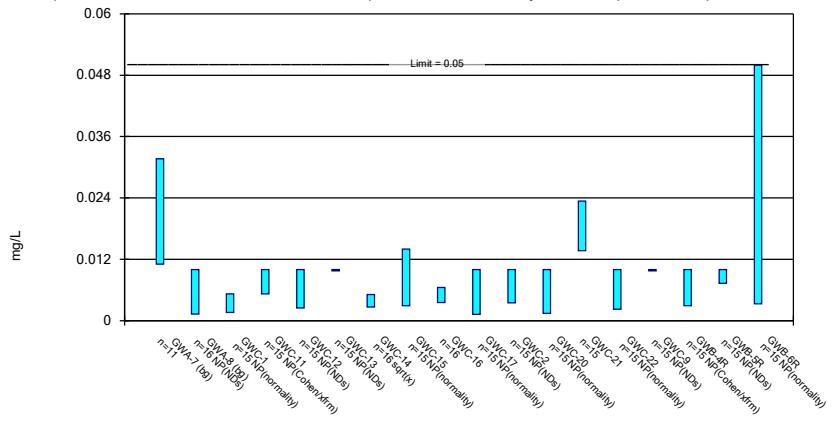
Compliance limit is exceeded.\* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Parametric and Non-Parametric (NP) Confidence Interval

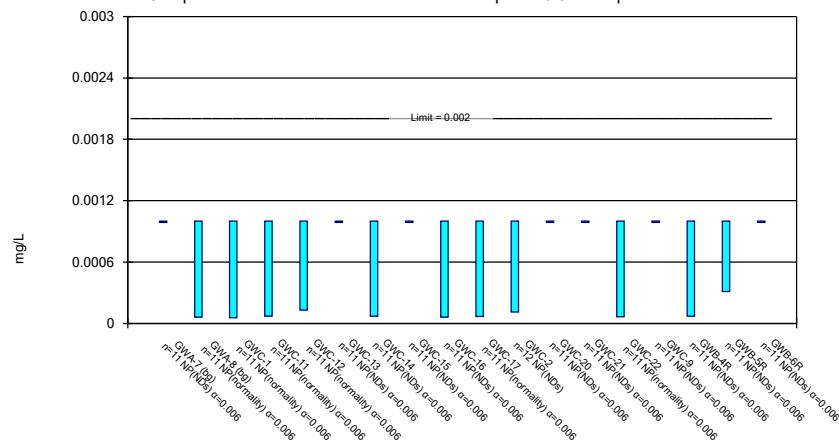
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Thallium Analysis Run 6/2/2020 1:52 PM View: Confidence Interval - State  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

FIGURE N.

## Confidence Interval Summary Table (Federal) - Significant Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:57 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWC-15	0.1293	0.05039	0.0287	Yes	15	0.08984	0.05821	0	None	No	0.01	Param.
Arsenic (mg/L)	GWC-16	0.08406	0.0633	0.0287	Yes	16	0.07368	0.01595	0	None	No	0.01	Param.
Arsenic (mg/L)	GWC-20	0.3752	0.277	0.0287	Yes	15	0.3261	0.07248	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-16	0.2054	0.104	0.1	Yes	11	0.1547	0.06085	0	None	No	0.01	Param.

# Confidence Interval Summary Table (Federal) - All Results

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:57 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWA-7 (bg)	0.003	0.0013	0.006	No	15	0.002513	0.0008568	73.33	None	No	0.01	NP (normality)
Antimony (mg/L)	GWA-8 (bg)	0.003	0.003	0.006	No	16	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-1	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-11	0.003	0.0005	0.006	No	15	0.001877	0.001249	53.33	None	No	0.01	NP (normality)
Antimony (mg/L)	GWC-12	0.003	0.003	0.006	No	14	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-13	0.003	0.0006	0.006	No	15	0.00284	0.0006197	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-14	0.003	0.003	0.006	No	16	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-15	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-16	0.003	0.003	0.006	No	16	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-17	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-2	0.003	0.0013	0.006	No	15	0.002887	0.0004389	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-20	0.003	0.0019	0.006	No	15	0.002927	0.000284	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-21	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-22	0.003	0.00049	0.006	No	15	0.002663	0.0008903	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-9	0.003	0.0016	0.006	No	15	0.002729	0.0007552	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-4R	0.003	0.0003	0.006	No	15	0.00282	0.0006971	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-5R	0.003	0.00054	0.006	No	15	0.002836	0.0006352	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWB-6R	0.003	0.003	0.006	No	15	0.003	0	100	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWA-7 (bg)	0.01379	0.004635	0.0287	No	12	0.009508	0.00692	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GWA-8 (bg)	0.005	0.0006	0.0287	No	16	0.003391	0.00215	62.5	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-1	0.0042	0.0015	0.0287	No	14	0.004343	0.006598	0	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-11	0.005	0.005	0.0287	No	15	0.005	0	100	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-12	0.005	0.0009	0.0287	No	15	0.004153	0.001754	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-13	0.005	0.0006	0.0287	No	15	0.004412	0.001552	86.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-14	0.0026	0.0018	0.0287	No	16	0.002271	0.0008184	6.25	None	No	0.01	NP (normality)
Arsenic (mg/L)	<b>GWC-15</b>	<b>0.1293</b>	<b>0.05039</b>	<b>0.0287</b>	<b>Yes</b>	<b>15</b>	<b>0.08984</b>	<b>0.05821</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	<b>GWC-16</b>	<b>0.08406</b>	<b>0.0633</b>	<b>0.0287</b>	<b>Yes</b>	<b>16</b>	<b>0.07368</b>	<b>0.01595</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GWC-17	0.005	0.0009	0.0287	No	15	0.002521	0.001835	33.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-2	0.005	0.00094	0.0287	No	15	0.004129	0.001807	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	<b>GWC-20</b>	<b>0.3752</b>	<b>0.277</b>	<b>0.0287</b>	<b>Yes</b>	<b>15</b>	<b>0.3261</b>	<b>0.07248</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GWC-21	0.005955	0.00332	0.0287	No	15	0.004067	0.001312	40	Cohen's	No	0.01	Param.
Arsenic (mg/L)	GWC-22	0.005	0.0006	0.0287	No	15	0.002705	0.002021	40	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-9	0.005	0.00084	0.0287	No	15	0.004723	0.001074	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWB-4R	0.003147	0.001641	0.0287	No	15	0.002457	0.001208	13.33	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GWB-5R	0.005	0.0009	0.0287	No	15	0.002487	0.001924	26.67	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWB-6R	0.005	0.0011	0.0287	No	15	0.002829	0.001743	33.33	None	No	0.01	NP (Cohens/xfrm)
Barium (mg/L)	GWA-7 (bg)	0.1545	0.0802	2	No	14	0.1174	0.05248	0	None	No	0.01	Param.
Barium (mg/L)	GWA-8 (bg)	0.0664	0.06025	2	No	16	0.06333	0.00472	0	None	No	0.01	Param.
Barium (mg/L)	GWC-1	0.0575	0.04982	2	No	15	0.05366	0.005669	0	None	No	0.01	Param.
Barium (mg/L)	GWC-11	0.1125	0.05506	2	No	15	0.08379	0.0424	0	None	No	0.01	Param.
Barium (mg/L)	GWC-12	0.0191	0.0162	2	No	15	0.01847	0.003995	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-13	0.02474	0.01968	2	No	15	0.02221	0.003733	0	None	No	0.01	Param.
Barium (mg/L)	GWC-14	0.067	0.0248	2	No	16	0.03726	0.01953	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-15	0.049	0.04021	2	No	15	0.04461	0.006483	0	None	No	0.01	Param.
Barium (mg/L)	GWC-16	0.1049	0.05422	2	No	14	0.08131	0.0372	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-17	0.1245	0.04703	2	No	15	0.09051	0.06112	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-2	0.057	0.049	2	No	14	0.05407	0.008399	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-20	0.148	0.078	2	No	15	0.1071	0.03885	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-21	0.07381	0.05031	2	No	15	0.06206	0.01734	0	None	No	0.01	Param.
Barium (mg/L)	GWC-22	0.09974	0.06378	2	No	15	0.08279	0.0285	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-9	0.2743	0.1982	2	No	15	0.2363	0.05612	0	None	No	0.01	Param.
Barium (mg/L)	GWB-4R	0.09633	0.07886	2	No	15	0.08759	0.01289	0	None	No	0.01	Param.
Barium (mg/L)	GWB-5R	0.1628	0.09057	2	No	15	0.1294	0.05934	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWB-6R	0.107	0.013	2	No	15	0.07353	0.04511	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWA-7 (bg)	0.003	0.0002	0.004	No	8	0.001225	0.001208	25	None	No	0.004	NP (Cohens/xfrm)

# Confidence Interval Summary Table (Federal) - All Results

Page 2

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:57 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	GWA-8 (bg)	0.00024	0.0002	0.004	No	11	0.0004564	0.0008438	9.091	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-1	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-11	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-12	0.000918	0.0005275	0.004	No	11	0.0007227	0.0002343	0	None	No	0.01	Param.
Beryllium (mg/L)	GWC-13	0.003	0.003	0.004	No	11	0.002733	0.000887	90.91	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-14	0.003	0.00009	0.004	No	11	0.002205	0.001362	72.73	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-15	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-16	0.003	0.00008	0.004	No	11	0.001147	0.001469	36.36	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-17	0.003159	0.001658	0.004	No	11	0.002427	0.0009318	0	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	GWC-2	0.003	0.00009	0.004	No	12	0.00229	0.001286	75	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-20	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-21	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	GWC-22	0.003	0.00009	0.004	No	11	0.001433	0.001501	45.45	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWC-9	0.0003	0.0002	0.004	No	11	0.0002582	0.00004916	0	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWB-4R	0.003	0.0001	0.004	No	11	0.001445	0.001491	45.45	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWB-5R	0.003	0.0001	0.004	No	11	0.0007051	0.001137	18.18	None	No	0.006	NP (normality)
Beryllium (mg/L)	GWB-6R	0.003	0.003	0.004	No	11	0.003	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWA-7 (bg)	0.0025	0.0001	0.005	No	9	0.002033	0.0009381	77.78	None	No	0.002	NP (NDs)
Cadmium (mg/L)	GWA-8 (bg)	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-1	0.0025	0.0001	0.005	No	11	0.002061	0.0009769	81.82	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-11	0.0007221	0.0001598	0.005	No	11	0.0005255	0.0006754	9.091	None	In(x)	0.01	Param.
Cadmium (mg/L)	GWC-12	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-13	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-14	0.0025	0.00017	0.005	No	11	0.001234	0.001213	45.45	None	No	0.006	NP (normality)
Cadmium (mg/L)	GWC-15	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-16	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-17	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-2	0.0025	0.0025	0.005	No	12	0.0025	0	100	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-20	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-21	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWC-22	0.0025	0.00001	0.005	No	11	0.0008245	0.001083	27.27	None	No	0.006	NP (normality)
Cadmium (mg/L)	GWC-9	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWB-4R	0.0025	0.00009	0.005	No	11	0.001644	0.001189	63.64	None	No	0.006	NP (normality)
Cadmium (mg/L)	GWB-5R	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	GWB-6R	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Chromium (mg/L)	GWA-7 (bg)	0.04592	0.02183	0.1	No	14	0.03387	0.017	0	None	No	0.01	Param.
Chromium (mg/L)	GWA-8 (bg)	0.01	0.0006	0.1	No	16	0.007657	0.004192	75	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-1	0.0062	0.0015	0.1	No	15	0.002653	0.002337	6.667	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-11	0.01	0.0007	0.1	No	15	0.005071	0.004747	40	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-12	0.01	0.00085	0.1	No	15	0.003005	0.00365	20	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-13	0.01	0.0007	0.1	No	15	0.005792	0.004666	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-14	0.01	0.00074	0.1	No	16	0.003754	0.004355	31.25	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-15	0.01	0.0012	0.1	No	15	0.004787	0.004412	40	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-16	0.01	0.0009	0.1	No	16	0.005468	0.004682	43.75	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-17	0.01	0.0009	0.1	No	15	0.004343	0.004295	33.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-2	0.01	0.00065	0.1	No	15	0.005669	0.004794	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-20	0.01	0.00089	0.1	No	15	0.005159	0.004688	46.67	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-21	0.01	0.0006	0.1	No	15	0.005641	0.004824	46.67	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-22	0.01	0.00057	0.1	No	15	0.005612	0.004856	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-9	0.01	0.001	0.1	No	15	0.004793	0.004418	40	None	No	0.01	NP (normality)
Chromium (mg/L)	GWB-4R	0.01066	0.004643	0.1	No	15	0.007653	0.004442	0	None	No	0.01	Param.
Chromium (mg/L)	GWB-5R	0.012	0.0011	0.1	No	15	0.009707	0.01775	26.67	None	No	0.01	NP (Cohens/xfrm)
Chromium (mg/L)	GWB-6R	0.011	0.0013	0.1	No	15	0.005607	0.005891	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWA-7 (bg)	0.00677	0.00267	0.0102	No	10	0.00472	0.002298	0	None	No	0.01	Param.
Cobalt (mg/L)	GWA-8 (bg)	0.005	0.0004	0.0102	No	11	0.002095	0.002304	36.36	None	No	0.006	NP (normality)

# Confidence Interval Summary Table (Federal) - All Results

Page 3

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:57 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	GWC-1	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-11	0.005	0.005	0.0102	No	11	0.004573	0.001417	90.91	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-12	0.001461	0.0009338	0.0102	No	11	0.001197	0.0003162	0	None	No	0.01	Param.
Cobalt (mg/L)	GWC-13	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-14	0.005	0.005	0.0102	No	11	0.004573	0.001417	90.91	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-15	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-16	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-17	0.006889	0.003475	0.0102	No	11	0.005182	0.002048	0	None	No	0.01	Param.
Cobalt (mg/L)	GWC-2	0.005	0.0003	0.0102	No	12	0.003115	0.002339	58.33	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-20	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-21	0.005	0.005	0.0102	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	GWC-22	0.005	0.0007	0.0102	No	11	0.002676	0.00223	45.45	None	No	0.006	NP (normality)
Cobalt (mg/L)	GWC-9	0.0017	0.00099	0.0102	No	9	0.001453	0.0003465	0	None	No	0.002	NP (normality)
Cobalt (mg/L)	GWB-4R	0.0024	0.0008	0.0102	No	11	0.001509	0.001244	9.091	None	No	0.006	NP (normality)
Cobalt (mg/L)	GWB-5R	0.005	0.00053	0.0102	No	11	0.003548	0.001882	54.55	None	No	0.006	NP (normality)
Cobalt (mg/L)	GWB-6R	0.005	0.005	0.0102	No	11	0.00458	0.001393	90.91	None	No	0.006	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GWA-7 (bg)	16.91	4.867	33.8	No	11	11.4	9.532	0	None	$x^{(1/3)}$	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWA-8 (bg)	2.886	1.863	33.8	No	11	2.375	0.6138	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-1	2.45	1.595	33.8	No	11	2.023	0.5129	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-11	6.309	2.104	33.8	No	11	4.207	2.523	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-12	3.199	1.981	33.8	No	11	2.59	0.7307	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-13	1.373	0.6802	33.8	No	11	1.026	0.4155	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-14	1.353	0.8114	33.8	No	11	1.082	0.3249	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-15	1.815	0.9742	33.8	No	11	1.395	0.5045	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-16	2.13	1.72	33.8	No	11	2.042	0.7575	0	None	No	0.006	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GWC-17	4.417	2.7	33.8	No	11	3.558	1.03	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-2	1.008	0.5555	33.8	No	11	0.7818	0.2716	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-20	3.207	1.453	33.8	No	11	2.33	1.053	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-21	1.862	1.039	33.8	No	11	1.451	0.4937	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-22	7.261	4.254	33.8	No	11	5.757	1.804	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-9	4.327	2.194	33.8	No	11	3.362	1.746	0	None	$\ln(x)$	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWB-4R	5.1	2.32	33.8	No	11	3.632	1.278	0	None	No	0.006	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GWB-5R	3.833	1.921	33.8	No	11	2.971	1.568	0	None	$\ln(x)$	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWB-6R	4.613	1.962	33.8	No	11	3.287	1.591	0	None	No	0.01	Param.
Fluoride (mg/L)	GWA-7 (bg)	0.3628	0.1388	4	No	13	0.2508	0.1506	30.77	None	No	0.01	Param.
Fluoride (mg/L)	GWA-8 (bg)	0.269	0.09469	4	No	13	0.1724	0.1027	15.38	Cohen's $\delta$	No	0.01	Param.
Fluoride (mg/L)	GWC-1	0.3	0.051	4	No	13	0.2455	0.09649	69.23	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-11	0.3	0.3	4	No	13	0.3	0	100	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-12	0.9234	0.3391	4	No	13	0.6312	0.3929	7.692	None	No	0.01	Param.
Fluoride (mg/L)	GWC-13	0.55	0.09	4	No	13	0.284	0.1172	76.92	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-14	0.3707	0.2416	4	No	13	0.3062	0.08685	53.85	None	No	0.01	Param.
Fluoride (mg/L)	GWC-15	0.5	0.13	4	No	13	0.2662	0.1082	61.54	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-16	0.55	0.1	4	No	13	0.3092	0.2106	46.15	None	No	0.01	NP (Cohen's/xfrm)
Fluoride (mg/L)	GWC-17	1.5	0.6906	4	No	13	1.095	0.5444	7.692	None	No	0.01	Param.
Fluoride (mg/L)	GWC-2	0.62	0.07	4	No	13	0.2264	0.1614	46.15	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-20	0.3	0.04	4	No	13	0.2264	0.118	69.23	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-21	0.3	0.071	4	No	13	0.2824	0.06351	92.31	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-22	0.3	0.04	4	No	13	0.1977	0.1179	53.85	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-9	0.3664	0.1032	4	No	13	0.2572	0.2511	0	None	$x^{(1/3)}$	0.01	Param.
Fluoride (mg/L)	GWB-4R	0.38	0.05	4	No	13	0.3004	0.2966	53.85	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWB-5R	0.3	0.04	4	No	13	0.1641	0.1206	38.46	None	No	0.01	NP (Cohen's/xfrm)
Fluoride (mg/L)	GWB-6R	0.3	0.053	4	No	13	0.1868	0.1042	30.77	None	No	0.01	NP (normality)
Lead (mg/L)	GWA-7 (bg)	0.009351	0.003464	0.013	No	13	0.006408	0.003959	0	None	No	0.01	Param.
Lead (mg/L)	GWA-8 (bg)	0.005	0.0001	0.013	No	16	0.003169	0.002442	62.5	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-1	0.005	0.00012	0.013	No	15	0.004348	0.001721	86.67	None	No	0.01	NP (NDs)

# Confidence Interval Summary Table (Federal) - All Results

Page 4

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:57 PM

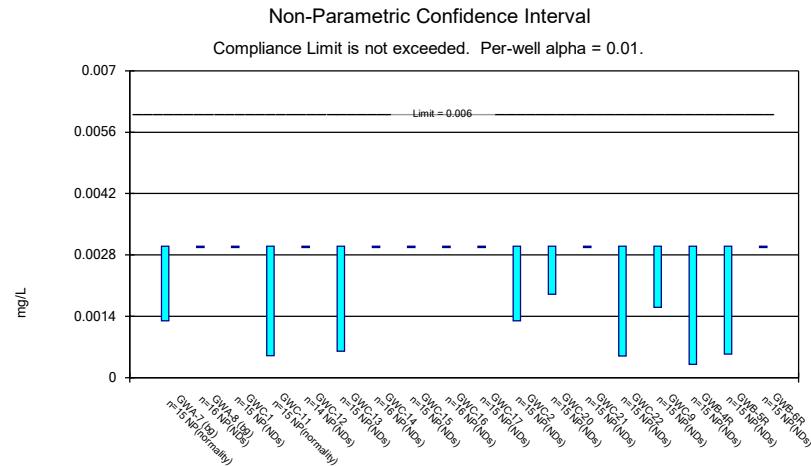
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	GWC-11	0.00036	0.0001	0.013	No	14	0.00058	0.001274	7.143	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-12	0.005	0.000081	0.013	No	15	0.001983	0.002358	33.33	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-13	0.005	0.00017	0.013	No	15	0.002021	0.002208	33.33	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-14	0.005	0.00051	0.013	No	16	0.003799	0.00215	75	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-15	0.005	0.00012	0.013	No	15	0.002756	0.002484	53.33	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-16	0.005	0.0001	0.013	No	16	0.002271	0.002486	43.75	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-17	0.005	0.0001	0.013	No	15	0.003422	0.002317	66.67	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-2	0.005	0.0002	0.013	No	15	0.00339	0.002358	66.67	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-20	0.005	0.0001	0.013	No	15	0.003374	0.00238	66.67	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-21	0.005	0.00009	0.013	No	15	0.003046	0.002477	60	None	No	0.01	NP (normality)
Lead (mg/L)	GWC-22	0.001163	0.0003349	0.013	No	15	0.001011	0.001307	6.667	None	In(x)	0.01	Param.
Lead (mg/L)	GWC-9	0.005	0.0001	0.013	No	15	0.003091	0.002425	60	None	No	0.01	NP (normality)
Lead (mg/L)	GWB-4R	0.006465	0.00267	0.013	No	14	0.004567	0.002679	14.29	None	No	0.01	Param.
Lead (mg/L)	GWB-5R	0.005	0.0002	0.013	No	15	0.00242	0.002266	40	None	No	0.01	NP (normality)
Lead (mg/L)	GWB-6R	0.005	0.0002	0.013	No	15	0.002544	0.002389	46.67	None	No	0.01	NP (normality)
Lithium (mg/L)	GWA-7 (bg)	0.03	0.03	0.04	No	6	0.03	0	100	None	No	0.0155	NP (NDs)
Lithium (mg/L)	GWA-8 (bg)	0.03	0.001	0.04	No	11	0.01948	0.0146	63.64	None	No	0.006	NP (normality)
Lithium (mg/L)	GWC-1	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-11	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-12	0.03	0.00094	0.04	No	11	0.01683	0.01513	54.55	None	No	0.006	NP (normality)
Lithium (mg/L)	GWC-13	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-14	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-15	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-16	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-17	0.007283	0.005226	0.04	No	11	0.006255	0.001234	0	None	No	0.01	Param.
Lithium (mg/L)	GWC-2	0.03	0.03	0.04	No	12	0.03	0	100	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-20	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-21	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-22	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	GWC-9	0.002162	0.001798	0.04	No	10	0.00198	0.0002044	0	None	No	0.01	Param.
Lithium (mg/L)	GWB-4R	0.013	0.0039	0.04	No	11	0.0073	0.00417	0	None	No	0.006	NP (normality)
Lithium (mg/L)	GWB-5R	0.03	0.0027	0.04	No	11	0.01333	0.01325	36.36	None	No	0.006	NP (normality)
Lithium (mg/L)	GWB-6R	0.03	0.03	0.04	No	11	0.03	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	GWA-7 (bg)	0.0005	0.0001	0.002	No	10	0.000381	0.000194	70	None	No	0.011	NP (normality)
Mercury (mg/L)	GWA-8 (bg)	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-1	0.0005	0.0005	0.002	No	10	0.000454	0.0001455	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-11	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-12	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-13	0.0005	0.0005	0.002	No	10	0.000463	0.000117	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-14	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-15	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-16	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-17	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-2	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	GWC-20	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-21	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-22	0.0005	0.0005	0.002	No	10	0.0005	0	100	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWC-9	0.0005	0.0005	0.002	No	10	0.000455	0.0001423	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWB-4R	0.0005	0.0005	0.002	No	10	0.0004549	0.0001426	90	None	No	0.011	NP (NDs)
Mercury (mg/L)	GWB-5R	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	GWB-6R	0.0005	0.0005	0.002	No	10	0.0004543	0.0001445	90	None	No	0.011	NP (NDs)
Molybdenum (mg/L)	GWA-7 (bg)	0.01	0.0013	0.1	No	8	0.0078	0.004012	62.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GWA-8 (bg)	0.01	0.01	0.1	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-1	0.1888	0.07681	0.1	No	11	0.1328	0.06721	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-11	0.01	0.01	0.1	No	11	0.009255	0.002472	90.91	None	No	0.006	NP (NDs)

# Confidence Interval Summary Table (Federal) - All Results

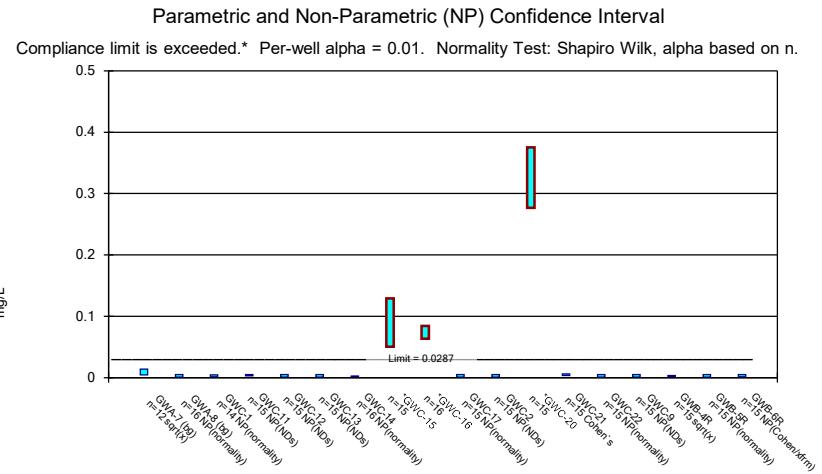
Page 5

Grumman Road Landfill Client: Southern Company Data: Grumman Road Printed 6/2/2020, 1:57 PM

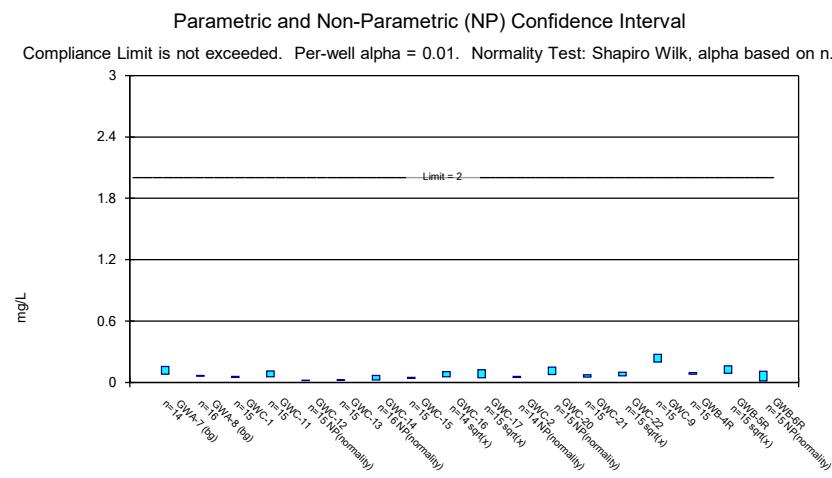
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	GWC-12	0.01	0.01	0.1	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-13	0.01	0.01	0.1	No	11	0.0096	0.001327	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-14	0.028	0.0022	0.1	No	10	0.00946	0.01198	0	None	No	0.011	NP (normality)
Molybdenum (mg/L)	GWC-15	0.1139	0.08688	0.1	No	11	0.1004	0.01621	0	None	No	0.01	Param.
<b>Molybdenum (mg/L)</b>	<b>GWC-16</b>	<b>0.2054</b>	<b>0.104</b>	<b>0.1</b>	<b>Yes</b>	<b>11</b>	<b>0.1547</b>	<b>0.06085</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GWC-17	0.01	0.0036	0.1	No	11	0.008182	0.003136	72.73	None	No	0.006	NP (normality)
Molybdenum (mg/L)	GWC-2	0.01	0.01	0.1	No	12	0.01	0	100	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	GWC-20	0.2605	0.09096	0.1	No	11	0.1757	0.1017	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-21	0.06805	0.01392	0.1	No	11	0.04098	0.03248	0	None	No	0.01	Param.
Molybdenum (mg/L)	GWC-22	0.01	0.01	0.1	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWC-9	0.01	0.01	0.1	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWB-4R	0.1	0.0209	0.1	No	11	0.04843	0.04052	0	None	No	0.006	NP (normality)
Molybdenum (mg/L)	GWB-5R	0.01	0.01	0.1	No	11	0.0092	0.002653	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	GWB-6R	0.01	0.01	0.1	No	11	0.009327	0.002231	90.91	None	No	0.006	NP (NDs)
Selenium (mg/L)	GWA-7 (bg)	0.03164	0.01103	0.05	No	11	0.02134	0.01237	0	None	No	0.01	Param.
Selenium (mg/L)	GWA-8 (bg)	0.01	0.0013	0.05	No	16	0.008894	0.003023	87.5	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-1	0.0052	0.0016	0.05	No	15	0.004147	0.005656	6.667	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-11	0.01	0.0052	0.05	No	15	0.009033	0.005691	26.67	None	No	0.01	NP (Cohens/xfrm)
Selenium (mg/L)	GWC-12	0.01	0.0025	0.05	No	15	0.008427	0.003259	80	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-13	0.01	0.01	0.05	No	15	0.01	0	100	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-14	0.00512	0.002676	0.05	No	16	0.004017	0.002087	6.25	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	GWC-15	0.014	0.0029	0.05	No	15	0.00846	0.00334	53.33	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-16	0.006459	0.003525	0.05	No	16	0.004992	0.002255	6.25	None	No	0.01	Param.
Selenium (mg/L)	GWC-17	0.01	0.0012	0.05	No	15	0.00616	0.00431	53.33	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-2	0.01	0.0035	0.05	No	15	0.009033	0.002567	86.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-20	0.01	0.0014	0.05	No	15	0.007127	0.004206	66.67	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-21	0.0234	0.01368	0.05	No	15	0.01854	0.007169	0	None	No	0.01	Param.
Selenium (mg/L)	GWC-22	0.01	0.0022	0.05	No	15	0.007793	0.003799	73.33	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-9	0.01	0.01	0.05	No	15	0.01	0	100	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWB-4R	0.01	0.0029	0.05	No	15	0.0058	0.003265	33.33	None	No	0.01	NP (Cohens/xfrm)
Selenium (mg/L)	GWB-5R	0.01	0.0073	0.05	No	15	0.008827	0.002656	80	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWB-6R	0.05	0.0033	0.05	No	15	0.01109	0.01125	73.33	None	No	0.01	NP (normality)
Thallium (mg/L)	GWA-7 (bg)	0.001	0.001	0.002	No	11	0.0009545	0.0001508	90.91	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWA-8 (bg)	0.001	0.00006	0.002	No	11	0.0007429	0.0004403	72.73	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-1	0.001	0.000054	0.002	No	11	0.0007416	0.0004425	72.73	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-11	0.001	0.00007	0.002	No	11	0.0005925	0.0004693	54.55	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-12	0.001	0.00013	0.002	No	11	0.0004073	0.0003839	27.27	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-13	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-14	0.001	0.00007	0.002	No	11	0.00083	0.0003782	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-15	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-16	0.001	0.00006	0.002	No	11	0.0008282	0.0003823	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-17	0.001	0.000066	0.002	No	11	0.0004998	0.0004791	45.45	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-2	0.001	0.00011	0.002	No	12	0.0009258	0.0002569	91.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	GWC-20	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-21	0.001	0.001	0.002	No	11	0.0009136	0.0002864	90.91	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWC-22	0.001	0.000065	0.002	No	11	0.0006646	0.0004654	63.64	None	No	0.006	NP (normality)
Thallium (mg/L)	GWC-9	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWB-4R	0.001	0.00007	0.002	No	11	0.0008309	0.0003762	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWB-5R	0.001	0.00031	0.002	No	11	0.0008515	0.0003351	81.82	None	No	0.006	NP (NDs)
Thallium (mg/L)	GWB-6R	0.001	0.001	0.002	No	11	0.001	0	100	None	No	0.006	NP (NDs)



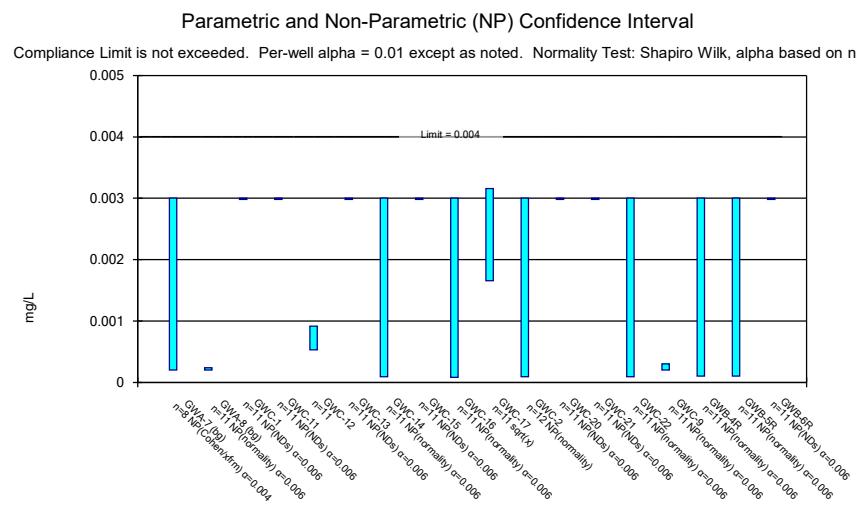
Constituent: Antimony Analysis Run 6/2/2020 1:55 PM View: Confidence Intervals - Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road



Constituent: Arsenic Analysis Run 6/2/2020 1:55 PM View: Confidence Intervals - Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road



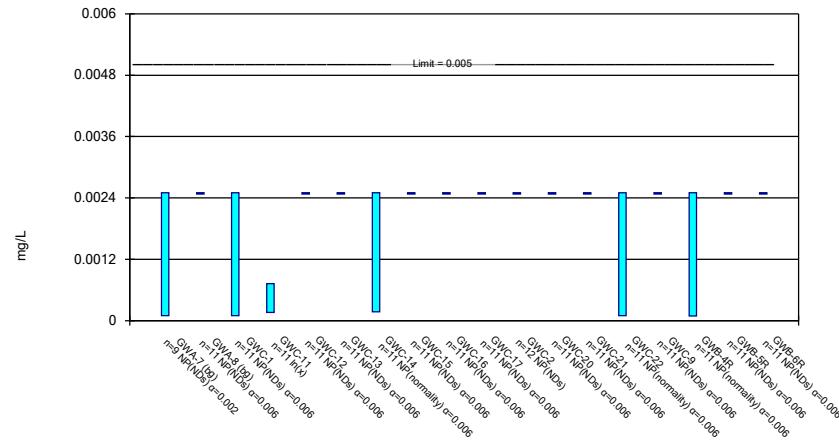
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Constituent: Beryllium Analysis Run 6/2/2020 1:55 PM View: Confidence Intervals - Federal Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

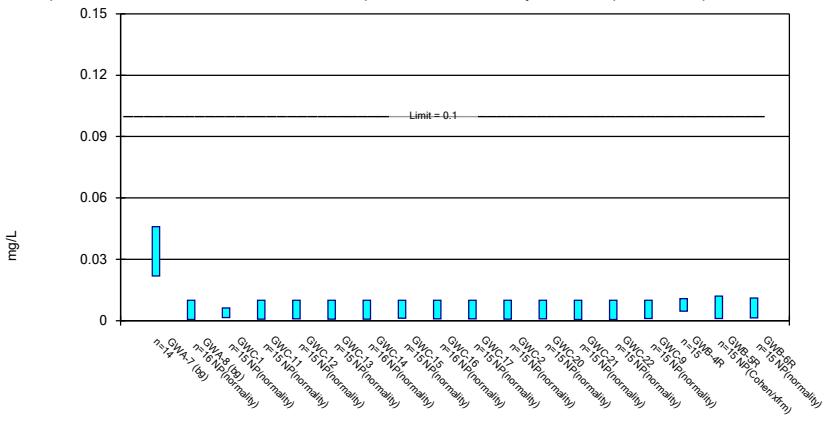
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 6/2/2020 1:55 PM View: Confidence Intervals - Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Parametric and Non-Parametric (NP) Confidence Interval

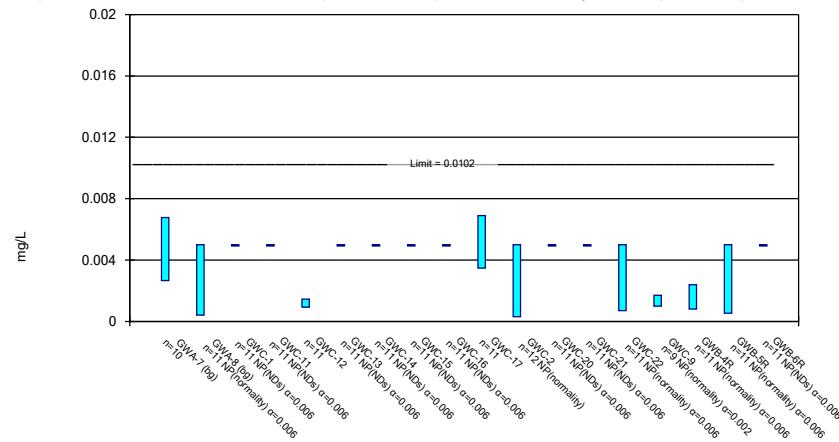
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Constituent: Chromium Analysis Run 6/2/2020 1:55 PM View: Confidence Intervals - Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

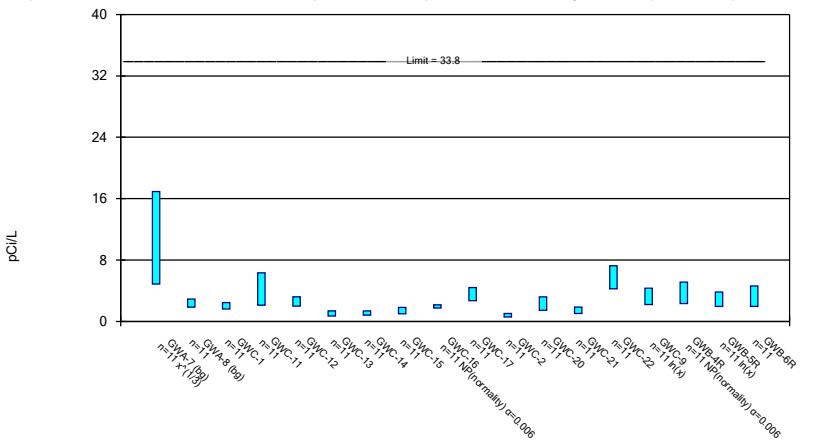
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 6/2/2020 1:55 PM View: Confidence Intervals - Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

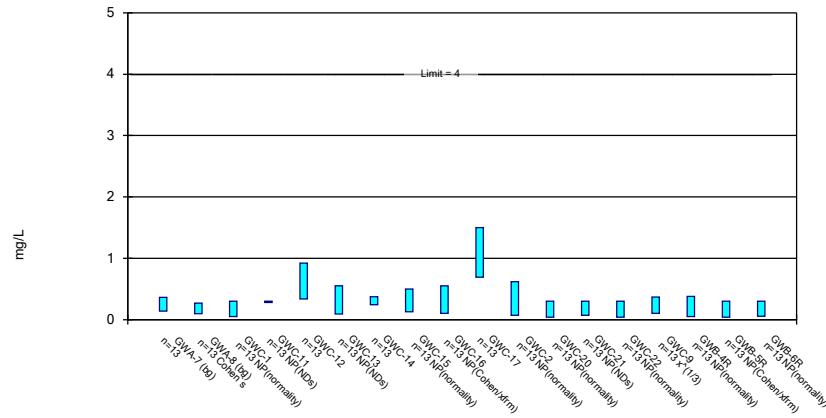
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Constituent: Combined Radium 226 + 228 Analysis Run 6/2/2020 1:55 PM View: Confidence Intervals - F  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

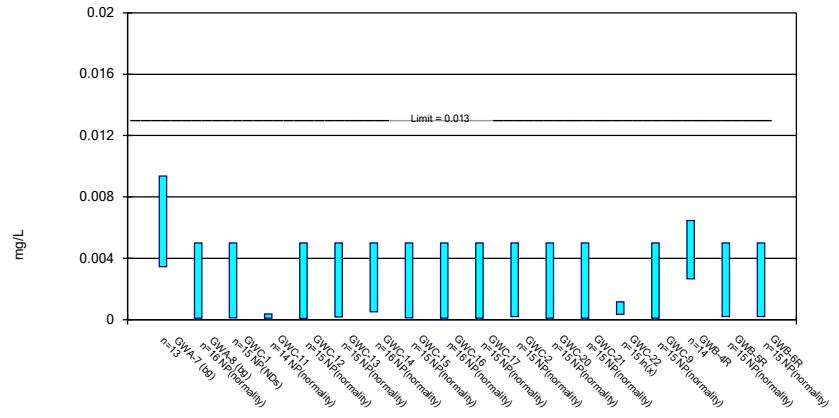
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Constituent: Fluoride Analysis Run 6/2/2020 1:56 PM View: Confidence Intervals - Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

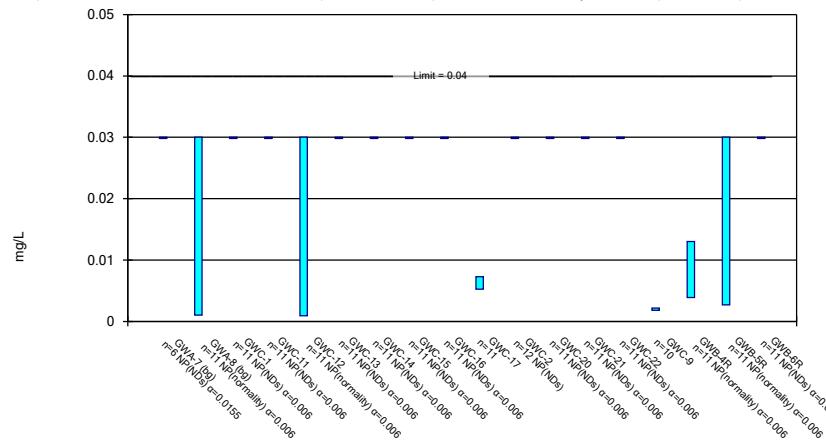
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 6/2/2020 1:56 PM View: Confidence Intervals - Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

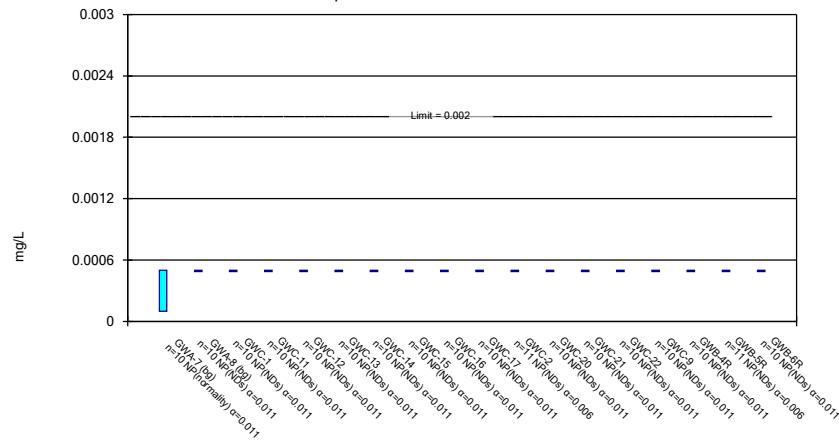
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 6/2/2020 1:56 PM View: Confidence Intervals - Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Non-Parametric Confidence Interva

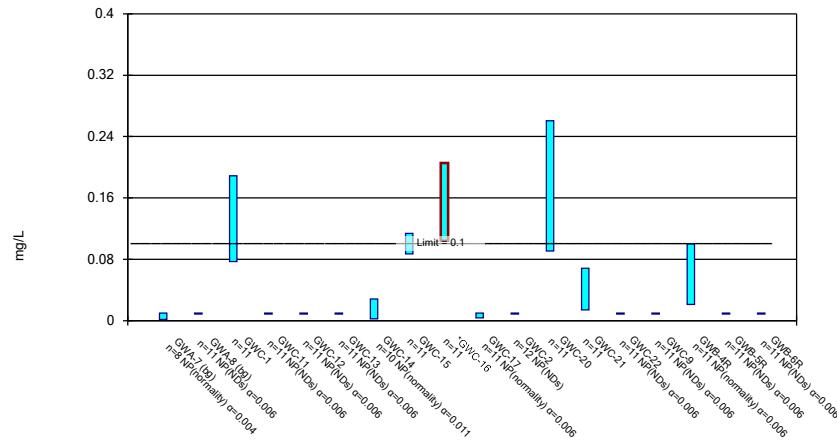
Compliance Limit is not exceeded



Constituent: Mercury Analysis Run 6/2/2020 1:56 PM View: Confidence Intervals - Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Parametric and Non-Parametric (NP) Confidence Interval

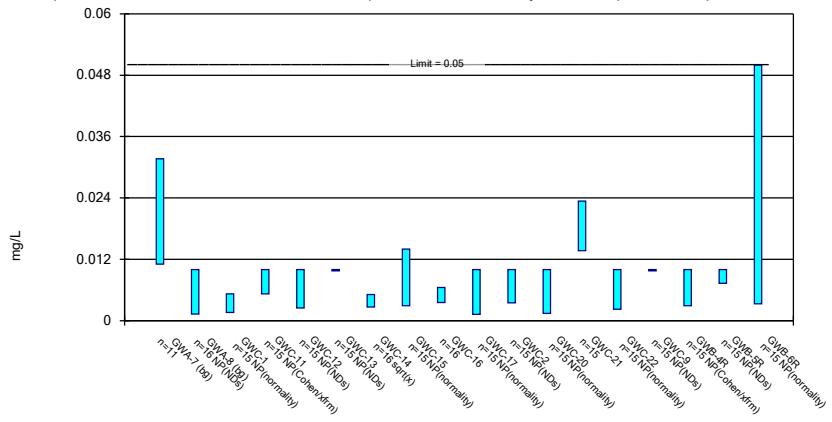
Compliance limit is exceeded.\* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 6/2/2020 1:56 PM View: Confidence Intervals - Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

## Parametric and Non-Parametric (NP) Confidence Interval

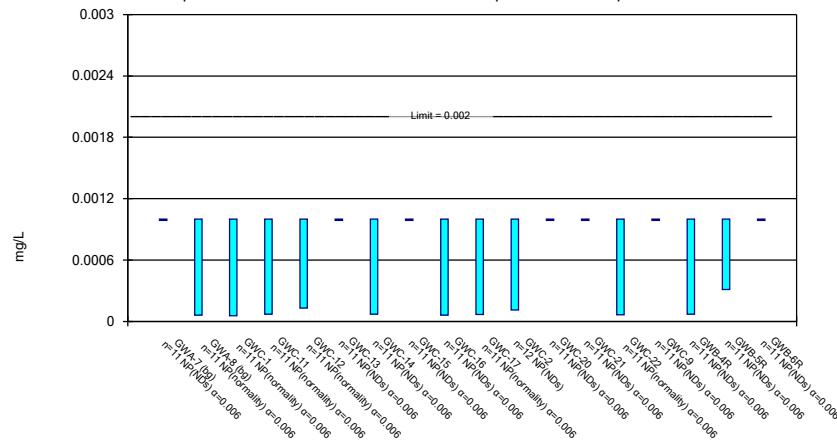
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 6/2/2020 1:56 PM View: Confidence Intervals - Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Thallium Analysis Run 6/2/2020 1:56 PM View: Confidence Intervals - Federal  
Grumman Road Landfill Client: Southern Company Data: Grumman Road